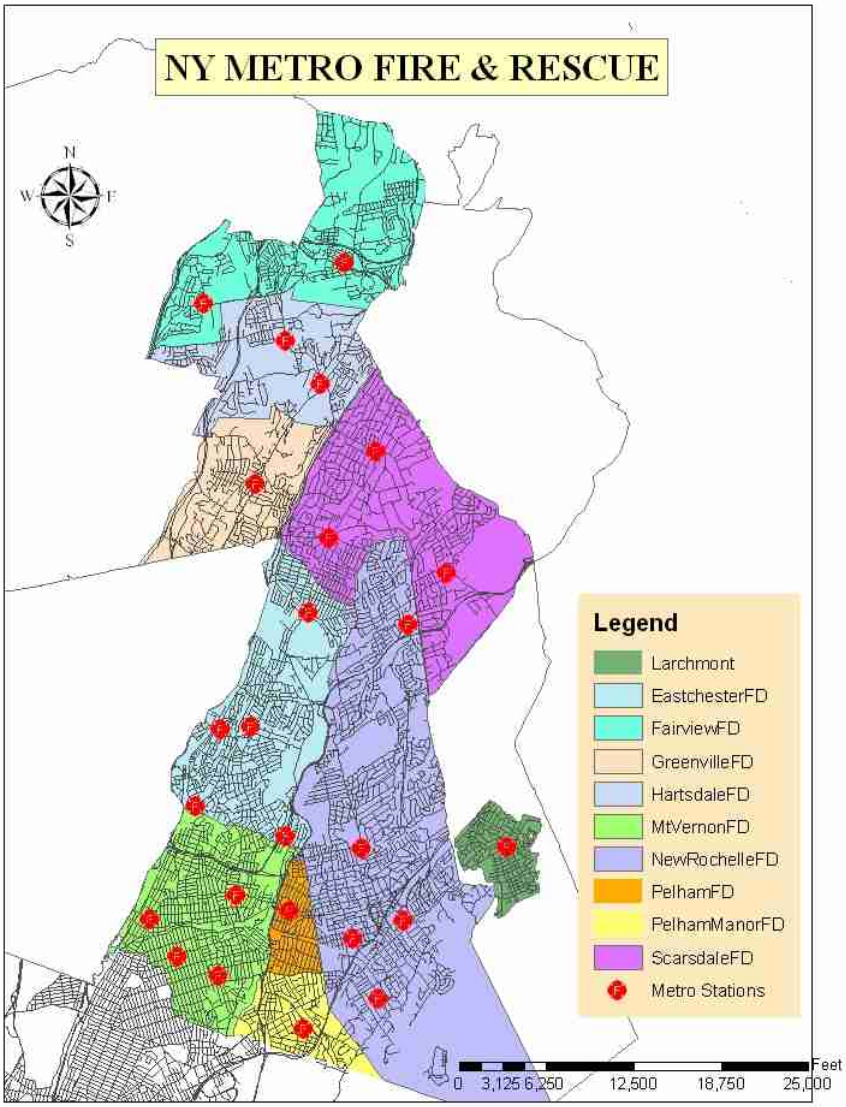
Fire Services of Southern Westchester County: A Case for Consolidation



Prepared by

The Edwin G. Michaelian Institute for Public Policy & Management

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Fire Services of Southern Westchester County: A Case for Consolidation

A research study prepared by

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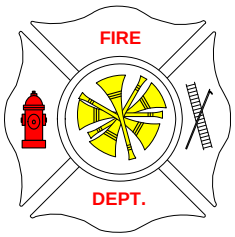

Westchester County Career Fire Chiefs Association

June 25, 2009

On behalf of the Westchester County Career Fire Chiefs Association, I would like to thank the following Fire Departments for their participation in this study:

Eastchester Fire Department – Chief Michael Grogan
Fairview Fire Department – Chief Robert Mauro
Greenville Fire Department – Chief Daniel Raftery
Hartsdale Fire Department – Chief Walter Schoonmaker
Larchmont Fire Department – Chief Richard Heine
Mt. Vernon Fire Department – Chief Al Everett
New Rochelle Fire Department – Fire Commissioner Raymond Kiernan
Pelham Fire Department – Chief Curtis Taylor
Pelham Manor Fire Department – Chief Joseph Ruggiero
Scarsdale Fire Department – Chief Tom Cain

And with special recognition for their support:

White Plains Fire Department – Chief Richard Lyman
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Yonkers Fire Department – Assistant Chief William Fitzpatrick

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Michael A. Genito, Director
Brian Nickerson, Ph.D., J.D.
Lester Steinman, J.D.
Captain Barry Nechis – New Rochelle Fire Department

Sincerely,

Chief Keith E. Fennelly (Ret)
President, WCCFCA

INTRODUCTION

Purpose of This Study

The purpose of this study is to explore the feasibility of enhancing cooperation or of consolidating fire departments and districts in Eastchester, Fairview, Greenville, Hartsdale, Larchmont, Mount Vernon, New Rochelle, Pelham, Pelham Manor, and Scarsdale. The Edwin G. Michaelian Institute for Public Policy & Management was retained by the Career Fire Chiefs Association Ltd. (CFCA) to examine the operational and logistical, financial and legal dimensions of the possibility of creating one consolidated district among participating communities.

From the outset, the CFCA has been motivated by a desire to improve fire services in their communities and wanted an objective assessment of the issues associated with consolidation. The CFCA actively consulted with various constituencies and entities during the lengthy study process and voluntarily provided necessary information to conduct this study. In short, this was a cooperative effort and the CFCA should be commended for its effort.

Study Methodology

The study team[1] essentially followed a two-part process in developing this report:

Step 1: Establishment of Research Protocol

A) Conducted a series of facilitated group sessions consisting of key fire service leaders in the subject communities.
B) Created on-going working groups around key issues of cooperation and consolidation.
C) Met individually with each subject department and related entities to discuss issues of concern.

Step 2: Conducted an Extensive Study of Fire Service Inter-Municipal Cooperation

A) Conducted an extensive review and analysis of the professional and academic literature on best practices of fire service cooperation.
B) Identified relevant models of successful inter-municipal fire service cooperation.
C) Conducted extensive field interviews and visits with the subject communities.
D) Obtained relevant public documents (budgets, contracts, etc.) for each of the communities.
E) Produced draft and final reports for review by CFCA.

This report contains several key sections. The first sections provide a brief overview of fire service issues in Southern Westchester followed by a general discussion of advantages and disadvantages that consolidation might offer communities. These broader discussion sections are followed by the core analytical areas of this report – the specific operational and logistical, financial, and legal

[1] The members of the study team are listed in Appendix A.

dimensions associated with the possible creation of a consolidated fire district for the subject communities.

The operational section details the major components (personnel, engines, equipment, stations, and run times) of consolidation for each participating community using Arcview mapping software. The financial section provides analysis of the cost of running a consolidated district under different personnel scenarios as well as discussing the related issues of taxing, assessment, equalization, the "2%" New York State Fire Insurance issue, and professional accounting standards. The next section focuses upon the legal issues created by possible consolidation including legislation required for consolidation, 207-a (line of duty injury leave) cases, status of *Vulcan* decrees, union contracts and the transfer of existing assets and liabilities into a new district.

The first two sections of the report are followed by another section that outlines additional areas of concern related to unions, volunteers, neighboring communities, political pressures and the mutual aid system. The final chapter details a process model for fire department consolidations as presented in the professional literature.

Several appendices complete this report with information and resources that the reader may find useful.

Special thanks to the Fire Chiefs, who provided guidance and input, and to the members of the study team: Brian Nickerson, Ph.D., J.D.; Lester Steinman, J.D., and Fire Captain Barry Nechis.

- Michael A. Genito, Director

EXECUTIVE SUMMARY

Overview

The 10 departments studied protect a resident population of 247,094 covering an area of 49.47 square miles. If this area was a city it would be the third most populated city in New York State[2] following New York City and the City of Buffalo. Currently, these 10 departments operate 130 vehicles out of 25 fire stations with 604 uniformed firefighter positions (599 of which are filled and 5 of which are vacant) and 24 civilian employees at a cost of $88.1 million per year.

The study looked at both enhancing cooperation and the possibilities of consolidating services. The study group quickly determined that all of the departments work well with each other, with several departments sharing the cost of training and communications. Joint purchasing is an additional area to consider, but the cost savings are relatively nominal (less than $100,000 per year).

Consolidation would significantly improve fire prevention and suppression services with the potential to save substantially more money over time.

NFPA Standards and Cost Considerations

The National Fire Protection Association (NFPA) 1710 Standard (*Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments*) along with standards developed by the International City/County Management Association (ICMA) and the Insurance Services Office (ISO) are used to determine proper staffing levels and response times. A consolidated district would be able to meet these standards with the existing roster of 604 approved (599 of which are filled) positions. However, if the 10 departments attempted to meet these standards individually they would require 504 additional positions at an annual cost ranging from between $40 million and $52 million.

Fire apparatus is an area where both response and costs can be dramatically improved. The current configuration reveals that staffing is not sufficient to provide a four-minute response time for the first engine and a 22 member response within eight minutes of a first alarm call. The equipment and staffing currently available for such a response includes 28 engines, 14 ladders, 5 rescues and 9 battalions. A consolidated district could reduce this to 19 engines, 12 ladders, 2 rescues and 4 battalions. These reductions would result in the following estimated savings:

1) With equipment replacement costs ranging from $600,000 for an engine to $1.3 million for a tower ladder[3], a consolidated district would save approximately $1.7 million per year. Standardized and group purchasing would save an additional $20,000 - $40,000 per vehicle (approximately $75,000 per year).

[2] *Census 2000*, United States Census Bureau.

[3] These figures are based on a fully equipped engine or tower ladder. Some departments have purchased for less, but this appears to be the 2009 costs for quality apparatus.

2) Fewer apparatus reduces insurance maintenance costs. It reduces the number of support personnel needed to maintain the vehicles and the equipment on it and staff to dedicate time on purchasing replacement units.

3) Fewer apparatus, reduces or eliminates the need for expansion or renovation of existing fire stations. The majority of the stations are 50 to 100 years old. Many were not designed to handle modern fire apparatus (more than half were designed for horse drawn apparatus). The study identified a one time savings of approximately $19 million.

Consolidation Advantages

- Manning per unit would be a minimum of three firefighters and one officer (Lieutenant or Captain) an improvement in all departments by one to three additional members.
- Manning per response on a first alarm (structural fire) would improve to a minimum of 16 firefighters and 6 officers (including a chief officer). This is an improvement of 6 to 19 additional firefighters and officers per response.
- Improved supervision with all apparatus to have an officer, and all stations to have a company commander who will be responsible for the station.
- The improved manning and supervision dramatically improves the safety for both firefighters and the general public.
- Improved ISO ratings provide reduced insurance rates for homes and businesses, with an estimated value of between $14 million and (with a change in state insurance regulation already enacted in 38 states and expected in New York State) a maximum of $47 million *annually*.
- Volunteers provide or have provided service to each of the fire departments in this study. Some communities, including Eastchester, Mount Vernon and New Rochelle no longer have volunteers that participate in emergency response; others have dwindling numbers.
- The New York State Commission on Local Government Efficiency and Competitiveness may provide substantial grant funding to facilitate the planning and implementation of a consolidated fire district.
- Consolidation would provide a proactive approach to reducing costs while improving services, inimizing the impact of mandates currently being considered or proposed at the state level, such as property tax caps and minimum fire service staffing requirements.
- Financial savings as listed elsewhere.

Consolidation Disadvantages

- Individual fire departments will cease to exist under a consolidated district (loss of autonomy).
- Fire services in the northeastern part of the United States have a history of working in a home rule environment, different from the regional approach used in other parts of the country and many countries in Europe.

- There are a number of legal challenges that need to be addressed, including enabling legislation, establishing joint fire districts, disbanding fire districts, service awards programs, transfer of capital assets, line-of-duty injury benefits, the Vulcan Consent Judgments and Union Contracts.

FIRE SERVICE IN SOUTHERN WESTCHESTER

Background

Starting in the 1980's, the mutual aid system in Southern Westchester was showing some signs of tension. The concept of mutual aid is to provide technical and logistical support to a neighboring community during and after a significant emergency beyond the capabilities of that community.

In the wake of the September 11, 2001 terrorist attacks, the Westchester County Career Fire Chiefs Association (WCCFC) agreed to establish squad companies and have these squads train together. They trained in Hazardous Materials (Hazmat), Weapons of Mass Destruction (WMD) and Technical Rescue (building collapse, trench and confined space rescue). It was during one of those squad training days that the career chiefs discussed mutual aid, and what some of them perceived as an imbalance in the sharing of mutual aid resources. The chiefs concluded that this imbalance would always exist due to the fact that some departments did not receive the needed resources from their respective governmental authorities. The chiefs decided to study the issue of uneven fire service protection among neighboring communities in Southern Westchester.

The Fifth District of the New York State Professional Firefighters Association had performed a basic study of consolidated fire service that appeared to improve the situation for five departments. However, that study did not go into sufficient operational detail, did not cover the full geographic area in question, and did not secure the political support of the public or elected officials. Nonetheless, the study did show that a consolidated fire service required substantially fewer firefighters to provide improved/superior service to the area in question.

Subsequent to this initial study, the career chiefs asked State Senator Nicholas Spano (R – Yonkers) for state funding to produce a more in-depth and independent study of potential fire service enhancements, including consolidation. Senator Spano was able to provide a grant that allowed the career chiefs to retain the Edwin G. Michaelian Institute for Public Policy and Management to perform a detailed feasibility study which examines the operational, financial, and legal dimensions to fire district/department consolidation. The Michaelian Institute is a non-partisan academic research and management support center within Pace University.

After several meetings among the chiefs, it was agreed that the study scope should include an evaluation of the performance, efficiency, effectiveness, safety, and cost of fire prevention and suppression in a consolidated fire district. NFPA 1710 would be the principal performance benchmark standard by which the operational and logistical components of the study would be measured.

NFPA 1710 is based on the fire propagation curve (which shows how fast fire will spread from the room or origin to the remainder of the structure) and on the American Heart Association (AHA) standards on preventing death/disability in patients who have stopped breathing. The most salient components of NFPA 1710 are:

1) All engine and ladder companies shall be staffed with a minimum of three firefighters and one officer.

2) An engine shall arrive within four minutes of an initial report of an emergency 90% of the time to fires and medical emergencies.

3) A first alarm response to a structural fire would be made with a minimum of 16 firefighters and officers within 8 minutes 90% of the time. For this standard, a structure is defined as a 2,000 square foot, two-story single family occupancy without a basement and with no exposures (detached home). Larger structures, high life hazards (hospitals, schools, nursing homes, multiple dwellings) and high hazard locations (factories, chemical storage facilities, special properties) require additional personnel in a first alarm response.

Additional standards that were considered in this study include the International City/County Management Association (ICMA) *Fire Service Administration* textbook and the Insurance Services Office (ISO) rating system. The ISO's Public Protection Classification (PPC) is an objective review of those features of public fire protection that have significant influence on minimizing damage once a fire has occurred. All 34,000 fire departments in the United States are rated by the ISO on a 1 to 10 scale, with 1 being the best rating and 10 being the lowest (where there is no fire department). This rating is the oldest fire service standard used in the United States and is the primary factor used by insurance companies in setting fire insurance premiums. For each PPC number reduction there is an approximate 8% reduction in property insurance premiums, which could amount to millions of dollars in savings for businesses and homeowners, depending on the characteristics of a particular community. It should be noted that less than 50 of the 34,000 departments in the United States have an ISO rating of 1. The changes needed to improve an ISO rating are closely correlated to improvements in the efficiency and effectiveness of a fire department. Studies have indicated that departments with better ratings have reduced death and injury rates of both fire service personnel and civilians[4].

The ISO ratings for the 10 departments in this study range from a 4 to a 2. It is feasible that consolidation would result in an initial ISO rating of two for the entire district and it is conceivable to achieve an ISO rating of one once a consolidated district is in effective operation for a period of time. Consequently, homeowners and businesses could see reductions in their insurance premiums, which would in turn will help communities in the district become more affordable.

Issues with Mutual Aid

Within the last several years, there have been multiple incidents that highlight the deficiencies of the current mutual aid system to adequately provide effective fire service. They are:

[4] "1995 I.S.O. grading and the relationships to fire losses, deaths and injuries by selected cities" by Austerman, Carl R., et al Emmitsburg, MD: National Fire Academy, 1996,

January 25, 2005 Yonkers, New York

On Tuesday, January 25, 2005 at approximately 6:54 pm Yonkers Fire Department received a call for a fire at 100 Carol Avenue (overlooking Van Cortlandt Park in the Bronx). The call was for a fire in apartment 1A. This building is a seven (7) story 100 ft. by 100 ft. ordinary apartment building. Ordinary construction means that the exterior walls are masonry, in this case brick, but all interior walls, floors and the roof are wood. There are close to 1,000 of this style building in the 10 communities in this study, with no community lacking this type of construction. These buildings were generally built between 1920 and 1960, they have numerous shafts and other spaces for hidden fires and they are not protected with sprinkler systems. They are notorious for very rapid fire spread.

When the first Yonkers fire units arrived on scene, they reported a working fire with people coming down the fire escapes. The battalion chief requested another engine. This was at 6:59pm. Over the next 10 minutes, the battalion chief ordered a 2nd, 3rd and 4th alarm. Within 23 minutes of arriving he had requested a 5th alarm, a recall of off duty members and mutual aid.

Within 25 minutes of requesting the 5th alarm. All firefighters were evacuated as fire had taken hold of the 1st through 4th floors. In the first 45 minutes of this fire approximately 100 civilians were rescue via both ground and aerial ladders. This herculean effort to remove these civilians could not have been accomplished in any other Westchester community and the Yonkers Fire Department's response prevented this incident from becoming a massive fatal fire. In fact only minor injuries were reported.

Over the next two and a half (2½) hours the fire continued to expand and the fire went up to nine (9) alarms with 22 engines and 11 ladders from Yonkers and mutual aid from Eastchester, Fairview, Greenville, Mt Vernon, New Rochelle, Pelham, Pelham Manor and FDNY (NY City). Bringing the total units on the scene to over 30 engines and 14 ladders. Recalled Yonkers firefighters were able to man three spare engines and two spare ladders to cover the rest of the city.

By 10pm the building had collapsed and was declared a total loss. The lesson that everyone in Westchester learned that day was without being able to place a high number of well coordinated firefighters on the scene within the first 30 minutes this fire would have set a new record for the number of lives lost. Mutual aid was useless in saving lives at this incident as it would have taken too long to arrive. All of the departments in this study have the potential for this incident, but none have the resources.

Hundreds of similar size and constructed apartment buildings exist in every district in this study. None of the departments can adequately handle a similar fire, even with mutual aid. In the event a similar fire scenario develops with the subject districts, the potential for loss of life exists without the ability to place dozens of apparatus and fifty to one hundred firefighter's on-scene, performing in a coordinated fashion in less than fifteen (15) minutes. Current mutual aid arrangements within the 10 departments provide approximately 30 firefighters and 12 officers if all departments are called. They would respond with a total of 12 units (engines and ladders) with a response time of 10 to 20 minutes. Yonkers was able to place approximately 49 firefighters and 19 officers on the scene in that time frame.

April 4, 2006 Mount Vernon, New York

On April 4th 2006 Mt. Vernon had three unrelated working fires at the same time:

A suspicious fire in an occupied supermarket located at 220-230 South Fulton Avenue was reported at 16:26 hours (4:26 pm). Upon arrival MVFD found a heavy fire condition in the rear of the store with many people still exiting through the front door. Unknown if or how many people might still be inside and store personnel wrestling a possible arson suspect in the front of the store. MVFD had all units fully occupied for over two hours at this incident.

At approximately the same time (16:51 hours; 4:51 pm), a well-involved fire was reported in a three story, two family home located at 133 Franklin Avenue. New Rochelle Engine 23 and Pelham Manor Tower Ladder Three arrived to find a very advanced fire and requested a 2nd alarm. New Rochelle Ladder 12 responding via another street to the rear of the home witnessed a victim jumping from an upper window. Greenville Engine 151, Pelham Engine 5 and an engine and ladder from Yonkers were the primary units on this incident.

As NRFD Engine 23 was arriving at the 133 Franklin Avenue Fire, Mt. Vernon received a call for a reported house fire at 358 Union Avenue, with people trapped on an upper floor. Because all remaining mutual aid resources had only moments before been committed to the second fire, when this fire was reported additional mutual aid was requested to respond directly from their home stations to the fire scene. This caused a very troubling dispatch: Fairview was requested to send a ladder directly to the scene, with a report of people trapped on upper floors. Fairview's Ladder is more than 12 miles from the scene and would take about 20 minutes to arrive. If people were trapped they had less than three minutes to live. Meanwhile, at least seven ladders that were closer *never responded*. New Rochelle had two ladders in-service less than four miles away, Eastchester had one ladder available 3.5 miles away, and Pelham had an available ladder two miles away. So, why weren't any of these ladders sent? A basic flaw in the mutual aid plan is that each department will send only one or two apparatus because its primary responsibility is to protect the taxpayers of its home district. New Rochelle had already sent an engine and a ladder to Mount Vernon. There were still two ladder companies sitting in New Rochelle Fire Stations waiting to help people in New Rochelle, while people were potentially trapped in a fire less than 4 miles away. In larger or regional departments, the closest available resources are dispatched (i.e. the Pelham, New Rochelle or Eastchester Ladders) as opposed to those resources that may be farthest from the incident (i.e. Fairview) which, in a consolidated district, are sent instead to cover the empty fire stations. Fortunately, this was a minor dryer fire and prior to Fairview's arrival, Eastchester Engine 29 and Ladder 16 were released from the South Fulton fire and were able to respond and handle this incident.

March 9, 2008 Pelham, New York

Pelham experienced a fire in a commercial property located at the intersection of Lincoln Avenue and First Avenue containing a convenience store and a large dry cleaner store. Pelham responded with two engines, one ladder and the chief. Mutual aid was provided by several departments: Eastchester provided one engine and a chief; Mount Vernon, New Rochelle, and Pelham Manor

each provided one engine, one ladder, and a chief; Greenville provided one ladder, and the Town of Mamaroneck provided one engine to cover the Pelham Fire Station. In a properly staffed consolidated department with unified command and established response protocols, this fire would have required fewer resources traveling less distance.

Consequently, these scenarios illustrate critical problems of mutual aid, including but not limited to, lack of unified command, lack of member accountability, and lack of company integrity. These are problems that endanger public safety and substantially increase the risk of injury, death, and damage to firefighters, the public, and property. Additional concerns with mutual aid involve the span of control under a chief in a mutual aid response, the ability and/or willingness of mutual aid partners to respond when needed, and the differences in policies, procedures, and equipment among the mutual aid fire departments.

An Argument for Consolidation

Professional literature is replete with information that provides a basis for informed discussion on the advantages and disadvantages of fire services consolidation. Any informed discussion and decision process concerning the possibility of fire service consolidation should consider overall advantages and disadvantages. In order to facilitate this discussion/decision-making process, we have collected various assessments of consolidation found in the professional literature and synthesized them here. Please note, however, we identify more specific advantages and disadvantages unique to each community in the "Operational and Logistical Dimensions" section of this report.

Advantages of Consolidation

Cooperative efforts and consolidation can result in several areas of improvement, including but not limited to, cost reductions, service enhancements, improved efficiency, professional development, resource and facility improvements, and overall organizational enhancement.

Expanding the geographical boundaries of several smaller districts into a single, large consolidated district can result in an improved ISO rating[5] and lower fire insurance premiums. An overview of the ISO rating process and system can be found in Appendix G of this report.

Elimination of duplicate systems and overlap of another key benefit of departmental cooperation and consolidation. Merging or consolidating fire departments can eliminate duplication in manpower, facilities, apparatus, services, personnel training, equipment, and political and fiscal resources.[6] Cooperation can help to reduce service disparities among the involved localities.[7]

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[5] Thompson, Stephanie, "Spotting a Trend: Fire Department Consolidation," American City and County, April 1992 pp.25-29; Pepler, Jr., William "Grounds for Consolidation." Fire Service Today. December 1982. p.31. Rule, Charles. "Consolidation/regionalization: Answers to the future?" Fire Chief. Jan 1992. p 32-34; Streuli, A.V. "Consolidation of Fire Districts." Fire Journal. Nov 1970. p 15-17; Frazier, Gary. "A Solution for increased efficiency and service consolidation." National Fire Academy. March 1998.

[6] *A Systematic Approach to Fire Service Consolidation and Merger ICMA*. Management Information Publications. Washington, DC. Clearinghouse Report #40599: *Managing Fire Services*. ICMA Training Institute. 1988: Thompson, Stephanie. "Spotting a Trend: Fire Department Consolidation." American City and County. April 1992. p 25-29: -

Lastly, improved efficiency of fire protection can occur through the elimination of duplicate routes and through the improved utilization of equipment.[8] Overall, cooperative efforts have the potential advantage of limiting inefficient and ineffective redundancies.[9]

Cost reductions and savings is another area of advantage to cooperative effort among departments.[10] Cooperative efforts can help the departments involved to achieve economies of scale through an increase in department size.[11] Joint and volume purchasing provides a decrease in procurement costs for everything from daily operational supplies to long-lived fire apparatus.[12]

Savings can result from the implementation of a uniform pay scale and benefit package.[13] The creation of one central human resource department responsible for recruiting and other personnel matters can result in savings.[14] Following a merger or consolidation, costs can be spread over a larger area and there is a broader tax base from which departments can draw funding.[15] Savings and economic efficiencies can result through the creation of the right-sized management team.[16] Overall, improvements in efficiency and effectiveness can lead to increased service levels for the same level of dollars spent.[17]

Cooperative and/or consolidated efforts provide for a more efficient and improved use of resources.[18] Merger or consolidation leading to the elimination of duplicate systems and services can lead to improved response through the utilization of fewer resources.[19] Resources will be used

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Pepler, Jr., William "Grounds for Consolidation." Fire Service Today. December 1982. pg. 31: McCormick, Patrick. "Examining the Feasibility of Regional Consolidation." American Fire Journal. Feb 2000. p 22-25: Rule, Charles. "Consolidation/regionalization: Answers to the future?" Fire Chief. Jan 1992. p 32-34: -Streuli, A.V. "Consolidation of Fire Districts." Fire Journal. Nov 1970. p 15-17: Frazier, Gary. "A Solution for increased efficiency and service consolidation." National Fire Academy. March 1998: Giorgio, Robert. "The Consolidations of Consolidation. Fire Chief. Feb. 2000. pg 6-7.

[7] Gargan, John. *Handbook of Local Government Administration*. Marcel Dekker, Inc. New York: 1997.

[8] "Productivity" Fire Chief Magazine. Aug 1972

[9] Ibid.

[10] *A Systematic Approach to Fire Service Consolidation and Merger ICMA*. Management Information Publications. Washington, DC. Clearinghouse Report #40599.

[11] *Managing Fire Services*. ICMA Training Institute. 1988.

[12] Giorgio, Robert. "The Consolidations of Consolidation. Fire Chief. Feb. 2000. pg 6-7; Jensen, Alec. "Consolidations a la carte." Fire Chief. Feb 2000. pg 102- 105.

[13] Thompson, Stephanie, "Spotting a Trend: Fire Department Consolidation," American City and County, April 1992 pp.25-29; Rule, Charles. "Consolidation/regionalization: Answers to the future?" Fire Chief. Jan 1992. p 32-34.

[14] McCormick, Patrick. "Examining the Feasibility of Regional Consolidation." American Fire Journal. Feb 2000. p 22-25.

[15] Pepler, Jr., William "Grounds for Consolidation." Fire Service Today. December 1982. pg. 31-31; McCormick, Patrick. "Examining the Feasibility of Regional Consolidation." American Fire Journal. Feb 2000. p 22-25.

[16] Gary, Stewart. "One is Better Than Two: The Benefits of Local Fire Agency Consolidation," Western City Magazine. July 1999.

[17] Thompson, Stephanie, "Spotting a Trend: Fire Department Consolidation," American City and County, April 1992 pp.25-29; Rule, Charles. "Consolidation/regionalization: Answers to the future?" Fire Chief. Jan 1992. p 32-34.

[18] Thompson, Stephanie, "Spotting a Trend: Fire Department Consolidation," American City and County, April 1992 pp.25-29; Rule, Charles. "Consolidation/regionalization: Answers to the future?" Fire Chief. Jan 1992. p 32-34.; *A Systematic Approach to Fire Service Consolidation and Merger ICMA*. Management Information Publications. Washington, DC. Clearinghouse Report #40599.

[19] McCormick, Patrick. "Examining the Feasibility of Regional Consolidation." American Fire Journal. Feb 2000. p 22-25.

more effectively due to the fact that the closest available equipment will be charged with the handling of the incident.[20]

Cooperative efforts can positively affect resources in the form of equipment. Consolidation or merger can lead to a situation where surplus or lightly used vehicles or equipment can be sold, reducing the overall age of the fleet, while a maintenance facility with dedicated mechanic positions can be created ensuring the effective maintenance of heavy equipment.[21] The pooling of funds can aid in the purchasing of costly but needed equipment.[22] In terms of manpower, cooperation can help ensure that personnel are more effectively utilized through improved job assignments.[23] Overall, "consolidation can produce a leaner, stronger, organization" through improved use of resources, resulting in higher service levels and lower costs.[24]

Improved response times are another observed advantage. Cooperation or consolidation will lead to a situation where the department closest to the alarm responds, regardless of jurisdiction, resulting in faster response times.[25] Inter-jurisdictional cooperation resulting in the joining of consolidated dispatch services can lead to improved response times.[26] Cooperation can improve a region's ability to respond to large incidents through combined efforts.[27]

Organizational improvements through increased centralization are yet another benefit of cooperative efforts. Cooperation leads to a more logical organization of services that are not based solely on jurisdiction or illogical boundaries.[28] Organizational improvements include centralized management, centralized dispatch and communication networks, and reduced administrative costs, all resulting in more effective and efficient delivery of services.[29] Finally, organizational changes can improve the level of professionalism among firefighters and their officers and lead to the more efficient use of equipment and facilities.[30]

Cooperation can lead to improvements in fire prevention due to the application of unified and consistent fire codes.[31] In terms of personnel and equipment, cooperative agreements can lead to

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[20] Gary, Stewart. "One is Better Than Two: The Benefits of Local Fire Agency Consolidation," Western City Magazine. July 1999.

[21] Haney, Paul. "A Feasibility study of public fire service consolidation for the southwest council of governments." National Fire Academy. Oct. 1998. ; Giorgio 106-115

[22] "Productivity" Fire Chief Magazine. Aug 1972.

[23] "Productivity" Fire Chief Magazine. Aug 1972.

[24] "Fire Department Consolidation, Why and How to do It." Colin A. Campbell Associates, Inc. VFIS, 1994, Pg 1-16.

[25] *A Systematic Approach to Fire Service Consolidation and Merger ICMA.* Management Information Publications. Washington, DC. Clearinghouse Report #40599; *Managing Fire Services* (IMCA); Giorgio, Robert. "The Consolidations of Consolidation. Fire Chief. Feb. 2000.pg 6-7; Jensen, Alec. "Consolidations a la carte." Fire Chief. Feb 2000; Thompson, Stephanie, "Spotting a Trend: Fire Department Consolidation," American City and County, April 1992 pp.25-29; Rule 32-34.

[26] "Fire Department Consolidation, Why and How to do It." Colin A. Campbell Associates, Inc. VFIS, 1994, Pg 1-16.

[27] Pepler, Jr., William "Grounds for Consolidation." Fire Service Today. December 1982. pg. 31.

[28] *Managing Fire Services*. ICMA Training Institute. 1988; "Fire Department Consolidation, Why and How to do IT." (VFIS) pg 1-16.

[29] *Managing Fire Services*. ICMA Training Institute. 1988.

[30] "Productivity" Fire Chief Magazine. Aug 1972.

[31] *Managing Fire Services*. ICMA Training Institute. 1988; Giorgio, Robert. "The Consolidations of Consolidation. Fire Chief. Feb. 2000. pg 6-7; Jensen, Alec. "Consolidations a la carte." Fire Chief. Feb 2000. 106-115.

uniform certification-based training, standardized department training, standardized equipment usage, uniform operational guidelines, and uniform inspection and investigation guidelines.[32]

As a result of merger or consolidation, departments may experience an improvement in personnel and employment. Such improvements would include increased staffing levels, enhanced career advancement opportunities, more qualified personnel, increased staff specialization and the development of specialized teams, more efficient allocation of personnel, increased recruiting and retention, decreased competition for personnel due to the elimination of boundaries and jurisdictions, more effective administrative and clerical functions, and improved communication.[33]

Due to cost savings and a more efficient use of resources, the departments involved may see improvements in their facilities. Examples of such improvements include improved training facilities due to collaboration, station renovation due to increased funding, and a decrease in the number of stations due to large scale planning and improved efficiency.[34]

Successful cooperative efforts can lead to improved efficiency and effectiveness in the delivery of emergency services,[35] allowing departments to specialize in various functions and stronger incident command through enhanced area-wide leadership, stronger programs, and improved response strength.[36] The joining of districts or departments can lead to improved service delivery through regionalized public information and education programs, and reduced fiscal and resource disparities.[37] A model response protocol is found in Appendix F of this report.

Disadvantages of Consolidation

There are some disadvantages with joint cooperation or consolidation of fire services. Difficulties typically revolve around the legal impediments, the process of merging or consolidating, personnel issues, organizational issues, and equipment. The process of successfully completing a cooperative effort is long and complicated. Four major obstacles to the successful completion of the process exist: turf, power, politics, and control.[38] These four obstacles are difficult to overcome and must

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[32] Giorgio, Robert. "The Consolidations of Consolidation. Fire Chief. Feb. 2000. pg 6-7; Jensen, Alec. "Consolidations a la carte." Fire Chief. Feb 2000. 106-115; Frazier, Gary; *A Systematic Approach to Fire Service Consolidation and Merger* (IMCA)

[33] Giorgio, Robert. "The Consolidations of Consolidation. Fire Chief. Feb. 2000. pg 6-7; Jensen, Alec. "Consolidations a la carte." Fire Chief. Feb 2000.; Thompson, Stephanie, "Spotting a Trend: Fire Department Consolidation," American City and County, April 1992 pp.25-29.

[34] Thompson, Stephanie, "Spotting a Trend: Fire Department Consolidation," American City and County, April 1992 pp.25-29.

[35] Gargan, John. *Handbook of Local Government Administration*. Marcel Dekker, Inc. New York: 1997. ; Gary, Stewart. "One is Better Than Two: The Benefits of Local Fire Agency Consolidation," Western City Magazine. July 1999.

[36] Thompson, Stephanie, "Spotting a Trend: Fire Department Consolidation," American City and County, April 1992 pp.25-29; Streuli, A.V. "Consolidation of Fire Districts." Fire Journal. Nov 1970. p 15-17; Gargan, John. *Handbook of Local Government Administration*. Marcel Dekker, Inc. New York: 1997; Gary, Stewart. "One is Better Than Two: The Benefits of Local Fire Agency Consolidation," Western City Magazine. July 1999.

[37] Thompson, Stephanie, "Spotting a Trend: Fire Department Consolidation," American City and County, April 1992 pp.25-29; Rule 32-34; Gargan, John. *Handbook of Local Government Administration*. Marcel Dekker, Inc. New York: 1997; "Fire Department Consolidation, Why and How to do IT." (VFIS) pg 1-16

[38] Wagner, Mary Jo. "Consolidation: two experts offer a positive approach." National Fire and Rescue. Winter 1996. p 21-24.

be effectively dealt with to help limit distortion or deterrence of the cooperative effort. These obstacles are made all the more difficult because in many instances the talent and experience required to execute an efficient and effective consolidation is not available.[39] Due to the inherent changes that take place as a result of department merger or consolidation, it is important that services provided do not suffer and instead are improved as a result of the effort.[40]

Negative perspective about consolidation from personnel can act as a major disadvantage to the successful completion of mergers or consolidations. Like most changes, it is often met by resistance.[41] This resistance frequently stems from a perceived loss of control and autonomy and can be magnified if there is a lack of trust among all involved.[42]

Collective bargaining agreements and union contracts can act as a disadvantage to the cooperative/consolidation effort.[43] Wage disparities among departments and work load issues can be a drawback to the process. Consolidation of personnel systems such as pension and retirement plans can negatively affect the effort.[44]

Selection of key staff for the new department may be difficult. The successful merger of administrative staff and the selection of "the right chief" are imperative to the process.[45] As the number of people at the top echelons is reduced and influence is decentralized, cooperative efforts often lead to a situation where some employees lose job status and responsibilities, ultimately creating role conflicts.[46] Visibility of operations is usually heightened during the merger or consolidation process, making it important to effectively and efficiently manage organizational difficulties that arise.[47]

Resource and equipment ownership issues may arise.[48] Cooperation can lead to a mixing of apparatus and equipment among departments, and situations of inadequate training can occur for those who are unfamiliar with the equipment.[49] As a result, it is necessary that decisions be made regarding a standardization of equipment and equipment training.[50]

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[39] Pepler, Jr., William "Grounds for Consolidation." Fire Service Today. December 1982. pg. 31.
[40] Ling, Jason D. Fire Department Consolidation: A View From Those Effected.
[41] Ibid.
[42] *Managing Fire Services* (IMCA); Jensen 102-105; Wagner 21-24
[43] *A Systematic Approach to Fire Service Consolidation and Merger* (IMCA); "Fire Department Consolidation, Why and How to do IT." (VFIS).
[44] Ibid,. pg 12
[45] Ibid.
[46] Thompson, Stephanie, "Spotting a Trend: Fire Department Consolidation," American City and County, April 1992 pp.25-29; Knabel, Robert; *A Systematic Approach to Fire Service Consolidation and Merger* (IMCA); "Fire Department Consolidation, Why and How to do IT." (VFIS) pg 12
[47] Haney, Paul. "A Feasibility study of public fire service consolidation for the southwest council of governments." National Fire Academy. Oct. 1998.
[48] Giorgio, Robert. "The Consolidations of Consolidation. Fire Chief. Feb. 2000. pg 6-7; Jensen, Alec. "Consolidations a la carte." Fire Chief. Feb 2000.
[49]Haney, Paul. "A Feasibility study of public fire service consolidation for the southwest council of governments." National Fire Academy. Oct. 1998.
[50] *Systematic Approach to Fire Service Consolidation and Merger* (IMCA); "Fire Department Consolidation, Why and How to do IT." (VFIS);

We now turn to an analysis of the core areas of this report; an examination of the more specific operational, logistical, financial, and legal dimensions of a possible consolidated fire district for the subject communities.

