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THE PUBLIC ADVOCATE FOR THE
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Wal-Mart's Economic Footprint:
A literature review prepared by Hunter College Center for Community Planning & Development and New York City Public Advocate Bill de Blasio

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Executive Summary

Wal-Mart is the world's largest retailer with more than 4,300 stores in the United States and over 8,000 worldwide, with global sales topping $400 billion in 2009.[1] It is the largest retailer in the U.S., where more than half its revenue comes from grocery sales.[2] Wal-Mart's formula for financial success includes: low-wage labor, limited health benefits, and leveraging of government subsidies

Hundreds of studies, reports, and articles have been written about the negative impacts of Wal-Mart. This document represents a thorough review of key literature between 2002 and 2010, and points to many of the retail giant's negative impacts. It examines over fifty studies conducted over the past seven years on Wal-Mart's impact on both local and national economies. It represents research encompassing all fifty states, including the first research conducted regarding Wal-Mart in a major U.S. City: Chicago.

Since opening its first store in Bentonville, Arkansas in 1962, Wal-Mart has steadily spread from its base in the South and Midwest to dominate the suburban and rural retail market across the U.S. Having effectively saturated these markets, Wal-Mart's most lucrative opportunities for growth are now outside the U.S.. However, the company has also begun to move aggressively into those more densely populated central cities that have so far been off limits, either for lack of space in which to shoe-horn the mall-size Wal-Mart outlets or due to local antipathy to the company because of its negative impact on small businesses and the local economy.

Wal-Mart is addressing the first obstacle – store size – by changing its standard big box model to a more flexible one involving stores of widely varying sizes, perhaps even as small as a few thousand square feet, the size of many local grocery stores. According to Garrick Brown, Vice President of Research at Colliers International, "Smaller designs, in the twenty thousand square-foot range, and mostly groceries – that's where the money is."[3] For example, four stores are planned for the Washington, DC area, including multi-story buildings in both central city and suburban settings.[4] Twenty-four new stores are planned for the San Francisco Bay Area. Several years ago the company opened its first store in Chicago and is planning a dozen more.[5]

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[1] Wal-Mart. "Corporate Facts: Wal-Mart by the Numbers." March, 2010. http://Wal-Martstores.com/download/2230.pdf

[2] ABMN Staff. "BusinessNews: Wal-Mart Hopes to Expand to San Francisco." September 22, 2010. www.americanbankingnews.com/2010/09/22/wal-mart-nyse-wmt-hopes-to-expand-to-san-francisco/

[3] ibid

[4] Dan Malouf. "Will Wal-Mart be Urban? Part 1: Brightwood." Greater Greater Washington. November 21, 2010. http://greatergreaterwashington.org/post/8208/will-Wal-Mart-be-urban-part-1-brightwood/

[5] ibid; Stephanie Clifford. "Wal-Mart Gains in its Wooing of Chicago." The New York Times. June 24, 2010. http://www.nytimes.com/2010/06/25/business/25 Wal-Mart.html

Although Wal-Mart has overcome the challenge of fitting its stores into urban environments, these smaller stores continue to bring negative overall economic impacts on the communities where they are located. The retail giant is undertaking a major public relations campaign; however, the corporation has made only minor concessions and their promises about job creation and tax revenues are not realized.

The overwhelming weight of the independent research on the impact of Wal-Mart stores on local and national economies – including jobs, taxes, wages, benefits, manufacturing and existing retail businesses – shows that Wal-Mart depresses area wages and labor benefits contributing to the current decline of good middle class jobs, pushes out more retail jobs than it creates, and results in more retail vacancies. There is no indication that smaller "urban" Wal-Mart stores scattered throughout a dense city in any way diminish these negative trends. Rather, such developments may actually result in more widespread economic disruption.

1. Wal-Mart's Economic Impacts: Net Loss of Jobs, Fewer Small Businesses

- Wal-Mart store openings kill three local jobs for every two they create by reducing retail employment by an average of 2.7 percent in every county they enter.[6]

- Wal-Mart's entry into a new market does not increase overall retail activity or employment opportunities.[7] Research from Chicago shows retail employment did not increase in Wal-Mart's zip code, and fell significantly in those adjacent.

- Wal-Mart's entry into a new market has a strongly negative effect on existing retailers.[8] Supermarkets and discount variety stores are the most adversely affected sectors, suffering sales declines of 10 to 40% after Wal-Mart moves in.[9]

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[6] Neumark, David, Junfu Zhang, and Stephen Ciccarella, January 2007. "The Effects of Wal-Mart on Local Labor Markets." Institute for the Study of Labor Discussion Paper #2545, University of Bonn. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=958704.

[7] Julie Davis, David Merriman, Lucia Samyoa, Brian Flanagan, Ron Baiman, and Joe Persky. "The Impact of an Urban Wal-Mart Store on Area Businesses: An Evaluation of One Chicago Neighborhood's Experience." Center for Urban Research and Learning, Loyola University Chicago. December 2009. http://luc.edu/curl/pdfs/Media/Wal-MartReport21010_01_11.pdf; David Neumark, Junfu Zhang, and Stephen Ciccarella. "The Effect of Wal-Mart on Local Labor Markets." IZA Discussion Paper No. 2545 (January 2007). http://ftp.iza.org/dp2545.pdf

[8] Srikanth Parachuri, Joel A.C. Baum, and David Potere. "The Wal-Mart Effect: Wave of Destruction or Creative Destruction?" Economic Geography 85.2 (2009): 209-236.

[9] Kenneth E. Stone, Georgeanne Artz, and Albery Myles. "The Economic Impact of Wal-Mart Supercenters on Existing Businesses in Mississippi." Mississippi University Extension Service. 2002. http://Wal-Mart.3cdn.net/6e5ad841f247a909d7_bcm6b9fdo.pdf ; O. Capps, and J.M, Griffin. "Effect of a Mass Merchandiser on Traditional Food Retailers." Journal of Food Distribution 29 (February 1998): 1-7;

- Stores near a new Wal-Mart are at increased risk of going out of business. After a single Wal-Mart opened in Chicago in September 2006, 82 of the 306 small businesses in the surrounding neighborhood had gone out of business by March 2008.[10]

- The value of Wal-Mart to the economy will likely be less than the value of the jobs and businesses it replaces. A study estimating the future impact of Wal-Mart on the grocery industry in California found that, "the full economic impact of those lost wages and benefits throughout southern California could approach $2.8 billion per year."[11]

- Chain stores, like Wal-Mart send most of their revenues out of the community, while local businesses keep more consumer dollars in the local economy: for every $100 spent in locally owned businesses, $68 stayed in the local economy while chain stores only left $43 to re-circulate locally.[12]

2. Wal-Mart's Costs to Taxpayers

- Wal-Mart has thousands of associates who qualify for Medicaid and other publicly subsidized care, leaving taxpayers to foot the bill.[13] For instance in Ohio Wal-Mart has more associates and associate dependents on Medicaid than any other employer, costing taxpayers $44.8 million in 2009.[14]

- According to estimates, Wal-Mart likely avoided paying $245 million in taxes 2008 by paying rent to itself and then deducting that rent from its taxable income.[15]

Vishal P. Singh, Karsten T. Hansen, and Robert C. Blattberg. "Impact of a Wal-Mart Supercenter on a Traditional Supermarket: An Empirical Investigation." February 2004. http://chicagobooth.edu/research/workshops/marketing/archive/WorkshopPapers/hansen.pdf; Kusum L. Ailawadi, Jie Zhang, Aradhna Krishna, and Michael W. Kruger. "When Wal-Mart Enters: How Incumbent Retailers React and How This Affects Their Sales Outcomes." Journal of Marketing Research 47.4 (August 2010).

[10] Davis et al, id

[11] Martin Boarnet, and Randall Crane. "The Impact of Big Box Grocers on Southern California: Jobs, Wages, and Municipal Finances." Orange County Business Council. September 2009. http://www.coalitiontlc.org/big_box_study.pdf

[12] Civic Economics. "The Andersonville Study of Retail Economics." October 2004. http://www.andersonvillestudy.com/AndersonvilleSummary.pdf

[13] "Good Jobs First" reports that in 21 of 23 states which have disclosed information, Wal-Mart has the largest number of employees on the Medicaid rolls of any employer. http://www.goodjobsfirst.org/corporate_subsidy/hidden_taxpayer_costs.cfm

[14] Ohio Department of Jobs and Family Services. "Ohio Medicaid Recipients by Employer." September 2009. http://pnohio.3cdn.net/5ddd17f44b6d3a8a58_sjm6bx1ew.pdf

[15] United Food and Commercial Workers International Union. "Outline of Data and Methodology for Estimating Amount of Tax Avoided By Wal-Mart." http://wakeupWal-Mart.com/facts/statebudgetsappendix.html.

- Wal-Mart has admitted a failure to pay $2.95 billion in taxes for fiscal year 2009.[16]

3. Wal-Mart's low paying jobs contribute to the decline of the middle class

- Median household income declined by 1.8% nationally and 4.1% in New York City in 2009.[17] This decline will be exacerbated by low paying Wal-Mart jobs.

- Wal-Mart's average annual pay of $20,774 is below the Federal Poverty Level for a family of four.[18]

- A Wal-Mart spokesperson publicly acknowledged in 2004 that, "More than two thirds of our people... are not trying to support a family. That's who our jobs are designed for."[19]

- Wal-Mart's 2010 health care offerings have a high annual deductible of $4,400 which means a family would have to spend $5,102 of their own money on health care before Wal-Mart's insurance pays anything. Based on the average salary of a Wal-Mart employee this payment represents almost 25% of their annual income.[20] [21]

For these reasons, we conclude that the entry of even a single Wal-Mart store in New York City could have a snowball effect and result in a negative long-term cumulative impact on the city's economy and continued decline of the middle class. A single small Wal-Mart, or a single superstore, could mean the demise of existing food retailers, end local retail, and hurt working families. Considering Wal-Mart's aggressive plans for expansion into urban markets all across the country, there is no reason to believe the company would be satisfied with only one store in the nation's largest city.

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[16] Tom English, and Mark J. Cowan. "The Challenges of Transparency in Corporate Tax Departments," The CPA Journal, October 2007; Wal-Mart Stores Inc. Form 10-K for fiscal year ended January 31, 2010. Consolidated Financial Statements, Note 8, pg. 36

[17] http://www.crainsnewyork.com/article/20100809/FREE/100809838

[18] The calculation assumes that a full-time Wal-Mart worker works an average of 34 hours a week, 52 weeks a year. The average of 34 hours a week is obtained from an internal Wal-Mart memo http://www.nytimes.com/packages/pdf/business/26Wal-Mart.pdf

[19] Transcript of PBS Newshour, 23 August 2004

[20] The calculation was performed for a family with one earning member who earns the Wal-Mart average wage of $11.24/hour, and works an average of 34 hours a week for 52 weeks a year.

[21] This information is taken from the guide to annual enrollment that Wal-Mart distributed to its associates in September-October 2009 for benefit year 2010.

Net Loss of Jobs, Fewer Small Businesses

While City representatives may have engaged in discussions with Wal-Mart or its agents, there has been no public review of Wal-Mart's plans or assessment of potential impacts. However, the case of the new Wal-Mart store in Chicago strongly suggests negative impacts that New York City could expect to experience with the introduction of Wal-Mart stores. A 2009 study by the Center for Research & Urban Learning at Loyola University surveyed a four-mile radius before and after the opening of Chicago's first Wal-Mart in September 2006.[22] The survey found that Wal-Mart's entry led to local business failures, no measurable increase in retail employment or sales in the immediate area of the new store, and a noticeable drop in jobs and sales in surrounding areas. To be more precise, 25% of retail businesses within a mile of the Wal-Mart closed within a year.

The Loyola study confirmed a basic principle of retailing in urban areas: total sales are for the most part based on a finite pool of disposable consumer income, and new retailers cannot simply create new sales without taking them away from others. "For Wal-Mart's own zip code, 60639, there is no evidence of an overall upturn in sales," concluded the researchers. Retail employment also declined overall: "Retail employment levels in Wal-Mart's own zip code show no significant change, presumably because of the addition of Wal-Mart's own employees. But retail employment trends in neighboring zip codes show a negative effect after Wal-Mart's opening. This effect is significant in the period 2003-2008."[23] The researchers found that the hardest-hit businesses were selling electronics, toys, office supplies, general merchandise, hardware, home furnishings and drugs. A University of Illinois analysis of a proposed Wal-Mart in Chicago in 2004 had accurately predicted that the megastore's arrival would lead to a net job loss and only a minimal increase in net tax revenues.[24]

Other research shows that Wal-Mart's arrival in a new market has a particularly damaging effect on ethnic retailers including supermarkets, bodegas, electronics and furniture stores.[25] A recent study in Florida found that drugstores and stores specializing in apparel, sporting goods, home furnishings, cards and gifts, and other essential consumer household goods are likely to suffer the

[22] Davis et al, id
[23] ibid.
[24] UIC Center for Urban Economic Development. "The Economic Impact of Wal-Mart: An Assessment of the Wal-Mart Store Proposed for Chicago's West Side. March 2004. http://www.uic.edu/cuppa/uicued
[25] Center for Research & Urban Learning & Loyola University, 2009.

most.[26] Take a stroll down neighborhood retail strips in Washington Heights, Flushing, or East New York and it's clear that these are the products most commonly sold by locally-owned retail shops in New York City.

Another study that examined the impact of new Wal-Mart stores in seven markets around the country found that Wal-Mart's entry had substantial negative impacts on sales of mass-produced consumer staples by local vendors: "In the year following entry, mass stores suffer a median sales decline of 40% and supermarkets suffer a median sales decline of 17%, while drug stores experience a much smaller median decline of 6%. This magnitude of sales impact is broadly consistent with prior research"[27]

Small locally-owned businesses are not the only Wal-Mart victims. Other chain stores and discount retailers also suffer from Wal-Mart's manipulation of prices. One study of a nationwide dataset of Wal-Mart's effect on previously existing discount retailers found that roughly half of small discount stores closed after Wal-Mart's arrival.[28] The unfortunate result is a reduction of competition and many empty storefronts.

Independently owned local businesses are an essential part of New York City's vibrant residential neighborhoods. Chain stores are concentrated in a few outer-borough malls and in heavily-trafficked parts of Midtown and Lower Manhattan, while independent retailers predominate in most of the rest of the city. Independent retailers flourish, for example, in the dense commercial districts serving immigrant communities, in Flushing and Corona (Queens), Sunset Park (Brooklyn), Melrose (The Bronx) and Washington Heights (Manhattan).

As Jane Jacobs observed in her classic work *The Death and Life of Great American Cities:*

> "Commercial diversity is, in itself, immensely important for cities, socially as well as economically...wherever we find a city district with an exuberant variety and plenty in its commerce, we are apt to find that it contains a good many other kinds of diversity also, including variety of cultural opportunities, variety of scenes, and a great variety in its population and other users. This is more than a coincidence." (p. 148)

The benefits of the small business economy are clear to see in districts like Downtown Flushing where small business has served as the engine of neighborhood growth and has led to the emergence of a uniquely diverse urban center that attracts residents and visitors from throughout the city and region. Linkages among small businesses strengthen them and help sustain them in hard times. Linkages between small businesses and civic and social organizations in

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[26] Parachuri et al, id

[27] Ailawadi et al, id

[28] Panle Jia. "What Happens When Wal-Mart Comes to Town: An Empirical Analysis of the Discount Retailing Industry." Econometrica 76.6 (November 2008): 1263-1316.

communities' help neighborhoods thrive and develop. Innumerable personal ties between local merchants and residents are enormous assets to a thriving urban environment.

Locally owned businesses are crucial to the vitality of our economy because they keep a higher percentage of their resources in the local economy by procuring their goods and services from the local area. Locally-owned businesses recirculate dollars in the neighborhood while chain stores send revenues to corporate headquarters. A 2004 study found that for every $100 spent in locally owned businesses, $68 stayed in the local economy while chain stores only left $43 to re-circulate locally. The local owners tend to live in the community, spend more on labor, are twice as likely to use local supply networks, and contribute more to local charities.[29]

Small businesses are the engines of local economic development, leaders in innovation and change, and are more productive than large chains.[30] In New York City, small retail businesses are a particularly important means of economic and social advancement for immigrant families.

Even if Wal-Mart imitates the appearance of our small business retailers by subdividing into small outlets, it will still operate as a global monopoly with the same giant supply chain, and the same low wages and substandard labor policies.

Our observations about the critical importance of locally-owned businesses are widely shared among those who have studied urban economies in depth. According to economists at Winthrop University, States with a higher percentage of very small businesses, those with 20 employees or less, have a more productive workforce and higher levels of GDP growth than states with lower levels of very small businesses. Furthermore, states that are rich in very small businesses have lower rates of unemployment.[31]

Wal-Mart is trying to take advantage of the current economic downturn by promising an immediate infusion of jobs and investment dollars in city neighborhoods that have been hit hard by the recession. Considering the body of independent research that clearly demonstrates Wal-Mart's negative long-term impacts on local economies, it would be shortsighted to allow this destructive retail monopolist to enter the New York City market via the Trojan Horse of "job creation."

Lastly, Wal-Mart typically sells promotable products below their cost as a loss leader to draw in customers.[32] Wal-Mart has the ability to lower these prices, even if it means losing money for up to ten years, something small businesses cannot afford.[33] After driving out competition, the

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[29] Civic Economics, id

[30] Parachuri et al, id

[31] D.K. Robbins, L.J. Pantuosco, D.F Parker, and B.K. Fuller. "An Empirical Assessment of the Contribution of Small Business Employment to U.S. State Economic Performance". Small Business Economics 15 (2000): 293–302.

32 B. Lund. "Predatory Pricing Practices and the Toy Industry." Global Toy News. August 27, 2010 http://www.globaltoynews.com/2010/08/Wal-Mart-predatory-pricing-and-the-toy-industry.html

[33] MacPherson; Lintereur, id

company increases prices on those products. Artificially lowering prices impacts not only small local businesses, but has major ramifications on manufacturing and the global economy.

Predatory pricing forces competing retailers to sell at a loss, or cancel orders for promotable products because they cannot compete with the artificially low prices. This hurts those small businesses and has major implications for manufacturers. Consumer products will ultimately sell fewer units because Wal-Mart will be the only store left selling these products. This causes losses for manufacturers by devaluating goods and impacting quantities.[34]

According to Bloomberg News, this was done on a massive scale this holiday season. Wal-Mart managers in the U.S. received instructions to mark up an average of 1,800 types of toys per store this holiday season, according to a company e-mail send the month before Christmas.[35]

Wal-Mart's power to sell products below their typical market value has led to the laying off of employees and the closure of U.S. plants in favor of outsourcing products from overseas.[36] Eighty-five percent of Wal-Mart's items are made overseas. The mega-retailer has faced numerous accusations of unacceptable conditions in the factories of their suppliers. Reported abuses include: "forced overtime, locked bathrooms, starvation wages, pregnancy tests, denial of access to health care, and workers fired and blacklisted if they try to defend their rights."[37]

Costs to Taxpayers

Because many of Wal-Mart's employees do not earn enough to make ends meet they often turn to public assistance. Each Wal-Mart store, averaging 200 employees, costs taxpayers approximately $420,750 annually in public social services used by store employees.[38] Wal-Mart has thousands of associates who qualify for Medicaid and other publicly subsidized care, leaving taxpayers to foot the bill.[39] For instance, Wal-Mart has the greatest number of associates and associate dependents on Medicaid in Ohio, costing taxpayers $44.8 million in 2009.[40]

According to the group Wal-Mart Subsidy Watch, a non-profit watchdog group, Wal-Mart has already received subsidies worth about $52 million in New York State. At least eight Wal-Mart locations in New York have challenged their property tax assessment, recouping about $766,000.[41] Wal-Mart has already cost New Yorkers millions of dollars, even before entering the state's largest marketplace.

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34 D. Moberg. "The Wal-Mart Effect: The How's and Whys of Beating the Bentonville Behemoth." June 10, 2004

[35] M. Boyle. "Wal-Mart Raising Prices on Toys, Squeezing More Out of Holidays." Bloomberg News. December 15, 2010

[36] Fishman, id

[37] United Food and Commercial Workers International Union. "Wal-Mart and Sweatshops." http://www.ufcw.org/take_action/Wal-Mart_workers_campaign_info/facts_and_figures/Wal-Martsweatshops.cfm

38 Congressman G. Miller. "Everyday Low Wages: The Hidden Price We All Pay For Wal-Mart" February 16, 2004.

[39] Good Jobs First, id

[40] Ohio Department of Jobs and Family Services., id.

[41] www.Wal-Martsubsidywatch.org/index.html

Wal-Mart also uses controversial methods to reduce the taxes it pays. They use a Capital Real Estate Investment Trust (REIT) where the corporation pays rent to itself and then deducts that rent from its taxable income.[42] It is estimated that Wal-Mart likely avoided paying $245 million in 2008 using this strategy nationwide.[43] By its own admission, Wal-Mart likely owes billions in taxes.

Wal-Mart's entry into the New York City market may also negatively affect the tax base by displacing the better compensated employees of the existing retail sector. This is especially relevant for the unionized workers of the grocery sector. A study of Wal-Mart's potential entry into the San Francisco market estimated that if Wal-Mart were to take ten to twenty percent of the grocery markets and replace thousands of union supermarket employees with Wal-Mart workers, the region would lose $300 to $576 million dollars in employee wages and benefits.[44]

Wal-Mart's low paying jobs contribute to the decline of the Middle Class

According to the 2009 Census Bureau's survey of income and poverty in the United States, Median household income is falling in the vast majority of U.S. states and in virtually every single major U.S. city, representing a shocking decline of the middle class. Unemployment has also skyrocketed in recent years and it has become much harder to get a good middle class job.[45]

According to the Census Bureau, median household income declined in thirty four U.S. states in 2009 and almost all U.S Cities.

- In New York City, median household declined 4.1% to $55,980.
- In Detroit, median household income declined 10% to $48,535.
- In Orlando, median household income dropped almost 10% to $46,856.
- In Cleveland, median household income fell 8.5% to $45,395.
- In Miami, median household income declined 8.2% to $45,946.
- In Indianapolis, median household income dropped 7.1% to $50,140.

With an average annual pay of $20,774, significantly below the Federal Poverty Level for a family of four, Wal-Mart's workforce can largely be classified as working poor.[46,47] Wal-Mart's 1.3 million employees being forced to accept poverty level wages and bare bones health benefits

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[42] Drucker, id

[43] Good Jobs First. "Wal-Mart Subsidy Watch." http://wakeupWal-Mart.com/facts/statebudgetsappendix.html

[44] Marlon Boarnet, Randall Crane, Daniel G. Chatman, and Michael Manville. "Emerging Planning Challenges in Retail: The Case of Wal-Mart." Journal of the American Planning Association 71.4 (2005): 433-449.

[45] U.S Census Bureau "Income, Poverty, and Health Insurance Coverage in the United States: 2009" September, 2010.

[46] The calculation assumes that a full-time Wal-Mart worker works an average of 34 hours a week, 52 weeks a year. The average of 34 hours a week is obtained from an internal Wal-Mart memo. http://www.nytimes.com/packages/pdf/business/26Wal-Mart.pdf

[47] U.S. Department of Labor Bureau of Labor Statistics "A Profile of the Working Poor, 2000" March 2002

will only exacerbate the continuing decline of the middle class, including in New York City.[48] A Wal-Mart spokesperson was quoted in 2004 saying, "More than two thirds of our people...are not trying to support a family, that's who our jobs are designed for."[49]

A study done by the UC Berkeley Institute of Industrial Relations compared Wal-Mart's wages to other large retailers, as well as other industry segments. Wal-Mart employees constitute of 55% of all general merchandise workers, and 71% of large general merchandise workers. The study found a significant gap in pay for Wal-Mart employees. Looking at comparable retailers and adjusting wages for local labor markets, Wal-Mart employees earned less than their counterparts at other retailers. On average, general merchandise workers made 17.4% more and large general merchandise workers made 25.6% more than the Wal-Mart average for similar employees[50].

Not only are employees being paid less than fair wages, only half of Wal-Mart employees are receiving healthcare. And those who do receive benefits are enrolled in plans that provide inadequate coverage.

Wal-Mart's 2010 health care offerings include low premiums of $27 per pay period for family coverage, or $702 per year; however this plan has a high annual deductible of $4,400.[51] With a $4,400 annual deductible, a family would have to pay $5,102 of their own money before Wal-Mart's insurance pays for anything. For a family whose only income comes from a Wal-Mart associate, making Wal-Mart average wages of $11.75 an hour, this equals almost 25% of their annual income.[52] New Yorkers cannot afford to devote one forth of their incomes to healthcare before their insurance kicks in.

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[48] Arindrajit Dube, and Steve Wertheim. "Wal-Mart and Job Quality – What Do We Know and Why Should We Care?" UC Berkeley Center for Labor Research and Education. October 16, 2005. http://laborcenter.berkeley.edu/retail/Wal-Mart_jobquality.pdf

[49] Transcript of PBS Newshour, 23 August 2004

[50] ibid

[51] This information is taken from the guide to annual enrollment that Wal-Mart distributed to its associates in September-October 2009 for benefit year 2010.

[52] The calculation was performed for a family with one earning member who earns the Wal-Mart average wage of $11.24/hour, and works an average of 34 hours a week for 52 weeks a year.

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Maritza Silva-Farrell Testimony on Walmart
February 3, 2011

Good morning and thank you for allowing me the opportunity to comment on the implications of Walmart opening stores throughout New York City. My name is Martiza Silva-Farrell, and I'm from New York Jobs with Justice, a coalition of worker and community organizations building power to secure good jobs and strong communities for all New Yorkers.

For nearly two decades, New York Jobs with Justice has worked to ensure that New York thrives by advocating for policies that encourage good job creation and corporate and government accountability. We have seen how building an economy around principles of shared prosperity strengthens communities, and we have seen how our communities suffer when irresponsible employers seek profit at all costs.

We have every reason to believe that if Walmart comes to town, New York's communities will suffer. As we've seen throughout the country, Walmart comes to town promising economic revitalization, but winds up leaving a trail of economic devastation in its wake:

- Across the nation, Walmart destroys 3 jobs for every 2 poverty-wage job it creates[1]
- In Chicago, Walmart's store put 25% of local shops out of business[2]
- And the few replacement jobs Walmart brings pay 18% less than the local jobs it eliminates[3]

While our ailing economy is in desperate need of jobs, it is clear that Walmart is not the solution. Not only does Walmart fail to provide the decent jobs needed to lift families out of poverty, it actually kills jobs and reduces the job quality of other area businesses. We need to protect our local small businesses and the men and women they employ. We simply cannot afford to allow Walmart to expand its global empire in New York City.

Walmart's plans to open stores throughout the five boroughs would fly in the face of everything we've learned about successful and accountable economic development. In New York State, Walmart has already crippled state and local budgets by sucking up over $52 million in subsidies over the last two decades.[4]

- Between 2002 and 2005, Wal-Mart received almost $65,000 from Industrial Development Agencies for every low-wage job it created in New York State, but paid its cashiers less than $12,000 a year.[5]
- Wal-Mart forces more employees to rely on taxpayer-funded health care than any other employer.[6] In 2005, the estimated cost to New York taxpayers for Walmart's employees and dependents on Medicaid and state health programs was $61.5 million dollars.[7]

As the world's richest company and retail industry leader, Walmart could be leading the way in creating decent workplaces and supporting local communities, but it's been far from a model employer. In addition to its negative impact on employment levels and wages in local communities and its abuse of subsidy programs, it has a well-documented history of workers' rights violations, gender discrimination, and harmful impacts on the environment. Walmart's recent backdoor strategy to open a store in East New York, Brooklyn by avoiding land use and environmental impact review only reinforces their reputation as an irresponsible employer.

Now, Walmart is trying to leave its bad reputation behind by spending big money to convince lawmakers, community leaders and everyday New Yorkers that they are committed to bringing jobs and fresh food to New York's food deserts. Walmart is not the answer for addressing food deserts in New York City. Over the past few years, we have worked with advocates from the Building Blocks coalition and City Council members on solutions to bring responsible employers to New York's underserved neighborhoods, and we're just now starting to see the fruits of this labor with the passage of the FRESH pilot program and the opening of new grocery stores in food deserts. Let's not unmake this progress by allowing Walmart to blanket our city with stores that only offer poverty-wage jobs, shutter small businesses and drive out competition from responsible employers. For a more sustainable food system, we should expand programs like FRESH and encourage more responsible employers to address food deserts while creating good local jobs in the process.

We urge City Council to stand up for New York's communities by sending a message to Walmart that their low-road business model is not welcome here. New York's struggling communities need good jobs and they deserve better than Walmart's empty promises.

1Neumark, David, Junfu Zhang and Stephen Ciccarella, January 2007. "The Effects of Walmart on Local Labor Markets." Institute for the Study of Labor Discussion Paper #2545, University of Bonn. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=958704.
2 Davis, Julie, David Merriman, Lucia Samayoa, Brian Flanagan, Ron Baiman, and Joe Persky, December 2009. "The Impact of an Urban Wal-Mart Store on Area Businesses: An Evaluation of One Chicago Neighborhood's Experience." Center for Urban Research and Learning Loyola University Chicago. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=958704.
3 Ibid
4 Good Jobs First, Searching for Wal-Mart Subsides, http://www.walmartsubsidywatch.org/search.html
5 NY State Authorities Budget Office data analyzed by NY Jobs with Justice May 2009
6 "Disclosures of Employers Whose Workers and Their Dependents are Using State Health Insurance Programs," Good Jobs First 2007.
7 Wal-Mart's Health Crisis Costs You Money: Tax Payer Cost by State, http://www.wakeupwalmart.com/feature/healthcrisis/map.html#NY

Testimony of
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to the
Committee on Economic Development jointly with the
Committee on Small Business and
the Committee on Community Development
of the NYC Council
on
When Wal-Mart Comes to Town: The Effect on Small Businesses and Communities: A Historical and Prospective View
Prepared for delivery on
February 3, 2011

Good afternoon, Chairmans Koslowitz, Reyna and Vann, and council members. Thank you for this opportunity to testify before your committees today.

My name is David F. Merriman, and I am a professor of public administration and professor and associate director of the Institute of Government and Public Affairs at the University of Illinois in Chicago. I am an economist with more than 25 years of experience doing evidence-based analyses of state and local public policies. I specialize in fiscal issues and urban economic development. Today I will discuss the results of research that was conducted with a number of colleagues at Loyola University Chicago and the University of Illinois with funding from the Woods Fund of Chicago and our universities.

We believe that our study is the first to focus on the economic development impacts of an urban Wal-Mart store on local businesses and employment. Fundamentally, our study had the narrow purpose of measuring the new Wal-mart's effect on net employment. We conducted three annual surveys of retail businesses in West Side Chicago neighborhoods starting in the months before Wal-Mart opened. Drawing on an analysis of those surveys, as well as State of Illinois data on sales tax receipts by zip-code, we find evidence that the Chicago Wal-Mart displaced many neighborhood businesses and in doing so displaced a number of jobs about equal to those it directly generated. We find no evidence of a stimulatory effect on new businesses. Full details of our study methodology and findings are available at a web site given in my written remarks

http://www.luc.edu/curl/pdfs/Media/WalMartReport21010_01_11.pdf. Overall, the study's conclusions support the common sense contention that large city Wal-Marts, like those in small towns, absorb retail sales from nearby stores without significant net contributions to local employment.

Methodology

In order to study the effect of Wal-Mart on economic activity on Chicago's West Side where it is located, we gathered baseline ("pre-Wal-Mart") information and measure post-Wal-Mart changes in activity over two years. We attributed changes in economic activity to Wal-Mart's presence by comparing (1) pre-Wal-Mart activity and trends to post-Wal-Mart activity and trends, (2) changes in activity near Wal-Mart to changes further away and (3) changes in product lines that directly competed with Wal-Mart to those that did not.

We obtained our main source of data about business activity in the neighborhood of the new Wal-Mart store by conducting a series of phone surveys of local businesses in the 64 square mile area within four miles of Wal-Mart. From March through late August 2006, we implemented our telephone survey and were able to obtain baseline (pre-Wal-Mart opening) data.

Beginning in March 2007, we re-surveyed those stores that completed surveys in 2006 and we conducted a third wave of data collection beginning Spring 2008. These data collection efforts yielded a sample of 306 retail establishments for which location relative to Wal-Mart, line of business and ongoing status as of 2006, 2007 and 2008 are known.

