
Economic Impact of the September 11 World Trade Center Attack

Preliminary Report

Prepared for the
New York City Central Labor Council and the
Consortium for Worker Education

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Preface

The Fiscal Policy Institute is a nonprofit research and education organization that focuses on New York tax, budget and economic issues. This report was prepared under the direction of James Parrott, Ph.D., FPI's Chief Economist and Deputy Director. Moshe Adler, Ph.D. and Zofia Nowakowski, M.C.R.P., were the principal analysts. FPI's Oliver Cooke and Good Jobs New York's Stephanie Greenwood and Bettina Damiani assisted on aspects of the research.

I. Findings

- The New York City economy is expected to lose an estimated 108,500 jobs within the first month following the September 11 attack on the World Trade Center as a direct result of the attack. This is approximately 2.4 % of total local employment (including full-time, part-time and self-employment). This employment estimate encompasses direct, indirect and induced effects to estimate the total economic impact.
- The three industries with the greatest job impacts are securities, retail trade and restaurants. Securities was the most heavily impacted in the immediate vicinity of the Trade Center. Numerous restaurants were destroyed or forced to close and others cut staff due to the spillover effects on tourism and business travel. Retail trade (excluding restaurants) has also suffered as a result of the direct effect of the attack and its aftermath on consumer spending.
- The total lost output to the New York City economy from the World Trade Center attack is estimated at \$16.9 billion. The total lost value-added in the local economy is estimated at \$11.7 billion, or 3.1% of the total value-added in the city economy in the year 2000.
- The total labor compensation associated with the 108,500 lost jobs is \$6.7 billion. Labor compensation includes total payroll costs (wages and salaries, fringe benefits, and payroll taxes). This amount represents 2.7% of the estimated total employee compensation in New York City in 2000.
- These results are summarized in the table below.

Industry	Employment	Output (\$ millions)	Compensation (\$ millions)
Securities	12,200	4,382.6	2,577.2
Retail trade	12,200	683.7	311.1
Restaurants	11,900	582.2	241.8
Theatrical producers	7,800	872.8	263.0
Banking	5,400	2,777.0	679.6
Building services	5,400	344.8	148.6
Air transportation	5,300	635.7	265.0
Hotels	4,300	451.1	177.3
Advertising	2,700	435.3	200.8
Insurance carriers	2,500	698.5	280.5
Real Estate operators	2,300	554.9	54.1
Computer/Data Processing	2,300	305.8	159.6
Subtotal, major industries	74,300	12,724.4	5,358.6
All other industries	34,200	4,129.0	1,364.7
Total	108,500	16,853.4	6,723.3

II. Purpose

This analysis was prepared to inform the emergency World Trade Center attack re-employment assistance provided by the New York City Central Labor Council and the Consortium for Worker Education.

Subsequent analyses will examine: (1) the occupational and wage distribution ramifications of these industry employment estimates; and (2) the positive economic and employment impacts of the clean-up and rebuilding effort.

III. Methodology

This report presents estimates of the total economic and employment effect of the September 11 event and its aftermath. These estimates are based on the best available information regarding the direct impacts, supplemented by FPI's economic analyses. The employment and output estimates are considered to be those that would occur in the first month following the event. The anticipated direct employment effects were used to estimate total economic and employment effects using the IMPLAN input-output model for New York (see page 5). This job loss estimate represents jobs lost to the New York City economy, not necessarily increased unemployment of that magnitude. Some jobs relocated outside of the city.

While the New York City economy was slowing prior to September 11, the World Trade Center (WTC) attack and its implications for the nation's financial sector and consumer confidence apparently pushed the local and the national economies into recession. The analysis in this report attempts to capture the economic effects that can be directly attributed to the World Trade Center attack and does not incorporate broader recession-related employment and output losses.

Three types of direct effects are considered:

1. **WTC Area** The displacement of businesses in the World Trade Center area and the disruption of retail activities in Lower Manhattan;
2. **Spillover Effects** The effects on industries such as air transport and tourism immediately affected in the aftermath; and
3. **WTC-Related Weaker Consumer Demand** The effects from weakened consumer demand in the local economy.

The assumptions made in connection with key industries in each of these categories are summarized in the following pages.

1. WTC Area

Businesses in the securities, banking, insurance carrier, real estate operation, legal, computer and data processing services occupied a substantial majority of the space in the WTC and surrounding buildings. For the major tenants in these industries, a database was developed tracking where these businesses relocated. The employment for businesses that relocated outside of New York City was considered to be lost to the city, at least for the first thirty days. However, in these cases, the household consumption of New York City residents whose jobs moved outside the city was assumed to remain in the city. It was assumed that the jobs of most of the missing workers would not be filled in the first thirty days. Except for this, it was assumed that the number of jobs in the displaced businesses would not change.

Since the financial markets were closed for most of a week, an allowance was made for industry-wide reduced productivity and output in the New York City securities industry. The securities industry has been the dominant driving force in the city economy in recent years, accounting for roughly half of total economic growth since the early 1990s although the industry accounts for only about 5% of total payroll employment in New York City.

Several thousand people worked as building service workers, in food service, or at hotels in the area of the attack. For most of these workers, such as those at the Windows on the World restaurant, their employing establishments ceased operations and they are permanently displaced.

