

CHINATOWN

AFTER SEPTEMBER 11TH:

An Economic Impact Study

An Interim Report

Asian American Federation of New York

April 4, 2002

In Collaboration With:

Federal Reserve Bank of New York

Fiscal Policy Institute

Ralph and Goldy Lewis Center for Regional Policy Studies, University of California, Los Angeles

The views expressed in this report are those of the Asian American Federation and do not necessarily reflect the views or positions of the Federal Reserve Bank of New York or the Federal Reserve System, the Fiscal Policy Institute, or the Ralph and Goldy Lewis Center for Regional Policy Studies, UCLA.

FOREWORD

Nearly seven months after September 11th, New Yorkers of all backgrounds continue to feel the pains of the unfortunate loss of life while we work hard to heal our wounds and rebuild our city. The impact of September 11th has certainly been pervasive beyond words, as has been the outpouring of heroism and philanthropy demonstrated by so many ordinary people, uniformed as well as civilian, during these trying times. All of us at the Asian American Federation pay our respects to those who have lost or given their lives, offer our best wishes to those families who have endured the tragedy, and salute the fine spirit of New York.

The lingering aftermath of September 11th is deeply felt in neighborhoods close to Ground Zero, including Chinatown. During the first three months after September 11th, stories abounded about the desperation of many low-wage workers who became unemployed and the resolution of many small business owners who worried about their firms' prospects. Ti-Hua Chang of WNBC-TV captured the vivid images of Chinatown in crisis in his special news report, "Tragedy in Chinatown," on February 10th. Clearly, Chinatown was experiencing an unprecedented level of economic depression.

Chinatown After September 11th is an attempt to document and quantify the severity of the economic impact on the community. We hope to provide a deeper understanding of the economic distress in Chinatown, beyond impression and anecdotes. More importantly, we hope to offer a sound basis for public policy discussions and community economic planning concerning the redevelopment of Chinatown and of Lower Manhattan.

This report is the product of wonderful cooperation and spirited teamwork. We benefited greatly from the wisdom and expertise of members of the collaborating organizations, the Academic Advisory Committee, and the Community Advisory Committee. We are immensely grateful for the tremendous level of collegiality and assistance from many individuals and organizations. We also would like to thank our funders, whose support was critical. Last but not least, this report would not have been possible without the extraordinary commitment of the research team. Their dedication to complete the study within three months was truly above and beyond the call of duty.

Chinatown After September 11th represents the beginning of a new rebuilding effort for our community and for our city - an endeavor that we hope will enhance and extend the concerted revitalization work already under way.

Cao K. O
Executive Director
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EXECUTIVE SUMMARY

OVERVIEW

The aftermath of the September 11th attack on New York City devastated the economy of Chinatown, a community less than 10 blocks from Ground Zero. Traffic restrictions, telephone and electricity outages, and downturns in the garment, retail, restaurant, and tourism industries — all results of the terrorist assault — pushed Chinatown's already-fragile economy to the point of crisis.

Among the hardest hit New York communities outside the immediate vicinity of the World Trade Center, Chinatown suffered alarming business and job losses that continue to impede its recovery.

Chinatown is only now beginning to recoup its losses. Full revitalization of this community, an essential ingredient in the resurgence of New York as a whole, will require substantial, concerted private and public efforts that are directed at addressing a range of remaining long-term issues.

CONTEXT

Home to 56,000 Asian residents and nearly 4,000 businesses that are Chinese-owned and -operated, Chinatown is a lively immigrant neighborhood and a vital economic force within New York City. Supported by a vast transportation network that connects it to the larger city, Chinatown contributes to the city's economy in a number of ways. The community is:

- **An active commercial hub.**
A total of 3,855 businesses are Chinese-owned and -operated in Chinatown; this number includes 1,423 retail stores and 241 wholesale outlets. In addition, 35 bank branches operate in Chinatown, with an aggregated deposit level exceeding \$5.44 billion.
- **An apparel manufacturing center.**
There are 246 garment factories in Chinatown, representing one fifth of all garment factories in Manhattan. Employing nearly 14,000 garment workers, this sector represents the largest industry in Chinatown.
- **A major New York City tourist attraction.**
Chinatown's dining and shopping establishments are the primary draw for over 2,000 visitors daily. More than 250 restaurants and 500 specialty stores (jewelry, gift, and apparel shops) are located in the neighborhood.
- **A vibrant immigrant enclave with close links to other Chinese communities.**
Most of the neighborhood's workers live in other boroughs and commute to work in Chinatown. In addition, residents from the other boroughs, as well as from the rest of the tri-state area and Atlantic region, are regularly drawn to Chinatown by family ties, shopping and dining, and community events.

FINDINGS

Among the major findings of this first-ever neighborhood-level economic impact assessment of September 11th are the following:

- **Chinatown's infrastructure was severely affected.**
 - From September 11th to 13th, a “frozen zone” prohibiting vehicular and nonresidential pedestrian traffic was enforced upon all areas south of 14th Street. From September 14th to 18th, the northern boundary for the “frozen zone” moved south to Canal Street.
 - From September 11th to 13th, the Canal Street subway station, which services eight subway lines (6, N, R, Q, J, M, Z, and W) and has an average weekday ridership of 49,016, was closed. The N and R lines resumed service six weeks later.
 - For nearly two months, telephone service was disrupted in the general area south of East Broadway.
 - Nearly 1,000 public parking spaces were eliminated in Chinatown due to street closures and increased police presence.
- **Chinatown businesses suffered significant revenue losses.**
The garment, restaurant, retail, and tourism industries were the hardest hit sectors of the economy as a direct result of September 11th.

In the first two weeks after September 11th,

- Businesses in the garment, restaurant, retail, and tourism industries suffered revenue declines ranging from 60% to 100%.

In the three months after September 11th,

- Garment factories continued to suffer revenue losses, with the shutdown of more than 40 garment factories.
- The majority of restaurants reported that business had declined by 30% to 70%.
- The retail industry experienced a 55% drop in monthly revenues.
- Jewelry sales decreased by 50%.

In the first three months of 2002,

- Restaurants anticipate a decline in revenue for the first quarter of 2002 as compared to the same time period in 2001.
- Garment factories expect a drop in business for the first quarter of 2002 as compared to the same time period in 2001.
- Major travel agencies are operating at 20% to 60% of normal business levels.

- **Chinatown workers experienced an unprecedented level of unemployment and underemployment.**

Based on the Federation's estimates,

- There are 33,658 workers in Chinatown. Out of this total, 24,500 workers were temporarily dislocated in the two weeks following September 11th; 13,000 of these workers represented the garment industry, and 2,000 represented the restaurant industry.
- 7,685 people, or 23% of the worker population in Chinatown, were laid-off in the three months after September 11th.
- Total wage losses are estimated at \$114 million.

Based on the data provided by Safe Horizon, a major relief agency that provided temporary cash assistance to affected workers south of Canal Street,

- Garment workers suffered a 46% reduction in their average weekly wages after September 11th.
- Restaurant workers experienced a 61% decline in their average weekly wages after September 11th.
- Jewelry store workers experienced an 80% decrease in their average weekly wages after September 11th.

In two industry-specific surveys conducted by the Federation with

- 1) Union of Needletrades, Industrial, and Textile Employees (UNITE) and
- 2) the Chinese American Restaurant Association,

- Over 70% of all garment workers and 35% of all restaurant workers were still working reduced hours five months after September 11.

- **These financial setbacks have had a particularly weighty impact on Chinatown's businesses, workers, and residents, who were especially hard-hit as a result of the following community-specific factors:**

- Most Chinatown businesses operate on thin profit margins, which increase the effect of even short-term losses.
- The majority of Chinatown's businesses are cash-based, making it difficult for owners to secure affordably priced loans.
- Most Chinatown workers have relatively low skill and education levels and face language barriers, which limit their employability and wage potential even in good times.

- Chinatown employees typically support large, extended families, thus amplifying the effects of individual job and wage losses.
- Many Chinatown residents pay a higher-than-average percentage of household income on housing, thus increasing their dependence on employment.
- **Initial aid had a limited impact on Chinatown.**
 - Despite extensive outreach, only 237 Chinatown businesses received Small Business Administration loans totaling \$14 million.
 - Short-term assistance from various sources, generally in the form of cash grants, helped many individuals and businesses in Chinatown make ends meet temporarily. However, long-term needs remain.

CONCLUDING REMARKS

When Chinatown hurts, New York City suffers.

Chinatown is an integral part of the larger New York City economy; the blows to its business community have reverberated throughout the city.

- Chinatown is a vital commercial hub, an apparel manufacturing center, a major tourist attraction, and an immigrant enclave that is linked inextricably to the rest of the city.
- Ripple effects have hit the apparel, retail, and tourism sectors particularly hard, striking those areas that underpin Chinatown's economy. The future health of the garment industry, which was already in decline before September 11th, is uncertain.
- Over half of Chinatown's workers live in New York's other boroughs, especially in Queens and Brooklyn, thus extending the impact of job and wage losses into these areas.

NEXT STEPS

Based on the findings of this study, the Asian American Federation offers the following recommendations:

- The Lower Manhattan Development Corporation should include Chinatown in its planning and development efforts.
- Chinatown as an economically impacted community should be defined by geographic boundaries that are consistent with the residential and commercial patterns of the community.
- State and city agencies should establish a targeted business assistance program that can respond effectively to the needs of businesses in Chinatown. Such a program could be piloted in partnership with both private funders and appropriate community organizations.
- Resources are needed to increase the availability of classes that offer English as a Second Language as well as job training programs targeting dislocated workers who are handicapped by language proficiencies and low job skill levels.
- Long-term rebuilding of Chinatown also requires comprehensive planning and investment for community economic and workforce development.
- A special task force should be convened to examine those long-term development issues, to identify both common ground and possibly conflicting priorities among the various interests, to cultivate community consensus on development needs, to propose recommendations to the Mayor and the Governor, and to explore the feasibility of public-private partnerships for the planning of Chinatown as a special economic development zone.

INTRODUCTION

The economic impact of September 11th continues to unfold in communities across New York City. In the aftermath of the tragedy, Chinatown in particular, suffered severe economic consequences due to its proximity to Ground Zero. An active commercial and industrial center consisting of almost 34,000 workers and 3,855 businesses that are Chinese-owned and operated,¹ Chinatown occupies an important, though often overlooked, position within the larger New York City economy. While the Fiscal Policy Institute, the New York City Partnership and Chamber of Commerce, and the City's Comptroller's Office have each issued reports assessing the economic consequences of September 11th on the city overall, a more focused inquiry into the effects at the neighborhood level has not yet been conducted.

In this context, the Asian American Federation of New York, a public policy leadership organization of 36 health and human services agencies serving the Asian American community, launched a comprehensive study of the economic impact of September 11th on Chinatown in mid-December 2001. Working under the direction of an advisory committee consisting of economists and researchers from the Center for Urban Research of the Graduate School of the City University of New York; the Federal Reserve Bank of New York; the Fiscal Policy Institute; the Ralph and Goldy Lewis Center for Regional Policy Studies at the University of California, Los Angeles; the New York City Partnership and Chamber of Commerce; and the Taub Urban Research Center of New York University; the research team examined the economic effects of September 11th on Chinatown. This report serves to: 1) document the tragedy's effects on Chinatown's businesses and workforce, including estimates of job losses, underemployment, and wage losses; and 2) inform future public policy making in the planning, recovery, and revitalization of Chinatown's economy.

The area of concern, defined as the region within the Manhattan ZIP codes 10002, 10012, 10013, and 10038, has a high concentration of Chinese workers and businesses that are Chinese-owned and -operated. More than just a geographic location, the idea of Chinatown as a community of Chinese businesses and residents was emphasized in the delineation of its physical boundaries. A total of 55,864 Asians² reside within this area, with 54% living south of Canal Street, where the "frozen zone" was imposed for more than a week following September 11th. A demographic analysis revealed a residential population consisting largely of Chinese immigrants with limited English skills and low educational attainment (see Appendix A).

Chinatown's economic downturn is significant not only in terms of its ramifications for community members, but also as it affects the larger city economy. Chinatown's importance to New York City's economy is evidenced by its four key economic roles: (1) as an active commercial hub, (2) as an apparel manufacturing center, (3) as a major New York City tourist attraction, and (4) as an immigrant enclave with ties to other Chinese communities (see Appendix A).

¹ Based on a door-to-door survey of Chinatown's businesses and an examination of the Chinese Business Telephone Directory.

² Data Source: Census 2000 Redistricting Data (Public Law 94-171) Summary File. Asian alone or in combination with one or more other race categories, and with one or more Asian groups; People who reported entirely or partially as Asian. The Census 2000 data has not been statistically adjusted to compensate for any undercount.

Supporting these links is a vast transportation network that connects this vital economic center to the larger city and to other areas where its workers and patrons live.

- **An active commercial hub.** Chinatown is a place where Chinese residents and nonresidents alike conduct their daily personal and business affairs. Less expensive retail goods and an abundance of professional and personal services that are linguistically accessible, culturally familiar, and conveniently located within close proximity to each other account for Chinatown's regional popularity.

Within the relatively small area that Chinatown covers, there are 3,855 businesses that are Chinese-owned and -operated. Of these, the retail trade (38% of all businesses); manufacturing (10%); accommodation and food services (7%); health care and social assistance (8%); professional, scientific, and technical services (7%); and wholesale trade (6%) constitute the largest sectors (see Appendix A).

In addition, there are 35 bank branches in Chinatown with an aggregated deposit level exceeding \$5.44 billion.³

- **An apparel manufacturing center.** Apparel manufacturing is one segment of the fashion industry that has helped to build New York City's reputation as a world fashion capital. Considered to be the backbone of the city's industrial base, the apparel business is the largest employer in New York City's manufacturing and wholesale sectors.⁴ One-fifth of Manhattan's garment factories are based in Chinatown.
- **A major New York City tourist attraction.** Chinatown's dining and shopping establishments are the primary draw for visitors, many of whom come from Europe, Asia, and Canada. In addition, an established system of tour businesses and commuter vans frequently transport thousands of visitors from the Atlantic region.
- **A vibrant immigrant enclave with links to other Chinese communities.** Chinatown maintains close ties to an extended Chinese American community beyond Manhattan. More than half of the neighborhood's workers live in other boroughs and commute to their jobs in Chinatown each day. In addition, residents from other boroughs and the rest of the tri-state area are regularly drawn to Chinatown by family ties, shopping and dining, and community events.

To assess the economic impact of September 11th on Chinatown, this study utilizes government, private, and community-sponsored business surveys; business loan files; aggregated and individual-level data from relief agencies; a door-to-door survey of Chinatown's businesses; the Chinese language business directory; interviews with Chinatown's major trade, labor, and industry associations; and an analysis of Chinese language newspaper coverage (see Appendix B). Using these data sources, the research team defined the study area, developed baseline data of Chinatown's businesses, synthesized aggregated findings, analyzed available individual-level data, and developed estimates on 1) employment levels in Chinatown (see Appendix C), 2) immediate wage losses, and 3) unemployment and underemployment among Chinatown workers (see Appendix D).

³ Figure includes only FDIC (Federal Deposit Insurance Corporation) insured financial institutions. Source: <http://www3.fdic.gov/sod>.

⁴ New York City Partnership, *Working Together to Accelerate New York's Recovery*, (November 15, 2001), p. 61.

Specific challenges that arose in conducting this study included the short timeframe of three months allotted to this project, the inaccessibility of data from some public and private sources, and the difficulty in obtaining data within the geographic boundary given the constraints imposed by the study population criteria for Chinatown. As such, the research team provides estimates, rather than exact figures, on employment levels and on job and wage losses for the entire Chinatown community. These estimates are based on actual data collected from available sources.

The report is structured as follows:

- The first chapter assesses the consequences of September 11th that affected Chinatown's community infrastructure, such as zone and street closings, the blockage of key entry points into the city, disruptions in subway and other transportation services, and the severing of basic telephone and power lines.
- The second chapter examines the impact of September 11th on businesses in Chinatown. Using various community-wide and industry-specific surveys and impacted business data from government and community sources, this report presents an in-depth analysis of immediate (i.e., within the first two weeks following September 11th) and short-term effects (i.e., up to six months after September 25th).
- The third chapter utilizes data from various relief agencies and government and community organizations to study the profile of affected workers in Chinatown. Based on available quantitative and qualitative evidence, the study then develops estimates of immediate wage losses and unemployment, and it documents the multiplier effect of these losses on Chinatown's economy.
- The fourth chapter presents short-term public and private financial relief and recovery assistance efforts within Chinatown in order to demonstrate the economic challenges faced by businesses and workers.
- The fifth chapter offers a set of public policy recommendations, appealing for a public policy leadership to garner private and public resources that address the challenges of unemployment and underemployment resulting from the tragedy.

Chapter One: Chinatown as a “Frozen” Community

Major Findings

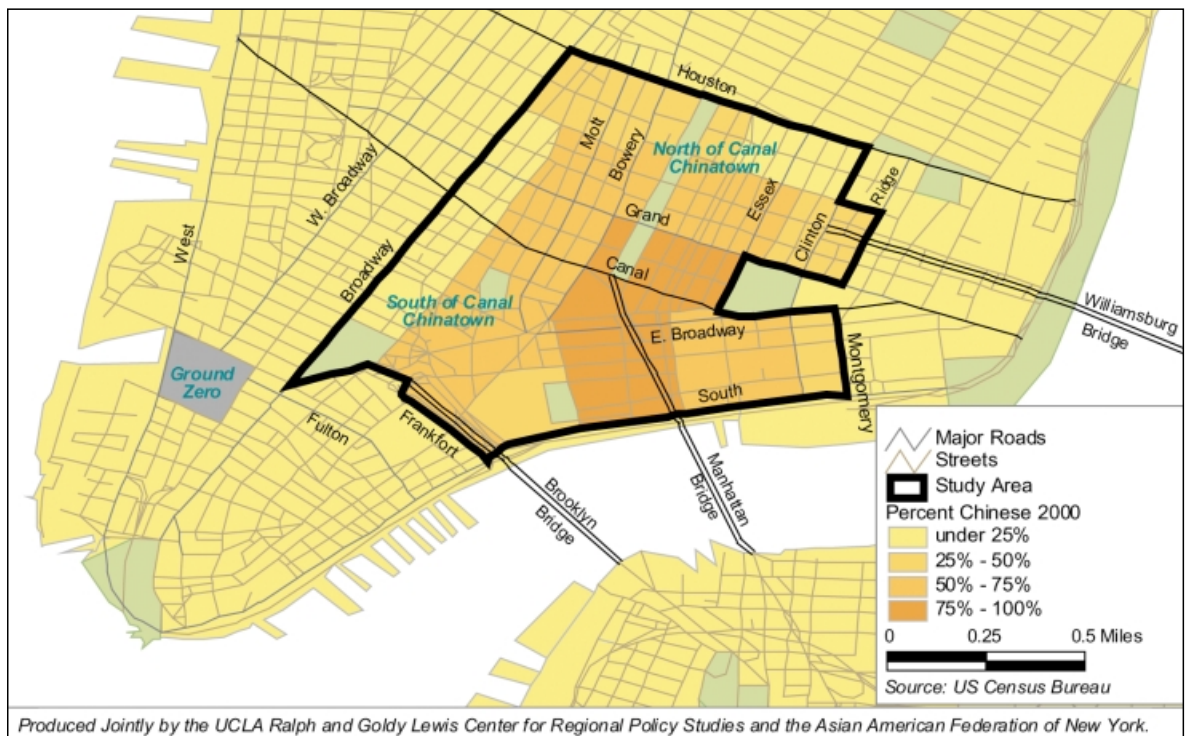
- From September 11th to 13th, vehicular and non-residential pedestrian traffic was prohibited within all areas south of 14th Street.
- From September 14th to 18th, the northern boundary for the prohibited zone moved south to Canal Street, barring all vehicular and non-residential pedestrian traffic south of this street.
- From September 11th to 13th, the (Chinatown) Canal Street subway station, which services eight subway lines (6, N, R, Q, J, M, Z and W) and has an average weekday ridership of 49,016, was closed. The N and R lines resumed service six weeks later.
- For nearly two months, telephone service was disrupted in the general area south of East Broadway.
- Certain sections of Bowery, Henry and Madison streets, all of which are adjacent to the New York City Police Department (NYPD) Headquarters, were closed to vehicular traffic until January 2002. Other streets in the vicinity of government offices have been repeatedly closed on a temporary basis in the months following September 11th.
- Nearly 1,000 public parking spaces were eliminated in Chinatown due to street closings and increased police presence.