Findings from Survey Data

On average the firms we surveyed in 2006 had about 10 employees and paid a wage of $8.08 per hour. About half were owned by Chicagoans while the rest had dispersed ownership. Many of the businesses had owners that worked directly in the store for many hours (an average of almost 49) each week and many had women or minority owners. All businesses in our survey had product lines that overlapped with Wal-Mart's. Many businesses carried multiple product lines – among the most popular were apparel (48 percent) and drugs (31 percent). Businesses ranged from as little as one-tenth of a mile from Wal-Mart to as far as 4 miles from Wal-Mart with the average business about two and one-third miles from Wal-Mart.

Fifty-six of the 306 businesses we surveyed in 2006 had gone out-of-business by Spring of 2008 and an additional 32 business for a total of 88 (=56+32) had gone out-of-business by the end of our data collection period. Thus, the probability of a business closing during our study period was about 29 percent=(88/306).

Distance from Wal-Mart and Retail Closures

We used maps and basic statistical analyze to test the hypothesis that proximity to Wal-Mart influenced the probability a firm would go out of business during the study period. We found that a business in the immediate proximity of Wal-Mart had about a 40% chance of closing some time over the two year period after Wal-Mart opened. The probability a firm would go out-of-business fell at a statistically significant rate of almost 6% per mile of distance to Wal-Mart. Thus at three miles, a competing business had only a 22% chance of closing during the course of our study.

The general decline of closures with distance from Wal-Mart was independent of direction. None of the simple models of business closure was significantly altered by the introduction of variables that measured the direction (north, south, east or west) from Wal-Mart. Similarly, base year employment had no statistically significant impact on the probability that a store went out of business.

We also studied the going-out-of-business data by retail line of business. All lines (except shoe stores) show negative distance effects and a majority are statistically significant. The largest effect is found for toy stores at 25% per mile. A hypothetical toy store adjacent to Wal-Mart had a 75% chance of going out of business. A toy store three miles away had almost no chance.

Estimated Job Loss from Wal-Mart

Using our data and conventional statistical techniques we estimate the additional business closures due to the presence of Wal-Mart and multiply that times the average number of jobs per establishment that went out-of-business. Average employment of the sampled establishments (for which we have employment data) that closed during our study was about six full time equivalent workers. This gives an estimate of 189 full-time equivalent jobs lost through the Wal-Mart effect on the 306 sampled stores. If we adjust this estimate for stores that were not sampled (482/306), the estimated loss increases to 298.

The job-loss figures estimated here can be compared to the employment created by the new Wal-Mart store which we estimate at 320 full-time equivalent jobs.

We find no evidence that distance to Wal-Mart was significantly correlated with the change in employment or wages in stores that did not close.

Sales Tax Data and Wal-Mart's Impact on Sales

The survey data throws light on the impact of Wal-Mart on nearby retailers in operation when the Chicago Wal-Mart opened. These data cannot fully address claims that the Chicago Wal-Mart stimulated new retail business in the surrounding area. To explore such claims we obtained quarterly, zip code-level

data on taxable sales from the Illinois Department of Revenue (IDOR) from the first calendar quarter of 2000 through the third quarter of 2008. This dataset includes the zip code in which Wal-Mart is located, and nine surrounding zip codes. We use data only through quarter 1 of 2008 to avoid confounding trends with the financial crisis that began in September of that year.

In 2005, the zip code in which Wal-Mart is located had taxable sales of about $743 million. We do not have data on the annual sales of the Chicago Wal-Mart, but estimate using various data sources that its sales would account for about eight percent of the sales in the zip code. Thus, in the absence of any crowd-out effects, sales in Wal-Mart's zip code would be expected to jump about eight percent after its opening. Sales in Wal-Mart's zip code were growing at a healthy 7.5 percent per year before its opening compared to growth of only one percent in neighboring areas. Thus, in the absence of any crowd-out effects, sales in Wal-Mart's zip code would be expected to continue to grow much faster than its neighboring zip codes.

Our statistical analyses of these data finds that there was a jump in retail sales in Wal-Mart's zip code immediately after it opened but that for the area as a whole there was no net change in sales—suggesting that the additional sales in Wal-Mart's zip code simply reduced sales elsewhere. Furthermore, the growth rate in sales fell in both Wal-Mart's zip code and its neighboring zip code after Wal-Mart's opened. This is consistent with Wal-Mart's sales substituting for sales of nearby retailers. The temporary jump in sales in Wal-Mart's zip code was immediately erased by slower growth in sales of other nearby retailers according to our analysis.

Summary and Conclusions

Our study of Chicago's West Side Wal-Mart has provided evidence that, in an urban setting, proximity to Wal-Mart is associated with a higher probability of going out of business for local retail establishments. In addition, sales tax collections suggest that the West Side Wal-Mart has replaced sales from its own zip code and its immediate neighboring zip code.

The relation between closure and distance from Wal-Mart has strengthened over time. The impact of distance from Wal-Mart on on store closures is larger and more significant in our later sample. While there is considerable uncertainty attached to these calculations, they suggest a loss in employment and sales about equal to Wal-Mart's own employment and sales. These estimates support the contention that this Wal-Mart store absorbed retail sales from other city stores without significantly expanding the market.

Thank you for the opportunity to speak before you today. I'd be happy to take questions.

For The Record

THE WAL-MART SNOWBALL AND THE AVALANCHE FACING NEW YORK CITY NEIGHBORHOODS

Testimony to New York City Council by Prof. Tom Angotti, Ph.D.
February 3, 2011

Wal-Mart is the world's largest retail chain and known for its unfair labor practices, predatory pricing, and damaging effects on local economies. Our review of the research on Wal-Mart found ample evidence documenting these conclusions and we have shared this evidence with the public in a White Paper issued by the Public Advocate. It documents how Wal-Mart suppresses local wages, creates retail vacancies and fails to meet its promises for jobs and economic development.

Despite its dominance in the U.S. market, Wal-Mart has been unable to open a store in New York City because of resistance here to its economic model and because Wal-Mart's stores have had giant footprints that don't easily fit into densely-developed New York City.

Now, Wal-Mart is changing its one-size-fits-all oversized footprint and proposing stores as small as a few thousand square feet, the size of a small grocery store. Wal-Mart expects that this will be a game-changer in New York City and the other more densely-developed areas in the nation that Wal-Mart has been unable to penetrate.

Wal-Mart is changing its business model because it has saturated the suburban market in the U.S. It has even abandoned some of its suburban stores. As suburban growth continues to stagnate there are likely to be many more vacant

superstores in the suburbs. Wal-Mart's largest areas of growth and profitability are outside the U.S.

Wal-Mart is shrinking the size of its stores, however, without changing its business model. The "new" Wal-Mart promises to bring with it all of the same problems as the old Wal-Mart and some new ones. Precisely because of its stated intention of operating at different scales, the entrance of Wal-Mart in the city could trigger a snowball effect that in the long run undermines the local economy and has devastating effects on our neighborhoods.

While many others will focus on the overall negative economic impacts of Wal-Mart, I would like to emphasize the potential effects on our neighborhoods. This is a crucial moment for both land use and economic development policy in New York City because we are at the threshold of a major and potentially devastating change in the local retail marketplace. Wal-Mart is preparing an invasion of New York City comparable to its original invasion of the suburbs and the effects could be even more devastating to the local economy. The suburbs had relatively little retail to begin with, but our neighborhoods thrive with locally-owned, independent retailers. Wal-Mart has already made inroads in Chicago and other large cities where its destructive effects on locally-owned businesses, food retailing, and wages have been documented.

New York City has an opportunity, indeed an obligation to its residents and local businesses, to establish clear and firm economic development and land use policies that counter Wal-Mart and other predatory retailers.

Small Wal-Mart Stores, Big Impacts

With its new, flexible model Wal-Mart stands to overtake and monopolize local food retailing, turning neighborhoods into miniature replicas of the giant superstore. The city's unique and diverse neighborhoods are part of what makes New York a global destination and home for people from 160 nations. One of the most vital parts of New York City's community life is the bodega or corner store, and local retailers that span a range of sizes to meet diverse needs. Fill them with global chain stores, homogenize them, and rob them of cultural diversity and there will be no more opportunities for local business start-ups, especially among immigrant groups, now the majority of the city's population.

We have already seen how this works. Giant drug store chains ran locally-owned pharmacies out of business with the kind of price gouging that Wal-Mart is known for. They and the banks drove up local commercial rents and drove out other local business owners. After the real estate bubble burst in 2008, even more local retailers had to close while corporate tenants more often stayed.

Look around and you will see vacant storefronts in every neighborhood. The city ought to be working with communities to insure that these storefronts are filled by businesses that nurture local entrepreneurship, meet local needs, recycle dollars locally, pay fair wages, and become an integral part of community life. The city should move to strengthen local retailers and not Wal-Mart and its clones because, in the long run, after Wal-Mart saturates a market it then abandons it and moves on

to the next frontier, resulting in more vacant stores. The abandoned suburban malls are testimony to this and a cautionary tale for New York City.

For all of the above reasons it is important that the City Council, the executive branch, community boards and borough presidents fully understand the potential long-term impacts of Wal-Mart on our neighborhoods and the city. We must understand the cumulative impact of the impending flood, including public costs and private damages. before Wal-Mart is allowed to open a single store of any size. Therefore, I propose the following as first steps:

- Require discretionary land use review for all large retailers regardless of the size of their individual stores. Large retail chains should not be permitted to saturate the city as-of-right, without public review. The city's zoning resolution should be revised to require approval of a special permit under the Uniform Land Use Review Procedure for large retailers with more than 10 outlets. This should involve disclosure of the cumulative long-term economic and environmental impacts of the retail chains. It would give policy makers at all levels the information needed to make critical land use decisions.
- In the upcoming revision of New York City's Long-term Sustainability Plan (PlaNYC2030), establish clear and precise policies for both the preservation and development of local retail over the long-term future. Community boards, borough presidents and the City Council should have a role in long-term planning for retail development to insure that it takes into account local

needs and conditions and is consistent with both neighborhood livability as well as city-wide public health and planning policies.

In cooperation with many others concerned about Wal-Mart's arrival in New York City, the Hunter College Center for Community Planning & Development intends to undertake the research necessary to establish an intelligent deliberative process, legislative action, and new city policy governing Wal-Mart and all of the largest chains. We invite all those concerned about the future of our neighborhoods to join us. If we do not proceed with caution, the Wal-Mart snowball will quickly become an avalanche.

Tom Angotti, Ph.D.

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STATEMENT FROM CHARLES FISHER & THE HIP-HOP SUMMIT YOUTH COUNCIL

Good afternoon, my name is Charles Fisher and I'm the Founder and Chairman of the Hip-Hop Summit Youth Council. I'm here today because I love NYC and I'm concerned about our children, the economy, our schools, Day Care Centers, the formerly incarcerated, and also Gun & Gang Violence Prevention. I'm tired of all the controversy about Walmart. I respect Small Businesses, City Council Members, Unions and Walmart. It is possible that each of you is right because there is more than one way to Skin a Cat.

Unlike the Unrest in Egypt, we do live in a Democratic Society where the Needs of many outweigh those of a few. As a small business owner I know that I can't compete with Walmart, but that does not mean that they would not be a good fit for the majority of New Yorkers. If we are concerned about the people then we must let them have the Final Vote in this matter. Put it on the Ballot if you must, but 51 members should take a look at history and be careful about how they represent the true Will of the People.

We live in a democratic society where everyone is treated equal. February is Black History Month, a time in which we highlight the history of African-Americans, as well as reflect upon the injustices and unfair policies that divided this nation for centuries. What I would suggest to City Council, the Unions and Small Businesses that don't want a Walmart in NYC is to be Fair across the board and have one policy. If Walmart can't come into our City then we should ask Target, Sears, K-mart, Costco and all the other big box stores with or without a UNION to also go. We can't be prejudice toward any one group because that would be Un-American.

If we get rid of all the Big Box Stores, that would be a greater victory for Small Business. I support the small business owner. But if we are going to be fair, ALL BIG BOX STORES HAVE TO GO, AND NO NEW STORES CAN COME INTO NYC. In addition, the ones that are here now have to give more back to our communities because of budget cuts and our economy. We have a lot of problems that need to be solved in this country and I would rather see my City Councilman focused on the impact the budget cuts will have on our youth, Public Safety, Education and the Economy in disadvantaged communities than spending time deciding on where we should shop in a FREE AND DEMOCRATIC SOCIETY.

After extensive Research on Walmart we launched the Walmart 2 NYC Campaign. THE PURPOSE OF THE CAMPAIGN is to produce a Petition with a minimum of 100,000 NYC Residents. The potential benefits of bringing Walmart Stores to NYC are the following: Job Opportunities; Minority Contracts; Affordable Goods and Services; Support for Youth, Seniors and Social Programs that help reduce crime and provide education; Scholarships and Grants for Students; Support for Re-entry initiatives for those under criminal justice supervision; an increase in Sales and Payroll Tax Revenue which can improve city services; and finally a Support for a Citywide movement to make this a better city.

Unemployment, Layoffs, Day Care Center and School Closings are a priority right now. Crime is up in our city with 61 more murders in 2010 vs. 2009. In NYC more than 55,000 men and women are released from our city's jails each year and another 15,000 return to the city from state prison. What are we doing to provide jobs, opportunities and services to this population to ensure Public Safety and a reduction of recidivism? Let's stop the fighting and let Walmart in or KICK EVERYONE OUT. Racism, Classicism, Sexisms and prejudice come in all forms, but have no place in the Greatest City on Earth. To paraphrase Dr. King, "We must judge individuals by the content of their character and not the color of their skin". This is not Nazi Germany and to discriminate against Walmart or any other legitimate business has no place in the U.S. No matter what we do let's be FAIR TO EVERYONE because that is what the Greatest Country on this planet is all about—EQUALITY AND JUSTICE FOR ALL!

2/3/2011---HHSYC.org

Statement of Tony Juliano
President, Greenwich Village-Chelsea Chamber of Commerce

RE: When Walmart Comes to Town

TO: NYC Council Committees on Economic Development, Small Business, and Community Development.

DATE: February 3, 2011

Good afternoon Councilmembers. Thank you for giving me the opportunity to speak to you today regarding the possible effects of a Walmart store opening and doing business in New York City.

My name is Tony Juliano and I am the President of the Greenwich Village Chelsea Chamber of Commerce. Our Chamber represents businesses in an area of Manhattan that stretches south from Canal Street up to 34th Street and from the Hudson River across to 3rd Avenue. Let me say that in a different way. My chamber represents businesses in Soho, the West Village, in Noho, the East Village, the Flatiron, Chelsea, and Union Square.

When I say the names of each of those neighborhoods different images come to mind, don't they? True they are not that far in distance, but they are very different one from another. Someone choosing to live in Chelsea, for example, might feel out of place living in the East Village. And, no one would accuse the West Village of being a clone of Union Square. Each neighborhood is unique in its own way and each has its own special character.

It's one of the things that's so inviting about NYC. It's why people are drawn here to visit and to live. People have come here over the years to start their families and their businesses. Many have been here for generations. The shops and stores that have grown up here give each of these neighborhoods much of its special character ... its flavor.

But these businesses are struggling to survive in this city where high rents, high taxes, high insurance, high fees, have made it difficult for a small, independent business to thrive. But we manage, with your help. The Business Owners' Bill of Rights, for example, that the Speaker introduced last year helps, as well as other streamlined processes and improvements you championed on our behalf. You kept the lid on our taxes this year. We know you understand the difficulties we're facing.

When a small business leaves a neighborhood, part of that neighborhood's character is forever changed. We look to the City Council to help protect the city's small businesses and the special character and cultural texture of the neighborhoods in which they reside. We look to the City Council to help protect our quality of life.

This brings me to Walmart. This issue is actually bigger than Walmart. It's really about all of these big, powerful mega-retailers of which Walmart is the biggest and most powerful. They work so well in the vast recesses of the suburban highway system, and we congratulate and admire their success. But they wreak havoc in a closely knit, diverse neighborhood in a city like ours.

We've all read the studies, which I'm sure you'll hear about over and over today. But they tell us what we already know because we have common sense. If a Walmart store opens in close proximity to established businesses in one of our well-known neighborhoods, many of those small businesses that compete with Walmart would go under. And for awhile we'd be left with a giant Walmart megastore and lots of empty storefronts surrounding it.

Eventually some business would re-emerge and find ways to compete around the edges. But at what cost? At what cost to the families who owned the

businesses, to the neighborhood's unique character, to the area's tourism prospects, and ultimately to the quality of life of the remaining residents?

This is a bit of a hypothetical exercise. I do not know what locations Walmart is considering in our city. To my mind, it is not likely that they would choose to locate in one of the neighborhoods served by my Chamber. The cost structure here is inherently high -- some aspects of which Walmart would not be able to control. This would jeopardize their low cost, low price business model. However, since this Chamber serves so many small, independent businesses in historic neighborhoods of unique and rich character, we could not sit back and watch these proceedings from the sidelines.

After careful consideration and a thorough look at the neighborhoods served by the Greenwich Village-Chelsea Chamber of Commerce, we could find no suitable location for a Walmart megastore to set up shop and we would oppose them here should they choose to do so.

Thank you for your time.

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TESTIMONY

OVERSIGHT HEARING ON WHEN WAL-MART COMES TO TOWN: THE EFFECT ON SMALL BUSINESSES AND COMMUNITIES ON FEBRUARY 3, 2011

submitted
to
THE COMMITTEES ON
SMALL BUSINESS,
ECONOMIC DEVELOPMENT,
COMMUNITY DEVELOPMENT

BY
SUNG SOO KIM
President
KOREAN AMERICAN SMALL BUSINESS SERVICE CENTER
OF NEW YORK, INC.

Honorable Councilmembers. My name is Sung Soo Kim, President of Korean American Small Business Service Center of New York, Inc., a federation of Korean American trade organizations in the City. Today, at this hearing, I represent 1,200 Korean American green grocers in New York City and am fully opposed to the entry of Walmart to our town. Walmart is not qualified to run its business in NYC as I found it does not benefit our town at all, but rather destructs welfare and quality of life of New Yorkers as well as it cannibalizes neighborhood-friendly small businesses through predatory pricing.

The Bloomberg Administration has long been tied up with Ideology of Food Deserts, thus crafting Green Cart Law which was turned out be be a fiasco at the beginning and now practically allows "derailed" 1,000 carts to cannibalize 1,200 Korean American green groceries in the City. Now, Walmart taps on this ideology in order to rationalize its intension of invading our town and to bait New Yorkers. Walmart places ADs exclusively with produce pictures and propagates its 5 year healthy food program by which Walmart will reduce fruit and vegetable prices to result in saving one billion dollars per year for American customers.

Historically, the food deserts in NYC were eventuated when big food retailers left City's neighborhoods. Korean American green grocers dared to open stores at these deserts serving dedicately the needs of neighborhoods and revitalizing the deserted local economy. Walmart noe with that ideology through predatory pricing will kill neighborhood-friendly grocery stores, thus once again creating food deserts in our town. Korean American fruit and vegetable stores which Mayor Koch once appraised to be "one of the four major features" New Yorkers should be proud of will be devastated by Walmart's invasion.

Should New Yorkers welcome the entry of Walmart into town? The answer is NO. Why? The way Walmart handles produce products does not benefit New Yorkers at all. The immediate question is about prices. There has been a wide-spread, almost unquestionable myth that Walmart prices are lower than any others. I went to Walmart located at 77 Green Acres Rd.,Valley Stream last weekend and made a comparison of prices between that Walmart and a normal Korean American fruit & vegetable store at Flatbush, Brooklyn. The chart enclosed clearly demonstrates the Korean store's prices are lower than those of Walmart almost by 60%. The Walmart myth ought to be withrawn.

1,200 Korean green grocers sensitivelyread "400 New Yorks'" respective needs by having over 200 produce items ready, go to Hunts Point Market every morning to bring in freshest produce products to neighborhoods and respectfully serve $1 to 2 customers and even opening 24 hours. Why should New Yorkers neglect to oppose the Walmart's entry into town which does not benefit them at all?

PRODUCE PRICES IN COMPARISN BETWEEN WALMART AND A KOREAN AMERICAN FRUIT & VEGETABLE STORE IN NEW YORK CITY

* Walmart of Valley Stream (77 Green Acres Rd.,Valley Stream) vs. A Korean American Green Grocery in Flatbush Ave., Brooklyn
* Survey Done on Jan.29 by Sung Soo Kim, KASBSC

Serial #	Name	weight/# of items	Walmart Price	KA Price	Weight/# of items	Price Comparison W	KA
#1	Banana	Bag with 8 pieces	$1.78	Price flexible			
#2	Grany Smith	bag with 8 pieces	$5	$1	3 apples		>
#3	Navel	1 dz bag	$3	$2.99	1 dz	Same	
#4	Pink Grapefruit	5 lb bag 9 items	$3.88	$1	3 items		>
#5	Cantalope	1 item	$2	$1.49	1 item		>
#6	Red Grapes	2 lb container	$4.50	$1.49	1 lb		>
#7	Green Grapes	2lb container	$4.50	$1.49	1 lb		>
#8	Cucumber	3 items in container	$1.58	$1	3 items		>
#9	Corn	4 items in container	$2.45	$2.99	3 items		<
#10	Squash	4 to 6 small sized in container	$1.98	$1	2 items		
#11	Green pepper	3 in container	$1.98	$1	3 items		>
#12	Avocado	4 in bag	$3.98	$1.99	1 item		<
#13	Onion	3 lb in bag	$1.58	¢50	2 lb		>
#14	Potato	5lb in bag	$1.78	$1.49	5 lb		>
#15	Red Potato	5 lb in bag	$2.98	$1.59	5 lb		>
#16	Sweet Potato	3 lb in bag	$1.98	$1	1 lb		<

#17	Lemon	1 bag	$3.98	$1	4 items
#18	Clementine	1 bag	$3.98		
#19	Tomato	3 items in container	$1.98	¢79	1 lb

***Serial numbers #1,#10, #17, #18 non-comparable as additional criteria, i.e., seasonal, degree of ripeness, source of product, etc. should be considered.

*** Walmart beat KA green grocery only three produce items, #8, #12, & #16. Item #3 shows the same price. KA store beat Walmart over 11 items.

NEW YORK CITY COUNCIL WAL-MART HEARING

February 3, 2011 @ 1 p.m. (testimony)

Sadly, savvy **New Yorkers know how to get "cheap" or discounted underwear without the Wal-Monster**. The last thing we at NYC need is to try to emulate the Windy city, St. Louis or the Baltimore inner city profile. NYC should be proud as the only major city in America with the guts and moral character to see through the Wal-mart flag wrapped mirage of being "American." We in New York City must stand for better than the dangling carrot of "jobs" no matter what they are, what the impact and what the real cost to our great city, just because of the idea of "jobs." **As far as Wal-mart is concerned, there are no net jobs** and **the actual real cost to the economy of our city is too "Damn High!"**

Wal-Mart could be the most anti-American large corporation in United States history. From poor worker policies, to lousy environmental records, to destroying an American manufacturing industry by having their products made in Asia, and to being the largest single drain on the country's health care system. The business model of the Wal-monster is good for only one thing: greed and Wal-mart. There is no long term benefit to quality of life, economic growth, the city's budget, the infrastructure, or anything other than more economic drain on our city and making sure the poor are kept poor.

Special Interests fighting Wal-Mart? That's a joke! The ones fighting are **New Yorkers, neighborhoods, communities, small businesses on local main streets, business owners born and bred right here in NYC. Special interests?** The **only special interest in this battle is Wal-Mart! BIG Wally fighting for one thing: money**. Not jobs or to make our city better, or pay the workers better, or help with medical and health care costs, or congestion, or pollution or neighborhoods or bringing manufacturing jobs back to the U.S. BECAUSE their decades long track record says, they don't' and they won't! PERIOD! **Our tax dollars will have to pay** for food stamps, subsidized housing, and medical benefits that the BIG Wally's workers can't afford for their families. The BIG Wally employee home owners we see on TV ads couldn't buy **here** where the cost of a home is 10 times what it is out in the Midwest!

No single company, although other BIG box stores have also followed their bad example of doing business, has crushed more communities, destroyed more small businesses, damaged more local main streets and shopping strips, and cost more good paying jobs in America than Wal-mart! Across America, the numerous independent academic respected studies of the five year impact after a Wal-mart opens **are clear and unquestionable**. The list of **economic devastation to the local economy and jobs and income levels is long**. There are many documentary films on this as well; even college level courses covering the economic crisis by Wal-mart, all by itself.

BIG Wally is a big bully and bullying cannot be tolerated in this country anymore, even in business, when it hurts America, destroys jobs, lowers wages and property values, reduces local government revenue and the tax base and costs us more to host, sucks other related and complementary businesses out of the local economy, Wal-mart all while eroding our shopping strips and local main streets, while creating more vehicle dependant use and more traffic; it causes huge infrastructure and security burdens in the name of political spin called "jobs." But Wal-mart's true track record has demonstrated undeniably, that **it destroys more jobs then it creates** and is **ALWAYS a loser for all local business, governments and quality of life for any county except for BIG WALLY! America deserves better. New Yorkers deserve better. The biggest special interest in the land must not be allowed to bully their way through ads in our city just to get their hands on our money and ship our NEW YORK cash out of town.** Business Bully BIG WALLY is not BIG Apple material.

NYC must remain Wal-Mart Free because we must lead the way for our nation to strong jobs and revenue for our citizens, as we have without BIG Wally!

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Member of the Board of Directors of the
New York Main Street Alliance since 1992--**NYMSA**

Executive Vice President & Spokesperson
Small Business Congress NYC
Representing over 200,000 Mom & Pop businesses, employing over 1 million New Yorkers and keeping NYC Wal-Mart Free!

Honorable New York City Council Members
Honorable Committee Chairs on Economic Development, Small Business, and Community Development

Hearing Oversight Concerning "When Walmart Comes to Town"

Dear Honorable CouncilMembers:

My name is Michael Pricoli and I am a proud member of CWA Local 1180 and have been a NYC civil servant for the last 25 years. I have been a life-long Bronxite except when I was in the Military. I have worked in the private sector, federal government, city government, and the military.

I am 100% against Walmart coming to NYC for the main reason Walmart does not listen to its employees or community. This does not mean Walmart as a main employer of retail and supermarket goods does not do some good. But any company that closes a very profitable mega store because its employees unionize as in Canada, or stops its fresh meats departments when unionized as it did in the Midwest, does not have any concern for its workforce or the community it belongs to.

Several years ago, I was sent by my union to the graduate center in midtown Manhattan and real Chinese Walmart employees told us the conditions they lived in and how even they brushed their teeth with ashes because they could not even afford to buy the toothpaste the factory they worked in made.

And Walmart has not always been successful. In very consumer frugal shopping economies like Germany and Korea, Walmart failed. Thousands of workers in those countries and ours lost their jobs due to Walmart not wanting to listen to the communities it wants to make a profit in.

Walmart does supply many jobs to distributors in the United States and abroad. However, the studies stating there is no negative affect on the local business economy ALL take in to consideration the global partnerships and ignore the the direct affect on local economies. As NYC legislators, are you happy that the West Coast distributors are making money and growing jobs because Walmart opens in the Bronx, while small business in the Bronx close because there is a overall net gain in the wider picture. Or as NYC legislators you care first about whats happening in your backyard.

Walmart also has received tens of millions of dollars from states, received millions of dollars from the federal government in all kinds of subsidies and enhancements that a giant, leading corporation of it's field should not be granted.

If Walmart was to let it's workers decide openly and freely without repercussions to unionize or not unionize, and if Walmart was to take into consideration the businesses it may hurt if in NYC, and if Walmart would promise not to raise prices as it has all over

America when some of it's competitors fold, then and only then Walmart's bid to come to NYC be looked at seriously. Thank you for letting me testify and hearing my thoughts.

In Solidarity,
Mike Pricoli
1730 Mahan Ave
Bronx NY 10461
February 3, 2011

SIERRA CLUB
FOUNDED 1892

1350 Broadway, Suite 201
New York, NY 10018
www.nyc.sierraclub.org

February 3, 2011

My name is Ken Baer and I live at 91 6th Avenue in Brooklyn. I serve as Chair of the NYC Group of the Sierra Club. The Sierra Club thanks the City Council for this opportunity to testify on the proposed Walmart project in East New York.

The Sierra Club opposes the Wal-Mart store proposed for Schenck and Fountain Avenues near Shore Parkway based on many environmental factors. The most obvious of our concerns is the amount of additional vehicular traffic that this store would create. It is estimated that Walmart alone would generate on average an additional 70,000 car trips per week. This would dramatically increase the amount of greenhouse gases produced, the vehicular congestion, noise, and the number of traffic accidents in the area. Most importantly, the additional air pollution would adversely affect residents that have pulmonary problems, especially those with asthma.

The proposed Walmart is a 20 minute bus ride from two subway lines, leaving people no other convenient alternative other than to drive. With 2,000 new parking spaces being proposed, this project cries out, "Drive to me, drive to me".

What also concerns the Sierra Club is that mom and pop stores that rely on pedestrian traffic will lose out to a big box store that relies on vehicular traffic. At a time when the City is rightfully focused on improving the health of its residents and decreasing greenhouse gas production, everyone should be encouraged to walk more and not use motor vehicles. This Walmart would run counter to these goals.

Thank you.

Testimony of Stephen Parker, on behalf of NYC Americans for Democratic Action in opposition to proposed Wal-Mart Superstore.

Good afternoon,

I would like to thank the chairwoman, Councilwoman Diane Reyna, and members of the Small Business Committee for the opportunity to share the views of Americans for Democratic Action with you. My name is Stephen Parker, and I am on the Board of the New York City Americans for Democratic Action. New York City Americans for Democratic Action is the local chapter of a proudly liberal organization founded by Eleanor Roosevelt and numerous distinguished labor leaders and economists in 1947. We remain committed to a democratic society and an economy with a manufacturing component that provides skilled jobs that pay a living wage with fairness, equal opportunity, and dignity for all.

Other speakers will tell you about the negative impact Wal-mart openings have on small retail businesses and communities around the nation. I will speak about how Wal-mart's slogan "Everyday Low Prices " has really camouflaged its successful efforts to destroy the skilled jobs of American manufacturing workers whose living wages and benefits previously provided work and a middle class lifestyle for women, recent immigrants, and member of minority groups.

Wal-mart is bad for America and bad for New York City.

In 1980 there were 24 million manufacturing jobs in America. Many of these jobs were skilled jobs which paid a living wage with benefits and provided respectable work and a middle class lifestyle for the American workers. Many of these manufacturing jobs were in the New York City where workers with little formal education found skilled work for living wages. A good example of local manufacturing was the garment industry which had 300,000 jobs in New York City in 1980.

Walmart's business plan is to sell goods at "Everyday Low Prices". In order to do so Wal-mart has set up hundreds of factories in China to make cheap goods. Chinese workers earn as little as 75 cents per hour for a 16 hour workday. Today Wal-mart is the largest retailer in America, the largest

employer in America, and the largest single importer of cheap Chinese made goods in America. Seventy percent of all the goods sold in Wal-mart are made in China.

Walmart has single handedly destroyed millions of well paying manufacturing jobs in America and in New York City. The fact that Walmart now wants to open stores in New York City to sell more Chinese made goods and to create a few thousand low paying part time service jobs does not mitigate the fact that Walmart has been bad for American manufacturing jobs and bad for America.

There are only 13 million manufacturing jobs remaining in America.
NYCADA opposes Walmart's malignant plan to open stores in New York City, sell more Chinese made goods, and to destroy even more American manufacturing jobs.

However, let me bring my testimony home to the New Yorkers who live and work in New York City.

Between 2002 and 2009 the number of manufacturing jobs in New York City lost due to free trade in New York City amounted to 64,000 jobs. The workers lived in working-class neighborhoods throughout the city like Harlem, Greenpoint, Jackson Heights, and East New York.

When one thinks of manufacturing job losses, the image is usually of male-oriented industries such as the auto industry. But a look at the actual numbers indicates a less known fact—a surprisingly large number of manufacturing job losses impact women workers. Many of the job losses that can be most directly linked to free trade
were predominantly female and by some measures, it is women workers who have been hardest hit by the negative effects of free trade.

According to the NYS Department of Labor the average annual salary for manufacturing within textile, apparel, and leather products in NY was $47,207 while Wal-mart's average pay is $20,774, far below the poverty level for a family of four and disgraceful for a family living in New York City.

