Under the Hood
A Look into New York City’s Auto Repair Industry

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PRATT CENTER
FOR COMMUNITY DEVELOPMENT
Overview

New York City is well known for several high-profile industries including finance, real estate, and film and TV. The city’s economy though is infinitely more complex; comprised of a large variety of sectors that often remain unnoticed by policy makers. But these less visible sectors often provide essential goods and services, from cement and heating oil to architectural metalworking and elevator repair, which are critical to the functionality of the city. **One of these industries is the auto-repair sector, which employs approximately 10,600 people across the five boroughs.**

As of 2015, there were 4,246 motor vehicle repair shops licensed by the New York State Department of Motor Vehicles (NYS DMV). Motor vehicle repair businesses—mechanical and body repair shops—are an important source of employment for people who typically face barriers to well-paying jobs including people of color, immigrants and those with limited educational attainment. Positions in the auto sector pay better than other jobs that do not require a formal degree, such as restaurant and retail work. The average annual wage for auto repair jobs in New York City is $44,000, compared to $25,000 for food preparers.

Auto repair businesses tend to locate near major highway corridors in active clusters that provide competitive advantages for both the businesses and their customers. **Despite providing an important source of employment, auto businesses are often under threat from changing land uses, rising real estate prices, and hostile permitting conditions.** As individual businesses are displaced, the negative impacts ripple through the clusters. Relocation is difficult: as a designated “heavy use group” these businesses are reliant on space zoned for intense commercial (C8) or manufacturing use for their operations, zoning designations that have frequently been rezoned for other uses over the past several decades. As less of this land is available for auto-related uses, these businesses and jobs are increasingly at risk. For those that can relocate, it is often very difficult to replicate the benefits achieved by the initial clustered location.

In several neighborhoods, real estate pressure has been exacerbated by the de Blasio Administration’s Housing New York plan which includes the rezoning of neighborhoods with high concentrations of auto businesses to encourage residential development. Real estate pressure, even when it is focused on areas adjacent to auto clusters, will likely herald displacement as a result of rising commercial rents and changing neighborhood character. Willets Point in Queens, Atlantic Avenue in East New York Brooklyn, and Jerome Avenue in the Bronx are examples of the challenge presented for the industry. Yet there has been no formal economic planning for the auto repair sector to mitigate these impacts.

**Positions in the auto sector pay better than other jobs that do not require a formal degree, such as restaurant and retail work.**

In recognition of this threat, and growing out of work with the Bronx Coalition for A Community Vision and its member organization, the United Auto Merchant Association, Pratt Center for Community Development has developed this issue brief to shed light on the value this sector holds for the city, in particular for immigrants and people of color. Pratt Center recommends that before any additional rezonings proceed, the City should conduct a comprehensive study on the industry to better understand the pressures facing the auto sector and develop necessary policies and programs to adequately address the sector’s needs.

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2. According to New York State law, any business that is wholly or partially engaged with repairing or diagnosing motor vehicles and/or those that appraise, evaluate or estimate the extent, value and need of motor vehicle repairs is required to be registered by the NYS Department of Motor Vehicles (NYS Department of Motor Vehicles). Motor vehicle repair shops do not include auto dealerships, audio or accessories stores, shops that sell only tires, taxi or limo dispatchers or auto part retail shops, such as Auto Zone.
Auto Repair Shop Employment

According to the U.S. Bureau of Labor Statistics, there are 10,594 auto repair employees in New York City, an increase of 15% since 2010.4 Available data reveals that 75% of auto workers are people of color and more than 64% are foreign-born; significantly higher representation than that in the city’s labor force overall with 59% and 46% respectively.5 The auto repair industry also provides employment for those with limited educational attainment: 68% of employees have a high school diploma or equivalent or less.6

Careers in the auto industry provide decent wages. The average annual wage for auto occupations in New York City is $44,000.7 Of the 21% of auto repair employees who earn more than $60,000 a year, half have a high school degree or less.8 By comparison, food preparation and retail—two industries that employ large numbers of individuals with a high school degree or less—have average annual wages $20,000 less a year.9 In fact, the auto repair industry offers a higher percentage of middle wage jobs (earning between $40,000 and $60,000) relative to the city’s overall labor force (see Figure 1).