Following the attacks on the World Trade Center, Chinatown was paralyzed by major zone and street closures, telephone service disruptions, electricity outages, and subway station closures. Chinatown's physical inaccessibility severely impeded businesses and restricted patrons, business owners and employees alike from entering the area. Within the neighborhood, street closures entirely prevented or partially interfered with commercial pickups and deliveries. These restrictions, as well as subway station closures in the neighborhood, discouraged tourists and non-residents from visiting the area and inconvenienced workers who reside elsewhere but commute to work in Chinatown. Disruptions in phone service and power outages in the neighborhood further diminished business capacity and operations. This chapter documents the extent to which Chinatown's infrastructure was affected by the September 11th attack, as well as specific consequences for the business community.

Chinatown Study Area

Figure 1.1 depicts the study area, with two broad area classifications, "North of Canal" and "South of Canal." Chinatown's major thoroughfare, Canal Street, served as the northern boundary for the "frozen zone," where all vehicular and pedestrian traffic was prohibited from September 14th to 18th. The study area's boundaries are Frankfort Street (east of Centre Street) and Chambers Street (east of Broadway) on the south; Broadway on the west; Houston on the north; and Montgomery Street (south of East Broadway), Clinton Street (south of Houston Street), Ridge Street (south of Rivington Street), and Essex Street (south of Grand Street) on the east.

Figure 1.1: Chinatown Study Area



Zone and Street Closures

From September 11th to 13th, a “frozen zone,” prohibiting all vehicular and nonresidential pedestrian traffic was enforced upon all areas south of 14th Street. This is depicted in Figure 1.2 as the “Prohibited Zone.”

Chinatown is entirely encompassed within the boundaries of the first established “frozen zone.” Nearly all of the businesses were thus shut down for at least two days as access was barred to non-resident owners, employees, and patrons.⁵ Between September 11th and 13th, pickup and delivery of commercial goods, such as piece and finished garments, newspapers, and food products, were halted. In order to relieve the resulting food shortages, the NYPD 5th Precinct permitted delivery of three truckloads of food to the area’s C-Town supermarket during this time.⁶

Also illustrated in Figure 1.2, from September 14th to 18th, the northern boundary for the “frozen zone” moved to Canal Street, prohibiting all vehicular and non-residential pedestrian traffic south of this street. According to a survey of Chinatown’s businesses by the Manhattan Borough President’s Office,⁷ 78% of respondents attributed business losses to a decrease in pedestrian traffic caused by the imposition of the prohibited zone.

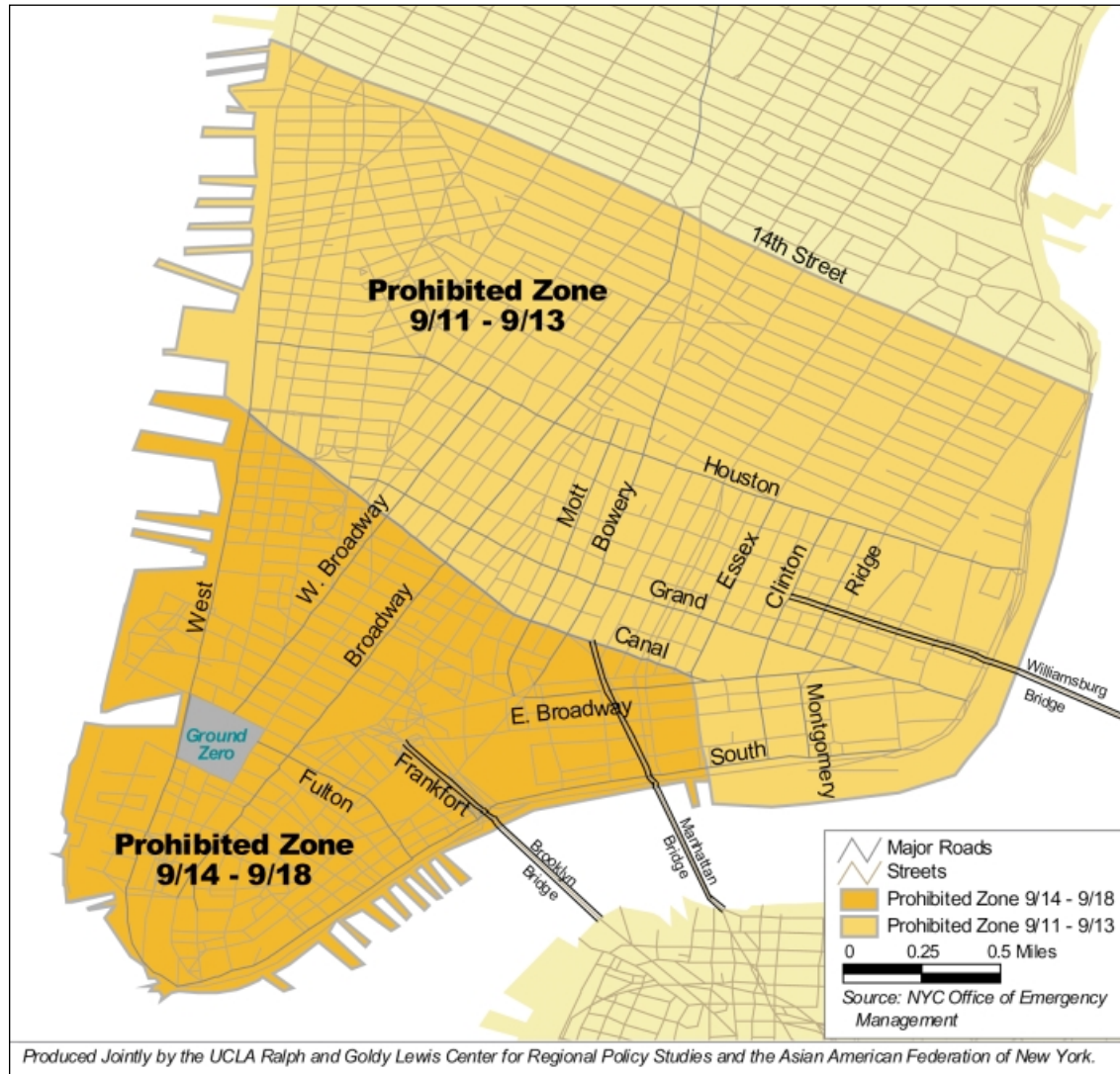
Certain sections of some streets (Bowery, Henry and Madison streets) that are adjacent to the NYPD Headquarters were not open to vehicular traffic until January 2002. In the three months after September 11th, due to their proximity to many of the key federal, state and city offices, various streets have been completely or partially shut down repeatedly by authorities, particularly when the federal government issued terror warnings. During this period, Chinatown was in a state of siege; barricades were erected, and the NYPD, New York State troopers, and National Guard guided pedestrian and vehicular traffic south of Canal Street.

⁵ “South of 14th Street is still blocked,” Singtao Daily (September 13, 2001).

⁶ “Traffic restrictions in Chinatown affected residents.” World Journal (September 14, 2001).

⁷ See appendix for detailed explanation of the survey.

Figure 1.2: “Frozen”/Prohibited Zones: September 11th to 13th, September 14th to 18th



The movement of the prohibited zone boundary from 14th Street to Canal Street, on September 14th, did not provide sufficient relief to mitigate the negative economic effects on Chinatown businesses in the newly opened area. For example, only 10% of the businesses on major streets, such as Mott, Elizabeth, Bayard and Pell, reopened on September 14th. The sections of those streets south of Canal Street remained closed to vehicular traffic, and entry was permitted only to residents and business owners with proof of identification at that time.⁸

The area south of Canal Street did not reopen until September 19th, eight days after September 11th. While lifting this restriction signaled a return to “business as usual,” the lengthy “frozen” period left most affected businesses reeling in the wake of the attacks. These businesses faced income downturns of 50%, on average.⁹

⁸ “Chinatown reopened gradually, businesses begin to strive,” World Journal (September 15, 2001).

⁹ Office of the Manhattan Borough President’s survey of Chinatown businesses.

Checkpoints

During the initial period following September 11th, checkpoints were established at the following major entrances to Manhattan from the other boroughs and New Jersey: the Queens Midtown Tunnel; the Brooklyn, Manhattan, Williamsburg and Queensboro bridges; and the New Jersey entrance to the Lincoln Tunnel. From 6 a.m. to 6 p.m. on weekdays, only commercial and residential vehicles were allowed through the checkpoints. After 6 p.m., the checkpoints were open to all traffic except for trucks.

After zone restrictions were lifted, many checkpoints were created because streets in Chinatown were located close to City Hall, courthouses, and NYPD Headquarters. Within Chinatown, checkpoints were established on major streets, such as Bowery, Broadway and Lafayette Street.

Chinatown Area Bridge and Tunnel Closures

The Brooklyn Battery Tunnel and the three major bridges connecting Manhattan and Brooklyn — the Brooklyn, Manhattan and Williamsburg bridges — are all located in the vicinity of Chinatown (see Figure 1.1). These river crossings were closed from September 11th to 13th, a measure that severely limited traffic between Manhattan's Chinatown and Chinese American communities in Brooklyn and Queens. The Holland Tunnel, linking lower Manhattan and New Jersey, was also closed during this period. Although the Holland Tunnel is not located in the immediate vicinity of Chinatown, its closure discouraged visitors to the area from New Jersey, Pennsylvania, and points south.

Bridge and tunnel closures prevented the approximately 3,200 daily commuter van passengers and the large number of bus riders between Manhattan and the other boroughs from utilizing their usual mode of transportation. Under normal circumstances, the subway would have been a reasonable, alternative form of transportation, but due to the closure of Chinatown subway stations during this time, access into Chinatown was severely limited.

Subway Station Closures

In the first three days after September 11th, the (Chinatown) Canal Street subway station, which has eight subway lines (6, N, R, Q, J, M, Z, and W) and an average weekday ridership of 49,016, was shut down. While the 6, Q, M, and W subway lines resumed their services a week after September 11th, the N and R lines did not resume service in the Canal Street station until October 28th, more than six weeks later. This closure restricted access into and out of Chinatown.

Commuter Van Service Disruptions

During this time, residents of the other boroughs could not travel to Chinatown by privately-run commuter vans, which under normal circumstances would have been a low-cost transportation alternative.¹⁰ While the bridges reopened three days after September 11th, these vans, which transport an estimated 3,276 passengers¹¹ daily between Manhattan's Chinatown and Chinese communities in Queens (Flushing and Elmhurst) and Brooklyn (8th Avenue) had to suspend their services for a full two weeks due to checkpoints and street closures.

¹⁰ Typically, the van fare is \$2 per passenger.

¹¹ This figure is based on the Federation's field surveys with major commuter van companies.

Telephone Service Disruptions

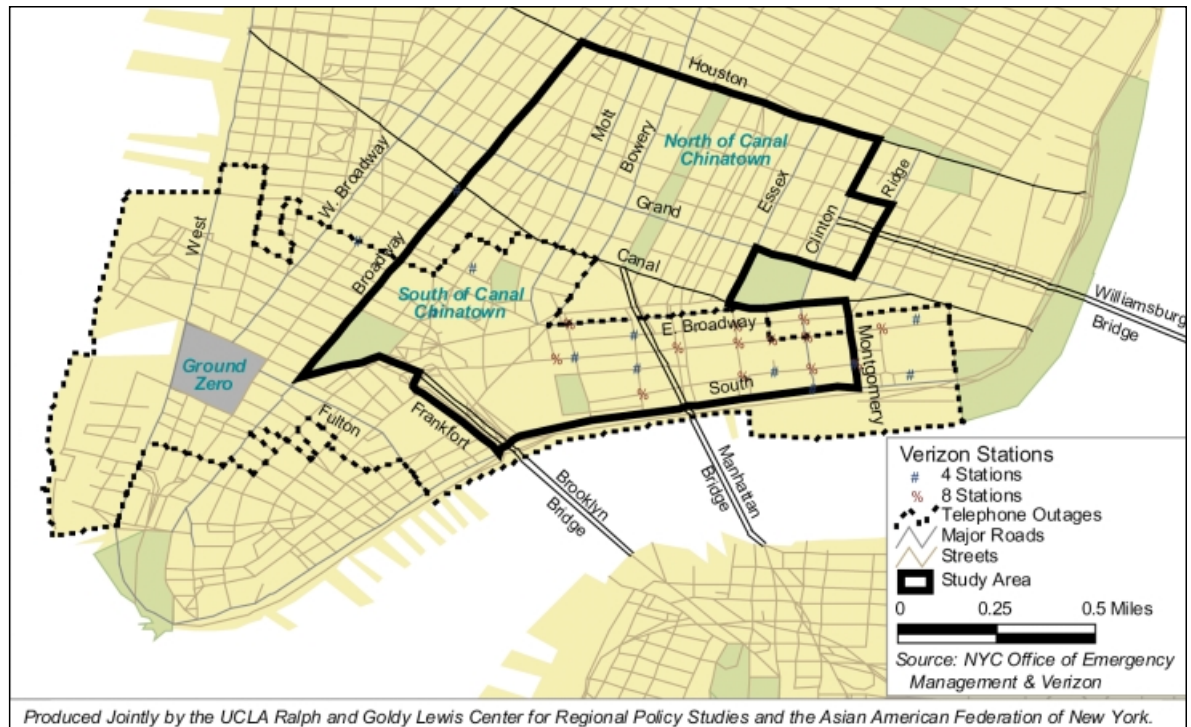
Many Chinatown businesses, particularly restaurants and travel agencies, rely heavily on phone transactions for a substantial portion of their business. As a result of the September 11th attack, telephone service in the general area south of East Broadway was disrupted for nearly two months, further crippling establishments that had already suffered huge losses due to their location in the prohibited vehicular and pedestrian zone (see Figure 1.3). This lack of phone service severely affected the ability of businesses to conduct daily operations, such as processing garment orders, restaurant take-out orders and dinner reservations, medical prescriptions, credit card transactions, and lottery ticket sales. According to data provided by the New York City Office of Emergency Management, as of October 15th, telephone service was still not completely restored in sections of major Chinatown streets, such as East Broadway, Bowery, Mott, Elizabeth, Centre, and Henry streets.

In response to the service disruptions, Verizon implemented a number of measures. For a three-month period beginning September 21st, Verizon set up wireless pay phone trailers at 27 locations around Chinatown (see Figure 1.3). The locations of these stations provide a general indication of where service was impaired. Also, Verizon initiated a special cell phone plan¹² for the Chinatown and Lower East Side communities. A total of 389 businesses and 1,465 residents took advantage of this offer.¹³

¹² For \$35/month, subscribers received 200 free minutes and a \$100 credit rebate, with no required contract. 300 free pre-paid phones were also available for three months beginning in mid-October for housing project residents in Chinatown.

¹³ This plan was available at three different locations in the area: at 62 Mott Street (from September 22nd to 26th and from October 3rd to 12th) at 15 St. James Place (September 27th to 30th), and at Gouverneur House (October 1st to 2nd).

Figure 1.3: Telephone Outages (as of 10/04/01) and Verizon Stations



Electricity Outages

Some streets in Chinatown also experienced electricity service disruption after September 11th.¹⁴ According to a special analysis conducted by Con Edison for the purpose of this study, the energy consumption level in Chinatown from September to October 2001 was slightly (0.04%) lower than during the same period in 2000. Meanwhile, energy usage in Manhattan and New York City increased 0.15% over this same period.¹⁵ Among the small businesses assisted by Asian Americans for Equality (AAFE) and the Renaissance Economic Development Corporation, a 24% decline in utility costs after September 11th was reported. The reduction might be explained both by the fact that nearly all of the businesses were forced to close in the three days following September 11th and the fact that a vast majority located south of Canal Street remained closed for at least 10 days.

As with other types of services, such fundamental resource disruptions significantly hindered Chinatown businesses' ability to conduct operations, exacerbating tremendous revenue losses suffered by this population. In a similar vein, media access diminished in the community. For example, Chung Wah Commercial Broadcasting (CWCB), a popular Cantonese-speaking radio station in the Chinatown area, terminated its service for the first two weeks after September 11th. Without access to news coverage, the largely non-English speaking residents and businesses were even further isolated.

¹⁴ "No phone, electricity, and water," World Journal (September 9, 2001).

¹⁵ These figures are based on active cases and do not reflect terminated accounts.

Parking Space Restrictions

Public access was prohibited to the One Police Plaza garage, depriving Chinatown of 400 \$8-a-day parking spots. With street closings and increased police presence, another 500 on-street parking spaces have been eliminated, significantly limiting parking options for commercial vans and delivery vehicles. The lack of parking space deters the most frequent, non-resident visitors (i.e., families who have moved out of Chinatown but make weekend trips to shop, eat, and see family members) from Chinatown.

Conclusion

The September 11th attack inflicted onerous damage on Chinatown's community infrastructure; public access to the entire neighborhood was restricted, its major transportation hub was shut down, key entryways to surrounding communities were blocked, and basic phone and power lines were severed. The city's laudable recovery efforts have resolved many of the immediate effects that were documented in the study, especially those problems that led to the physical isolation Chinatown experienced after September 11th. Some persistent long-term effects, such as increased traffic congestion and the shortage of parking spaces in the Chinatown area, are unfortunate products of the recovery process and of increased security measures taken throughout the entire city. In this still-fragile community, however, quality-of-life issues must still be considered.

It is clear that Chinatown's physical isolation translates into heavy economic losses incurred by the community: 1) The prohibited zone prevented tourists and non-Chinatown or New York City metropolitan area residents from patronizing businesses; 2) Routine business operations were impeded by disruptions in basic phone and utility services; 3) Initial closures of streets, bridges, and tunnels, and disturbances in transportation services discouraged people from patronizing the area and made travel to and from work difficult for business owners and employees; and 4) Ongoing disruptions in street, transportation, phone and utility systems further debilitated an already-crippled business community. These obstacles had a significant effect on Chinatown's economy, a topic to be discussed further in the following chapters.

Chapter Two: The Impact of September 11th on Business

Major Findings

- The garment and restaurant industries were hardest hit as a direct result of September 11th.
- In the first two weeks after September 11th:
 - Businesses in the garment, restaurant, retail, and tourism sectors suffered revenue losses ranging from 60% to 100%.
- In the three months after September 11th:
 - Garment factories continued to suffer revenue losses, with the shutdown of more than 40 businesses.
 - The majority of restaurants reported that business had declined by 30% to 70%.
 - The retail industry experienced a 55% drop in monthly revenues.
 - Jewelry sales plummeted 50%.
- In the first three months of 2002:
 - Restaurants anticipate revenue to be lower for first quarter 2002 than in the same time period in 2001.
 - Garment manufacturers expect a marked decline in business for first quarter 2002 as compared to the same quarter in 2001.
 - Many travel agencies suffered business losses and generally have been operating at 20% to 60% of normal business levels.