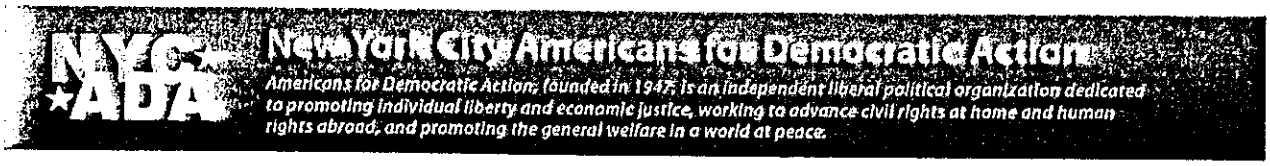
In what is surely a cruel and twisted irony Wal-Mart having sent our good paying jobs to China, now wants to move into our neighborhoods to save us money by offering "Everyday Low Prices" or maybe even an everyday low-paying job!

Still, further, according to a 2007 Economic Policy Institute study, Wal-Mart was responsible for 9.3 percent of U.S .imports from China in 2001-2006, and for 11.2 percent of U.S. job losses due to the free trade. In New York City the Wal-mart strategy is to create smaller stores in more places rather than the large boxes usually associated with them to mute the criticisms of citizens who are fighting for their own jobs and those of their friends and their communities.

Thus, for these reasons:

1. Wal-mart destroys skilled manufacturing jobs in America and in New York City and the living wages that they provide;
2. Walmart creates low wage part time jobs which require the workers to have taxpayer paid Medicaid and Food Stamps to support themselves and their families;
3. Wal-mart is unlikely to hire the women and minority workers who lose manufacturing jobs due to Wal-mart's "Everyday Low Prices" policy favoring cheap Chinese made goods.

In conclusion New York City Americans for Democratic Action believes that we must stand together in opposing Wal-mart which is an American manufacturing job destroying monster while understanding that rejecting Wal-mart's presence in New York City protects our few remaining local manufacturing jobs with the living wages, dignity, and equal opportunity that they provide and also protect local taxpayers from subsiding the Wal-mart poverty wages.



Testimony of Stephen Parker, on behalf of NYC Americans for Democratic Action in opposition to proposed Wal-Mart Superstore.

Good afternoon,

I would like to thank the chairwoman, Councilwoman Diane Reyna, and members of the Small Business Committee for the opportunity to share the views of Americans for Democratic Action with you. My name is Stephen Parker, and I am the Treasurer of the New York City Americans for Democratic Action. New York City Americans for Democratic Action is the local chapter of a proudly liberal organization founded by Eleanor Roosevelt and numerous distinguished labor leaders and economists in 1947. We remain committed to a society and an economy whose bedrock is fairness, equal opportunity and dignity for all.

Wal-mart is bad for America and bad for New York City.

Other speakers - representing academia, labor unions, and community organizations - have already spoken or are scheduled to speak. They will tell you about the negative impact Wal-mart openings have on small businesses and communities around the nation. They will speak about how Wal-mart's slogan "Everyday Low Prices " has really camouflaged its successful efforts to destroy the skilled jobs of workers whose living wages and benefits previously provided work and a middle class lifestyle. And, they are right!

However, let me bring my testimony home to the New Yorkers who live in Williamsburg and Greenpoint, Harlem and East New York as well as other neighborhoods in this great city of ours!

In 2011, Wal-Mart is the largest retailer in America, the largest employer in America, and the largest single importer in America of Chinese made goods. Seventy percent of all the goods sold in Wal-Mart are made in China

According to a recent report in City Limits (1/3/11) Sarah Crean notes that between 2002 and 2009, the number of manufacturing jobs in the US dropped 25%; In New York those losses were more than 20 percent higher (46%) or a total of 64,000 jobs. According to Crean, "non-white New Yorkers with limited formal education, but frequently highly skilled, held these jobs. They live in working-class neighborhoods throughout the city – yes, like Harlem, Greenpoint and East New York.

A December 2010 Community Service Society report on New York City unemployment codified what we already know – that black men experienced the largest increase in their already high unemployment rates during the recent recession, from 9% in 2006 to 17% in 2009, which effectively doubled black men's unemployment rates in New York City. These minority workers in low income city neighborhoods are disproportionately affected by the ruthless practices of Wal-mart and other similar business enterprises.

According to a recent study by the New York based, non-partisan think tank Demos: "When one thinks of manufacturing job losses, the image is usually of male-oriented industries such as the auto industry. But a look at the actual numbers indicates a less known fact—a surprisingly large number of manufacturing job losses impact women

workers. Many of the job losses that can be most directly linked to international trade have a predominantly female bias and, by some measures, it is women workers who have been hardest hit by the negative effects of globalization.

Displaced women workers often face greater struggles than their male counterparts in finding new employment with comparable pay, an ordeal exacerbated by factors such as the high cost of childcare."

According to the previously cited Community Service Society report, women in the 16-24 age group had the highest absolute unemployment rate in 2009 (18.3 percent), and since 2006 women without a high school or equivalent diploma experienced the largest absolute increase in their overall unemployment rate jumping 8.1 percentage points from 7.9 percent in 2006 to 16 percent in 2009. Women with less than a high school or equivalent diploma had the lowest labor force participation of any group.

Further, according to the NYS Department of Labor the average annual salary for manufacturing within textile, apparel, and leather products was $47,207 while Wal-mart's average pay is $20,774, far below the poverty level for a family of four and disgraceful for a family living in New York City.

In what is surely a cruel and twisted irony Wal-Mart having sent our good paying jobs to China, now wants to move into our neighborhoods to save us money by offering "Everyday Low Prices" or maybe even an everyday low-paying job!

Still, further, according to a 2007 Economic Policy Institute study, Wal-Mart was responsible for 9.3 percent of U.S .imports from China in 2001-2006, and for 11.2 percent of U.S. job losses due to the trade deficit. Its strategy is to create smaller stores

in more places rather than the large boxes usually associated with them to mute the criticisms of citizens who are fighting for their own jobs and those of their friends and their communities. Additional Wal-Mart stores would result in the loss of independently owned small businesses and those who supply them, creating an increased burden on American tax payers .Not only do these small businesses disappear. So, too, do the small wholesalers who supply them, creating a domino effect of destruction and despair.

Thus, for these reasons:

1. Wal- mart destroys small businesses in local neighborhoods and the decent jobs they provide;
2. Wal-mart destroys jobs for women who often are the family's breadwinners in local neighborhoods;
3. Wal-mart's low wages imperil tax-payers who must provide supplemental medical care and other economic supports to residents in local neighborhoods;

New York City Americans for Democratic Action believes that we must stand together in opposing this behemoth, understanding that rejecting Wal-mart's presence in New York City protects our own livelihood and the quality of life of residents of our City. And , we must stand together now!

BRIAN KETCHAM ENGINEERING, PC

175 Pacific Street, Brooklyn, NY 11201, 718-330-0550, btk@konheimketcham.com

Testimony—Brian Ketcham, PE, February 3, 2011
New York City Council Hearings on the Effects of Wal-Mart in New York City
Representing the WalmartFreeNYC Coalition

You have been provided copies of a report that backs up what I am about to tell you. The report is an analysis of the traffic impacts of adding a 180,000 square foot Wal-Mart supercenter at the Gateway Estates project in East New York. The report investigates Wal-Mart's impact along Shore Parkway and at a number of key intersections. It evaluates the parking needs of Wal-Mart. And it estimates the increased costs of congestion, increased costs from additional traffic accidents and increased environmental damages.

Gateway II is a huge project. More than 700,000 square feet of new retail space plus 2,400 residential units generating more than 3,400 auto trips during weekday PM peak hours and more than 4,400 trips on Saturday peak hours. About a third of this traffic would use the Shore Parkway—already jammed with traffic. Adding a Wal-Mart supercenter would add significantly to these impacts.

What we have found is that a Wal-Mart supercenter will add 1,000 to 1,300 more autos to the area during peak traffic hours; 37% of this traffic will attempt to use the Shore Parkway.

Wal-Mart alone would increase traffic reported in the Gateway EIS by 45% in the weekday AM peak hour, by 39% for the PM peak hour and by 24% for the Saturday PM peak hour again compared to what was reported by the Related Companies for all project activities.

Gateway II will more than double the retail space at this site and will consequently increase traffic along the Shore Parkway by more than 1,300 auto trips during the evening peak hour without a Wal-Mart. The impact of Gateway will be to slow traffic from 46 MPH without this new development to 35 MPH.

The addition of Wal-Mart traffic will slow travel speeds even more, from 35 MPH to 25 MPH, a huge impact on congestion not anticipated in the FEIS—significantly increasing the travel time for the 160,000 daily commuters already using the Shore Parkway.

Intersections surrounding the Gateway site are already gridlocked. Gateway II will make these conditions worse. Many intersections cannot be mitigated with just Gateway II traffic. None of these intersections can be mitigated with Wal-Mart. The report provides you with plenty of detail.

When completed, Gateway II would generate 23 million auto trips each year. The addition of a Wal-Mart will add another 4 million auto trips a year generating 16 million more miles of travel, resulting in 130 more traffic accidents and add 10,000 tons per year of green house gas emissions to the 60,000 tons contributed by Gateway II further undermining Mayor Bloomberg's goal of reducing greenhouse gas emissions by 30% over the next two decades.

It is clear that, based on this analysis, adding a Wal-Mart to the Gateway project in East New York will result in huge community and regional impacts that have not been accounted for. These unreported impacts demand that a full EIS be undertaken for any proposed Wal-Mart. Once these impacts are fully disclosed and it is understood that these impacts cannot be mitigated I cannot see how a Wal-Mart can be incorporated into the East New York Gateway project site. The downside is just too great.

BRIAN KETCHAM ENGINEERING, PC

175 Pacific Street, Brooklyn, NY 11201, 718-330-0550, btk@konheimketcham.com

THE IMPACT OF INCLUDING A WAL-MART IN THE GATEWAY ESTATES II PROJECT IN EAST NEW YORK, BROOKLYN

Introduction and Summary

Wal-Mart is the most successful retailer in America, perhaps the world. The volume of its sales is gigantic. The number of people shopping at Wal-Mart record shattering! Yet, Wal-Mart has yet to land a store in New York City. Recently, Wal-Mart began an ambitious and costly public relations program to convince New Yorkers and New York City decision makers to endorse their entrance into the City. This report addresses the traffic impact of Wal-Mart opening a store in New York City; in particular, at the Gateway Estates II project in the East New York section of Brooklyn.

While the analysis is indicative of the effects of locating an auto dependent Wal-Mart supercenter anyplace in New York City this analysis is a little different in that it assumes a Wal-Mart will displace an equal amount of space in the Gateway Estates project designated as "destination retail." The FEIS for Gateway II reports on traffic impacts that do not fully account for a Wal-Mart type store that might be located in a newly rezoned Gateway site. As the results demonstrate, the impact of any auto dependent Wal-Mart is huge.

This report evaluates this proposal for its impact on the East New York community. We have estimated the full effect of an 180,000 square foot Wal-Mart supercenter, estimating parking impacts and modeling the impact of a Wal-Mart on the surrounding roadways including the heavily congested Shore Parkway. We have not corrected for the under reporting of traffic impacts identified in The Related Companies Gateway Estates II FEIS.

We have also estimated the regional effects of an 180,000 square foot Wal-Mart supercenter in terms of total added travel and resulting externality costs—that is, the increased costs of congestion, increased costs from additional traffic accidents, increased environmental damages and related health consequences.

Gateway II is a huge project. More than 700,000 square feet of new retail space plus approx. 2,400 new residential dwelling units generating (according to the FEIS) more than 3,400 auto trips during weekday PM peak hours and more than 4,400 trips for the Saturday PM peak hours. About a third of this traffic would use the Shore Parkway—already jammed with traffic. Adding a Wal-Mart supercenter would add significantly to these impacts.

We have found that a Wal-Mart supercenter will add 1,000 to 1,300 more autos to the area during peak traffic hours; based on FEIS trip assignments 37% of this traffic will attempt to use the Shore Parkway.

Wal-Mart alone would increase traffic reported in the Gateway FEIS by 45% in the weekday AM peak hour, by 39% for the PM peak hour and by 24% for the Saturday PM peak hour again compared to what is reported by The Related Companies for all Gateway II project activities.

Gateway II will more than double the retail space at this site and will consequently increase traffic along the Shore Parkway by more than 1,300 auto trips during the evening peak hour *without* a Wal-Mart. The impact of Gateway will be to slow traffic by 24%, from 46 MPH without this new development to 35 MPH. The addition of Wal-Mart traffic will slow travel speeds even more, from 35 MPH to 25 MPH, a huge impact on congestion not anticipated in the FEIS—significantly increasing travel time for the 160,000 daily commuters already using the Shore Parkway.

The Gateway FEIS reports very significant traffic impacts at nearby intersections that cannot be mitigated. These are problems that exist today at many locations without Gateway II traffic at locations like Atlantic and Pennsylvania Avenues and Linden Boulevard and Pennsylvania Avenue. The addition of Gateway II traffic makes these conditions much worse. Most impacts cannot be mitigated. And the addition of Wal-Mart will make traffic conditions even more severe. Wal-Mart traffic will increase vehicle delay throughout the East New York area increasing the length of time vehicles takes to clear an intersection by as many as three light changes or by more than 5 minutes with traffic spilling back onto nearby intersections creating area wide gridlock.

When completed, Gateway II would annually generate 23 million vehicle trips. The addition of a Wal-Mart will add another 4 million car and truck trips a year generating 16 million more miles of travel, resulting in 130 more traffic accidents; Wal-Mart would also add 10,000 tons per year of green house gas emissions adding to the 60,000 tons per year that would be contributed by Gateway II further undermining Mayor Bloomberg's goal of reducing greenhouse gas emissions by 30% over the next two decades.

It is clear that, based on these study results, adding a Wal-Mart to the Gateway project in East New York will result in huge community and regional impacts that have not been accounted for. These unreported impacts demand that a full EIS be undertaken for the proposed Wal-Mart. Once these impacts are fully disclosed and it is understood that these impacts cannot be mitigated it is impossible to see how a Wal-Mart can be incorporated into the East New York Gateway project site. The downside is just too great.

The following summarizes how these impact were derived

The following presents the assumptions and detailed results for this analysis of the traffic impacts of including an 180,000 square foot Wal-Mart in the Gateway Estates II project. It includes an estimate of the resulting number of trips that would be added to this project site as a result of the Wal-Mart substituting for a similar amount of "destination retail" space, an estimate of the distribution of these added trips to the surrounding road network including the Shore Parkway, an estimate of the impact on traffic operations along the Shore Parkway as well as at selected intersections, a summary of the environmental effects of Wal-Mart including greenhouse emissions, traffic accidents and the resulting externality costs.

Additional trips generated by incorporating a Wal-Mart into the Gateway II project

The Gateway Estates II project has estimated traffic impacts based on limited traffic counts for the existing Gateway I project. The resulting numbers are significantly lower than reported by the Institute of Transportation Engineers (ITE) in their *Trip Generation Manual* for similar uses. The consequence is that the FEIS for the Gateway II project under reports project traffic impacts assuming all big box retail activities fall under the generic description of "destination retail." The mix of retail stores currently located at Gateway I is varied and complex and are not fully accounted for in the FEIS for Gateway II. This under reporting is not analyzed or corrected in this report but should be the subject of further study.

What is accounted for in this report is the substitution of a Wal-Mart supercenter for destination retail activity. A Wal-Mart supercenter produces a great deal more traffic than assumed in the Gateway II FEIS for destination retail. The following describes how this correction has been made for placing a Wal-Mart in the Gateway II project.

We are assuming the rumored Wal-Mart totals 180,000 square feet in retail space and that half the space is a supermarket and the rest a standard Wal-Mart with its multitude of retail products. We have used the ITE Land Use Codes for a supermarket (#850) and a free-standing discount superstore (#813) in making this adjustment. We have further assumed that 15% of all trips are linked trips (that is, that 15% of shoppers have multiple destinations) although a Wal-Mart tends to be a single destination shopping activity. The FEIS reports that 95% of shoppers will arrive by auto.

A problem with using ITE data is that not only is most of the data derived from sites in suburban America unrepresentative of the density of New York City, it is reported in auto trips not person trips as reported in the FEIS. In adjusting for person trips we have assumed 2 passengers per trip for both a supermarket and for a free-standing discount superstore to get person trips per 1,000 square feet of retail space.

ITE reports high, low and average trip generation rates. Typically, most developers assume average rates to estimate project impacts. As noted above, the Gateway II rationalized much lower than *average* ITE rates by taking limited counts (FEIS rates are about 80% of ITE average rates). NYCDCP and NYCDOT approved these artificially low rates to under report project impacts. For this analysis we are assuming ITE rates that are appropriate for a Wal-Mart, or 20% *above* average ITE rates (still a very conservative adjustment).

The Gateway II assumes average vehicle occupancy of 1.4 persons per car for destination retail. This tends to over-estimate project impacts. For this analysis we have assumed an average occupancy of 1.8 resulting in 29% fewer trips than would occur were the FEIS's 1.4 rate used.

To estimate the effects of substituting a Wal-Mart supercenter for destination retail, we deducted the number of person trips 180,000 square feet of destination retail would produce as reported in Tables 16-30 and 16-31 of the FEIS. This total was deducted from the total that would be generated by the Wal-Mart supercenter (without correcting for destination retail) discussed above. The results are shown in Table 1, Estimated Vehicular Trips Generated by a Walmart Supercenter in Substitution for Destination Retail at Gateway Center II.

Table 1 summarizes the impacts.[1] During an average weekday, Wal-Mart would generate 10,692 more vehicle trips than accounted for in the FEIS (an increase of 32%), on an average Saturday, a Wal-Mart would add 13,206 vehicle trips (an increase of 33%), on an average weekday morning peak hour Wal-Mart will add 1,208 trips (an increase of 45%), on an average weekday evening peak hour 1,320 trips (an increase of 39%), and on an average Saturday peak hour 1,073 trips (an increase of 24%). It is important to emphasize that these impacts are over and above the traffic impacts reported in the FEIS for the entire Gateway II project including residential development.

As stated above, this analysis assumed ITE trip generation rates that are 20% above reported ITE average rates for land uses approximating those for a Wal-Mart supercenter. However, travel to and from big box retail vary by day of the week and by month of the year and result in huge differences for impacts on a host community. Table 2 reports the daily and monthly variation in trip attractions for large shopping centers reported by ITE. The table also reports related trip generation for a Wal-Mart, Gateway II (without Gateway I trips) and the original Gateway I. It also reports total vehicle miles of travel and carbon dioxide emissions that are dealt with later in this report.

Table 2 shows that the number of trips can vary greatly by day of the week and by month of the year. Daily travel associated with a shopping center varies from 82% of weekly average on a Sunday to 151% on a Saturday and from 78% of average monthly travel in February to 142% in December. Taken to an extreme, project trip generation can vary from 64% to 214%, for a Sunday in February compared to a Saturday in December.[2] Table 2 is as close a proxy as we can get for the likely variation in traffic generated by the Gateway project as well as for a Wal-Mart inserted into Gateway without extensive independent data collection. However, this analysis reinforces the assertion that the assumptions made for the Gateway II trip generation for destination retail are significantly under reported.

Traffic Assignments for a Wal-Mart at Gateway II

Due to limitations in time and resources, this analysis is focused on the effects of a Wal-Mart on the average weekday PM peak hour reported on in the Gateway II FEIS.[3] Table 3 summarizes how Wal-Mart trips were distributed in the PM peak hour for critical nearby intersections. Table 3 reports turning movements at the intersections shown for No Build conditions in 2011, plus new trips assigned in the FEIS for Build conditions in 2011 and Build conditions in 2013 (Columns 1, 2 and 3). Column 4 sums the new trips (Column 2 plus Column 3) for what was assumed as total project traffic impacts. Column 5 sums No Build (Column 2) with new trips (Column 4). Column 6 reports the 2013 Build conditions reported in the FEIS (FEIS table references are at the bottom of Table 3). Column 7 reports the difference between the calculated results (Column 4) and the traffic volumes reported in the FEIS (Column 6). Column 7 shows significant numbers of numerically large differences between calculated and reported traffic volumes suggesting there may be some considerable error in the FEIS traffic analysis.

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[1] All Tables and figures are presented at the end of the text.

[2] From Table 2: for a Sunday in February 64% is derived by multiplying 82% for a Sunday times 78% for February; for a Saturday in December 214% is derived by multiplying 151% for a Saturday times 142% for December.

[3] As reported above, an 180,000 square foot Wal-Mart would result in 45% more traffic than reported in the FEIS for the AM peak hour, resulting in even more significant project impacts than reported herein.

Because of this apparent error and because the FEIS assumes all destination retail will be completed in 2011, we have assumed Wal-Mart trips would be assigned on the basis of 2011 Build FEIS project trip distribution. Column 8 reports the resulting distribution on Wal-Mart trips as a percent of total trips generated for the PM peak hour. Column 9 applies the percentages reported in Column 8 to the total number of Wal-Mart trips reported above, 1,320 in the PM peak hour, to produce the distribution of trips by intersection approach for each of the intersections analyzed. Column 10 reports the resulting 2013 total trips for each intersection with Wal-Mart traffic added to Column 6 (the 2013 FEIS Build traffic volumes). Column 11 shows the percentage increase for each intersection approach turning and through movement with an overall average increase of more than 10%.

Estimation of Traffic Impacts at Selected Intersections and the Shore Parkway

Traffic impacts of both Gateway II and the addition of a Wal-Mart were estimated using the Synchro/SimTraffic traffic simulation model approved by NYCDOT and NYSDOT.[4] Models were run for No Build conditions in 2011, Build conditions in 2013 without Wal-Mart, for Build conditions with mitigation recommended in the Gateway II FEIS and for Build conditions with the substitution of an 180,000 square foot Wal-Mart for destination retail. Wal-Mart traffic impacts are estimated assuming all intersection mitigation reported in the FEIS.

Impact on the Shore Parkway

Figure 1 shows an aerial photograph of the Shore Parkway analysis area including Gateway Drive at Erskine Street. Figure 2 shows the traffic volumes used for this location including the intersection of Erskine Street and Gateway Drive (along with the two intersections connecting with Shore Parkway). Traffic volumes include 2013 Build conditions plus Wal-Mart traffic volumes in the PM peak hour. Figure 3 shows the resulting traffic simulation for this location with Wal-Mart in place in 2013. Reinforcing what is claimed in the Gateway II FEIS, traffic simulation shows considerable delay along Shore Parkway both with Gateway II traffic and because of the addition of Wal-Mart traffic. Table 4 summarizes the results for Shore Parkway including the three intersections shown in Figure 1.

Table 4 provides what are generally termed "measures of effectiveness." (MOE) MOE's are a means of comparing the results for a traffic simulation network shown in Figure 2. Four MOE's are provided to represent overall network operation including the three intersections shown in Figure 2. MOE's include average travel speed in MPH, total vehicle delay in hours, fuel economy (miles per gallon averaged for the entire network) and carbon monoxide emissions in Kilograms (a proxy for other vehicular emissions, hydrocarbons and nitrogen oxides that vary in the same proportions to carbon monoxide emissions). The following MOE's are for a typical average weekday PM peak hour for the network shown in Figure 2.

[4] Synchro is a software application for optimizing traffic signal timing and performing capacity analysis. The software optimizes splits, offsets, and cycle lengths for individual intersections, an arterial, or a complete network. Synchro performs capacity analysis using both the ICU and HCM methods. SimTraffic is software that performs micro simulation and animation of vehicle traffic. With SimTraffic, individual vehicles are modeled and displayed traversing a road network. SimTraffic models signalized and unsignalized intersections, and freeway sections with cars, trucks, pedestrians, and buses.

Travel speeds average 46 MPH for 2011 No Build conditions but are reduced to 35 MPH for 2013 Build conditions with Gateway II traffic (a 24% reduction). With the addition of a Wal-Mart speeds are further reduced by another 29% to 25 MPH. These speed reductions are severe and not only result in increased travel time for Gateway shoppers but, more importantly, they severely affect commuters using Shore Parkway.

The extent of these impacts is illustrated by the increase in total vehicle delay shown in Table 4. Delay increases by 300% from 2011 No Build to 2013 Build conditions with Gateway traffic or from 16 hours to 64 hours in the weekday PM peak hour. The addition of Wal-Mart more than doubles this delay, from 64 to 147 hours, a 130% increase.

The reduction in travel speeds and the resulting increase in delay have an effect on fuel consumption and vehicular emissions. These effects not only impact Gateway shoppers but the more than ten thousand motorists an hour that use the Shore Parkway and who bear the lion's share of these costs. Fuel economy drops from 26 to 22 miles per gallon from 2011 No Build to 2013 Build with Gateway (a 15% decline) and drops an additional 17% to 18 miles per gallon when Wal-Mart traffic is added. Vehicle emissions increase in inverse proportion to fuel consumption with carbon monoxide emissions increasing by 29% from 2011 No Build to 2013 Build with Gateway II and by an additional 23% with the addition of Wal-Mart.

None of these impacts are reported in the FEIS.

Intersection Level of Service

The following describes the results of level of service calculations for six intersections heavily impacted by Wal-Mart. The analysis was completed using the Synchro/SimTraffic computer software described above for calculating Level of Service (LOS).[5] A word of caution: Because no details are provided in the FEIS about assumptions made in undertaking level of service analyses, it is difficult to fully match the LOS estimates reported in the FEIS.[6] For this analysis intersection operation has been optimized for each intersection for each scenario reported in Table 5. Cycle times and signal phasing were optimized to minimize overall average vehicle delay for each intersection. And, for the three intersections connecting with the Shore Parkway offsets between nearby intersections were optimized as well to minimize overall vehicle delay. Because this analysis is consistent from one scenario to the next for each intersection the relative impact of both Gateway II and Wal-Mart is an accurate depiction of project impacts on the surrounding roadway system.

Impact at Gateway Drive at Erskine Street

The intersection at Gateway Drive and Erskine Street is the only direct access from the Gateway project to the Shore Parkway. As noted above, more than a third of Gateway traffic will utilize

[5] LOS A (less than 10 sec of delay), B (10 to 20 sec of delay) and C (20 to 35 sec of delay) demonstrate good operating conditions with minimum average vehicle delay. LOS D (35 to 55 sec of delay) means traffic begins to show congestion with increased delay. LOS E (55 to 80 sec of delay) is the effective capacity of an intersection with some intersection approaches exhibiting LOS F (greater than 80 sec of delay). LOS F is effectively breakdown conditions with very substantial delays with some approaches forcing motorists to wait two, even three signal cycles, to move through the intersection.

[6] Unlike the FEIS, this report contains all intersection LOS calculation sheets for all analyses reported on herein. See Appendix.

the Shore Parkway and therefore utilize this intersection to enter and leave the site. According to the FEIS Gateway II impacts at this location are minimal and therefore no mitigation would be required. However, the analyses in the FEIS are for a different intersection than exists today. Recent (June 2010) aerial photographs of the area show two northbound left turn lanes. (See Figure 4) This analysis accounts for these two lanes throughout. Overall LOS for this location is B for 2011 No Build conditions deteriorating to LOS D with Gateway II traffic. The addition of Wal-Mart traffic results in a significant deterioration to LOS F with severe impacts for the eastbound right turn (LOS E to F with vehicle delay increasing from 56 seconds to 231 seconds) and for the northbound left turn (LOS D to F with vehicle delay increasing from 58 seconds to 153 seconds). Again, this is with optimized signal operation. Clearly, the intersection of Gateway Drive at Erskine Street would require significant additional mitigation were Wal-Mart to be located in the Gateway project. The impact of Wal-Mart traffic on the intersection connecting with the southbound Shore Parkway is also significant.

The intersection of Gateway Drive at Erskine Street is one more example of the Gateway FEIS outliving the facts. Chapter 22, Mitigation, outlines mitigation that has, and as shown in Figure 4, become obsolete by the geometry that is in place today. What you see in the aerial photo is that the operational capacity far exceeds what was proposed as mitigation and again makes the FEIS obsolete. As noted above, we have assumed the intersection geometry shown in Figure 4 for all analyses reported on herein for this location.

Impact at the intersection connecting with the southbound Shore Parkway off Erskine Street

LOS for this intersection for 2013 Build conditions with Gateway II operate at an overall LOS C for the southbound entrance to Shore Parkway deteriorating to a LOS D with Wal-Mart. However, the impact for the westbound right turn deteriorates from LOS D with Gateway II traffic to LOS F with the addition of Wal-Mart traffic. This assumes optimum signal timing, phasing and intersection offsets for all three intersections analyzed accessing the Shore Parkway. If Wal-Mart is added to the Gateway project these impacts would have to be mitigated. To do so, the bridge crossing Shore Parkway would have to be widened to accommodate the additional Wal-Mart traffic to bring operating conditions to within a mid-range LOS D, a NYCDOT standard.

Impact at Pennsylvania Avenue and Atlantic Avenue

While the intersection of Pennsylvania and Atlantic Avenues is somewhat distant from the Gateway II project, both Gateway and Wal-Mart will have a very significant impact along Atlantic Avenue. As pointed out in the FEIS, no mitigation is available to improve the operation of this intersection. So any added traffic from Gateway and from Wal-Mart will increase vehicle delay and increase area wide congestion. Gateway II traffic will increase LOS from D for 2011 No Build conditions to a high level E in 2013. Moreover, the addition of Gateway traffic will result in severe delays at a number of intersection approaches with severe LOS F for each of the following approaches: eastbound through/right, northbound left and the southbound through/right vehicle movements. The addition of Wal-Mart traffic will increase overall LOS to F with the severity of delay increased significantly at two of the three intersection approaches listed above. Again, neither the impact of Gateway II traffic nor that for a Wal-Mart can be mitigated.

Impact at Pennsylvania Avenue and Linden Boulevard

Conditions at Pennsylvania Avenue and Linden Boulevard are even more severe than at Pennsylvania and Atlantic Avenues with LOS a severe F for 2011 conditions without Gateway II. Average vehicle delay nearly doubles with the addition of Gateway traffic to 239 seconds with five of eight intersection approaches a LOS F (up from three for No Build conditions). Two of these approaches, the eastbound through/right and the northbound left, exhibit 393 seconds and 428 seconds of delay, respectively, or approximately three light changes before vehicles get past the intersection. The FEIS proposes some mitigating measures that help to cut average vehicle delay but the intersection remains gridlocked even with these improvements. Moreover, Gateway project traffic impacts are not themselves mitigated as shown in Table 5. The addition of Wal-Mart traffic even with FEIS mitigation and optimized traffic light operation, results in significant impacts with average vehicle delay increasing from 154 seconds with Gateway II mitigated to 178 seconds of delay with the addition of Wal-Mart. Whatever happens, the intersection at Pennsylvania Avenue and Linden Boulevard is gridlocked without Gateway II and even with Gateway II and mitigation will be severely gridlocked and this intersection will experience even greater gridlock with Wal-Mart.

Impact at Flatlands Avenue and Pennsylvania Avenue

The FEIS reports LOS C for 2011 No Build conditions at the intersection of Flatlands and Pennsylvania Avenue deteriorating to LOS E with Gateway II traffic with three vehicle approaches exhibiting LOS F (up from LOS C for No Build conditions). The FEIS proposes some very modest mitigation for this intersection with Gateway II that cuts average vehicle delay from 69 seconds (LOS E) to 66 seconds. However, this mitigation does not provide relief from the gridlock LOS F conditions for the eastbound left turn, the westbound through/right movement or the southbound left turn movement. The addition of Wal-Mart traffic results in a deterioration of overall LOS from E with mitigation to F with Wal-Mart, with average vehicle delay increasing from 66 seconds to 92 seconds with severe LOS F at the three approaches described above. From the discussion in the FEIS there appears to be no additional mitigation available at this location to offset the impacts from adding a Wal-Mart.

Impact at Flatlands at Schenck Avenue—the apparent main entrance to the Gateway project north of the site

The Gateway II FEIS assumes the north entrance/exit would be at Jerome Avenue. However, Jerome Avenue is not a through street north of the project site. Recent (June 2010) aerial photographs (Figure 5 from Google Earth) reveals that the main entrance has apparently been changed and is now located at Schenck Avenue. Because the FEIS reports the main entrance at Jerome Avenue it has been necessary to move major traffic movements into and out of the project site from Jerome to Schenck for this analysis. This has been approximated using FEIS data and balancing the traffic movements along Flatlands Avenue for 2011 No Build and 2013 Build conditions. The results, shown in Table 5, are LOS C for 2011 No Build conditions but LOS F with Gateway II traffic with breakdown conditions (LOS E or F) for many intersection approaches (average intersection delay increases from 27 seconds for No Build to 188 seconds for Build with Gateway II traffic). Clearly this will not be acceptable to NYCDOT so we have investigated a possible mitigation effort widening the intersection approaches where needed eliminating nearby on-street parking, providing sufficient capacity along Vandalia Avenue south of Flatlands and fully optimizing the signal timing to minimize overall average vehicle delay

with Gateway II traffic. The improvements include widening the northbound approach to accommodate two southbound lanes and two northbound left turn lanes, eliminating parking on the eastbound approach and creating two right turn lanes, and eliminating parking on the southbound approach to create a dedicated left turn along with a combined through/right turn lane. The result is that for 2013 Build conditions with Gateway II traffic LOS can be reduced from LOS F (188 seconds of delay) to LOS E (62 seconds of delay). The addition of Wal-Mart traffic will produce a near doubling of average vehicle delay (from LOS E with 62 seconds of delay to LOS F with 119 seconds of delay). Two intersection approaches will be severely deteriorated by Wal-Mart traffic (eastbound right turn from 92 to184 seconds of delay and the northbound left turn from 87 to 210 seconds of delay, from 2013 Build with Gateway and mitigation to 2013 with Wal-Mart).

