REFUELING NEEDS IN A RESILIENCY ERA

FUELING BROOKLYN'S FUTURE:

BROOKLYN BOROUGH PRESIDENT
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Introduction

Over the past several years, gas stations have been disappearing from our borough. The borough’s land prices have skyrocketed, often making residential, commercial, or hotel development the highest value for land where gas stations are sited. These closures, as well as the effects on gas stations from Superstorm Sandy, have had, and will continue to have, a tremendous impact on many Brooklynites if the status quo remains.

According to the New York City Economic Development Corporation (EDC)\(^1\), the majority of Brooklyn households do not have access to an automobile. However, the importance of access to reliable fueling stations remains, especially in neighborhoods that have higher car ownership, such as those in southern Brooklyn.

While access to traditional gas stations remains important, we must also rethink our fueling strategies for the future in ways that support the development and integration of alternative fuel vehicles into our transportation landscape. Fuel distribution infrastructure like compressed natural gas, electric charging stations, and hydrogen fuel cells are critical if we are to move from the gasoline-powered engine to the more energy-efficient vehicles of tomorrow.

This report reviews the current state of fueling stations in Brooklyn, steps we can take to harden our existing fuel distribution network to prevent the mass station closures and lines that were seen in the days following Superstorm Sandy, as well as policy actions that can support innovation as we move toward cleaner fuels for automobiles. There is no one solution to confronting the challenges of Brooklyn’s fueling future. Only a concerted, multi-prong effort will fully address the borough’s needs adequately.

Background

While this report is intended to address and make recommendations to prevent the closure of existing stations as well as adapt fueling stations to a cleaner future and climate change reality, it is not intended to be alarmist. As such, it is important to acknowledge that the closure of fueling stations is likely to have little impact on first responders and City employees undertaking activities for their jobs in government. According to the New York City Department of Citywide Administrative Services (DCAS):

> The city uses over 25 million gallons of fuel per year for fleet and equipment and operates 415 fueling locations including three (3) that dispense compressed natural gas (CNG). In addition, NYC Fleet offers contracts for fueling at private gas stations and private CNG fueling sites.\(^2\)

As a result, it appears that fuel access for first responders is less of a primary concern than the need to ensure accessibility for private first responders. While there are ample fueling stations for the City’s first responders, we must also be mindful of the needs of traditional consumers (car owners and cab drivers) and private emergency response institutions like local Emergency Medical Services (EMS) responders.

Disappearing Gas Stations

The borough of Manhattan has long faced a crisis of disappearing gas stations. According to an analysis by the New York Times from April 2016, there are only 50 gas stations total in the borough, a decline of about 30 since 2008.\(^3\)

This challenge is slowly growing in Brooklyn, and I am committed to addressing it head-on, before we arrive at a situation such as what we currently see in Manhattan.

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According to analysis by the Land Use Department in the Office of the Brooklyn Borough President (the Department) conducted in February 2017, nine stations in the borough have closed post-Superstorm Sandy and two additional station locations have had plans filed with the New York City Department of Buildings (DOB) and/or the New York City Board of Standards and Appeals (BSA) that would result in new development. In addition, a preliminary analysis of the zoning potential and current development trends conducted by the Department indicate that another 12 gas station locations could be at risk in the coming two to three years, including locations in Bushwick, Clinton Hill, Downtown Brooklyn, Greenpoint, Midwood, Sheepshead Bay, and Sunset Park. While a rigorous analysis has been undertaken to identify these potential sites, we are also seeing that additional stations are at risk at locations throughout the borough. For example, within days of the commencement of this report, a previously unidentified location at the corner of Coney Island and Foster avenues in Ditmas Park announced its closure.

If the current trend continues, the impact will go beyond traditional gas station consumers and have effects throughout the borough, whether one owns a vehicle or not. The aftermath of Superstorm Sandy dramatically highlighted that fact. A major disruption to our primary fuel source, combined with too few stations, would mean that deliveries to commercial and retail locations cannot be made and services cannot be provided with regularity, which would impact every Brooklynite.

Given rising land values, we are certain to be facing fuel deserts in our borough in the coming years unless we incentivize land owners to protect current uses. We must work together to develop a plan that balances access to fueling stations with well-thought-out development across Brooklyn.
In the days and weeks that followed the devastation of Superstorm Sandy, gas stations with no power were unable to pump gas, and when power was restored, many stations ran out of fuel. According to the United States Department of Energy (DOE), nine gas terminals in the metropolitan area were shuttered after the storm, hindering supply and distribution to stations throughout the region.

At a hearing held at Brooklyn Borough Hall on November 10, 2016 titled “Fueling Brooklyn’s Future: Station Access and Resiliency in the 21st Century,” advocates such as AAA testified that in the aftermath of Superstorm Sandy waterside terminals were identified as a critical weakness in the gasoline distribution network. These waterside terminals are where gasoline is delivered and stored prior to delivery to regional gas stations. According to testimony from AAA's Robert Sinclair, citing statistics from a 2014 “NYSERDA New York State Petroleum Terminal Resiliency Assessment,” Superstorm Sandy “disrupted supply at 60 percent of the Downstate terminals, affecting 75 percent of Downstate throughput.”

One of those facilities was 25 Paidge Avenue in Greenpoint, crippling the distribution from containers along Newtown Creek, which hold up to 2.5 million gallons of gasoline. According to AAA, a recent NYSERDA survey also indicated that of the 28 terminals along the waterside, only two had installed elevated berms and/or other resiliency measures, leaving the vast majority of gasoline distribution networks at continued risk.