Chinatown's 3,855 businesses, the lifeblood of the neighborhood economy, are typically small, operate on thin profit margins, and are especially cash-strapped during economic downturns. In the wake of September 11th, business in Chinatown came to a standstill with the initial shutdown of the entire neighborhood, closures of major streets and subway stations in the area, and disruptions in telephone and utility services. The 71 small businesses assisted by Asian Americans for Equality (AAFE) and the Renaissance Economic Development Corporation¹⁶ were closed an average of 11 days, and some businesses were suspended for as long as two months.

¹⁶ Assistance includes provision of loans, grants, and wage subsidies.

This chapter examines the extent of economic injury to businesses, emphasizing immediate and short-term repercussions on the most affected sectors: the garment, restaurant, retail, and tourism industries. This discussion will be framed within a temporal context with:

- “immediate” impacts, referring to those that occurred within two weeks of September 11th (prior to September 26th) and
- “short-term” impacts, referring to those that occurred up to six months after September 25th.

The findings discussed in this chapter are derived from: 1) four business surveys: (Manhattan Borough President’s Office survey of Chinatown businesses; the Greater Blouse, Skirts & Undergarment Association’s membership, Federation/Union of Needle Trades Industry and Textile Employees (UNITE - Local 23-25)¹⁷ survey of garment businesses, and Federation/Chinese American Restaurant Association survey of restaurants); 2) business assistance files provided by government agencies (Manhattan Borough President’s Office and U.S. Small Business Administration) and community-based agencies (AAFE and the Renaissance Economic Development Corporation); and 3) personal interviews with businesses and leaders of different Chinatown business associations.¹⁸

I. Garment Industry

The apparel industry is the largest sector in New York City’s manufacturing base. In Chinatown, a total of 246 garment factories¹⁹ employed an estimated 13,808 garment factory workers.²⁰ According to the New York State Department of Labor (NYSDOL) Apparel Industry Task Force registry, 80% of Chinatown’s garment factories are located north of Canal Street, as shown in Figure 2.1. Occupying on average 5,200 square feet, each garment factory employs an average of 50 workers.²¹ Monthly rents are approximately \$5,300, with utility costs estimated at \$1,000. In an industry with thin profit margins, garment business contractors rely on large volume orders and inexpensive labor to make a profit. Therefore, even slight decreases in product demand translate into significant business losses.

¹⁷ UNITE, with a membership of 11,808 is the largest textile union in New York City. In order to assess the impact of September 11th on garment businesses, the Federation and UNITE jointly developed a survey that was administered to 82 garment factories in January and February 2002.

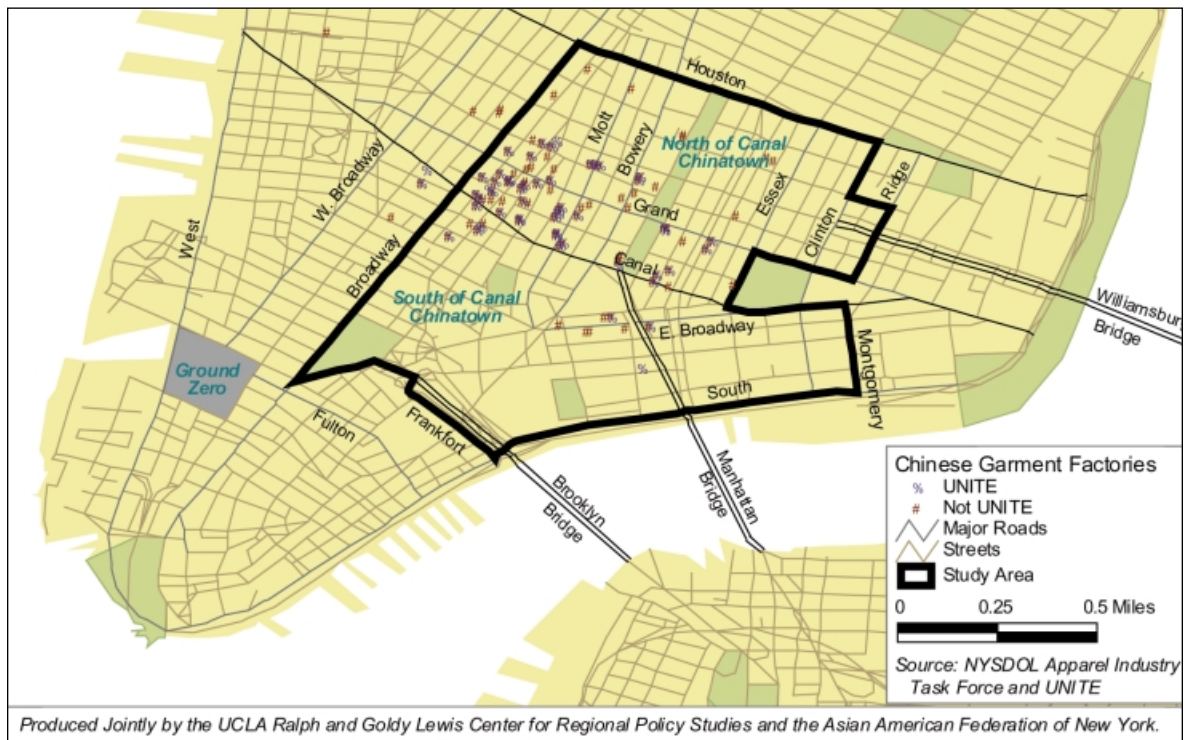
¹⁸ See Data Sources in Appendix B.

¹⁹ New York State Department of Labor’s Apparel Industry Task Force, 2002.

²⁰ Numbers are based on UNITE’s membership of 11,808 and another estimated 2,000 non-unionized workers. The non-unionized estimate is calculated using the difference between the total number of garment factories and 161 factories with union contracts, which is equal to 85 non-unionized factories. This number is then multiplied by 50, or the average number of workers per garment factory according to data from the UNITE survey, resulting in over 4000 non-unionized workers. However, the conservative 2,000 estimate was used because non-unionized garment factories typically have fewer employees than unionized garment factories.

²¹ These figures are based on a joint employer survey by the Federation and UNITE.

Figure 2.1: Chinese Garment Factories in Chinatown



September 11th dealt a severe blow to the garment industry. Garment factories below Canal Street were forced to close for at least a week as public access to the “frozen zone” was prohibited. Closed-off streets prevented supplier deliveries and the inability to transport finished products on time to retailers resulted in enormous losses for garment manufacturers. Furthermore, the drop in demand for apparel in retail outlets led retailers to cancel their orders with garment manufacturers.

Immediate Impacts

- According to the Greater Blouse, Skirts & Undergarment Association, which has a membership of 120 garment factories in Chinatown, business losses totaled an estimated \$2.5 million in the first two weeks after September 11th.
- The Metropolitan Area Apparel Association, with over 40 members in Chinatown, reported that business in the garment industry dropped 80% to 90% in the initial two weeks following September 11th. In addition, the Association reported a 5% to 10% closure rate of garment factories during this time.²²
- Respondents of the Federation/UNITE survey²³ of garment factory owners reported a decrease in production of more than 268,000 pieces of apparel, representing a 61% drop in their anticipated production level during this time.

²² Interview with Wing Ma, Director of the Metropolitan Area Apparel Association and Executive Vice President of its Board of Directors, March 13, 2002.

²³ See Appendix B for details about the Federation/UNITE survey.

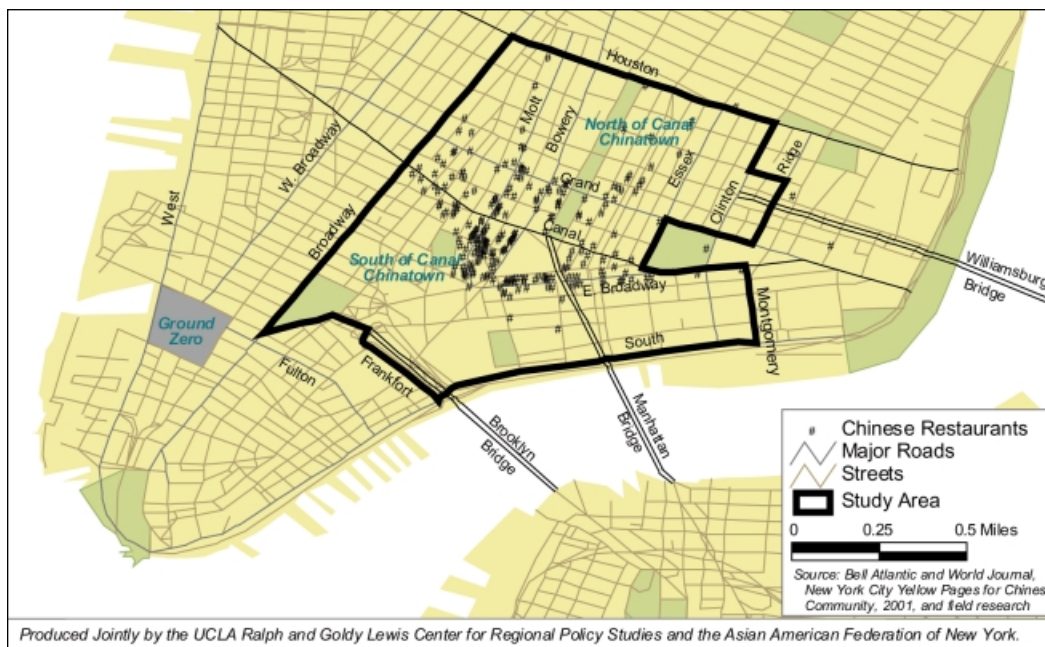
Short-term Impacts

- According to UNITE, over 40 garment factories in Chinatown were shut down in the three months after September 11th.
- The Greater Blouse, Skirts & Undergarment Association projected losses exceeding \$33 million for its members during the first six months after September 11th.
- The Sportswear Apparel Association and the Ladies' Apparel Contractors Association reported that their 80 members in Chinatown lost over \$6 million due to the general downturn of the apparel industry, exacerbated by September 11th.
- Federation/UNITE employer survey respondents reported 60% lower production levels in fourth quarter 2001, compared to the same period during the prior year.

II. Restaurant Industry

There are 284 businesses in Chinatown that provide food and accommodation services; most of these are restaurants, bakeries, cafes, and bars. As Figure 2.2 indicates, 165, or 60% of these establishments, are located south of Canal Street, in the area where public access was prohibited from September 11th to 18th. Thus, the majority of Chinatown's restaurants were closed for at least one week, resulting in substantial industry-wide losses.

Figure 2.2: Chinese Restaurants in Chinatown



The following information about immediate and short-term impacts is based on personal interviews and a survey conducted by the Federation and the Chinese American Restaurant Association.²⁴

Immediate Impacts

- Restaurants experienced a sharp decline in reservations, take-out orders, and patronage as a result of telephone service disruptions, utility outages, and street closures. Many restaurants were forced to reduce business hours, dispose of spoiled food, and lay off workers.
- Restaurants such as those on Mott Street, which serve a high volume of tourists and non-Chinatown residents, were seriously affected. Sixty-three percent of the restaurant respondents reported revenue decreases of 30% or more.²⁵
- A major Chinese restaurant, Jing Fong, was closed for four days after September 11th and reported over \$100,000 in losses. More than 100 of its employees were unable to work during the two weeks after September 11th.²⁶

Short-term Impacts

- In the first two months after September 11th, the Chinese American Restaurant Association reported a 40% drop in business among its members.
- Over 60% of the restaurants experienced business downturns of 30% to 70% after September 11th.
- All respondents to the Federation/Chinese American Restaurant Association survey reported a significant decrease in tourist business.
- Nearly 100% of the respondents anticipated that their revenues, in the first three months of 2002, would fall short of figures for the same time period of the prior year.

III. Retail Industry

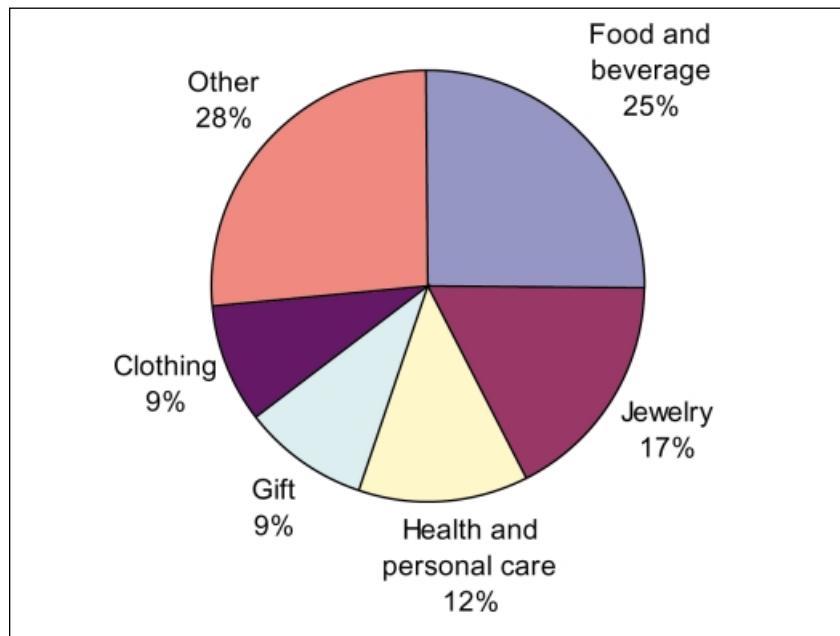
With an estimated 1,423 establishments in Chinatown, the retail industry comprises the largest category (38%) of businesses in Chinatown. The industry is largely comprised of food and beverage (361), jewelry (245), health and personal care (223), and gift stores (134). Together these sub-sectors account for over half of the retail outlets in Chinatown.

²⁴ The impact on restaurants is primarily based on a survey of 53 restaurant members of the Chinese Restaurant Association; these establishments employ nearly 1,000 workers in Chinatown.

²⁵ Federation and Chinese American Restaurant Association survey.

²⁶ "Restaurants' business deeply hurt." World Journal (September 20, 2001).

Figure 2.3: Chinatown Retail Business Types



Source: Federation door-to-door Chinatown business survey, Bell Atlantic and World Journal NYC Yellow Pages for Chinese Community, 2001

The September 11th attack altered the spending behavior of local and non-local residents, causing sales revenues for Chinatown's retailers to plummet. The extensive damage to the retail industry is evident in the high level of demand for financial assistance by its workers after September 11th. Retail businesses represented approximately 35% and 37%, respectively, of the businesses approved by U.S. Small Business Administration (SBA) and Office of the Manhattan Borough President for aid. Also, the retail sector reflected 40% of businesses assisted by Asian Americans for Equality (AAFE)²⁷ and the Renaissance Economic Development Corporation to apply for aid. Among the retailers seeking governmental assistance were furniture stores, grocery stores, meat markets, fruit and vegetable markets, clothing stores, shoe stores, jewelry stores, optical goods stores, and gift shops.

Immediate Impacts

- Revenues for jewelers plunged 70% during the first two weeks after September 11th, according to the Chinese American Jewelers Association.
- Summit Import Corporation, one of the largest food distributors to retail stores and restaurant suppliers in Chinatown, reported a loss of \$600,000 in sales volume in the first two weeks after September 11th.
- Street vendors and store owners who were unable to sell their fresh produce or pay their distributors closed down; sales for produce stores fell from between \$700 and \$800 per day to under \$100 a day.²⁸

²⁷ "The Closure of Ten Year Old Vegetable Store: A Dilemma Confronting Chinatown Business." World Journal (November 4, 2001).

²⁸ Assistance includes provision of loans, grants, and wage subsidies.

- Retail outlets, such as grocery stores and fresh fish markets, were unable to replenish their shelves due to street blockades and traffic restrictions. For example, Fulton Fish Market, a major supplier of fish to Chinatown, was temporarily closed immediately after September 11th due to its proximity to Ground Zero.

Short-term Impacts

- Monthly revenues for affected Chinatown retail businesses dropped 55% among the 71 small businesses that were assisted in receiving aid by AAFE.²⁹
- Jewelers experienced a reduction of 50% in sales volume during the three months after September 11th.³⁰
- Summit Import Corporation witnessed a decline of \$1.8 million in sales in the last three months of 2001.

IV. Tourism Industry³¹

Tourism contributes significantly to the economies of Chinatown and New York City. Chinatown is included in the travel routes of major tour bus companies like Gray Line, which operates nine double-decker buses daily, carrying approximately 75 passengers each. Group tour buses and commuter vans bring on average over 2,000 visitors to Chinatown each day. With typically higher spending power than local residents, tourists patronize Chinatown's restaurants and shops, contributing to Chinatown's economy. In fact, as part of typical tour/travel packages, tour bus companies often have special arrangements with Chinatown restaurants. In the aftermath of September 11th, heightened concerns about security and fears of traveling led to the cancellation of major tours. Tour buses were brought to a sudden halt, and services were suspended for as long as three to four months.

Chinatown has 83 travel agencies³² serving inbound and outbound customers.³³ Travel companies faced with high operating expenses, severe credit crunch, and substantial debt folded.³⁴ Based on data from the different public and private relief agencies, at least 40 travel/tour companies were affected in the immediate- and short-term after September 11th.

²⁹ According to AAFE's affected business data file, as of January 2002.

³⁰ According to AAFE's affected business data file, as of January 2002.

³¹ The information and data contained in this section draws heavily from interviews and surveys with the New York Chinatown Tourism Promotion and Attraction Association and five major travel/tour agencies with a total annual customer base of over 120,000. Many tour agencies/buses located outside New York City also bring tourists and visitors to Chinatown, but data from these sources are not available. In addition, considering that the poor financial condition of a company can impact its ability to secure credit, the business names in this section are not disclosed.

³² Bell Atlantic and World Journal NYC Yellow Pages for the Chinese Community 2001.

³³ Inbound customers are defined as visitors from outside New York City, including both foreign tourists and frequent visitors from the Atlantic region. Outbound customers are local residents who travel to other parts of the Northeast, Canada, and internationally.

³⁴ Travel agencies offering bus tours rent buses for about \$400-\$700 per day or lease buses at a cost of \$4,000 to \$7,000 per month for lease terms of four to seven years. Without the inflow of revenue or sufficient cash flow to pay insurance premiums, companies had to renegotiate terms with financial institutions or secure other lines of credit. One travel bureau serving inbound clients from Asia found itself \$2 million in debt (This business is not located in Chinatown, but before September 11th, it handled a high volume of tours to Chinatown. Because the poor financial condition of a company can hurt its ability to secure credit, several business names are not disclosed.). In other instances, companies unable to make insurance payments were required to take off their license plates.

Immediate Impacts

- Some tour bus companies experienced a 100% drop in the inbound segment of their business immediately after September 11th.
- One tour bus company whose inbound business comprised 30% of its total business temporarily closed this division after September 11th.
- Most travel agencies received no customers immediately after September 11th and experienced cancellations in every travel segment.³⁵
- Telephone and network lines were down, causing major interruptions in business operations; travel agencies located in the “prohibited zone” were forced to close for several days.
- With the lack of business and the inaccessibility of Chinatown due to street closures and parking restrictions, buses were grounded as long as four months.
- Revenue losses ran as high as 100% in the two weeks after September 11th.³⁶

Short-Term Impacts

- There was a 50% decline for some businesses; one company’s customer base shrank from 600 per week to 300.
- With a total monthly client base of 2,500, a local company that conducts tours of Chinatown reported a 50% to 70% drop in business. Sixty percent of the company’s inbound customers were from overseas.
- As of March 2002, the major travel agencies reported that business was only 20% to 60% back to normal.