Many other intersections with breakdown conditions not analyzed in this report

The above is a sampling of the impact of adding a Wal-Mart to the Gateway II project. As noted elsewhere because of constraints on time and resources the effects of adding a Wal-Mart for other time periods and other intersections were impossible to analyze. Plus, as shown in the FEIS, there are other intersections that exhibit severe operating conditions that result in localized gridlock conditions without Wal-Mart but severely exacerbated with Wal-Mart traffic (such as Linden Blvd. and Rockaway Avenue, Linden Blvd. and Rockaway Parkway and Linden Blvd. and Kings Highway and Remsen Avenue). All of these locations must be analyzed for the effects of Wal-Mart should that project actually be undertaken. However, this should be done with the understanding that, as reported in the FEIS, most of these locations cannot be mitigated for Gateway II traffic let alone with Wal-Mart traffic.

Impact on Parking

The Gateway Estates II FEIS reports there will be plenty of parking for the addition of 630,000 square feet of destination retail (Table 16-35). Gateway II will provide 2,067 new parking spaces and claims that on weekdays less than half of these spaces will be occupied and on Saturdays less than 70% will be occupied. Nowhere in the FEIS are the assumptions made in estimating parking demand. An independent analysis based on available data for parking activity in shopping centers for weekdays and weekends shows that with the addition of Wal-Mart, parking demand will exceed available parking on both weekdays and Saturdays. The results are presented in Table 6. The supporting documentation including all assumptions for daily trip generation, hourly traffic movements and the resulting parking accumulation are provided in the Appendix to this report.

What Table 6 shows is that parking demand would exceed availability for weekdays and significantly exceed available parking on Saturdays. This assumes average travel behavior and the low-balled estimates of trip generation reported for destination retail in the FEIS. Table 6 shows that, with Wal-Mart, demand on weekdays would be about 150% greater than reported in the FEIS (again, Table 16-35 of the FEIS) and as much as 230% greater on Saturdays. Indeed, parking capacity including the assertions for existing parking availability reported for Gateway I would be significantly exceeded with Wal-Mart, resulting in very significant spill over of traffic onto the surrounding roadway network. Again, this is assuming trip generation characteristics for destination that are 80% of what is reported by ITE for average trip generation rates for destination retail. Plus it does not account for the very significant variation that can occur as

demonstrated above for peak weekdays and peak months such as December (Table 2). Clearly, much more parking would be required should a Wal-Mart be incorporated into the Gateway II project.

Environmental Effects

Adding 4 million more cars and trucks to the East New York community each year will generate approximate 16 million more miles of vehicular travel within four miles of the Wal-Mart site. Air pollution and traffic noise will certainly be impacted, especially by the huge increase in diesel trucks servicing Wal-Mart that emit cancer causing particulates and other unhealthy chemicals. Four million additional vehicle trips annually (as many as 1,300 per hour on a typical weekday) must cause some environmental impacts in the area of East New York known for its high asthma rates.

Moreover, as noted elsewhere in this report, the Gateway FEIS under reports the traffic impacts of destination retail and totally ignores the real impact of including a Wal-Mart which, by itself and as demonstrated herein, will increase overall daily project traffic by 32% weekdays, 33% Saturdays. For this reason alone the environmental concerns of the Wal-Mart must be evaluated by The Related Companies in a new environmental impact statement.

In addition, the addition of 4 million more car and truck trips, approx. 16 million added vehicle miles of travel, to the already congested Shore Parkway and the East New York area, will clearly result in more congestion with increased travel times for all current motorists along with lost productivity to nearby businesses (as quantified below). This increase in travel will result in a significant increase in traffic accidents and personal injuries. The external costs borne by residents and workers in the East New York area are not trivial. Accident costs, increased health care costs, pain and suffering resulting from the impacts of more traffic, are all very real totaling approximately $12 million each year for the project as reported, borne both by all motorists (current and future) as well as the large proportion of the East New York community who do not own a car.

Greenhouse Gas Emissions

As clearly stated in New York City's PlaNYC, "Scientists have now proven that human activities are increasing the concentration of greenhouse gases in the earth's atmosphere—and these gases are raising global temperatures. The warming of the earth is causing longer heat waves, rising sea levels, and more violent storms." (page 133) So, it comes as a continuing shock that the Bloomberg administration continues to contribute to an increase in greenhouse gases by nine years of supporting a huge number of auto dependent big box stores such as Wal-Mart. As noted elsewhere in this report, the addition of a Wal-Mart to the approved Gateway Estates II project will add another 4 million car and truck trips traveling more than 16 million miles annually. This increased travel would generate 10,000 tons of carbon dioxide emissions each year. This is in addition to the 60,000 tons per year that the Gateway II project, itself totally auto dependent, will generate. New York City is nearing completion of the periodic revisions it is required to do for PlaNYC. It will be very informative whether or not this hypocrisy will continue.

Traffic Accident Impacts

The FEIS for Gateway Estates II report accident rates for various roadway types but fails entirely to report on additional accidents that will be produced by this project due to the addition of more trips to the area of East New York. The limited accident analysis that is provided does reinforce the fact that accidents will increase in direct proportion to any increase in travel resulting from the Gateway project. This calculation is simply not provided because the NYCDCP CEQR Manual does not require it. By itself the Gateway project, generating 23 million more vehicle trips annually will increase annual vehicular travel by 92 million miles of travel and, because of this, produce an additional 730 traffic accidents each year. This impact is entirely ignored in the Gateway FEIS.

Table 7 summarizes the traffic accidents estimated specifically for an 180,000 square foot Wal-Mart anticipated to occur within approx. 4 miles of the assumed Wal-Mart along with the related externality costs (more than $5 million in damages annually). Estimates were made using accident rates used by NYSDOT for their cost-benefit analyses for new construction. On this basis, Wal-Mart can be expected to generate 130 additional traffic accidents each year.

Externality Costs

The addition of four million vehicle trips generating 16 million added miles of travel comes with a financial cost to East New York and other Brooklyn communities. Table 8 summarizes the types of externalities this increase in traffic would generate. Congestion, an increase in traffic accidents and environmental damages are just the most obvious externalities.[7]

Table 8 summarizes these costs in terms of their dollar value to the community. These are costs that would be borne by existing motorists as well as by Wal-Mart shoppers, by residents and businesses alike. These costs total about $20 million dollars a year and represent a real loss to the community in terms of lost productivity, increased health care costs, and losses associated with traffic accidents not covered by auto insurance. Congestion and lost productivity from Wal-Mart traffic comes to approx. $4 million a year in losses; increased health care costs from air pollution, $2 million a year; traffic accident costs not covered by insurance, $5.2 million a year; plus all the other externalities listed in Table 8 and summarized in the footnote below, more than $7 million a year.

[7] There are many more costs that have not been fully quantified in dollar terms that are borne by all communities from imposing new vehicular travel: storm water runoff of road salts and toxic organics that are a major source of water pollution, the damage and clean up costs of oil spills from the extraction of oil from off-shore drilling (as we so recently observed), greenhouse effects of vehicular emissions, the value of land devoted to highways and removed from our tax roles, the value of unpaid parking of cars and trucks which amount to untaxed subsidies to motorists, the cost nationwide of disposing of ten million car and truck chassis and a quarter billion tires each year, the social costs to those deprived of auto access (a big problem in Brooklyn), the foreign policy and defense costs of protecting our supplies of imported oil (the current Iraq war and other serious problems in the Middle East), and a similar array of hidden costs due to the manufacture of vehicles and the storage and refinement of petroleum products. All are part of the externalities associated with car and truck use.

TABLE 1

ESTIMATED VEHICULAR TRIPS GENERATED BY A WALMART SUPERCENTER IN SUBSTITUTION FOR DESTINATION RETAIL AT GATEWAY ESTATES II

ITE CODE	PROJECT TYPE			TRIP GEN ADJUSTMENT	PERSON TRIPS PER 1,000 SQ. FT. WEEKDAY	SATURDAY	AM PK HR	PM PK HR	SAT/SUN PK HR
813	Walmart Supercenter	90,000	sf	+20% Avg	11,476	13,839	745	1,011	1,218
850	Walmart Supercenter Supermarket	90,000	sf	+20% Avg	22,084	38,359	2,171	2,560	2,344
	TOTAL WALMART PERSON TRIP GENERATION			+20% Avg	33,560	52,199	2,916	3,570	3,562
	GATEWAY II ESTIMATED PERSON TRIPS FEIS TABLE 16-31 DESTINATION RETAIL	180,000			9,726	22,760	222	628	1,169
	ADDITIONAL PERSON TRIPS WALMART SUPERCENTER (Trip generation rates 120% of reported average rates for ITE Codes shown)				23,834	29,439	2,694	2,943	2,393
	ESTIMATED INCREASE IN VEHICLE TRIPS FROM SUBSTITUTING A WALMART SUPERCENTER FOR DESTINATION RETAIL **(Assuming 95% auto use, vehicle occupancy of 1.8 persons, and 15% linked trips)**				**10,692**	**13,206**	**1,208**	**1,320**	**1,073**
	GATEWAY II FEIS TOTAL NUMBER OF VEHICLE TRIPS (Table 16-31) **(Weekday and Saturday auto trips estimated from data provided in Gateway II FEIS--see table in the Appendix)**				**33,440**	**39,792**	**2,684**	**3,424**	**4,441**
	GROWTH IN TOTAL PROJECT VEHICULAR TRIPS DUE TO WAL-MART (Percent)				**32%**	**33%**	**45%**	**39%**	**24%**

Brian Ketcham Engineering, PC
January 2, 2011

TABLE 2

ESTIMATE OF ANNUAL TRAVEL BY DAY AND SEASON

		WAL-MART	GATEWAY II	GATEWAY I
AVERAGE DAILY TRAVEL		**10,692**	**60,000**	**28,800**
Summary of weekly trips (annual average conditions)				
Sunday	82%	8,778	49,260	23,645
Monday	95%	10,168	57,060	27,389
Tuesday	91%	9,773	54,840	26,323
Wednesday	95%	10,136	56,880	27,302
Thursday	100%	10,639	59,700	28,656
Friday	119%	12,745	71,520	34,330
Saturday	151%	16,145	90,600	43,488
Total Avg. Weekly Travel (1-way trips)		**78,384**	**439,860**	**211,133**
Variation by Month (Vehicle trips per month)				
January	85%	334,309	1,876,003	900,481
February	78%	244,872	1,374,123	659,579
March	92%	288,454	1,618,685	776,969
April	93%	292,216	1,639,798	787,103
May	105%	413,085	2,318,062	1,112,670
June	106%	332,349	1,865,006	895,203
July	101%	316,045	1,773,516	851,287
August	102%	320,121	1,796,388	862,266
September	95%	297,233	1,667,949	800,616
October	99%	387,610	2,175,108	1,044,052
November	102%	318,240	1,785,832	857,199
December	142%	555,744	3,118,607	1,496,932
Total Annual Travel (1-way trips)		**4,100,279**	**23,009,077**	**11,044,357**
Assume 4 miles average travel distance for each trip				
Estimated Vehicles Miles of Travel (VMT)		**16,401,117**	**92,036,306**	**44,177,427**
Assumes 40% will use Shore Parkway; rest local streets.				
		Annual VMT		
Local travel		9,840,670		
Shore Parkway travel		6,560,447		
CARBON DIOXIDE EMISSIONS (tons/year)		10,130	56,846	27,286

TABLE 3

SUMMARY OF GATEWAY ESTATE II TRIP ASSIGNMENTS

SIGNALIZED INTERSECTIONS		1 2011 NO-BUILD TRAFFIC VOLUMES (1)	2 2011 WEEKDAY BUILD (2) NEW TRIPS	3 2013 WEEKDAY BUILD (3) NEW TRIPS	4 TOTALS 2011 + 2013 TRIP INCREMENTS	5 2013 BUILD TRAFFIC VOLUMES (4) CALCULATED	6 2013 BUILD TRAFFIC VOLUMES FEIS (5)	7 DIFFERENCE FEIS LESS CALCULATED	8 ASSIGNMENT OF WALMART TRIPS BASED ON 2011 TRIP ASSIGNMENTS	9 INCREASE IN TRIPS BY LOCATION DUE TO WALMART TRAFFIC	10 2013 BUILD TRAFFIC VOLUMES WITH WALMART	11 PERCENT INCREASE IN VOLUME WITH WALMART
Erskine Street & Belt Parkway Eastbound Ramps	EBL	411	228	178	406	821	795	-26	9.58%	127	922	15.9%
	EBT	47				47	48	1				
	SBL	637	213	191	404	1047	912	-135	8.95%	118	1030	13.0%
Erskine Street & Belt Parkway Westbound Ramps	WBR	526	258	216	474	1005	920	-85	10.84%	143	1063	15.6%
	SBT	637	213	191	404	1047	912	-135	8.95%	118	1030	13.0%
	SBR	498	180	158	338	841	751	-90	7.57%	100	851	13.3%
	NBT	411	228	178	406	821	795	-26	9.58%	127	922	15.9%
Erskine Street & Gateway Drive	EBL	9				9	10	1			10	0.0%
	EBT	17				17	17	0			17	0.0%
	EBR	490	124	114	238	733	643	-90	5.21%	69	712	10.7%
	WBL	281				284	286	2			286	0.0%
	WBT	44				44	45	1			45	0.0%
	WBR	27				27	28	1			28	0.0%
	SBL	3				3	3	0			3	0.0%
	SBT	364	270	235	505	873	734	-139	11.35%	150	884	20.4%
	SBR	3				3	3	0			3	0.0%
	NBL	447	154	123	277	728	674	-54	6.47%	85	759	12.7%
	NBT	414	329	271	600	1018	956	-62	13.83%	183	1139	19.1%
	NBR	76	3	0	3	80	85	5	0.13%	2	87	2.0%
Erskine Street & Gateway Plaza SOUTH	SBT	222	270	235	505	729	589	-140	11.35%	150	739	25.4%
	SBR	121				122	123	1			123	0.0%
	NBT	304	329	271	600	907	843	-64	13.83%	183	1026	21.7%
	NBL	147				148	150	2			150	0.0%
	EBL	135				136	137	1			137	0.0%
	EBR	148				149	151	2			151	0.0%
Erskine Street & Gateway Plaza NORTH (NEW)	SBR		95	94	189	189	94	-95	3.99%	53	147	56.1%
	SBT	343	80	46	126	472	519	47	3.36%	44	563	8.6%
	NBL		204	204	408	408	204	-204	8.58%	113	317	55.5%
	NBT	439	125	67	192	635	782	147	5.25%	69	851	8.9%
	EBL		64	62	126	126	65	-61	2.69%	36	101	54.6%
	EBR		191	191	382	382	192	-190	8.03%	106	298	55.2%
Erskine Street & North Parking Lot	SBR		16	16	32	32	16	-16	0.67%	9	25	55.5%
	SBT	343	137	102	239	585	575	-10	5.76%	76	651	13.2%
	NBL		41	41	82	82	41	-41	1.72%	23	64	55.5%
	NBT	439	144	85	229	672	800	128	6.05%	80	880	10.0%
	EBL		36	36	72	72	36	-36	1.51%	20	56	55.5%
	EBR		38	38	76	76	38	-38	1.60%	21	59	55.5%
Gateway Drive & North Parking Lot	SBL		65	55	120	120	65	-55	2.73%	36	101	55.5%
	SBT	625	285	275	560	1191	939	-252	11.98%	158	1097	16.8%
	NBR		16	16	32	32	16	-16	0.67%	9	25	55.5%
	NBT	589	229	197	426	1021	881	-140	9.63%	127	1008	14.4%
	WBL		15	15	30	30	15	-15	0.63%	8	23	55.5%
	WBR		127	127	254	254	127	-127	5.34%	70	197	55.5%
Gateway Drive & Gateway Plaza NORTH (NEW)	SBL		276	275	551	551	275	-276	11.60%	153	428	55.7%
	SBT	625	24	15	39	670	679	9	1.01%	13	692	2.0%
	NBR		106	106	212	212	106	-106	4.46%	59	165	55.5%
	NBT	589	47	16	63	658	700	42	1.98%	26	726	3.7%
	WBL		99	99	198	198	99	-99	4.16%	55	154	55.5%
	WBR		198	197	395	395	197	-198	8.32%	110	307	55.8%
Gateway Drive & Gateway Plaza SOUTH	SBT	300	124	114	238	541	449	-92	5.21%	69	518	15.3%
	SBL	325				328	331	3			331	0.0%
	NBT	353	154	123	277	634	577	-57	6.47%	85	662	14.8%
	NBR	3				3	3	0			3	0.0%
	WBL	5				5	5	0			5	0.0%
	WBR	238				240	242	2			242	0.0%
Fountain Avenue & Flatlands Ave.	NBL	31				31	32	1			32	0.0%
	NBT	276	74	69	143	422	368	-54	3.11%	41	409	11.2%
	NBR	75				76	79	3			79	0.0%
	SBL	6				6	6	0			6	0.0%
	SBT	332	91	78	169	504	469	-35	3.83%	50	519	10.8%
	SBR	114	12	8	20	135	153	18	0.50%	7	160	4.4%
	EBL	114	35	30	65	180	190	10	1.47%	19	209	10.2%
	EBT	133				134	136	2			136	0.0%
	EBR	41				41	42	1			42	0.0%
	WBL	74				75	75	0			75	0.0%
	WBT	100				101	102	1			102	0.0%
	WBR	13				13	13	0			13	0.0%
Flatlands Avenue & Jerome St. (Note that these numbers are not correct since The Related Companies have, according the aerial photos (see note below) have switched the main north entrance/exit to Schenck Avenue.)	NBL	480	355	319	674	1159	919	-240	14.92%	197	1116	21.4%
	NBT	75	10	9	19	95	87	-8	0.42%	6	93	6.4%
	NBR	23				23	24	1			24	0.0%
	SBL	3				3	0	-3				0.0%
	SBT	22	10	10	20	42	0	-42	0.42%	6	6	0.0%
	SBR	57				58	0	-58				0.0%
	EBL	66				67	77	10			77	0.0%
	EBT	464	39	40	79	548	602	54	1.64%	22	624	3.6%
	EBR	609	407	335	742	1357	1213	-144	17.11%	226	1439	18.6%
	WBL	27				27	28	1			28	0.0%
	WBT	623	38	58	96	725	771	46	1.60%	21	792	2.7%
	WBR	7	2	1	3	10	9	-1	0.08%	1	10	12.3%

TABLE 3 Cont'd

SUMMARY OF GATEWAY ESTATES II TRIP ASSIGNMENTS

SIGNALIZED INTERSECTIONS		1 2011 NO-BUILD TRAFFIC VOLUMES (1)	2 2011 WEEKDAY BUILD (2) NEW TRIPS	3 2013 WEEKDAY BUILD (3) NEW TRIPS	4 TOTALS 2011 + 2013 TRIP INCREMENTS	5 2013 BUILD TRAFFIC VOLUMES (4) CALCULATED	6 2013 BUILD TRAFFIC VOLUMES FEIS (5)	7 DIFFERENCE FEIS LESS CALCULATED	8 ASSIGNMENT OF WALMART TRIPS BASED ON 2011 TRIP ASSIGNMENTS	9 INCREASE IN TRIPS BY LOCATION DUE TO WALMART TRAFFIC	10 2013 BUILD TRAFFIC VOLUMES WITH WALMART	11 PERCENT INCREASE IN VOLUME WITH WALMART
Flatlands Avenue & Schenck Ave.	NBL	480	287	262	549	1034	919	-115	12.06%	159	1078	17.3%
(Revised as NB exit from project	NBT	75	78	69	147	223	87	-136	3.28%	43	130	49.7%
site has apparently been switched	NBR	23				23	24	1			24	0.0%
from Jerome to Schenck Ave	SBL	132				133	134	1			134	0.0%
based on June 18, 2010 Google	SBT	63	59	59	118	182	199	17	2.48%	33	232	16.5%
aerial photograph. Trips have been	SBR	24	0	0		24	37	13			37	0.0%
moved from Jerome Ave. and the	EBL	18				18	77	59			77	0.0%
network balanced to estimate	EBT	334	39	40	79	416	513	97	1.64%	22	535	4.2%
the volumes shown to the right.)	EBR	568	398	285	683	1257	1015	-242	16.73%	221	1236	21.8%
	WBL	27				27	28	1			28	0.0%
	WBT	687	38	56	94	788	639	-149	1.60%	21	660	3.3%
	WBR	175	70	60	130	307	262	-45	2.94%	39	301	14.8%
Flatlands Avenue & Van Sicklen	NBL	28				28	27	-1			27	0.0%
Avenue	NBT	137				138	139	1			139	0.0%
	NBR	98	11	11	22	121	112	-9	0.46%	6	118	5.4%
	SBL	81	57	51	108	190	159	-31	2.40%	32	191	19.9%
	SBT	256				259	262	3			262	0.0%
	SBR	36				36	36	0			36	0.0%
	EBL	71				72	81	9			81	0.0%
	EBT	782	329	263	592	1382	1329	-53	13.83%	183	1512	13.7%
	EBR	59				60	60	0			60	0.0%
	WBL	182	11	10	21	205	199	-6	0.46%	6	205	3.1%
	WBT	862	268	271	539	1410	1285	-125	11.27%	149	1434	11.6%
	WBR	47	46	37	83	130	111	-19	1.93%	26	137	23.0%
Flatlands Avenue &	NBL	141				142	144	2			144	0.0%
Pennsylvania Avenue	NBT	694				701	708	7			708	0.0%
	NBR	98	9	8	17	116	109	-7	0.38%	5	114	4.6%
	SBL	196	212	159	371	569	581	12	8.91%	118	699	20.2%
	SBT	1162				1174	1186	12			1186	0.0%
	SBR	60				61	61	0			61	0.0%
	EBL	198				200	202	2			202	0.0%
	EBT	625	100	87	187	818	780	-38	4.20%	55	835	7.1%
	EBR	218				220	222	2			222	0.0%
	WBL	101	9	12	21	123	116	-7	0.38%	5	121	4.3%
	WBT	632	86	94	180	818	767	-51	3.61%	48	815	6.2%
	WBR	125	166	157	323	449	391	-58	6.98%	92	483	23.6%
Flatlands Avenue &	NBL	156				158	159	1			159	0.0%
Rockaway Parkway	NBT	282				285	267	-18			267	0.0%
	NBR	64	11	9	20	85	82	-3	0.46%	6	88	7.4%
	SBL	38	8	8	16	54	47	-7	0.34%	4	51	9.4%
	SBT	281				284	286	2			286	0.0%
	SBR	118				119	120	1			120	0.0%
	EBL	34				34	34	0			34	0.0%
	EBT	793	70	62	132	933	909	-24	2.94%	39	948	4.3%
	EBR	125				126	128	2			128	0.0%
	WBL	21	9	10	19	40	35	-5	0.38%	5	40	14.3%
	WBT	842	61	63	124	974	942	-32	2.56%	34	976	3.6%
	WBR	80	8	8	16	97	90	-7	0.34%	4	94	4.9%
Linden Blvd. &	NBL	310	91	85	176	489	467	-22	3.83%	50	517	10.8%
Pennsylvania Avenue	NBT	588	75	72	147	741	712	-29	3.15%	42	754	5.8%
	NBR	98				99	100	1	0.00%		100	0.0%
	SBL	130	21	17	38	169	165	-4	0.88%	12	177	7.1%
	SBT	911	96	73	169	1089	1096	7	4.04%	53	1149	4.9%
	SBR	64				65	65	0	0.00%		65	0.0%
	EBL	145				146	148	2	0.00%		148	0.0%
	EBT	1722	48	35	83	1822	1839	17	2.02%	27	1866	1.4%
	EBR	394	115	86	201	599	616	17	4.83%	64	680	10.4%
	WBL	80				81	82	1	0.00%		82	0.0%
	WBT	1652	35	33	68	1737	1731	-6	1.47%	19	1750	1.1%
	WBR	104	17	17	34	139	130	-9	0.71%	9	139	7.3%
Atlantic Avenue &	NBL	209	35	30	65	276	266	-10	1.47%	19	285	7.3%
Pennsylvania Avenue	NBT	782	23	21	44	834	831	-3	0.97%	13	844	1.5%
	NBR	78	9	8	17	96	91	-5	0.38%	5	96	5.5%
	SBL	147				148	150	2	0.00%	0	150	0.0%
	SBT	777	29	23	52	837	841	4	1.22%	16	857	1.9%
	SBR	45				45	46	1	0.00%		46	0.0%
	EBL	244				246	249	3	0.00%		249	0.0%
	EBT	1669				1686	1703	17	0.00%		1703	0.0%
	EBR	162	45	33	78	242	248	6	1.89%	25	273	10.1%
	WBT	955				965	975	10	0.00%		975	0.0%
	WBR	115				116	117	1	0.00%		117	0.0%

Sources

1) Figure E-11a & E-11b, 2011 No Build Traffic Volumes - Weekday PM Peak Hour (Premary Study Area)
2) Figure E-15a & E-15b, 2011 Build Traffic Volumes Increments-Weekday PM Peak-Hour (Primary Study Area)
3) Figure E-31a & E-31b, 2013 Build Traffic Volumes Increments-Weekday PM Peak-Hour (Primary Study Area)
(1) Assumes a 0.5% per year growth involume from 2011 to 1013.
(5) Figure E-35a & E-35B, 2013 Build Traffic Volumes - Weekday PM Peak Hour (Premary Study Area)

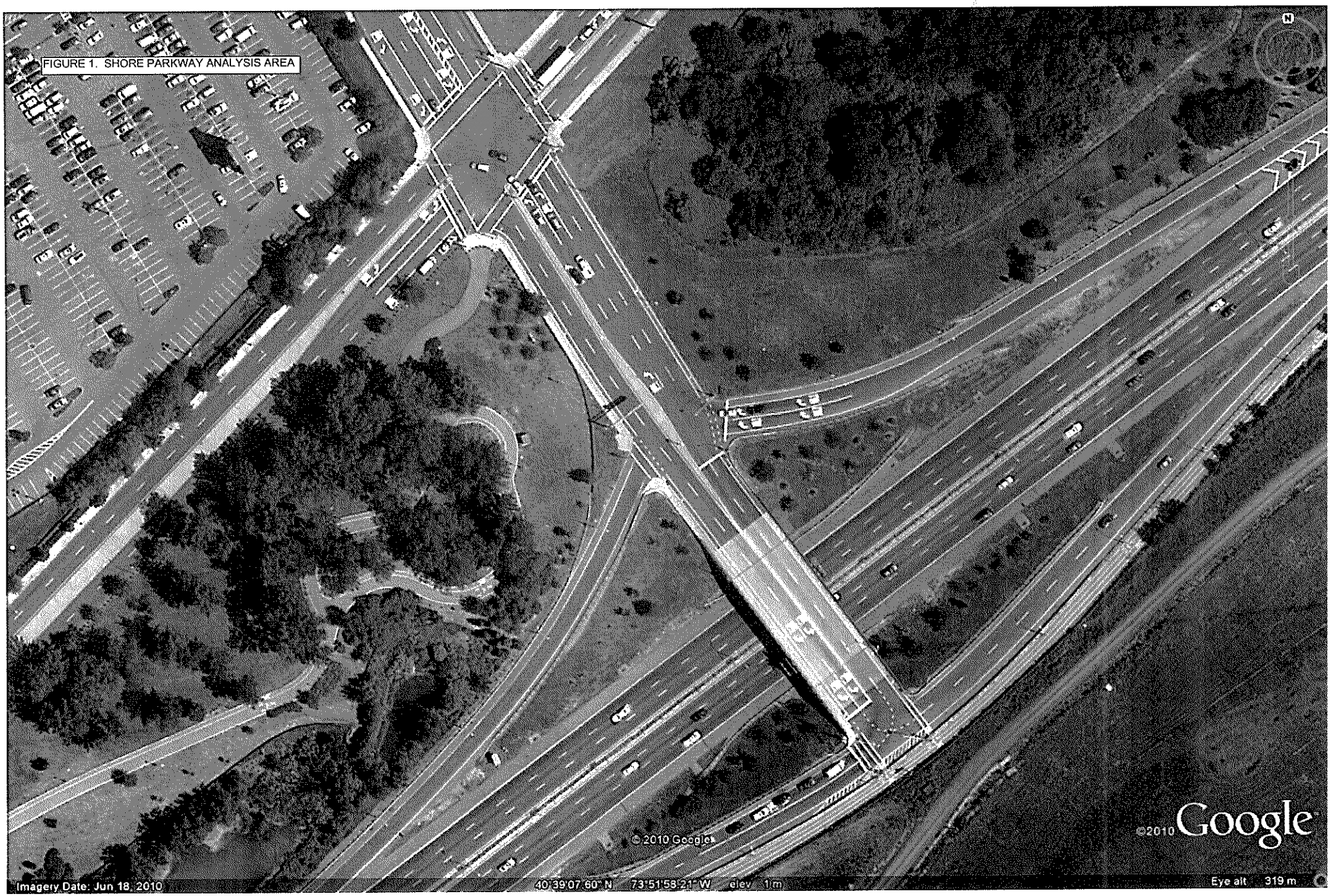
FIGURE 1. SHORE PARKWAY ANALYSIS AREA
N
© 2010 Google
©2010 Google
Imagery Date: Jun 18, 2010
40°39'07.60" N 73°51'58.21" W elev 1 m
Eye alt 319 m

FIGURE 2. TRAFFIC VOLUMES
GATEWAY ESTATES II

WEEKDAY PM PEAK HOUR
2013 BUILD CONDITIONS WITH WALMART

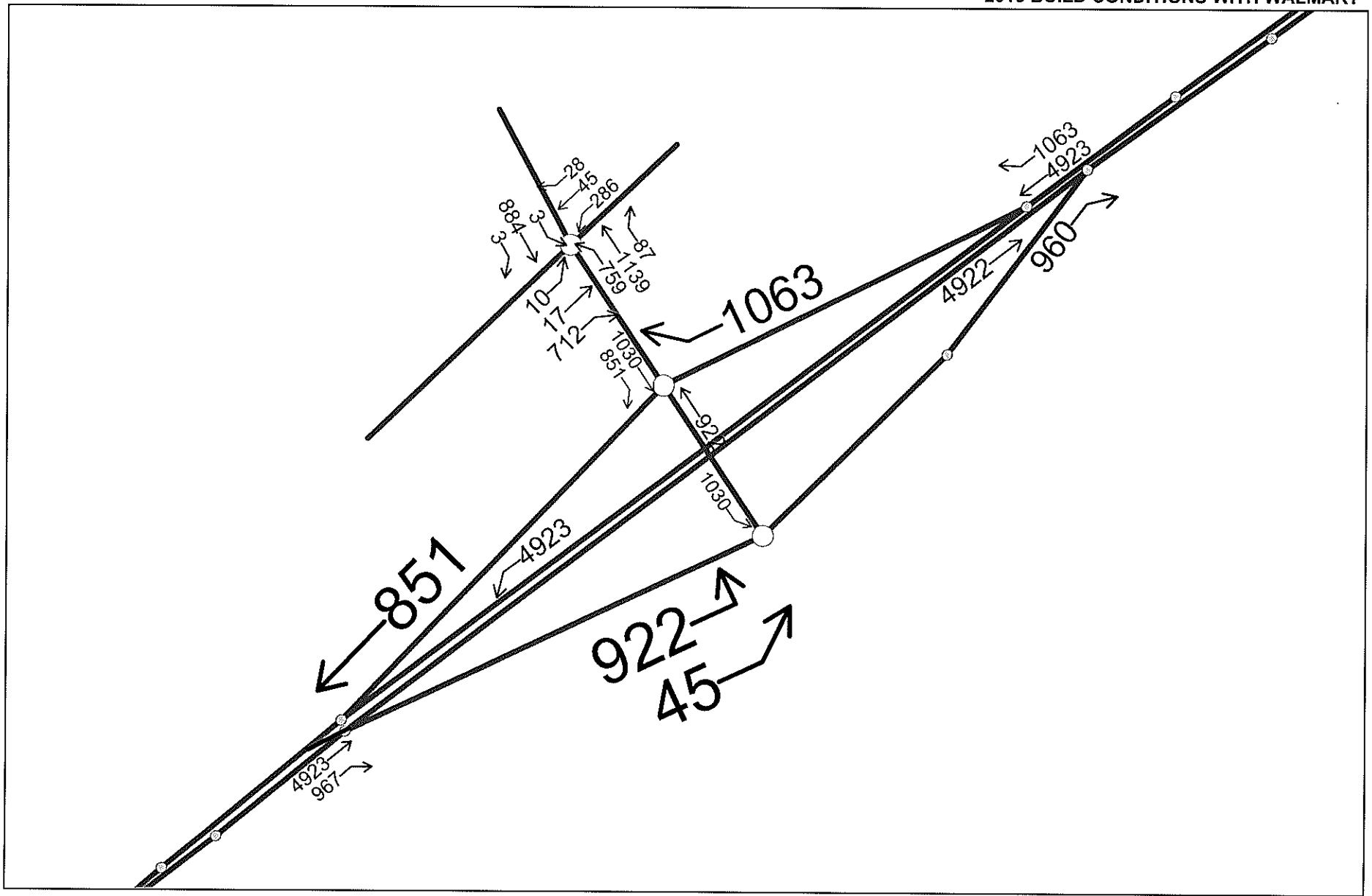

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FIGURE 3. TRAFFIC SIMULATION SHOWING LOCATION OF SEVERE BACKUPS
GATEWAY ESTATES II