Despite this source of well-paying jobs, particularly for individuals that typically face high barriers to employment including people of color, immigrants and those with a high school degree or less, there has been no formal planning for this sector. This is particularly problematic in light of the numerous proposed zoning changes and real estate pressures impacting the city’s main auto repair corridors. When auto businesses are displaced and jobs are lost, alternative employment opportunities are not often of the same quality.

Source: ACS PUMS 5 Year Estimates, 2014

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5. ACS PUMS 5 Year 2014
6. ACS PUMS 5 Year 2014
7. NYS Department of Labor Occupation Employment Statistics 2015
8. ACS PUMS 5 Year 2014
9. NYS Department of Labor, Occupation Employment Statistics 2015
How and Where Auto Repair Shops Operate

New York City has made long and critical strides to improve mass transit and to reduce reliance on cars, a trend that Pratt Center strongly supports as vital to a sustainable city. Yet many individuals and businesses depend on personal transportation for daily needs. In the five boroughs, there were 2,057,433 registered vehicles in 2014 (the most recent available data), an increase of over 41,000 vehicles from 2013, creating significant demand for a robust and skilled automotive repair sector.

Auto businesses tend to cluster around major highways and arterial roads (see Figure 2). Major auto clusters currently exist along the Cross Bronx and Bruckner Expressways in The Bronx, the Gowanus Expressway and Atlantic Avenue in Brooklyn, Northern Boulevard and the Queensborough Bridge in Queens, and under the approach to the Bayonne Bridge in Staten Island, to name a few. Proximity to these major roadways enables customers and tow trucks to easily bring vehicles in for service, a critical locational asset.

FIGURE 2
DMV-licensed Auto Businesses and Relationship to Major Thruways

10. NYS Open Data Department of Motor Vehicles 2014
On a more granular scale, the auto repair sector is highly clustered in corridors (see Figure 3). The clustering of auto businesses along corridors provides another competitive advantage: multiple businesses operating in one area facilitates the purchasing of products and services from one business to another and keeps prices competitive for customers who can quickly and easily find a range of goods and services in one location. It also attracts customers to an area with the knowledge that their service need has a high chance of being met by at least one establishment in the district.

The benefits of this clustering extend to auto-related economic activity outside of DMV-licensed shops as well, and include businesses such as auto retail establishments that do not require the same heavier zoning. To illustrate, the Jerome Avenue corridor in the Bronx that the City proposes to rezone contains 102 shops that are licensed by the DMV for repair. Yet a field survey of the area identified a total of 156 auto-related businesses.\(^{11}\) This represents an additional increment of 53% of firms whose economic livelihood is associated with and supported by the repair cluster. Although it is not possible to ascertain whether this ratio of associated auto activity is the same for all repair clusters without a more in-depth study of additional corridors, for every cluster of DMV businesses

\(^{11}\) This number excludes the number of parking establishments and gas stations. Were these to be included, the associated number of auto-related firms in the area would be 198.
FIGURE 4
Council Districts with Highest Numbers of DMV-licensed shops

<table>
<thead>
<tr>
<th>Rank</th>
<th>Council Member</th>
<th>District</th>
<th>No. of Businesses</th>
<th>Housing NY Study or Zoning Proposal</th>
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<tbody>
<tr>
<td>1</td>
<td>Van Bramer</td>
<td>26</td>
<td>303</td>
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<td>2</td>
<td>Miller</td>
<td>27</td>
<td>202</td>
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<td>3</td>
<td>Rose</td>
<td>49</td>
<td>195</td>
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<tr>
<td>4</td>
<td>Crowley</td>
<td>30</td>
<td>181</td>
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<td>5</td>
<td>Menchaca</td>
<td>38</td>
<td>178</td>
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<td>6</td>
<td>Ferreras-Copeland</td>
<td>21</td>
<td>168</td>
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<td>7</td>
<td>Williams</td>
<td>45</td>
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<td>8</td>
<td>Salamanca</td>
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<td>King</td>
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<td>Wills</td>
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<td>111</td>
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<td>Barron</td>
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<td>16</td>
<td>Vallone</td>
<td>19</td>
<td>101</td>
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<td>Vacca</td>
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<td>Greenfield</td>
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<td>Gibson</td>
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<td>Reynoso</td>
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<td>Koo</td>
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<td>Mark-Viverito</td>
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<td>x</td>
</tr>
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There is likely to be a larger and more diverse cluster of auto-related businesses. Accordingly, the forces that impact cluster health and vitality will also impact the associated businesses, regardless of the zoning their establishment requires.