Revenues for Chinatown’s travel agencies plummeted by as much as 100% following the attack, creating ripple effects within Chinatown’s overall economy. Many of the tour buses and some commuter vans bring tourists from the Atlantic region and Canada into Chinatown. These visitors eat at the local restaurants and patronize the gift shops and retail outlets. The travel industry also affects the regional economy; many of the Chinatown outbound buses have service routes to Lake Placid, N.Y., Washington D.C., Boston, Philadelphia, Atlantic City, etc.

Conclusion

Chinatown’s economy depends on the inflow and outflow of vehicular and pedestrian traffic in the neighborhood. The imposition of road restrictions, closure of public transportation stations, telephone disruptions and electricity outages threatened Chinatown’s economy.

In the wake of September 11th, businesses across all sectors suffered revenue losses, with the garment and restaurant industries hit hardest. Many cash-strapped businesses were forced to close either temporarily or permanently. Due to the interconnectedness of the different

³⁵ Based on interviews with five major travel agencies, March 8-25, 2002.

³⁶ Interviews with five major travel agencies, March 8-25, 2002, and Ignace Cheng, President of the New York Chinatown Tourism Promotion and Attraction Association, March 5, 2002.

industries in Chinatown, the September 11th attack initiated a ripple effect on Chinatown's economy. Moreover, Chinatown's links to other areas spread these effects throughout the larger regional economy.

Following is a presentation of the outlooks for Chinatown's industries which suffered economic injury:

- September 11th further damaged an already-weakened garment industry. Garment factory revenue losses varied from 60% to 100%, with the closure of over 40 businesses. Compounding these challenges for garment manufacturers are expiring leases; an estimated 86% of the leases are expected to expire by 2004.³⁷ While the majority of factory owners noted that an increase in orders is necessary for business survival, others indicated that low-interest loans and real estate assistance would also help.³⁸
- Restaurant revenue losses ranged from 60% to 100% during the two weeks following September 11th. With a significant customer base of Chinese Americans who live outside of Chinatown and drive into the neighborhood on weekends, the resurgence of this industry will depend on street accessibility and the availability of parking.
- Retail sales revenues plunged after September 11th. Jewelry and gift shop owners saw their business sales drop by 70%³⁹ due to a decrease in the spending power of local residents and security concerns. The ability of this sector to rebound will depend to a large extent on increased consumer confidence, recovery of other businesses, and a revival of tourism. In the interim, some retail establishments cited low-interest loans, business grants, and marketing tools as types of assistance that could help their businesses gradually recover.
- Tourism, which helps support the retail and restaurant industries, also suffered huge losses, declining as much as 100%. September 11th revealed the vulnerability of Chinatown travel companies that serve a solely Chinese clientele. It was noted that marketing assistance and more English training for workers would help to expand the travel companies' customer base.⁴⁰ To market Chinatown, the New York Chinatown Promotion and Tourism Association has launched an "I Love New York Chinatown" campaign.

September 11th resulted in sharp revenue losses for Chinatown's businesses. The imposition of road restrictions limited the delivery of products and goods to garment factories, restaurants, and retail stores. It also deterred visitors from entering Chinatown. The future of some of these industries, especially the garment sector, remains uncertain. The recovery of many of Chinatown's businesses will depend in large part on increasing the earning power of Chinatown workers who reside both inside Chinatown and in the other boroughs. Recognizing that small businesses will continue to play an integral role in Chinatown's local and regional economies, steps need to be taken to help them rebound.

³⁷ Federation/UNITE survey.

³⁸ Federation/UNITE survey; real estate assistance can include help with space relocations after leases expire as well as zoning to preserve manufacturing space.

³⁹ "Few Tourists Visiting Chinatown, Businesses Suffered," World Journal (October 9, 2001).

⁴⁰ Interview with a major travel agency.

Chapter Three:

The Impact of September 11th on Workers

Major Findings

- Based on the Federation's estimation:
 - 24,500 workers were temporarily dislocated in the two weeks following September 11th, with 13,000 of these workers representing the garment industry and 2,000 from the restaurant industry.
 - The baseline employment level in Chinatown is 33,658. Out of this figure, 7,685 people, or 23% of the worker population in Chinatown, were laid-off in the three months after September 11th.
 - Total wage losses are estimated at \$114 million.
- Based on individual-level data provided by Safe Horizon, after September 11th:
 - Garment workers witnessed a 46% decrease in their average weekly wages.
 - Restaurant workers experienced on average a 61% reduction in their average weekly wages.
 - Jewelry store workers experienced an 80% decline in their average weekly wages.
- In two industry-specific surveys conducted by the Federation with UNITE and the Chinese American Restaurant Association five months after September 11th:
 - Over 70% of garment workers were still working reduced hours.
 - 35% of restaurant workers were still working reduced hours.

September 11th took a heavy toll on Chinatown's workers. The dramatic decline in business resulted in massive layoffs and generally diminished the spending power of workers. Decreased consumer activity perpetuated the cyclic economic downturn, threatening the health of the community as a whole.

This chapter assesses the extent of job loss, underemployment, and wage loss in the aftermath of September 11th. First, relying on employment and wage data for affected employees who worked south of Canal Street and using a factor estimation model,⁴¹ this chapter presents estimates of total wage losses and unemployment levels in Chinatown. Then, using individual-level data provided by Safe Horizon, this chapter discusses the economic impact on workers from specific industries in Chinatown.

⁴¹ See Appendix section for an explanation of estimation methodology.

Estimation Framework

Based on individual-level data provided by Safe Horizon,⁴² the research team identified two types of employment loss: immediate-term and short-term. Job loss in the immediate-term refers to those who were unable to work during the first two weeks after September 11th because the community was paralyzed. Unemployment in the short-term refers to those who were laid-off during the first three months after September 11th. Three types of wage losses were identified: 1) Lost wages of workers affected during the first two weeks; 2) Lost wages of laid-off workers; and 3) Reduced wages for current workers due to decreased working hours. The Federation's recently completed industry-specific surveys with garment factories and restaurant owners indicated that five months after September 11th, over 70% of garment workers and 35% of restaurant workers were still working reduced hours.

The data from Safe Horizon, however, captures only part of the picture. The agency provided assistance only to residents and displaced workers south of Canal Street. In reality, businesses located on the north side of Canal Street were as economically affected as those south of Canal Street.

The area north of Canal Street is significant because, according to the latest Census figures, nearly 80% of the 23,000 residents living between Canal and Delancey streets (north of Canal Street) are of Asian descent. Also, according to the New York State Department of Labor, over 80% of garment factories are located north of Canal Street. Further, according to a joint garment factory survey by the Federation and UNITE, the average size and workforce of garment factories north of Canal Street are larger than those south of Canal Street.

The estimates of employment and wage losses are derived from the conservative assumption that the levels of economic impact north and south of Canal Street are similar. By multiplying the employment and wage loss figures south of Canal Street by the ratio of businesses north of Canal Street relative to businesses south of Canal Street, the extent of employment and wage losses north of Canal Street were estimated (see Appendix D).

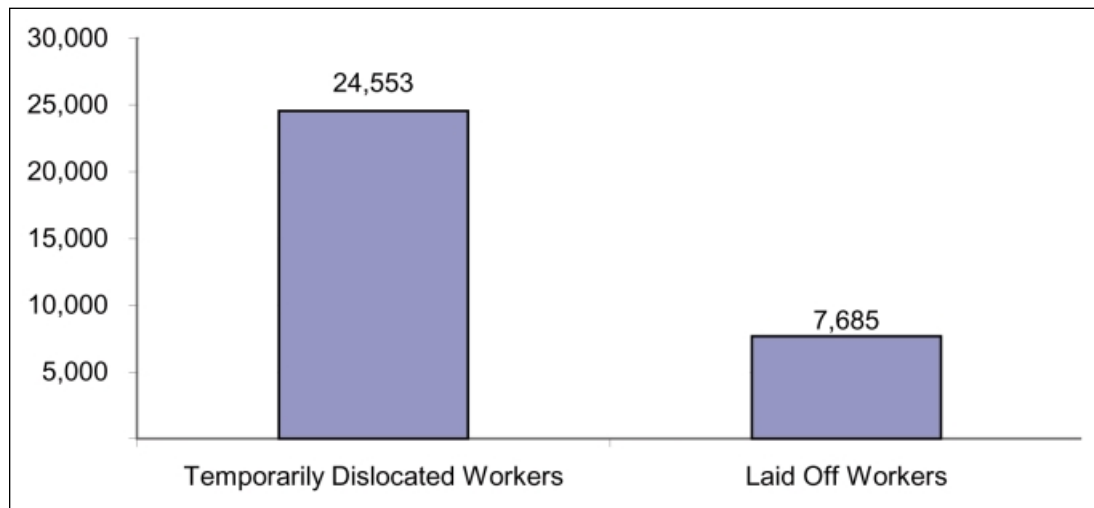
Estimated Job Losses: First Two Weeks and Three Months After September 11th

Based on the above estimation framework, over 24,500 workers across different sectors in Chinatown were temporarily dislocated in the first two weeks after September 11th. Due to the combination of a slowing local economy, declining apparel industry and, more importantly, the immediate shutdown of Chinatown, an estimated 7,685 workers in Chinatown were laid off (see Figure 3.1). These immediate and short-term job losses translated into wage reductions totaling \$114 million.⁴³

⁴² Safe Horizon is a major relief agency that provided temporary cash assistance to impacted workers in the disaster zone which had Canal Street as the northern boundary for relief to residents and dislocated workers.

⁴³ See Appendix D for an explanation of estimation methodology.

Figure 3.1: September 11th Impact on Job Dislocation in Chinatown



Source: Federation Estimation

Based on the individual-level data on Chinatown workers provided by Safe Horizon,⁴⁴ workers across the multiple sectors in Chinatown experienced substantial wage loss in the two weeks after September 11th (see Figure 3.2). To begin with, prior to September 11th, the average weekly wages of Chinatown's workforce, consisting mostly of blue-collar and service employees, were not high. On average, retail employees earned approximately \$350 in average weekly wages; restaurant workers earned \$320; and garment workers earned \$207.

⁴⁴ The Federation received a total of 5,119 records documenting pre- and post-September 11th income information for affected workers in Chinatown from Safe Horizon's three relief centers: 141 Worth Street, 62 Mott Street and Pier 94. However, due to time constraints, the team was not able to analyze the 700 cases from Pier 94 and the findings presented in this chapter only cover the first 4,449 cases. The analysis will be updated in the final report.

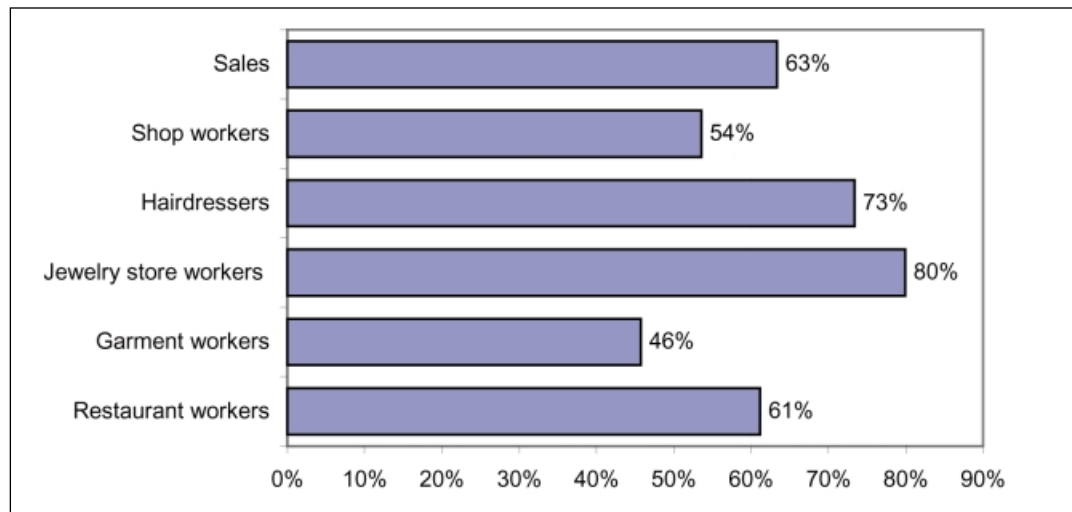
Figure 3.2: Average Weekly Wage Decrease (in Dollars) Among Chinatown Workers



Source: Safe Horizon

As Figure 3.3 shows, workers across the board experienced similar percentage decreases in average weekly wages. Specifically, average weekly wages for jewelry store workers plummeted 80% following September 11th, while hairdressers suffered a 73% decline in weekly wages.

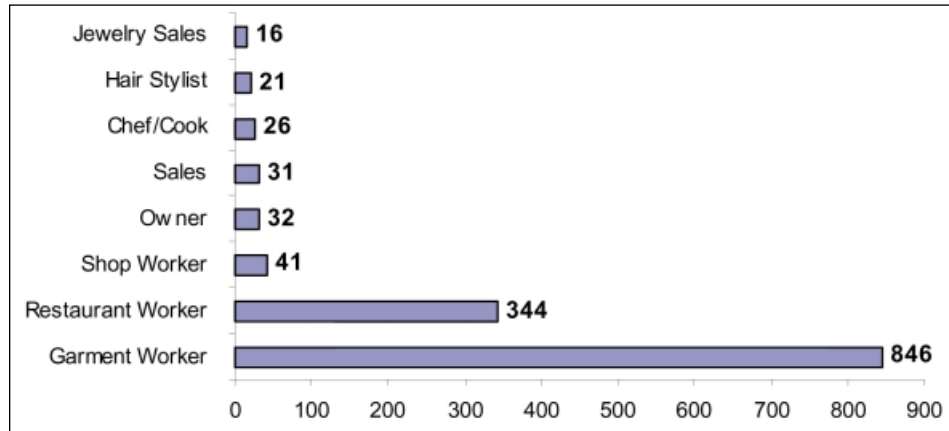
Figure 3.3: Percent Decrease in Average Weekly Wage Among Chinatown Workers After September 11th



Source: Safe Horizon

In terms of laid-off workers, garment and restaurant workers again represented the most affected industries in Chinatown, as shown in Figure 3.4.

Figure 3.4: Number of Laid-Off Workers Based on Safe Horizon File (South of Canal Street)



Source: Safe Horizon

According to the New York State Department of Labor (NYSDOL), half of the Unemployment Insurance (UI) recipients in Chinatown have low levels of educational attainment. Fifty percent do not have a high school diploma, and within this group, the majority have less than eight years of education. Most of the laid-off workers seeking job training/retraining through the Chinatown Manpower Project are of Chinese descent, with Cantonese (88%) and/or Mandarin language ability (59%). Nearly all (95%) have lived in the United States for over five years, and within this group, over 50% are between 41 and 54 years old. While the majority of applicants (94%) work in Manhattan, 65% of the individuals live in other boroughs. The largest barriers to employment and professional mobility for this population are limited English proficiency and a low level of job skills.

Industry-Specific Analyses

The following sections outline the impact on workers in Chinatown's major industries. "Immediate wage losses" refers to reduced shifts, while "unemployment" refers to layoffs. The analysis of the effects on workers are based on data for employees who worked south of Canal Street and received temporary cash assistance from Safe Horizon, unless otherwise specified.⁴⁵

⁴⁵ Safe Horizon was among the largest relief agencies providing temporary cash assistance to affected workers. After September 11th, a total of 5,119 dislocated workers from 1,249 companies in Chinatown received temporary cash assistance through Safe Horizon. Approximately 28% of all Safe Horizon aid recipients, or 1,227 individuals, lost their jobs as a result of September 11th. As noted earlier, only 20% of the garment factories are located on the south side of Canal Street. Therefore, the Safe Horizon figure covers only a small portion of impacted garment workers.

I. Garment Workers

Immediate Wage Losses

- 2,641 garment workers were temporarily dislocated; these employees represented over half of all dislocated workers that received Safe Horizon assistance.
- Prior to September 11th, the average weekly income for garment workers was \$207 (see Figure 3.2). In the first two weeks after September 11th, that figure dropped to \$112, a 46% decrease in earnings (see Figure 3.3).

Unemployment

- 846 garment workers, reflecting 57% of all recipients of Safe Horizon aid, lost their jobs (see Figure 3.4).
- More than 1,000 garment workers were laid-off, and nearly 70% of the workers were forced to work reduced shifts, according to the Federation/UNITE survey.

II. Restaurant Workers

Immediate Wage Losses

- Average earnings for all restaurant employees dropped 61%, from \$320 to \$124 per week, according to Safe Horizon data (see Figures 3.2 and 3.3).
- 1,092 restaurant workers received Safe Horizon aid. These employees represented over 20% of all unemployed workers in Chinatown. Within this group, about 880 were restaurant workers (e.g., wait staff and bussers), and over 212 workers were chefs or cooks.

Unemployment

- 344 restaurant workers were laid-off, representing 18% of all recipients of Safe Horizon aid (see Figure 3.4).
- According to the Federation/Chinese American Restaurant Association survey, nearly 50% of all restaurant workers were laid-off or had to work reduced hours after September 11th.

III. Workers in the Tourism and Travel-Related Business

Immediate Wage Losses

- Average weekly earnings for travel industry workers dropped from \$607 to \$292, a decrease of over 50%.⁴⁶
- The average weekly earnings for car service drivers were \$1,000 prior to September 11th but fell to only \$200 after that date.⁴⁷

⁴⁶ Figure based on Safe Horizon data of 88 travel industry workers.

⁴⁷ "Cab Drivers' Business Decline," World Journal (November 4, 2001).

- With the termination of some bus tours and commuter van trips, drivers lost on average \$550 in weekly earnings.
- Based on available data sources, over 100 employees⁴⁸ (i.e., bus drivers, tour guides, interpreters, and sales agents) from more than 40 travel/tour agencies in Chinatown were dislocated, as indicated by data from Safe Horizon and SBA.
- The majority of the travel/tourism industry workers had to work reduced hours in the immediate-term.

Unemployment

- At least 50 travel industry workers were laid-off.⁴⁹

IV. Workers in Other Industries

Beyond the most severely affected occupations in the garment and restaurant industries, many of the workers who received assistance held positions as salesclerks or workers in Chinatown's shops. Of these, jewelry stores and hair salons were particularly impacted. Following is a presentation of findings from Safe Horizon data.

Immediate Wage Losses

- Hairdressers on average experienced a 73% decline in weekly earnings, from \$316 to \$84 (see Figures 3.2 and 3.3).
- As a group, jewelry business employees suffered an 80% decrease in income, the most dramatic loss of wages of all occupations, from \$356 per week before September 11th to \$72 after that date (see Figures 3.2 and 3.3).
- 161 salesclerks on average saw their wages fall from \$358 to \$131, a 63% reduction (see Figures 3.2 and 3.3).
- 121 shop workers experienced a wage reduction from an average of \$344 prior to September 11th to \$160 after that date. This difference represents a 54% decrease in income (see Figures 3.2 and 3.3).