WEEKDAY PM PEAK HOUR
2013 BUILD CONDITIONS WITH WALMART

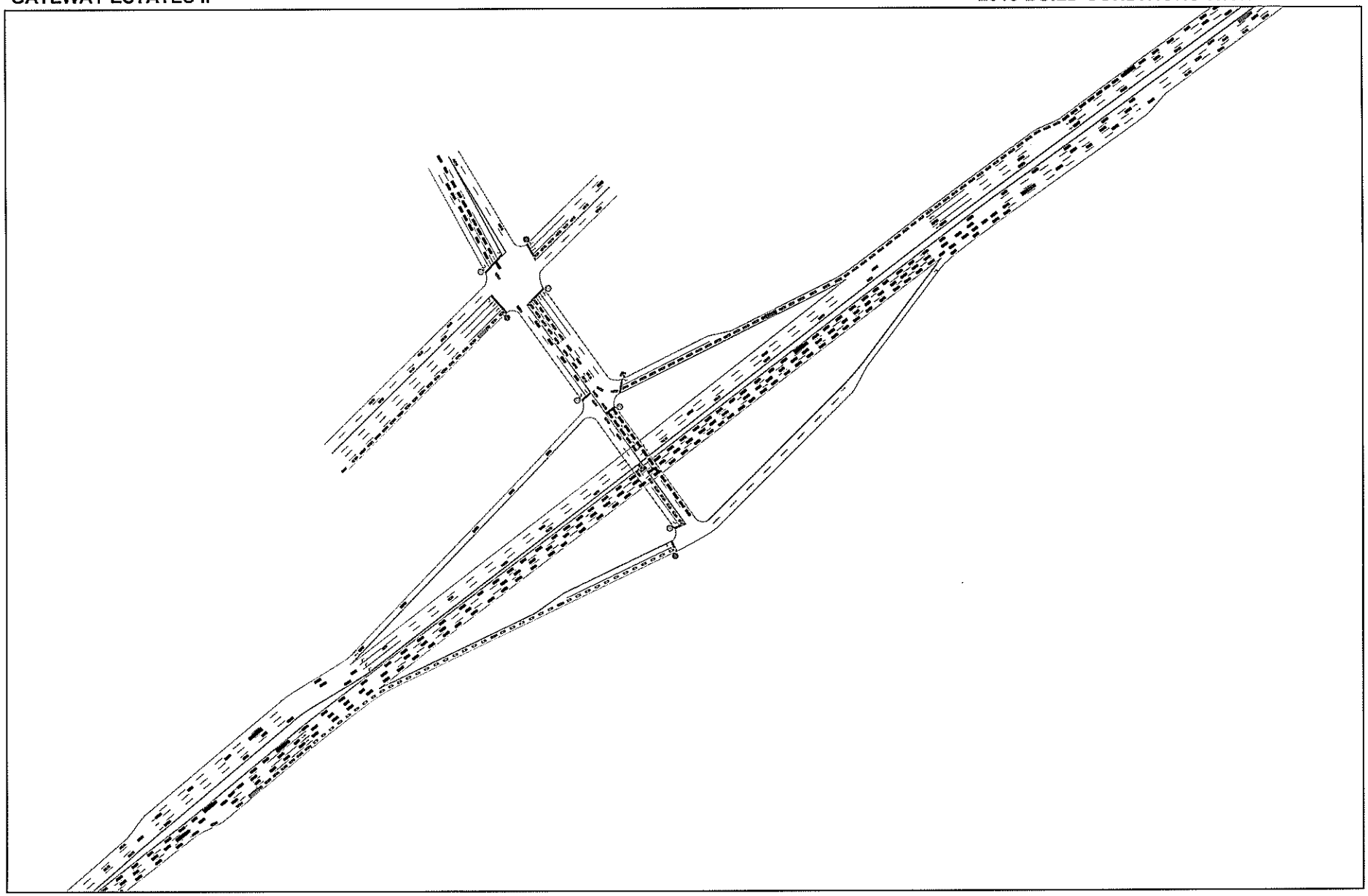

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TABLE 4

PERFORMANCE MEASURES, SHORE PARKWAY ASSUMING A WAL-MART IN THE GATEWAY ESTATES II PROJECT
WEEKDAY PM PEAK HOUR

SHORE PARKWAY

Measures of Effectiveness	2011 No Build	2013 Build	Percent Change	2013 Build with Wal-Mart	Percent Change
Average Travel Speed (MPH)	46	35	-24%	25	-29%
Total Vehicle Delay (hours)	16	64	300%	147	130%
Fuel Economy (miles per gal)	26.2	22.2	-15%	18.4	-17%
CO Emissions (kg)	17.8	22.9	29%	28.2	23%

TABLE 5

LEVEL OF SERVICE AT SELECTED CRITICAL INTERSECTIONS
ASSUMING A WAL-MART IN THE GATEWAY ESTATES II PROJECT
WEEKDAY PM PEAK HOUR

GATEWAY DRIVE AT ERSKINE STREET

	2013 No Build		2013 Build		2013 Build w/Mitigation		2013 Build with Wal-Mart	
APPROACH	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
EB Left	10.6	B	11.2	B	No mitigation assumed in		11.8	B
EB Through	10.4	B	11.0	B	the FEIS		11.6	B
EB Right	28.1	C	55.8	E			231.4	F
WB Left	17.3	B	17.6	B			20.9	C
WB Through/Right	10.7	B	11.3	B			11.9	B
NB Left	16.4	B	44.4	D			152.8	F
NB Through/Right	11.9	B	14.1	B			10.3	B
SB Left	15.0	B	22.0	C			15.7	E
SB Through	17.8	B	57.8	E			38.6	D
SB Right	15.0	B	21.0	C			15.0	B
Overall Int. LOS	18.1	B	37.1	D			84.3	F

ERSKINE STREET AT SOUTHBOUND ENTRANCE TO SHORE PARKWAY

	2013 No Build		2013 Build		2013 Build w/Mitigation		2013 Build with Wal-Mart	
APPROACH	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
WB Right	1.6	A	47.8	D	No mitigation assumed in		94.4	F
NB Through	2.1	A	5.5	A	the FEIS		9.8	A
SB Through	6.9	A	29.1	C			54.0	D
SB Right	1.0	A	3.2	A			4.4	A
Overall Int. LOS	3.4	A	22.8	C			43.7	D

PENNSYLVANIA AVENUE AT ATLANTIC AVENUE

	2013 No Build		2013 Build		2013 Build w/Mitigation		2013 Build with Wal-Mart	
APPROACH	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
EB Left	16.5	B	19.3	B	No mitigation assumed in		19.5	B
EB Through/right	58.8	E	109.8	F	the FEIS		125.5	F
WB Through/Right	24.9	C	27.5	C			29.2	C
NB Left	100.5	F	137.8	F			168.6	F
NB Left/Through/Right	46.4	D	43.6	D			42.6	D
SB Left	46.7	D	46.9	D			45.6	D
SB Through/Right	85.1	F	97.9	F			92.4	F
Overall Int. LOS	53.3	D	76.1	E			82.8	F

LINDEN BOULEVARD AT PENNSYLVANIA AVENUE

	2013 No Build		2013 Build		2013 Build w/Mitigation		2013 Build with Wal-Mart	
APPROACH	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
EB Left	61.4	E	67.5	E	124.9	F	125.1	F
EB Through/Right	234.9	F	393.4	F	223.0	F	261.1	F
WB Left	10.7	B	12.0	B	44.6	D	45.2	D
WB Through/Right	116.8	F	183.0	F	77.9	E	93.6	F
NB Left	242.6	F	428.4	F	273.5	F	312.9	F
NB Through	48.5	D	52.1	D	41.6	D	36.6	D
NB Right					32.5	C	28.5	C
SB Left	55.9	E	101.3	F	28.1	C	36.0	C
SB Through/Right	68.6	E	116.6	F	192.7	F	218.3	F
Overall Int. LOS	144.3	F	239.4	F	154.3	F	178.7	F

FLATLANDS AVENUE AT PENNSYLVANIA AVENUE

	2013 No Build		2013 Build		2013 Build w/Mitigation		2013 Build with Wal-Mart	
APPROACH	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
EB Left	34.1	C	123.7	F	123.7	F	123.7	F
EB Through	31.0	C	36.8	D	36.8	D	40.7	D
EB Right	5.3	A	5.7	A	5.7	A	5.9	A
WB Left	16.4	B	34.0	C	30.9	C	30.7	C
WB Through/Right	25.9	C	122.5	F	110.4	F	159.3	F
NB Left	30.1	C	32.3	C	32.3	C	32.5	C
NB Through/Right	27.8	C	41.6	D	41.6	D	46.5	D
SB Left	25.0	C	152.5	F	152.5	F	235.8	F
SB Through/Right	31.6	C	27.7	C	27.7	C	27.7	C
Overall Int. LOS	27.6	C	68.8	E	66.1	E	91.8	F

FLATLANDS AVENUE AT SCHENCK AVENUE

	2013 No Build		2013 Build		2013 Build w/Mitigation (1)		2013 Build with Wal-Mart (1)	
APPROACH	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
EB Left	25.8	C	22.8	C	30.2	C	28.1	C
EB Through/Right	27.7	C	246.0	F	48.6	D	45.8	D
EB Right					91.6	F	183.8	F
WB Left	35.5	D	15.5	B	14.2	B	14.5	B
WB Through/Right	30.5	C	32.8	C	30.8	C	34.0	C
NB Left	31.1	C	336.4	F	86.7	F	210.1	F
NB Through/Right	10.3	B	21.6	C	25.6	C	26.7	C
SB Left					20.7	C	20.4	C
SB Through/Right	12.3	B	58.3	E	45.5	D	47.6	D
Overall Int. LOS	27.4	C	188.3	F	62.1	E	119.2	F

(1) Because this location is the apparent main north entrance/exit to the project site a mitigation program has been developed that is described in the text of this report and that would require an expansion of the intersection beyond the physical limits of the existing intersection configuration.

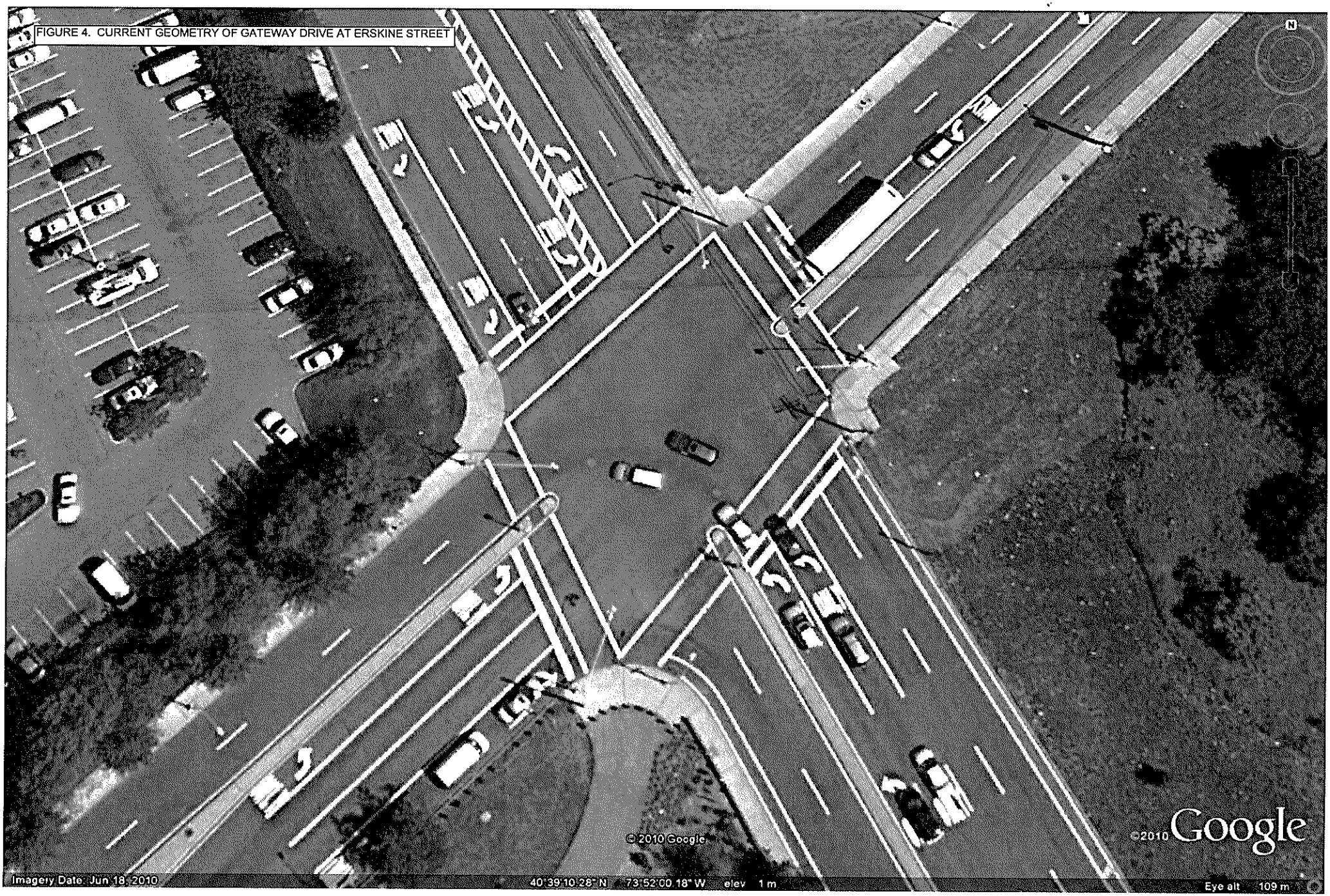


FIGURE 4. CURRENT GEOMETRY OF GATEWAY DRIVE AT ERSKINE STREET

FIGURE 5. CURRENT GEOMETRY ALONG FLATLANDS AVENUE SHOWING MAIN ENTRANCE NORTH OF SITE AT SCHENCK AVENUE

TABLE 6

ESTIMATED PARKING ACCUMULATION OF GATEWAY ESTATES II WITH WAL-MART 2013 BUILD CONDITIONS

HOURS	WEEKDAY FEIS TABLE 16-35	WEEKDAY CUMULATIVE PARKING	PERCENT INCREASE	SATURDAY FEIS TABLE 16-35	SATURDAY CUMULATIVE PARKING	PERCENT INCREASE
12 am-1 am		0			0	
1 am-2 am		0			0	
2 am-3 am		0			0	
3 am-4 am		0			0	
4 am-5 am		0			0	
5 am-6 am		0			0	
6 am-7 am		0			0	
7 am-8 am	130	214	64.3%		159	
8 am-9 am	263	395	50.2%		710	
9 am-10 am	438	865	97.5%		1,320	
10 am-11 am	629	1,425	126.6%		1,934	
11 am-12 pm	790	1,879	137.9%	783	2,504	219.8%
12 pm-1 pm	898	2,242	149.7%	951	3,148	231.0%
1 pm-2 pm	1,017	2,434	139.4%	1,117	3,293	194.8%
2 pm-3 pm	880	2,183	148.1%	1,268	3,319	161.8%
3 pm-4 pm	896	2,125	137.1%	1,411	3,178	125.3%
4 pm-5 pm	867	2,231	157.4%	1,407	2,524	79.4%
5 pm-6 pm	924	2,317	150.8%	1,310	1,846	40.9%
6 pm-7 pm	992	2,450	147.0%	1,236	671	-45.7%
7 pm-8 pm	862	2,141	148.4%		173	
8 pm-9 pm		1,351			83	
9 pm-10 pm		427			28	
10 pm-11 pm		0			0	
11 pm-12 am		0			0	

Planned Gateway II parking capacity, 2,067 spaces.
Brian Ketcham Engineering, P.C. (1/28/2011)

TABLE 7

ESTIMATION OF THE NUMBER OF TRAFFIC ACCIDENTS ANNUALLY GENERATED BY 16 MILLION VMT GENERATED BY A WALMART AT THE EAST NEW YORK GATEWAY ESTATES II, 2013

ACCIDENT TYPE	RATE/100 MIL VMT (1)	NUMBER OF ACCIDENTS	EXTERNAL COSTS (2)
Fatal Accidents	1.5	0	$1,130,681
Incapacitating Injury Accidents	41	7	$2,122,067
Serious Injury Accidents	81	13	$836,210
Minor Injury Accidents	150	24	$822,590
Property-Damage-Only Accidents	540	86	$314,534
TOTAL NUMBER OF ACCIDENTS EACH YEAR		130	$5,226,083

(1) Rates based on accident data provided by NYMTC in their 2006 Transportation Safety Statistical Report adjusted for national figures presented in the NHTSA's Traffic Safety Facts 2006.

(2) Based on costs reported in "SafetyAnalyst: Software Tools for Safety Management of Specific Highway Sites, While Paper for Model 3-Economic Appraisal and Priority Ranking," prepared for FHWA by Midwest Research Institute, 2002, adjusted to 2013 dollars.

Brian Ketcham Engineering, PC, January 2011

TABLE 8

ANNUAL EXTERNALITY COSTS OF ADDING A WAL-MART TO THE PROPOSED GATEWAY ESTATES II, 2013

SUMMARY OF RESULTS

	Externality Costs
Added Travel Time Costs (Congestion)	**$4,040,960**
Air Pollution (Health Costs)	**$2,135,280**
Noise Impacts (Health Costs)	**$367,360**
Accident Costs, Internal	**$3,362,002**
Accident Costs, External	**$1,864,081**
Pavement Wear & Tear	**$482,160**
Vehicular Wear & Tear Costs	**$459,200**
Other Externality Costs (1)	**$7,645,680**
TOTALS	**$20,356,723**

(1) Includes environmental degradation such as the control of water pollution, oil spills, the lost value of highway land removed from tax rolls, and, most apparent today, the foreign policy and military costs of ensuring an abundant supply of imported oil. Greenhouse gas emissions and their destabilizing effect on climate are another important environmental externality from motor vehicle use. Traffic generated by a Wal-Mart included in the Gateway II will generate about 10,000 tons of CO2 emissions annually.

Brian Ketcham Engineering, PC, January 27, 2011

APPENDIX

- **Assumptions for estimating trips for the Gateway Center II in Brooklyn**
- **ITE trip generation factors and conversion from vehicle trips to person trips**
- **Assumptions for parking analysis**
- **Intersection Level of Service calculation sheets**

ASSUMPTIONS FOR ESTIMATING TRIPS FOR THE GATEWAY CENTER IN BROOKLYN
Project to be completed in approximately 2013

		GATEWAY CENTER II BIG BOX		GATEWAY CENTER II BIG BOX	
		BIG BOX Weekday	BIG BOX Saturdays	LOCAL RETAIL Weekday	LOCAL RETAIL Saturdays
Project Component:	Area (gsf)	630,000	630,000	68,000	68,000
	Units	0	0	0	0
	Residents	0	0	0	0
	Employees	1,000	1,000	120	120
	Customers/weekday	90,720	113,400	16,728	39,821
		Rates as reported in Flushing Commons FEIS		Rates reported in Gateway II FEIS	
Trip Generation (person trips): ITE No. 820		120 trips/1,000 gsf	150 trips/1,000 gsf	205 trips/1,000 gsf	488 trips/1,000 gsf
Peak Hour Person Trips (%):	AM (8-9)	2.2%	4.0%	2.3%	4.0%
	MD (12-1)	8.7%	9.0%	7.9%	9.0%
	PM (5-6)	8.9%	12.5%	10.7%	12.5%
Modal Split:	Auto	95.1%	93.5%	15.0%	15.0%
	Taxi	1.5%	3.5%	0.0%	0.0%
	Subway	1.2%	1.0%	0.0%	0.0%
	Bus	1.2%	1.0%	5.0%	5.0%
	Walk	1.0%	1.0%	80.0%	80.0%
	Other	0.0%	0.0%	0.0%	0.0%
Linked Trips (%)		15.0%	15.0%	0.0%	0.0%
Vehicle Occupancy:	Auto	1.4	1.4	1.72	1.72
	Taxi	1.65	1.65	1.75	1.75
In/Out Split:	AM (8-9)	63/37	63/37	63/37	63/37
	MD (12-1)	55/45	50/50	55/45	50/50
	PM (5-6)	47/53	47/53	47/53	47/53
Truck Trip Gen.:		0.35 per 1,000 gsf	0.35 per 1,000 gsf	0.35 per 1,000 gsf	0.35 per 1,000 gsf
Peak Hour Truck Trips:	AM (8-9)	13.0%	13.0%	6.0%	6.0%
	MD (12-1)	9.0%	9.0%	11.0%	11.0%
	PM (5-6)	0.0%	0.0%	0.0%	0.0%
Total Weekday Person Trips		75,600	94,500	13,940	33,184
Walk Trips Only	Daily	756	945	11,152	26,547
	AM (8-9)	17	38	256	1,062
	MD (12-1)	66	85	881	2,389
	PM (5-6)	67	118	1,193	3,318
Total Daily Generated Vehicle Trips					
	Auto Trips	29,957	36,816	871	2,074
	Taxi Trips (1)	945	2,756	0	0
	Truck Trips	221	221	24	24
	Totals	31,122	39,792	895	2,098
Total Peak Hour Vehicle Trips					
	AM (8-9)	708	1,612	21	84
	MD (12-1)	2,708	3,581	71	189
	PM (5-6)	2,750	4,946	93	259
Total Daily Generated Transit Trips					
	Subway Trips	907	945	0	0
	Bus Trips	907	945	697	1,659
Total Peak Hour Subway Trips					
	AM	20	38	0	0
	PM	81	118	0	0
Total Peak Hour Bus Trips					
	AM	20	38	16	66
	PM	81	118	75	207

(1) Assumes 2 trips per entrance with 30% leaving occupied.
Estimated from assumptions reported in Table II.I-19, Gateway Estates DEIS
Brian Ketcham Engineering, P.C. (January 2, 2011)

ESTIMATED TRIP GENERATION FROM PROJECTS RELATED TO THE WALMART AT GATEWAY II

TRIP GENERATION RATES

ITE CODE	PROJECT TYPE			VEHICLE TRIPS PER 1,000 SQ. FT. WEEKDAY	SATURDAY	AM PK HR	PM PK HR	SAT PK HR
813	Free Standing Discount Superstore	sf	Low	29.65	35.32	1.24	2.66	2.99
			High	85.01	105.94	5.67	7.4	7.95
			Avg.	53.13	64.07	3.45	4.68	5.64
			+20% Avg	63.76	76.88	4.14	5.62	6.77
820	Shopping Center	sf	Low	12.5	16.7	0.1	0.68	1.46
			High	270.89	227.5	9.05	29.27	18.32
			Avg.	42.94	49.97	1	3.73	4.97
			+20% Avg	51.53	59.96	1.20	4.48	5.96
861	Sporting Goods Superstore	sf	Low		1.6			3.55
			High		4.69			9.83
			Avg.		3.1			6.69
			+20% Avg		3.72			8.03
862	Home Improvement Superstore	sf	Low	18.35	34.77	1.87	1.96	2.63
			High	39.31	73.12	5.31	5.89	7.28
			Avg.	29.8	56.72	3.08	3.32	4.51
			+20% Avg	35.76	68.06	3.70	3.98	5.41
861	Sporting Goods Superstore	sf	Low				1.8	3.55
			High				4.69	9.83
			Avg.				3.1	6.69
			+20% Avg				3.72	8.03
863	Electronics Superstore	sf	Low	33.74		2.91	3.45	
			High	59.17		4.18	5.78	
			Avg.	45.05		3.46	4.5	
			+20% Avg	54.06		4.15	5.40	
864	Toy/Children's Superstore	sf	Low				4.99	4.66
			High				5	6.2
			Avg.				4.99	5.53
			+20% Avg				5.99	6.64
865	Baby Superstore	sf	Low					
			High					
			Avg.				1.82	3.73
			+20% Avg				2.18	4.48
866	Pet Supply Superstore	sf	Low				2.19	3.9
			High				4.96	11.08
			Avg.				3.38	6.98
			+20% Avg				4.06	8.38
867	Office Supply Superstore	sf	Low				2.27	
			High				4.55	
			Avg.				3.4	
			+20% Avg				4.08	
869	Book Superstore	sf	Low					19.05
			High					26.04
			Avg.					21.3
			+20% Avg					25.56
869	Discount Home Furnishing Superstore	sf	Low	12.01	17.38	0.16	0.94	1.44
			High	47.81	70.01	1	4.01	6.19
			Avg.	20	33.29	0.57	1.57	3.16
			+20% Avg	24.00	39.95	0.68	1.88	3.79
872	Bed and Linen Superstore	sf	Low					
			High					
			Avg.				2.22	6.97
			+20% Avg				2.66	8.36
850	Supermarket	sf	Low	68.65	168.41	5.94	6.5	5.78
			High	168.88	190.43	12.67	18.62	22.6
			Avg.	102.24	177.59	10.05	11.85	10.85
			+20% Avg	122.69	213.11	12.06	14.22	13.02
854	Discount Supermarket	sf	Low	68.66	88.54	6.66	8.49	8.11
			High	127.12	152.26	7.92	10.85	12.63
			Avg.	96.82	117.03	7.32	9.84	10.46
			+20% Avg	116.18	140.44	8.78	11.81	12.55

Reference Institute of Transportation Engineers trip generation rates, ITE Trip Generation Manual

ESTIMATED VEHICULAR TRIPS GENERATED BY PROJECTS

ITE CODE	PROJECT TYPE	VEHICLE OCCUPANCY		PERSON TRIPS PER 1,000 SQ. FT. WEEKDAY	SATURDAY	AM PK HR	PM PK HR	SAT/SUN PK HR
813	Free Standing Discount Superstore	2	Low	59	71	2	5	6
			High	170	212	11	15	16
			Avg.	106	128	7	9	11
			+20% Avg	128	154	8	11	14
820	Shopping Center	1.7	Low	21	28	0	1	2
			High	461	387	15	50	31
			Avg.	73	85	2	6	8
			+20% Avg	88	102	2	8	10
861	Sporting Goods Superstore	1.5	Low		2			5
			High		7			15
			Avg.		5			10
			+20% Avg		6			12
862	Home Improvement Superstore	1.8	Low	33	63	3	4	5
			High	71	132	10	11	13
			Avg.	54	102	6	6	8
			+20% Avg	64	123	7	7	10
861	Sporting Goods Superstore	2	Low				4	7
			High				9	20
			Avg.				6	13
			+20% Avg				7	16
863	Electronics Superstore	1.3	Low	44		4	4	
			High	77		5	8	
			Avg.	59		4	6	
			+20% Avg	70		5	7	
864	Toy/Children's Superstore	1.8	Low				9	8
			High				9	11
			Avg.				9	10
			+20% Avg				11	12
865	Baby Superstore	2	Low					
			High					
			Avg.				4	7
			+20% Avg				4	9
866	Pet Supply Superstore	1.5	Low				3	6
			High				7	17
			Avg.				5	10
			+20% Avg				6	13
867	Office Supply Superstore	1.2	Low				3	
			High				5	
			Avg.				4	
			+20% Avg				5	
869	Book Superstore	2	Low					38
			High					52
			Avg.					43
			+20% Avg					51
869	Discount Home Furnishing Superstore	2	Low	24	35	0	2	3
			High	96	140	2	8	12
			Avg.	40	67	1	3	6
			+20% Avg	48	80	1	4	8
872	Bed and Linen Superstore	2	Low	0				
			High					
			Avg.				4	14
			+20% Avg				5	17
850	Supermarket	2	Low	137	337	12	13	12
			High	338	381	25	37	45
			Avg.	204	355	20	24	22
			+20% Avg	245	426	24	28	26
855	Discount Supermarket	2	Low	137	177	13	17	16
			High	254	305	16	22	25
			Avg.	194	234	15	20	21
			+20% Avg	232	281	18	24	25

ESTIMATED PARKING ACCUMULATION OF GATEWAY ESTATES II WEEKDAYS

ASSUMES 700,000 SQ.FT.
WEEKDAY AVERAGE AUTO TRIPS: 32,017
PARKING CAPACITY: 2067

ESTIMATED WEEKDAY

HOURS	Hourly Trip Percentages	Distribution (%) IN	Distribution (%) OUT	IN	OUT	WEEKDAY CUMULATIVE PARKING	TOTAL MOVEMENTS	IN Hourly Trip Percentages	OUT Hourly Trip Percentages
12 am-1 am		0.0%	0.0%	0	0	0	0		
1 am-2 am		0.0%	0.0%	0	0	0	0		
2 am-3 am		0.0%	0.0%	0	0	0	0		
3 am-4 am		0.0%	0.0%	0	0	0	0		
4 am-5 am		0.0%	0.0%	0	0	0	0		
5 am-6 am		0.0%	0.0%	0	0	0	0		
6 am-7 am		0.0%	0.0%	0	0	0	0		
7 am-8 am	0.6%	91.7%	8.3%	176	16	160	192	1.1%	0.1%
8 am-9 am	2.3%	58.7%	41.3%	432	304	288	736	2.7%	1.9%
9 am-10 am	4.5%	62.2%	37.8%	896	544	640	1,441	5.6%	3.4%
10 am-11 am	6.1%	60.7%	39.3%	1,185	768	1,057	1,953	7.4%	4.8%
11 am-12 pm	7.0%	57.6%	42.4%	1,281	945	1,393	2,225	8.0%	5.9%
12 pm-1 pm	8.7%	55.2%	44.8%	1,537	1,249	1,681	2,785	9.6%	7.8%
1 pm-2 pm	8.9%	53.9%	46.1%	1,537	1,313	1,905	2,850	9.6%	8.2%
2 pm-3 pm	8.2%	46.6%	53.4%	1,217	1,393	1,729	2,609	7.6%	8.7%
3 pm-4 pm	8.5%	49.7%	50.3%	1,345	1,361	1,713	2,705	8.4%	8.5%
4 pm-5 pm	8.9%	50.8%	49.2%	1,441	1,393	1,761	2,834	9.0%	8.7%
5 pm-6 pm	8.9%	50.0%	50.0%	1,425	1,425	1,761	2,850	8.9%	8.9%
6 pm-7 pm	8.9%	52.0%	48.0%	1,473	1,361	1,873	2,834	9.2%	8.5%
7 pm-8 pm	7.1%	43.3%	56.7%	977	1,281	1,569	2,257	6.1%	8.0%
8 pm-9 pm	5.3%	33.0%	67.0%	560	1,137	993	1,697	3.5%	7.1%
9 pm-10 pm	4.1%	24.4%	75.6%	320	993	320	1,313	2.0%	6.2%
10 pm-11 pm	2.3%	28.3%	71.7%	208	528	0	736	1.3%	3.3%
11 pm-12 am				0	0	0	0		
TOTALS	100.0%					18,843	32,017	100.0%	100.0%

Brian Ketcham Engineering, P.C. (1/28/2011)