Similarly, forces that disrupt clusters may have a greater effect on employment than formal data sets would indicate. From the outside, an auto repair business may appear to be just that, one business engaged in fixing motor vehicles. On the inside, however, a single auto repair shop may actually be home to multiple individual businesses, increasing the small business density of a particular corridor. The primary tenant of a shop, for example, may sublease a lift space to other independent auto repair people as subtenants, some of whom may not be officially licensed or incorporated. These subtenants can have their own independent client base or receive excess work orders from the primary shop owner. Auto body shops each have their own employees, but they will also hire contract workers to handle increased work volume. Since both primary and subtenants hire contract workers, it is difficult to approximate the exact number of jobs at any given establishment. Therefore, it is likely that since contract workers and non-licensed establishments are not adequately represented in publicly available data sets, the reported number of businesses and the number of employees is misleadingly low.

As auto corridors are undermined by real estate pressure and land use changes they become less effective as the cluster of businesses starts to dissipate. When looking to find another optimal area and therefore maintain these advantages, it is increasingly difficult for multiple businesses to relocate together due to a constrained real estate market.

Auto repair clusters are both dense and long, and form in configurations that often cross political jurisdictions. For example, the tightly packed Jamaica auto cluster is governed by three Council Districts, while the Atlantic Avenue corridor stretches across seven. The multi-jurisdictional pattern of the clusters adds to the challenges of planning for the sector and suggests the need for a citywide cross-district approach. A distributional look at the shops by Council District shows that 25% of DMV auto shops are in the top five districts, while overall 80% percent of all DMV shops are located in approximately half of Council Districts. Because of this heavy clustering, actions that impact shops in these districts will have a disproportionate effect on the sector as a whole.
Auto repair businesses are permitted to operate in areas zoned C8 or M, two zoning districts that are geared to commercial and industrial activities and prohibit housing. This division of uses minimizes conflicts that may arise between residents and businesses that rely on numerous vehicles and trucks to function. Yet simply having compatible zoning does not fully mitigate the challenges that real estate pressure poses for the sector. These challenges derive from multiple sources: competing uses within the zone, sharply heightened pressure when zoning is changed (directly and/or nearby), and dwindling available land supply, with even fewer sites available for accommodating the clustering needed for businesses to succeed.

The Impact of Land Use Actions & Real Estate Pressure on the Auto Repair Sector

The de Blasio Administration has proposed a series of actions that will have a major impact on the auto sector citywide. Of the 15 Council Districts that are home to more than half of the city's DMV shops, 40% have a Housing New York study or rezoning proposal underway (See Figure 4). Decisions about actions that will strengthen and support, or otherwise disrupt or cause to displace, clusters should be informed by citywide knowledge of distributional patterns and needs and the amount of car repair capacity that the city as a whole requires, alongside local considerations.

The history of highway development and also that of zoning have contributed to the uneven distribution of auto repair shops throughout the city. Having never been valued by municipal planners, the auto repair industry has clung on in harsh conditions to provide services in areas that were historically targeted for disinvestment, often the same communities in which auto workers live. The lack of investment in facilities that have adequate space and proper environmental controls have made tenant auto businesses an easy target to blame for what is actually the consequence of poor planning.

To ensure that workers and community members living near auto facilities have access to a safe workplace, protection from pollution, and access to walkable streets requires investment, education and services for workers, and design solutions to address potential conflicts.
Under the zoning in which they are permitted to operate, auto repair businesses face competition from other allowed uses that can pay higher rents. The differential in land value for competing uses in these zones can be quite substantial. For example, in the proposed Jerome Avenue rezoning area, where currently an active auto cluster exists, commercial businesses that can also locate in the area, including self-storage, restaurants and retail establishments, have market values for space that are as much as five and a half times that of an auto business (see Figure 5). This illustrates how little economic incentive a land owner has to rent to an auto shop, and this differential can be expected to increase dramatically if more residential uses are allowed nearby, as businesses that can pay higher rents seek to capitalize on the expanded consumer market.