Unemployment

Based on the Safe Horizon file, which only provided aid to employees south of Canal Street, the following numbers of workers from other sectors also suffered job losses:

- 21 hairdressers
- 16 jewelry store workers
- 31 salesclerks
- 41 shop workers

⁴⁸ This figure includes both immediate-term dislocated workers and laid-off workers.

⁴⁹ This number also includes layoffs of part-time workers and is based only on Safe Horizon data of 88 travel industry workers and interviews with major travel agencies.

Conclusion

The garment, restaurant, and retail industries continue to be an important source of entry-level employment for Chinatown's large immigrant worker population. Workers are typically relegated to these industries by limited English ability, a lack of other job skills, and relatively low levels of educational attainment. A shortage of employment options renders these workers particularly vulnerable in times of economic hardship.

In the wake of September 11th, Chinatown businesses across the board suffered huge losses. In the two weeks following September 11th, more than 24,500 workers were temporarily dislocated. More than 7,600 employees were laid-off in the three months after September 11th, representing 23% of all workers in Chinatown. Another 12,000 employees experienced reduced work shifts. Garment and restaurant workers were particularly hard hit; five months after September 11th, over 70% of garment workers and 35% of restaurant workers were still underemployed. As such, the total estimated wage losses exceeded \$114 million.

Chapter Four: Assistance for Small Business, Dislocated Workers and Residents

Major Findings

- Despite extensive outreach, only 237 Chinatown businesses received SBA loans, totaling \$14 million. The majority (61%) of Chinese businesses received less than \$50,000 in loans, while the average loan for all approved businesses in New York City was \$80,000.
- Many relief agencies established Canal Street as the northern boundary of the area within which residents and businesses were eligible for aid. Thus, while the areas north and south of Canal Street were similarly affected, only those south of Canal Street qualified for financial assistance. Essentially, then, this measure potentially excluded nearly 10,000 garment workers from receiving financial assistance and limited support available to Chinatown businesses.
- Safe Horizon provided a total of \$3,107,845 in temporary cash assistance to 5,119 affected workers in Chinatown. The average amount of relief was \$546 per person.

The objective of this chapter is to demonstrate the extent of economic difficulties facing businesses and workers, by documenting various short-term public and private financial relief and recovery assistance efforts in Chinatown. Given that many of the affected businesses and workers north of Canal Street were not eligible to receive this assistance, the needs of the entire community have not been addressed. More importantly, this chapter seeks to explore the extent to which this financial relief has helped to alleviate the longer-term issues of unemployment and underemployment among many Chinatown workers and residents.

The following sections outline the aid provided by various organizations to affected businesses and individuals in Chinatown.

I. Assistance for Affected Small Businesses

In the aftermath of September 11th, many small businesses suffered cash-flow difficulties. To help business owners meet resulting short-term capital needs, the U.S. Small Business Administration (SBA) and other public and private entities offered programs and funding. In addition, funds were established to assist unemployed workers and residents.

1. *U.S. Small Business Administration (SBA)*

The SBA has issued over 4,000 business disaster loan applications in Chinatown. According to the Federation's analysis of SBA data as of February 26, 2002, the SBA received a total of 1,831 completed emergency loan applications from the four ZIP code areas covering Chinatown. The SBA approved 810 (or 44%) of these applications in the four ZIP codes. Out of this figure, however, only 237 Chinatown businesses received loans. According to SBA, the average loan is an estimated \$80,000, and the interest rate is 4% for up to 30 years. Out of the 237 businesses that received SBA loans, totaling \$14 million, 144 of the

firms, or 61% of them, obtained less than \$50,000 in SBA loans, while 40 received SBA loans of less than \$10,000.

2. *Asian Americans for Equality (AAFE) and Renaissance Economic Development Corporation*

AAFE launched a community relief program to help small business owners in Chinatown and the neighboring vicinity access private, public, and emergency funds. As of January 2002, AAFE had assisted 71 small businesses to obtain over \$1.01 million in grants, loans, and wage subsidies through The September 11th Fund and Seedco. These businesses were primarily in the retail, food service, and garment industries. Seventy percent of the aid was in the form of loans, 24% in wage subsidies, and 7% in grants.

3. *Office of the Manhattan Borough President*

A total of 70 small businesses in Chinatown received recovery grants of \$1,500 each from the Office of the Manhattan Borough President. The total amount disbursed among these companies was \$105,000. Recipients intended to use the grant money primarily in three categories: rent, payroll/salary/wages, and utilities.

4. *Empire State Economic Development Corporation (ESDC) and New York City Economic Development Corporation (EDC)*

Jointly administered by the ESDC and EDC, the WTC Disaster Recovery Loan Program was established in September 2001. Working with private banking institutions, the program provides bridge loans of up to \$100,000 within three days of application to businesses and not-for-profit organizations that suffered economic injury or physical damage. In addition, in February 2002, ESDC and EDC launched the World Trade Center Business Recovery Grant Program to assist businesses and non-profit organizations on or south of 14th Street. Data on Chinatown recipients of the bridge loan and grant programs are not available to the Federation at this time.

II. Financial and Job Training Assistance for Unemployed Workers

The adverse impact of September 11th on businesses created a job crisis in Chinatown. The affected individuals were primarily blue-collar and service sector employees who worked in restaurants, garment factories, and retail stores, with average wages under \$12 per hour. To assist this relatively low-income, dislocated population group, several funds, as well as job training programs, were developed.

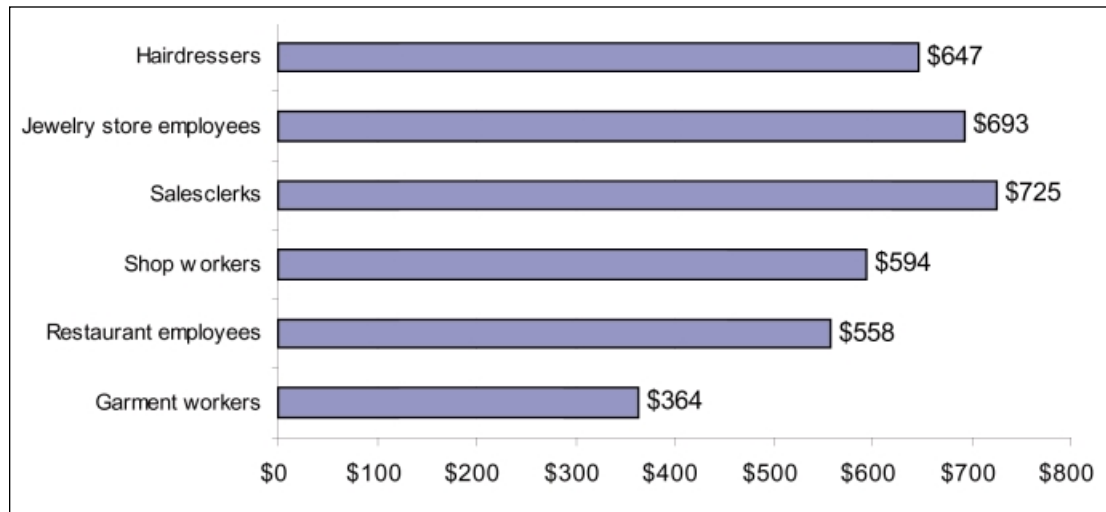
1. *Safe Horizon*

Safe Horizon provided a total of \$3,107,845 in temporary cash assistance to 5,119 unemployed workers in Chinatown in the aftermath of September 11th. This support was made available to employees working south of Canal Street. The funding was intended to cover a two-week period of lost wages; the average amount of relief provided for each affected worker was \$546.⁵⁰

Figure 4.1 shows the different aid amounts received by the most affected occupational groups from Safe Horizon.

⁵⁰ Based on assistance amounts to 4,449 Safe Horizon aid recipients (141 Worth Street and 62 Mott Street); this does not include the 700 recipients from the Pier 94 site.

Figure 4.1: Average Aid Received/Person



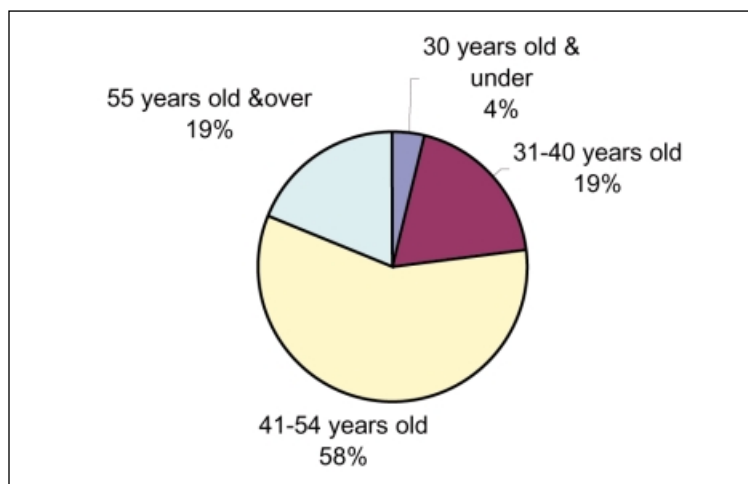
Source: Safe Horizon

2. Chinatown Manpower Project

In January 2002, a total of 194 unemployed individuals applied for job training through Chinatown Manpower Project (CMP). The majority of these applicants were women (77%). The largest barrier to employment was English language ability, with 71.13% facing communication challenges. This is consistent with the demand for English as a Second Language (ESL) classes by 84% of all CMP training applicants. Other significant employment obstacles include low-level job skills (reported by 59% of job seekers) and age (affecting 11.86% of all respondents). Home attendant training and computer training were requested by 45% and 29% of the applicants, respectively.

Over half (58%) of the training applicants were 41 to 54 years old. Older workers (55 and older) and those 31 to 40 years old were equally represented, at 19% each. This older population is the most difficult to train.

Figure 4.2: Applicant Age Groups



Source: Chinatown Manpower Project

3. **Chinese-American Planning Council (CPC)**

CPC, the oldest and largest multi-social service organization assisting New York's Chinese American community, served a total of 1,055 Chinatown workers and residents from December 10, 2001 to February 15, 2002. CPC provided support in the following areas: applications to obtain Medicaid benefits, applications for Federal Emergency Management Agency (FEMA) aid, Red Cross applications for air humidifiers, referrals for job training, mental health services, and information on general access to relief.

From January 14, 2002 to February 15, 2002, CPC reached out to 63 businesses, providing them with Safe Horizon grant information. A vast majority of CPC's clients were affected individuals from businesses located south of Canal Street.⁵¹ Consistent with other analyses, the garment industry with 642 people, was the most widely represented of all sectors. Seventy-three people from the next largest group, the restaurant industry, also sought services with CPC during this time.

III. Other Assistance and Relief Efforts in Chinatown

Affected families and individuals in the community have also received assistance from various entities, including monies from the government, as well as from private, faith-based, and community-based relief agencies. The following groups provided assistance to the Chinatown community:

1. **Federal Emergency Management Agency (FEMA)**

At the Chinatown Community Center at 62 Mott Street, FEMA set up a relief station on September 19, 2001. As of January 21, 2002, a FEMA official reported that over 23,000 affected individuals, families, and businesses had inquired about different types of relief services, including rental assistance, disaster unemployment benefits, small business loans, and counseling services.

⁵¹ This figure is based on the Chinese American Planning Council data of clients served post-September 11th.

2. Other Relief Agencies

New York State Department of Labor reported that a total of 2,055 unemployed workers in the four ZIP codes (10002, 10012, 10013 and 10038) covering Chinatown received disaster unemployment assistance (DUA) and unemployment assistance (UA) in November 2001.⁵² Of this figure, 1,005, or 49%, were Asian American workers.

The World Vision Fund, a Christian charity organization, offered cash assistance totaling about \$300,000 to 430 Chinatown employees who worked north of Canal Street. Each worker received approximately \$700.

TzuChi Buddhist Foundation distributed a total of \$157,125 in cash grants to 813 individuals at the Chinatown Community Center. Representing primarily garment factories, restaurants, jewelry shops, and travel agencies, these individuals received between \$50 and \$400 as a one-time grant.

Catholic Charities, through **Chinese Staff and Workers Association**, provided a total of \$300,000 to 100 individuals who worked north of Canal Street.

3. American Red Cross

The American Red Cross provided financial assistance to individuals in the four Chinatown ZIP codes.⁵³ The Red Cross provided financial assistance in the following categories: emergency relief, rent/mortgage and grocery subsidies, family maintenance allowances, and personal living, housing and furnishing, health and mental health needs.

Conclusion

In the wake of September 11th, funds and programs were established to help affected businesses, workers, and residents. Initial aid had a limited impact on Chinatown for several reasons. First, the eligibility criteria for many programs were based on business or residential location south of Canal Street. While businesses, workers, and residents throughout Chinatown were similarly affected by September 11th, many programs could not reach out to those north of Canal Street. Second, the assistance efforts by the government, public, and private entities have helped some businesses, families, and individuals to make ends meet, but only on a short-term basis. Many Chinese family households have immediate and extended family members; thus, the assistance that these households receive must spread further. Finally, little is being done to address the long-term impacts on dislocated workers and unemployed workers in Chinatown, a population that is difficult to absorb in the current economy.

⁵² This represents relief provided in November 2001 only; there are no cumulative data to date on emergency unemployment assistance and unemployment assistance.

⁵³ Red Cross provided aid for both Chinese and non-Chinese recipients in these ZIP codes, based on information available as of January 15, 2002. In addition, although the bulk of the aid was granted to those who were economically impacted (e.g., lost jobs or wages), relief funds provided to those who were residentially impacted (e.g., lost homes or suffered damage to homes) are also substantial.

Chapter Five: Recommendations

The September 11th tragedy gravely devastated the Chinatown economy. The unprecedented level of economic disruptions to families' lives and the community as a whole necessitates that priority attention be given to the rebuilding of Chinatown. As a cultural center and as a local economy with an aggregated bank deposit level exceeding \$5.4 billion, Chinatown is an integral part of Lower Manhattan and contributes significantly to the economic well-being of the city and metropolitan area. Therefore, efforts to rebuild Lower Manhattan would be incomplete without incorporating Chinatown into the overall development plan.

Based on the findings of this study, the Asian American Federation offers the following recommendations:

- **The Lower Manhattan Development Corporation should include Chinatown in its planning and development efforts.**

From both economic and urban planning perspectives, integrating Chinatown into the overall redevelopment efforts provides a broader vision, as well as social and economic value. This would enable a rational planning approach that addresses physical landscape and infrastructure concerns, requirements of the economic base, and the needs of residents, workers and businesses in the area.

- **The magnitude of economic disruptions in Chinatown requires immediate and targeted intervention with coherent policy and coordinated strategies to help businesses recover and unemployed workers obtain assistance.**

Almost one in four of those who worked in Chinatown lost their jobs during the first three months after September 11th. This statistic alone is an alarming call for immediate action. Support to businesses and workers must move from ad hoc and uncoordinated to sustained and integrative interventions that appropriately respond to the conditions in Chinatown.

- Chinatown, as an economically affected community, should be defined by geographic boundaries that are consistent with its residential and commercial patterns.
- State and city agencies should establish a targeted business assistance program that can respond effectively to the needs of the businesses in Chinatown. Such a program could be piloted in partnership with private funders and community organizations.
- Most dislocated workers are not English-proficient and lack skills suitable for employment opportunities outside of Chinatown. Resources are needed to increase the availability of English as a Second Language and job training programs targeting affected workers. Current performance-based job training contracts present serious barriers to non-profit agencies attempting to assist these hard-to-place workers. Short-term retraining of workers for employment opportunities related to Lower Manhattan redevelopment should be considered.

- The rebuilding of Lower Manhattan will generate significant jobs and business opportunities. There should be sufficient outreach and recruitment efforts to ensure equitable participation by workers and businesses in Chinatown.
- Chinatown has long been a prime tourist destination. Promoting Chinatown should be part of the tourism campaigns for New York City and the state of New York. There is a need for a comprehensive marketing campaign to stimulate tourism in Chinatown, featuring dining, shopping, and cultural attractions.
- **Long-term revival of Chinatown also requires comprehensive planning and investment for community economic and workforce development.**

Because of the importance of Chinatown in the larger city and regional economy, the recovery of Chinatown is vital to the economic development of Lower Manhattan and the city as a whole. The rebuilding efforts should involve an all-encompassing planning process to address systemic issues in order to foster business opportunities and the economic security of workers. Key issues to be examined include the strengths and growth potential as well as limitations of the industries in Chinatown; environmental concerns; and land-use, zoning and transportation factors that affect present and future economic development and the community's quality-of-life.

A special task force should be convened to investigate those long-term development matters, to identify both common ground among the various interests and possibly conflicting priorities, to cultivate community consensus on needs, to propose recommendations to the mayor and the governor, and to explore the feasibility of a public-private partnership to plan the creation of a special economic development zone for Chinatown.

Appendix A: Baseline Characteristics of Chinatown: Neighborhood Demographic, Social, and Economic Profiles

To provide a foundation for evaluating the economic impacts of September 11th on Chinatown, this chapter presents an overview of 1) the study area boundary estimation, 2) population demographics, 3) the community's economic sectors, and 4) inter-community linkages. Mapping analyses of the study area, businesses, and infrastructure are included, using data from the Census 2000, a door-to-door survey of Chinatown businesses, and the 2001 New York Yellow Pages for Chinese Community developed by Bell Atlantic and World Journal. The first section delineates the study area using census tract information and business data gathered from the Chinese Yellow Pages. Next, the demographic section highlights key characteristics of the study population, drawing from Census 2000 and Public Use Microdata Samples (PUMS) data. Then, an economic profile of Chinatown is presented, highlighting the community's role within the larger New York economy. Finally, an examination of the linkages between Manhattan Chinatown and other Chinese American communities in New York City is provided.

Defining Chinatown's Geography

In delineating the study area, the study's economic focus characterizes Chinatown as a community of Chinese-owned and -operated businesses and Chinese workers.⁵⁴ Chinatown spans across four ZIP codes: 10002, 10012, 10013, and 10038. While a number of non-Chinese businesses are established within these ZIP codes, the study area represents only those with the highest concentrations of Chinese businesses and residents. The impacts of the September 11th attack on these Chinese businesses and workers in Chinatown are assessed in this study.

The residential part of Chinatown covers a total of 13 Census tracts.⁵⁵ The tracts that were included within the boundary estimation fulfilled the following criteria: 1) an Asian⁵⁶ population greater than 500 people and 2) the Asian population comprises more than 25% of the total population. Two other tracts⁵⁷ were included within the Chinatown boundary estimation, because these contain a significant number of garment businesses, Chinatown's largest industry. According to the New York State Department of Labor (NYSDOL) Apparel Industry Task Force, many of the registered garment factories lie within these two tracts.

Figure A.1 depicts the study area, with two broad area classifications, "North of Canal" and "South of Canal." Chinatown's major thoroughfare, Canal Street, served as the northern boundary for the "frozen zone" that prohibited all vehicular and pedestrian traffic from September 14th to 18th. The study area's boundaries are Frankfort Street (east of Centre) and Chambers Street (east of Broadway) on the south; Broadway on the west; Houston on the north, and Clinton (south of Houston), Ridge (south of Rivington), and Essex (south of Grand) Streets, and Montgomery (south of East Broadway) on the east.