ESTIMATED PARKING ACCUMULATION OF A WAL-MART AT THE GATEWAY ESTATES II WEEKDAYS

ASSUMES 180,000 SQ.FT.
WEEKDAY AVERAGE AUTO TRIPS: 10,692

ESTIMATED WEEKDAY

HOURS	Hourly Trip Percentages	Distribution (%) IN	OUT	IN	OUT	WEEKDAY CUMULATIVE PARKING	TOTAL MOVEMENTS	IN Hourly Trip Percentages	OUT Hourly Trip Percentages
12 am-1 am		0.0%	0.0%	0	0	0	0		
1 am-2 am		0.0%	0.0%	0	0	0	0		
2 am-3 am		0.0%	0.0%	0	0	0	0		
3 am-4 am		0.0%	0.0%	0	0	0	0		
4 am-5 am		0.0%	0.0%	0	0	0	0		
5 am-6 am		0.0%	0.0%	0	0	0	0		
6 am-7 am		0.0%	0.0%	0	0	0	0		
7 am-8 am	0.6%	91.7%	8.3%	59	5	53	64	1.1%	0.1%
8 am-9 am	2.4%	60.4%	39.6%	155	102	107	257	2.9%	1.9%
9 am-10 am	4.5%	62.2%	37.8%	299	182	225	481	5.6%	3.4%
10 am-11 am	6.2%	61.0%	39.0%	401	257	369	658	7.5%	4.8%
11 am-12 pm	7.0%	57.9%	42.1%	433	315	487	748	8.1%	5.9%
12 pm-1 pm	7.6%	54.6%	45.4%	444	369	561	813	8.3%	6.9%
1 pm-2 pm	7.9%	48.1%	51.9%	406	438	529	845	7.6%	8.2%
2 pm-3 pm	8.0%	45.6%	54.4%	390	465	454	855	7.3%	8.7%
3 pm-4 pm	8.1%	47.5%	52.5%	412	454	412	866	7.7%	8.5%
4 pm-5 pm	9.3%	53.0%	47.0%	524	465	470	989	9.8%	8.7%
5 pm-6 pm	9.7%	54.1%	45.9%	561	476	556	1,037	10.5%	8.9%
6 pm-7 pm	8.7%	51.1%	48.9%	476	454	577	930	8.9%	8.5%
7 pm-8 pm	8.0%	49.7%	50.3%	422	428	572	850	7.9%	8.0%
8 pm-9 pm	5.5%	31.8%	68.2%	187	401	358	588	3.5%	7.5%
9 pm-10 pm	4.4%	23.0%	77.0%	107	358	107	465	2.0%	6.7%
10 pm-11 pm	2.3%	28.3%	71.7%	69	176	0	246	1.3%	3.3%
11 pm-12 am				0	0	0	0		
TOTALS	100.0%						10,692	100.0%	100.0%

Brian Ketcham Engineering, P.C. (1/28/2011)

ESTIMATED PARKING ACCUMULATION OF GATEWAY ESTATES II SATURDAYS

ASSUMES 700,000 SQ.FT. GATEWAY ESTATES II
SATURDAY AVERAGE AUTO TRIPS: 41,890
PARKING CAPACITY: 2067

ESTIMATED SATURDAY

HOURS	Hourly Trip Percentages	Distribution (%) IN	OUT	IN	OUT	SATURDAY CUMULATIVE PARKING	TOTAL MOVEMENTS	IN Hourly Trip Percentages	OUT Hourly Trip Percentages
12 am-1 am		0.0%	0.0%	0	0	0	0		
1 am-2 am		0.0%	0.0%	0	0	0	0		
2 am-3 am		0.0%	0.0%	0	0	0	0		
3 am-4 am		0.0%	0.0%	0	0	0	0		
4 am-5 am		0.0%	0.0%	0	0	0	0		
5 am-6 am		0.0%	0.0%	0	0	0	0		
6 am-7 am		0.0%	0.0%	0	0	0	0		
7 am-8 am	0.3%	100.0%	0.0%	126	0	126	126	0.6%	0.0%
8 am-9 am	4.0%	62.5%	37.5%	1,047	628	545	1,676	5.0%	3.0%
9 am-10 am	5.0%	60.0%	40.0%	1,257	838	963	2,095	6.0%	4.0%
10 am-11 am	5.7%	57.5%	42.5%	1,361	1,005	1,320	2,367	6.5%	4.8%
11 am-12 pm	7.2%	54.9%	45.1%	1,655	1,361	1,613	3,016	7.9%	6.5%
12 pm-1 pm	9.0%	55.6%	44.4%	2,095	1,676	2,032	3,770	10.0%	8.0%
1 pm-2 pm	9.5%	50.0%	50.0%	1,990	1,990	2,032	3,980	9.5%	9.5%
2 pm-3 pm	9.5%	50.0%	50.0%	1,990	1,990	2,032	3,980	9.5%	9.5%
3 pm-4 pm	9.9%	49.5%	50.5%	2,053	2,095	1,990	4,147	9.8%	10.0%
4 pm-5 pm	11.1%	45.9%	54.1%	2,136	2,513	1,613	4,650	10.2%	12.0%
5 pm-6 pm	11.9%	47.9%	52.1%	2,388	2,597	1,403	4,985	11.4%	12.4%
6 pm-7 pm	8.0%	37.5%	62.5%	1,257	2,095	566	3,351	6.0%	10.0%
7 pm-8 pm	4.0%	37.5%	62.5%	628	1,047	147	1,676	3.0%	5.0%
8 pm-9 pm	2.2%	45.5%	54.5%	419	503	63	922	2.0%	2.4%
9 pm-10 pm	1.5%	46.7%	53.3%	293	335	21	628	1.4%	1.6%
10 pm-11 pm	1.3%	48.0%	52.0%	251	272	0	524	1.2%	1.3%
11 pm-12 am				0	0	0	0		
TOTALS	100.0%					16,463	41,890	100.0%	100.0%

Brian Ketcham Engineering, P.C. (1/28/2011)

ESTIMATED PARKING ACCUMULATION OF A WAL-MART AT THE GATEWAY ESTATES II SATURDAYS

ASSUMES 180,000 SQ.FT. WAL-MART
SATURDAY AVERAGE AUTO TRIPS: 13,206

ESTIMATED SATURDAY

HOURS	Hourly Trip Percentages	Distribution (%) IN	Distribution (%) OUT	IN	OUT	SATURDAY CUMULATIVE PARKING	TOTAL MOVEMENTS	IN Hourly Trip Percentages	OUT Hourly Trip Percentages
12 am-1 am		0.0%	0.0%	0	0	0	0		
1 am-2 am		0.0%	0.0%	0	0	0	0		
2 am-3 am		0.0%	0.0%	0	0	0	0		
3 am-4 am		0.0%	0.0%	0	0	0	0		
4 am-5 am		0.0%	0.0%	0	0	0	0		
5 am-6 am		0.0%	0.0%	0	0	0	0		
6 am-7 am		0.0%	0.0%	0	0	0	0		
7 am-8 am	0.3%	100.0%	0.0%	33	0	33	33	0.5%	0.0%
8 am-9 am	1.9%	76.3%	23.7%	191	59	165	251	2.9%	0.9%
9 am-10 am	4.6%	65.9%	34.1%	396	205	357	601	6.0%	3.1%
10 am-11 am	6.4%	65.4%	34.6%	548	291	614	839	8.3%	4.4%
11 am-12 pm	8.8%	61.9%	38.1%	720	442	891	1,162	10.9%	6.7%
12 pm-1 pm	10.2%	58.3%	41.7%	786	561	1,116	1,347	11.9%	8.5%
1 pm-2 pm	11.4%	54.8%	45.2%	825	680	1,261	1,505	12.5%	10.3%
2 pm-3 pm	12.2%	50.8%	49.2%	819	792	1,288	1,611	12.4%	12.0%
3 pm-4 pm	12.0%	46.9%	53.1%	740	839	1,189	1,578	11.2%	12.7%
4 pm-5 pm	11.3%	40.7%	59.3%	607	885	911	1,492	9.2%	13.4%
5 pm-6 pm	8.8%	29.7%	70.3%	343	812	442	1,156	5.2%	12.3%
6 pm-7 pm	5.5%	26.6%	73.4%	191	528	106	720	2.9%	8.0%
7 pm-8 pm	2.5%	38.0%	62.0%	125	205	26	330	1.9%	3.1%
8 pm-9 pm	1.7%	48.5%	51.5%	106	112	20	218	1.6%	1.7%
9 pm-10 pm	1.5%	46.7%	53.3%	92	106	7	198	1.4%	1.6%
10 pm-11 pm	1.3%	48.0%	52.0%	79	86	0	165	1.2%	1.3%
11 pm-12 am				0	0	0	0		
TOTALS	100.0%						13,206	100.0%	100.0%

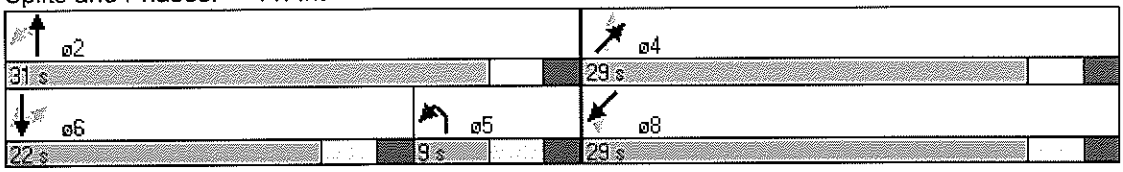
Brian Ketcham Engineering, P.C. (1/28/2011)

Lane Group	NBL	NBT	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT
Lane Configurations										
Volume (vph)	447	414	3	364	3	9	17	490	281	44
Turn Type	pm+pt		Perm		Perm	Perm		Perm	Perm	
Protected Phases	5	2		6			4			8
Permitted Phases	2		6		6	4		4	8	
Detector Phases	5	2	6	6	6	4	4	4	8	8
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
Total Split (s)	9.0	31.0	22.0	22.0	22.0	29.0	29.0	29.0	29.0	29.0
Total Split (%)	15.0%	51.7%	36.7%	36.7%	36.7%	48.3%	48.3%	48.3%	48.3%	48.3%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lag		Lead	Lead	Lead					
Lead-Lag Optimize?	Yes		Yes	Yes	Yes					
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	27.0	27.0	18.0	18.0	18.0	25.0	25.0	25.0	25.0	25.0
Actuated g/C Ratio	0.45	0.45	0.30	0.30	0.30	0.42	0.42	0.42	0.42	0.42
v/c Ratio	0.52	0.34	0.01	0.37	0.01	0.02	0.01	0.81	0.53	0.06
Control Delay	16.4	11.9	15.0	17.8	15.0	10.6	10.4	27.7	17.2	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.0
Total Delay	16.4	11.9	15.0	17.8	15.0	10.6	10.4	28.1	17.3	10.7
LOS	B	B	B	B	B	B	B	C	B	B
Approach Delay		14.1		17.8			27.2			15.9
Approach LOS		B		B			C			B

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 8 (13%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 18.1 — Intersection LOS: B
Intersection Capacity Utilization 66.0% — ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 11: Int

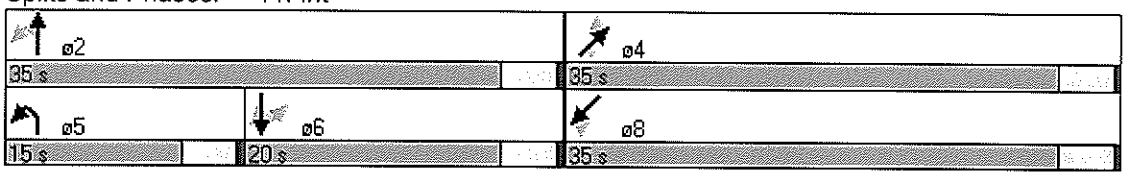


Lane Group	NBL	NBT	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT
Lane Configurations										
Volume (vph)	674	956	3	734	3	10	17	643	286	45
Turn Type	pm+pt		Perm		Perm	Perm		Perm	Perm	
Protected Phases	5	2		6			4			8
Permitted Phases	2		6		6	4		4	8	
Detector Phases	5	2	6	6	6	4	4	4	8	8
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	15.0	35.0	20.0	20.0	20.0	35.0	35.0	35.0	35.0	35.0
Total Split (%)	21.4%	50.0%	28.6%	28.6%	28.6%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead		Lag	Lag	Lag					
Lead-Lag Optimize?	Yes		Yes	Yes	Yes					
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	31.0	31.0	16.0	16.0	16.0	31.0	31.0	31.0	31.0	31.0
Actuated g/C Ratio	0.44	0.44	0.23	0.23	0.23	0.44	0.44	0.44	0.44	0.44
v/c Ratio	0.98	0.73	0.03	0.99	0.01	0.02	0.01	1.00	0.51	0.05
Control Delay	44.4	11.7	22.0	57.8	21.0	11.2	11.0	55.8	17.6	11.3
Queue Delay	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.4	14.1	22.0	57.8	21.0	11.2	11.0	55.8	17.6	11.3
LOS	D	B	C	E	C	B	B	E	B	B
Approach Delay		26.0		57.5			54.0			16.3
Approach LOS		C		E			D			B

Intersection Summary

Cycle Length: 70
Actuated Cycle Length: 70
Offset: 36 (51%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Pretimed
Maximum v/c Ratio: 1.00
Intersection Signal Delay: 37.1 Intersection LOS: D
Intersection Capacity Utilization 85.9% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 11: Int

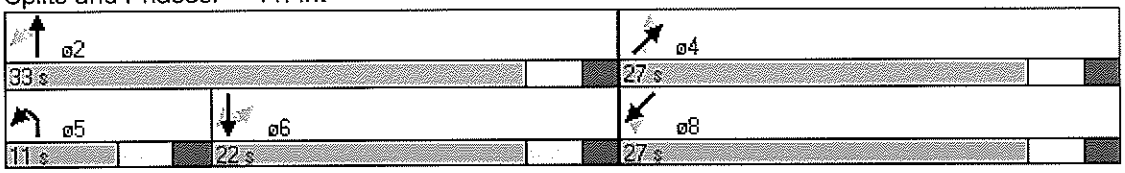


Lane Group	NBL	NBT	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT
Lane Configurations										
Volume (vph)	759	1139	3	884	3	10	17	712	286	45
Turn Type	pm+pt		Perm		Perm	Perm		Perm	Perm	
Protected Phases	5	2		6			4			8
Permitted Phases	2		6		6	4		4	8	
Detector Phases	5	2	6	6	6	4	4	4	8	8
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
Total Split (s)	11.0	33.0	22.0	22.0	22.0	27.0	27.0	27.0	27.0	27.0
Total Split (%)	18.3%	55.0%	36.7%	36.7%	36.7%	45.0%	45.0%	45.0%	45.0%	45.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead		Lag	Lag	Lag					
Lead-Lag Optimize?	Yes		Yes	Yes	Yes					
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	29.0	29.0	18.0	18.0	18.0	23.0	23.0	23.0	23.0	23.0
Actuated g/C Ratio	0.48	0.48	0.30	0.30	0.30	0.38	0.38	0.38	0.38	0.38
v/c Ratio	1.29	0.79	0.02	0.90	0.01	0.02	0.01	1.28	0.58	0.06
Control Delay	152.8	8.5	15.7	34.5	15.0	11.8	11.6	158.5	20.2	11.9
Queue Delay	0.0	1.8	0.0	4.1	0.0	0.0	0.0	72.8	0.8	0.0
Total Delay	152.8	10.3	15.7	38.6	15.0	11.8	11.6	231.4	20.9	11.9
LOS	F	B	B	D	B	B	B	F	C	B
Approach Delay		64.8		38.4			223.5			19.1
Approach LOS		E		D			F			B

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 8 (13%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Pretimed
Maximum v/c Ratio: 1.29
Intersection Signal Delay: 84.3 — Intersection LOS: F
Intersection Capacity Utilization 94.4% — ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 11: Int

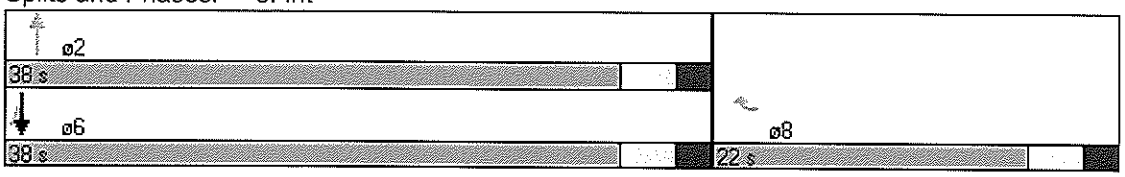


Lane Group	WBR	NBT	SBT	SBR
Lane Configurations				
Volume (vph)	526	411	637	498
Turn Type	custom			Perm
Protected Phases			6	
Permitted Phases	8	2		6
Detector Phases	8	2	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0	21.0	21.0
Total Split (s)	22.0	38.0	38.0	38.0
Total Split (%)	36.7%	63.3%	63.3%	63.3%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	Max	Max	Max
Act Effct Green (s)	18.0	34.0	34.0	34.0
Actuated g/C Ratio	0.30	0.57	0.57	0.57
v/c Ratio	0.43	0.22	0.64	0.47
Control Delay	1.6	2.1	5.4	1.3
Queue Delay	0.0	0.0	1.5	0.7
Total Delay	1.6	2.1	6.9	2.0
LOS	A	A	A	A
Approach Delay		2.1	4.7	
Approach LOS		A	A	

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 48 (80%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 3.4 Intersection LOS: A
Intersection Capacity Utilization 37.5% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 8: Int

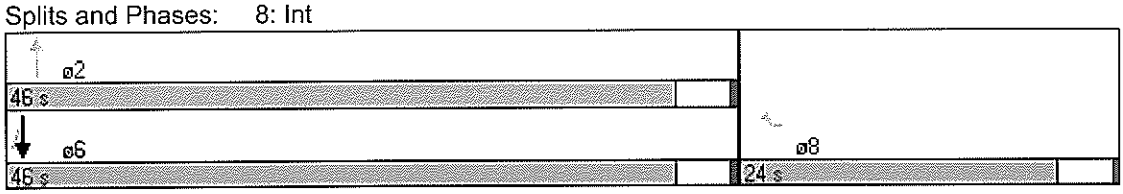


Lane Group	WBR	NBT	SBT	SBR
Lane Configurations				
Volume (vph)	920	795	912	751
Turn Type	custom			Perm
Protected Phases			6	
Permitted Phases	8	2		6
Detector Phases	8	2	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0
Minimum Split (s)	20.0	20.0	20.0	20.0
Total Split (s)	24.0	46.0	46.0	46.0
Total Split (%)	34.3%	65.7%	65.7%	65.7%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	Max	Max	Max
Act Effct Green (s)	20.0	42.0	42.0	42.0
Actuated g/C Ratio	0.29	0.60	0.60	0.60
v/c Ratio	0.98	0.40	0.87	0.63
Control Delay	43.8	4.6	13.8	2.2
Queue Delay	3.9	0.8	15.3	1.0
Total Delay	47.8	5.5	29.1	3.2
LOS	D	A	C	A
Approach Delay		5.5	17.4	
Approach LOS		A	B	

Intersection Summary

Cycle Length: 70
Actuated Cycle Length: 70
Offset: 32 (46%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 70
Control Type: Pretimed
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 22.8 — Intersection LOS: C
Intersection Capacity Utilization 60.8% — ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 8: Int

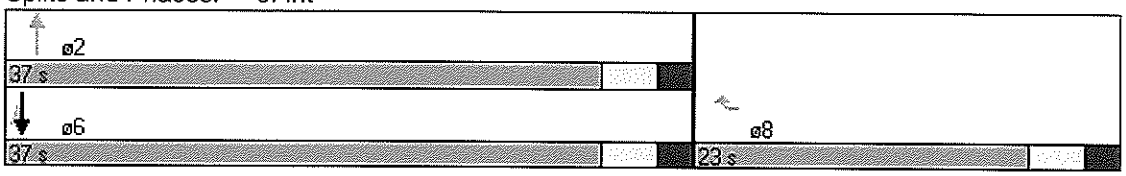


Lane Group	WBR	NBT	SBT	SBR
Lane Configurations				
Volume (vph)	1063	922	1030	851
Turn Type	custom			Perm
Protected Phases			6	
Permitted Phases	8	2		6
Detector Phases	8	2	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0
Minimum Split (s)	21.5	21.5	21.5	21.5
Total Split (s)	23.0	37.0	37.0	37.0
Total Split (%)	38.3%	61.7%	61.7%	61.7%
Yellow Time (s)	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	Max	Max	Max
Act Effct Green (s)	19.0	33.0	33.0	33.0
Actuated g/C Ratio	0.32	0.55	0.55	0.55
v/c Ratio	1.13	0.50	1.07	0.71
Control Delay	93.5	7.9	54.0	4.1
Queue Delay	1.0	2.0	0.0	0.3
Total Delay	94.4	9.8	54.0	4.4
LOS	F	A	D	A
Approach Delay		9.8	31.6	
Approach LOS		A	C	

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Pretimed
Maximum v/c Ratio: 1.13
Intersection Signal Delay: 43.7 — Intersection LOS: D
Intersection Capacity Utilization 69.3% — ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 8: Int

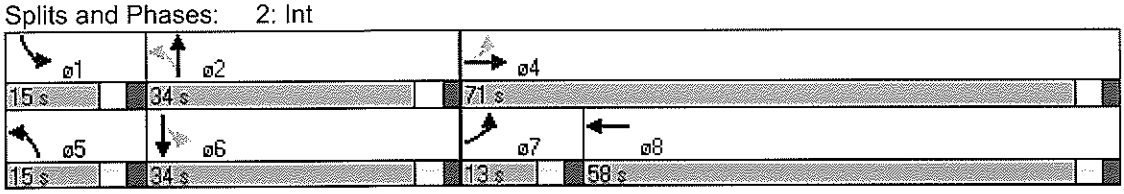


Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Volume (vph)	244	1669	955	209	782	147	777
Turn Type	pm+pt			pm+pt		pm+pt	
Protected Phases	7	4	8	5	2	1	6
Permitted Phases	4			2		6	
Detector Phases	7	4	8	5	2	1	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	21.0	9.0	21.0	9.0	21.0
Total Split (s)	13.0	71.0	58.0	15.0	34.0	15.0	34.0
Total Split (%)	10.8%	59.2%	48.3%	12.5%	28.3%	12.5%	28.3%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead		Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	67.0	67.0	54.0	41.0	30.0	41.0	30.0
Actuated g/C Ratio	0.56	0.56	0.45	0.34	0.25	0.34	0.25
v/c Ratio	0.52	1.04	0.53	1.03	0.76	0.73	1.04
Uniform Delay, d1	12.7	26.5	23.8	28.1	41.7	26.0	45.0
Control Delay	16.5	58.8	24.9	100.5	46.4	46.7	85.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.5	58.8	24.9	100.5	46.4	46.7	85.1
LOS	B	E	C	F	D	D	F
Approach Delay		53.9	24.9		57.0		79.2
Approach LOS		D	C		E		E

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 8 (7%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 100
Control Type: Pretimed
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 53.3 — Intersection LOS: D
Intersection Capacity Utilization 95.8% — ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 2: Int

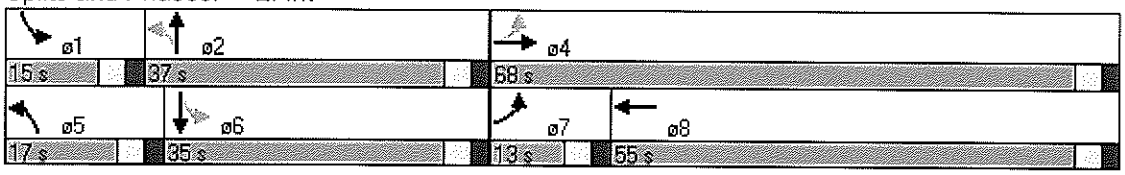


Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Volume (vph)	249	1703	975	266	831	150	841
Turn Type	pm+pt			pm+pt		pm+pt	
Protected Phases	7	4	8	5	2	1	6
Permitted Phases	4			2		6	
Detector Phases	7	4	8	5	2	1	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	21.0	9.0	21.0	9.0	21.0
Total Split (s)	13.0	68.0	55.0	17.0	37.0	15.0	35.0
Total Split (%)	10.8%	56.7%	45.8%	14.2%	30.8%	12.5%	29.2%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead		Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	64.0	64.0	51.0	46.0	33.0	42.0	31.0
Actuated g/C Ratio	0.53	0.53	0.43	0.38	0.28	0.35	0.26
v/c Ratio	0.57	1.17	0.57	1.16	0.74	0.74	1.08
Uniform Delay, d1	14.2	28.0	26.2	30.3	39.6	24.3	44.5
Control Delay	19.3	109.8	27.5	137.8	43.6	46.9	97.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.3	109.8	27.5	137.8	43.6	46.9	97.9
LOS	B	F	C	F	D	D	F
Approach Delay		99.6	27.5		64.7		90.5
Approach LOS		F	C		E		F

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 8 (7%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Pretimed
Maximum v/c Ratio: 1.17
Intersection Signal Delay: 76.1 Intersection LOS: E
Intersection Capacity Utilization 104.4% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 2: Int

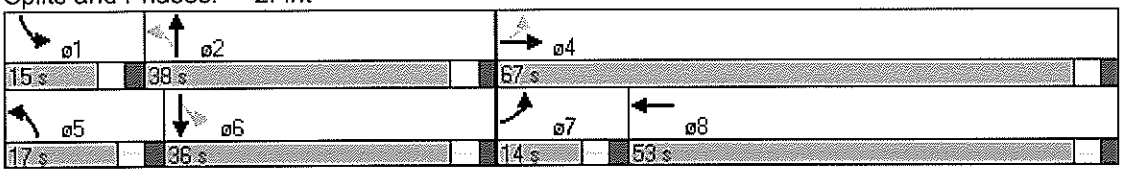


Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Volume (vph)	249	1703	975	285	844	150	857
Turn Type	pm+pt			pm+pt		pm+pt	
Protected Phases	7	4	8	5	2	1	6
Permitted Phases	4			2		6	
Detector Phases	7	4	8	5	2	1	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	21.0	9.0	21.0	9.0	21.0
Total Split (s)	14.0	67.0	53.0	17.0	38.0	15.0	36.0
Total Split (%)	11.7%	55.8%	44.2%	14.2%	31.7%	12.5%	30.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead		Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	63.0	63.0	49.0	47.0	34.0	43.0	32.0
Actuated g/C Ratio	0.53	0.53	0.41	0.39	0.28	0.36	0.27
v/c Ratio	0.56	1.20	0.59	1.24	0.73	0.73	1.07
Uniform Delay, d1	14.7	28.5	27.7	30.2	38.9	23.6	44.0
Control Delay	19.5	125.5	29.2	168.6	42.6	45.6	92.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.5	125.5	29.2	168.6	42.6	45.6	92.4
LOS	B	F	C	F	D	D	F
Approach Delay		113.7	29.2		72.0		85.7
Approach LOS		F	C		E		F

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 8 (7%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 120
Control Type: Pretimed
Maximum v/c Ratio: 1.24
Intersection Signal Delay: 82.8 — Intersection LOS: F
Intersection Capacity Utilization 106.7% — ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 2: Int

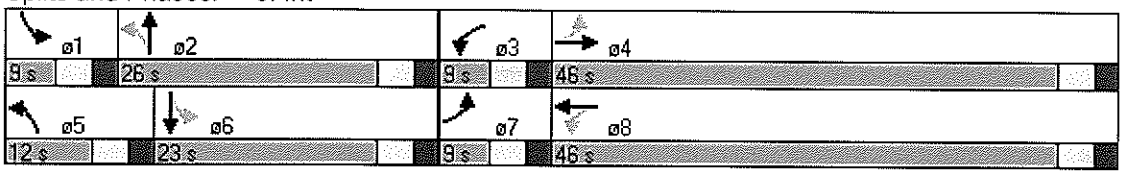


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	145	1722	80	1652	310	588	130	911
Turn Type	pm+pt		pm+pt		pm+pt		pm+pt	
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8		2		6	
Detector Phases	7	4	3	8	5	2	1	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	9.0	21.0	9.0	21.0	9.0	21.0
Total Split (s)	9.0	46.0	9.0	46.0	12.0	26.0	9.0	23.0
Total Split (%)	10.0%	51.1%	10.0%	51.1%	13.3%	28.9%	10.0%	25.6%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	47.0	42.0	47.0	42.0	30.0	22.0	24.0	19.0
Actuated g/C Ratio	0.52	0.47	0.52	0.47	0.33	0.24	0.27	0.21
v/c Ratio	0.89	1.46	0.25	1.19	1.43	0.90	0.79	1.02
Uniform Delay, d1	10.3	24.0	8.8	24.0	23.5	32.9	21.8	35.5
Control Delay	61.4	234.9	10.7	116.8	242.6	48.5	55.9	68.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.4	234.9	10.7	116.8	242.6	48.5	55.9	68.6
LOS	E	F	B	F	F	D	E	E
Approach Delay		223.8		112.2		108.9		67.1
Approach LOS		F		F		F		E

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 8 (9%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Pretimed
Maximum v/c Ratio: 1.46
Intersection Signal Delay: 144.3 Intersection LOS: F
Intersection Capacity Utilization 113.0% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Int

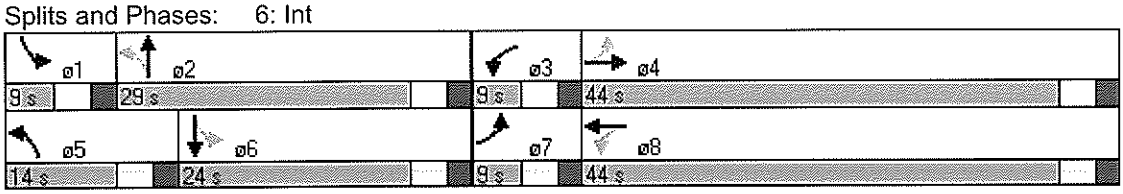


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	148	1839	82	1731	467	712	165	1096
Turn Type	pm+pt		pm+pt		pm+pt		pm+pt	
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8		2		6	
Detector Phases	7	4	3	8	5	2	1	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	9.0	21.0	9.0	21.0	9.0	21.0
Total Split (s)	9.0	44.0	9.0	44.0	14.0	29.0	9.0	24.0
Total Split (%)	9.9%	48.4%	9.9%	48.4%	15.4%	31.9%	9.9%	26.4%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	45.0	40.0	45.0	40.0	34.0	25.0	25.0	20.0
Actuated g/C Ratio	0.49	0.44	0.49	0.44	0.37	0.27	0.27	0.22
v/c Ratio	0.91	1.82	0.26	1.34	1.87	0.94	1.02	1.16
Uniform Delay, d1	11.4	25.5	10.1	25.5	21.5	32.3	23.9	35.5
Control Delay	67.5	393.4	12.0	183.0	428.4	52.1	101.3	116.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.5	393.4	12.0	183.0	428.4	52.1	101.3	116.6
LOS	E	F	B	F	F	D	F	F
Approach Delay		374.9		175.8		189.5		114.7
Approach LOS		F		F		F		F

Intersection Summary

Cycle Length: 91
Actuated Cycle Length: 91
Offset: 8 (9%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Pretimed
Maximum v/c Ratio: 1.87
Intersection Signal Delay: 239.4 — Intersection LOS: F
Intersection Capacity Utilization 135.7% — ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Int

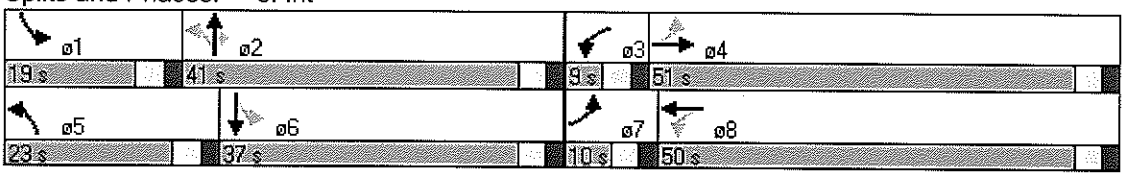


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	148	1839	82	1731	467	712	100	165	1096
Turn Type	pm+pt		pm+pt		pm+pt		Perm	pm+pt	
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phases	7	4	3	8	5	2	2	1	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	9.0	21.0	9.0	21.0	21.0	9.0	21.0
Total Split (s)	10.0	51.0	9.0	50.0	23.0	41.0	41.0	19.0	37.0
Total Split (%)	8.3%	42.5%	7.5%	41.7%	19.2%	34.2%	34.2%	15.8%	30.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	53.0	47.0	51.0	46.0	56.0	37.0	37.0	48.0	33.0
Actuated g/C Ratio	0.44	0.39	0.43	0.38	0.47	0.31	0.31	0.40	0.28
v/c Ratio	1.09	1.42	0.67	1.07	1.51	0.72	0.23	0.58	1.33
Uniform Delay, d1	19.9	36.5	18.2	37.0	33.9	36.9	30.8	19.6	43.5
Control Delay	124.9	223.0	44.6	77.9	273.5	41.6	32.5	28.1	192.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	124.9	223.0	44.6	77.9	273.5	41.6	32.5	28.1	192.7
LOS	F	F	D	E	F	D	C	C	F
Approach Delay		217.4		76.5		125.6			172.2
Approach LOS		F		E		F			F