When the City rezones an area with numerous auto repair businesses to allow housing, the market conditions that previously supported these businesses change, often rapidly. If an area is rezoned to an R (residential) district, new auto uses will not be allowed to move into the area, but existing auto uses can legally remain. In practice, however, since the new zoning allows substantially higher-paying uses, such as housing or commercial businesses that support a new residential population, auto businesses can rarely afford the higher rents that landlords begin to demand. As auto businesses leave the area as a result, their absence has a multiplying effect on the deterioration of the cluster. Whether other auto businesses are located in C8, M, or are grandfathered in new R zones, and regardless of whether they have an affordable rent, the reduction in the cluster reduces the attractiveness to customers. Disruption of auto clusters triggers a cascading negative effect.

While the scale of any given corridor may seem small in the context of the entire city, locally the corridors represent critical hubs for auto repair businesses and jobs. Unemployment in many of these areas is already high: the Jerome Avenue rezoning area unemployment is 17%\(^{12}\) and in the East New York rezoning area that also has an auto cluster it is 19%\(^{13}\). Rezonings will place extreme real estate pressure on these companies to close or relocate, resulting in job losses for local residents.

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12. NYC Department of City Planning, Jerome Ave Neighborhood Profile
13. East New York Neighborhood Rezoning Community Plan
Relocating a business is never an easy endeavor. Moving expenses and disruptions in a company’s customer base and workforce can be difficult to manage. Even if an auto business attempted to move to an adjacent C8 or M zone, the same vulnerabilities to competing use groups (e.g., retail, restaurants, office, and industrial uses, etc.) would exist. And, auto uses face another real estate challenge in that they typically require ground floor space to accommodate vehicle access, further limiting their options when searching for new space in which to operate.

Finding such space is increasingly difficult. Between 2009 and 2015, there has been a decrease of 10 million square feet of land zoned as C8 and a decrease of 98 million square feet of land zoned as M.14 Today, C8 zones represent only 1% of available land in NYC and M zones only 14%.15 Without a comprehensive strategy to retain auto and other industrial businesses, quality jobs for New Yorkers with typical barriers to entry will be at risk.

Permitting Difficulties Add Another Challenge

An additional challenge for auto businesses is that they frequently operate in a building with an inaccurate Certificate of Occupancy (C of O). The New York City Department of Buildings (DOB) issues C of Os, a document that states a building’s legal use and/or permitted occupancy. Auto repair businesses are required to operate in buildings with a C of O specifically for auto repair. Technically the New York State Department of Motor Vehicles requires a correct C of O to issue an auto business license; however, a random sampling of a DMV data set found approximately 49% of licensed auto repair shops with inaccurate C of Os.16 Auto businesses with inaccurate C of Os are subject to fines from the DMV and a number of City agencies including the Department of Consumer Affairs, Department of Buildings, and the Fire Department.

Changing a C of O is a difficult and lengthy process and must be done by the landlord. It requires a building inspection, attendance at a public hearing and submission of paperwork to DOB. Often, an auto business that is renting space is unaware of the need to verify that their landlord has the correct C of O, even though the auto business is the entity that is subject to a majority of the fines. This leaves little incentive for a landlord to initiate the process to correct a C of O.

In a rezoning area this challenge multiplies. Since auto uses would no longer be permitted as-of-right in an area that was rezoned to a residential district, a new C of O would only be obtainable if there were existing permit filings on record with the DOB proving that an auto repair shop has been operating previously at that location. This added regulatory hurdle, coupled with the fact that a landlord would likely be able to command much higher rent from a different commercial use, paves the way for auto businesses and their employees to be displaced.

In the Jerome Avenue rezoning area, the Department of City Planning (DCP) has noted that auto businesses will likely be displaced as a result of the rezoning. In recognition, DCP has identified several small adjacent areas zoned C8 or M1 where they believe Jerome Avenue auto businesses can locate. Yet these “retention” areas have a very low vacancy rate with few currently available spaces for auto businesses to move into and 70% of the buildings do not have a C of O appropriate for an auto repair operation.17 If an auto business moved into one of those spaces without the correct C of O, they would face immediate challenges for licensing and compliance.