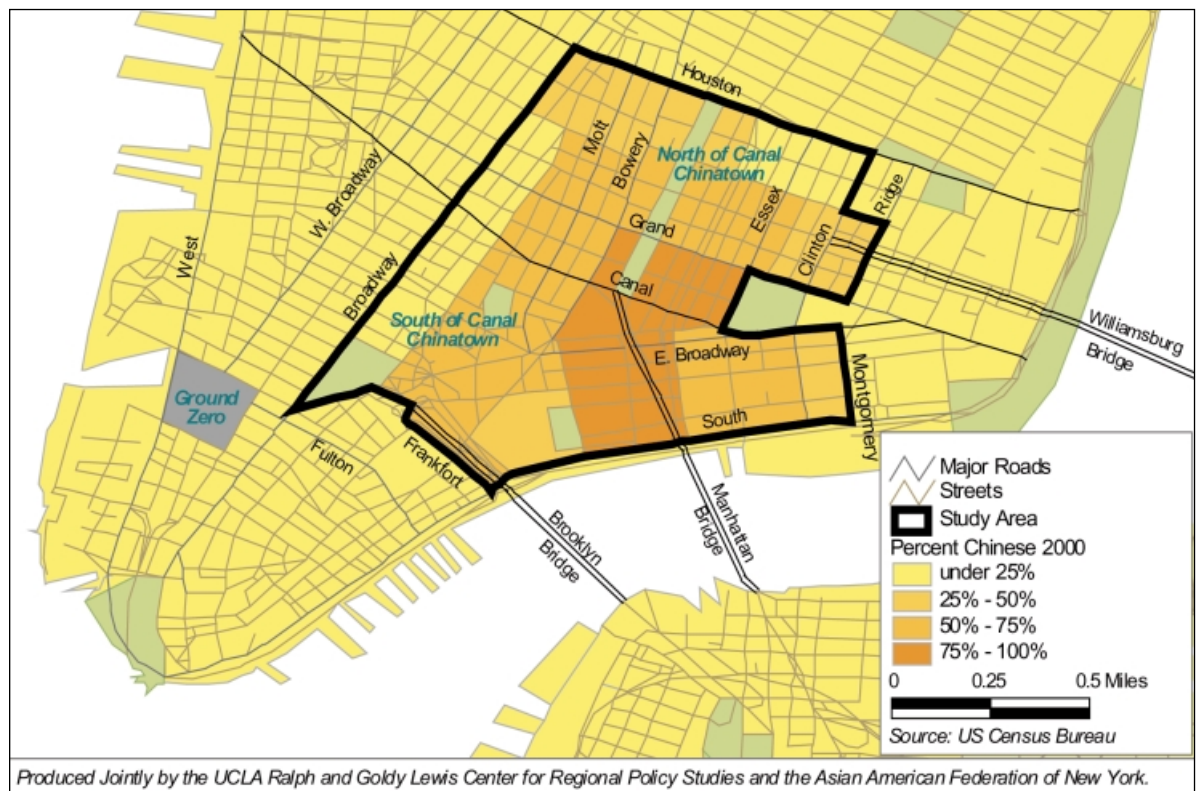
⁵⁴ The Chinese are defined as East Asians of Chinese cultural heritage, which can include individuals from China, Hong Kong, Taiwan, Cambodia, Laos, Macau, Malaysia, Mongolia, Singapore, and Vietnam.

⁵⁵ Census tracts: 2.01, 6, 8, 14.02, 16, 18, 25, 27, 29, 30.01, 36.01, 41, and 43.

⁵⁶ Data Source: Census 2000 Redistricting Data (Public Law 94-171) Summary File. Asian alone or in combination with one or more other race categories, and with one or more Asian groups; People who reported entirely or partially as Asian. The Census 2000 data has not been statistically adjusted to compensate for any undercount.

⁵⁷ Census tracts 31 and 45.

Figure A.1: Chinatown Study Area



Population Demographics

Residential Area

Chinatown is home to 55,864 Asian residents,⁵⁸ 54% of whom live south of Canal. The north/south distinction is significant because Canal Street, as previously described, served as the boundary for the “prohibited zone” that prohibited all vehicular and pedestrian traffic south of Canal Street from September 14th to 18th. Further, major relief agencies have used Canal Street as their northern boundary for relief activities. Residents of that area were required to show identification in order to pass south beyond Canal Street. In addition, restriction of access to this region bore severe economic consequences for the business community.

Age

According to Census 2000 data, 9,837 Asians⁵⁹ are under 18, comprising 18% of the Asian population; 35,932 Asians are between 18 and 64, accounting for 65.7% of the Asian population; and 8,881 Asians are 65 and older, comprising 16.3% of the Asian population.

⁵⁸ Data Source: Census 2000 Redistricting Data (Public Law 94-171) Summary File. Asian alone or in combination with one or more other race categories, and with one or more Asian groups; People who reported entirely or partially as Asian. The Census 2000 data has not been statistically adjusted to compensate for any undercounting.

⁵⁹ Census 2000. Age data is for the population that reported Asian Alone, one Asian group. This data is derived from Census 2000 Summary File 1. It corresponds to the respondents who reported only one Asian group and no other race category or Asian group. Asian alone data represents the minimum number in any calculation of population size.

English Language Ability and Level of Educational Attainment

English language skills and educational attainment are significant factors associated with employment status. Limitations in these areas can isolate workers in low-wage, labor-intensive occupations and can increase their vulnerability to job loss in times of economic hardship. Chinatown was classified as an area with a high concentration of linguistically isolated households.⁶⁰

According to PUMS data,⁶¹ 40.5% of Chinese New Yorkers do not speak English well or at all. This figure may be higher in Chinatown's largely blue-collar workforce population. According to Chinatown Manpower Project, an employment and vocational training center, 71% of all training applicants reported that difficulty with English was a primary barrier to employment. Referrals to English as a Second Language classes were made more commonly than any other type of job training referral (85% of all applicants).

The same data source reflected a low level of educational attainment, with 44% of all Chinese New Yorkers having completed less than a high school education. Over half (57.3%) have not attained education beyond high school.⁶²

Housing

Asian residents of Chinatown are typically housing renters; 93% of all housing units in Chinatown are tenant-occupied.⁶³ According to a survey by Asian Americans for Equality, the majority of respondents (71%) were considered "rent-burdened," that is, spending more than 30% of their household income on rent. In addition, a substantial number of respondents (45%) paid more than 50%. On top of the rent burden, to secure an apartment, many enter into debt to pay exorbitant key money fees exacted upon them by property owners. Key money is a non-refundable fee that a potential renter must pay in order to obtain housing. Highly illegal, but very pervasive in Chinatown, the fee typically ranges from \$2,000 to \$7,000.⁶⁴

Household Composition

One distinctive characteristic of the Asian Chinatown population is its high number of family households, relative to other groups.⁶⁵ The majority of Asian Chinatown residents, 47,178 people, live with family members. Furthermore, more generations live together than in the average American household. Thus, an individual's income loss typically affects more than one person.

⁶⁰ 1990 Census. Linguistic isolation in a household was defined using the following criteria: 1) No person age 14 years or over speaks only English or 2) No person age 14 years or over who speaks a language other than English speaks English "very well."

⁶¹ 1990 PUMS.

⁶² Educational attainment for adults age 25 years and older.

⁶³ Census 2000 Summary File 1.

⁶⁴ Asian Americans for Equality (AAFE) Housing Survey, 1996.

⁶⁵ AAFE Housing Survey, 1996.

Economic Profile

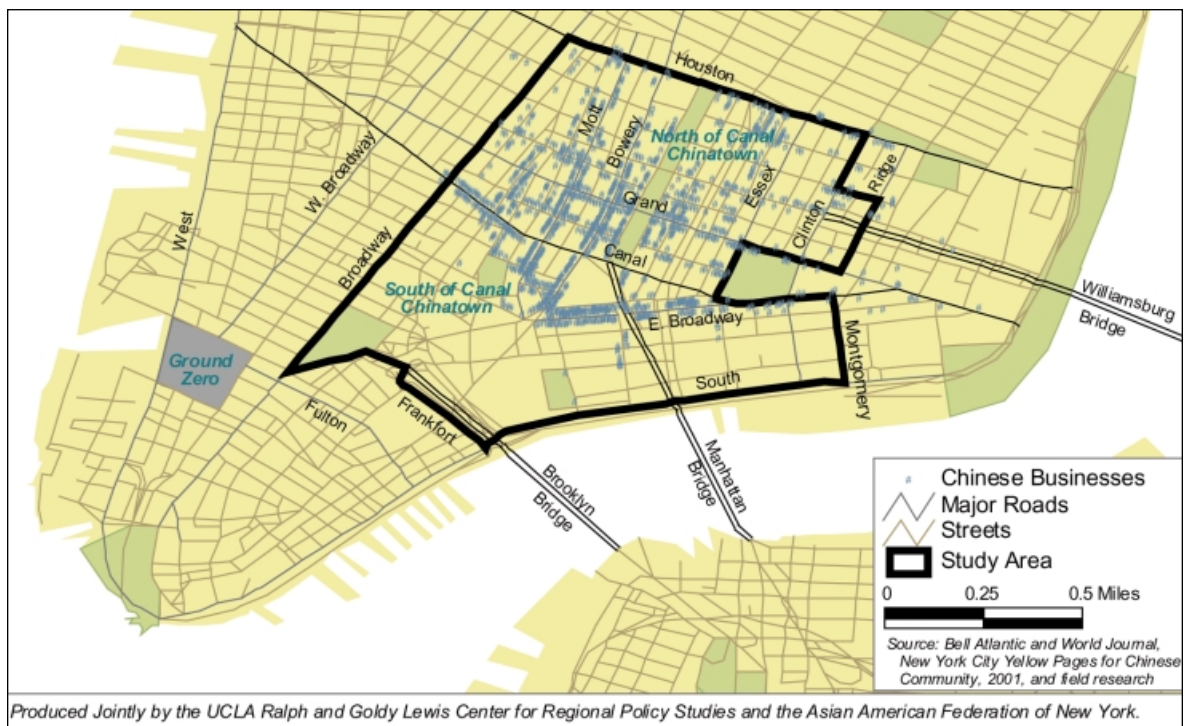
Chinatown's status as a neighborhood that is both a vital economic force for the city and a tightly-knit residential community of immigrants presents unique opportunities and challenges for its community members. As a major New York City tourist attraction and a center of commercial activity with a vast transportation network, Chinatown's cosmopolitan identity is counterbalanced by an insular and self-sufficient neighborhood culture. This section explores four key economic roles that Chinatown plays in these contexts: 1) commercial hub, 2) apparel manufacturing center, 3) tourist attraction, and 4) immigrant enclave.

1. Chinatown as an Active Commercial Hub

Chinatown is a place where Chinese residents and non-residents alike conduct their daily personal and business affairs. Less expensive retail goods and an abundance of professional and personal services that are linguistically accessible, culturally familiar, and conveniently located within close proximity of each other make Chinatown an attractive place to shop and handle one's business. In addition, specialty goods and food products that cannot be found in mainstream markets are widely available.

According to the Federation door-to-door survey of Chinatown business and the 2001 Bell Atlantic and World Journal NYC Yellow Pages for the Chinese Community, a total of 3,855 Chinese-owned and operated firms are established in Chinatown. As an active commercial hub, Chinatown is home to many major institutions and industries. A wide variety of manufacturing and trade establishments (see Figure A.2) are established here. In particular, the retail, food service, and garment industries are heavily woven into the fabric of Chinatown's unique economy.

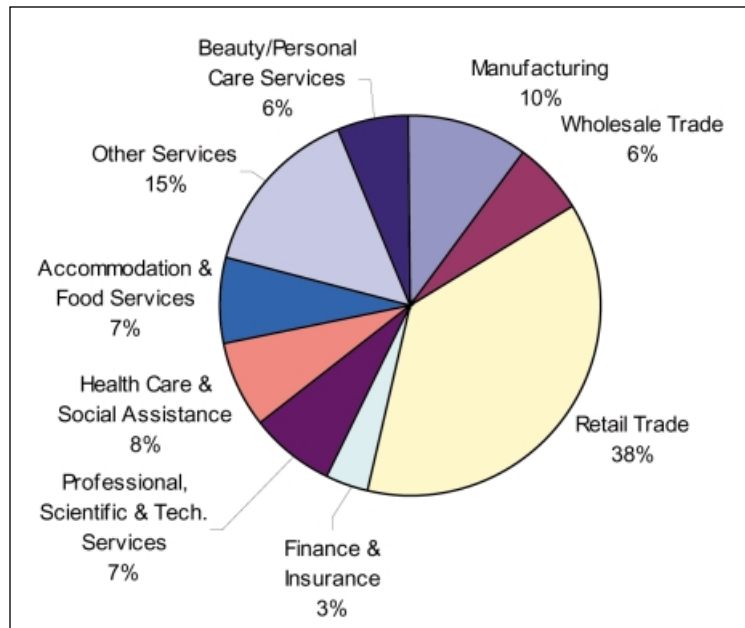
Figure A.2: Chinese Businesses in Chinatown



Chinatown's Economic Makeup

Chinatown has a diversified economy comprised of the following major sectors: retail trade (38% of all businesses), manufacturing (10%), accommodation and food services (7%), health care and social assistance (8%), professional, scientific and technical services (7%), and wholesale trade (6%) comprise the largest sectors (see Figure A.3).

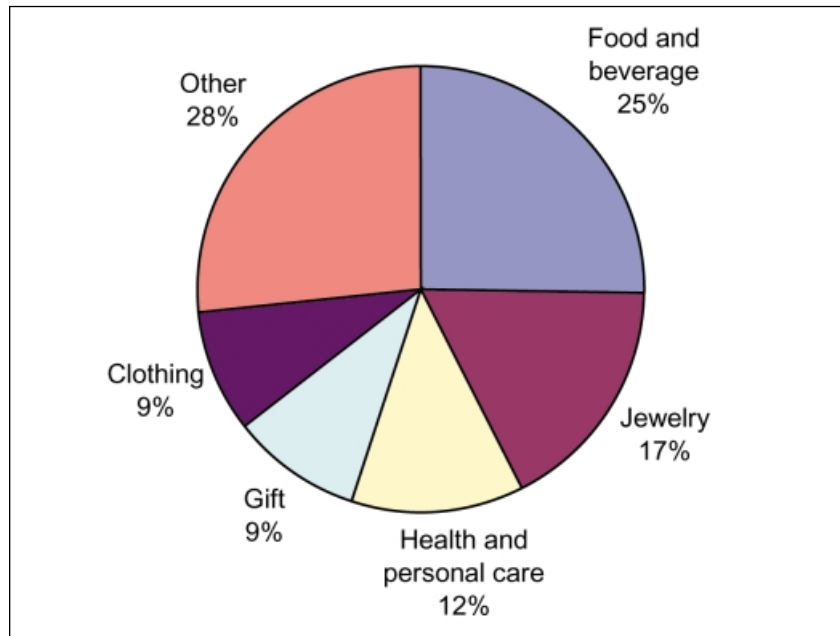
Figure A.3 Chinatown's Major Businesses



Source: Federation door-to-door survey of Chinatown Business, Bell Atlantic and World Journal NYC Yellow Pages for Chinese Community, 2001

According to Figure A.4, the same data show that Chinatown's 1,423 retail trade stores comprise the bulk of the district's businesses (38%). Of these, the 361 food and beverage businesses (meat and fish markets, grocery stores, bakeries, etc.) make up the largest category of retail establishments. Also prominent are jewelry businesses (245 stores), health and personal care stores (176), gift stores (134), and clothing stores (129).

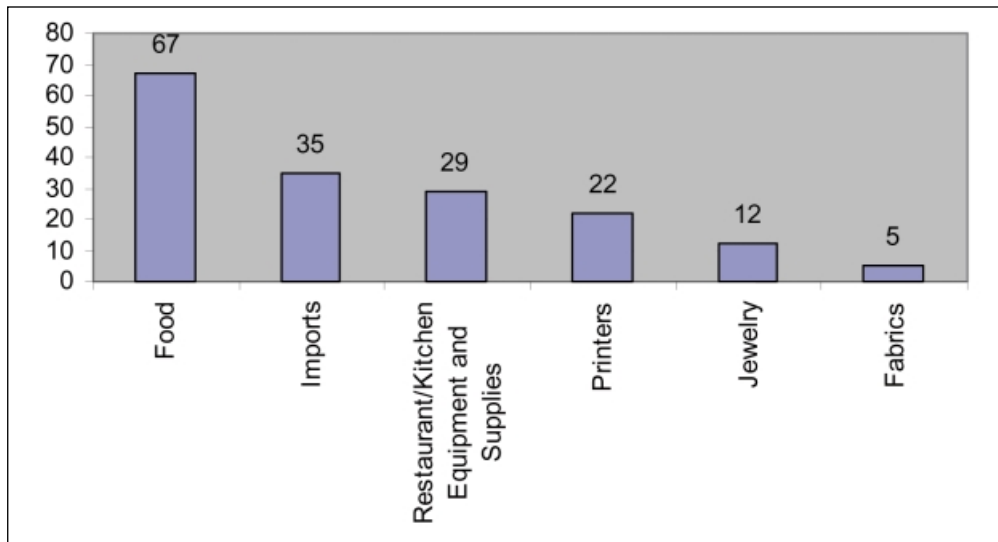
Figure A.4: Chinatown Retail Business Types



Source: Federation door-to-door Chinatown business survey, Bell Atlantic and World Journal NYC Yellow Pages for Chinese Community, 2001

Establishments in other sectors are also prominent in Chinatown. With 241 wholesale outlets, Chinatown is considered an active wholesale center, most commonly supplying such products as food, jewelry, imports, and restaurant equipment to small businesses in Chinatown (see Figure A.5). Ten percent of all firms (392 companies) belong to the manufacturing sector, with most businesses concentrated in the apparel/garment industry. This industry will be described in more detail later in this appendix. Other establishments include construction companies (58) and those providing transportation and delivery services (22).

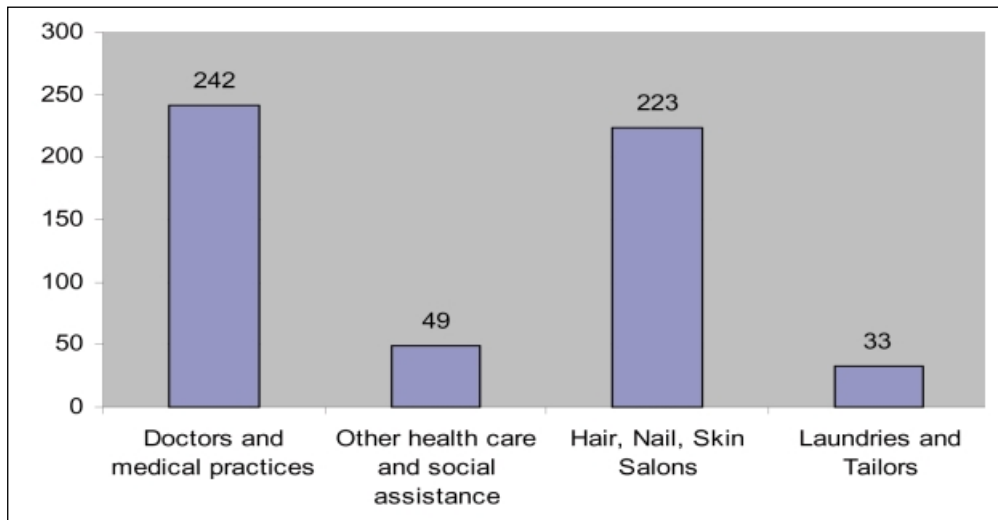
Figure A.5: Most Common Wholesale Outlet Types



Source: Federation door-to-door Chinatown business survey, Bell Atlantic and World Journal NYC Yellow Pages for Chinese Community, 2001

There are 291 health care and social assistance providers, of which individual doctors/medical practices comprise the majority (242). As Figure A.6 shows, personal care services (hair, nail, and skin care) are also widely available (223 businesses) in Chinatown. Other personal services, such as cleaning services, are numerous in the community (33 establishments).