There was a substantial underground mall beneath the WTC plaza and several other, generally small, retail and restaurant operations in the immediate vicinity. Most of these jobs are lost, at least for the first 30 days. In addition, because the entire area below Canal was off-limits for several days and that pedestrian access since then has been limited, many stores and restaurants in Lower Manhattan have experienced greatly diminished sales.

For each of the major industries, the direct employment assumptions are provided in the table on page 6.

2. Spillover Effects

Several industries in New York City were immediately hit by adverse spillover effects. Air travel throughout the nation was shut down for a few days but more importantly, people's desire to travel by air plummeted. With 2 major airports and several air transportation-related businesses, New York City has over 54,000 air transport jobs.

The tourism and business travel industry more generally was also immediately hit. Hotel occupancy rates in New York City and other major tourist destinations in the U.S. dropped sharply. While there is no explicit "tourism" industry category in the official employment data, one can see tourism-related effects in hotels, restaurants,

local transportation, and in New York City, in attendance at Broadway theaters. Several Broadway plays have been forced to close within the first two weeks after September 11. Newspaper reports of business and employment declines were verified and supplemented with FPI's own analysis of the likely direct effects.

Advertising, another significant and high value-added industry in New York City, was also immediately affected. The television networks generally refrained from running commercials for the first few days, and reports of a broader negative effect on advertising industry revenues appeared. FPI assumed a 1,000 reduction in advertising employment and a 3% drop in revenues.

3. WTC-Related Weaker Consumer Demand

The tremendous human, emotional and psychological impact of the events of September 11 and its aftermath has had an effect on household spending in New York City, especially on non-essential items. Total consumption spending in New York City is over \$200 billion annually. FPI assumed a 10% reduction in consumer spending for one month for items other than food, housing and medical care.

The total employment impact of FPI's assumption regarding reduced consumer demand is 9,600 jobs. These are largely concentrated in retail and local service areas.

The IMPLAN Model

FPI used the IMPLAN model to estimate the indirect and induced effects throughout the city economy of the impacts of the WTC attack on 12 industries. The IMPLAN model, originally developed for the Federal government, utilizes detailed data on national and local inter-industry economic transactions to model the effects of regional economic changes. Indirect effects are effects on the businesses supplying industries directly affected. Induced effects result from the change in household expenditures (consumption) caused by the lost earnings in industries directly affected.

IV. Detailed Employment, Output and Compensation Effects

The following tables show the detailed direct, indirect and induced effects on employment, output and compensation in the New York City economy.

Direct, Indirect and Induced New York City Employment Effects Resulting from the World Trade Center Attack

Industry	Direct	Indirect	Induced	Total
Securities	10,513	1,574	93	12,180
Retail Trade*	7,542	54	4,590	12,187
Restaurants	8,819	427	2,634	11,879
Broadway theaters	6,014	1,673	80	7,766
Banking	5,064	161	220	5,445
Building Services	5,010	261	133	5,404
Air Transportation	5,038	141	153	5,332
Hotels	3,955	144	238	4,337
Advertising	2,352	235	70	2,657
Insurance carriers	2,119	28	368	2,514
Real estate operators	1,068	634	569	2,271
Computer/data processing	1,003	1,142	191	2,336
Subtotal, major industries	58,496	6,472	9,337	74,305
All other industries	6,332	11,145	16,724	34,202
Total	64,829	17,617	26,062	108,507

* Retail trade excluding restaurants.

Direct, Indirect and Induced New York City Output Effects Resulting from the World Trade Center Attack (in \$millions)

Industry	Direct	Indirect	Induced	Total
Securities	\$3,783	\$566	\$33	\$4,383
Retail Trade*	\$436	\$3	\$245	\$684
Restaurants	\$432	\$21	\$129	\$582
Broadway theaters	\$676	\$188	\$9	\$873
Banking	\$2,583	\$82	\$112	\$2,777
Building Services	\$320	\$17	\$8	\$345
Air Transportation	\$601	\$17	\$18	\$636
Hotels	\$411	\$15	\$25	\$451
Advertising	\$385	\$38	\$11	\$435
Insurance carriers	\$589	\$8	\$102	\$699
Real estate operators	\$261	\$155	\$139	\$555
Computer/data processing	\$131	\$149	\$25	\$306
Subtotal, major industries	\$10,608	\$1,259	\$857	\$12,724
All other industries	\$1,144	\$1,203	\$1,782	\$4,129
Total	\$11,752	\$2,463	\$2,639	\$16,853

* Retail trade excluding restaurants.

Direct, Indirect, Induced New York City Compensation Effects Resulting from the World Trade Center Attack (in \$millions)

Industry	Direct	Indirect	Induced	Total
Securities	\$2,225	\$333	\$20	\$2,577
Retail Trade*	\$194	\$1	\$115	\$311
Restaurants	\$179	\$9	\$54	\$242
Broadway theaters	\$204	\$57	\$3	\$263
Banking	\$632	\$20	\$27	\$680
Building Services	\$138	\$7	\$4	\$149
Air Transportation	\$250	\$7	\$8	\$265
Hotels	\$162	\$6	\$10	\$177
Advertising	\$178	\$18	\$5	\$201
Insurance carriers	\$236	\$3	\$41	\$280
Real estate operators	\$25	\$15	\$14	\$54
Computer/data processing	\$69	\$78	\$13	\$160
Subtotal, major industries	\$4,492	\$554	\$313	\$5,358
All other industries	\$217	\$529	\$618	\$1,365
Total	\$4,709	\$1,083	\$931	\$6,723

* Retail trade excluding restaurants.