OPERATIONAL AND LOGISTICAL DIMENSIONS

This section of the report details on a community-by-community basis, the operational and logistical issues associated with the potential creation of a consolidated fire service district.

Overview

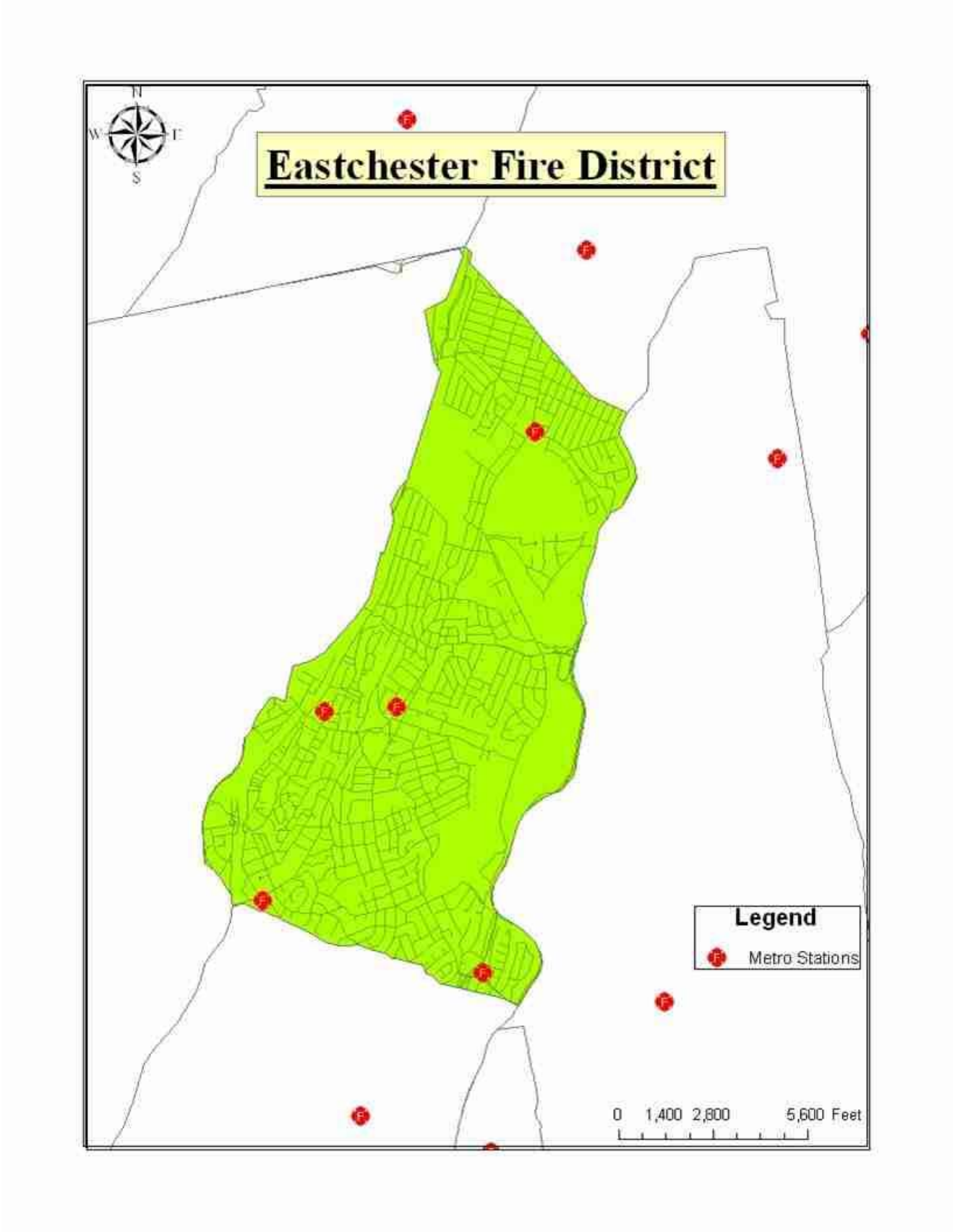
Ten fire departments and districts (Eastchester, Fairview, Greenville, Hartsdale, Larchmont, Mount Vernon, New Rochelle, Pelham, Pelham Manor, and Scarsdale) voluntarily agreed to participate in this study, and their participation does not obligate them or their governmental authorities to become part of any current or future consolidated fire service district. Departments with career chiefs obtained the necessary approval from their respective governing bodies.

The principal basis for the operations component of this study began with evaluating each department in terms of personnel, facilities, and apparatus. This extensive data collection and analysis was followed by visually mapping these resources and then determining what was needed to meet the NFPA 1710 response time standard. The analysis in this section of the report is an overview, with more detailed information provided in the appendices to this report. Appendix I provides an overview of the NFPA standards.

The mapping was all performed using ESRI's Arcview 9.2 with Network Analysis. The parameters used for each municipality and scenario are clearly identified in each subsection. A few notable problems were encountered in the analysis. First; the Westchester County road data that was obtained from the County did not have the critical information (street speed limits, one way status, etc.) to perform some of the baseline analysis. Second, the available map data from ESRI had one major error: East Hartsdale Avenue has been a two way street for the last 200 years or so, but the map data indicates that it is two-way from Central Avenue to the western intersection with Rockledge Road and two-way from the eastern intersection with Rockledge Road to Fenimore Road. The 650-foot section between the eastern and western section of Rockledge Road is listed as a one way in the east bound direction. This is not a reality, but it created a major series of errors in the initial pilot analysis[51]. To resolve this issue some of the one way streets in these communities were "turned off" in the Arcview program as if they existed as a two-way street. We believe that this modification is minor and some random scenario testing showed only insignificant response changes, as apparatus may travel in either direction on one way streets.

After analyzing all of the personnel, stations and equipment for each subject community, mapping scenarios were created for each subject district/department as outlined below. The mapping scenarios are then followed by an identification of the major advantages and disadvantages of consolidation to each community. Appendix K provides an organizational chart for a possible consolidated district.

[51] For instance, it created a scenario that Scarsdale apparatus could drive from its headquarters to Hartsdale's station #1 on Central Avenue in less than four minutes, but, in reality, Hartsdale apparatus could never get to Scarsdale.



Eastchester Fire District

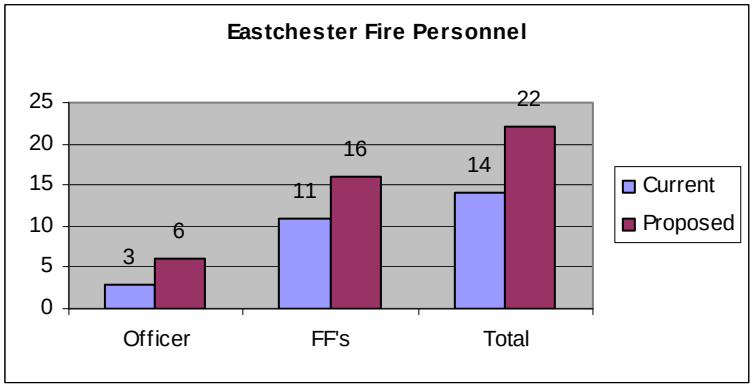
The Eastchester Fire Department (EFD) consists of 76 career firefighters and officers operating four (4) engines, two (2) ladders and a command vehicle out of 5 stations. The on-duty staffing is 11 firefighters and 3 officers. EFD operates out of five (5) fire stations, covering 5 square miles

with a population of 31,386 including the Town of Eastchester and the Villages of Bronxville and Tuckahoe. The EFD's oversight is provided by a five (5) member Board of Fire Commissioners. There are a small number of "active" volunteers, who no longer respond to emergencies.

Current Response to a Structure Alarm: two Engines, one Ladder, one Command, manned with six firefighters and two officers. This manning is substantially below all national standards (ISO, NFPA 1710, ICMA, & CFAI). To meet NFPA 1710 without consolidation would require an additional 8–11 firefighter and 4–5 officers per shift or 42–58 additional firefighters and 21–26 additional officers or 63–84 additional staff.

Consolidation Advantages:

1. Improved on-duty manning: The on-duty shift will increase from the current 11 firefighters and 3 officers to 16 firefighters and 6 officers.

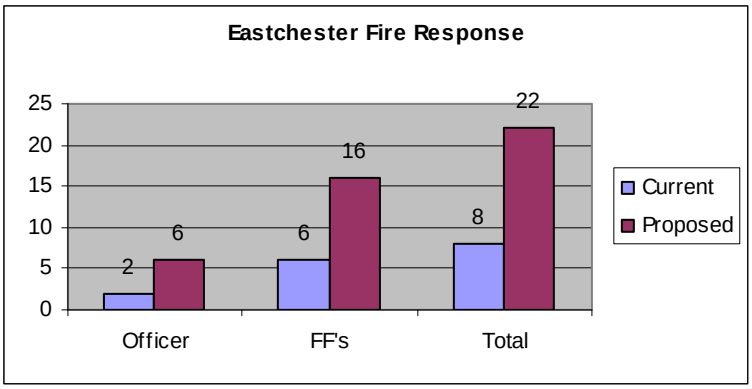


2. Improved response manning: Current response is 6 firefighters and 2 officers this will increase to 16 firefighters and 6 officers. Because the closest units will be responding, some of this response will be coming from stations that are not in Eastchester, for example a call in:

- Chester Heights:
  1 Engine from Chester Heights
  1 Engine from NRFD Sta. #3 (North Ave. & Eastchester Rd.)
  1 Ladder from NRFD Sta. #3
  1 Ladder and one Chief from MVFD HQ (Lincoln Ave)
  1 Rescue from Pelham (5th Avenue)

- Garth Road:
  1 Engine from Scarsdale (Rt.22 at Popham Rd)
  1 Engine and 1 Ladder from Greenville (Central Ave.)
  1 Ladder and Chief from EFD North End Sta. #5
  1 Rescue from Hartsdale Sta.#1 (Central Ave.)

- Any of these scenarios leave 3–4 engines and 1–2 ladders with 12 firefighters and 4 officers in reserve covering the rest of Eastchester.



3. Improved safety for the public and firefighters by meeting minimum manning and response standards as set by NFPA, ICMA and ISO.

4. Ability to place three firefighters and an officer on medical emergencies within 4 minutes without utilizing command (2102) who should be occupying this time preparing the remaining units to deal with multi-unit incidents. This reduces the need to send two fire units to every EMS call. Note: EFD is the only dept. in the county that does this.

5. Ability to respond to a medical emergency or other calls and still have 22 firefighters and officers available to respond to a fire or other emergency.

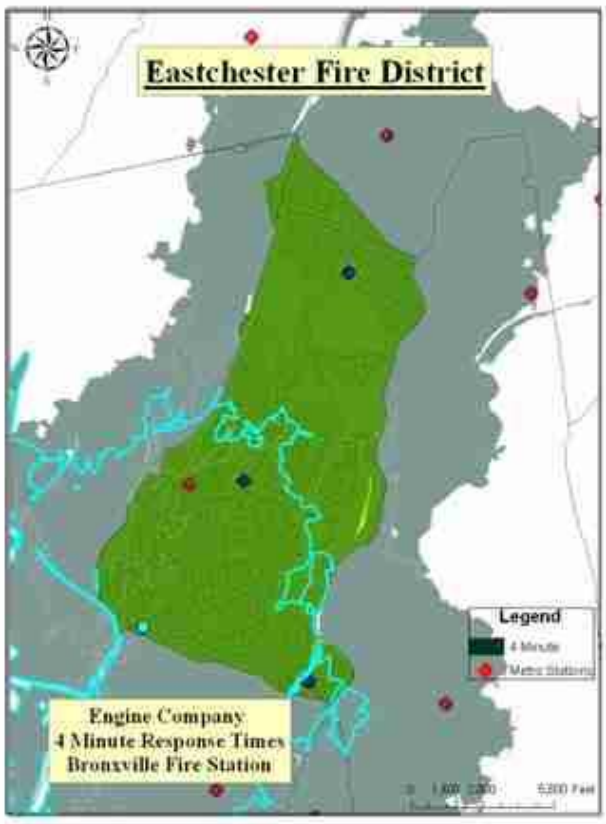
6. Increased supervision and coordination. Currently more than half of the apparatus in Eastchester do not have company officers that are directly responsible for that unit and they have no officer arriving in the first and most critical minutes of an emergency. Under this proposal all apparatus will have company officers.

Consolidation Disadvantages:

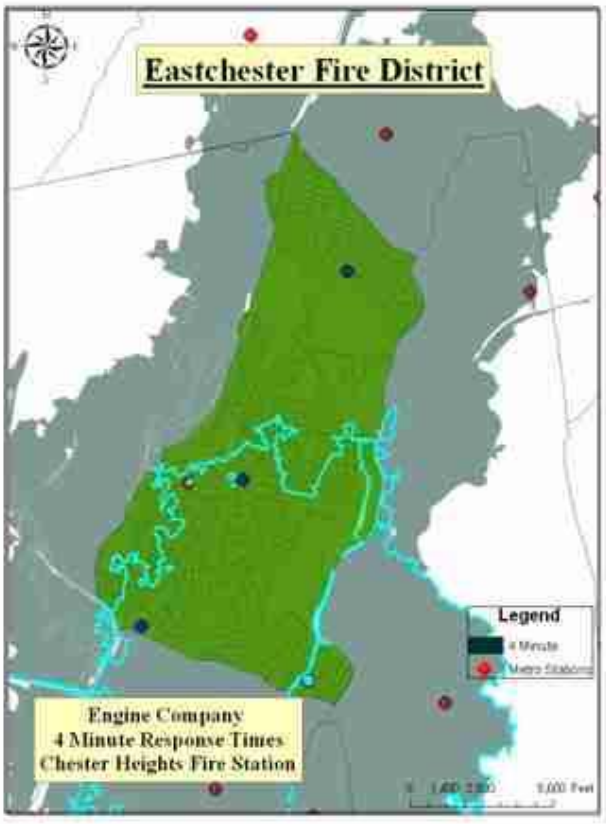
Loss of local autonomy: If EFD and the community agree to be a part of this regional service, the EFD will no longer exist as it currently does. Each of the fire stations will retain the community names that the public knows them as:

- Bronxville Fire Station
- Chester Heights Fire Station
- North End Fire Station
- Tuckahoe Fire Station
- Waverly Fire Station

Engine Company 4 Minute Response Area



Bronxville Fire Station



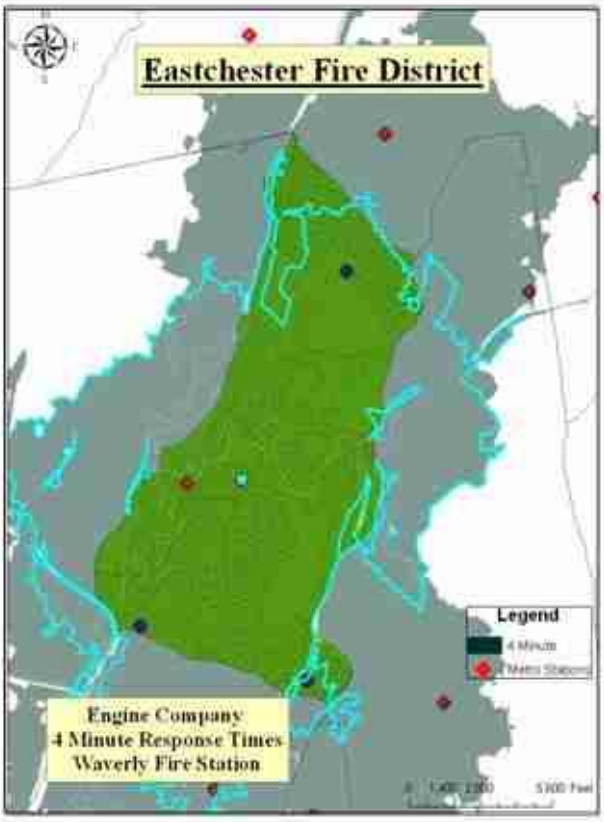
Chester Heights Fire Station

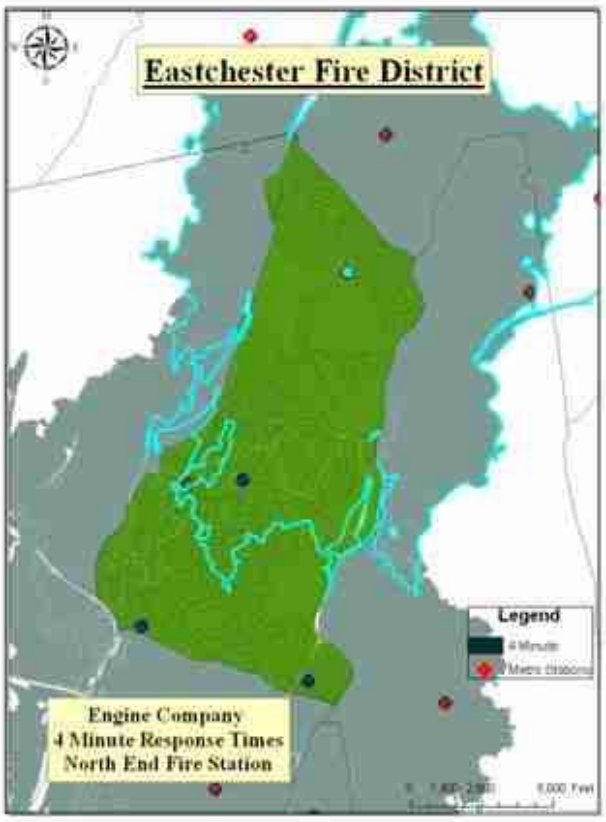
The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map (Bronxville on left, Chester Heights on the right). The three navy dots are the remaining Eastchester Fire Stations with Engine Companies. The red dots are the Tuckahoe Fire Station and Fire Stations in Greenville, Mt. Vernon, New Rochelle, Pelham, and Scarsdale.

The light blue lines are the 4 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all Eastchester Engine Companies.

Engine Company 4 Minute Response Area





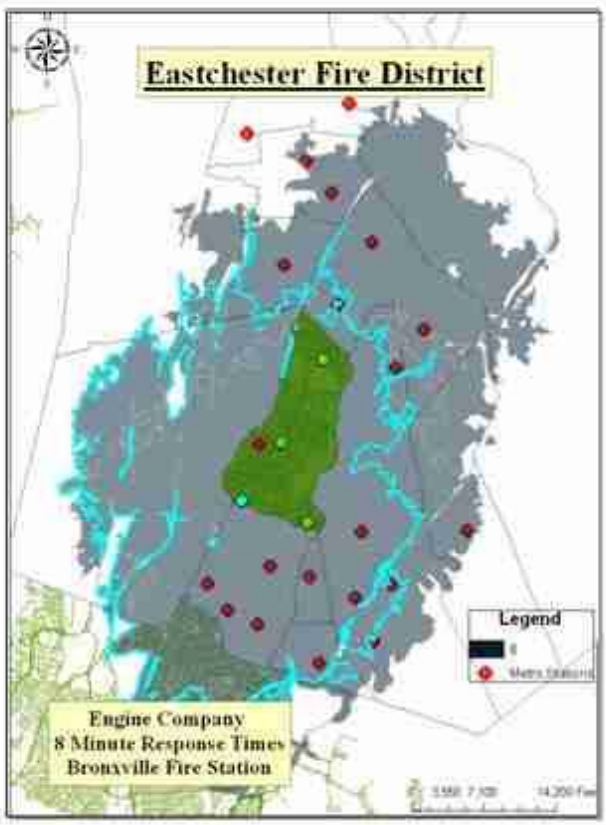
Waverly Fire Station **North End Fire Station**

The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

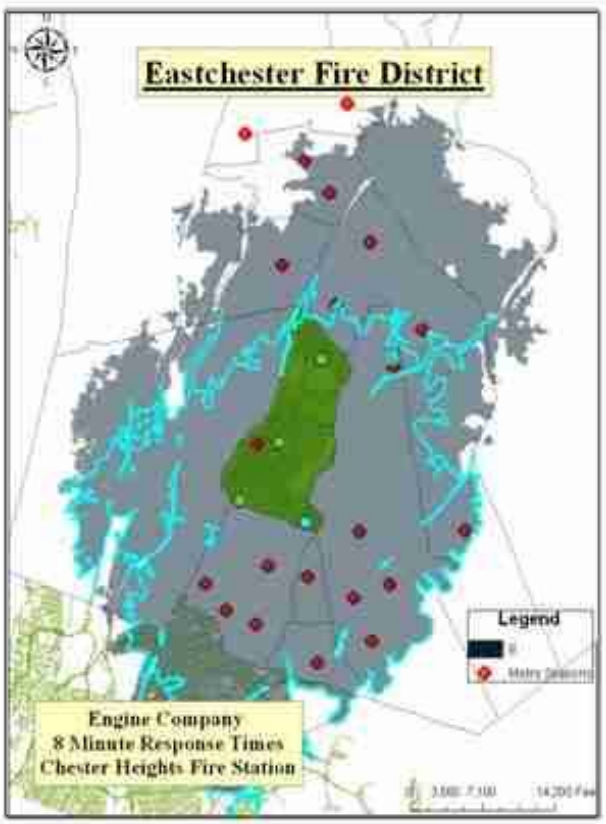
The light blue dot is the firehouse listed for the study from that map (Waverly on left, North End on the right). The three navy dots are the remaining Eastchester Fire Stations with engine companies. The red dots are the Tuckahoe Fire Station and Fire Stations in Greenville, Mt. Vernon, New Rochelle, Pelham, and Scarsdale.

The light blue lines are the 4 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all Eastchester Engine Companies.

Engine Company 8 Minute Response Area



Bronxville Fire Station



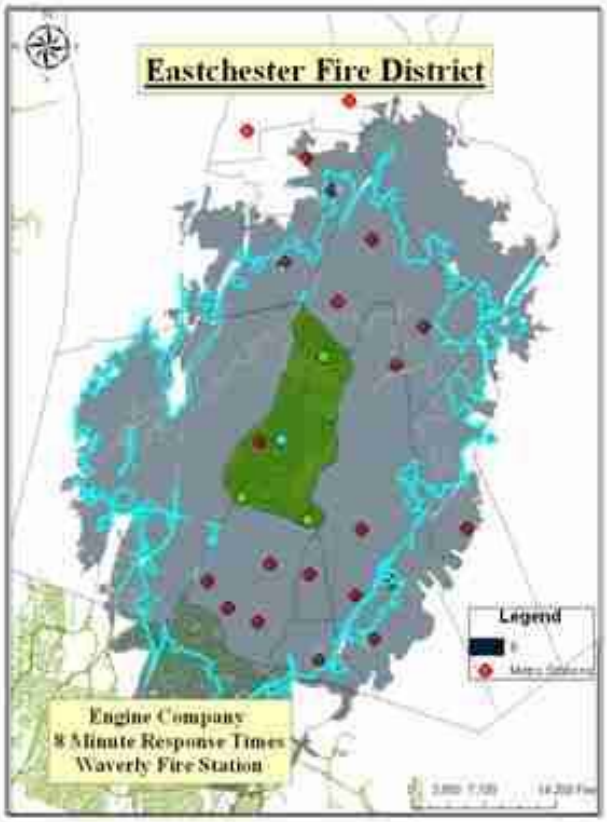
Chester Heights Fire Station

Eight (8) minutes represents the time it takes for the 2nd due engine to arrive during a full alarm response. It indicates the maximum time allowable when the 1st due engine is not available due to another response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

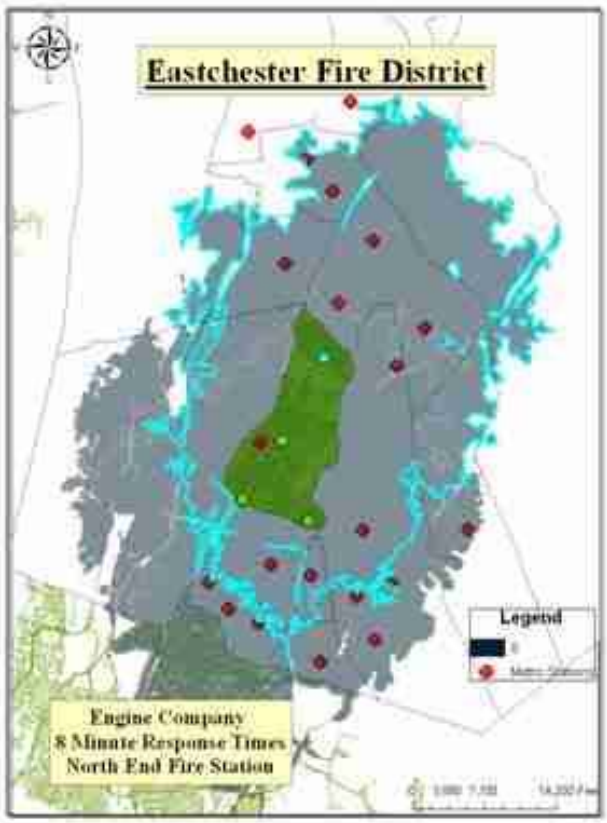
The light blue dot is the firehouse listed for the study from that map (Bronxville on left, Chester Heights on the right). The three navy dots are the remaining Eastchester Fire Stations with Engine Companies. The red dots are the Tuckahoe Fire Station and Fire Stations in Fairview, Greenville, Hartsdale, Larchmont, Mt. Vernon, New Rochelle, Pelham, Pelham Manor and Scarsdale.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Eastchester Engine Companies.

Engine Company 8 Minute Response Area



Waverly Fire Station



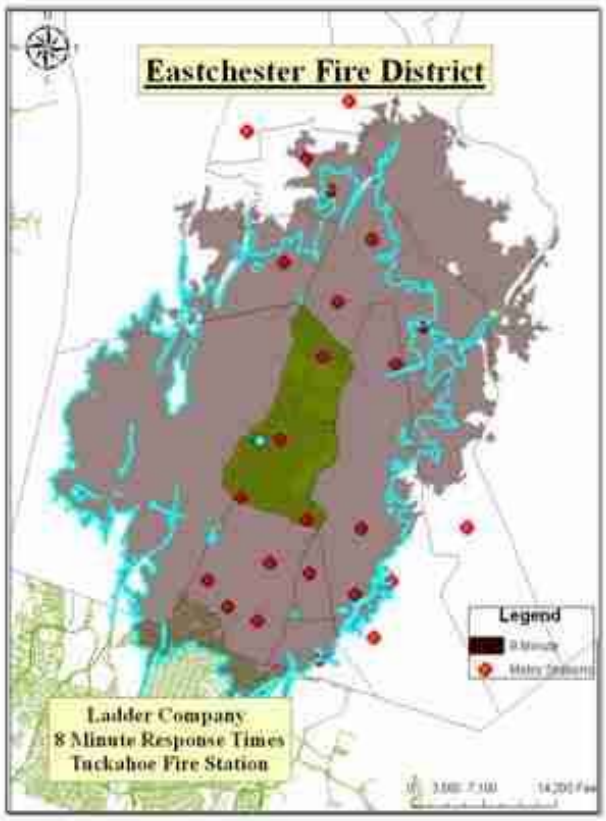
North End Fire Station

Eight (8) minutes represents the time it takes for the 2nd due engine to arrive during a full alarm response. It indicates the maximum time allowable when the 1st due engine is not available due to another response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

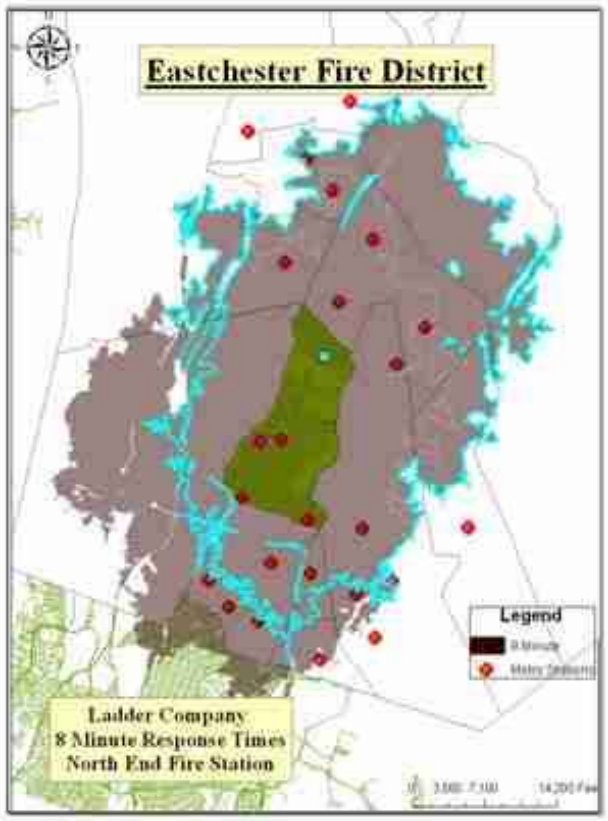
The light blue dot is the firehouse listed for the study from that map (Waverly on left, North End on the right). The three navy dots are the remaining Eastchester Fire Stations with Engine Companies. The red dots are the Tuckahoe Fire Station and Fire Stations in Fairview, Greenville, Hartsdale, Larchmont, Mt. Vernon, New Rochelle, Pelham, Pelham Manor and Scarsdale.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Eastchester Engine Companies.

Ladder Company 8 Minute Response Area



Tuckahoe Fire Station



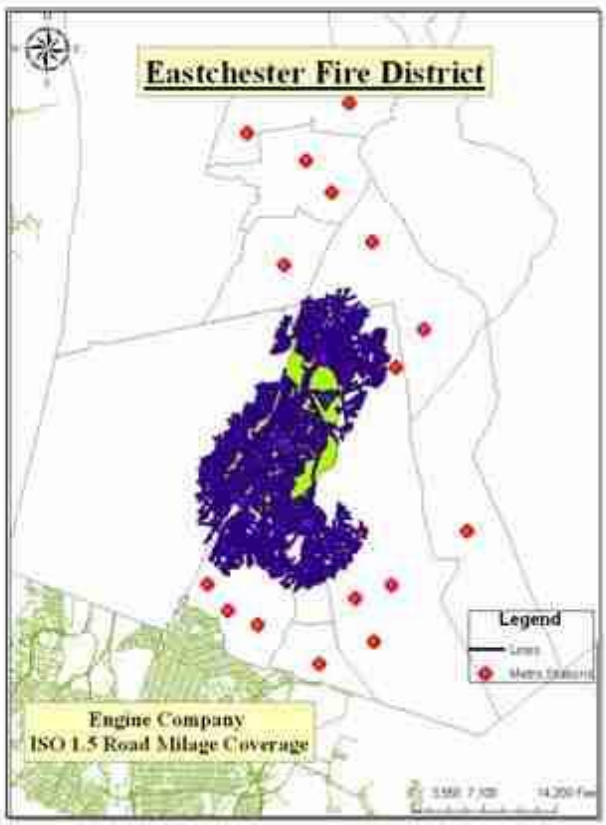
North End Fire Station

Eight (8) minutes represents the time it takes for the 1st and 2nd due ladders to arrive during a full alarm response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

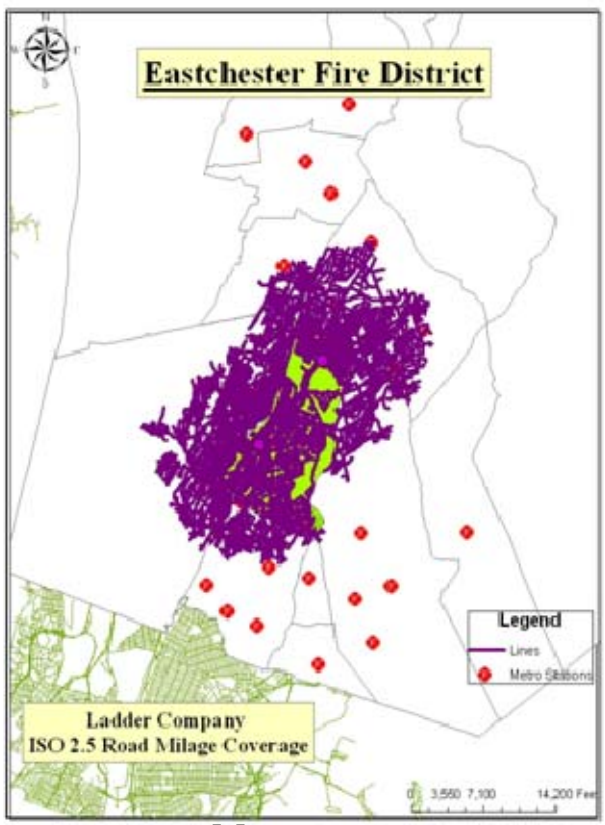
The light blue dot is the firehouse listed for the study from that map (Tuckahoe on left, North End on the right). The maroon dots are the remaining Eastchester Fire Stations with Ladder Companies. The red dots are the other Eastchester Fire Stations and Fire Stations in Fairview, Greenville, Hartsdale, Larchmont, Mt. Vernon, New Rochelle, Pelham, Pelham Manor and Scarsdale.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by both Eastchester Ladder Companies.

I.S.O. Engine and Ladder Drive Distances



Engine Company
1.5 Road Miles



Ladder Company
2.5 Road Miles

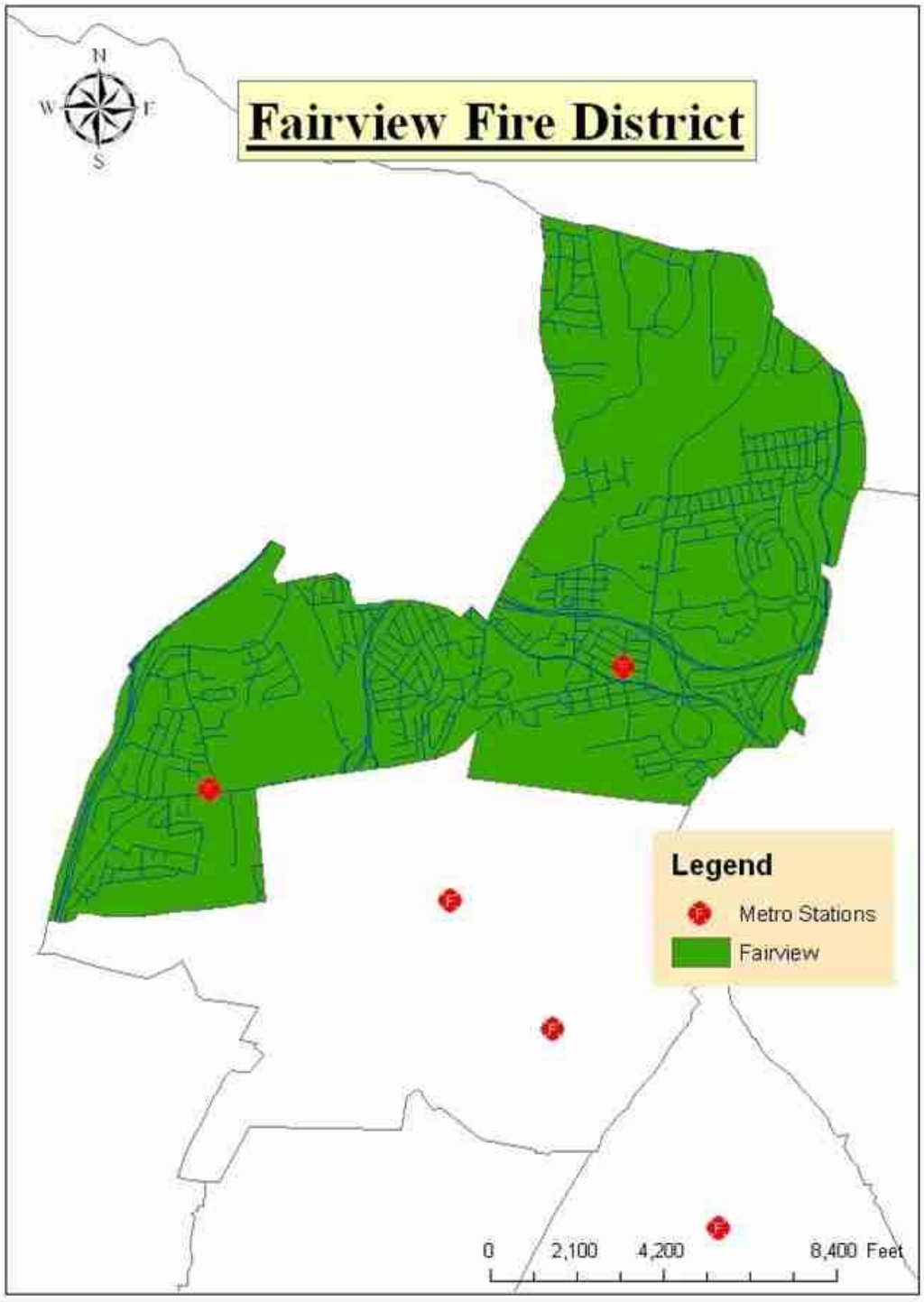
The Insurance Service Office (ISO) requires all insured properties to be within 1.5 driving miles of the closest engine company and 2.5 driving miles of the closest ladder company.