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14. NYC DCP Zoning Designation Database 2016
15. NYC DCP Zoning Designation Database 2016
16. NYS Open Data DMV and NYC DOB Building Information System Database accessed summer 2016
Recommendations

Recommendation 1

To ensure the City maintains auto repair businesses and jobs, and has a plan to mitigate the negative impacts real estate pressure is placing on the sector, Pratt Center recommends the following:

*The City should conduct a comprehensive study on the needs of the auto repair sector before proceeding with any further rezoning of or adjacent to an auto cluster.*

The auto repair sector is a source of well-paying employment for New Yorkers and an important component of the city’s overall infrastructure. Real estate pressure throughout the five boroughs is placing a significant burden on auto businesses, threatening to displace businesses and jobs and upend long standing industry clusters that provide competitive advantages. Before City actions, including rezonings, proceed and exacerbate these pressures further, a comprehensive study should be completed to better understand the challenges the sector faces and identify strategies to mitigate negative impacts. This study should include best practices for worker and environmental protection.

Recommendation 2

To address the challenges auto businesses face from C of O violations, often beyond their control, Pratt Center recommends that the NYC Department of Buildings develop the following:

2A *An amnesty program for auto repair businesses currently out of compliance that would make permitting possible without an appropriate C of O.*

2B *An assistance program designed to help owners of spaces occupied by auto repair shops easily change their C of O to reflect current auto operations.*

Conclusion

Auto businesses are a critical part of New York City’s complex economy. They provide much needed services to residents and are a source of well-paying jobs for people of color, immigrants and those with limited educational attainment. Real estate pressure is occurring along active auto corridors, including those in and adjacent to the de Blasio Administration’s proposed neighborhood rezonings. As these neighborhoods transition to residential use, rising rents and a changing neighborhood character will place significant real estate pressure on auto businesses, forcing many to close and jobs to be lost, unless the City puts a plan in place to mitigate this risk.

17. Department of City Planning PLUTO, NYC DOB Building Information System Database accessed summer 2016
Methodology

To develop this Issue Brief, the Pratt Center employed multiple available data sources. These include:

- **New York State Department of Motor Vehicles (DMV) data set**: The 2015 data set provides the most accurate count of businesses engaged specifically in auto repair or body work and lists the date of license issuance and expiration. Pratt Center conducted analysis on a random sampling of this data.

- **U.S Bureau of Labor Statistics Quarterly Census on Employment and Wages (BLS QCEW)**: This data set provides information on both the number of businesses and employees in this sector. This data is reflective of businesses that self-identify as auto repair, and may include a wider range of businesses than the DMV data set. This data set includes job counts that the DMV does not.

- **The NYS Bureau of Labor Statistics Occupation Employment Statistics (OES)**: This data set was used to assess the auto repair and other industry annual wages.

- **New York City Buildings Building Information System (BIN)**: This data set was used to identify whether properties occupied by an auto shop had the correct Certificate of Occupancy.

- **The Field Study conducted in the proposed Jerome Study Area was performed by Department of City Planning in 2014 and provided to Pratt Center for Community Development.**

- **Market Value figures are derived from a sample set of each use on the chart within the Jerome Rezoning area and are averages of ratios of Department of Finance Market Value FY17 per square foot.**

- **Public Use Microdata Sample (PUMS)**: this data set, issued by the U.S. Census American Community Survey, provided cross tabulated information on the demographics of auto sector employees including race, education, wages, spoken language and place of birth. Auto sector occupations were defined by the following SOC codes for this data set:
  - 7150 .RPR-Automotive Body and Related Repairers
  - 7160 .RPR-Automotive Glass Installers and Repairers
  - 7200 .RPR-Automotive Service Technicians and Mechanics
  - 7210 .RPR-Bus and Truck Mechanics and Diesel Engine Specialists
  - 7220 .RPR-Heavy Vehicle and Mobile Equipment Service Technicians and Mechanics
  - 7240 .RPR-Small Engine Mechanics
  - 7260 .RPR-Miscellaneous Vehicle and Mobile Equipment Mechanics, Installers, and Repairers
Staten Island Auto Businesses by Council District
Manhattan Auto Businesses by Council District

- DMV Licensed Auto Businesses
- City Council Districts
Bronx Auto Businesses by Council District

DMV Licensed Auto Businesses
City Council Districts
Brooklyn Auto Businesses by Council District

DMV Licensed Auto Businesses

City Council Districts
Queens Auto Businesses by Council District

- DMV Licensed Auto Businesses
- City Council Districts