Figure A.6: Health and Personal Care Services

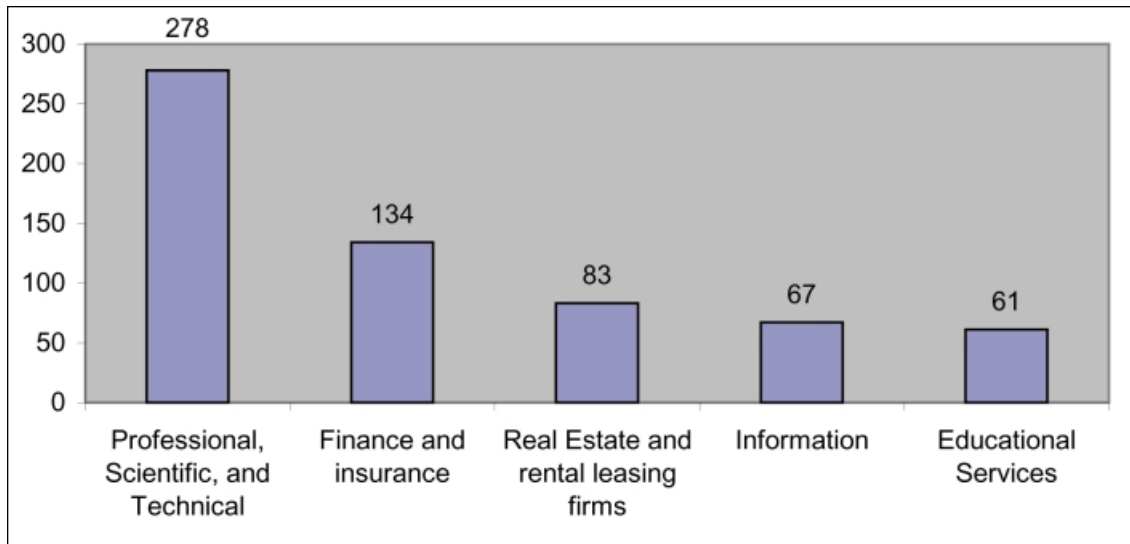


Source: Federation door-to-door Chinatown business survey, Bell Atlantic and World Journal NYC Yellow Pages for Chinese Community, 2001

Chinatown has its own developed infrastructure. Financial and insurance institutions (134) comprise 3% of all businesses. Real estate and rental leasing firms (83) make up 2% of all businesses. Chinatown is also home to 61 various educational services. In addition to traditional schools, specialized education, such as driving schools and art institutes are common.

278 businesses providing professional, scientific and technical services account for 7% of all businesses. Information services (newspapers, phone, publishers, fax transmission services, radio and TV broadcasting and services, internet, paging and signaling equipment and service) constitute another 2% (67) of all businesses in the Chinatown community.

Figure A.7: Other Major Businesses and Educational Facilities



Source: Federation door-to-door Chinatown business survey, Bell Atlantic and World Journal NYC Yellow Pages for Chinese Community, 2001

2. Chinatown as an Apparel Manufacturing Center

Apparel manufacturing is one segment of the fashion industry that has built New York City's reputation as a world fashion capital. Considered to be the backbone of New York City's industrial base, the garment industry represents 1 out of every 3 manufacturing jobs in the city. With approximately 70,000 workers,⁶⁶ the garment industry is the city's largest employer in the manufacturing and wholesale trade sectors.⁶⁷ In this respect, Chinatown is a microcosm of the larger city. Its largest industry is also the garment business, which employs an estimated 11,808 unionized factory workers and another 2,000 non-unionized workers.

The following is a snapshot of Chinatown's garment industry from NYSDOL Apparel Industry Task Force and UNITE data sources.

- According to NYSDOL 2001, there are a total of 246 registered garment factories in Chinatown.
- The majority of these garment factories, 202 factories, are located north of Canal Street (see Figure A.8). On average, each of these factories employs 47 workers.

⁶⁶ Pratt Institute Center for Community and Environmental Development, "Working Paper on Employment," September 2001.

⁶⁷ Bureau of Labor Statistics 2001, U.S. Census Bureau 1997 Economic Census.

- South of Canal Street, there are 44 garment companies, with an average of 39 workers per factory (see Figure A.8).

Between January and February 2001, a survey of Chinatown garment factories was jointly conducted by the Federation and UNITE. Presented below are the most relevant findings:

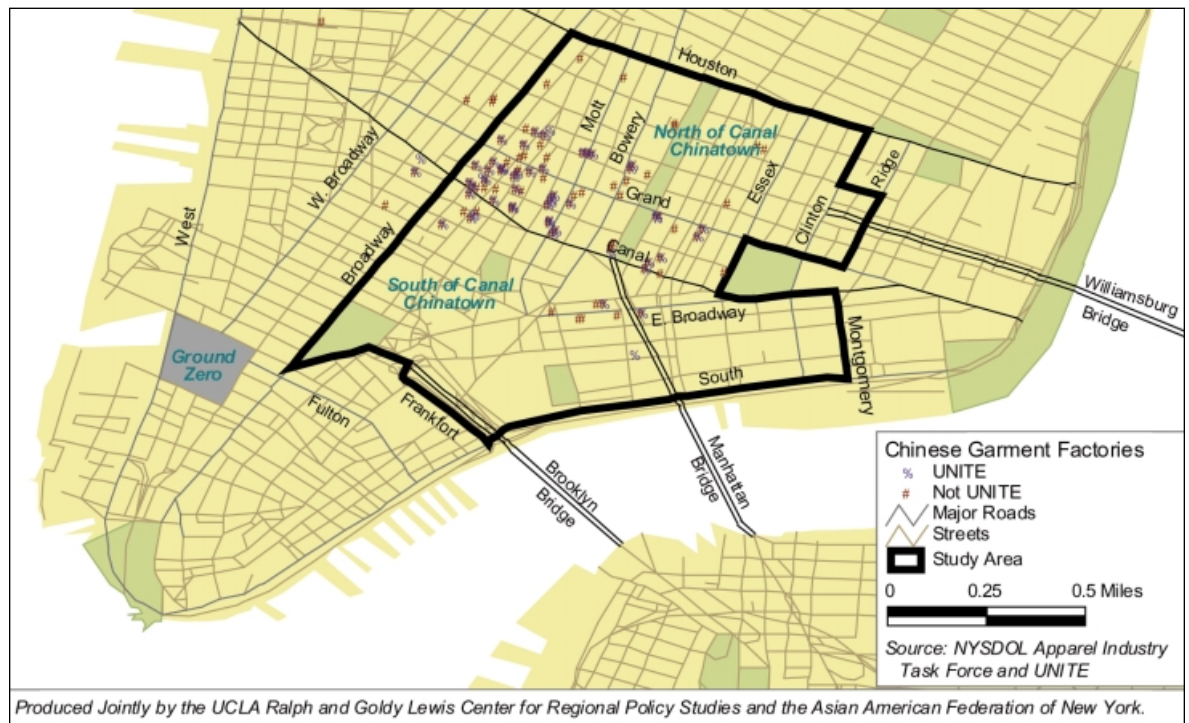
- Three years and 4 months is the average length of time that surveyed garment businesses had been established on their premises.
- North of Canal Street, each factory spanned 5,871 square feet, on average. South of Canal Street, this figure was 4,480 square feet.
- Prior to September 11th, the total number of garment pieces produced per month by all surveyed factories was 1,133,920; the average number of pieces produced per factory was 14,353. Thus, in one month, the average number of pieces produced per worker was between 305⁶⁸ and 368⁶⁹ pieces.
- North of Canal Street, monthly rent costs were \$5,871, while south of Canal Street, monthly rent was \$5,940, on average.
- Thus, for businesses south of Canal Street, rent is higher and space is smaller as compared to businesses north of Canal Street. Individual factories have fewer workers, but they produce more pieces on average monthly.⁷⁰

⁶⁸ North of Canal Street.

⁶⁹ South of Canal Street.

⁷⁰ However, garment pieces vary widely in design, materials, and therefore in the amount of required labor.

Figure A.8: Chinese Garment Factories in Chinatown

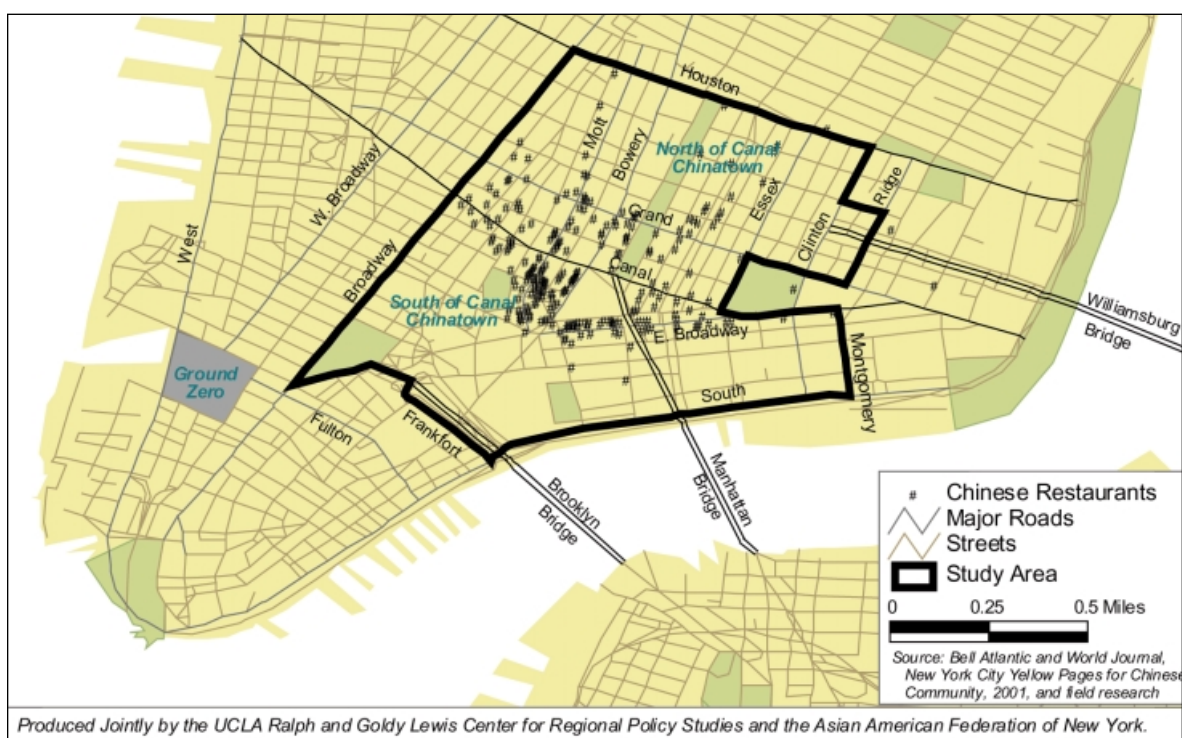


3. Chinatown as a Tourist Attraction

As a major New York City tourist attraction, Chinatown's dining and shopping establishments are the primary draw for millions of visitors each year. The presence of a large number of restaurants and specialty stores (jewelry, gift, apparel) indicates a targeted tourist market. There are 284 food and accommodation services in the neighborhood. Most of these businesses are restaurants, cafes, and bars. Of the restaurants, 110 were located north of Canal, and 165 were located south of Canal.⁷¹ In addition to these activities, a number of recreational, arts, and entertainment venues (46 companies) reside in Chinatown, attracting both visitors and locals.

⁷¹ Bell Atlantic and World Journal, NYC Yellow Pages for Chinese Community, 2001.

Figure A.9: Chinese Restaurants in Chinatown



Visitors come from around the world, particularly from Britain, France, Italy, and Switzerland. According to interviews conducted by the Federation staff, prior to September 11th, an estimated 83 tour companies⁷² typically brought on average over 2,000⁷³ visitors to Chinatown daily. Tour companies rely on group travel to generate profits.

4. Chinatown as Immigrant Enclave with Linkages to Other Chinese Communities

Immigrant Residents

The Lower East Side has historically been a major residential point of entry for New York City immigrants. The most recent Immigration Naturalization Service data, for the period 1990-1999, indicates that 31,207 total East Asian immigrants from Chinese-speaking countries of origin lived in the four ZIP codes over which Chinatown spans, with the highest number of immigrants residing in the 10002 ZIP code. As noted in Figure A.10, the largest group of Chinatown immigrants⁷⁴ came from mainland China, Hong Kong, and Taiwan, respectively.

⁷² Tour companies can also be travel agencies that sponsor tours.

⁷³ Federation research with major tour and travel agencies.

⁷⁴ The INS defines immigrants as legal permanent residents.

Figure A.10 Chinatown Immigrants by Asian Birthplace: 1990-1999

COUNTRY OF ORIGIN	MANHATTAN	ZIP CODE 10002	ZIP CODE 10012	ZIP CODE 10013	ZIP CODE 10038
China- TOTAL	40,424	22,352	1,585	4946	1721
*China – Mainland	35,773	20,477	1,411	4367	1473
*Hong Kong	3,624	1,692	148	518	214
*Taiwan	1,027	183	26	61	34
Other East Asian Countries ⁷⁵	2103	580	38	154	37

Source: New York Department of City Planning, Population Division

Linkages with Other Chinese Communities

An extended Chinese American community beyond Manhattan maintains close ties to Chinatown. According to an analysis of garment union members' residential addresses,⁷⁶ more than 60% of these workers live outside of Manhattan. Evidence from Chinatown Manpower Project supports this figure, with 62% of the client population living in the other boroughs. UCLA's commute-to-work analysis⁷⁷ also demonstrated that 65% to 70% of the worker population lives in other boroughs in New York City.

In Figure A.11, the 1999 Housing and Vacancy survey⁷⁸ revealed that the following neighborhoods were heavily concentrated with Asian residents: Flushing/Whitestone (Queens), Sunset Park (Brooklyn), and Elmhurst/Corona (Queens).

⁷⁵ Burma, Cambodia, Macau, Malaysia, Singapore, Vietnam.

⁷⁶ UNITE.

⁷⁷ Data provided by UCLA Lewis Center for Regional Policy Studies.

⁷⁸ 1999 Housing and Vacancy Survey, Census Bureau.

Figure A.11: Neighborhood Settlement of Asians in Other Boroughs

	Flushing/Whitestone	Sunset Park	Elmhurst/Corona
Chinese	32,776	22,311	10,622
All Asians Including Chinese	87,402	27,077	26,756
Total Population	228,059	128,102	118,716

Source: 1999 Housing and Vacancy Survey

- With a total Asian resident population of 87,402, Flushing/Whitestone, Queens is the most Asian-concentrated neighborhood within the five boroughs. Asians make up 38.3% of the total population of 228,059 residents. A population breakdown by ethnicity demonstrated that 37.5% of the Asian total is Chinese.
- In Sunset Park, Brooklyn, the total population is 128,102, of which 27,077 or 21.1% are Asian. The Asian population is comprised of 82.4% Chinese.
- In Elmhurst/Corona, Queens, the total population is 118,716, of which 22.5% or 26,756 are Asian. Within the Asian population, Chinese comprise the largest group, at 39.7%.

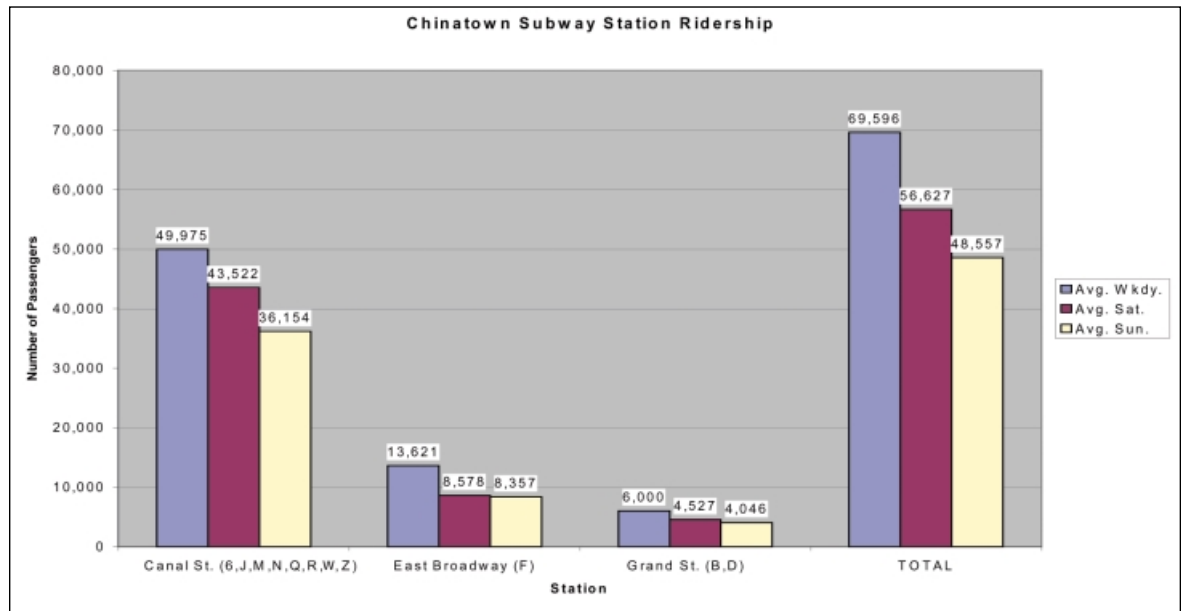
Transportation Linkages

The three major bridges in lower Manhattan — the Brooklyn, Williamsburg, and Manhattan bridges — lead directly into Chinatown, a major transportation hub. The easy accessibility to Chinatown through these entryways promotes business activities in the neighborhood.

Residents of the other boroughs rely on various forms of transportation to get to work in Chinatown. Three subway stations, Canal Street, East Broadway, and Grand Street stations are located in the center of the Chinatown area. In August 2001, the (Chinatown) Canal Street station's average ridership was 49,975 on weekdays, 43,522 on Saturdays, and 36,154 on Sundays (see Figure A.12). The East Broadway station's average ridership was 13,621 on weekdays, 8,578 on Saturdays, and 8,357 on Sundays. The Grand Street station had an average weekday ridership of 6,000, an average Saturday ridership of 4,527, and an average Sunday ridership of 4,046 (Figure A.12).

According to data presented in Figure A.12, the (Chinatown) Canal Street station which services eight subway lines (6, N, R, Q, J, M, Z, and W), was the busiest station in August 2001.

Figure A.12: Chinatown Subway Ridership by Station, August 2001



Source: New York City Transit Authority

Buses

Chinatown is also served by several public bus routes, including the M1, M6 (both Broadway/Centre), M9 (East Broadway), M15 (Madison/East Broadway), M103, (Bowery) and the Grand Street Shuttle buses.

Commuter Vans

Privately-owned commuter vans transport about 3,276 riders⁷⁹ per day between the other boroughs and Chinatown. Commuter vans run 14 hours a day, from 8 a.m to 10 p.m. typically, and serve approximately 420 passengers a day. Common routes include: Canal Street to 8th Avenue, Brooklyn; Confucius Plaza to Flushing, Queens; East Broadway to 8th Avenue, Brooklyn; and Hester Street to Elmhurst, Queens. Additionally, approximately 1,000 to 2,000 riders per day (conservative estimate) utilize commuter vans and buses that transport people, including many non-Chinese passengers⁸⁰ out of town, to Albany, Boston, Philadelphia, Kingston, Baltimore, and Washington, DC. Often, these passengers work in these other areas but have families in New York.⁸¹

⁷⁹ Based on Federation research with major commuter van companies.