The calculations are made by driving outward from each fire station for a maximum of 1.5 miles or 2.5 miles without going the wrong way on any one way streets.

The medium blue dots are firehouses with engine companies. The purple dots are firehouses with ladder companies. The red dots are the other Fire Stations in the study.

The blue lines are the roads driven in 1.5 miles by engines, the purple lines are the roads driven in 2.5 miles by ladders.

Green sections are areas that are not within 1.5 or 2.5 road miles from engine or ladder companies. It is possible that that is due to a lack of roads in those areas, often they are parks or golf courses.



Fairview Fire District

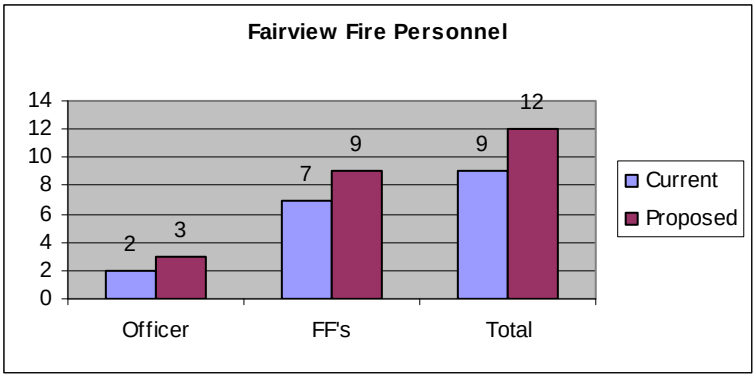
The Fairview Fire Department (FFD) consists of 47 career firefighters and officers operating two (2) engines, one (1) ladder, and one (1) rescue out of two stations. The minimum on-duty staffing is 6 firefighters[52] and 2 officers. FFD operates out of two (2) fire stations, covering 5.5 square miles with a population of 25,142. Fairview covers about 1/3 of the unincorporated section of the Town of Greenburgh. The FFD's oversight is provided by a five (5) member Board of Fire Commissioners. There are approximately 16 "active" volunteers.

Current Response to a Structure Alarm: two Engines, one Ladder, one Rescue, manned with 7 firefighters and 2 officers.

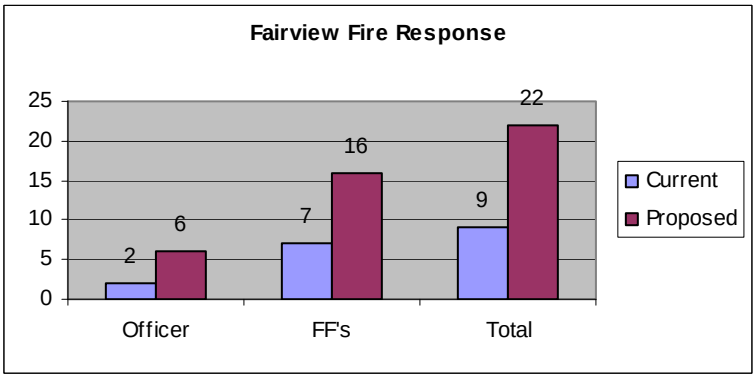
To meet NFPA 1710 without consolidation would require an additional 6 firefighters and 3 officers per shift or 32 additional firefighters and 16 additional officers or 48 additional staff.

Consolidation Advantages:

1. Improved on-duty manning: The on-duty shift will increase from the current 7 firefighters and 2 officers to 9 firefighters and 3 officers. Mutual aid is needed for all structure fires to meet any of the national standards (ISO, NFPA 1710, ICMA, & CFAI).



2. Improved response manning: Current response is 7 firefighters and 2 officers this will increase to 16 firefighters and 6 officers.



[52] Fairview's Chief reported that the staff with 8 firefighters, but the minimum was 6. We had calculated this at 7.

3. Improved safety for the public and firefighters by meeting minimum manning and response standards as set by NFPA, ICMA and ISO.

4. Ability to place three firefighters and an officer on medical emergencies within 4 minutes without utilizing a second apparatus. This maintains more apparatus in-service to handle additional emergencies.

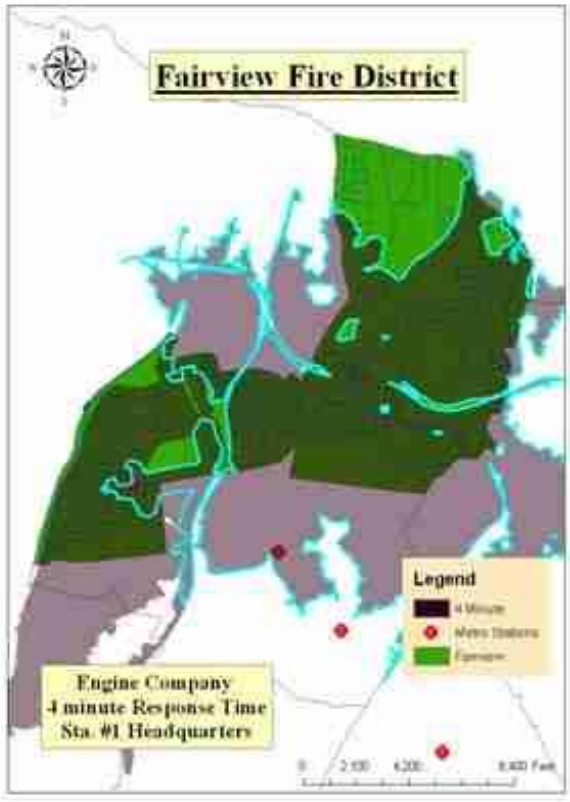
5. Ability to respond to a medical emergency or other calls and still have 22 firefighters and officers available to respond to a fire or other emergency.

6. Increased supervision and coordination. Currently half of the apparatus in Fairview do not have company officers that are directly responsible for that unit and they have no officer arriving in the first and most critical minutes of an emergency. Under this proposal all apparatus will have company officers.

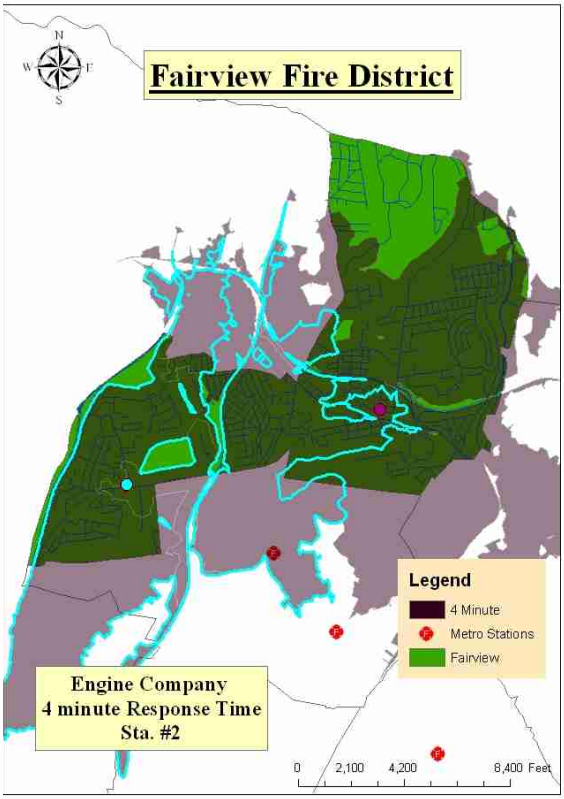
Consolidation Disadvantages:

Loss of local autonomy;:If FFD and the community agree to be a part of this regional service, the FFD will no longer exist as it currently does. The two fire stations can retain the community names that the public knows them as: i.e. Fairview Fire Station

Engine Company 4 Minute Response Area



Headquarters Fire Station



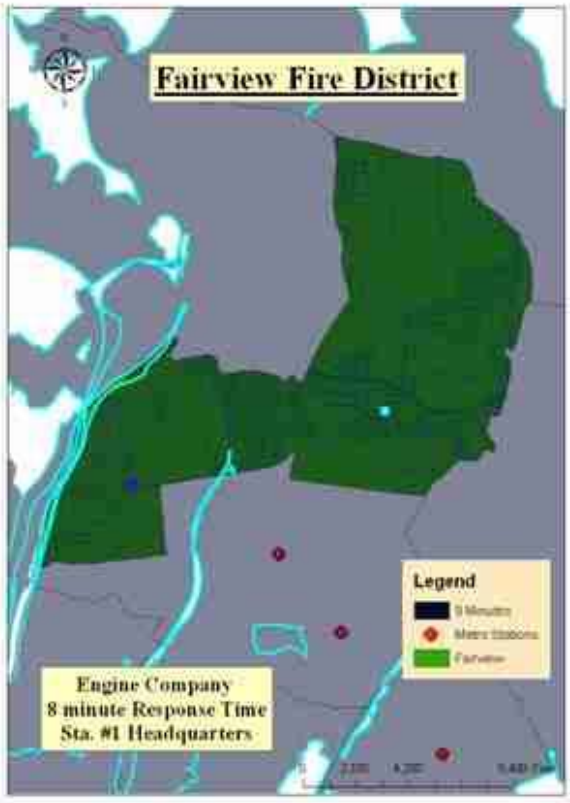
Station #2 Fire Station

The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map (Headquarters on the left, Station #2 on the right). The purple dot is the other Fairview Fire Station. The red dots are other Fire Station withins the study.

The light blue lines are the 4 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Purple areas indicate the 4 minute response distance covered by both Fairview Engine Companies. The lighter green section in the north area (including the WCC campus) is beyond the 4 minute response time, and can only be addressed with an additional station.

Engine Company 8 Minute Response Area



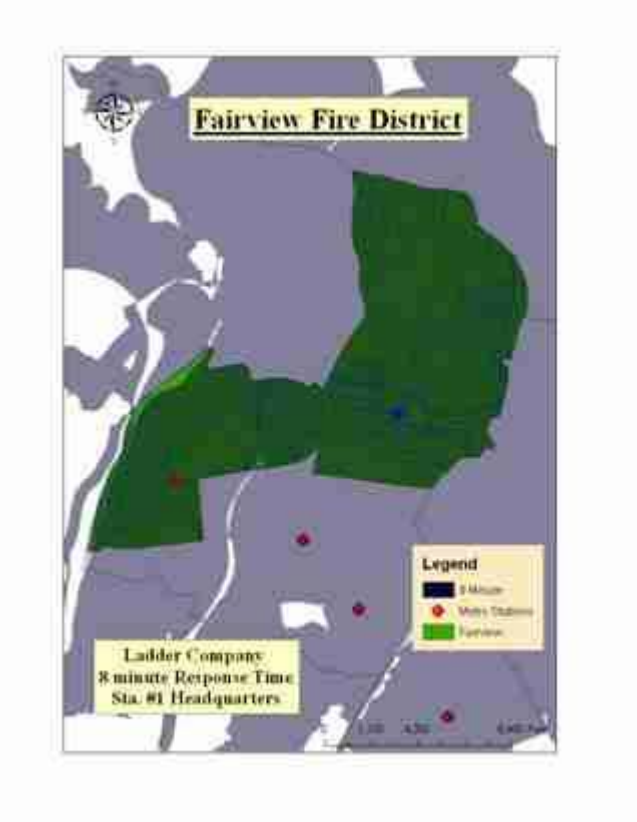
Headquarters Fire Station **Station #2 Fire Station**

Eight (8) minutes represents the time it takes for the 2nd due engine to arrive during a full alarm response. It indicates the maximum time allowable when the 1st due engine is not available due to another response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map (Headquarters on the left, Station #2 on the right). The medium blue dot is the other Fairview Fire Station. The red dots are other Fire Stations within the study.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by both Fairview Engine Companies.

Ladder Company 8 Minute Response Area



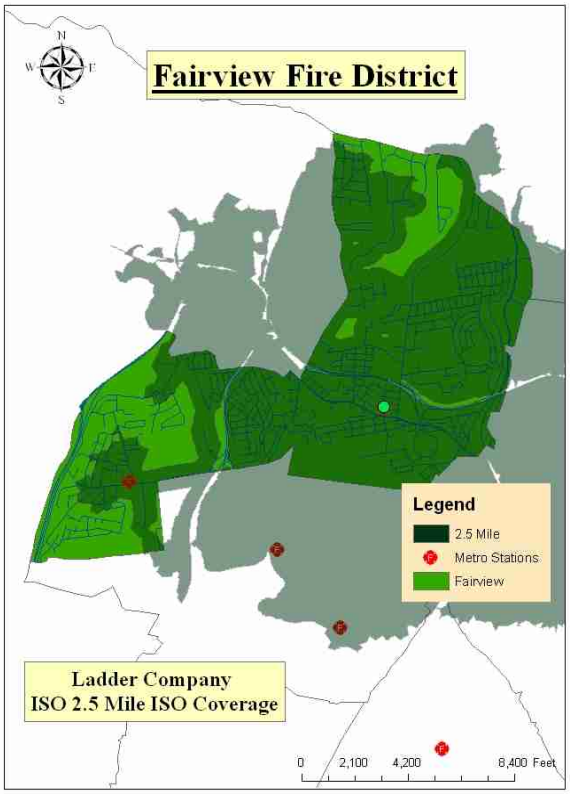
Eight (8) minutes represents the time it takes for Fairview's Ladder to arrive during a full alarm response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

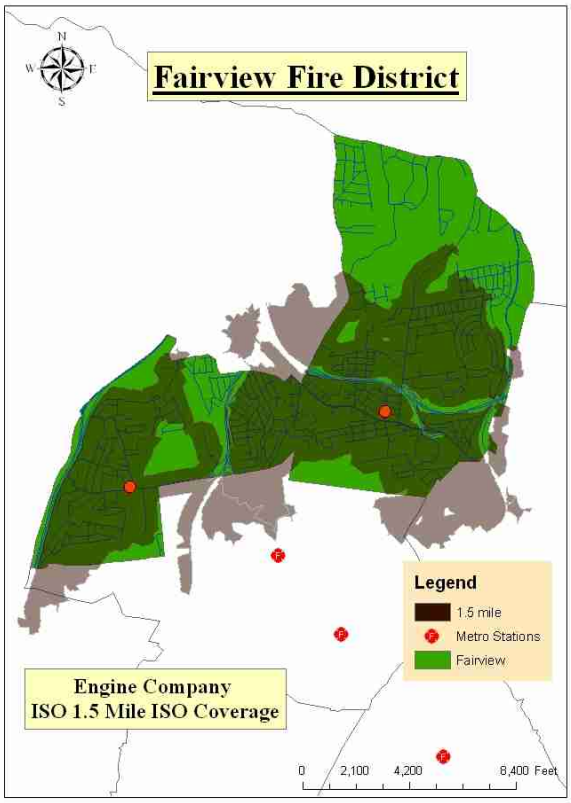
The blue dot is the Fairview Headquarters Firehouse. The red dots are the other Fire Stations in the study.

Grey areas indicate the 8 minute response distance covered by Fairview's Ladder Companies.

I.S.O. Engine and Ladder Drive Distances

Engine Company





Ladder Company

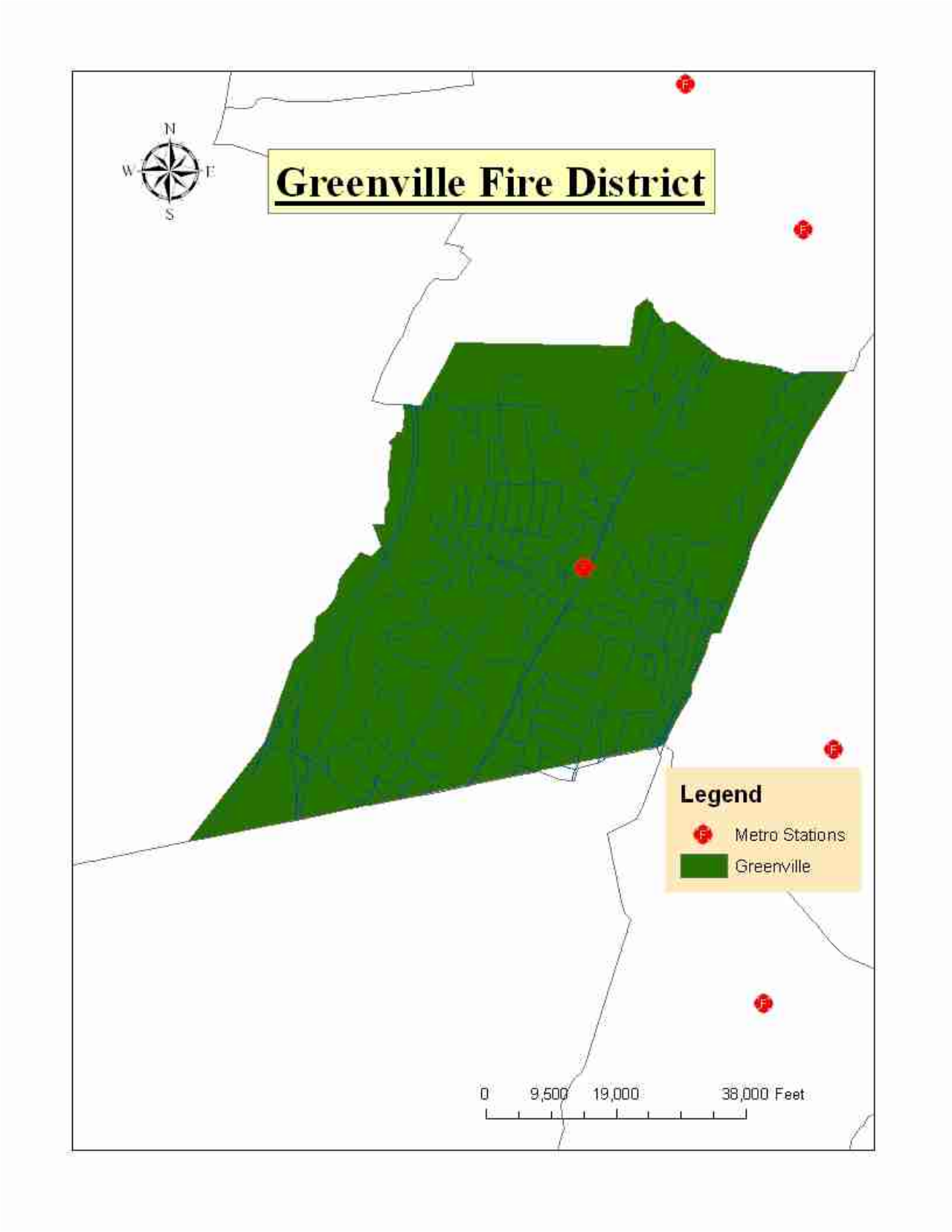
1.5 Road Miles 2.5 Road Miles

The Insurance Service Office (ISO) requires all insured properties to be within 1.5 driving miles of the closest engine company and 2.5 driving miles of the closest ladder company.

The calculations are made by driving outward from each fire station for a maximum of 1.5 miles or 2.5 miles without going the wrong way on any one way streets. The red dots (in the green areas) are Fairview Firehouses with engine companies. The light green dot is the only firehouse with a ladder company. The red dots are the other Fire Stations in the study.

The purple areas are the roads driven in 1.5 miles by engines, the grey areas are the roads driven in 2.5 miles by ladders.

Green sections are areas that are not within 1.5 or 2.5 road miles from engine or ladder companies. It is possible that that is due to a lack of roads in those areas, some are parks or golf courses. These maps show that Fairview needs an additional engine company located in the north end of the district and better ladder coverage in the west end.



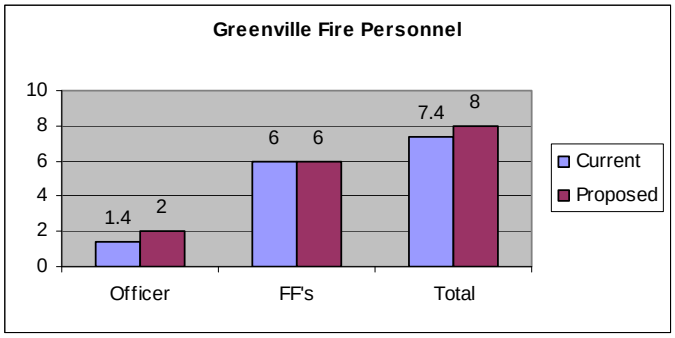
Greenville Fire District

The Greenville Fire District (GFD) consists of 30 career firefighters and officers operating one (1) engine, and one (1) ladder (quint) out of one station. The on-duty staffing is 6 firefighters and one-two officers. GFD operates out of one (1) fire station, covering 3.45 square miles[53] with a population of 8,500[54]. Greenville covers about 1/4 of the unincorporated section of the Town of Greenburgh. The GFD's oversight is provided by a five (5) member Board of Fire Commissioners. There is a small group of "active" volunteers.

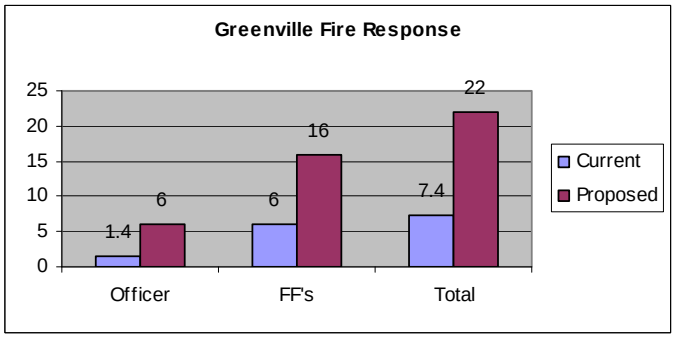
Current Response to a Structure Alarm: One Engine, one Ladder, manned with 6 firefighters and 1.4 officers, plus mutual aid. Mutual aid is needed for all structure fires no matter how minor. To meet NFPA 1710 without consolidation would require an additional 7 firefighters and 2 officers per shift or 38 additional firefighters and 11 additional officers or 49 additional staff.

Consolidation Advantages:

1. Improved on-duty manning: The on-duty shift will increase from the current 6 firefighters and 1-2 officers (2 daytime weekdays only) to 6 firefighters and 2 officers. While Greenville does in this plan receive the least amount of additional on duty staff it almost triples its response to fires.



2. Improved response manning: Current response is 6 firefighters and 2 officers this will increase to 16 firefighters and 6 officers.



3. Improved safety for the public and firefighters by meeting minimum manning and response standards as set by NFPA, ICMA and ISO.

[53] Various data sources reported square miles covered by GFD as between 2.75 and 3.45 square miles.
[54] Various data sources reported population counts between 3,800 and 8,500. The population of 8,500 as used in this report is based on the population reported by the Edgemont School District.

4. Ability to respond to a medical emergency or other calls and still have 22 firefighters and officers available to respond to a fire or other emergency.

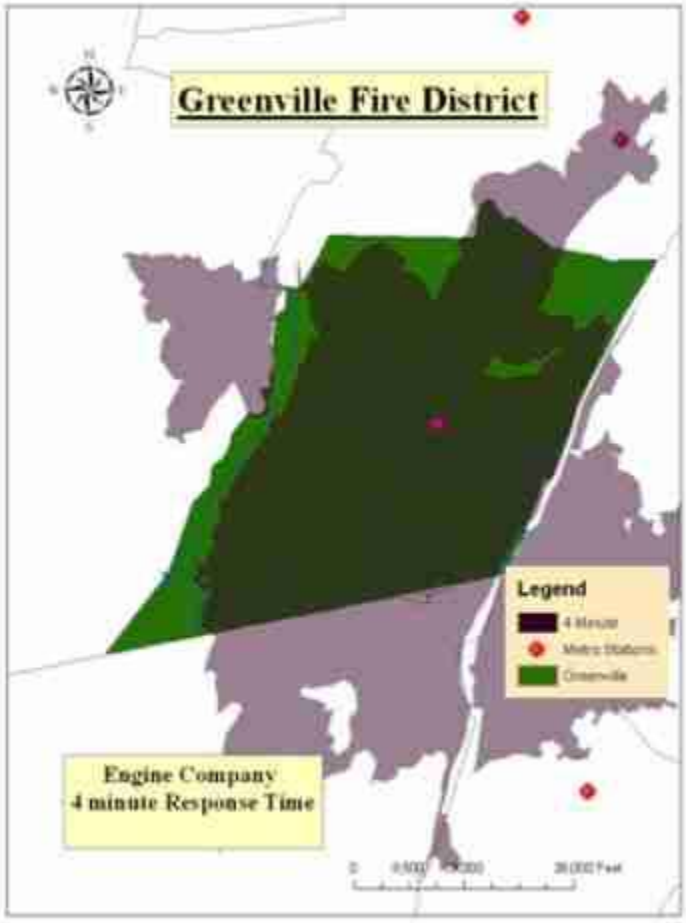
5. Increased supervision and coordination. Currently only one of the two apparatus in Greenville has a company officer 24/7 that is directly responsible for both units. Under this proposal all apparatus will have company officers.

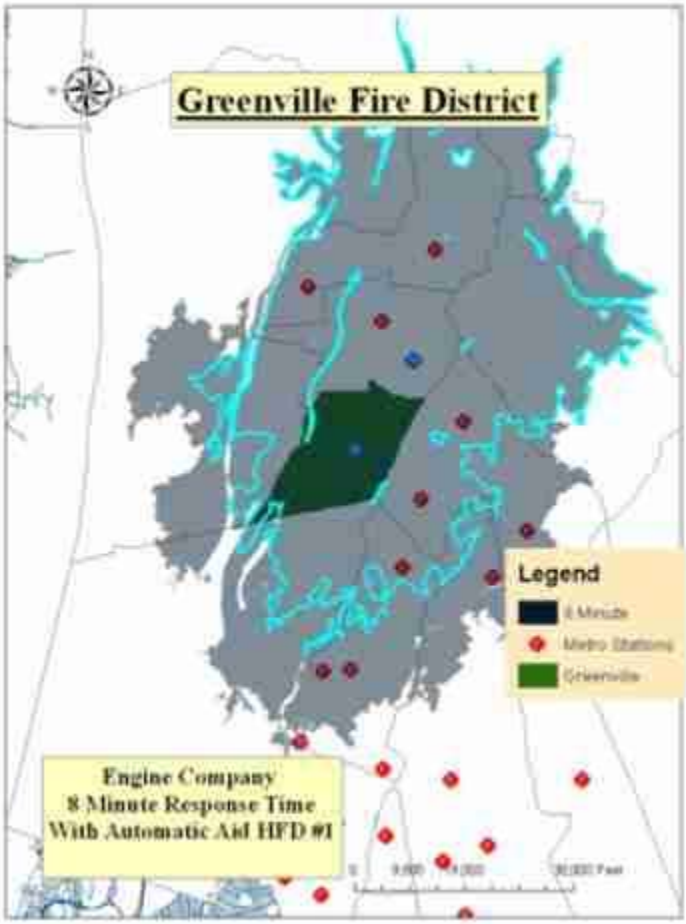
6. When Greenville units (along with the Hartsdale automatic aid engine) are committed to a call (even a minor one), no additional resources are available to handle any other calls.

Consolidation Disadvantages:

Loss of local autonomy: If GFD and the community agree to be a part of this regional service, the GFD will no longer exist as it currently does. The fire station can retain the community name that the public knows them as: i.e. Greenville Fire Station or even Edgemont Fire Station.

Engine Company 4 & 8 Minute Response Area





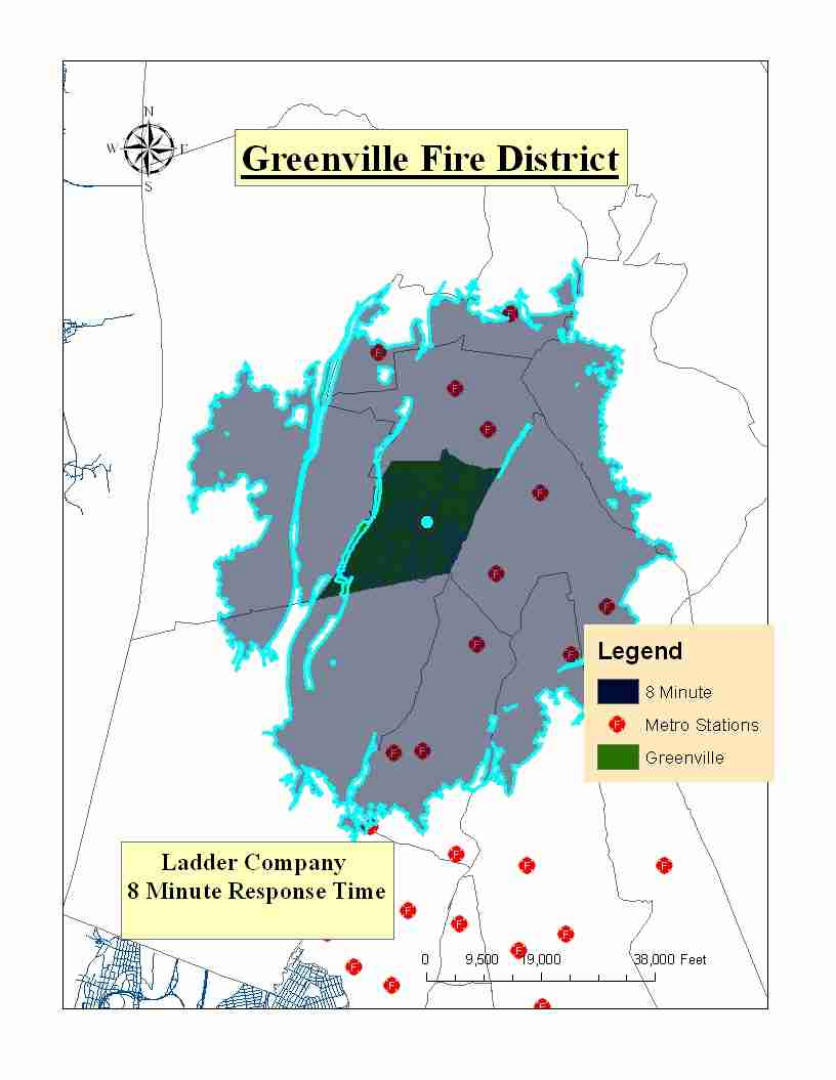
Headquarters Fire Station

Automatic Aid from HFD

The response time of 4 or 8 minutes is drive time only. 8 minutes represents the time it takes for the 2nd due engine (Automatic Aid from Hartsdale) to arrive during a full alarm response. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The rose dot is the firehouse listed for the 4 minute study. The medium blue dots (on the right map) are Greenville HQ and Hartsdale Station #1. The red dots are other Fire Stations within the study. The purple area on the left map is Greenville's 4 minute coverage area. The light blue lines are the 8 minute boarder when HFD automatic aid is provided. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by both Greenville and Hartsdale Engine Companies.

Ladder Company 8 Minute Response Area

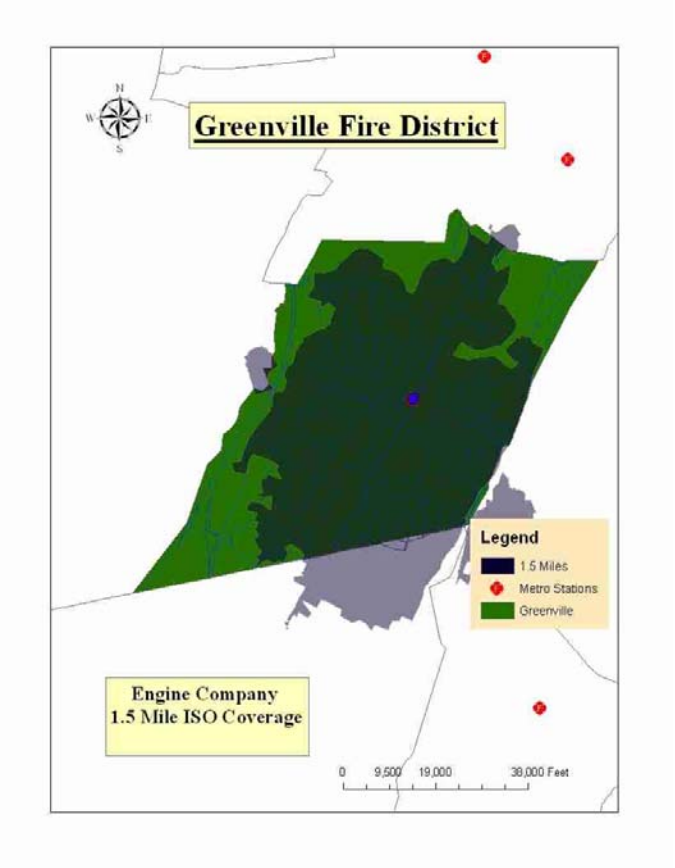


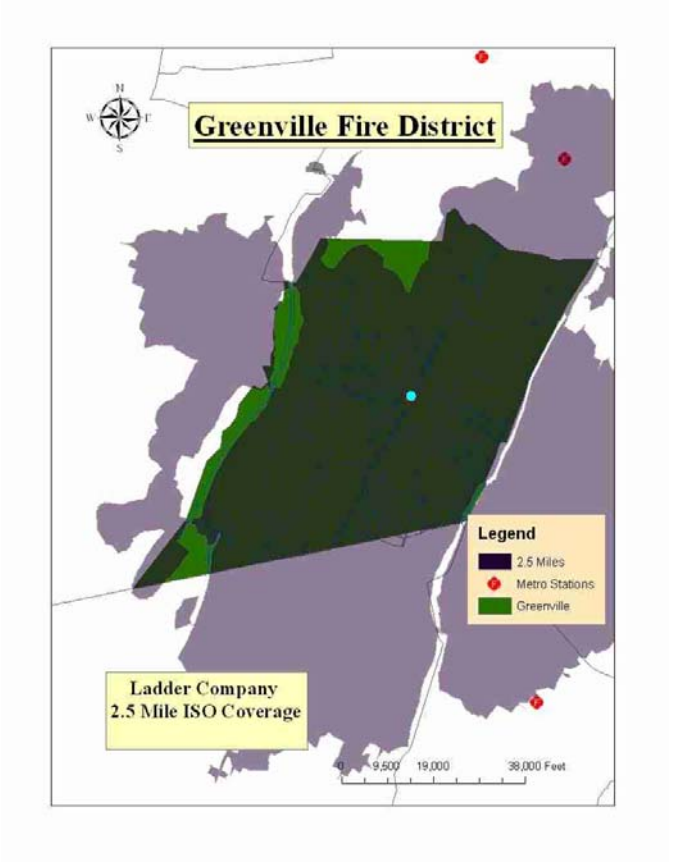
Eight (8) minutes represents the time it takes for Greenville's ladder to arrive during a full alarm response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The blue dot is the Greenville Firehouse. The red dots are the other Fire Stations in the study.

Grey areas indicate the 8 minute response distance covered by Greenville's Ladder Company. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways.