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Pretimed
Maximum v/c Ratio: 1.51
Intersection Signal Delay: 154.3 Intersection LOS: F
Intersection Capacity Utilization 125.4% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Int

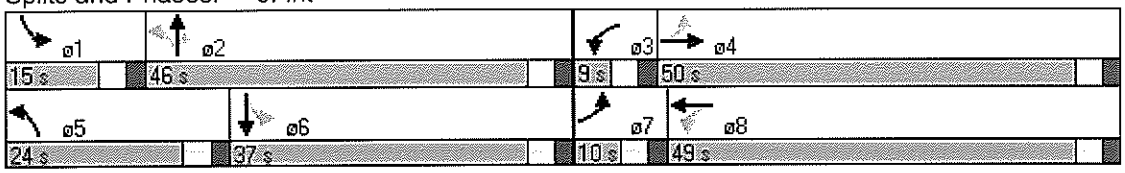


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	148	1866	82	1750	517	754	100	177	1149
Turn Type	pm+pt		pm+pt		pm+pt		Perm	pm+pt	
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phases	7	4	3	8	5	2	2	1	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	9.0	21.0	9.0	21.0	21.0	9.0	21.0
Total Split (s)	10.0	50.0	9.0	49.0	24.0	46.0	46.0	15.0	37.0
Total Split (%)	8.3%	41.7%	7.5%	40.8%	20.0%	38.3%	38.3%	12.5%	30.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	52.0	46.0	50.0	45.0	57.0	42.0	42.0	44.0	33.0
Actuated g/C Ratio	0.43	0.38	0.42	0.38	0.48	0.35	0.35	0.37	0.28
v/c Ratio	1.09	1.51	0.67	1.11	1.61	0.67	0.20	0.71	1.39
Uniform Delay, d1	20.0	37.0	18.8	37.5	34.1	33.2	27.2	19.9	43.5
Control Delay	125.1	261.1	45.2	93.6	312.9	36.6	28.5	36.0	218.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	125.1	261.1	45.2	93.6	312.9	36.6	28.5	36.0	218.3
LOS	F	F	D	F	F	D	C	D	F
Approach Delay		253.6		91.6		140.1			195.1
Approach LOS		F		F		F			F

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Pretimed
Maximum v/c Ratio: 1.61
Intersection Signal Delay: 178.7 Intersection LOS: F
Intersection Capacity Utilization 131.6% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 6: Int

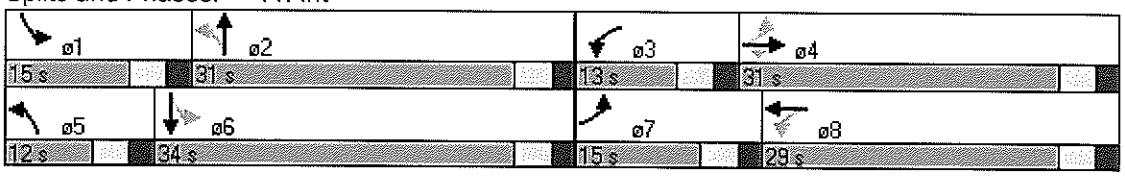


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	198	625	218	161	632	141	694	196	1162
Turn Type	pm+pt		Perm	pm+pt		pm+pt		pm+pt	
Protected Phases	7	4		3	8	5	2	1	6
Permitted Phases	4		4	8		2		6	
Detector Phases	7	4	4	3	8	5	2	1	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	21.0	9.0	21.0	9.0	21.0	9.0	21.0
Total Split (s)	15.0	31.0	31.0	13.0	29.0	12.0	31.0	15.0	34.0
Total Split (%)	16.7%	34.4%	34.4%	14.4%	32.2%	13.3%	34.4%	16.7%	37.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	38.0	27.0	27.0	34.0	25.0	35.0	27.0	41.0	30.0
Actuated g/C Ratio	0.42	0.30	0.30	0.38	0.28	0.39	0.30	0.46	0.33
v/c Ratio	0.73	0.65	0.38	0.59	0.86	0.65	0.58	0.65	0.80
Uniform Delay, d1	15.9	27.4	0.0	15.8	29.8	14.7	25.7	14.6	27.1
Control Delay	34.1	31.0	5.3	16.4	25.9	30.1	27.6	25.0	31.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.1	31.0	5.3	16.4	25.9	30.1	27.6	25.0	31.6
LOS	C	C	A	B	C	C	C	C	C
Approach Delay		26.2			24.3		28.0		30.7
Approach LOS		C			C		C		C

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 40 (44%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Pretimed
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 27.6 Intersection LOS: C
Intersection Capacity Utilization 77.4% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 11: Int

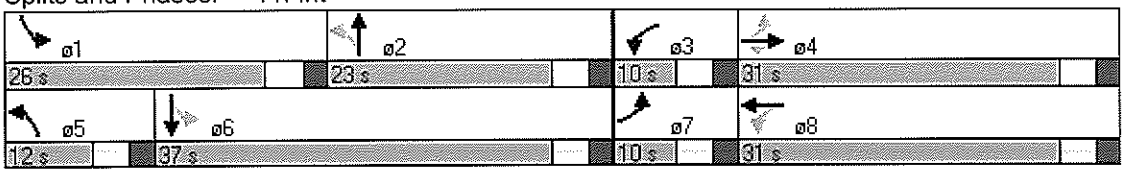


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	202	780	222	116	767	144	708	581	1186
Turn Type	pm+pt		Perm	pm+pt		pm+pt		pm+pt	
Protected Phases	7	4		3	8	5	2	1	6
Permitted Phases	4		4	8		2		6	
Detector Phases	7	4	4	3	8	5	2	1	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	21.0	9.0	21.0	9.0	21.0	9.0	21.0
Total Split (s)	10.0	31.0	31.0	10.0	31.0	12.0	23.0	26.0	37.0
Total Split (%)	11.1%	34.4%	34.4%	11.1%	34.4%	13.3%	25.6%	28.9%	41.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	33.0	27.0	27.0	33.0	27.0	27.0	19.0	45.0	33.0
Actuated g/C Ratio	0.37	0.30	0.30	0.37	0.30	0.30	0.21	0.50	0.37
v/c Ratio	1.12	0.81	0.38	0.64	1.19	0.67	0.84	1.25	0.74
Uniform Delay, d1	19.5	29.2	0.6	17.0	28.5	15.4	32.9	23.2	24.6
Control Delay	123.7	36.8	5.7	34.0	122.5	32.3	41.6	152.5	27.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	123.7	36.8	5.7	34.0	122.5	32.3	41.6	152.5	27.7
LOS	F	D	A	C	F	C	D	F	C
Approach Delay		45.7			114.4		40.2		67.4
Approach LOS		D			F		D		E

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 40 (44%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 100
Control Type: Pretimed
Maximum v/c Ratio: 1.25
Intersection Signal Delay: 68.8 — Intersection LOS: E
Intersection Capacity Utilization 106.5% — ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 11: Int

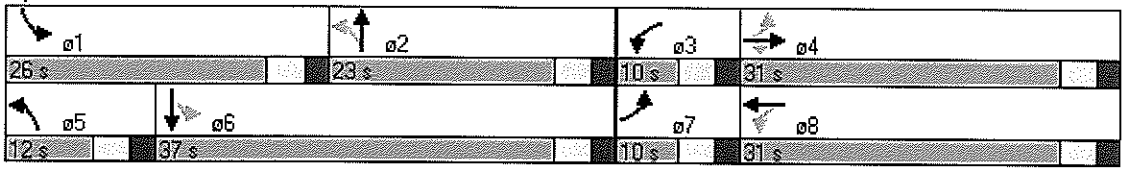


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	202	780	222	116	767	144	708	581	1186
Turn Type	pm+pt		Perm	pm+pt		pm+pt		pm+pt	
Protected Phases	7	4		3	8	5	2	1	6
Permitted Phases	4		4	8		2		6	
Detector Phases	7	4	4	3	8	5	2	1	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	21.0	9.0	21.0	9.0	21.0	9.0	21.0
Total Split (s)	10.0	31.0	31.0	10.0	31.0	12.0	23.0	26.0	37.0
Total Split (%)	11.1%	34.4%	34.4%	11.1%	34.4%	13.3%	25.6%	28.9%	41.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	33.0	27.0	27.0	33.0	27.0	27.0	19.0	45.0	33.0
Actuated g/C Ratio	0.37	0.30	0.30	0.37	0.30	0.30	0.21	0.50	0.37
v/c Ratio	1.12	0.81	0.38	0.64	1.19	0.67	0.84	1.25	0.74
Uniform Delay, d1	19.5	29.2	0.6	17.0	28.5	15.4	32.9	23.2	24.6
Control Delay	123.7	36.8	5.7	30.9	110.4	32.3	41.6	152.5	27.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	123.7	36.8	5.7	30.9	110.4	32.3	41.6	152.5	27.7
LOS	F	D	A	C	F	C	D	F	C
Approach Delay		45.7			103.1		40.2		67.4
Approach LOS		D			F		D		E

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 40 (44%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 100
Control Type: Pretimed
Maximum v/c Ratio: 1.25
Intersection Signal Delay: 66.1 Intersection LOS: E
Intersection Capacity Utilization 106.5% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 11: Int

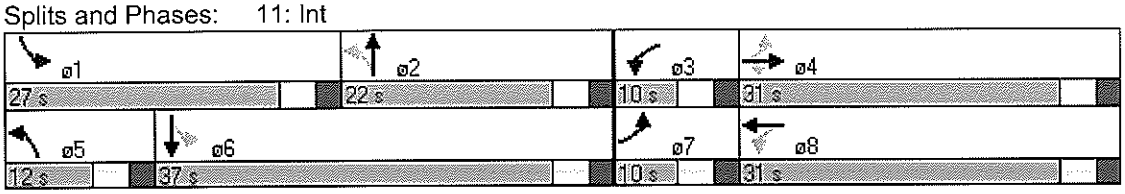


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	202	835	222	121	815	144	708	699	1186
Turn Type	pm+pt		Perm	pm+pt		pm+pt		pm+pt	
Protected Phases	7	4		3	8	5	2	1	6
Permitted Phases	4		4	8		2		6	
Detector Phases	7	4	4	3	8	5	2	1	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	21.0	9.0	21.0	9.0	21.0	9.0	21.0
Total Split (s)	10.0	31.0	31.0	10.0	31.0	12.0	22.0	27.0	37.0
Total Split (%)	11.1%	34.4%	34.4%	11.1%	34.4%	13.3%	24.4%	30.0%	41.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	33.0	27.0	27.0	33.0	27.0	26.0	18.0	45.0	33.0
Actuated g/C Ratio	0.37	0.30	0.30	0.37	0.30	0.29	0.20	0.50	0.37
v/c Ratio	1.12	0.87	0.38	0.67	1.31	0.67	0.89	1.45	0.74
Uniform Delay, d1	19.5	29.9	0.8	17.0	27.5	15.6	33.8	23.1	24.6
Control Delay	123.7	40.7	5.9	30.7	159.3	32.5	46.5	235.8	27.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	123.7	40.7	5.9	30.7	159.3	32.5	46.5	235.8	27.7
LOS	F	D	A	C	F	C	D	F	C
Approach Delay		47.9			148.3		44.4		102.5
Approach LOS		D			F		D		F

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 40 (44%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 100
Control Type: Pretimed
Maximum v/c Ratio: 1.45
Intersection Signal Delay: 91.8 — Intersection LOS: F
Intersection Capacity Utilization 117.5% — ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 11: Int

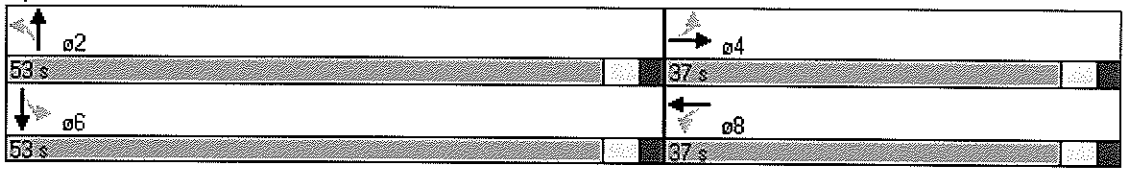


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	18	334	27	687	480	75	132	63
Turn Type	Perm		Perm		Perm		Perm	
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phases	4	4	8	8	2	2	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
Total Split (s)	37.0	37.0	37.0	37.0	53.0	53.0	53.0	53.0
Total Split (%)	41.1%	41.1%	41.1%	41.1%	58.9%	58.9%	58.9%	58.9%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	33.0	33.0	33.0	33.0	49.0	49.0		49.0
Actuated g/C Ratio	0.37	0.37	0.37	0.37	0.54	0.54		0.54
v/c Ratio	0.21	1.10dr	0.35	0.77	0.83	0.10		0.29
Uniform Delay, d1	19.6	26.4	20.7	25.2	17.1	9.9		11.1
Control Delay	25.8	27.7	35.5	30.5	31.1	10.3		12.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay	25.8	27.7	35.5	30.5	31.1	10.3		12.3
LOS	C	C	D	C	C	B		B
Approach Delay		27.7		30.6		27.5		12.3
Approach LOS		C		C		C		B

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 45
Control Type: Pretimed
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 27.4 Intersection LOS: C
Intersection Capacity Utilization 67.5% ICU Level of Service C
Analysis Period (min) 15
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 17: Int

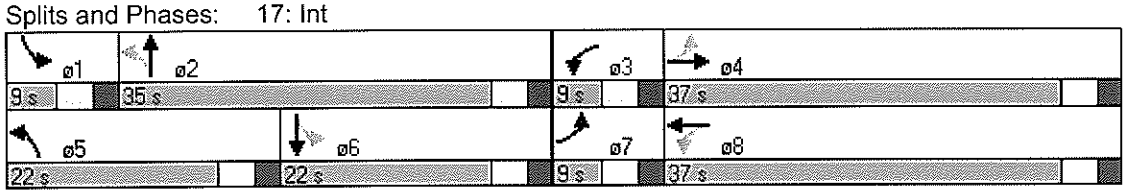


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	77	513	28	639	919	87	134	199
Turn Type	pm+pt		pm+pt		pm+pt		pm+pt	
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8		2		6	
Detector Phases	7	4	3	8	5	2	1	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	9.0	21.0	9.0	21.0	9.0	21.0
Total Split (s)	9.0	37.0	9.0	37.0	22.0	35.0	9.0	22.0
Total Split (%)	10.0%	41.1%	10.0%	41.1%	24.4%	38.9%	10.0%	24.4%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	38.0	33.0	38.0	33.0	40.0	31.0		23.0
Actuated g/C Ratio	0.42	0.37	0.42	0.37	0.44	0.34		0.26
v/c Ratio	0.47	1.97dr	0.17	0.82	1.68	0.18		0.93
Uniform Delay, d1	13.6	28.5	13.1	25.8	22.1	20.6		27.8
Control Delay	22.8	246.0	15.5	32.8	336.4	21.6		58.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay	22.8	246.0	15.5	32.8	336.4	21.6		58.3
LOS	C	F	B	C	F	C		E
Approach Delay		235.3		32.3		302.4		58.3
Approach LOS		F		C		F		E

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Pretimed
Maximum v/c Ratio: 1.68
Intersection Signal Delay: 188.3 Intersection LOS: F
Intersection Capacity Utilization 134.6% ICU Level of Service H
Analysis Period (min) 15
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 17: Int

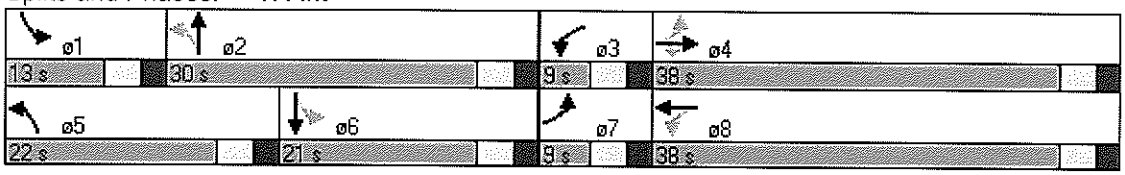


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	77	513	1015	28	639	919	87	134	199
Turn Type	pm+pt		Perm	pm+pt		pm+pt		pm+pt	
Protected Phases	7	4		3	8	5	2	1	6
Permitted Phases	4		4	8		2		6	
Detector Phases	7	4	4	3	8	5	2	1	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	21.0	9.0	21.0	9.0	21.0	9.0	21.0
Total Split (s)	9.0	38.0	38.0	9.0	38.0	22.0	30.0	13.0	21.0
Total Split (%)	10.0%	42.2%	42.2%	10.0%	42.2%	24.4%	33.3%	14.4%	23.3%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	39.0	34.0	34.0	39.0	34.0	39.0	26.0	26.0	17.0
Actuated g/C Ratio	0.43	0.38	0.38	0.43	0.38	0.43	0.29	0.29	0.19
v/c Ratio	0.45	0.82	1.09	0.14	0.80	1.11	0.22	0.39	0.70
Uniform Delay, d1	13.0	25.3	28.0	12.6	24.9	19.6	24.2	17.0	34.1
Control Delay	30.2	48.6	91.6	14.2	30.8	86.7	25.6	20.7	45.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.2	48.6	91.6	14.2	30.8	86.7	25.6	20.7	45.5
LOS	C	D	F	B	C	F	C	C	D
Approach Delay		74.9			30.3		80.1		36.5
Approach LOS		E			C		F		D

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Pretimed
Maximum v/c Ratio: 1.11
Intersection Signal Delay: 62.1 Intersection LOS: E
Intersection Capacity Utilization 82.6% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 17: Int

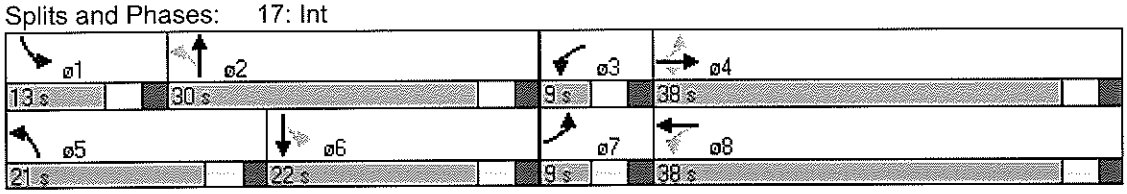


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	77	535	1236	28	660	1078	130	134	232
Turn Type	pm+pt		Perm	pm+pt		pm+pt		pm+pt	
Protected Phases	7	4		3	8	5	2	1	6
Permitted Phases	4		4	8		2		6	
Detector Phases	7	4	4	3	8	5	2	1	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.0	21.0	21.0	9.0	21.0	9.0	21.0	9.0	21.0
Total Split (s)	9.0	38.0	38.0	9.0	38.0	21.0	30.0	13.0	22.0
Total Split (%)	10.0%	42.2%	42.2%	10.0%	42.2%	23.3%	33.3%	14.4%	24.4%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	39.0	34.0	34.0	39.0	34.0	39.0	26.0	27.0	18.0
Actuated g/C Ratio	0.43	0.38	0.38	0.43	0.38	0.43	0.29	0.30	0.20
v/c Ratio	0.48	0.86	1.33	0.15	0.85	1.40	0.30	0.39	0.75
Uniform Delay, d1	13.0	25.8	28.0	12.6	25.7	20.6	24.9	16.8	33.9
Control Delay	28.1	45.8	183.8	14.5	34.0	210.1	26.7	20.4	47.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.1	45.8	183.8	14.5	34.0	210.1	26.7	20.4	47.6
LOS	C	D	F	B	C	F	C	C	D
Approach Delay		137.3			33.4		187.2		38.5
Approach LOS		F			C		F		D

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 140
Control Type: Pretimed
Maximum v/c Ratio: 1.40
Intersection Signal Delay: 119.2 Intersection LOS: F
Intersection Capacity Utilization 90.7% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 17: Int



Walmart
Save money. Live better.

Community Affairs

Philip H. Serghini, Senior Manager

200 East 10th Street, #812
New York, NY 10003
Phone: 212.533.2186

February 1, 2011

Hon. Diana Reyna, Chair
Committee on Small Business

Hon. Albert Vann, Chair
Committee on Community Development

Hon. Karen Koslowitz, Chair
Committee on Economic Development

The New York City Council
250 Broadway
New York, NY 10007

Dear Council Members Reyna, Vann, and Koslowitz:

Thank you for your invitation to appear before your joint committee hearing entitled, "*When Walmart Comes to Town - The Effect on Small Businesses and Communities: A Historical and Prospective View.*"

We are proud of our record on this topic – from saving people money and creating jobs, to serving as a magnet for growth and development and supporting local non-profits – and I am enthusiastic about the opportunity to share information on this topic with you. At Walmart, we recognize the importance of being a strong community partner and at no time in recent history has this responsibility been more important.

As you are aware, Walmart does not have a store in New York City, and therefore members of the committee might not be familiar with our company. To that end, please find below facts about Walmart that will help you shape an informed view about our commitment to our associates, our local suppliers, our neighbors, and the customers we serve. What's more, since I understand that the impact of our Chicago store will be discussed at the hearing, I have enclosed a video that documents some of the success stories that have come to pass there since Walmart opened in 2006. I thought this video would be especially appropriate to show at the hearing since many of those in attendance have never visited our Chicago store.

Above all else though, I am enthusiastic about the opportunity to continue our recent conversations about New York City.

New York City is home to many of our best competitors. Companies such as Sears, Kohl's, Macy's, Trader Joe's, Marshall's, TJ Maxx, Dollar Store, Home Depot, Costco, Target, Best Buy, BJ's, Lowes, Ikea, Kmart, Office Max, Office Depot, Toys 'R Us, Borders, Barnes & Noble certainly have changed the face of retail across all 5 boroughs. We believe that the jobs, business competition and economic growth created by Walmart and companies such as these are to the benefit of any community.

The joint hearing, however, does not appear to consider the impact of the hundreds of NYC stores operated by these companies; rather it focuses solely on Walmart. Since we have not announced a store for New York City, I respectfully suggest the committee first conduct a thoughtful examination of the existing impact of large grocers and retailers on small businesses in New York City before embarking on a hypothetical exercise.

For these reasons and more, we respectfully decline participation in the February 3rd hearing.

Should the committee decide to conduct the hearing in a more comprehensive manner, we would be happy to revisit our decision. In the interim, we do feel a responsibility to better inform the planned discussion and share some facts about the company that the committee can share with participants.

Walmart's "save money, live better" mission is relevant to every customer, every day, everywhere we have a presence. During tough economic times, the savings we provide matter more than ever. We see an opportunity and a responsibility to lead on issues like sustainability, sourcing, economic opportunity and health care. Through sustainability, we're lowering costs and improving product quality. We're helping customers and suppliers become more responsible through our purchasing and sourcing choices. We're creating thousands of jobs around the world each year. And on health care, our $4 prescriptions have saved customers $3 billion in the last three years. Initiatives like these help us deliver on our mission, and they contribute to the strength of the Walmart business.

Stores

Walmart currently operates 111 stores in New York State and last year, collected $364 million in state sales taxes and paid more than $88 million in property taxes. Although we do not have any stores in the five boroughs, New York City residents spent more than $165 million at Walmart last year.

Impact on Communities

All across the country, Walmart co-exists with small, medium and large businesses. A quick visit to the neighborhoods that are home to our stores, particularly in urban settings, will give you a good sense of how we foster opportunity for others. Chicago is a great example. Since we opened our store there, 22 new businesses have opened nearby including a Food4Less, Menard's, ALDI, Burlington Coat Factory, Harris Bank, Bank of America and Chase Bank. This is not surprising. There have been countless studies done that show Walmart stores are a magnet for growth and development.

Jobs

Walmart creates jobs that provide a competitive wage, affordable benefits and the chance to build a career. In New York State, we already employ more than 38,000 people, including over 1,400 New York City residents. The majority of these positions are full-time. Nationwide, more than 70-percent

of our store management team started as an hourly associate. Our average hourly wage for regular, full-time associates in New York State is $12.21 per hour.

Associates are eligible for health care benefits and our goal is to ensure that our plans remain affordable, accessible and high quality. We currently offer plans for as low as $11 (associate only) or $33 (associate plus dependants) per pay period. This year we also redesigned our retirement and bonus incentive plans to make them more contemporary and relevant. We are encouraging associates to save for retirement and will now match up to 6 percent into our 401(k) program.

Thousands of Americans ever year choose to make Walmart their first job, providing them training, interaction and experience to build a successful career. With over 156,000 hourly associates getting promoted last year, Walmart provides true opportunity to advance within the company.

Women's Initiatives

As one of the nation's largest private employers, Walmart is an employer of choice for female associates in the U.S. and around the world. We continue to have a commitment to diversity and inclusion in all aspects of our global business.

Many of our initiatives **elevate women through women** – allowing our female executives to develop and mentor women throughout the organization. Our goal is to continue to build a robust pipeline of future female leaders. As we continue our journey towards becoming the best place for women to work, Walmart has been recognized for our efforts, having received the following awards over the past two years:

- 2010 Top Companies for Executive Women - National Association for Female Executives
- 2010 Best Companies for Multicultural Women - Working Mother Media
- 2009 Top 50 Places to Work for Women by the Times (awarded to ASDA)
- 2009 Top Diversity Employers for Multi-Cultural - Women Professional Women's Magazine
- 2009 Top Companies for Executive Women - National Association for Female Executives
- 2009 Best Companies for Multicultural Women - Working Mother Media
- 2009 10 Best Companies for Women - PINK Magazine
- 2009 Top 12 Companies for Latinas - Latina Style

Local Supplier Partnerships

Last year, Walmart spent more than $5.7 billion for merchandise and services with 835 New York City-based suppliers. The majority of these suppliers are small businesses, employing 100 people or less. As a result of these partnerships, Walmart supports more than 49,000 supplier jobs in New York City.

Commitment to Affordable, Healthy Food

City Council Speaker Quinn recently outlined a bold vision for a more sustainable food system and correctly pointed out that the New York City food system faces a number of critical challenges, including:

- 25% of New York City's children are obese
- 3 million people lack adequate access to grocery stores
- 1.4 million New Yorkers struggle to put food on the table
- 30% of low-income students take advantage of free breakfast

As the largest seller of locally grown produce in the country, we share the Speaker's concern and want to be part of the solution when it comes to improving access to healthy, affordable food. We currently participate in *Pride of New York. Buy Local. Buy New York,* and recently unveiled a new sustainable agriculture program that focuses on maximizing the number of items grown within a one-day delivery radius of our 40 food distribution centers, including one in Johnstown, New York. We think our distribution network can save many food miles and provide fresher product with less waste.

Over the next five years, we plan to sell $1 billion globally in food sourced directly from small, medium and local farmers; provide training to 1 million farmers and farm workers in such areas as crop selection and sustainable farming practices; raise the income of farmers we source from by 10 to 15 percent; and invest $1 billion in our global fresh supply chain to help deliver fresh, quality food with a longer shelf life to customers.

Most recently, Walmart was joined by First Lady Michelle Obama as we outlined the five key elements of an effort to provide healthier and more affordable food choices:

- ✓ Reformulating thousands of everyday packaged food items by 2015
- ✓ Making healthier choices more affordable
- ✓ Developing strong criteria for a simple front-of-package seal
- ✓ Providing solutions to address food deserts by building stores
- ✓ Increasing charitable support for nutrition programs

Philanthropy

Over the past three years, the Walmart Foundation gave more than $9 million in cash and in-kind donations to local New York City organizations. Examples include: The Harlem Academy, Fordham University, New Yorkers for Children, Food Bank for NYC, City Harvest, The Door, the Hispanic Scholarship Fund, Eagle Academy, and many others. We've challenged ourselves to look for ways to make a long-lasting impact in neighborhoods across New York City by funding programs that address critical needs, like hunger, education and job training. We look forward to sustaining those partnerships in the years to come and forging new relationships along the way.

Thank you again for the invitation and we hope this information is helpful.

Sincerely,

Philip H. Serghini
Walmart Community Affairs

Walmart

Walmart in New York City

New Yorkers Already Shopping and Working at Walmart

- Last year, New Yorkers spent more than $195 million at Walmart stores OUTSIDE the city.
- New York City is the top metro market for Walmart.com in the country.
- Walmart currently employs more than 1,400 New York City residents.

New Yorkers Want & Need More Convenient Access

71%:	New Yorkers who favor Walmart coming to New York City
63%:	New Yorkers who favor bringing Walmart to their neighborhood
62%:	Small businesses in the five boroughs who favor Walmart coming to New York City
8.9%:	City-wide unemployment rate
19.2%:	Unemployment rate in East New York
15.7%:	Unemployment rate in Central and South Bronx
14.8%:	Unemployment rate in Central Brooklyn
13.6%:	Unemployment rate in Harlem and Washington Heights
3 million:	Number of New Yorkers who lack adequate access to grocery stores
$1 billion:	Amount of additional grocery spending New York City stands to capture

Walmart Associate Opportunity

- Walmart's wages and benefits are equal to - or often better than - those offered by the majority of competitors.
- The average hourly wage for regular, full-time associates in New York State is $13.09.
- More than 65% of Walmart associates in the New York City region work full-time.
- 70% of Walmart's store management team started as hourly associates.
- Last year, more than 138,000 hourly associates in Walmart U.S. stores received promotions.
- Benefits include affordable health plans, 401(k), stock purchase plans and a 10% store discount.

A Diverse Employer

- Walmart employs more than:
  - ✓ 869,000 female associates
  - ✓ 430,000 mature associates who are 50 and older
  - ✓ 257,000 African-American associates
  - ✓ 171,000 Hispanic associates
  - ✓ 41,000 Asian associates

Walmart Grocery

- Walmart's everyday low price business model helps make healthier food more affordable.
- As the nation's largest grocer, Walmart sells more locally grown produce than any company in America.
- Walmart was recently joined by First Lady Michelle Obama as it outlined the five key elements of an effort to provide healthier and more affordable food choices:
  - ✓ Reformulating thousands of everyday packaged food items by 2015
  - ✓ Making healthier choices more affordable
  - ✓ Developing strong criteria for a simple front-of-package seal
  - ✓ Providing solutions to address food deserts by building stores
  - ✓ Increasing charitable support for nutrition programs

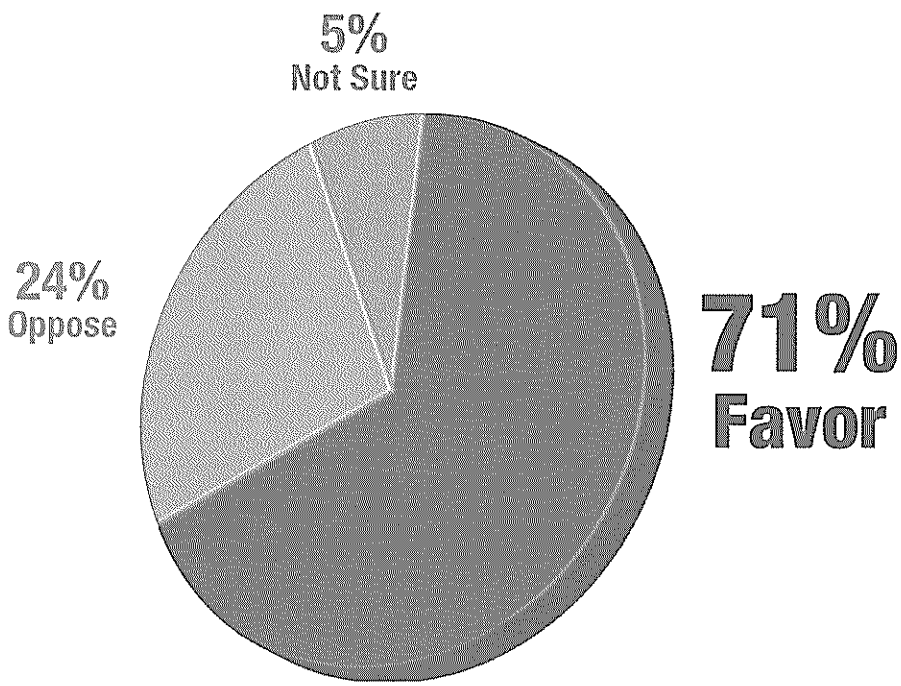
Local Suppliers & Philanthropy

- Last year, Walmart spent more than $5.7 billion for merchandise and services with 835 New York City-based suppliers.
- Over the past three years, the Walmart Foundation gave more than $9 million in cash and in-kind donations to local New York City organizations.