Our City and State have undertaken important steps to make fueling stations more resilient to combat future crisis events. For example, in the wake of Superstorm Sandy, New York State Governor Andrew Cuomo created the Fuel NY program housed in the Governor’s Office of Storm Recovery (GOSR), which, in part, funded the purchase of back-up generators in priority corridors to ensure “that critical gas stations have back-up power capacity, making it possible to avoid long lines, get to work, and restore normalcy as quickly as possible after a major storm or other disaster.”

This type of backup system should be the norm at all of our fueling stations, in order to ensure continued operations in the aftermath of disasters.

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7Governor’s Office for Storm Recovery, Fuel NY, available at: stormrecovery.ny.gov/fuel-ny.
Fueling Brooklyn’s Future

In addition to New York State’s efforts at hardening our fueling stations, Governor Cuomo recently announced a goal to provide more than 500 electric vehicle charging stations at workplaces across the state. The Governor also announced enhancements to ChargeNY, adding incentives for public and private employers to encourage employees to purchase electric vehicles, and providing innovative financing for charging station installations.8 Complementing the State’s effort is New York City’s very ambitious renewable energy goals. Both New York City Mayor Bill de Blasio and the City Council are creating policies that provide alternative fuels such as electric charging stations for electric vehicles. In November 2016, the Council passed, and the Mayor signed into law in December of that same year, Intro. 1124, which will encourage more New Yorkers to shift from gasoline-powered automobiles to electric vehicles by implementing a pilot program for publicly accessible charging stations. According to the new law:

[Twenty-five] publicly accessible electric vehicle charging stations shall be installed in the city, provided that at least two such electric vehicle charging stations shall be installed in each of the city’s five boroughs. The department of transportation shall post the location of such electric vehicle charging stations on its website.10

In addition, the private sector is slowly making gains in creating new alternative fuel stations. For example, in February 2017, Air Liquide announced the siting of two hydrogen fueling stations in New York, with one to be located in Brooklyn.11

These are important efforts on the part of both the City and the State, but based on testimony at our November 10, 2016 hearing, the future fueling needs of New York City and the region are at a crossroads.

Testimony submitted by policy experts, automobile advocates, advocates for renewable fuel sources, and representatives from the alternative fueling industry, were clear in indicating that governmental institutions are not moving quickly enough or doing enough to foster innovation aimed at protecting our existing fueling process and adapting that process to encourage the use of alternative fuels for those who choose or need to drive in New York City and the region.

For example, testimony from a representative from Air Liquide, a world leader in gas, technologies, and services for industry and health,12 indicated that hydrogen fuel cell vehicles are ready to be brought more broadly to market, but the lack of hydrogen fueling locations in and around the metropolitan area makes the rollout of cleaner automobiles more difficult. Government must foster an environment for fueling innovation to meet the demand that the private sector is creating in order to seamlessly transition to cleaner fuels for vehicles.

Conclusion and Recommendations

The impact of fueling access, resiliency, and sustainability is not only felt by vehicle owners and users. If there is a lesson from the aftermath of Superstorm Sandy, it is that we are all affected by a disruption of access. Viewed properly, this lesson points the way forward, not only as to access, but toward a more resilient and sustainable fueling future for Brooklyn. Our response must be bold in order to address the specific challenges we continue to face — such as access to fuel during disasters and power outages — but also to ensure that the lofty goals our city has set for a more sustainable future are met through a more energy-friendly fueling economy and distribution network.

I am committed to using my powers as borough president to ensure that we meet these challenges. As such:

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9NYSERDA, Governor Cuomo Announces New Campaign to Install Charging Stations and Promote Electric Vehicle Use Across New York State, available at: nyserda.ny.gov/About/Newsroom/2017-Announcements/2017-03-06-Governor-Cuomo-Announces-Campaign-to-Install-Charging-Stations-and-Promote-EV.
• To protect existing fueling stations, I am calling on the New York City Department of City Planning (DCP) to undertake a zoning text amendment to enable fueling stations in Fuel NY priority corridors to more liberally transfer development rights. In order to qualify for this TDR:
  o Stations must incorporate resilient power-generating measures, and
  o Stations must incorporate alternate fuel technologies such as Compressed Natural Gas (CNG), high-capacity electric vehicle charging, hydrogen, and/or emerging clean fuel sources into station redesign and/or resiliency measures
• To support and encourage technological innovation to improve resiliency and decrease reliance on fossil fuels, I will commit capital funding to the New York City Department of Transportation (NYCDOT) for the siting of electric vehicle stations in Brooklyn
• To support the hardening of our existing waterside terminals, I will commit capital funding to the City of New York to build upon and expand waterfront resiliency infrastructure
• I will advocate for future New York City street furniture, wayfinding, LinkNYC, muni-meters, and street lamp procurement to incorporate electric charging capacity

In addition, the following should be a part of any comprehensive approach to Brooklyn’s fueling future:

• **Governor Cuomo’s Fuel NY initiative should be expanded to provide backup power supply at every fueling station in the borough**
  o This expansion should incorporate solar panels, wind-power, and/or backup batteries that are not reliant on the main power grid to operate or generators to operate
• To help New York State comply with the Zero Emissions Vehicle (ZEV) Program Implementation Taskforce, **Empire State Development (ESD) and New York City Economic Development Corporation (NYCEDC) should create incentives for businesses to retrofit existing stations with new electric vehicle, hydrogen, and CNG stations**
• Congress should renew the Federal Alternative Fuel Infrastructure Tax Credit that expired at the end of 2016 at the same 30 percent credit or higher for coastal stations and depots that also increase resiliency as part of the infrastructure upgrade
• **The New York State Alternative Fueling Infrastructure Tax Credit should be renewed upon expiration at the end of 2017 while also increasing the current incentive of up to $5,000, which is insufficient and should at least be doubled.** This is particularly important given the expiration of federal incentives and the decreased chance of renewal at the federal level under the current administration.