I.S.O. Engine and Ladder Drive Distances





Engine Company
1.5 Road Miles

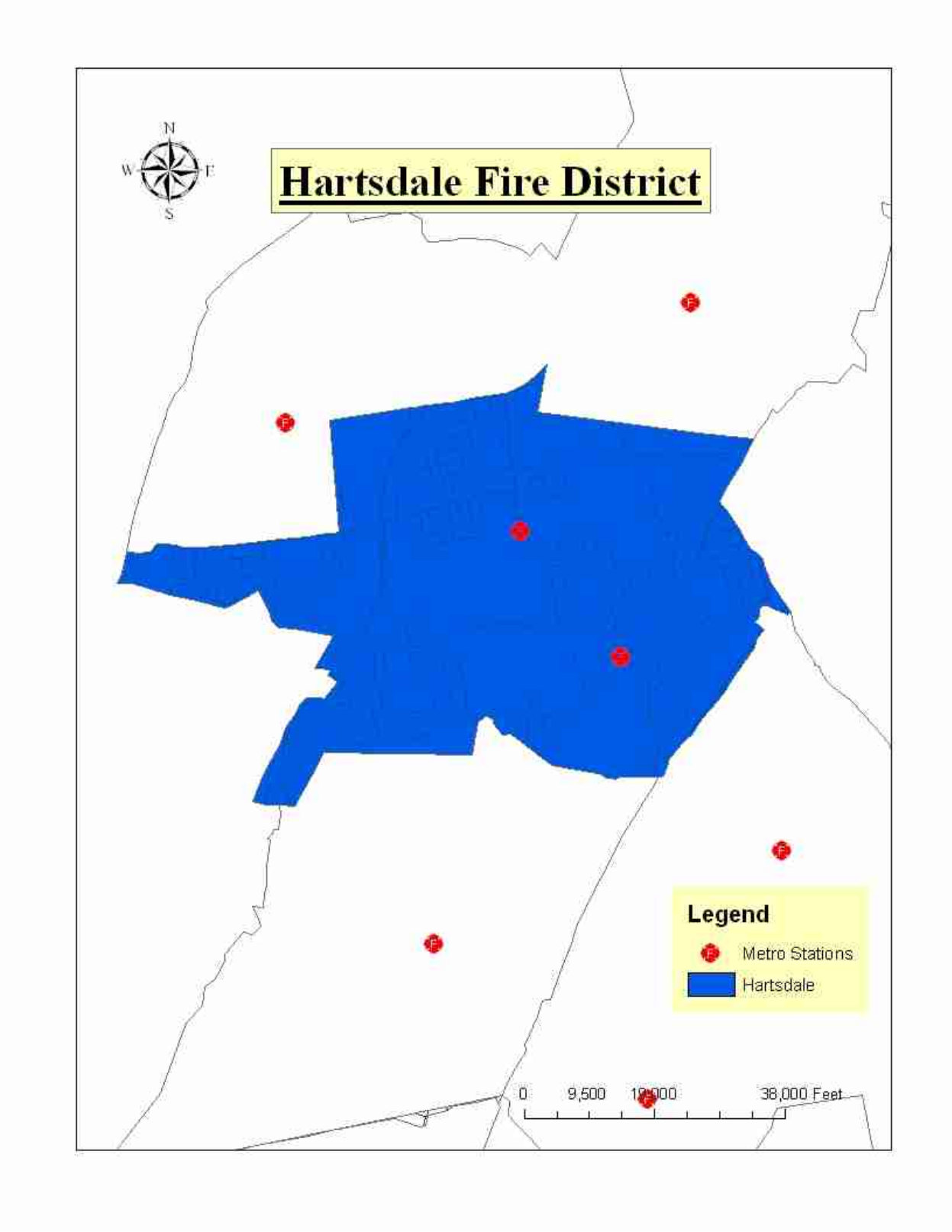
Ladder Company
2.5 Road Miles

The Insurance Service Office (ISO) requires all insured properties to be within 1.5 driving miles of the closest engine company and 2.5 driving miles of the closest ladder company.

The calculations are made by driving outward from fire headquarters for a maximum of 1.5 miles or 2.5 miles without going the wrong way on any one way streets. The blue dot (in the green areas) is the firehouse. The red dots are the other Fire Stations in the study.

The purple areas are the roads driven in 1.5 miles by engines on the left and the roads driven in 2.5 miles by ladders on the right.

Green sections are areas that are not within 1.5 or 2.5 road miles from engine or ladder companies. It is possible that that is due to a lack of roads in those areas, some are parks or golf courses.



Hartsdale Fire District

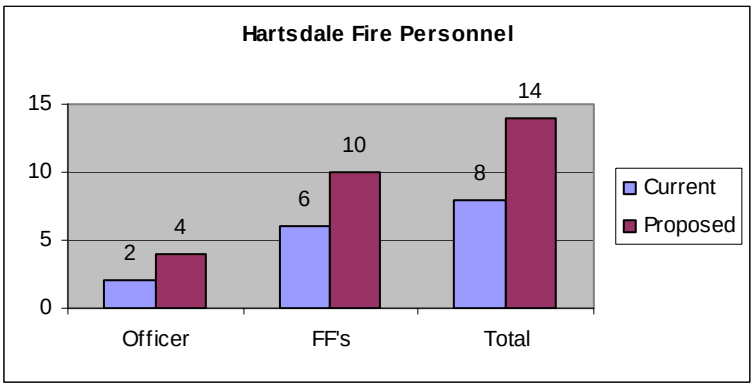
The Hartsdale Fire Department (HFD) consists of 37 career firefighters and officers operating two (2) engines, one (1) ladder, and one(1) command unit out of 2 stations. The on-duty staffing is 6 firefighter and 2 officers. HFD operates out of two (2) fire stations, covering 3.2 square miles with a population of 9,830. Hartsdale covers about 1/3 of the unincorporated section of the Town of Greenburgh. The HFD's oversight is provided by a five (5) member Board of Fire Commissioners. There is a small group of "active" volunteers.

Current Response to a Structure Alarm: two Engines, one Ladder, and one command unit, manned with 6 firefighters and 2 officers.

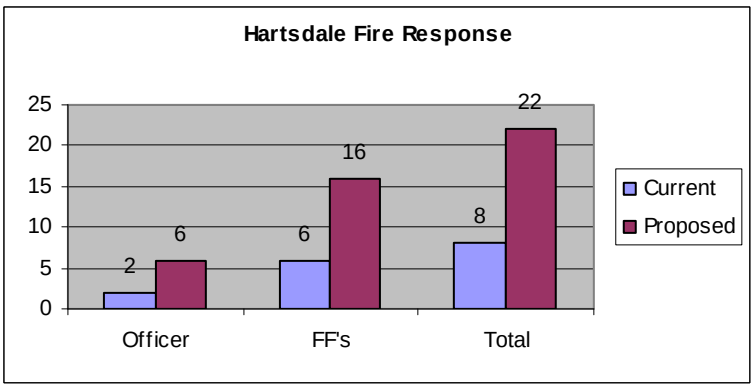
To meet NFPA 1710 without consolidation would require an additional 6 firefighters and 3 officers per shift or 32 additional firefighters and 16 additional officers or 48 additional staff.

Consolidation Advantages:

1. Improved on-duty manning: The on-duty shift will increase from the current 6 firefighters and 2 officers to 10 firefighters and 4 officers. Mutual aid is needed for all structure fires to meet any of the national standards (ISO, NFPA 1710, ICMA, & CFAI).



2. Improved response manning: Current response is 6 firefighters and 2 officers this will increase to 16 firefighters and 6 officers.



3. Improved safety for the public and firefighters by meeting minimum manning and response standards as set by NFPA, ICMA and ISO.

4. Ability to place three firefighters and an officer on medical emergencies within 4 minutes without utilizing a second apparatus. This maintains more apparatus in-service to handle additional emergencies.

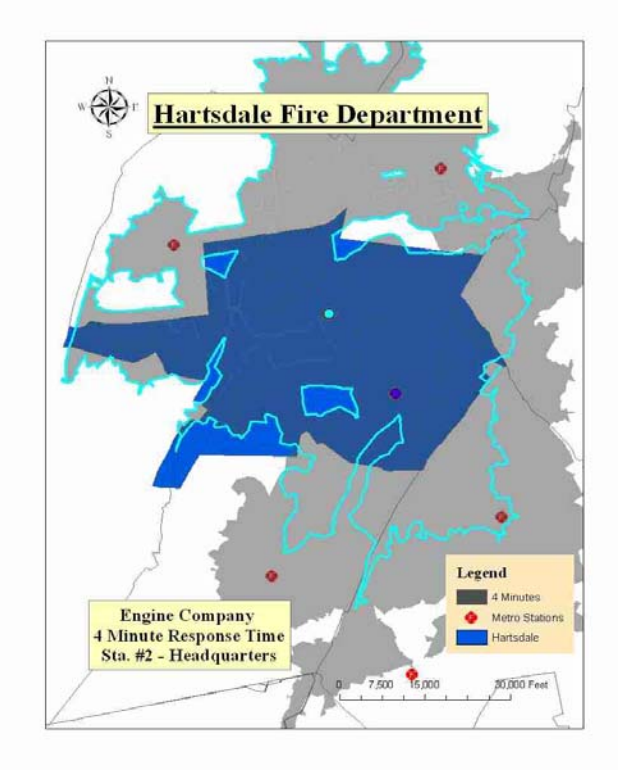
5. Ability to respond to a medical emergency or other calls and still have 22 firefighters and officers available to respond to a fire or other emergency.

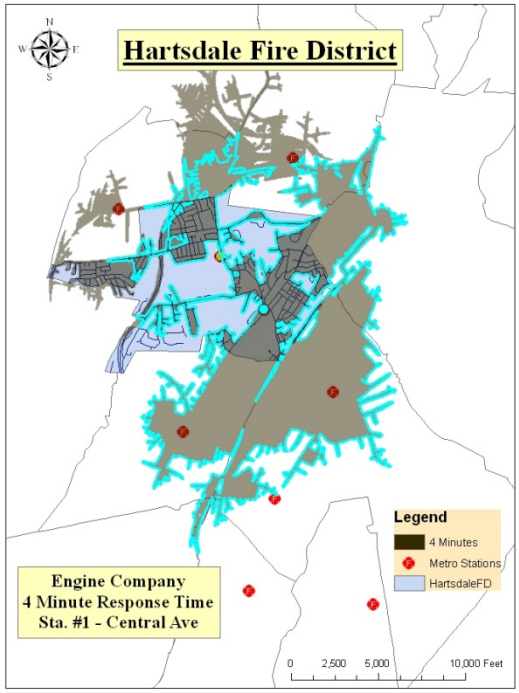
6. Increased supervision and coordination. Currently half of the apparatus in Hartsdale do not have company officers that are directly responsible for that unit and they have no officer arriving in the first and most critical minutes of an emergency. Under this proposal all apparatus will have company officers.

Consolidation Disadvantages:

Loss of local autonomy: If HFD and the community agree to be a part of this regional service, the HFD will no longer exist as it currently does. The two fire stations can retain the community names that the public knows them asI,.e. Hartsdale Fire Station

Engine Company 4 Minute Response Area





Headquarters Fire Station

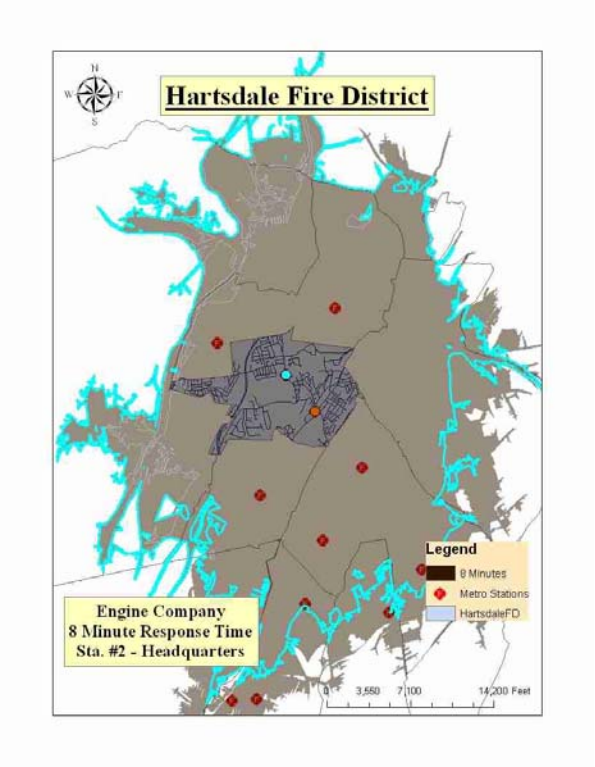
Station #1 Fire Station

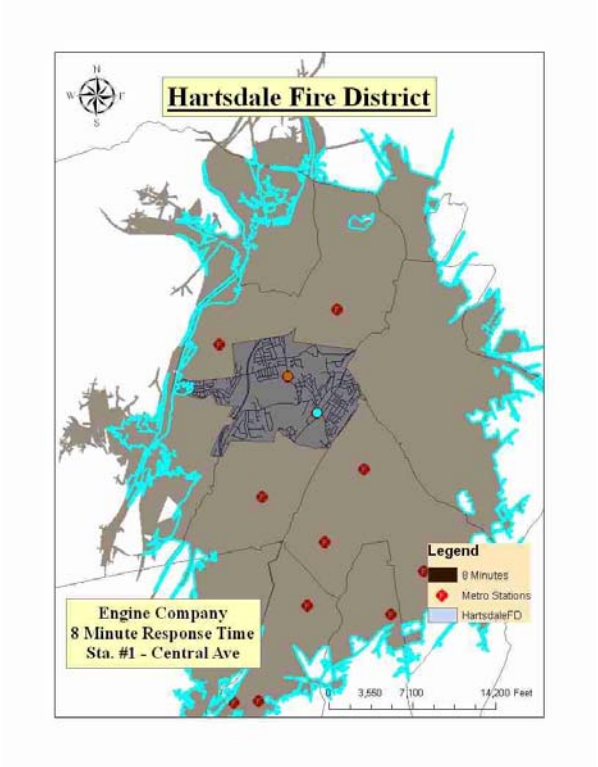
The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map (Headquarters on the left, Station #2 on the right). The navy blue dot is the other Hartsdale Fire Station. The red dots are other Fire Stations within the study.

The light blue lines are the 4 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Dark Grey areas indicate the 4 minute response distance covered by both Hartsdale Engine Companies. The light blue sections are areas without roadways such as golf courses.

Engine Company 8 Minute Response Area





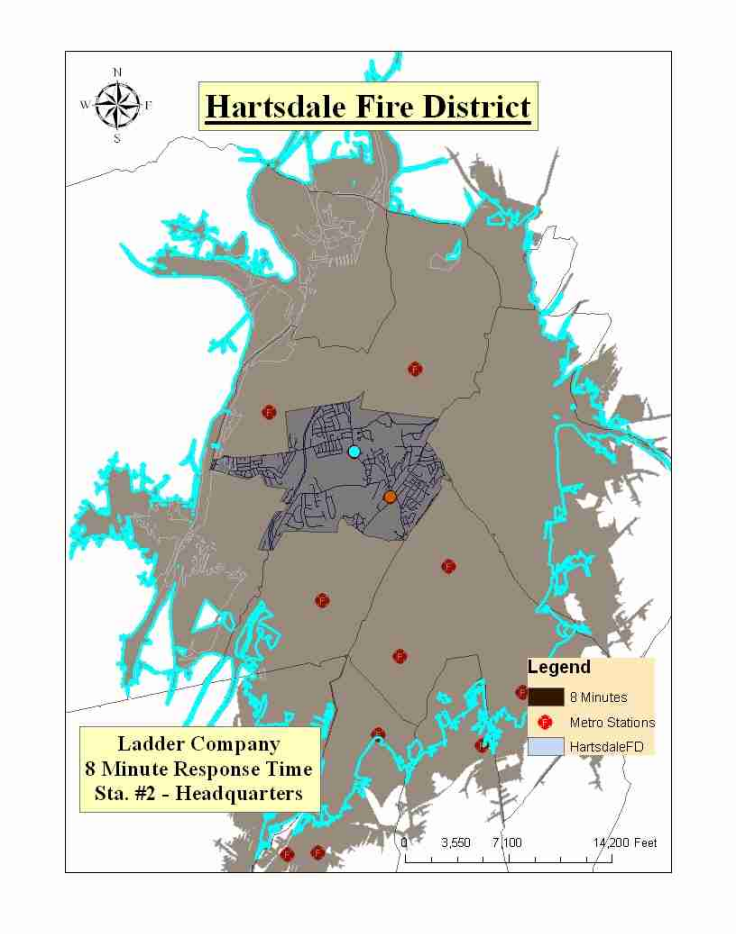
Headquarters Fire Station
Station #2 Fire Station

Eight (8) minutes represents the time it takes for the 2nd due engine to arrive during a full alarm response. It indicates the maximum time allowable when the 1st due engine is not available due to another response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map (Headquarters on the left, Station #2 on the right). The orange dot is the other Hartsdale Fire Station. The red dots are other Fire Stations within the study.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by both Hartsdale Engine Companies.

Ladder Company 8 Minute Response Area

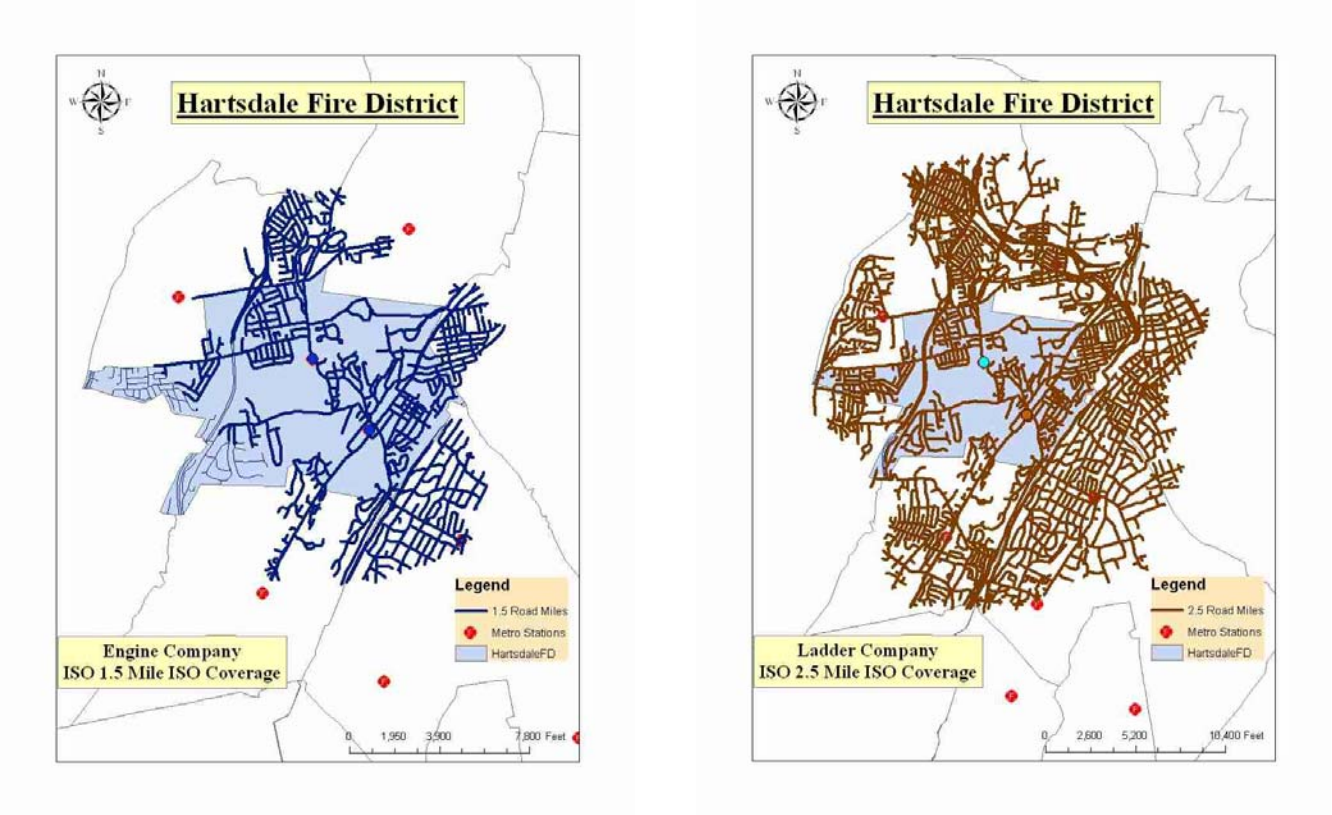


Eight (8) minutes represents the time it takes for Hartsdale's ladder to arrive during a full alarm response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The blue dot is the Hartsdale Headquarters Firehouse. The orange dot is the other Hartsdale Fire Station. The red dots are the other Fire Stations in the study.

Grey areas indicate the 8 minute response distance covered by Hartsdale's Ladder Company.

I.S.O. Engine and Ladder Drive Distances



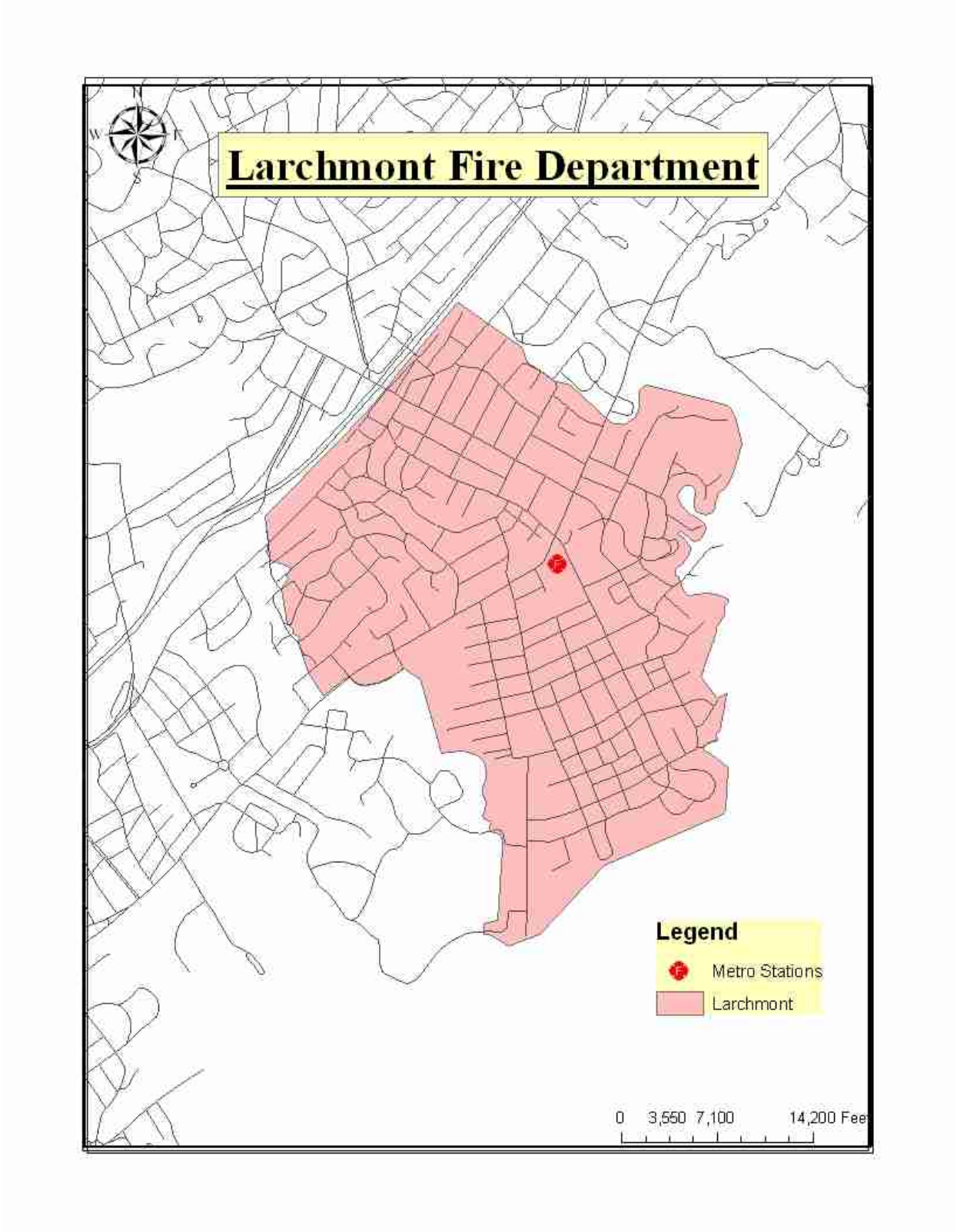
Engine Company 1.5 Road Miles Ladder Company 2.5 Road Miles

The Insurance Service Office (ISO) requires all insured properties to be within 1.5 driving miles of the closest engine company and 2.5 driving miles of the closest ladder company.

The calculations are made by driving outward from each fire station for a maximum of 1.5 miles or 2.5 miles without going the wrong way on any one way streets. The dark blue dots are Hartsdale Firehouses with Engine Companies. The light blue dot is the only firehouse with a ladder company. The red dots are the other Fire Stations in the study.

The blue lines are the roads driven in 1.5 miles by engines, the brown lines are the roads driven in 2.5 miles by ladders.

Light Blue lines are not within 1.5 road miles from an engine. The entire district is within the 2.5 mile ladder requirement. It is possible that that is due to a lack of roads in those areas, some are parks or golf courses. These maps show the additional engines will have only minor effects, what Hartsdale needs is additional roads.



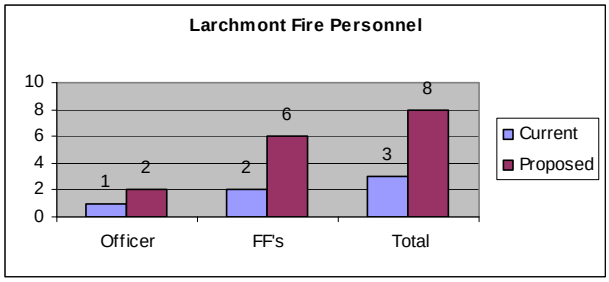
Larchmont Fire Department

The Larchmont Fire Department (LFD) consists of 16 career firefighters and officers operating one (1) engine, and one (1) ladder out of one station. The on-duty staffing is two firefighters and one officer. LFD operates out of one (1) fire station, covering one square mile with a population of 6,485. Larchmont Fire Department covers the Village of Larchmont which is an incorporated village within the Town of Mamaroneck. The LFD's oversight is provided by the Village of Larchmont. There is a small group of "active" volunteers. When this study started, Larchmont was not included primarily because it did not have a career chief and it was felt that they did not have the departmental or political leadership to be able to commit to this study or its findings. Prior to the release of the draft the Mayor and Village Board determined that they needed to change the leadership of the LFD and they proceeded to create a civil service fire chief's position. The study group discussed adding LFD to the study. It was determined that LFD would help cover the eastern side of the new district, howeve, they did bring only three firefighters per shift and they would need 8. It was determined that adding Larchmont would increase the cost more than what they brought to the table, but it was decided that LFD's participation would help the entire district, by allowing units along the New Rochelle/Pelham border to remain in service when incidents on the east side of New Rochelle occurred.

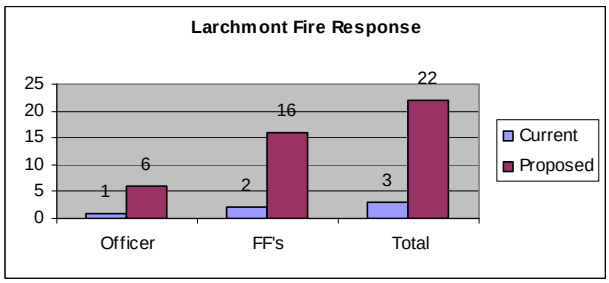
Current Response to a Structure Alarm: Two Engines, one Ladder, manned with two firefighters and one officers, plus mutual aid. Mutual aid is needed for all structure fires no matter how minor. To meet NFPA 1710 without consolidation would require an additional 11 firefighters and 4 officers per shift or 58 additional firefighters and 21 additional officers or 79 additional staff.

Consolidation Advantages:

1. Improved on-duty manning: The on-duty shift will increase from the current 2 firefighters and 1 officer to 6 firefighters and 2 officers.



2. Improved response manning: Current response is two firefighters and one officer this will increase to 16 firefighters and 6 officers.



3. Improved safety for the

public and firefighters by meeting minimum manning and response standards as set by NFPA, ICMA and ISO.

4. Ability to respond to a medical emergency or other calls and still have 22 firefighters and officers available to respond to a fire or other emergency.

5. Increased supervision and coordination. Currently only one of the two apparatus in Larchmont has a company officer 24/7 that is directly responsible for both units. Under this proposal all apparatus will have company officers.

6. Under Department of Labor Law (29CFR1910.134) the current manning makes it illegal for LFD firefighters to enter a burning structure until additional firefighters (recalled, volunteer or mutual aid) arrive at the incident.

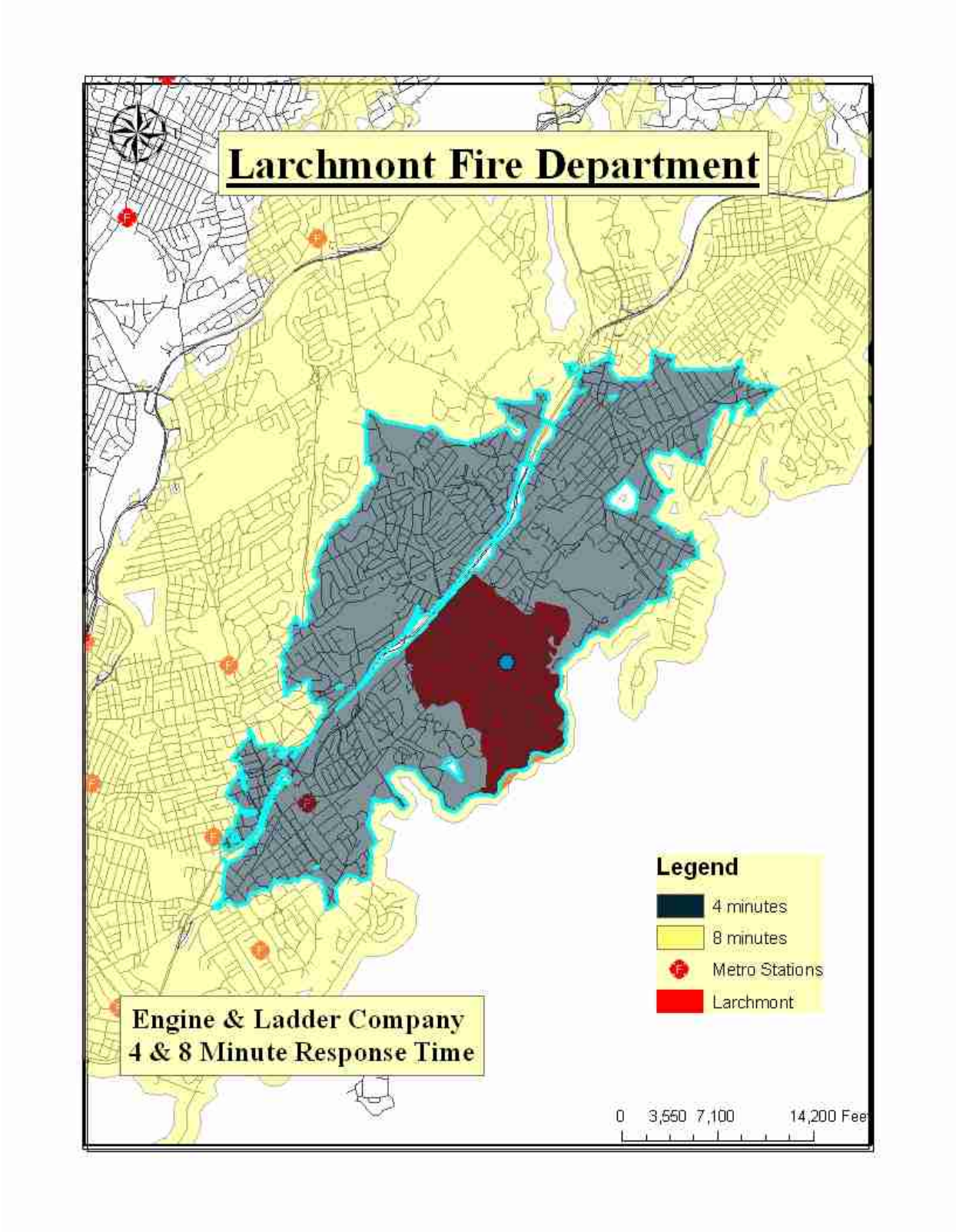
7. The current manning makes it impossible for LFD to handle a second call when committed to even the most minor of calls.

Consolidation Disadvantages:

1. Loss of local autonomy: If LFD and the community agree to be a part of this regional service, the LFD will no longer exist as it currently does.

2. The current configuration of LFD's station will need to be modified to accommodate a larger on-duty staff.

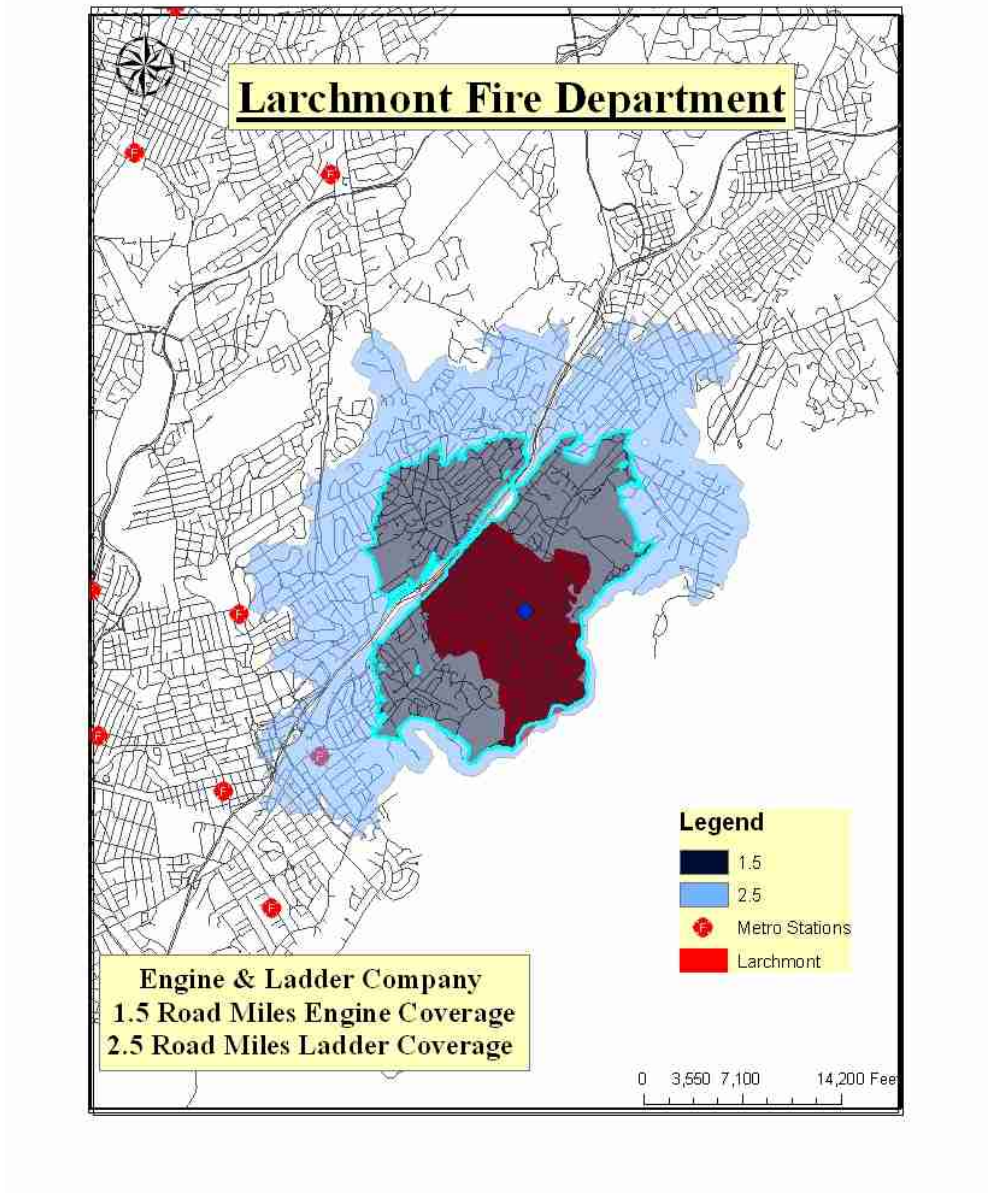
Engine & Ladder Company 4 & 8 Minute Response Area



The response time of 4 or 8 minutes is drive time only. 8 minutes represents the time it takes for the 2nd due engine (which LFD currently does not man) and the 1st due ladder to arrive during a full alarm response. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

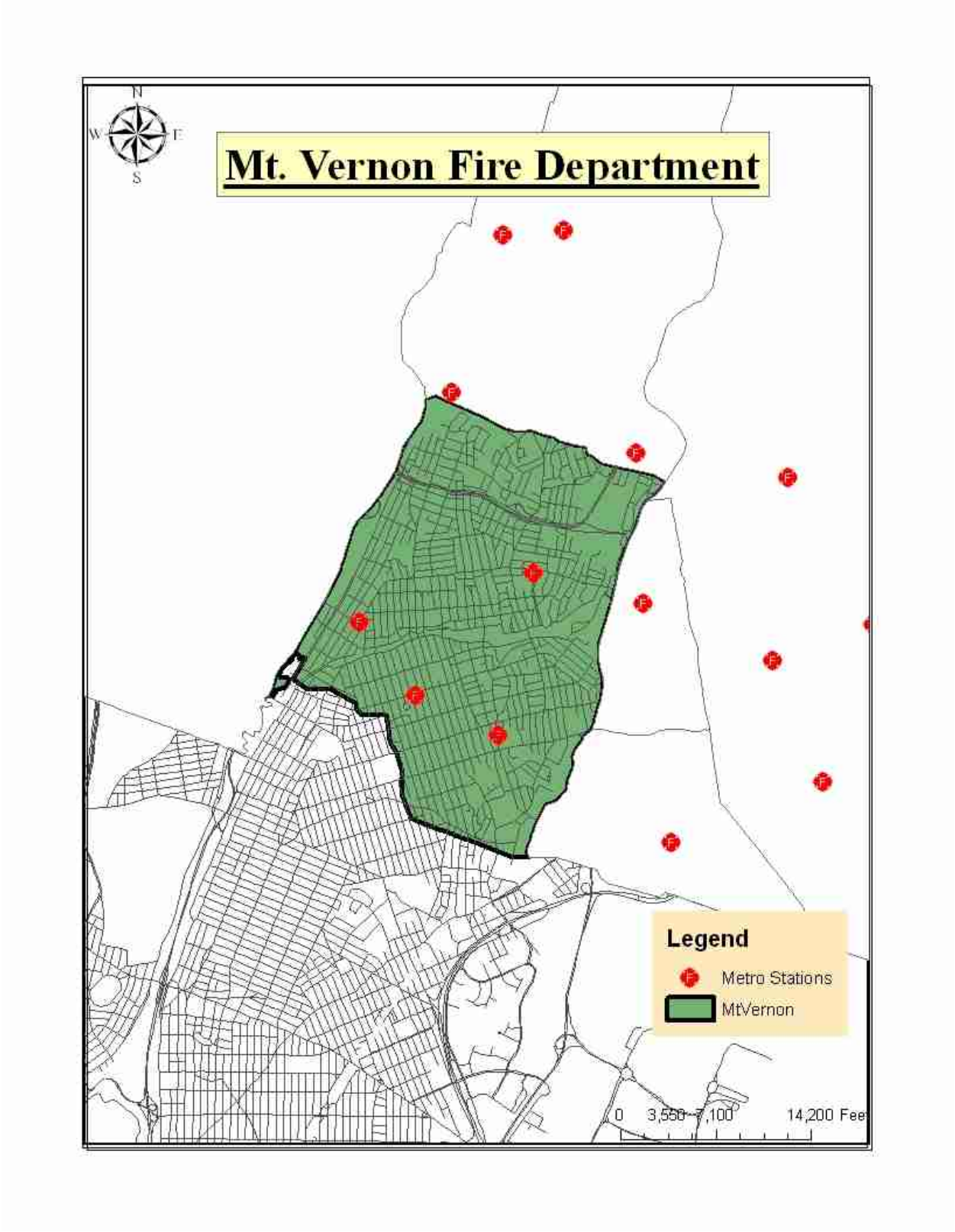
The blue dot is the firehouse. The red dots are other fire stations within the study. The grey area is Larchmont's 4 minute coverage area. The light blue lines are the 4 minute border, those that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Yellow areas indicate the 8 minute response distance covered by both Engine and Ladder Companies.