⁸⁰ "A Shuttle Between Chinatowns," New York Times (January 27, 2002).

⁸¹ Federation research with major commuter van and bus companies.

Summary

This section defines the physical and socio-economic characteristics of Chinatown. Geographically, Chinatown is defined as the region within the Manhattan ZIP codes 10002, 10012, 10013, and 10038, with a high concentration of Chinese-owned and -operated businesses and Chinese workers. More than as just a geographic location, the idea of Chinatown as a community of Chinese businesses and residents was emphasized in the delineation of its physical boundaries. A demographic analysis revealed a residential population comprised largely of Chinese immigrants with limited job skills, English ability, and low educational attainment. Chinatown's importance to New York City's economy was then presented in the context of its four economic roles: 1) as an active commercial hub, 2) as an apparel manufacturing center, 3) as a major New York City tourist attraction, and 4) as an immigrant enclave with linkages to other Chinese communities. These linkages are supported by a vast transportation network that connects this vital economic center to the larger city and other areas where its workers and patrons live.

Appendix B: Data Sources

The following table summarizes the different business surveys, impacted business files, aggregated and disaggregated data files from public, private and community-based relief agencies. Pertinent information on the number of survey respondents, individual record files as well as the different time periods covered are presented in the table below.

Sources of Data	Size	Time Period Covered					
		Sept. '01	Oct. '01	Nov. '01	Dec. '01	Jan. '02	Feb. '02
Business Surveys							
Office of the Manhattan Borough President (OMBP) Survey of Chinatown Businesses	103		X	X			
Greater Blouse, Skirts, and Undergarment Association Membership Survey	64		X	X	X		
Federation/UNITE Employer Survey of Garment Factories	82					X	X
Federation/Chinese Restaurant Association Employer Survey of Chinese Restaurants	53					X	X
Business Assistance Files							
OMBP Business Recovery Grant	70		X	X	X		
Businesses Assisted by Asian Americans for Equity and Renaissance Economic Development Corporation.	71	X	X	X	X	X	
Small Business Administration Loan Approvals in Chinatown	237	X	X	X	X	X	X
Public, Private and Community Relief Agencies							
Safe Horizon	5,119	X	X	X	X		
Federal Emergency Management Agency (FEMA)	23,000	X	X	X	X	X	X
American Red Cross		X	X	X	X	X	
Catholic Charities	100			X	X		
World Vision Fund	400						X
TzuChi Buddhist Foundation	813	X	X	X			
Chinatown Manpower Project	194					X	X
Chinese American Planning Council	1,055				X	X	X
New York State Department of Labor Unemployment Insurance File	1,005		X	X			
Qualitative Research							
Interviews with Office of Emergency Management, New York Police Department, Verizon, Con Edison					X	X	X
Interviews with Business, Labor, Community Leaders					X	X	X
Analysis of Chinese Language Newspaper Coverage		X	X	X	X	X	

Appendix C: Estimation Methodology for Employment in Chinatown

Conventional government and private employment data sources do not readily provide a comprehensive estimate of the private employment in Chinese-owned businesses in Chinatown. In the ES 202 file, the New York State Department of Labor only provides employment counts at the ZIP code level. However, Chinatown covers parts of four ZIP codes in Lower Manhattan. In its survey of private industry, American Business Incorporated (ABI) captures employment level data on a census block group level, which allows a closer approximation of businesses in Chinatown. However, a careful review of both ES 202 and ABI files shows that both surveys substantially understated garment shops and jobs when comparing with other data from the New York State Department of Labor's Apparel Industry Task Force garment shop registration file and UNITE Local 23-25's list of union shops in Chinatown by street address. One of the main reasons the ES 202 file understates the number of garment shops and garment workers in the Chinatown ZIP codes is that accountants for garment shops often report the employment and payroll for their business clients using the address of the accountant. Further, both surveys provide estimates of businesses and jobs in Chinatown without considering ethnicity. The focus of this study, however, is on Chinese-owned and -operated businesses and Chinese workers in Chinatown.

In light of this challenge, the research team estimated employment level in Chinatown using the following data sources:

- (1) A door-to-door survey of Chinatown businesses;
- (2) A Chinese business telephone directory;
- (3) Data on registered garment factories from the Apparel Industry Task Force at the New York State Department of Labor;
- (4) UNITE (Local 23-25) garment shop and union membership lists;
- (5) Private employment data from New York State Department of Labor (ES 202 file, based on administrative records compiled in conjunction with the unemployment insurance system); and
- (6) A private industry survey (American Business Incorporated file).

Then, the following procedure was used to estimate the baseline employment figure in Chinatown:

1. Based on an intensive door-to-door survey of Chinatown businesses in the study area, team members identified and counted businesses by industry in the community. Then, based on a reconciliation of data derived from the door-to-door survey with the business information listed in the major Chinese language business directory, the team estimated a total of 3,855 businesses in Chinatown.
2. Out of 3,855 businesses, there are 246 garment factories in Chinatown (according to the Labor Apparel Industry Task Force at the New York State Department of Labor). The balance of 3,609 represents non-garment businesses in Chinatown.

3. According to the 2000 ABI (American Business Incorporated) file, a major business propriety data file, 5.5 employees is the average number of workers in a non-garment firm in the 10002 ZIP code, the major ZIP code in Chinatown.
4. The team multiplied 3,609 non-garment businesses by 5.5 (the average number of employees per non-garment establishment from the ABI file) to obtain an estimated total of 19,850 non-garment workers.
5. According to the UNITE membership file and other garment industry sources, there are 13,808 garment workers (unionized and non-unionized).
6. Based on the above analysis, the estimated total private employment level for Chinese businesses in Chinatown is 33,658 (this figure is derived by combining 19,850 non-garment workers and 13,808 garment workers).

Appendix D: Estimation Methodology for Job Loss and Wage Loss

The estimates for employment and wage loss are derived from data provided by Safe Horizon (see Table D.1). Based on Safe Horizon files, two types of employment loss were identified: immediate-term and short-term.

Immediate-term impacted workers refers to employees who experienced temporary dislocations during the first two weeks after September 11th.

Short-term impacted workers refers to workers who were laid-off during the first three months after September 11th.

Three types of wage losses were identified:

- (1) Lost wages of impacted workers during the first two weeks after September 11th;
- (2) Lost wages by laid-off workers; and
- (3) Reduced wages by current workers who experience reduced working hours.⁸²

However, the employment and wage data from Safe Horizon captured only part of the picture of impacted businesses and workers in Chinatown. Safe Horizon provided temporary cash assistance to workers in the disaster zone (south of Canal Street). Based on field research with businesses, labor groups, and trade association representatives, businesses located on the north side of Canal Street were as economically devastated as those located on the south side of Canal Street. As a result of the restricted vehicular traffic in Lower Manhattan, major bridges and tunnel shut-downs, and the increased scrutiny of trucks traveling into and out of Manhattan, consumers and tourists shied away from Chinatown entirely.

Furthermore, according to Census 2000 data, nearly 80% of the 23,000 residents who reside between Canal and Delancey streets (north of Canal Street in the Chinatown area) are of Asian descent. According to the Apparel Industry Task Force at the New York State Department of Labor, over 80% of Chinatown's garment factories are located north of Canal Street. According to a joint garment factory survey by the Federation and UNITE, the average size and workforce of garment factories north of Canal Street are larger than those south of Canal Street. While most other relief agencies use Canal Street as the relief boundary, the Empire State Economic Development Corporation extended the boundary beyond Canal Street in their business assistance programs and officially recognized Houston Street as the northern boundary for providing relief to struggling businesses. Therefore, in estimating job loss and wage loss for the entire Chinatown community, the extent of economic injury for Chinatown's businesses located north of Canal Street must also be taken into consideration.

The extent of employment and wage loss for north of Canal Street was estimated by multiplying the figure for employment and wage loss south of Canal Street, by the ratio of businesses for north of Canal Street relative to businesses south of Canal Street.

⁸² The Federation's recently completed industry-specific surveys with garment factories and restaurants owners indicate that over 70% of garment workers and 35% of restaurant workers were still working at reduced hours, five months after September 11th.

In order to capture the economic impact on employment and wage losses in Chinatown, the following procedures were implemented (see Table D.2):

1. Obtained a breakdown of businesses by type (e.g., garment factories, restaurants, and others) between south of Canal Street and north of Canal Street.
- **Employment Loss**
 2. Multiplied the ratio of businesses north of Canal Street relative to businesses south of Canal Street by the number of immediate-term dislocated workers and laid-off workers south of Canal Street to obtain estimates for the total number of immediate-term dislocated workers and laid-off workers in Chinatown.
 - **Wage Loss**
 3. Immediate-term Dislocated Workers:
Multiplied the ratio of businesses north of Canal Street relative to businesses located south of Canal Street by the amount of lost earnings for impacted workers in the area south of Canal Street to obtain estimates of reduced earnings for the area north of Canal Street. Then, the reduced wage figures for north and south of Canal were combined to estimate the total lost wages for immediate-term impacted workers in Chinatown.
 4. Laid-off Workers:
Multiplied the average weekly wage (before September 11th) by the six-month period to obtain wages lost due to job losses.
 5. Current Workers:
According to industry-specific employer surveys conducted by the Federation with UNITE and the Chinese American Restaurant Association, over 70% of garment workers and 35% of restaurant workers were working at reduced hours, five months after September 11th. Multiplying these percentages by the number of immediate-term impacted workers, an estimate of the current affect workers was determined. Then, this figure was multiplied by 50% of their pre-September weekly average earnings to obtain an estimate of reduced wages for currently affected workers.
 6. Total Wage Loss:
For the total estimation of wage loss, the estimates of lost wages for immediate-term impacted workers, lost wages of laid off workers, and reduced wages of currently affected workers were combined.
 - **Direct Effect Multipliers on Job Loss and Wage Loss**
 7. To estimate the multiplier effect⁸³ of these lost wages among garment workers and restaurant workers in Chinatown, the estimates of direct wage losses incurred by garment workers and restaurant workers were multiplied by a factor of 1.4 (garment workers) and 1.6 (restaurant workers).⁸⁴

⁸³ It should be noted that the multiplier effect of job loss and wage loss is not geographically bounded. Given that more than half of all Chinatown workers do not live in Chinatown, a substantive share of the spillover effect took place in other areas.

⁸⁴ Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis, Bureau of Economic Analysis.

As the above methodological framework shows, conservative assumptions were made when estimating employment loss and wage loss. Assuming that the average number of workers per factory north and south of Canal Street is the same, in other words a 1 to 1 ratio; but given that 80% of the factories are located north of Canal Street, this ratio becomes 4 to 1. This was the ratio used in the study. Alternatively, a more liberal approach in estimating employment loss and wage loss is to consider the ratio of average number of workers per factory for north and south of Canal, which is 1.2 to 1, based on our survey of garment factory owners. This would yield a ratio for garment factories (north of Canal Street and south of Canal Street) of 4.8 to 1.

Furthermore, the above estimation is conservative given the following factors:

1. Due to lack of available data, the estimation of total wage loss for all of Chinatown's workers (\$114 million) is calculated with the multiplier effect factored in for garment and restaurant workers only.
2. Due to the nature of the informal (cash-based) economy of Chinatown, not every affected worker who worked on the south side of Canal Street was able to access short-term cash assistance from Safe Horizon. According to Safe Horizon's guidelines, appropriate documentation, such as earnings records, had to be submitted before an individual could be approved for cash assistance. As reported in one Chinese language newspaper⁸⁵, more than 3,000 affected workers applied for Safe Horizon's temporary cash assistance program in a community center located at 62 Mott Street, however, only 1,900 were given relief monies.
3. In the garment industry, there are still some sweatshops that are not registered with NYSDOL. The size of these unofficial businesses is a matter of debate. Thus, these businesses are not captured in government, relief, or community source data files.
4. Also, a substantial number of workers perform garment work in their homes. Due to a lack of documentary support, this particular group of affected workers would not qualify for any assistance and, therefore, are not included in the data used for this study.

⁸⁵ "Safe Horizon Assistance Update," World Journal (November 13, 2001).

TABLE D.1:

Job Loss and Wage Loss in Chinatown in the Aftermath of September 11th
Safe Horizon Data - ONLY South of Canal Street

Number of Immediate-Term Impacted - All	5,119	Number of Laid-Offs - All	1,527
Garment Workers	2,641	Garment Workers	846
Restaurant Workers	1,092	Restaurant Workers	344
Others	1,386	Others	337
First Two Week Weekly Wage Loss - All	944,473	Average Weekly Earnings - All	318
Garment Workers	250,651	Garment Workers	207
Restaurant Workers	214,855	Restaurant Workers	319
Others	478,967		
Reduced Earnings of Current Workers		Underemployed Workers	2,712
Weekly Wage Loss - All	304,968	Garment Workers (70%)	2,278
Garment Workers	235,752	Restaurant Workers (35%)	434
Restaurant Workers	69,216		
Wage Loss for Laid-Off Workers	11,654,064		
Garment Workers	4,202,928		
Restaurant Workers	2,633,664		
Others	4,817,472		
Total Wage Loss	12,903,505		
Garment Workers	4,689,331		
Restaurant Workers	2,917,735		
Others	5,296,439		

TABLE D.2:
Estimation of Job Loss and Wage Loss in Chinatown
in the Aftermath of September 11th

Number of Immediate-Term Impacted - All	17,163	Number of Laid-Offs - All	5,323
Garment Workers	13,205	Garment Workers	4,230
Restaurant Workers	1,824	Restaurant Workers	574
Others	2,134	Others	519
First Two Week Weekly Wage Loss - All	5,657,741	Average Weekly Earnings - All	318
Garment Workers	3,088,288	Garment Workers	207
Restaurant Workers	814,795	Restaurant Workers	319
Others	1,754,658		
Reduced Earnings of Current Workers		Underemployed Workers	12,114
Weekly Wage Loss - All	31,064,378	Garment Workers (70%)	11,389
Garment Workers	28,290,189	Restaurant Workers (35%)	725
Restaurant Workers	2,774,189		
Wage Loss for Laid-Off Workers	45,928,990		
Garment Workers	24,031,210		
Restaurant Workers	4,336,337		
Others	17,561,443		
Total Wage Loss	82,651,110		
Garment Workers	55,409,687		
Restaurant Workers	7,925,321		
Others	19,316,102		
Direct-effect Multipliers	Wage Loss	Multiplier*	
Garment Workers	55,409,687	1.4678	81,330,338
Restaurant Workers	7,925,321	1.6654	13,198,830
Others	19,316,102	–	19,316,102
Total Wage Loss with Multipliers***			113,845,270
Direct Effect Multipliers Temporary Job Dislocat**		Multiplier*	
Garment Workers	13,205	1.4678	19,382
Restaurant Workers	1,824	1.6654	3,037
Others	2,134	–	2,134
Total Temporary Job Dislocations with Multipliers			24,553
Direct-Effect Multipliers	Job Loss	Multiplier*	
Garment Workers	4,230	1.4678	6,209
Restaurant Workers	574	1.6654	957
Others	519	–	519
Total Job Loss with Multipliers			7,685

* Source: Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis, Bureau of Economic Analysis.

** Temporary Job Dislocations.

*** Figure represents total wage loss for all of Chinatown workers with multipliers factored in for garment and restaurant workers only.

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Federal Emergency Management Agency
Garment Industry Development Corporation
Greater Blouse, Skirts and Undergarment Association
Ladies Apparel Contractors Association
Metropolitan Area Apparel Association
New York Chinatown Promotion & Tourism Association
New York City Department of City Planning
New York City Office of Emergency Management
New York City Police Department
New York City Department of Transportation
New York City Transit Authority
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An Economic Impact Study

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Tony Liu	New York Chinatown Promotion and Tourism Association
William Liu	TzuChi Buddhist Foundation
David Lo	Paradise Vacations
Jack Lok	Longitude-Latitude Travel
David Louie	Chinese Chamber of Commerce
Wing Ma	Metropolitan Area Apparel Association
Jim McConnell	Office of Emergency Management
Shannon McConville	UCLA Ralph and Goldy Center for Regional Policy Studies
Doug Miller	UCLA Ralph and Goldy Center for Regional Policy Studies
Timmy Moy	Chinese American Restaurant Association
Robin Mui	Chinese American Journalist Association
Regina Ng	Volunteer
Patty Noonan	New York City Partnership and Chamber of Commerce
Tanaz Pardiwala	Safe Horizon
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Elizabeth Rodriguez	Federal Reserve Bank of New York
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Joe Salvo	New York City Department of City Planning
Debra Shime	Safe Horizon
Belinda Siu	Charming Holiday Travel
Michael Sorrento	U.S. Small Business Administration
Robert Tam	Chinese American Restaurant Association
Anita Tse	Volunteer
Frank Tsu	Civilian Volunteer Crisis Relief
John Wang	Asian American Business Development Center
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Whiting Wu	Summit Import Corporation
Eva Xu	Volunteer
David Yat	5th Precinct Police Station, NYPD
Buckley Yung	Volunteer

About the Asian American Federation of New York

The Asian American Federation of New York is a not-for-profit organization that provides public policy and community service leadership to identify and meet the critical needs of Asian Americans in the New York metropolitan area. The New York City-based Federation serves the entire Asian American community by analyzing issues and voicing common concerns, advocating for beneficial policies, offering financial and management assistance, coordinating service delivery, and creating and heading unified, community-wide initiatives. Founded in 1989, the Federation has a membership of 36 community agencies that provide health and human services to diverse populations.

Working toward an empowered Asian American community with full participation in the larger society, the Federation is guided by the following priorities:

- Articulating Asian American concerns on public policy matters, and promoting understanding and cooperation between communities.
- Strengthening the capacity of community institutions.
- Generating human and financial resources for enhanced effectiveness in meeting community needs and aspirations.

The Federation's public policy and research work focuses on issues related to resource allocation, community needs, service availability and accessibility, immigrant rights, and community development.

This economic impact study is part of a comprehensive September 11th Relief, Recovery and Rebuilding Initiative that the Federation spearheaded in December 2001 with four community organizations to address Asian American community needs resulting from the September 11th terrorist attacks. The Federation launched the initiative with major support from The September 11th Fund, the McCormick-Tribune Foundation and the JP Morgan Chase Foundation. In addition to conducting this study, the Federation's September 11th efforts have included establishing a community service center in Chinatown, coordinating outreach and relief services, and providing financial aid through the Asian American Federation WTC Fund. The Federation belongs to the 9/11 United Services Group (USG), a 13-member consortium formed to coordinate assistance to people affected by the September 11th events.

Among other pivotal leadership functions, the Federation is the only Asian American organization on the East Coast selected by the U.S. Census Bureau to operate a Census Information Center. The center was established in August 2001 to conduct data and policy analysis and to encourage representation of the Asian American community in Census Bureau censuses and surveys. The Census Bureau's designation recognized the Federation's success in leading the Asian American Task Force on Census 2000, a coalition of 65 organizations that advised the Census Bureau and ensured an accurate count of Asian Americans in Census 2000.

Other current Federation projects, in addition to extensive support of its member agencies, include a campaign to foster Asian American philanthropy, as well as a groundbreaking research study of the quality of life and care of New York's growing Asian American elderly population.

For more information on the Federation, visit www.aafny.org or call 212-344-5878.

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