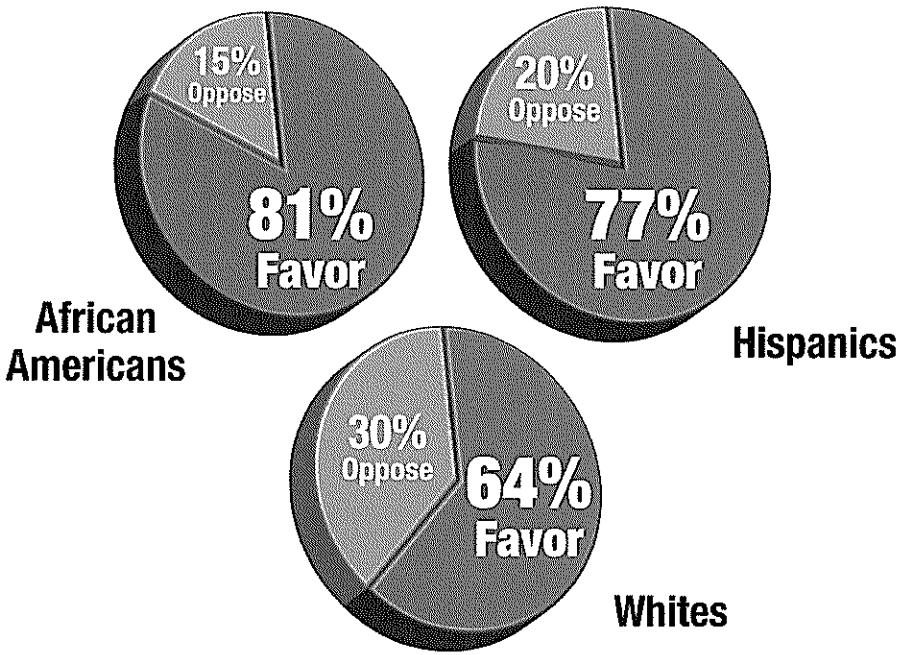
Walmart New York City Poll (December, 2010)

This memo summarizes the results of a poll that we conducted with a random sample of 1000 interviews of New York City residents from December 2nd to December 7th 2010.

Overall Support for Walmart in NYC



Support for Walmart in NYC by Race



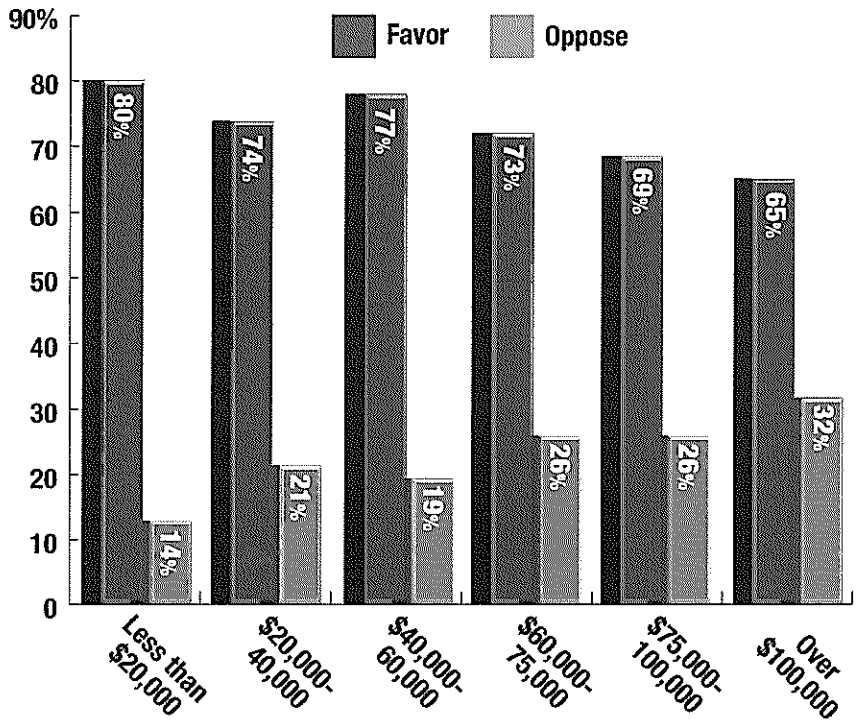
Overall, 71% of respondents support opening a Walmart in New York City, with 24% opposed.

Support was strongest among minorities, with 81% of African Americans and 77% of Hispanics supporting opening a Walmart.

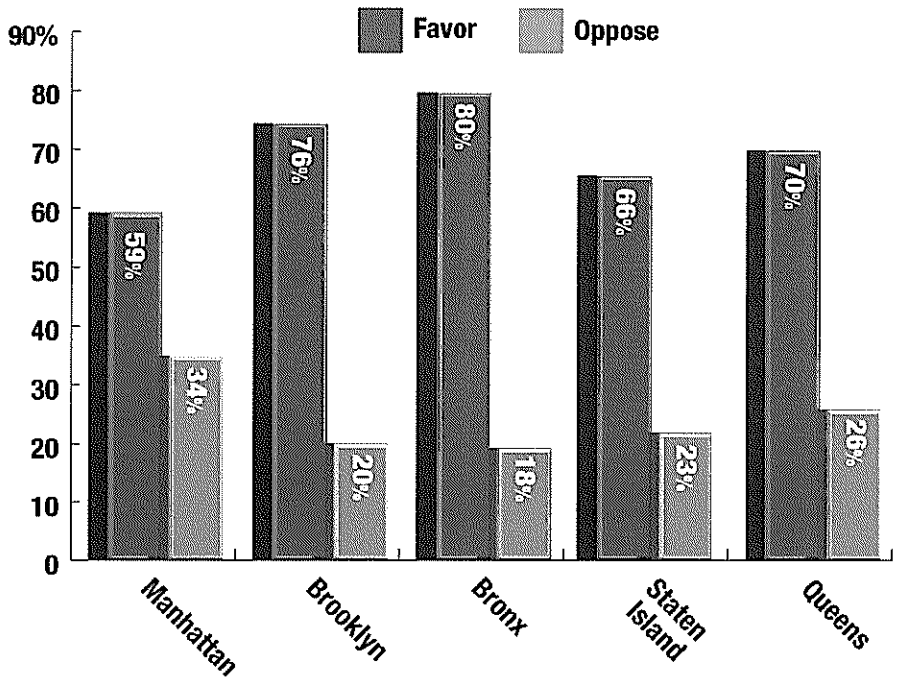
These results are based on a survey conducted by Douglas E. Schoen, LLC. The margin of sampling error for this poll is +/- 3.5%.

Walmart New York City Poll (December, 2010)

Support for Walmart in NYC by Income



Support for Walmart in NYC by Borough



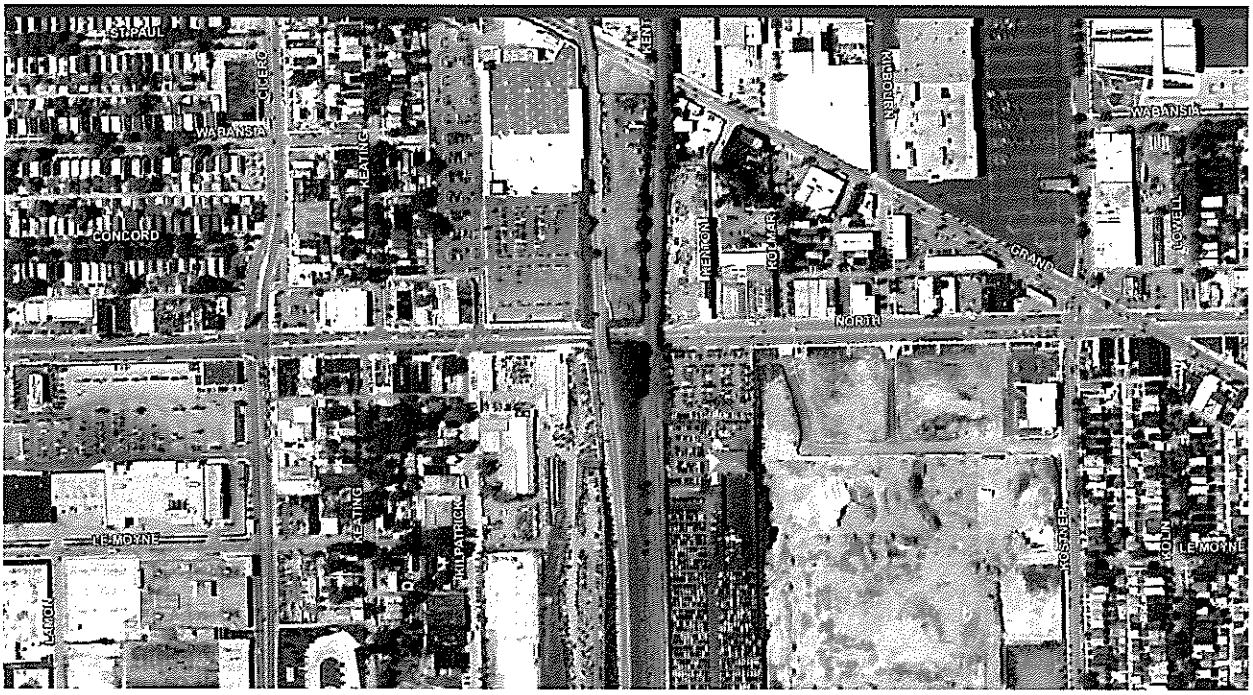
The lowest income group (those whose families make less than $20,000 annually), support Walmart the most, by 80% to 14%. Those in the highest income group (whose families make over $100,000 annually) support bringing a Walmart to the city the least, by 65% to 32%.

The Citywide survey showed varying degrees of support with the least support coming from Manhattan, and the most support coming from Bronx residents.

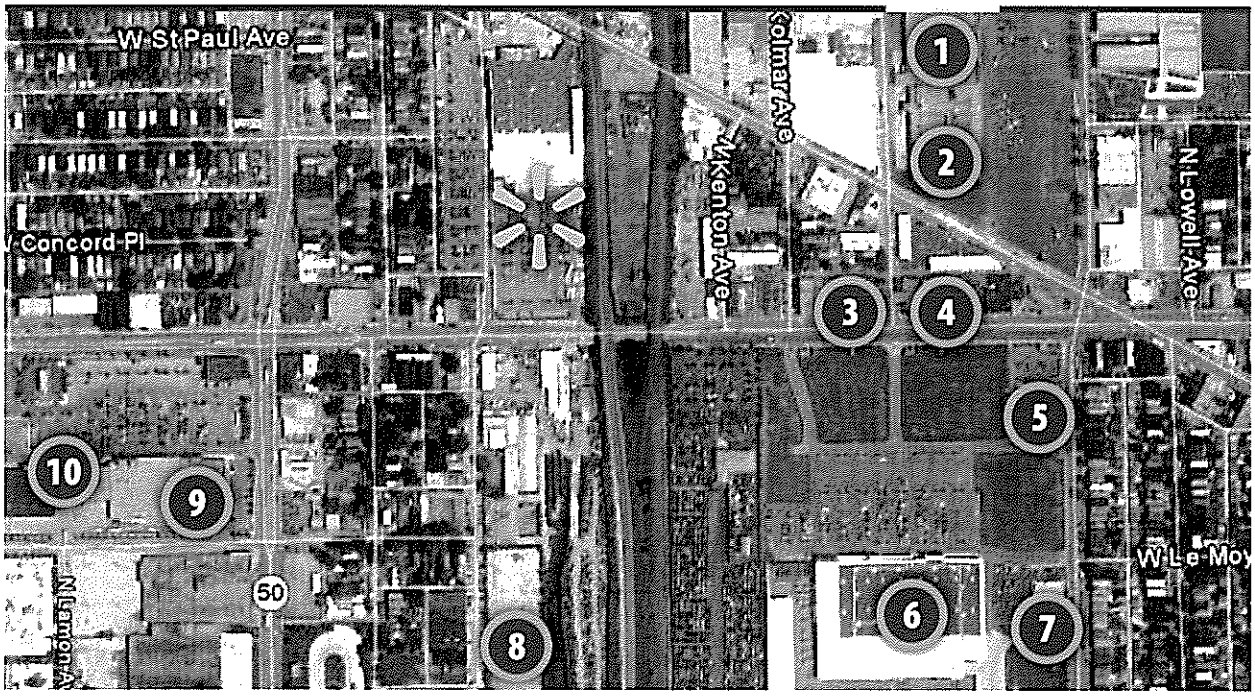
These results are based on a survey conducted by Douglas E. Schoen, LLC. The margin of sampling error for this poll is +/- 3.5%.

Walmart's Impact on One Chicago Neighborhood: Before and After

4650 W. North Avenue / 2004 Aerials



4650 W. North Avenue / Present Day Aerials



- Walmart
- 1 Cook Brothers
- 2 Burlington Coat Factory
- 3 Bank of America
- 4 Chase Bank
- 5 CVS
- 6 Menards
- 7 Aldi's
- 8 Coca-Cola Distribution Center
- 9 Food 4 Less
- 10 America's Kids

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Professional Opinion of a Recent & **Second Study** by the Center for Urban Research and Learning of Loyola University Chicago Concerning the Impact of Chicago's West Side Wal-Mart

OPINION UPDATE

(Please see our website for the original forty-four page MG opinion released in 2008.)

January 12, 2010

Prepared for
Wal-Mart Stores Inc.

Overview

Mari Gallagher Research & Consulting Group was retained by Wal-Mart Stores Inc. to develop a Professional Opinion (the Opinion) on a report entitled *The Impact of an Urban Wal-Mart Store on Area Businesses: An interim-evaluation of one Chicago neighborhood's experience* by authors Julie L. Davis, David F. Merriman, Lucia Samayoa, Brian Flanagan, Ron Baiman, and Joe Persky of the Center for Urban Research and Learning of Loyola University Chicago[1] (the Loyola report). The version available for this review was marked "last revised April 15, 2008."

The original forty-four page MG opinion of the 2008 Loyola report is available at www.marigallagher.com.

Loyola recently provided an update to their 2008 report with a similar title and the date of December 2009. **MG was retained again by Wal-Mart to provide a brief summarized update of our Opinion of this second 2009 Loyola report (this document).**

We emphasize that we are neither "pro" nor "anti" Wal-Mart but, rather, a neutral third-party research firm. We do not conduct advocacy or any type of political work.

Summary Opinion of the December 2009 Loyola Report

Most of our original criticisms of the Loyola report continue to be serious issues in this second version; key methodological flaws were not addressed. In this Opinion Update, we focus on only two key concerns for the sake of brevity.

First, the most important finding advanced by the Loyola report is that there is essentially no change in community jobs as a result of Wal-Mart opening and operating a store on Chicago's West Side. We believe that this is an inaccurate finding based on the evidence provided.

In the body of the Loyola report, the research team estimates job losses resulting from Wal-Mart's entry by looking only at firms that exited. They acknowledge that firms have entered since Wal-Mart's arrival, but this is buried in the Appendix, and not included in their job calculation. To put it in very simple terms, understanding if and how Wal-Mart impacted community jobs requires the following calculation at minimum:

Businesses that entered and those jobs gained	*MINUS*	**Businesses that closed and those jobs lost**	*EQUALS*	**Net job loss or gain**

But, instead, the foundation of Loyola's calculation is:

Just the new regular Wal-Mart jobs	*MINUS*	**Businesses that closed and those jobs lost**	*EQUALS*	**Net job loss or gain**

In short, the Loyola report concludes:

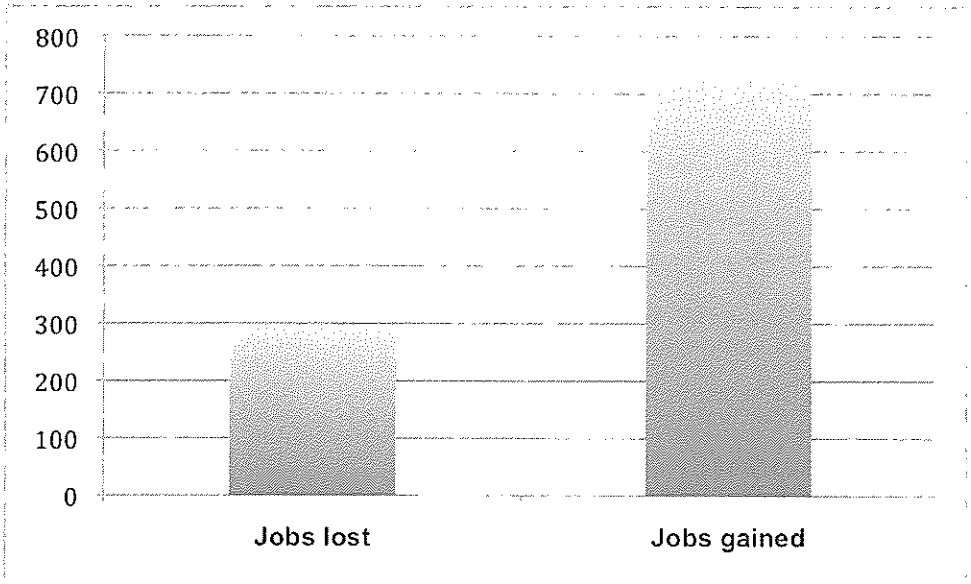
The roughly 320 regular Wal-Mart jobs that were created	*MINUS*	**The 298 jobs that were lost**	*EQUALS*	**22 jobs gained which Loyola calls "a wash"**

If we were to create a chart for this Loyola finding, it would look like this:

However, based on Loyola's own figures in the Appendix where they use D & B data – which often do not capture small "mom and pop" business and also were not updated from Loyola's 2008 report version – the Loyola team themselves estimated 406 new business entrants or firms that compete with Wal-Mart. Again, the jobs that these firms provide are not included in the above Loyola calculation. To see why the Loyola conclusion is misleading, let's assume that the 406 new competing firms each offer one new job. It is likely that many of these firms indeed offer *more* than one job. Mernard's, for example, is one of the new entrants, competes with Wal-Mart on some product lines, and offers more than one job. Nonetheless, let's suppose that there is one new job per entrant, which equals 406 new jobs in the study after Wal-Mart moved in. **If we were to add these jobs to the Loyola calculation, we would find:**

The roughly 320 regular Wal-Mart jobs that were created plus 406 jobs created by other competing entrants totals 726 jobs	*MINUS*	**The 298 jobs that were lost**	*EQUALS*	**428 jobs gained**

If we were to create a chart for this **revised example**, it would look like this:



We emphasize that we are not stating that this *is the* job gain, but, rather, that the Loyola report excluded a key component (*competing* firm entrants) and that, if included, it is reasonable to assume that, using the Loyola approach, the job gain would be at least this much. If studying the success of heart transplants, we would need to look at patients that lived as well as died. If studying the personal effects of gambling, we would need to look at winners as well as losers. And when studying the impact of a retailer on competing community jobs, we must look at competing jobs gained as well as competing jobs lost. It's that simple.

Furthermore, one could easily argue that *all new business entrants and related new jobs* in the study area should be accounted for, at least to some degree, in the calculation. In addition to Menard's, new entrants include Aldi's, Chase Bank, Bank of America, CVS, Conway's, American Kid, O & W Auto Parts, and J-Bees.

There are many reasons why stores go in and out of business. Markets are in constant movement, and when markets revitalize, they churn. Where there is churning, impact needs to be measured carefully. The Loyola authors themselves state that there is "considerable uncertainty" attached to their finding, yet they nonetheless put forth few or no qualifications elsewhere in the report or at media venues where the report is featured.

Second, the Loyola report evaluates the impact of Wal-Mart's arrival using a linear regression. This is a bit more complicated to explain to a general audience. In short, we developed Figure #1 (scroll down to end of document) to show synthetic data (indicated

by the asterisks) and a regression line (the solid black line) that represents the best fit to the data if no account is taken of a break in the pattern in late 2006.

There are three ways to account for a break in a linear regression, which we outline here:

OPTION #1
Allow the *level* of sales to change but not the *rate of growth* as shown by the dashed blue line in Figure #1; or

OPTION #2
Allow the *rate of growth* of sales to change but not the *level* as shown by the dashed red line in Figure #1; or

OPTION #3
Allow both the *level* of sales and the rate of *growth of sales* to change as shown by the dashed black line in Figure #1.

The current version of the Loyola report (December 2009) used Option #2.

The previous version of the Loyola report (April 2008) used Option #1.

We do not know why different options were used at different times. In any event, neither Loyola report (2008 or 2009) uses Option #3, which, in this case, provides the best fit to the data in our hypothetical example. In this example, sales could actually be higher shortly after Wal-Mart's entry even if the estimated "Wal-Mart effect" in regressions like those in Table 8 in this report (using Option #2) or Table 7 in the original report (using Option #1) is negative.

Although the data in our Figure #1 is contrived to provide an example, as we do not have access to Loyola's raw data, the regression results based on our synthetic data are the same as those in Loyola's Table 8: sales growth is positive when no account is taken of Wal-Mart's arrival, and if Option #2 is used – allowing the rate of growth of sales to change after Wal-Mart's entry but not the level of sales – it appears as though Wal-Mart's arrival leads to a sharp reduction in the growth of sales (after the break, the red dashed regression line is flatter than it was before the break).

The regression results based on our synthetic data (Figure #1) are also the same as those in Loyola's Table 7 in the original (April 2008) version of the study where Option #1 above allows the level of sales to change after Wal-Mart's entry but not the rate of growth of sales. In this case, it appears as though Wal-Mart's arrival leads to a sharp reduction in the level of sales (after the break, the blue dashed regression line is always below where it was before the break).

In general, Option #3 is the preferred way to analyze the data: if it can be shown that only the level or only the rate of growth is affected by Wal-Mart's entry, then it is

sensible to move to Option #1 or Option #2. But the Loyola Study has proceeded in this version without demonstrating that Option #3 is not the correct way to analyze the data.

We recognize that this is a difficult and seemingly arcane point, but it is important because, to restate, Option #3 is the best fit to the data. We provided feedback on this methodological shortfall in our original Opinion, which is perhaps why the Loyola authors switched from Option #2 to Option #1, but that did not solve the problem. If the authors have reasons to believe that Option #3 is inappropriate, they should present evidence before proceeding to Option #2 or Option #1.

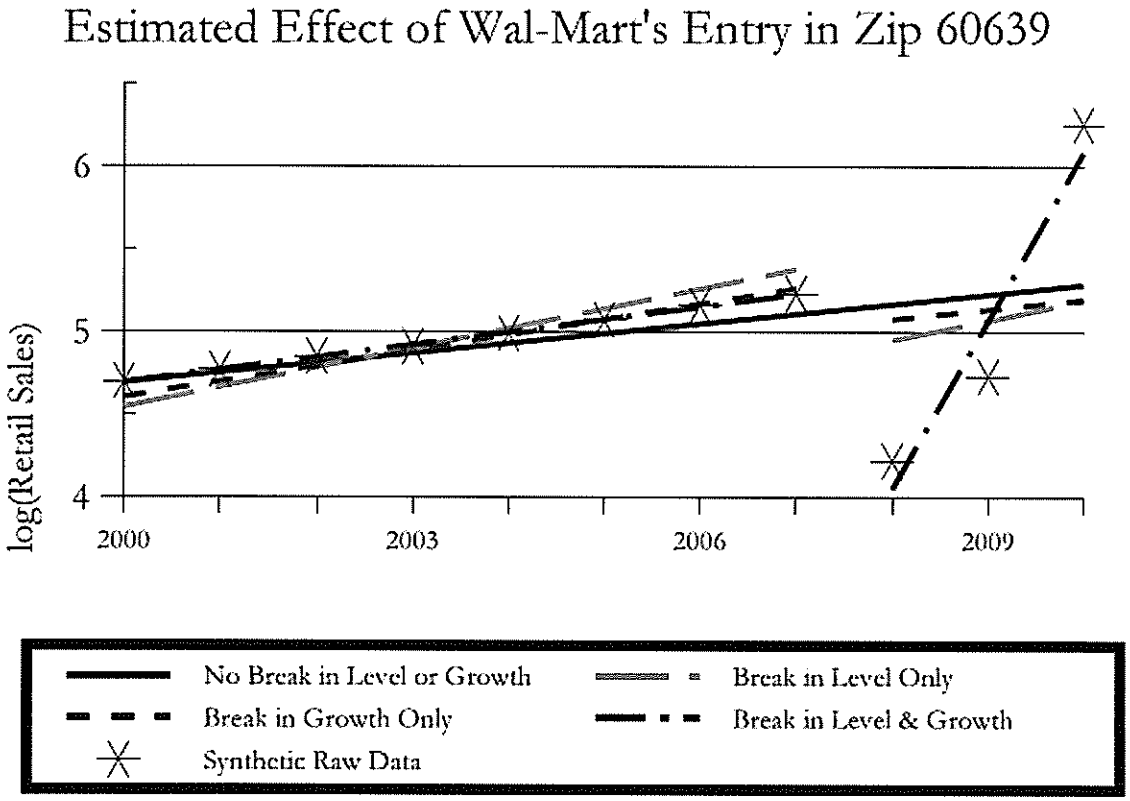


Figure 1

[1] The study was funded by the Woods Fund of Chicago and Loyola University Chicago.

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☒ in opposition

Date: _____

(PLEASE PRINT)

Name: Stephanie Packer

Address: _____

I represent: New York City Americans for Democratic Action

Address: _____

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Appearance Card

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☐ in favor ☒ in opposition

Date: _____

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Name: Elizabeth Bird

Address: _____

I represent: Good Jobs New York

Address: 11 Park Pl #701

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Appearance Card

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☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: BRIAN KETCHAM

Address: 175 PACIFIC ST. BKN

I represent: WALMART FREE NYC COALITION

Address: _____

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. ______ Res. No. ______
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Date: ______

(PLEASE PRINT)

Name: KEN BAER
Address: 91 6th AVE BROOKLYN
I represent: SIERRA CLUB
Address: 1350 BROADWAY NY, NY

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Appearance Card

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Name: Maisha Morales
Address: 98 South Elliott pl.
I represent: Small business / FUREE
Address: ______

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Name: Steven Barrison, esq. - Ex VP SBC
Address: 1414 Madison Ave, Suite 1705 NY NY
I represent: Small Business Congress NYC
Address: ______

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THE CITY OF NEW YORK

Appearance Card

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☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: John Petro

Address: 40 Exchange Place, 10005

I represent: Dorm Major Institute

Address: 40 Exchange Place

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

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☒ in favor ☐ in opposition

Date: 2/3/2011

(PLEASE PRINT)

Name: SUNG SOO KIM 11354

Address: 146-03 34th AVE, Flushing, NY

I represent: KOREAN AMERICAN SMALL

Address: BUSINESS SERVICE CENTER NY

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. Walmart Res. No. _____

☐ in favor ☒ in opposition

Date: _____

(PLEASE PRINT)

Name: ~~Bill~~ Tony Juliano

Address: 157 W 24 St

I represent: Greenwich Village-Chelsea Chamber of Commerce

Address: Christopher St. NY

Please complete this card and return to the Sergeant-at-Arms ③

anti Walmart

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☑ in opposition

Date: _____

(PLEASE PRINT)

Name: Zulema Wiscovitch

Address: 30-56 Whitestone Expressway

I represent: National Supermarket Assoc.

Address: _____

THE COUNCIL
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Appearance Card

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☐ in favor ☑ in opposition

Date: _____

(PLEASE PRINT)

Name: Hon. Inez Barron

Address: _____

I represent: Assembly Woman

Address: _____

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☑ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Tony Herbert

Address: _____

I represent: _____

Address: _____

Please complete this card and return to the Sergeant-at-Arms (2)

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☑ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Charles Fisher

Address: 205-26 115 DR St. Albans NY

I represent: Hip Hop Summit Youth Council

Address: 155 West 126st NY 10027

antiwalmart

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☑ in opposition

Date: _____

(PLEASE PRINT)

Name: Nelson Eusebio

Address: 96-09 Liberty Ave Queens

I represent: NSA - Compare

Address: _____

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☒ in favor ☐ in opposition

Date: 2/3/11

(PLEASE PRINT)

Name: ANDY SULLIVAN

Address: 50-37 60 St

I represent: 911 HARD HATS

Address: 138 21st BKLY NY 11209

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THE CITY OF NEW YORK

Appearance Card

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☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Luis Ducasse

Address: 5030 Broadway Sta 8B NYC

I represent: The Bodega Association of USA.

Address: of USA.

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THE CITY OF NEW YORK

Appearance Card

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☒ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Eduardo Giraldo

Address: 76-11 37th Avenue, Suite 203

I represent: Hispanic Chamber of Commerce Queens

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

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☐ in favor ☑ in opposition

Date: 2/3/2011

(PLEASE PRINT)

Name: Marlen Lugones Bracho

Address: 544 Prospect Ave Ridgefield, NJ 07647

I represent: 3Ko Generation Enterprises (TDP Pop 500)

Address: _____

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THE CITY OF NEW YORK

Appearance Card

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☐ in favor ☒ in opposition

Date: 2/2/11

(PLEASE PRINT)

Name: Mike PRICOLI

Address: 1730 MAHAN Ave BRONX NY 10461

I represent: BAY SIDE

Address: _____

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☑ in opposition

Date: FEB 3RD

(PLEASE PRINT)

Name: UMAR JORDAN

Address: 98 Ellery ST. 11206

I represent: Bedford Stuy Youth Dev.

Address: 98 Ellery ST BKlyn NY

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: ROBERT CONLON MOORE

Address: 153-26-58 AVE. FLUSHING 11355

I represent: WORKERS FOR A BETTER FUTURE

Address: None

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THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☑ in opposition TO WALMART

Date: _____

(PLEASE PRINT)

Name: Ken DIAMONDSTONE

Address: 200 Clinton St #5K, Bklyn 11201

I represent: Self

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☑ in opposition

Date: _____

(PLEASE PRINT)

Name: David Schwartz - Gotham

Address: 1044 Northern Blvd

I represent: NY Neighborhood Alliance

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Brad Gerstman NMA

Address: 1044 N. Blvd Roslyn

I represent: NY Neighborhood Alliance

Address: _____

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☑ in opposition

Date: _____

(PLEASE PRINT)

Name: Frank C Garcia

Address: [illegible]

I represent: NYH CC NYS Hispanic Chamber of Commerce

Address: [illegible]

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☑ in opposition

Date: 2/03/2011

(PLEASE PRINT)

Name: Anthony Valenti

Address: 457 Knickerbocker Ave

I represent: Krauner's Pharmacy, Inc

Address: _____

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☑ in opposition

Date: _____

(PLEASE PRINT)

Name: alexis Santana

Address: 1143 University ave apt 6I Bronx N

I represent: _____

Address: _____

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THE CITY OF NEW YORK

Appearance Card 1

I intend to appear and speak on Int. No. ______ Res. No. ______

☐ in favor ☒ in opposition

Date: ______

(PLEASE PRINT)

Name: Stephen Parker

Address: ______

I represent: Americans for Democratic Action

Address: 115 Fifth Avenue - 7th Floor

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THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. ______ Res. No. ______

☐ in favor ☒ in opposition

Date: ______

(PLEASE PRINT)

Name: Veronica WILLIAMS

Address: 1574 Sedgwick Av # 2E

I represent: LOCAL 1500 PATHMARK

Address: 207 - Inwood

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. ______ Res. No. ______

☐ in favor ☒ in opposition

Date: 2/3/10

(PLEASE PRINT)

Name: [illegible] Williams

Address: 215 W. 150 St Apt 1 # 2E

I represent: [illegible] and Shop / Former Wal-Mart Emp.

Address: 694 [illegible] Blvd Bronx / 275 Main St White Plains NY

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☒ in opposition

Date: _____

(PLEASE PRINT)

Name: Ronald L. Dillon

Address: PO Box 080144 Brklyn NY 11208

I represent: Concerned Homeowners Assn

Address: PO Box 080144 Brklyn NY 11208

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL
THE CITY OF NEW YORK

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

☐ in favor ☒ in opposition

Date: _____

(PLEASE PRINT)

Name: Maritza Silva-Farrell

Address: 50 Broadway,

I represent: NY Jobs with Justice

Address: _____

Please complete this card and return to the Sergeant-at-Arms