I.S.O. Engine and Ladder Drive Distances



The Insurance Service Office (ISO) requires all insured properties to be within 1.5 driving miles of the closest engine company and 2.5 driving miles of the closest ladder company.

The calculations are made by driving outward from fire headquarters for a maximum of 1.5 miles or 2.5 miles without going the wrong way on any one way streets. The blue dot (in the red areas) is the firehouse. The red dots are the other fire stations in the study. The grey areas are the roads driven in 1.5 miles by engines and the light blue areas are the roads driven in 2.5 miles by a ladder. All areas of Larchmont are within the ISO 1.5 mile road area.



Mount Vernon Fire Department

The Mt. Vernon Fire Department (MVFD) consists of 144 career firefighters and officers operating four (4) engines, two (2) ladders, one (1) rescue and a command vehicle out of four stations. The on-duty staffing is 16 firefighter and 5 officers. MVFD operates out of four (4) fire stations, covering 4.4 square miles with a population of 67,924. MVFD covers the City of Mount Vernon. The MVFD's oversight is by a civilian Commissioner and Deputy Commissioner who answer to the Mayor (Strong Mayor Council model).

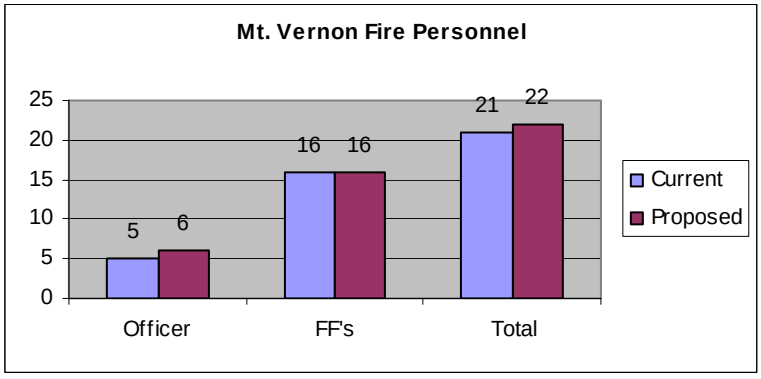
The concept of this study comes from the complaints that MVFD "abuses" mutual aid and takes advantage of the surrounding communities. Mt Vernon does have a number of major issues, including a very high population density, which live in mostly older apartment buildings with multiple exposures. Many of buildings are rental units without the benefit of central station fire alarms and a higher percentage of economic challenges than most of the departments in the study. This often results in fires that are fully involved and often with trapped persons upon the arrival of the MVFD. We believe that MVFD will benefit as much from consolidation as the rest of the departments will benefit from MVFD's participation.

Current Response to a Structure Alarm: two Engines, one Ladder, one Rescue and one Command, manned with 9 firefighters and 4 officers. This manning meets ISO's minimum (for property protection) but is below all other national standards (NFPA 1710, ICMA, & CFAI).

To meet NFPA 1710 without consolidation would require an additional 6 firefighters and 3 officers per shift or 31 additional firefighters and 16 additional officers or 48 additional staff.

Consolidation Advantages:

1. Improved on-duty manning: The on-duty shift will increase from the current 16 firefighters and 5 officers to 16 firefighters and 6 officers.

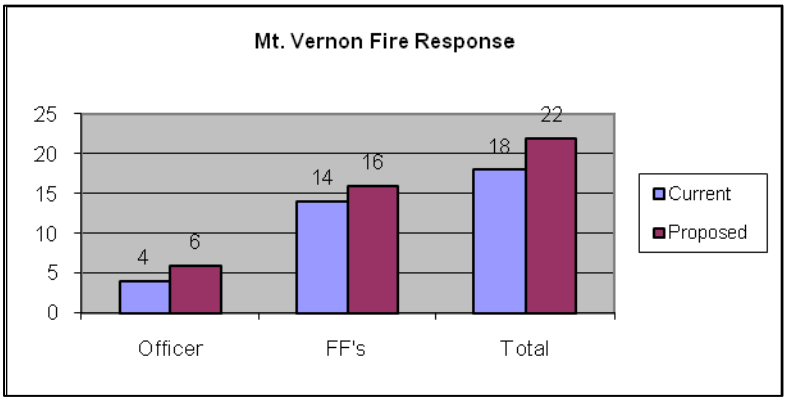


2. Improved response manning: Current response is 9 firefighters and 4 officers this will increase to 16 firefighters and 6 officers. Because the closest units will be responding, some of this response will be coming from stations that are not in Mt Vernon, for example a call in:

- Fleetwood:
  1 Engine from Chester Heights (EFD)
  1 Engine from Bronxville (EFD)
  1 Ladder and 1 Chief from MVFD HQ (Lincoln Ave)
  1 Ladder from either MV Sta. #3 or Tuckahoe (EFD)
  1 Rescue from Pelham (5th Avenue)

- Sanford Boulevard:
  1 Engine from MVFD - Fulton
  1 Engine and 1 Ladder from Pelham Manor
  1 Ladder from MVFD Sta. #3 (3rd Street)
  1 Chief from MVFD HQ (Lincoln Ave)
  1 Rescue from Pelham (5th Avenue)

- This leaves three – 4 engines and 1 ladder with 12 – 15 firefighters and 4 – 5 officers in reserve covering the rest of Mt. Vernon.



3. Improved safety for the public and firefighters by meeting minimum manning and response standards as set by NFPA, ICMA and ISO.

4. Ability to place three firefighters and an officer on medical emergencies within 4 minutes without a second unit.

5. Ability to respond to a medical emergency or other calls and still have 22 firefighters and officers available to respond to a fire or other emergency.

6. Increased supervision and coordination. Currently 3 of 7 apparatus in Mt. Vernon do not have company officers that are directly responsible for that unit. Under this proposal all apparatus will have company officers.

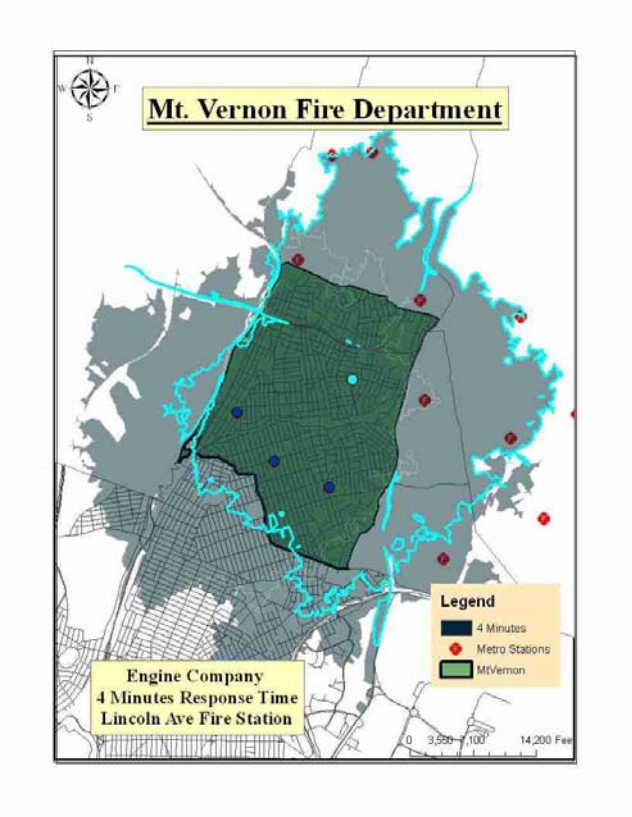
7. While the study did not consider this during the initial study, it has been reported that the Oak Street Fire Station and Fire Headquarters both need to be replaced (due to structural issues and sever mold). The cost to replace these two structures is in the $4 to $12 million dollar range. While we did not consider the potential loss of these stations, minor modifications in apparatus assignments in adjacent stations (Fulton, 3rd St, Pelham, Pelham Manor, Chester Heights and Bronxville) potentially can cover all areas within the required response times and manpower requirements of NFPA 1710. This is not to say these facilities would or should be abandoned, just until such time as proper funding can be secured (which is more likely under the expanded tax base) the community could be properly covered. Additional studies would be needed to determine the exact coverage needs.

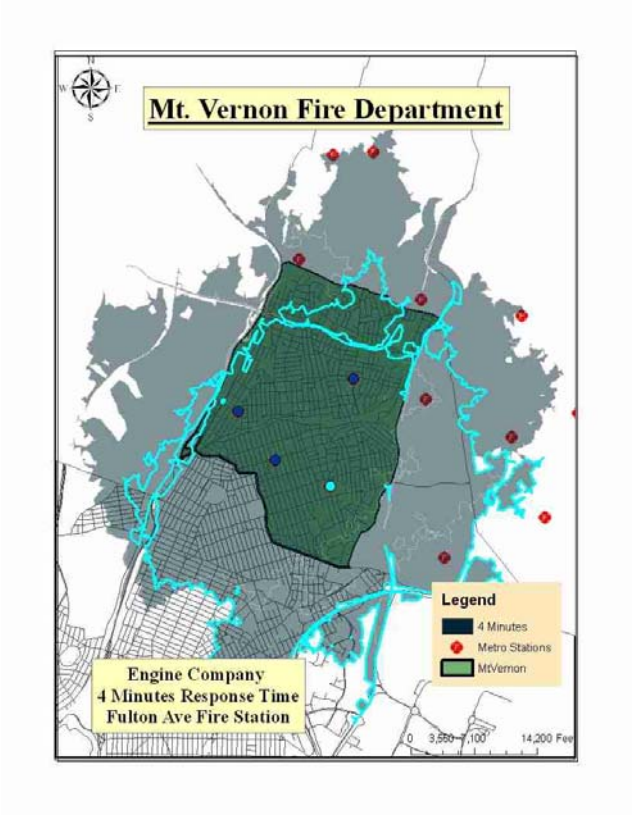
Consolidation Disadvantages:

Loss of local autonomy: If MVFD and the community agree to be a part of this regional service, the MVFD will no longer exist as it currently does. Each of the fire stations will retain the community names that the public knows them as:

- Oak Street Fire Station
- Fulton Street Fire Station
- Lincoln Avenue Fire Station
- Third Street Fire Station

Engine Company 4 Minute Response Area





Lincoln Avenue Fire Station

Fulton Avenue Fire Station

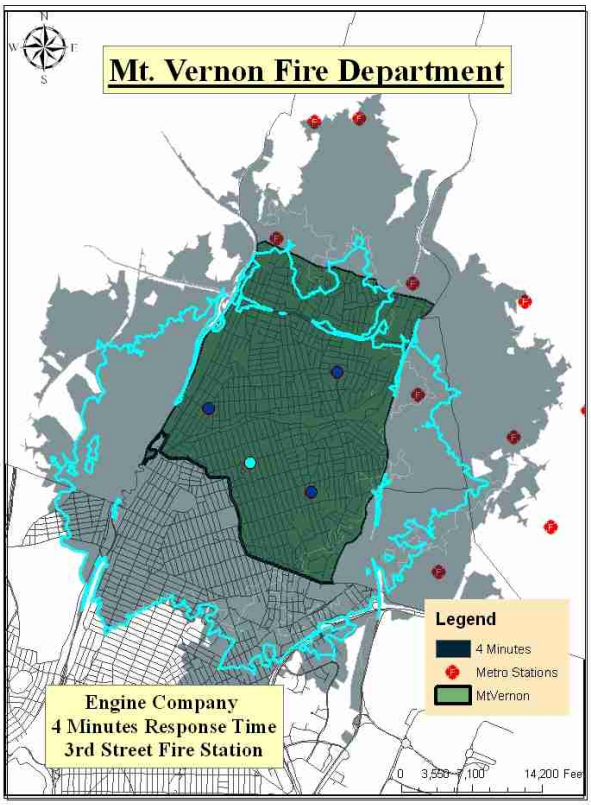
The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map (Headquarters on left, Fulton Ave. on the right). The three navy dots are the remaining Mt. Vernon Fire Stations with Engine Companies. The red dots are the Fire Stations in Eastchester, New Rochelle, Pelham and Pelham Manor.

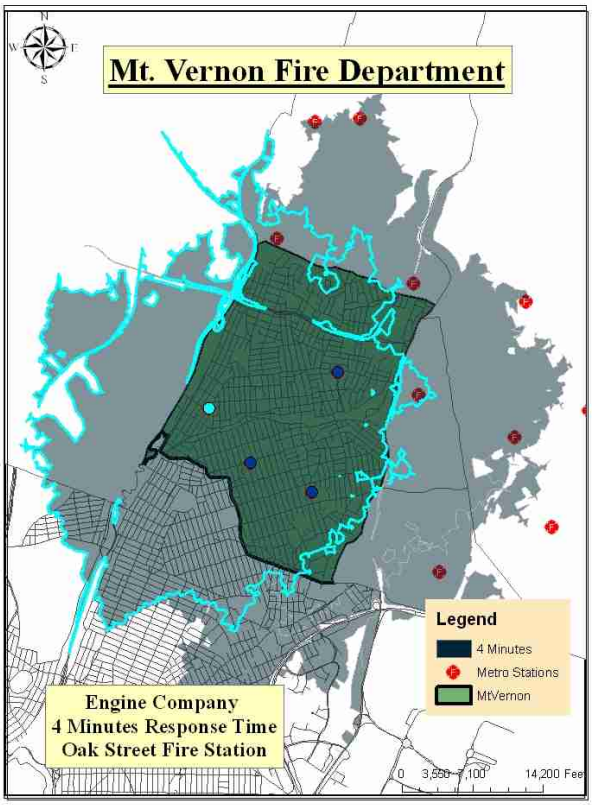
The light blue lines are the 4 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all Mt. Vernon Engine Companies.

Engine Company 4 Minute Response Area

3rd Street Fire Station



Oak Street Fire Station

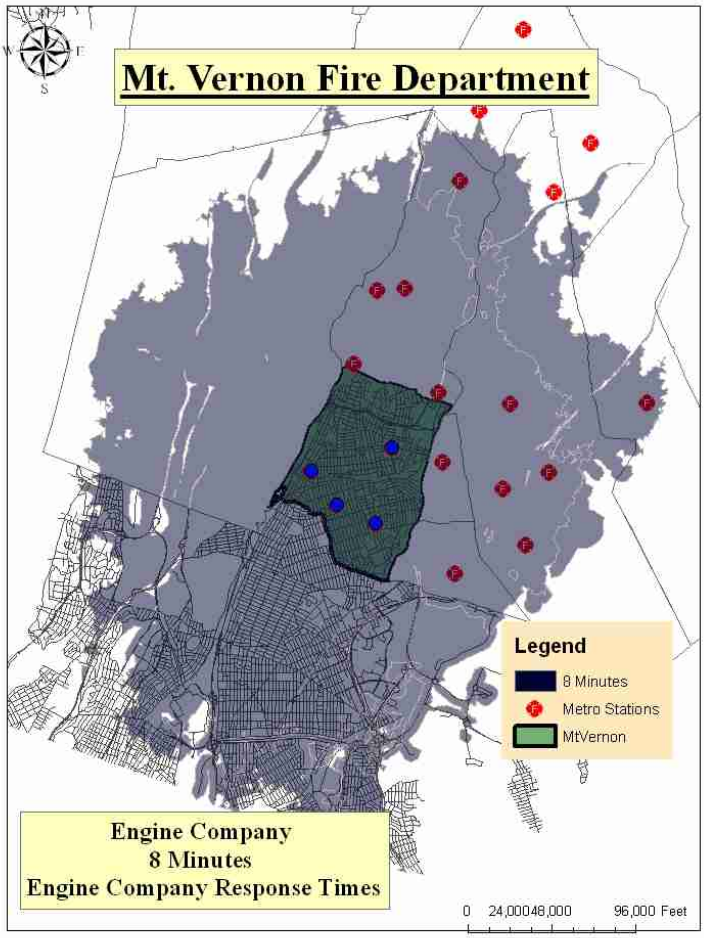


The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map (3rd Street on left, Oak Street on the right). The three navy dots are the remaining Mt. Vernon Fire Stations with engine companies. The red dots are the Fire Stations in Eastchester, New Rochelle, Pelham, and Pelham Manor.

The light blue lines are the 4 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all Mt. Vernon Engine Companies.

Engine Company 8 Minute Response Area



Eight (8) minutes represents the time it takes for the 2nd due engine to arrive during a full alarm response. It indicates the maximum time allowable when the 1st due engine is not available due to another response.

Because Mt. Vernon Fire Stations are so close to one another, the map at right shows the total 8 minute response for all four stations.

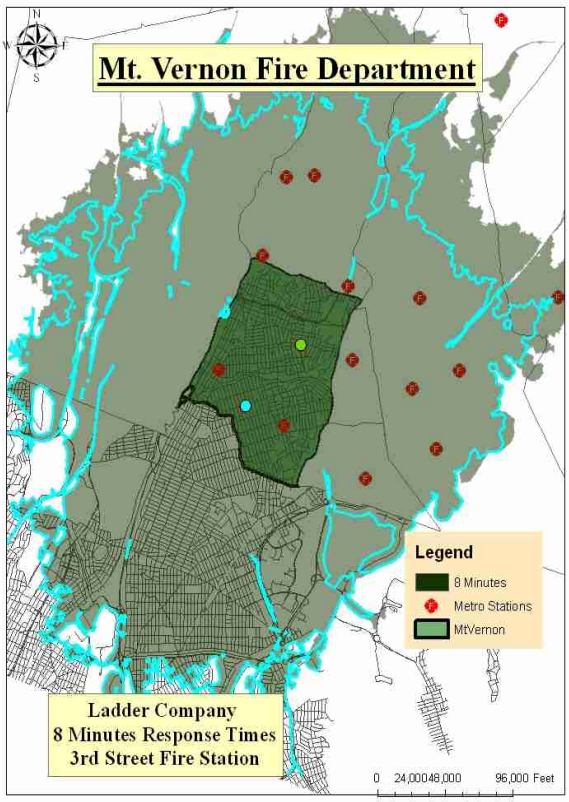
The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The blue dots are the Mt. Vernon Firehouses. The red dots are the Eastchester, Larchmont, New Rochelle, Pelham, Pelham Manor and Scarsdale.

Grey areas indicate the 8 minute response distance covered by all Mt. Vernon Engine Companies.

Ladder Company 8 Minute Response Area

Lincoln Avenue Fire Station
3rd Street Fire Station

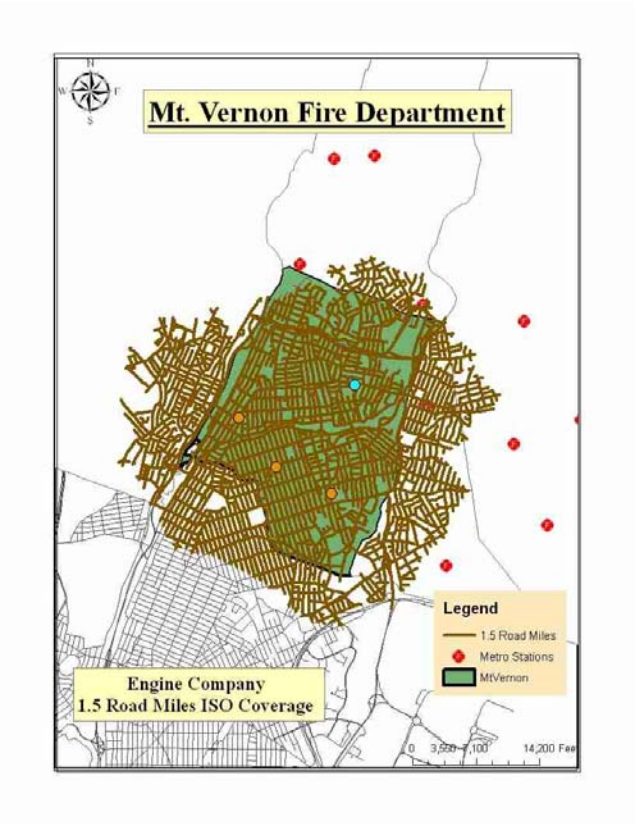


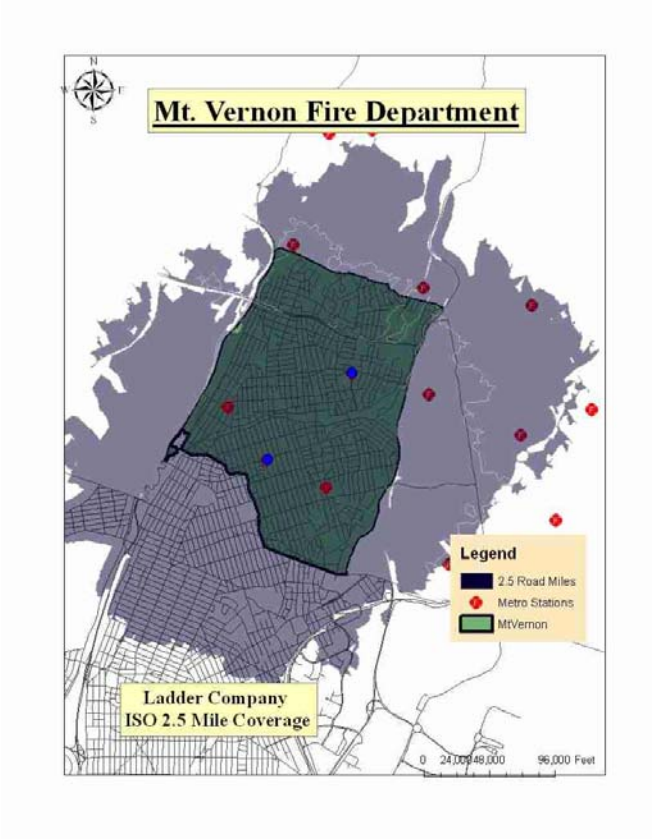
Eight (8) minutes represents the time it takes for the 1st and 2nd due ladders to arrive during a full alarm response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map (Lincoln Avenue on left, 3rd Street on the right). The light green dots are the other Mt. Vernon Fire Stations with Ladder Companies. The red dots are the other Mt. Vernon Fire Stations and Fire Stations in Eastchester, Larchmont, New Rochelle, Pelham, Pelham Manor and Scarsdale.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by both Mt. Vernon Ladder Companies.

I.S.O. Engine and Ladder Drive Distances





Engine Company 1.5 Road Miles

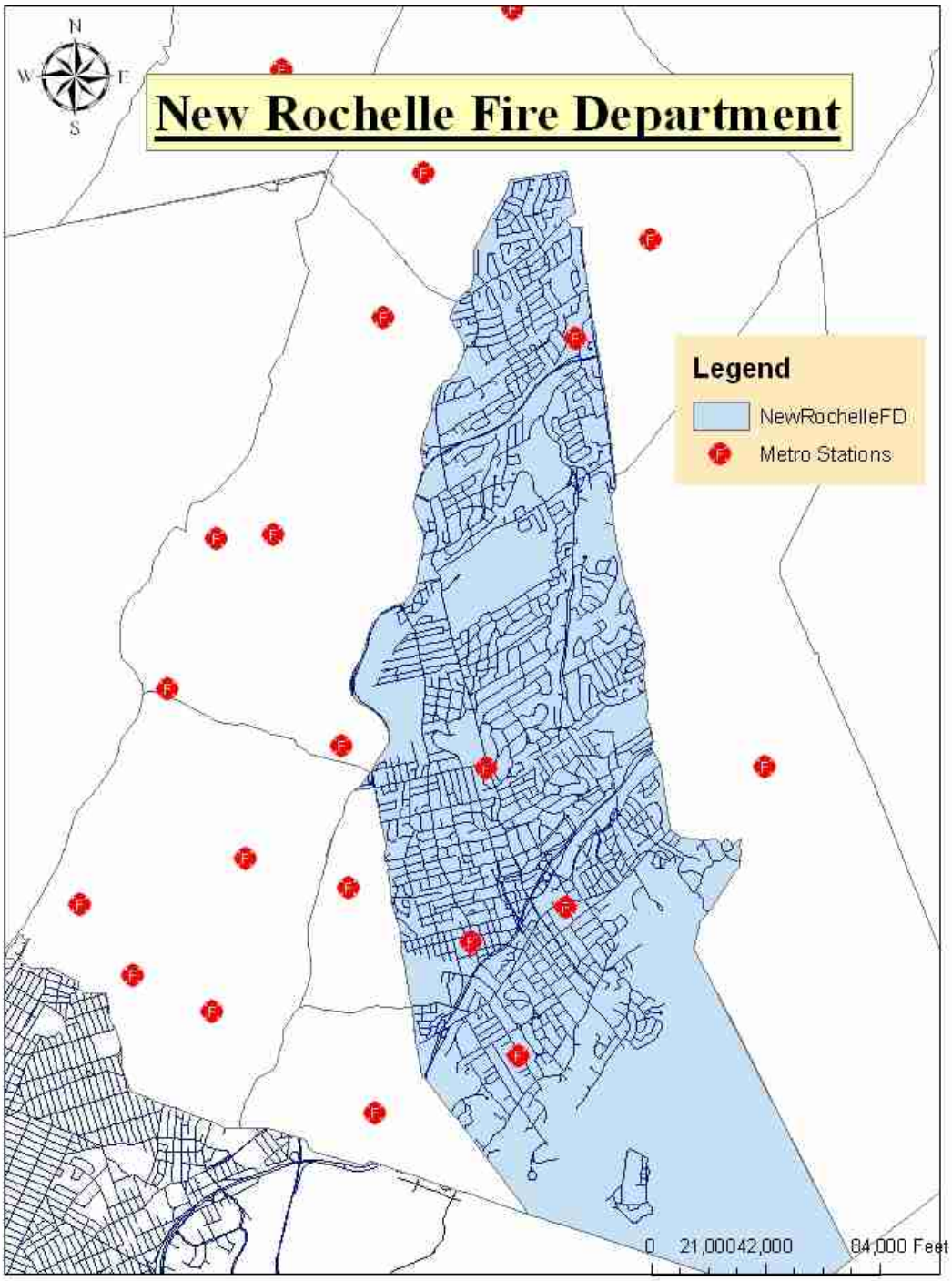
Ladder Company 2.5 Road Miles

The Insurance Service Office (ISO) requires all insured properties to be within 1.5 driving miles of the closest engine company and 2.5 driving miles of the closest ladder company.

The calculations are made by driving outward from each fire station for a maximum of 1.5 miles or 2.5 miles without going the wrong way on any one way streets.

The brown lines are the roads driven in 1.5 miles by engines; the grey area covers the roads driven in 2.5 miles by ladders.

Green sections are areas that are not within 1.5 road miles from engine companies. It is possible that that is due to a lack of roads in those areas, often they are parks or golf courses. The North West section (Fleetwood) is beyond 1.5 road miles.



New Rochelle Fire Department

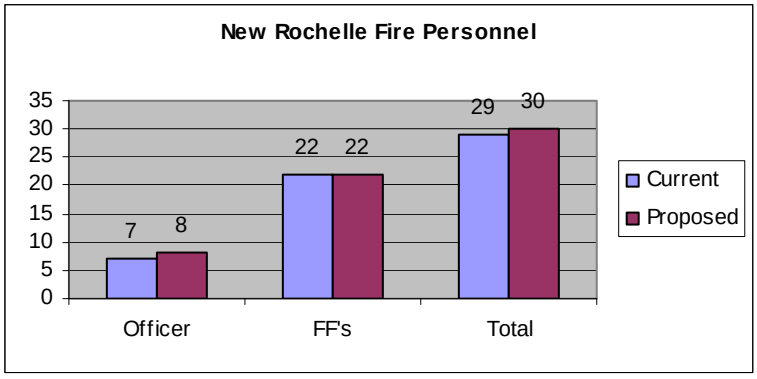
The New Rochelle Fire Department (NRFD) consists of 168 career firefighters and officers operating five (5) engines, three (3) ladders and a command vehicle out of 5 stations. The on-duty staffing is 23 firefighters and 6 officers. NRFD operates out of five (5) fire stations, covering 10.4 square miles with a population of 73,000. NRFD covers the City of New Rochelle. The NRFD's oversight is by a civilian Commissioner/Chief who answers to the City Manager in a Manager/Council form of government.

Current Response to a Structure Alarm: two Engines, two Ladders, one Command, manned with 11 - 13 firefighters and 3 officers.

To meet NFPA 1710 without consolidation would require an additional 5 firefighters and 4 officers per shift or 26 additional firefighters and 21 additional officers or 45 additional staff.

Consolidation Advantages:

1. Improved on-duty manning: The on-duty shift will increase from the current 22 firefighters and 7 officers to 22 firefighters and 8 officers. While New Rochelle only receives a minor increase in the on-duty staff it dramatically improves its ability to respond to fires particularly in the North End and near its borders.



2. Improved response manning: Current response is 11-13 firefighters and three officers this will increase to 16 firefighters and 6 officers. Because the closest units will be responding, some of this response will be coming from stations that are not in New Rochelle, for example a call in:

   - North End – North of Stratton Road:
   - 1 Engine from NRFD Sta. #5
   - 1 Engine from Scarsdale (Crossroad or Popham Rd.)
   - 1 Ladder and Chief from EFD Sta. #5 (Wilmot Rd.)
   - 1 Ladder from Scarsdale HQ (Rt. 22 at Fenimore Rd.)
   - 1 Rescue from Hartsdale Sta.#1 (Central Ave.)

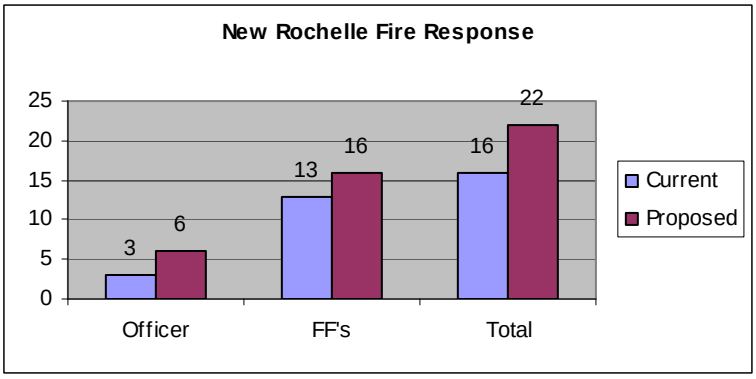
- North End – Wykagyl
  1 Engine from NRFD Sta. #3
  1 Engine from EFD "Waverly" (Main Street)
  1 Ladder from NRFD Sta. #3
  1 Ladder and Chief from EFD Sta. #5 (Wilmot Rd)
  1 Rescue from Pelham (5th Avenue)

- East End (City Park, Palmer Square, Premium Point):
  1 Engine and 1 Ladder from NRFD Sta. #1
  1 Engine and 1 Ladder from Larchmont
  1 Chief from NRFD Sta. #1
  1 Rescue from Pelham (5th Avenue)

- South End – Pelham Rd and Drake up to Sycamore Park
  1 Engine from NRFD Sta. # 4.
  1 Engine and 1 Ladder from Pelham Manor
  1 Ladder and 1 Chief from NRFD Sta. #1
  1 Rescue from Pelham (5th Avenue)

- West Side – Glenwood Lake
  1 Engine from NRFD Sta. #3
  1 Engine from EFD Chester Heights
  1 Ladder from NRFD Sta. #3
  1 Ladder and 1 Chief from NRFD Sta. #1
  1 Rescue from Pelham (5th Avenue)

- These responses leave 4 engines and 1 ladder with 15 firefighters and 5 officers in reserve covering the rest of New Rochelle.



3. Improved safety for the public and firefighters by meeting minimum manning and response standards as set by NFPA, ICMA and ISO.

4. Improved response time to many areas of the city, particularly in the north end and near city borders. In many cases it will not improve the response time of the 1st arriving unit, but it will dramatically reduce the time for all additional units.

5. The ability to respond with sufficient personnel to handle a high rise fire.

6. The ability to handle the rapidly increasing call volume, which has gone up from 3,200 to 9,000 calls in the last 20 years. This will require additional apparatus and personnel in the next few years.

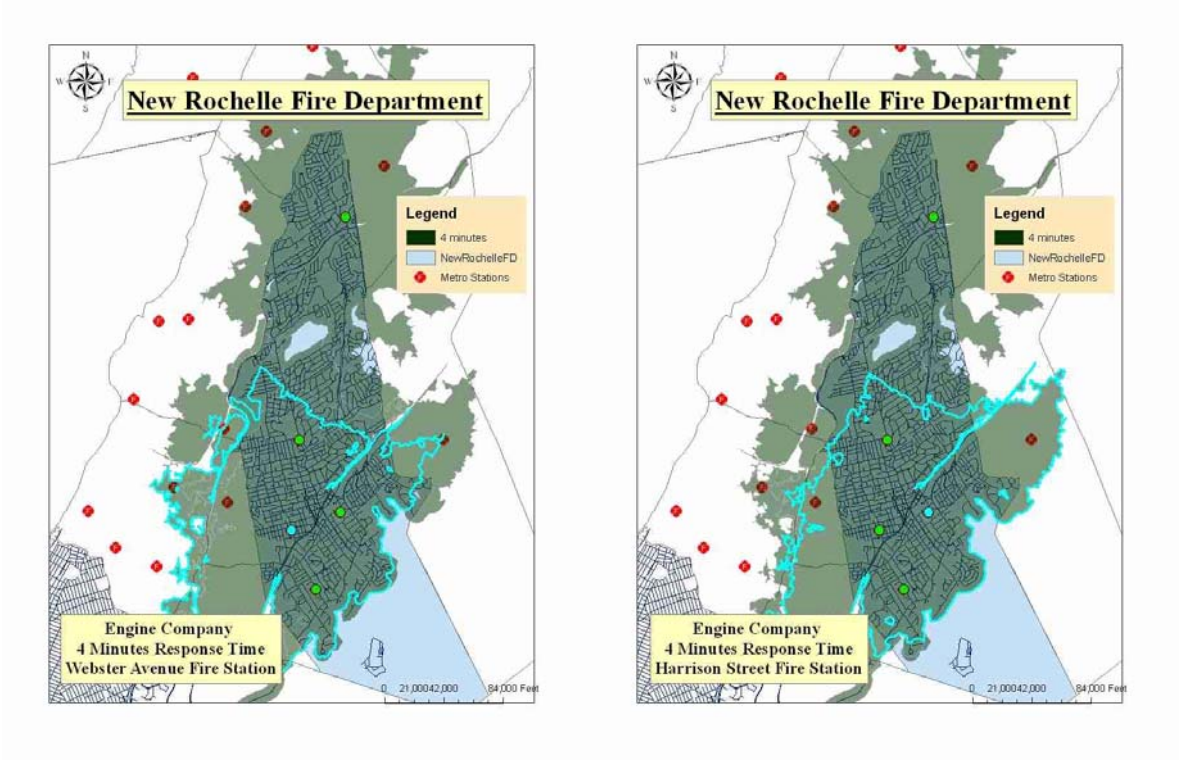
7. The ability to respond to a medical emergency or other calls and still have 22 firefighters and officers available to respond to a fire or other emergency.

8. Increased supervision and coordination. Currently 30% of the apparatus in New Rochelle does not have company officers that are directly responsible for that unit. This represents almost $3 million in apparatus without a supervisor. Under this proposal all apparatus will have company officers.

Consolidation Disadvantages:

Loss of local autonomy: If NRFD and the community agree to be a part of this regional service, the NRFD will no longer exist as it currently does.

Engine Company 4 Minute Response Area



Harrison Street Fire Station Webster Avenue Fire Station

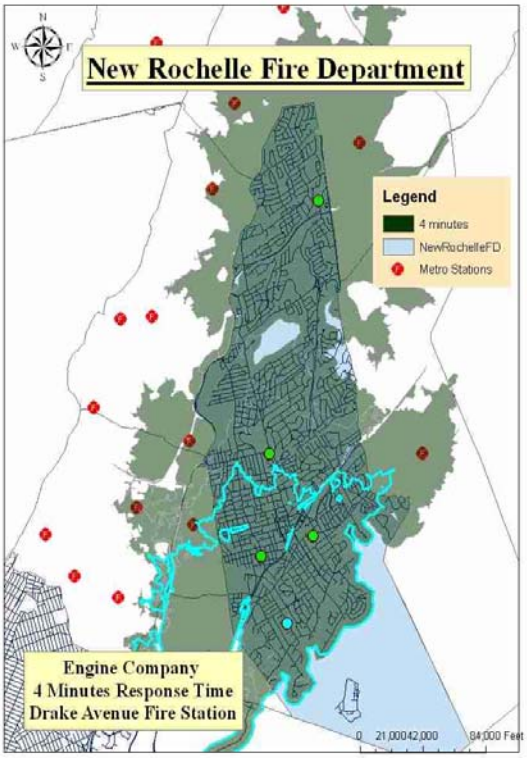
The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map (Harrison Street – Sta. #1 on left, Webster Ave.- Sta. #2 on the right). The four light green dots are the remaining New Rochelle Fire Stations with Engine Companies. The red dots are the Fire Stations in Eastchester, Greenville, Larchmont, Mt. Vernon, Pelham and Pelham Manor.

The light blue lines are the 4 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all New Rochelle Engine Companies. The light blue areas are beyond 4 minutes, they include Larchmont Woods, Bayberry and the Wykagyl Country Club.

Engine Company 4 Minute Response Area

North Ave. Fire Station
Drake Ave. Fire Station



The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map (North Ave. – Sta. #3 on left, Drake Ave. - Sta. #4 on the right). The four light green dots are the remaining New Rochelle Fire Stations with Engine Companies. The red dots are the Fire Stations in Eastchester, Greenville, Larchmont, Mt. Vernon, Pelham and Pelham Manor.

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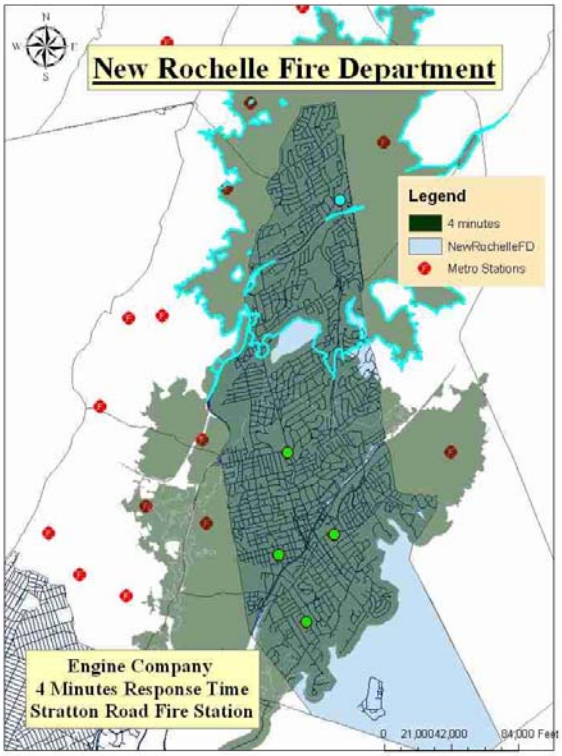
Engine Company 4 Minute Response Area



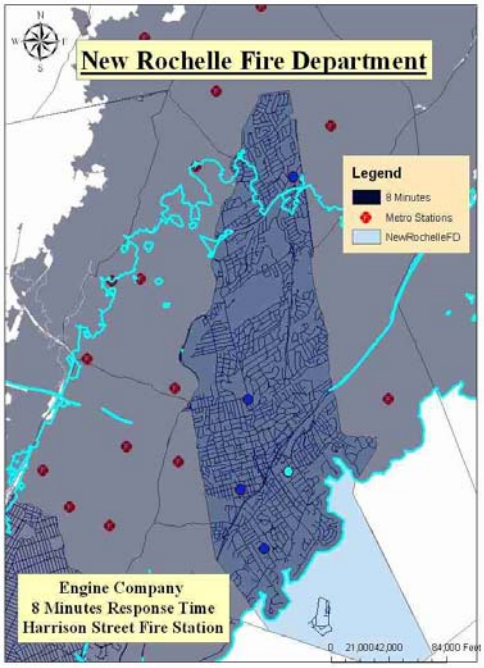
Stratton Road Fire Station

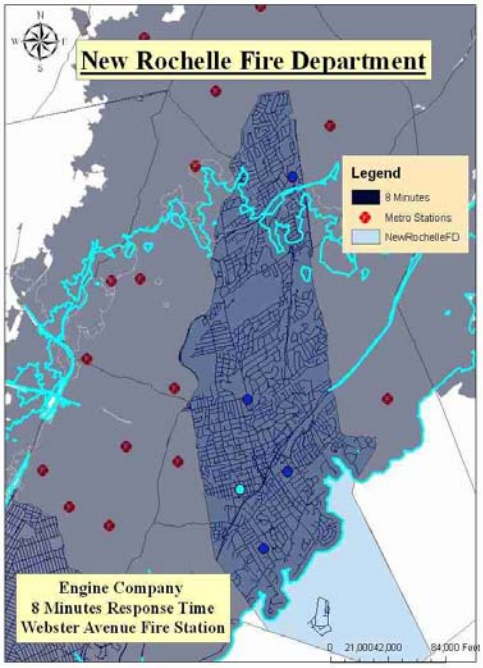
The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map. The four light green dots are the remaining New Rochelle Fire Stations with engine companies. The red dots are the Fire Stations in Eastchester, Greenville, Larchmont, Mt. Vernon, Pelham and Pelham Manor.

The light blue lines are the 4 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all New Rochelle Engine Companies. The light blue areas are beyond 4 minutes, they include Larchmont Woods, Bayberry and the Wykagyl Country Club.

Engine Company 8 Minute Response Area





Harrison Street Fire Station

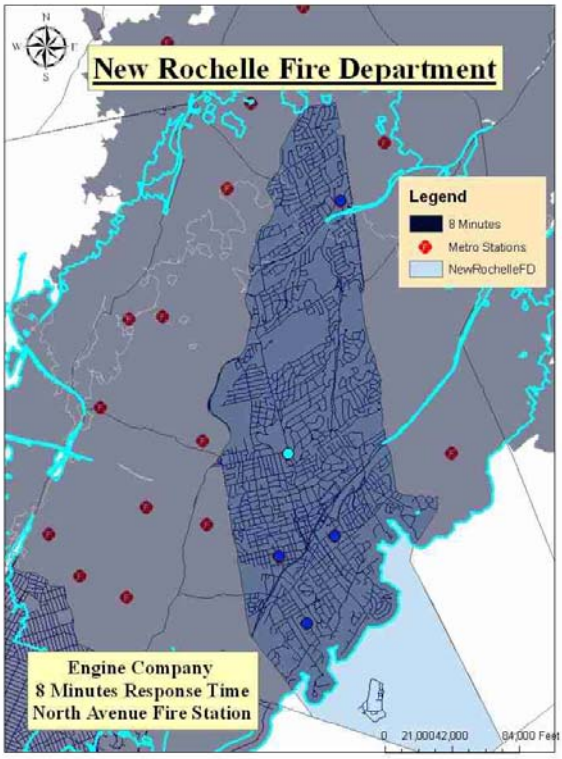
Webster Avenue Fire Station

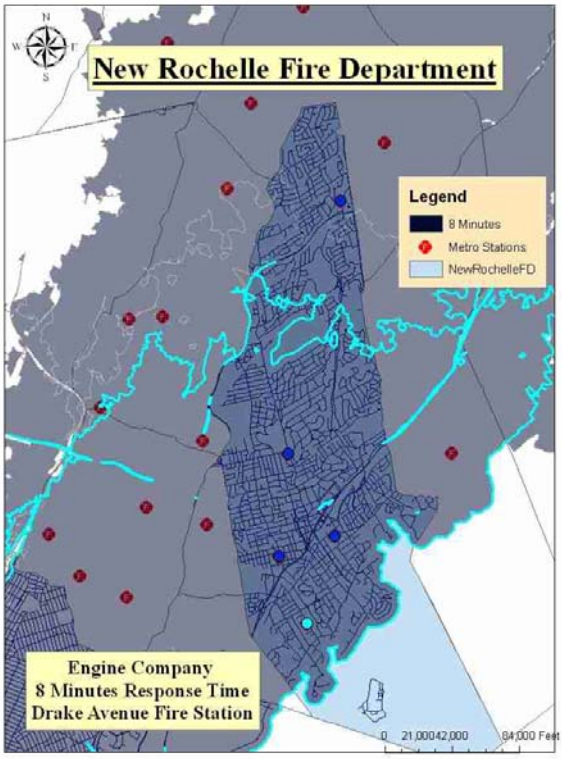
8 minutes represents the time it takes for the 2nd due engine to arrive during a full alarm response. It indicates the maximum time allowable when the 1st due engine is not available due to another response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map (Harrison St. on the left, Webster Ave. on the right). The medium blue dots are the other New Rochelle Fire Stations. The red dots are other fire ftations within the study.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all New Rochelle Engine Companies.

Engine Company 8 Minute Response Area





North Ave. Fire Station

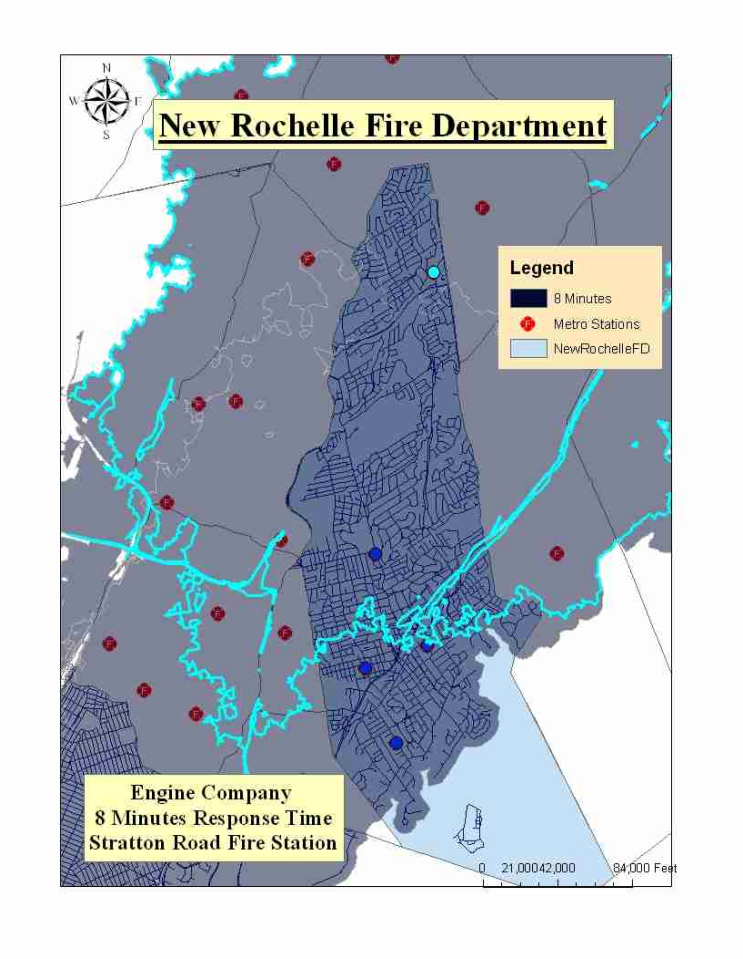
Drake Ave. Fire Station

Eight (8) minutes represents the time it takes for the 2nd due engine to arrive during a full alarm response. It indicates the maximum time allowable when the 1st due engine is not available due to another response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map (North Ave. on the left, Drake Ave. on the right). The medium blue dots are the other New Rochel Fire Stations. The red dots are other fire stations within the study.

The light blue lines are the 8 minute boarder from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all New Rochelle Engine Companies.

Engine Company 8 Minute Response Area



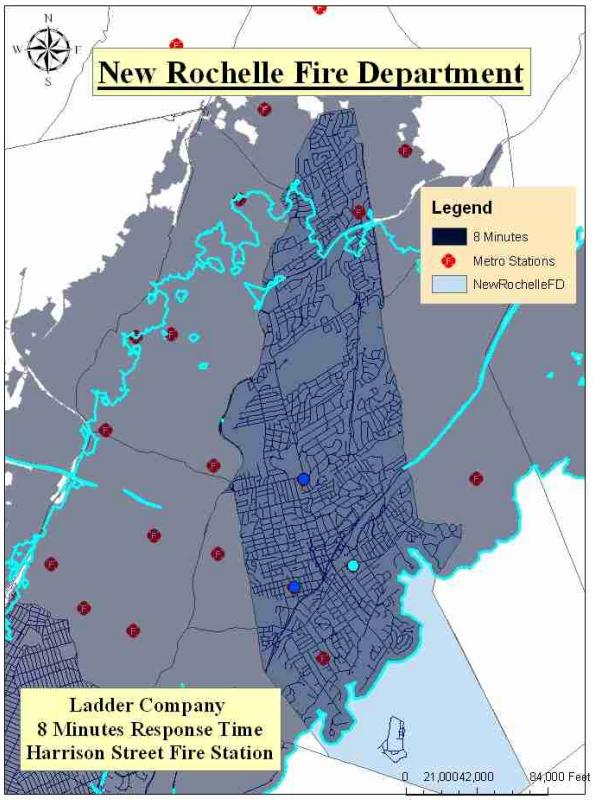
Stratton Road Fire Station

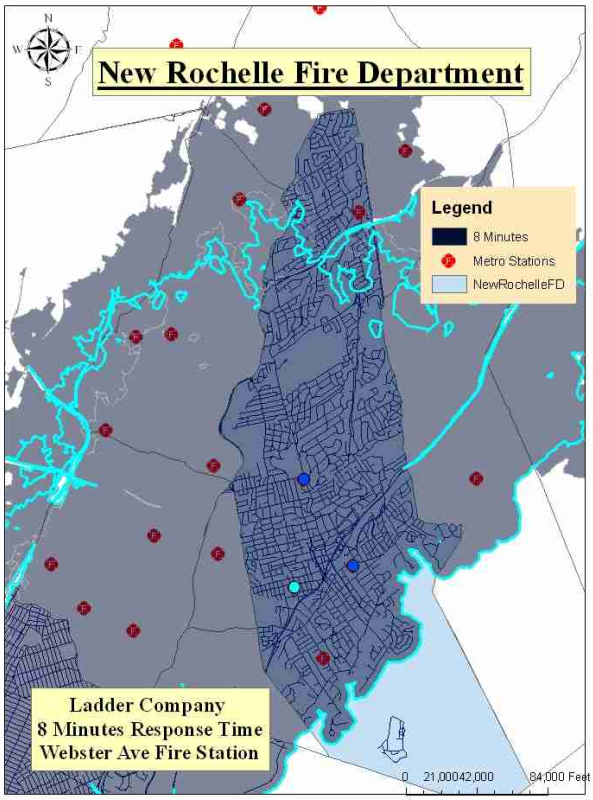
Eight (8) minutes represents the time it takes for the 2nd due engine to arrive during a full alarm response. It indicates the maximum time allowable when the 1st due engine is not available due to another response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map (Stratton Road). The medium blue dots are the other New Rochelle Fire Stations. The red dots are other fire stations within the study.

The light blue lines are the 8 minute boarder from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all New Rochelle Engine Companies.

Ladder Company 8 Minute Response Area





Harrison Street Fire Station

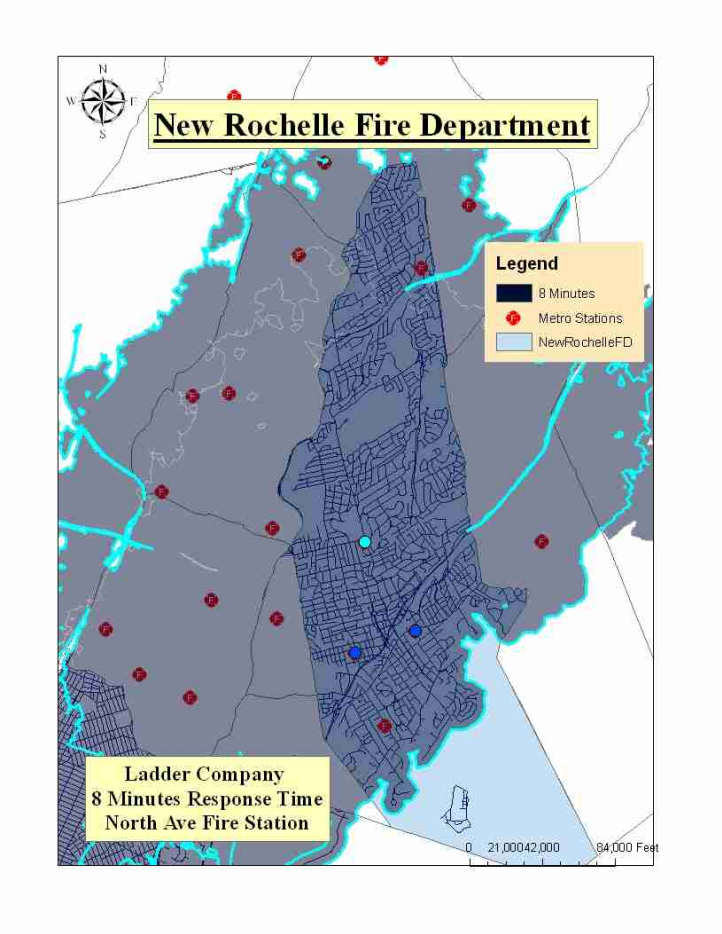
Webster Avenue Fire Station

Eight (8) minutes represents the time it takes for the 1st and 2nd due ladders to arrive during a full alarm response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map (Harrison Street on left, Webster Avenue on the right). The medium blue dots are the other New Rochelle Fire Stations with ladder companies. The red dots are the other New Rochelle Fire Stations and Fire Stations in Eastchester, Greenville, Larchmont, Mt. Vernon, Pelham, Pelham Manor and Scarsdale.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by the three New Rochelle Ladder Companies.

Ladder Company 8 Minute Response Area



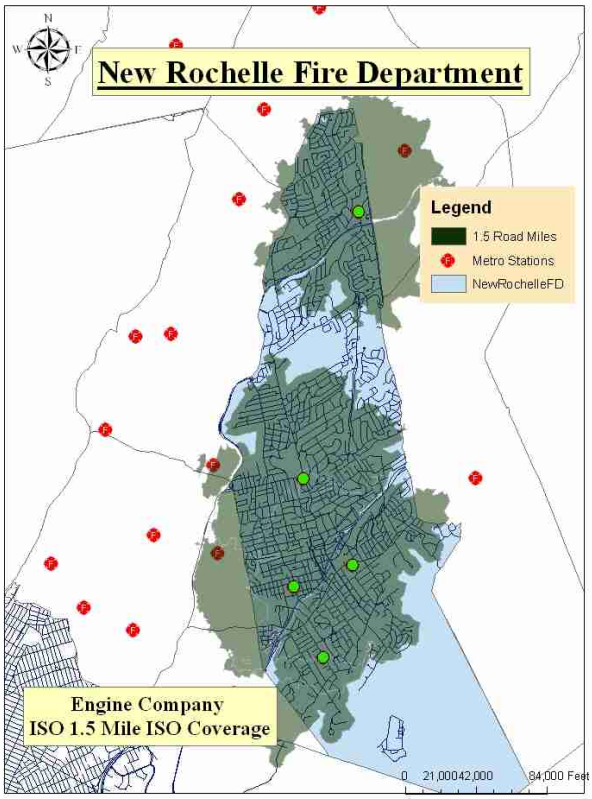
North Ave. Fire Station

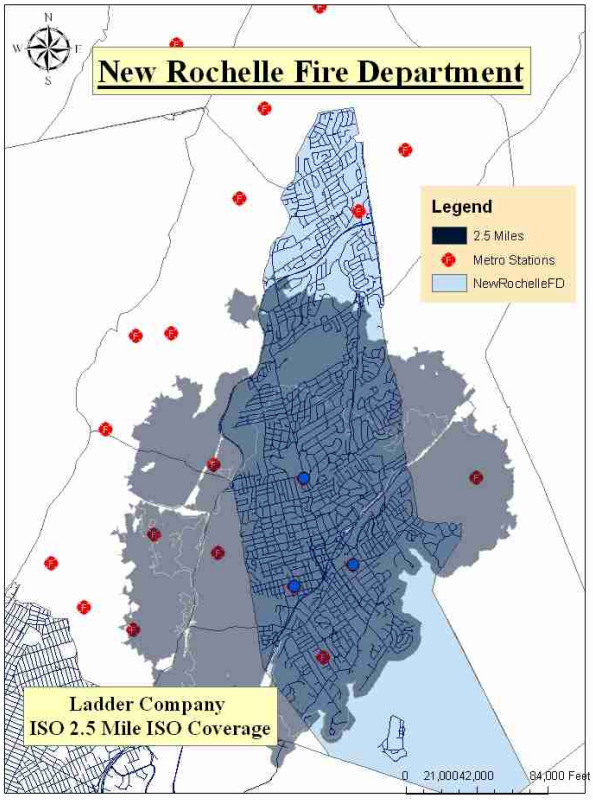
Eight (8) minutes represents the time it takes for the 1st and 2nd due ladders to arrive during a full alarm response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map (North Avenue). The medium blue dots are the other New Rochelle Fire Stations with ladder companies. The red dots are the other New Rochelle Fire Stations and Fire Stations in Eastchester, Greenville, Larchmont, Mt. Vernon, Pelham, Pelham Manor and Scarsdale.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by the three New Rochelle Ladder Companies.

I.S.O. Engine and Ladder Drive Distances





Engine Company 1.5 Road Miles

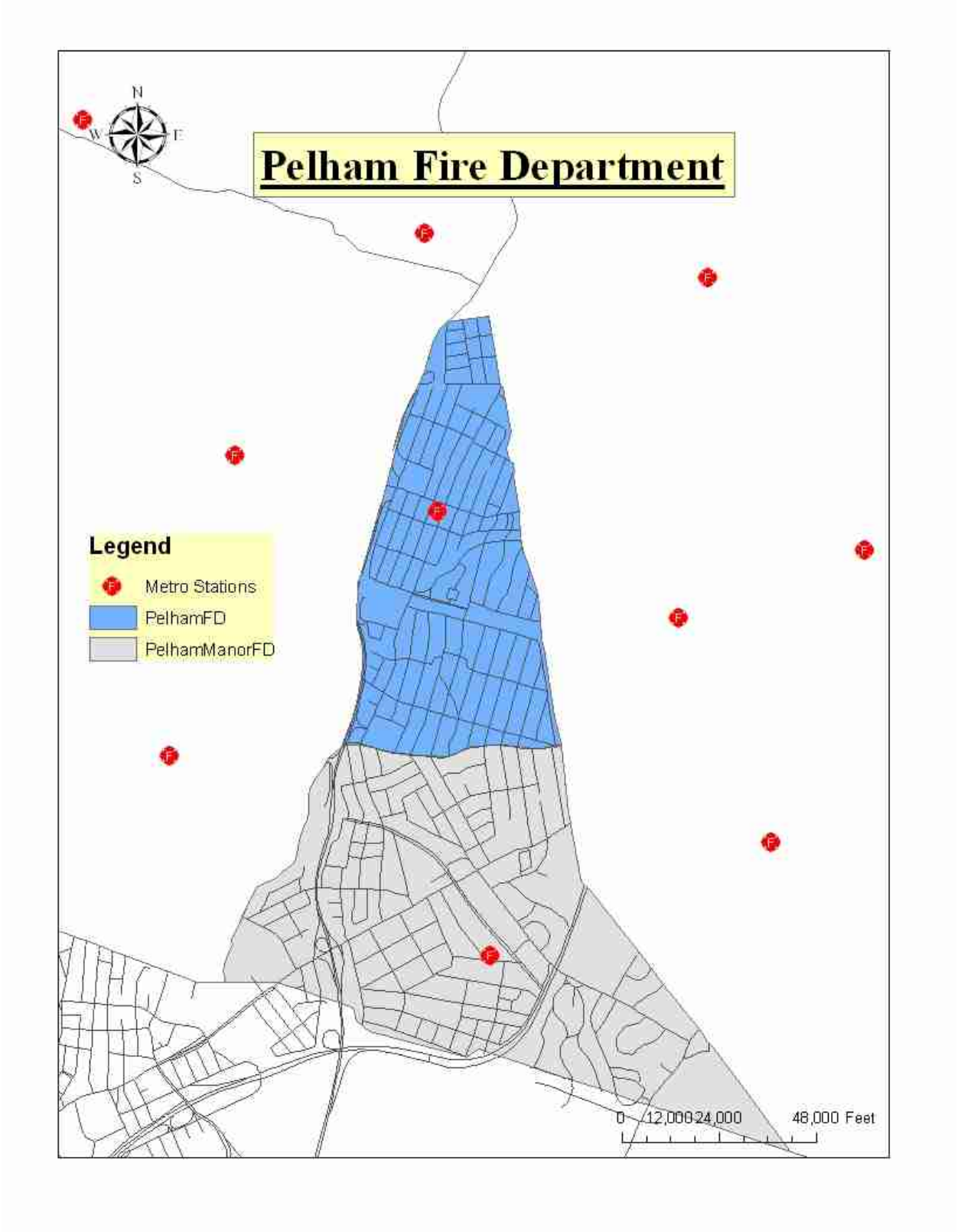
Ladder Company 2.5 Road Miles

The Insurance Service Office (ISO) requires all insured properties to be within 1.5 driving miles of the closest engine company and 2.5 driving miles of the closest ladder company.

The calculations are made by driving outward from each fire station for a maximum of 1.5 miles or 2.5 miles without going the wrong way on any one way streets.

The grey/green shading is the areas driven in 1.5 miles by engines; the grey shading covers the area driven in 2.5 miles by ladders.

Light Blue sections are areas that are not within 1.5 road miles from engine companies or 2.5 miles from ladder companies. It is possible that that is due to a lack of roads in those areas, often they are parks or golf courses. The North Central section (Wykagyl through Bayberry/Larchmont Woods) is beyond 1.5 road miles and indicates the need for an additional engine company located on Quaker Ridge Road. The Northern Section is beyond 2.5 road miles and indicates the need for an additional ladder company located north of Quaker Ridge Road.



Pelham Fire Department

The Pelham Fire Department (PFD) consists of 16 career firefighters and officers operating one (1) engine, and one (1) ladder out of one station. The on-duty staffing is two firefighters and one officer. PFD operates out of one (1) fire station, covering 0.8 square mile with a population of 5,400. Pelham Fire Department covers the Village of Pelham which is an incorporated village within the Town of Pelham. The PFD's oversight is provided by the Village of Pelham. There is a small group of "active" volunteers.

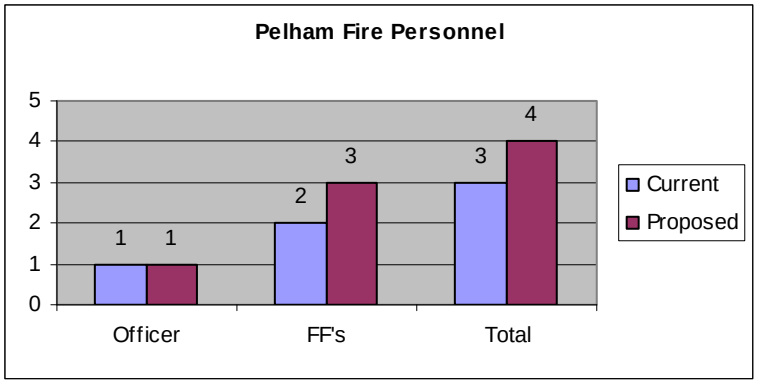
Current Response to a Structure Alarm: one Engine, one Ladder, manned with two firefighters and one officer, plus mutual aid. Mutual aid is needed for all structure fires no matter how minor.

To meet NFPA 1710 without consolidation would require an additional 11 firefighters and 4 officers per shift or 58 additional firefighters and 21 additional officers or 79 additional staff.

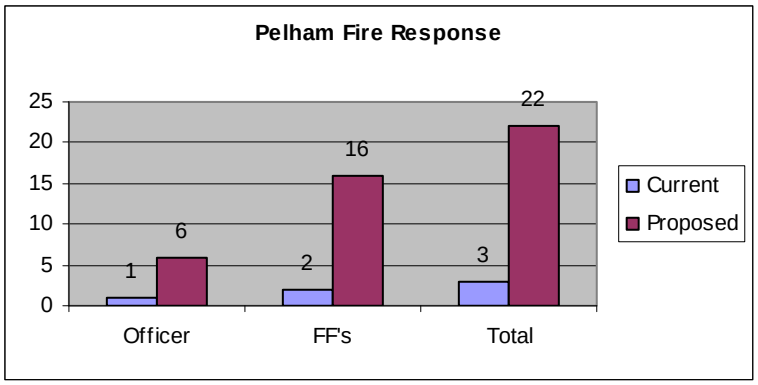
The Insurance Service Office (ISO) requires an engine company within 1½ miles of all occupied structures and a ladder company within 2½ miles. Under this plan no less than five (5) engines and three (3) ladders, not including the units in Pelham meet this standard for covering Pelham. The study determined that in a consolidated district having either an engine or a ladder in Pelham was not necessary and extremely costly. It was determined that the Pelham Fire House was the perfect location to house an elite Rescue Company.

Consolidation Advantages:

1. Improved on-duty manning: The on-duty shift will increase from the current two firefighters and one officer to a minimum of three firefighters and one officer. A Heavy Rescue Company is what we are proposing for this station. The manning of this unit dictates that whenever extra firefighters are available (due to low vacation requests) they would be assigned to the Rescue.



2. Improved response manning: Current response is two firefighters and one officer this will increase to 16 firefighters and 6 officers.



3. Improved safety for the public and firefighters by meeting minimum manning and response standards as set by NFPA, ICMA and ISO.

4. Ability to respond to a medical emergency or other calls and still have 22 firefighters and officers available to respond to a fire or other emergency.

5. Increased supervision and coordination. Currently only one of the two apparatus in Pelham has a company officer 24/7 that is directly responsible for both units. Under this proposal all apparatus will have company officers.

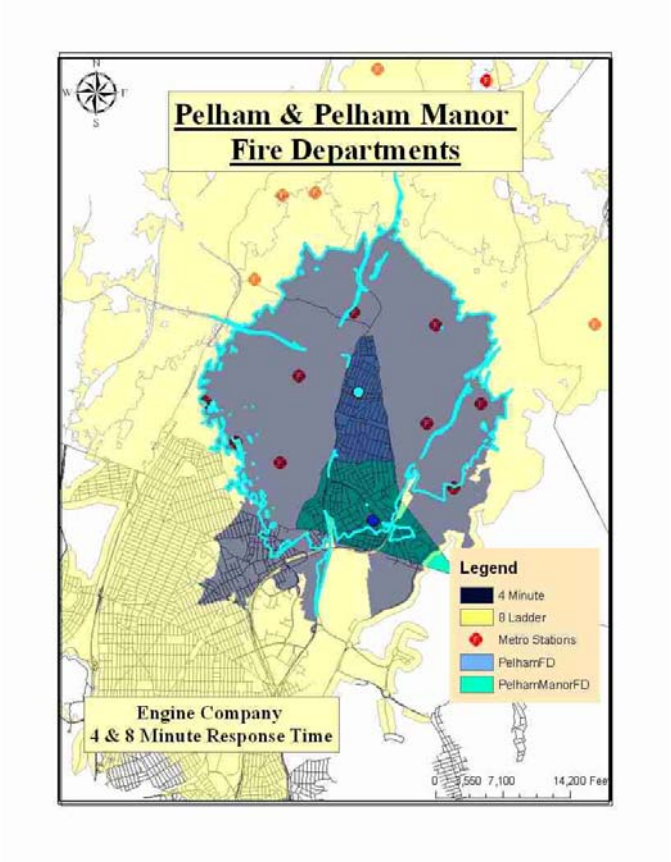
6. Under Department of Labor Law (29CFR1910.134) the current manning makes it illegal for PFD firefighters to enter a burning structure until additional firefighters (recalled, volunteer or mutual aid) arrive at the incident.

7. Currently Pelham barely has enough manpower to handle even the most minor calls and no ability to handle multiple simultaneous calls. Consolidation would completely address this.

Consolidation Disadvantages:

Loss of local autonomy: If PFD and the community agree to be a part of this regional service, the PFD will no longer exist as it currently does.

Engine Company 4 & 8 Minute Response Area

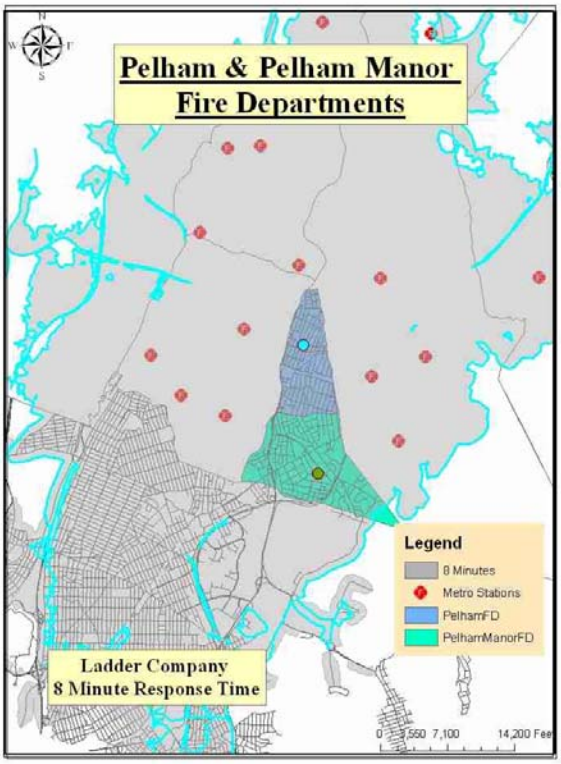


Four (4) minutes is the maximum response time for the 1st due engine. 8 minutes represents the maximum time it takes for the 2nd due engine to arrive during a full alarm response. It indicates the maximum time allowable when the 1st due engine is not available due to another response. The response time of 4 or 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the Pelham Firehouse. The medium blue dot is the Pelham Manor Firehouse. The red dots are other fire stations within the study.

The light blue lines are the 4 minute border from the Pelham Firehouse. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Yellow areas indicate the 8 minute response distance covered by both Pelham and Pelham Manor Engine Companies. Pelham does not currently staff its 2nd engine so the 8 minutes considers Pelham Manor.

Ladder Company 8 Minute Response Area

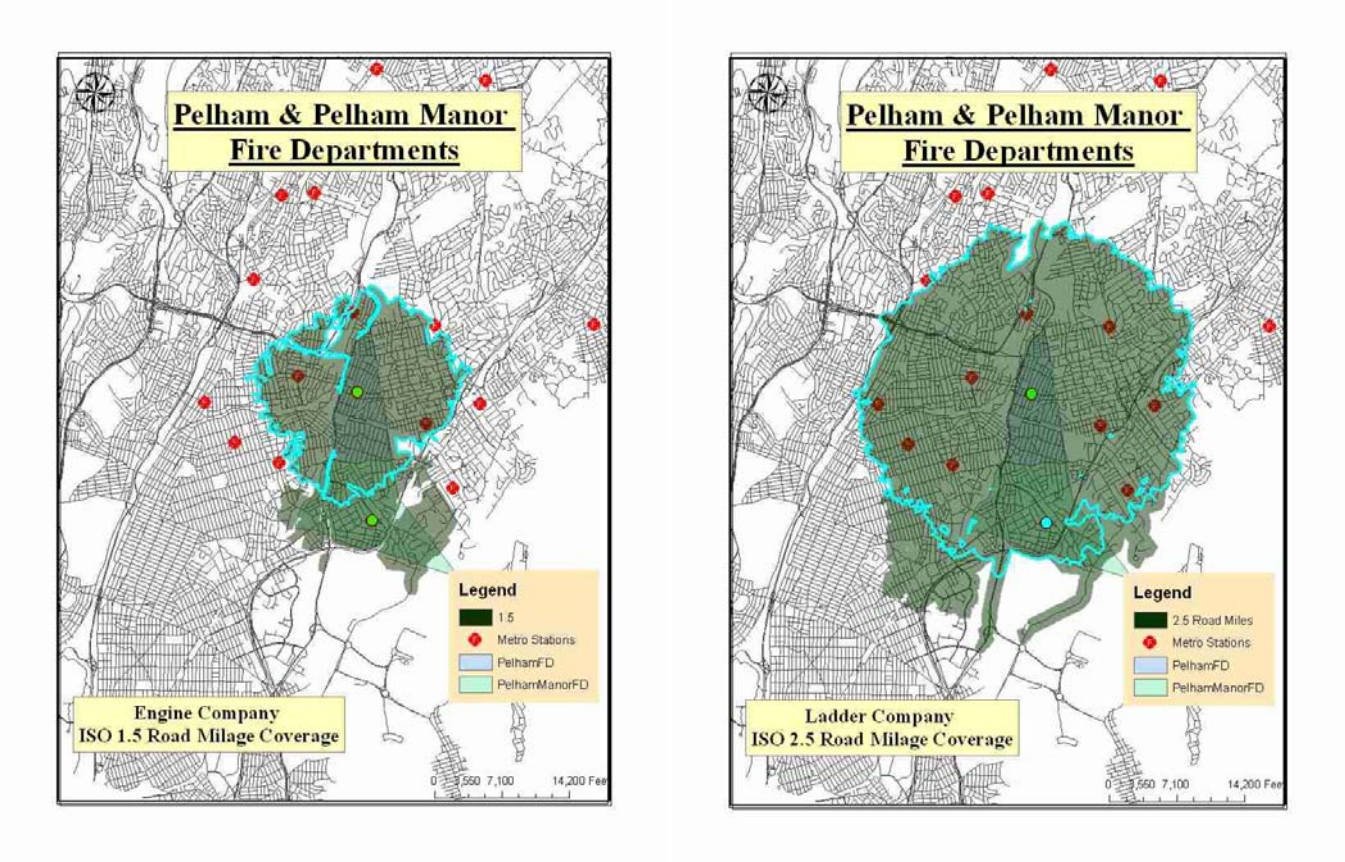


Eight (8(minutes represents the time it takes for the 1st and 2nd due ladders to arrive during a full alarm response. It indicates the maximum time allowable when the 1st due ladder is not available due to another response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the Pelham Firehouse. The green dot is the Pelham Manor Firehouse. The red dots are other Fire Stations within the study.

The light blue lines are the 8 minute border from the Pelham Firehouse. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by both Pelham and Pelham Manor Ladder Companies. Pelham does not own a 2nd ladder so the 8 minutes considers Pelham Manor.

I.S.O. Engine and Ladder Drive Distances



Engine Company 1.5 Road Miles

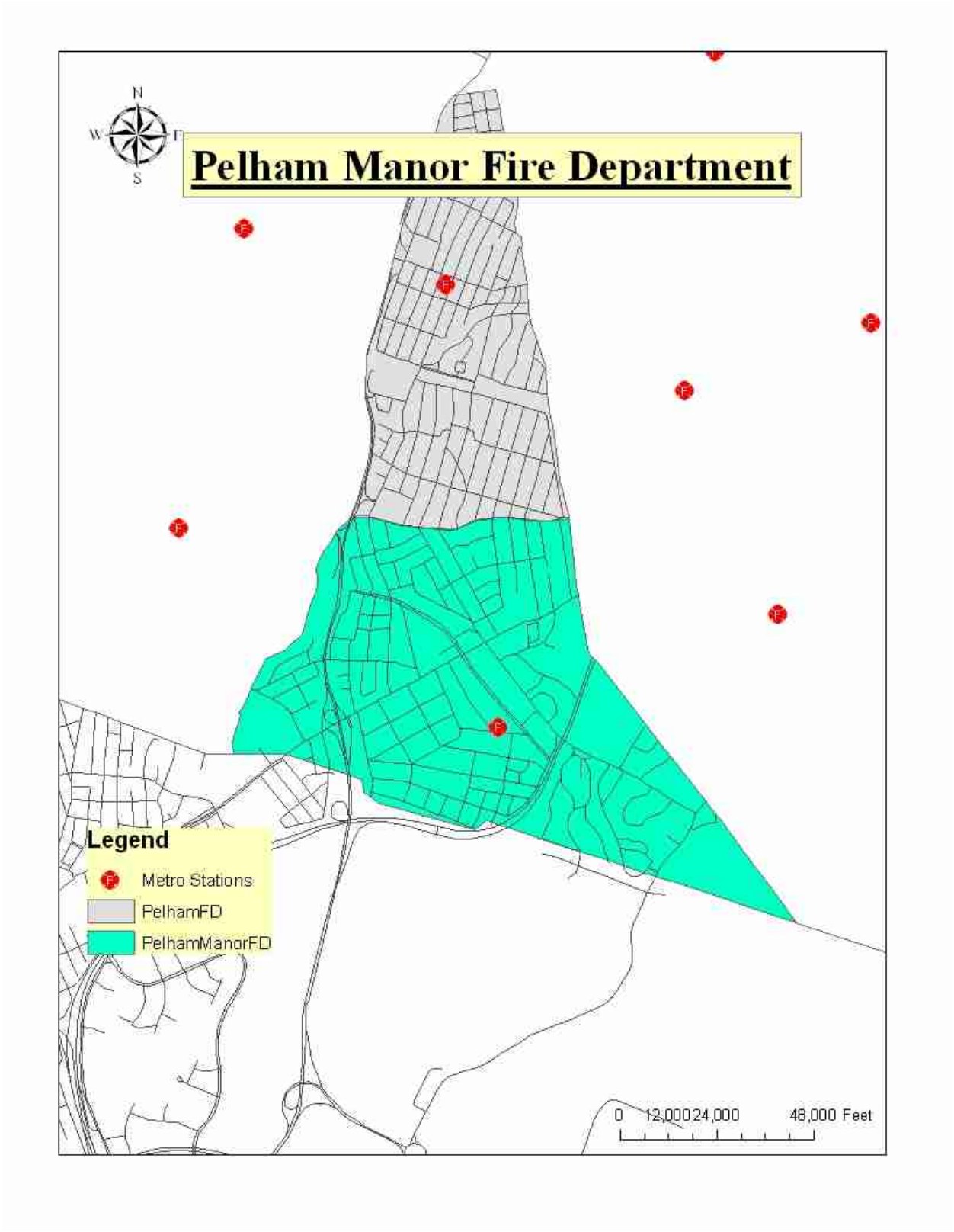
Ladder Company 2.5 Road Miles

The Insurance Service Office (ISO) requires all insured properties to be within 1.5 driving miles of the closest engine company and 2.5 driving miles of the closest ladder company.

The calculations are made by driving outward from each fire station for a maximum of 1.5 miles or 2.5 miles without going the wrong way on any one way streets.

The grey shading are the areas driven in 1.5 miles by engines (left), the grey shading covers the area driven in 2.5 miles by ladders (right).

Three (3) engines outside Pelham completely cover Pelham's 1.5 mile drive distance. An additional seven (7) engines combined can cover components of Pelham's 1.5 mile drive distance. Six (6) ladders outside Pelham completely cover Pelham's 2.5 mile drive distance. Two (2) additional ladders combined can cover components of Pelham's 2.5 mile drive distance.



Pelham Manor Fire Department

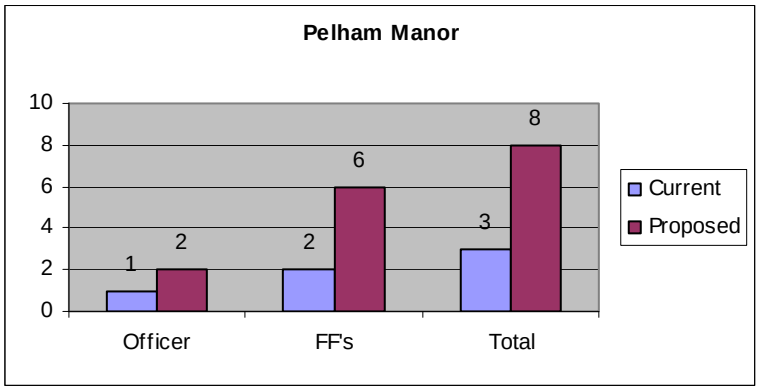
The Pelham Manor Fire Department (PMFD) consists of 17 career firefighters and officers operating two (2) engines, and one (1) ladder out of one (1) station. The minimum on-duty staffing is two firefighters and one officer. PMFD operates out of one (1) fire station, covering 1.3 square mile with a population of 6,364. Pelham Manor Fire Department covers the Village of Pelham Manor which is an incorporated village within the Town of Pelham. The PMFD's oversight is provided by the Village of Pelham Manor. There is a small group of active volunteers.

Current Response to a Structure Alarm: two Engines, one Ladder, manned with two firefighters and one officers, plus mutual aid. Volunteers, Call Back or Mutual Aid is needed for all structure fires no matter how minor. This manning is substantially below all national standards (ISO, NFPA 1710, ICMA, & CFAI).

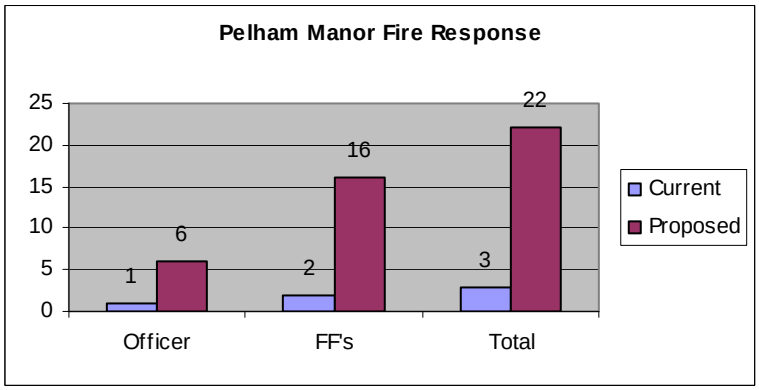
To meet NFPA 1710 without consolidation would require an additional 11 firefighters and 4 officers per shift or 58 additional firefighters and 21 additional officers or 79 additional staff.

Consolidation Advantages:

1. Improved on-duty manning: The on-duty shift will increase from the current 2 firefighters and 1 officer to a minimum of 6 firefighters and 2 officers.



2. Improved response manning: Current response 2 firefighters and 1 officer this will increase to 16 firefighters and 6 officers.



3. Improved safety for the public and firefighters by meeting minimum manning and response standards as set by NFPA, ICMA and ISO.

4. Ability to respond to a medical emergency or other calls and still have 22 firefighters and officers available to respond to a fire or other emergency.

5. Increased supervision and coordination. Currently only one of the two apparatus in Pelham Manor has a company officer 24/7 that is directly responsible for both units. Under this proposal all apparatus will have company officers.

6. Under Department of Labor Law (29CFR1910.134) the current manning makes it illegal for PMFD firefighters to enter a burning structure (to conduct interior firefighting) [55]until additional firefighters (recalled, volunteer or mutual aid) arrive at the incident.

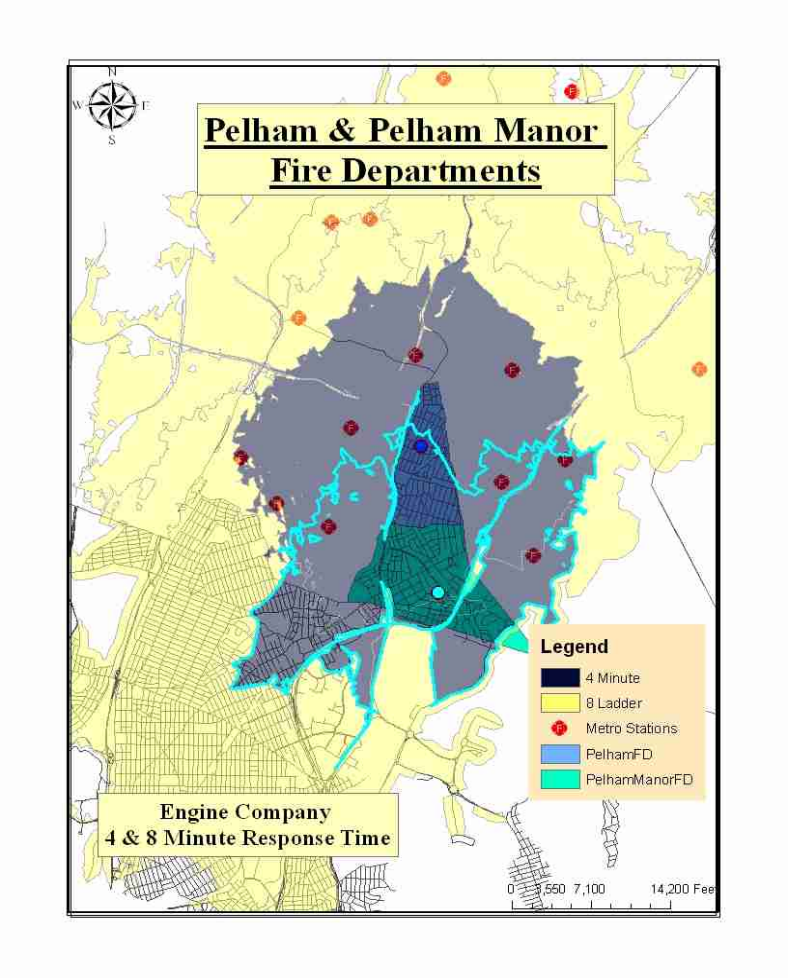
Consolidation Disadvantages:

1. Loss of local autonomy: If PMFD and the community agree to be a part of this regional service, the PMFD will no longer exist as it currently does.

2. The current configuration of PMFD's station will need to be modified to accommodate a larger on-duty staff.

[55] To meet the OSHA 2 in / 2 out standard (found in 29CFR 1910.134) a response must include a minimum of four (4) interior firefighters, not including "critical personnel" (which includes the pump operator and most consider the Incident commander).

Engine Company 4 & 8 Minute Response Area

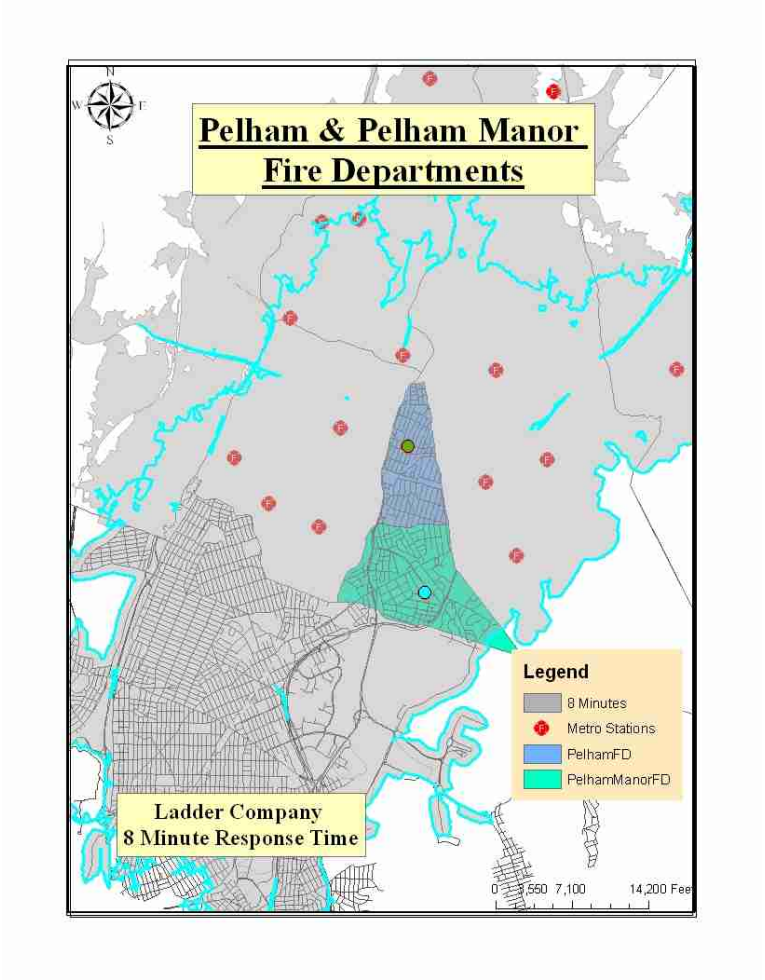


Four (4) minutes is the maximum response time for the 1st due engine. 8 minutes represents the maximum time it takes for the 2nd due engine to arrive during a full alarm response. It indicates the maximum time allowable when the 1st due engine is not available due to another response. The response time of 4 or 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the Pelham Manor Firehouse. The medium blue dot is the Pelham Firehouse. The red dots are other fire stations within the study.

The light blue lines are the 4 minute border from the Pelham Manor firehouse. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Yellow areas indicate the 8 minute response distance covered by both Pelham and Pelham Manor Engine Companies.

Ladder Company 8 Minute Response Area

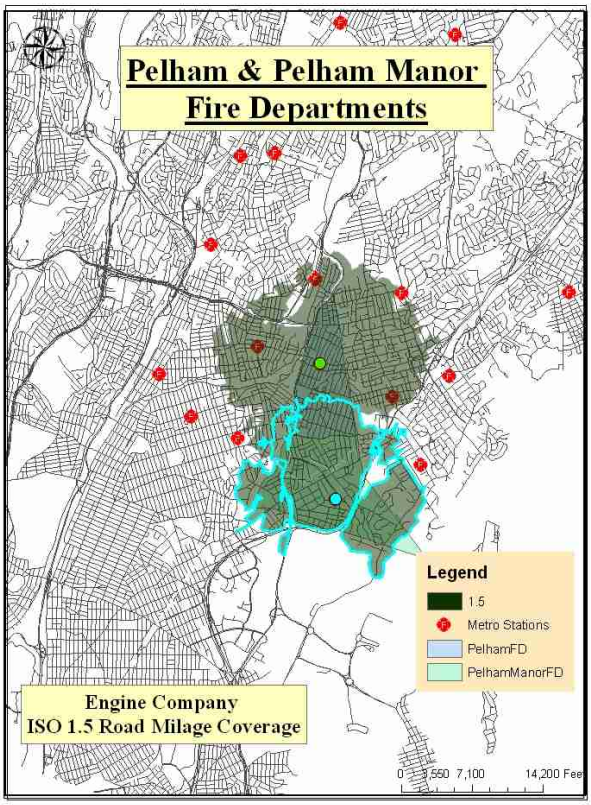


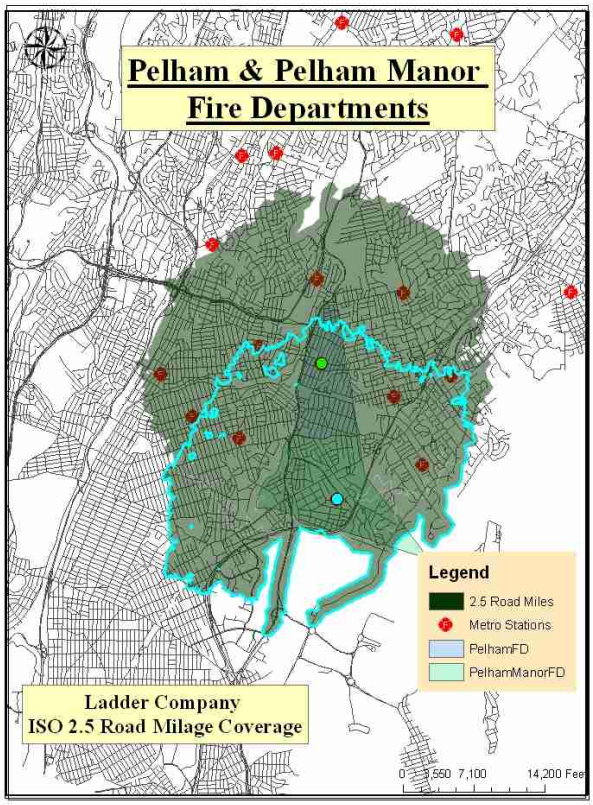
Eight (8) minutes represents the time it takes for the 1st and 2nd due ladders to arrive during a full alarm response[56]. It indicates the maximum time allowable when the 1st due ladder is not available due to another response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the Pelham Manor Firehouse. The green dot is the Pelham Firehouse. The red dots are other fire stations within the study. The light blue lines are the 8 minute border from the Pelham Manor Firehouse. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by both Pelham and Pelham Manor Ladder Companies. Pelham Manor does not own a 2nd Ladder so the 8 minutes considers Pelham.

[56] While NFPA 1710 does not require a second ladder the response of 16 or more personnel (3 ff's & 1 officer per rig) generally require a minimum of 4 apparatus per response.

I.S.O. Engine and Ladder Drive Distances





Engine Company 1.5 Road Miles

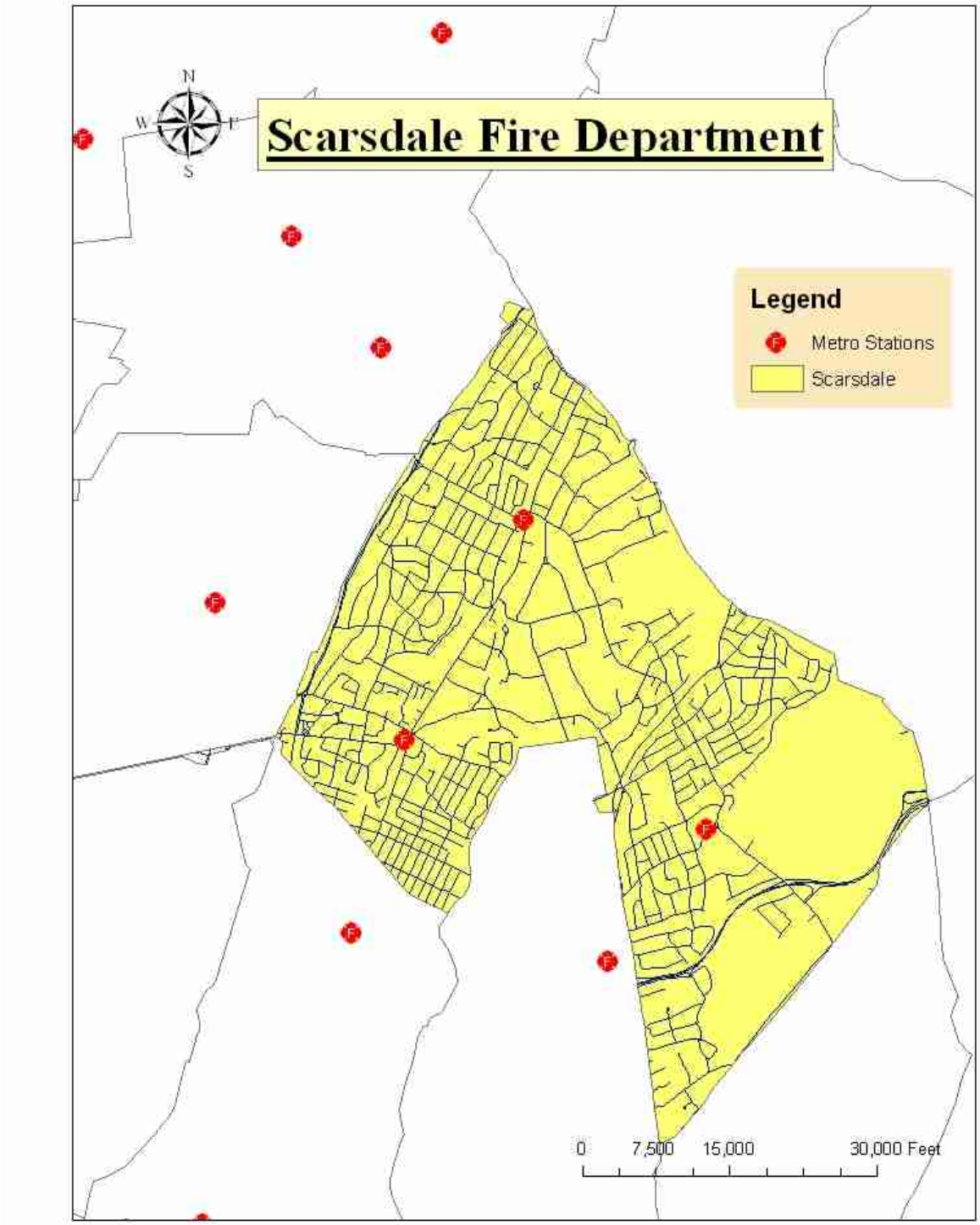
Ladder Company 2.5 Road Miles

The Insurance Service Office (ISO) requires all insured properties to be within 1.5 driving miles of the closest engine company and 2.5 driving miles of the closest ladder company.

The calculations are made by driving outward from each fire station for a maximum of 1.5 miles or 2.5 miles without going the wrong way on any one way streets.

The grey shading are the areas driven in 1.5 miles by engines (left), the grey shading covers the area driven in 2.5 miles by ladders (right).

Five (5) engines outside Pelham Manor can cover components of Pelham Manor's 1.5 mile drive distance. Three (3) ladders outside Pelham Manor can cover components of Pelham Manor's 2.5 mile drive distance.



Scarsdale Fire Department

The Scarsdale Fire Department (SFD) consists of 47 career firefighters and officers operating three (3) engines, one (1) ladder, and one command unit out of three stations. The on-duty staffing is 8

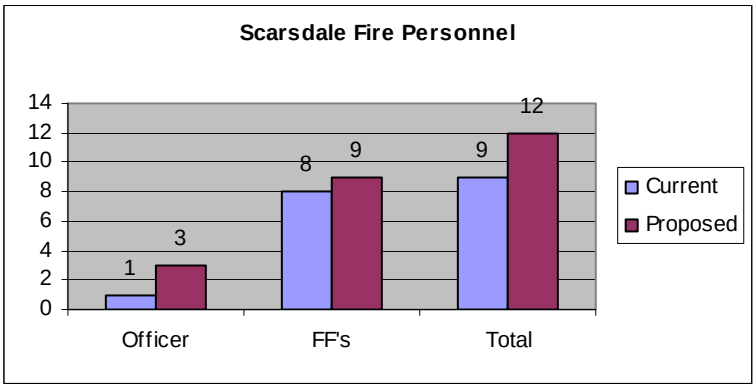
firefighters and 1 officer. SFD operates out of three (3) fire stations, covering 6.64 square miles with a population of 17,763. Scarsdale Fire Department covers the Town/Village of Scarsdale. The SFD's oversight is provided by the Village of Scarsdale. There is a large group of active volunteers.

Current Response to a Structure Alarm: two Engines, one Ladder, and one command unit, manned with 6 firefighters and 1 officer.

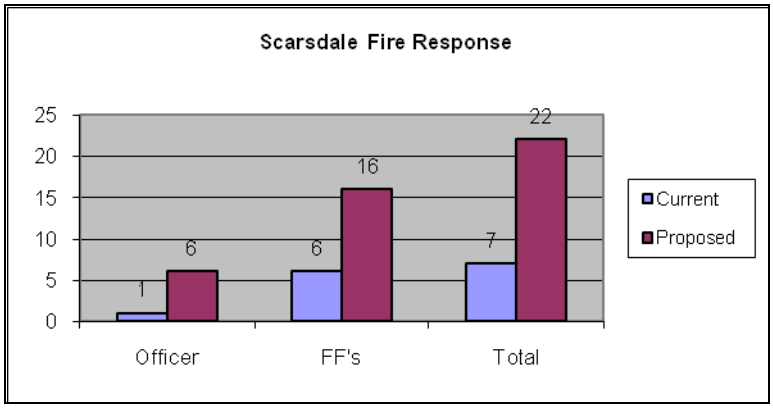
To meet NFPA 1710 without consolidation would require an additional 5 firefighters and 4 officers per shift or 26 additional firefighters and 12 additional officers or 48 additional staff.

Consolidation Advantages:

1. Improved on-duty manning: The on-duty shift will increase from the current 8 firefighters and 1 officer to 9 firefighters and 3 officers. Mutual Aid or a substantial volunteer response is needed for all structure fires no matter how minor.



2. Improved response manning: Current response is 6 firefighters and 1 officer this will increase to 16 firefighters and 6 officers.



3. Improved safety for the public and firefighters by meeting minimum manning and response standards as set by NFPA, ICMA and ISO.

4. Ability to place three firefighters and an officer on medical or other emergencies within 4 minutes. This maintains more apparatus in-service to handle additional emergencies.

5. Ability to respond to a medical emergency or other calls and still have 22 firefighters and officers available to respond to a fire or other emergency.

6. Increased supervision and coordination. Currently none of the apparatus in Scarsdale have company officers that are directly responsible for that unit and they have no company officer arriving in the first and most critical minutes of an emergency (they do have an officer who serves as incident commander responding from HQ). The maximum recommended span of control is 7 firefighters to 1 officer. Scarsdale exceeds this and with additional volunteers arriving the single officer does not have the ability to properly supervise and account for the safety of the Scarsdale firefighters. Under this proposal all apparatus will have company officers.

Consolidation Disadvantages:

1. Loss of local autonomy; If SFD and the community agree to be a part of this regional service, the SFD will no longer exists as it currently does. The three fire stations can retain the community names that the public knows them as: i.e. Crossway, Popham and Headquarters.

2. The volunteers may be asked to perform additional tasks, such as driving and operating apparatus. It is unclear to the study group if this would be considered a disadvantage. If this is acceptable it would be a major advantage. See volunteer section for details. Scarsdale Fire Chief Thomas Cain has stated that he would assume that the SFD volunteers would be uninterested in staffing fire stations on a consistent and scheduled basis. They wish to respond only on an as needed basis. The volunteers in Scarsdale provide a significant manpower resource which the consolidated district will need to work with to determine what is the best utilization of these firefighters.

Proving the Need:

1. On Thursday April 3rd 2008 firefighters from Eastchester, Hartsdale and Scarsdale (including three Scarsdale off duty career firefighters) were at the Crossway Fire House for a NYS Office of Fire Prevention and Control (OFPC) hazardous materials technician recertification. Scarsdale received a call for a gas leak three blocks from the fire house. Quick action by SFD in evacuating works saved at least 7 lives. The home exploded and caught fire. EFD, HFD and the off duty SFD members arrived on the scene in under two minutes and were able to deploy a stang monitor and two (2) large handlines (2½"). Scarsdale's officers stated that without the actions of these additional 12 responders they would have lost the occupied house on exposure #4 and possibly the home on exposure #3. They stated that this was still substantially below the numbers needed.

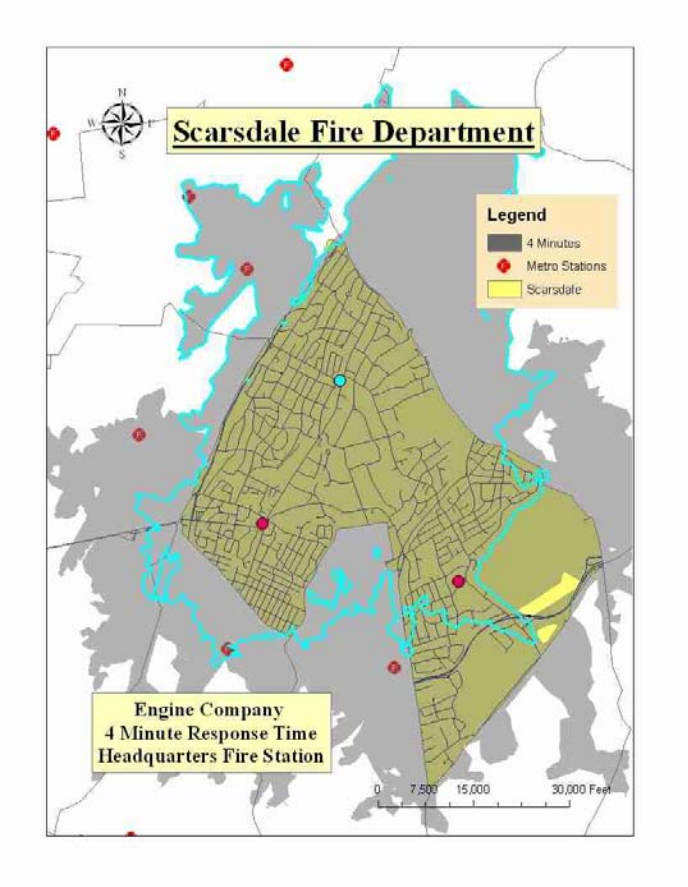
   This study is recommending a routine response of 22 firefighters and officers to all "box alarms" within 8 minutes. With additional alarms bringing another round of 22 firefighters

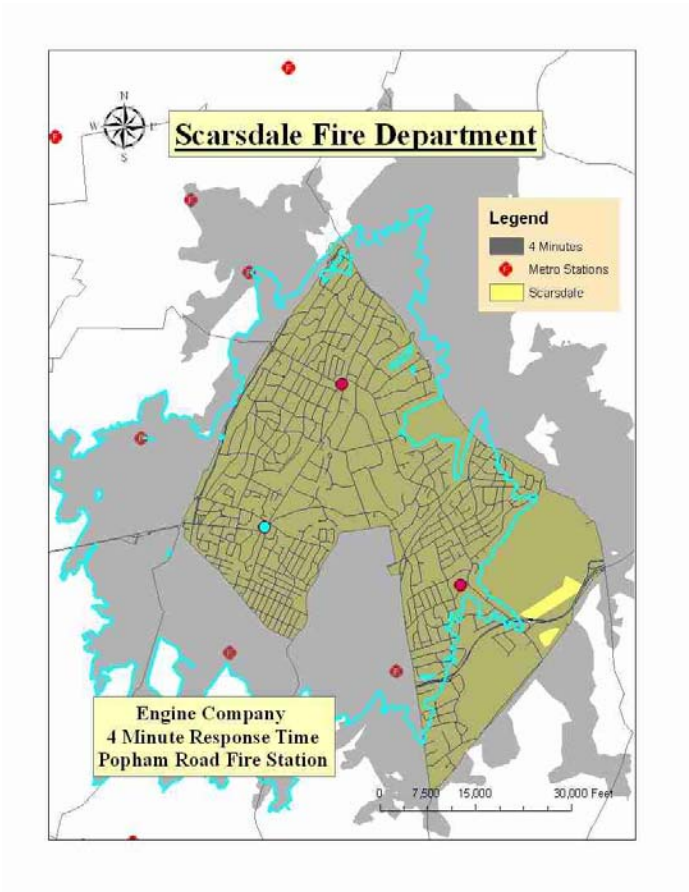
in another 4 to 8 minutes. This incident at this time normally would have received eight (8) Scarsdale career firefighters and two (2) officers. This incident received the same number of responders that it will receive under this plan, it was double what SFD normally has and was still not considered enough by the officers at this incident.

Scarsdale has a large and very active number of volunteers. They currently have approximately 90 members. They play a vital role in providing protection, but they have a major limitation, most are not available during the day. During the first 20 minutes of this incident it appears that approximately 6 volunteers were on scene. Many volunteers did arrive later in the incident and were able to assist, but not in time to affect the outcome. The final total was 33 volunteers, that showed up over the next 6 hours. But there is a major manning shortfall when they are not in town that places every resident and firefighter at risk. The consolidation review team recognizes both the need to provide sufficient firefighters in the 1st 8 minutes and the value of the volunteers and would incorporate both to protect the community.

2. Less than a week earlier, on March 28th Hartsdale, New Rochelle, Scarsdale and White Plains were at the Crossways Fire House for the same Hazmat Technician recertification. Scarsdale received a call for a structure fire on Winslow Place. Hartsdale Engine 169 was dispatched to assist SFD at the scene, while the other departments were covering Scarsdale.

Engine Company 4 Minute Response Area





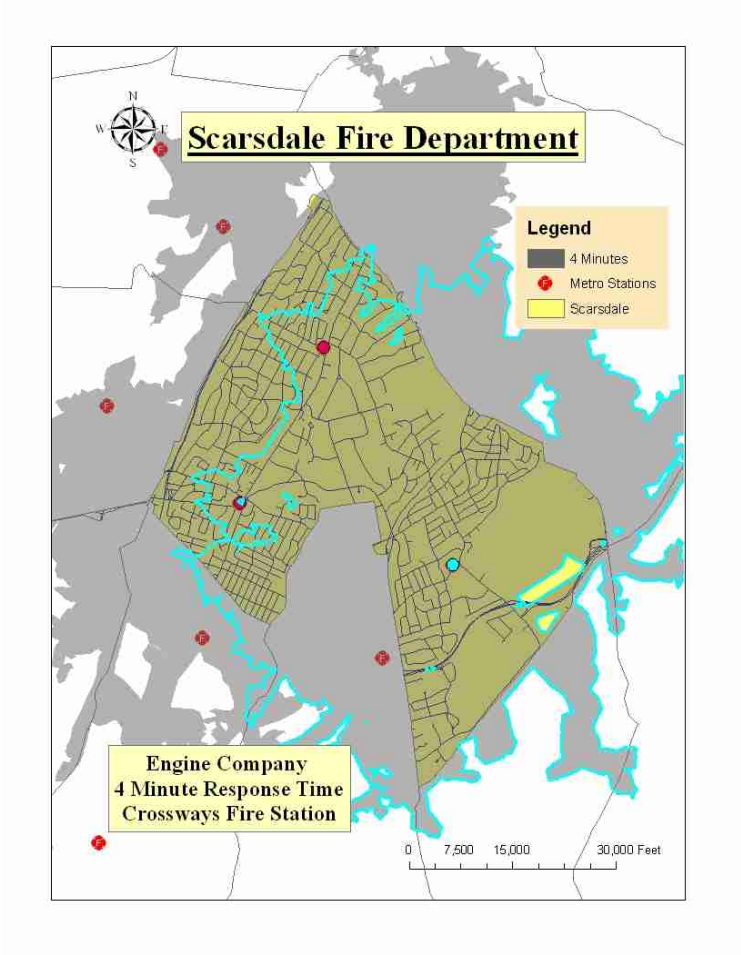
Headquarters Fire Station Popham Road Fire Station

The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map (Headquarters on left, Popham Road on the right). The two small red dots are the remaining Scarsdale Fire Stations with Engine Companies. The red Maltese Cross are the Fire Stations in Eastchester, Fairview, Greenville, Hartsdale, and New Rochelle.

The light blue lines are the 4 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all Scarsdale Engine Companies.

Engine Company 4 Minute Response Area



Crossway Fire Station

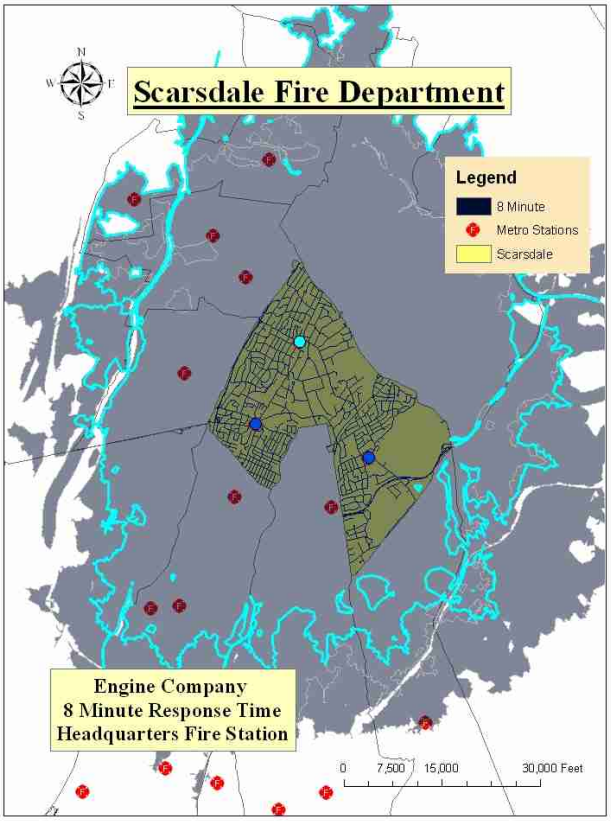
The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

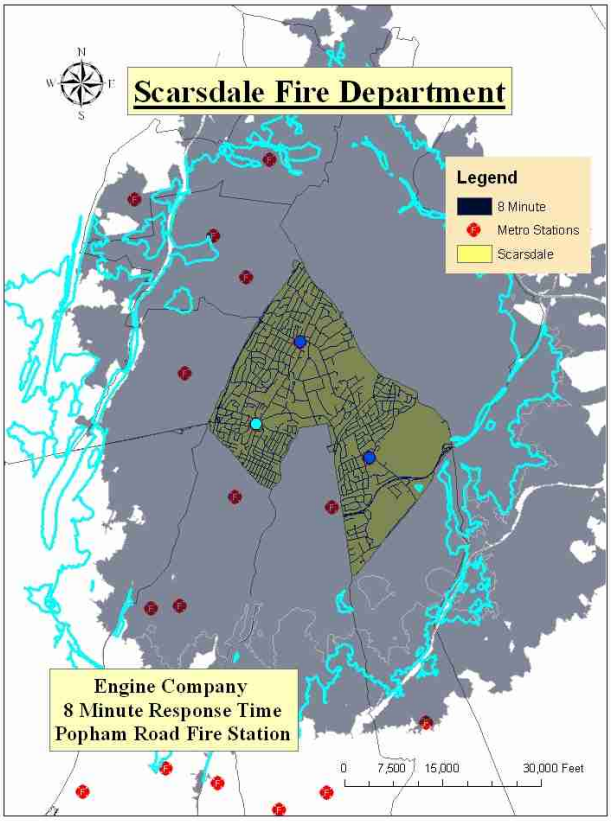
The light blue dot is the firehouse listed for this study. The two small red dots are the remaining Scarsdale Fire Stations with Engine Companies. The red Maltese Cross are the Fire Stations in Eastchester, Fairview, Greenville, Hartsdale, and New Rochelle.

The light blue lines are the 4 minute border from the Crossways station. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all Scarsdale Engine Companies.

Engine Company 8 Minute Response Area

Headquarters Fire Station





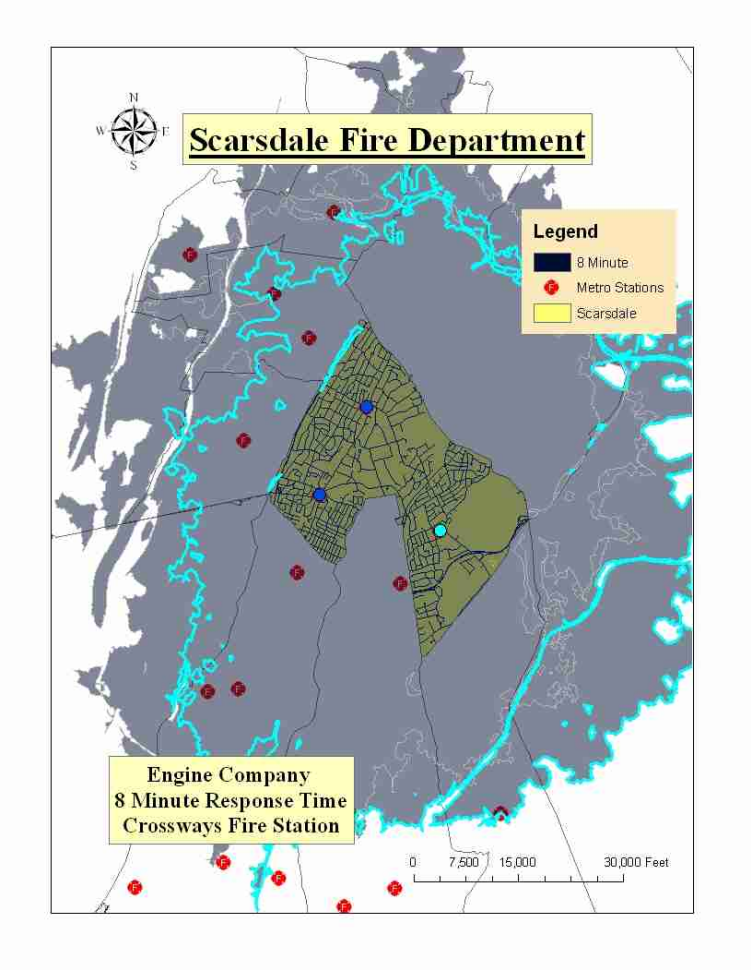
Popham Road Fire Station

Eight (8)minutes represents the time it takes for the 2nd due engine to arrive during a full alarm response. It indicates the maximum time allowable when the 1st due engine is not available due to another response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map (Headquarters on left, Popham Road on the right). The two medium blue dots are the remaining Scarsdale Fire Stations with Engine Companies. The red dots are the Fire Stations in Eastchester, Fairview, Greenville, Hartsdale, Mt Vernon, New Rochelle and Pelham.

The light blue lines are the 8 minute barder from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Scarsdale Engine Companies.

Engine Company 8 Minute Response Area



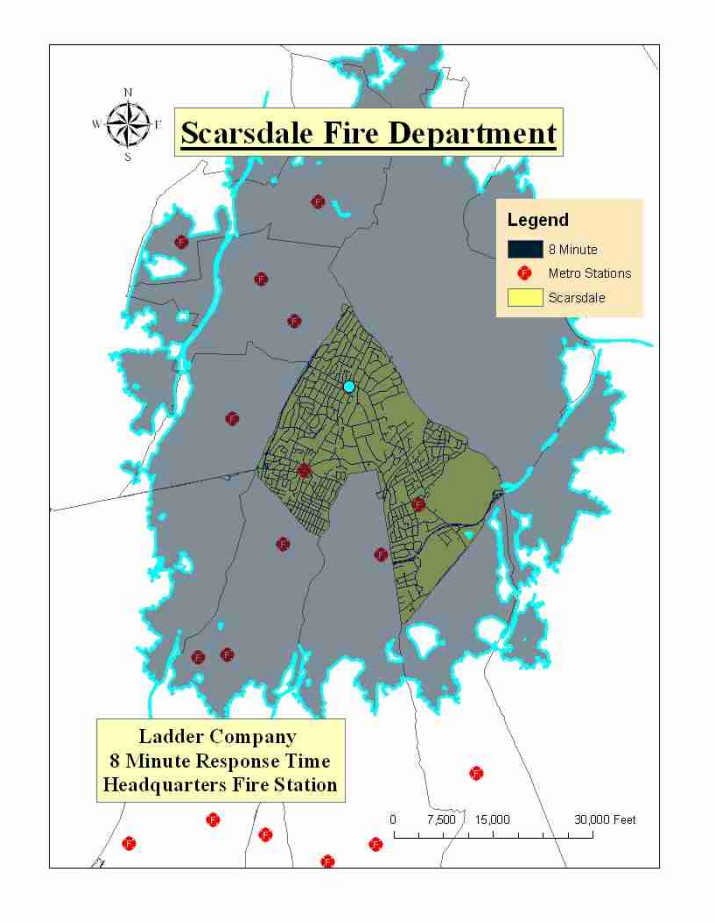
Crossway Fire Station

Eight (8) minutes represents the time it takes for the 2nd due engine to arrive during a full alarm response. It indicates the maximum time allowable when the 1st due engine is not available due to another response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study from that map. The two medium blue dots are the remaining Scarsdale Fire Stations with Engine Companies. The red dots are the Fire Stations in Eastchester, Fairview, Greenville, Hartsdale, Mt Vernon, New Rochelle and Pelham.

The light blue lines are the 8 minute barder from the station listed. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Scarsdale Engine Companies.

Ladder Company 8 Minute Response Area



Headquarters Fire Station

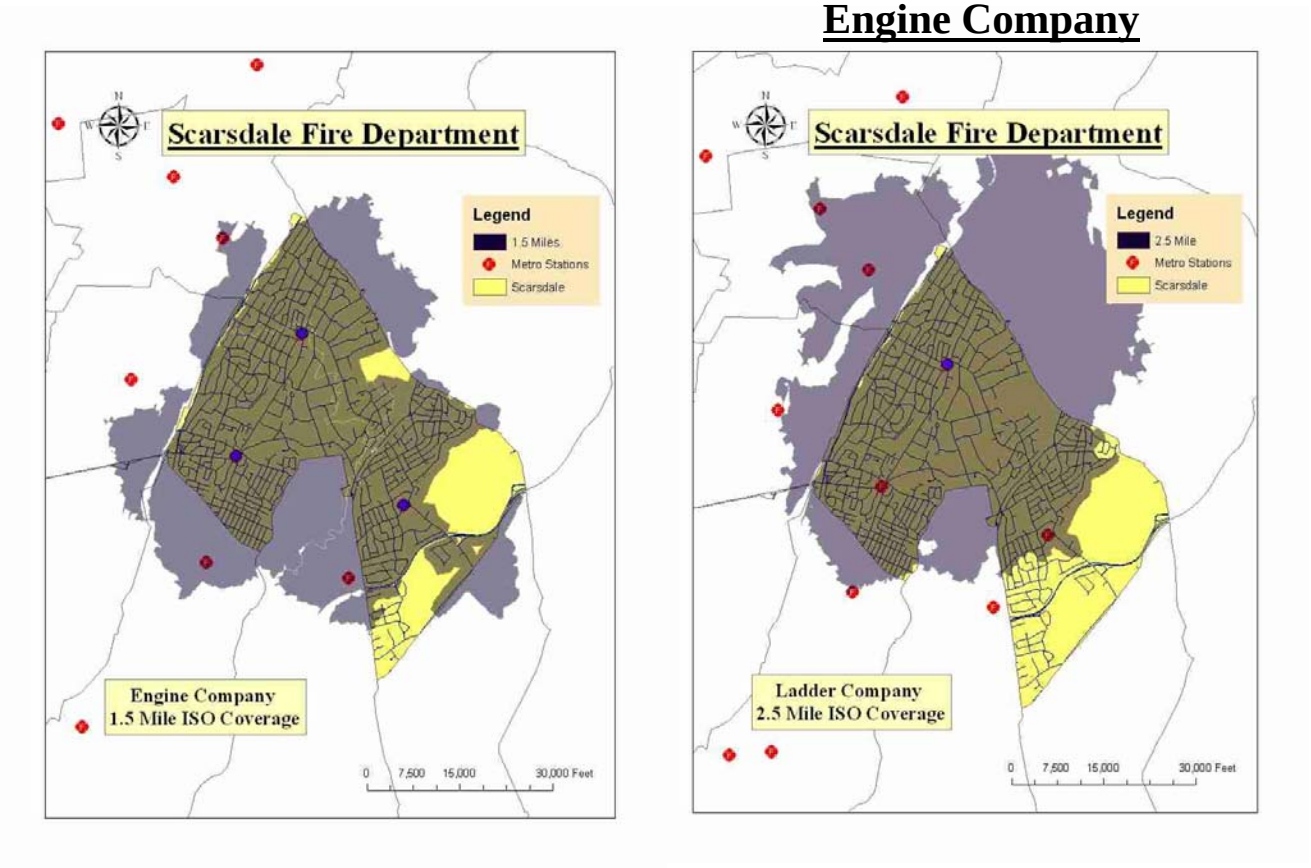
Eight (8) minutes represents the time it takes for the 1st and 2nd due ladders to arrive during a full alarm response. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the firehouse listed for the study (Headquarters). The red dots are the other Fire Stations in Eastchester, Fairview, Greenville, Hartsdale, Larchmont, Mt. Vernon, New Rochelle and Pelham.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by the Scarsdale Ladder Company.

I.S.O. Engine and Ladder Drive Distances

Engine Company



Ladder Company

1.5 Road Miles 2.5 Road Miles

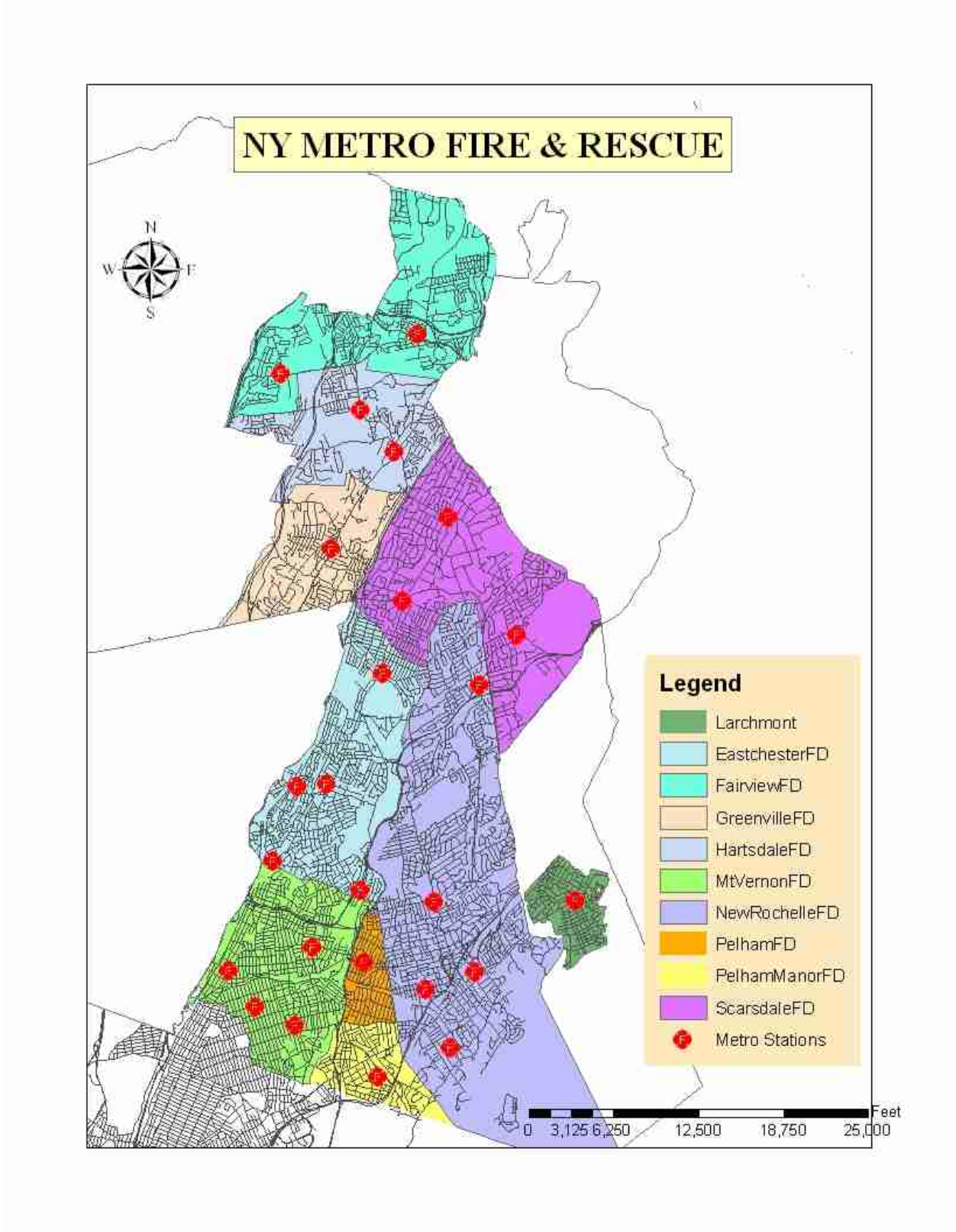
The Insurance Service Office (ISO) requires all insured properties to be within 1.5 driving miles of the closest engine company and 2.5 driving miles of the closest ladder company.

The calculations are made by driving outward from each fire station for a maximum of 1.5 miles or 2.5 miles without going the wrong way on any one way streets.

The medium blue dots are firehouses with engine companies (on the Left) or the firehouse with a ladder company (on the right). The red dots are the other Fire Stations in the study.

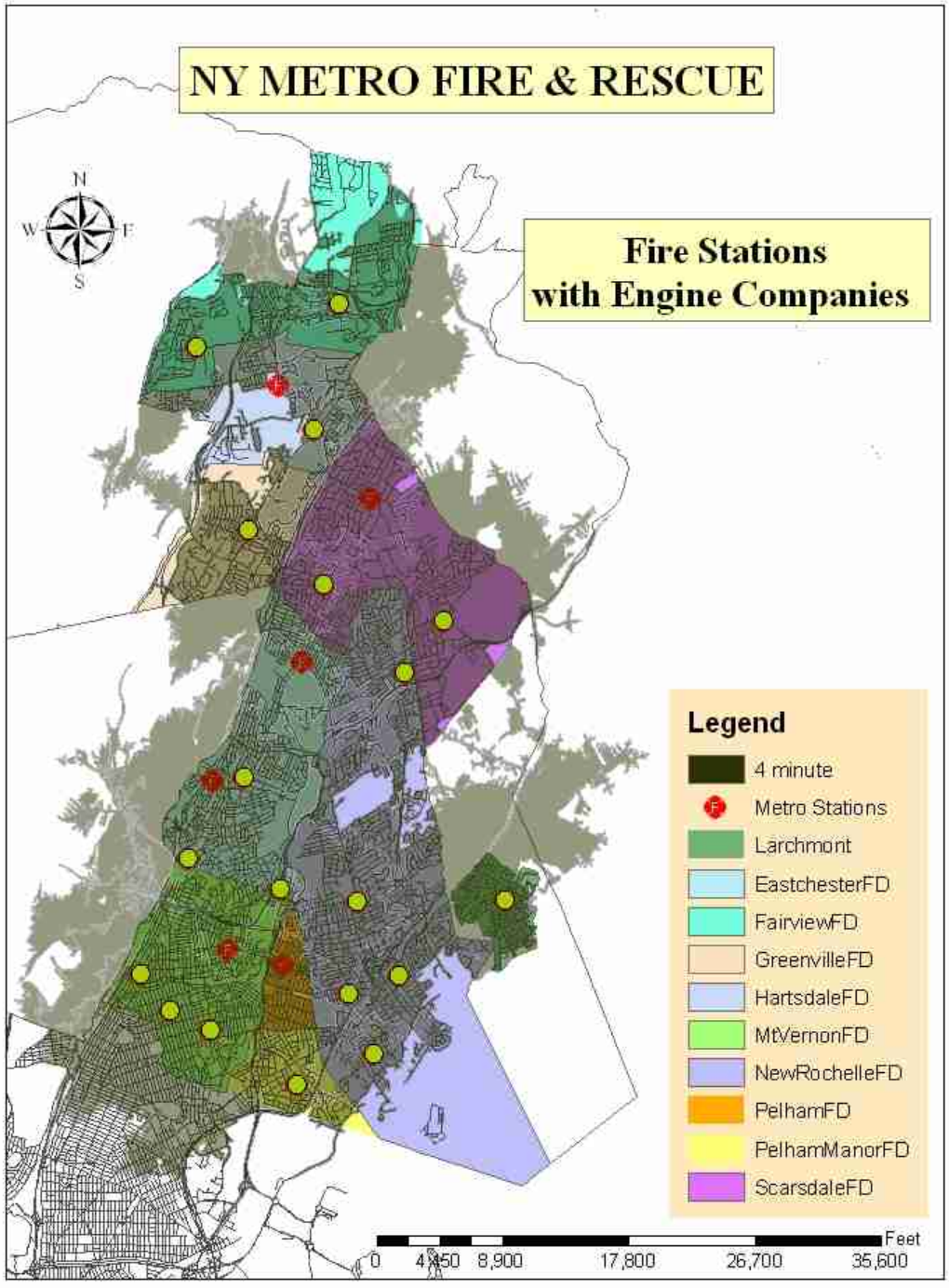
The grey/purple sections are the roads driven in 1.5 miles by engines, or the grey/purple sections are the roads driven in 2.5 miles by the ladder.

Yellow sections are areas that are not within 1.5 or 2.5 road miles from engine or ladder companies. It is possible that that is due to a lack of roads in those areas, often they are parks or golf courses. The southern section (Weaver Street & Griffin Avenue) would be within 1.5 miles of New Rochelle Engine 25 (NRFD Station #5) and 2.5 miles from Eastchester Ladder 17 (EFD Station #5).



New York Metro Fire & Rescue

Engine Company Placement in Consolidated Department



The following stations have the ability to cover practically all response aspects for Engine Companies as required under NFPA 1710[57]:

Eastchester: Bronxville, Chester Heights and Headquarters

Fairview: Headquarters and Station #2

Greenville: Headquarters

Hartsdale: Station #1 (Central Ave)

Larchmont: Headquarters

Mt. Vernon: Fulton, 3rd St. and Oak St.

New Rochelle: Harrison St., Webster Ave, North Ave, Drake Ave and Stratton Rd.

Pelham Manor: Headquarters

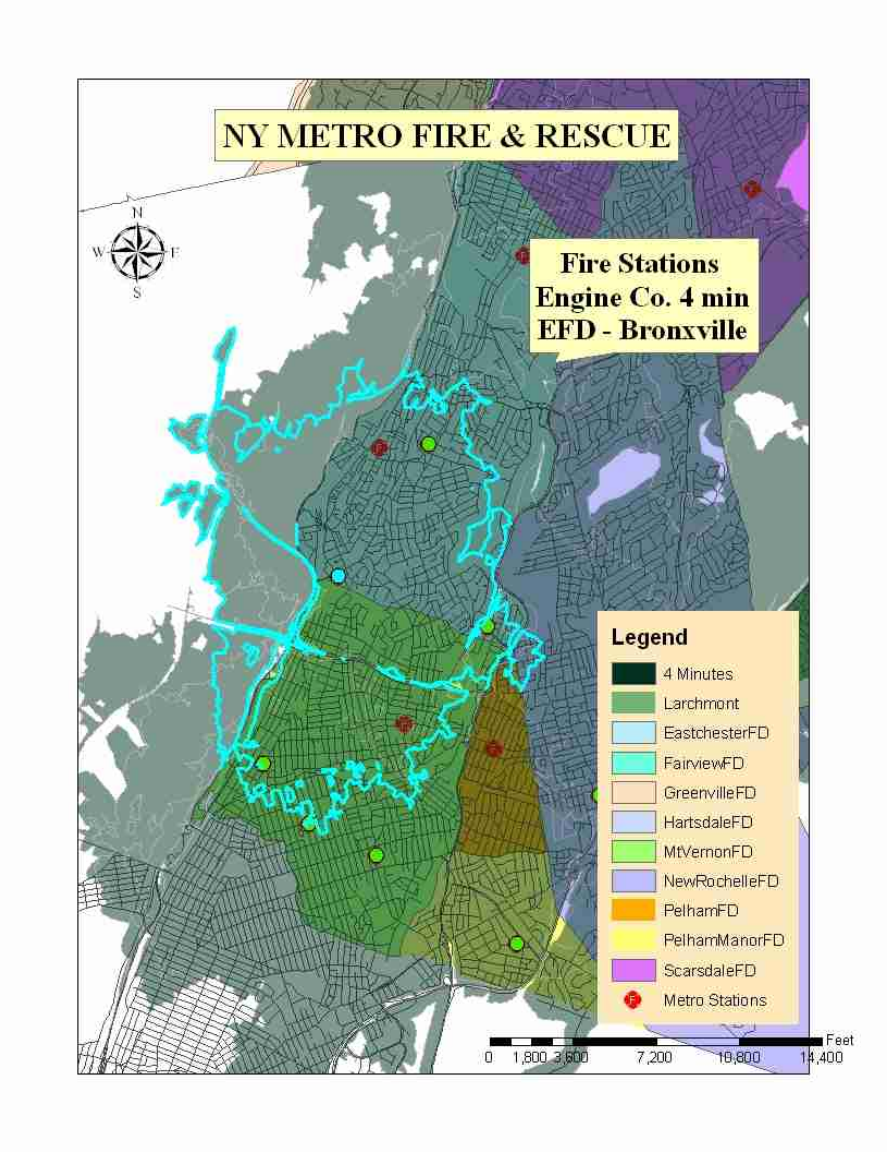
Scarsdale: Popham Rd and Crossway

The study determined that 19 engine companies could provide dramatically better coverage than we collectively or individually could provide today.

The following maps show the area that can be covered in 4 minutes of drive time:

[57] Minor deficiencies will be covered in detail with each stations local mapping

4 Minute Response Time – Bronxville Engine Coverage Area

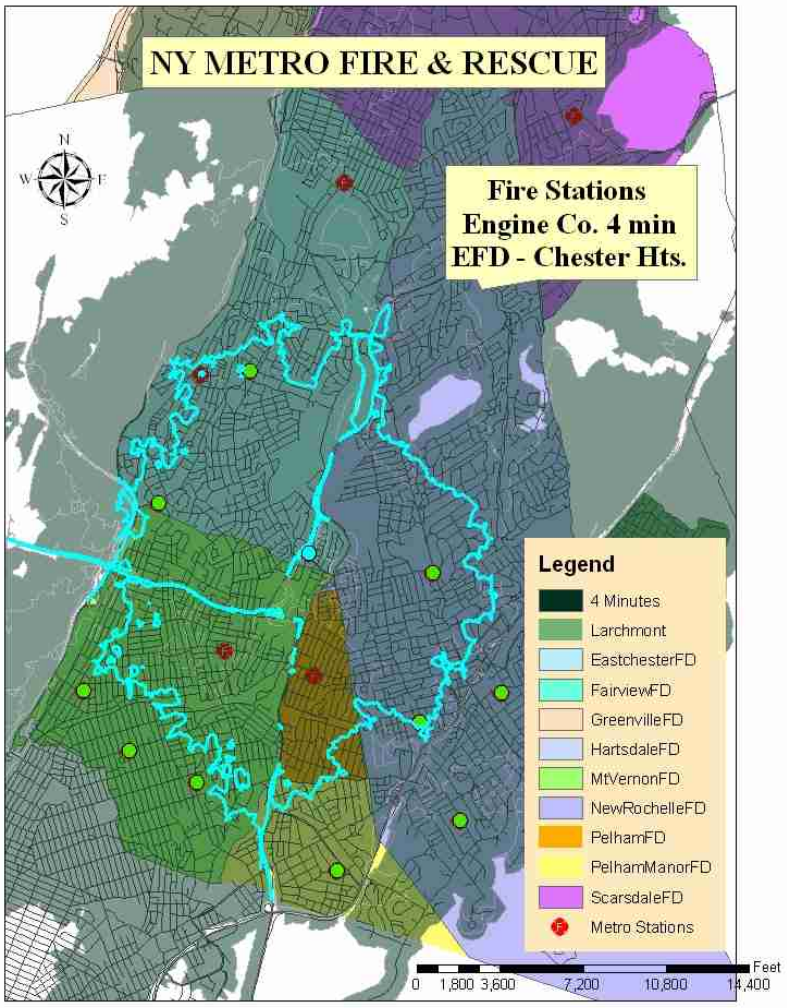


The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Eastchester Fire Departments Bronxville Firehouse. The three green dots are the Engines within the 4 minute drive time, which can cover this station when its engine is committed to another incident. The remaining green dots are fire stations with engine companies. The red dots are the Fire Stations that have apparatus other than engine companies.

The light blue lines are the 4 minute border from the Bronxville Fire Station. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all Engine Companies. Note that about 20% of area inside the blue lines is grey and has no visible streets. This area is part of Yonkers and while this unit may be the closest, that section is not part of this stations response area.

4 Minute Response Time – Chester Heights Engine Coverage Area

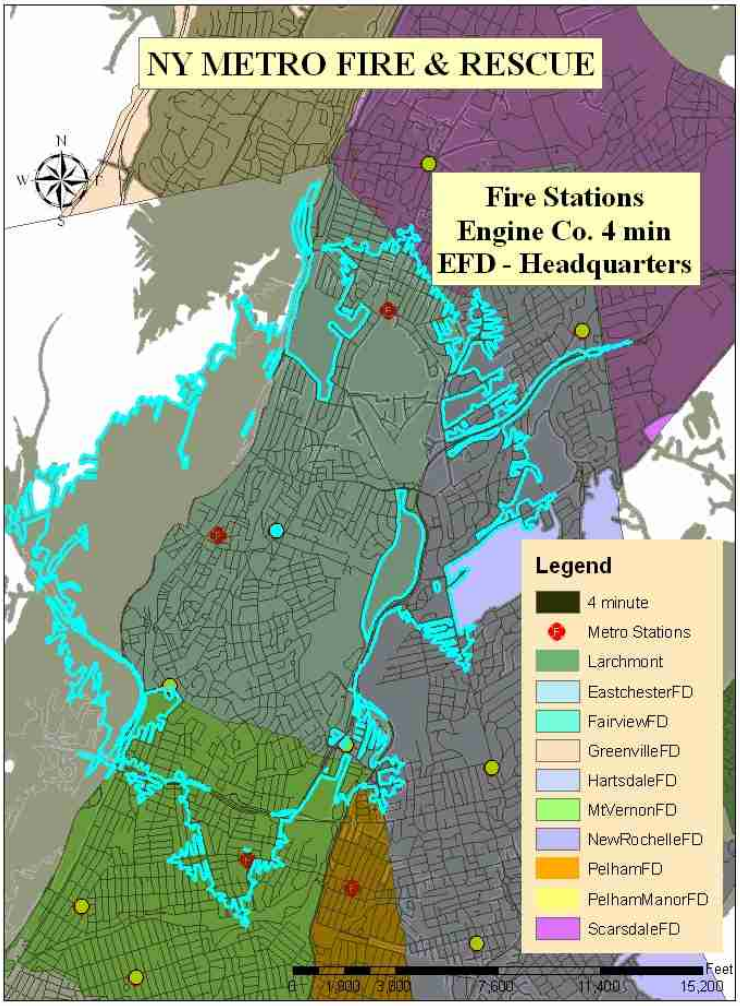


The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Eastchester Fire Department's Chester Heights Firehouse. The four green dots are the engines within the 4 minute drive time, which can cover this station when its engine is committed to another incident. The remaining green dots are fire stations with engine companies. The red dots are the fire stations that have apparatus other than engine companies.

The light blue lines are the 4 minute border from the Chester Heights Fire Station. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all Engine Companies.

4 Minute Response Time – EFD - Headquarters Engine Coverage Area

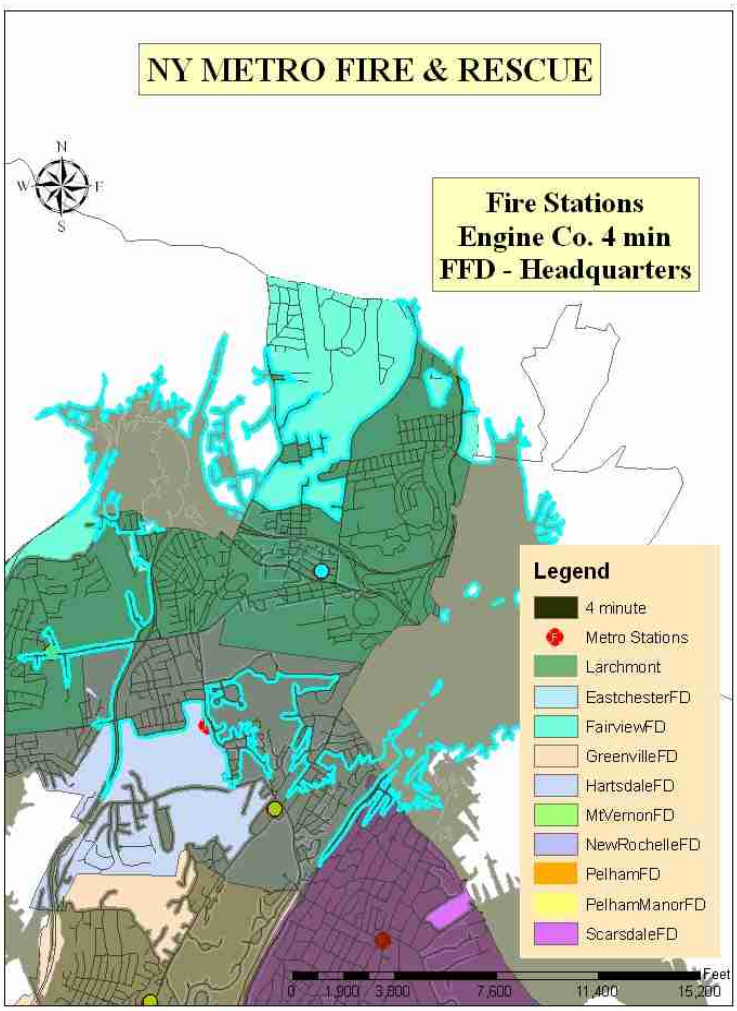


The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the Eastchester Fire Department Headquarters Firehouse. The green dots are Fire Sstations with Engine Companies. The red dots are the fire stations that have apparatus other than engine companies.

The light blue lines are the 4 minute border from the station listed. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all engine companies. Note that about 20% of area inside the blue lines is grey and has no visible streets. This area is part of Yonkers and while this unit may be the closest, that section is not part of this stations response area.

4 Minute Response Time – Fairview Headquarters Engine Coverage Area



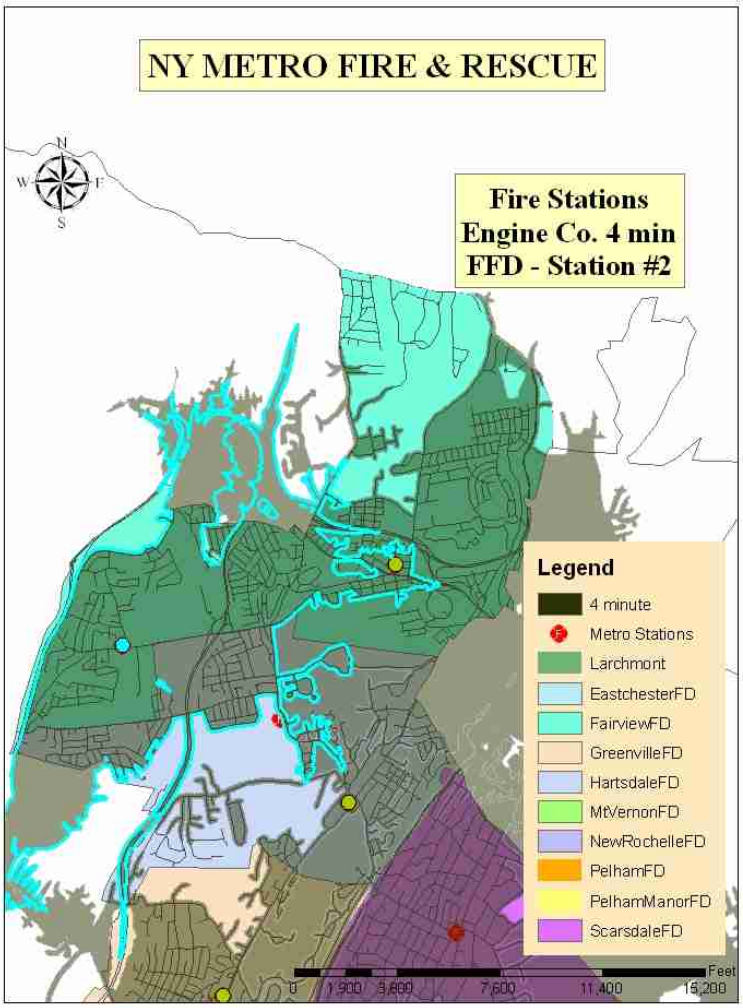
The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Fairview Fire Department's Headquarters. The green dots are Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 4 minute border from the Fairview Fire Headquarters. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all engine Companies. The light blue section in the north end does not meet the 4 minute standard and requires an additional fire station with an engine company. This is no change from the existing coverage.

Note that about 20% of area inside the blue lines is grey and has no visible streets. This area is part of White Plains and while this unit may be the closest, that section is not part of this stations response area.

4 Minute Response Time – Fairview Station #2 Engine Coverage Area



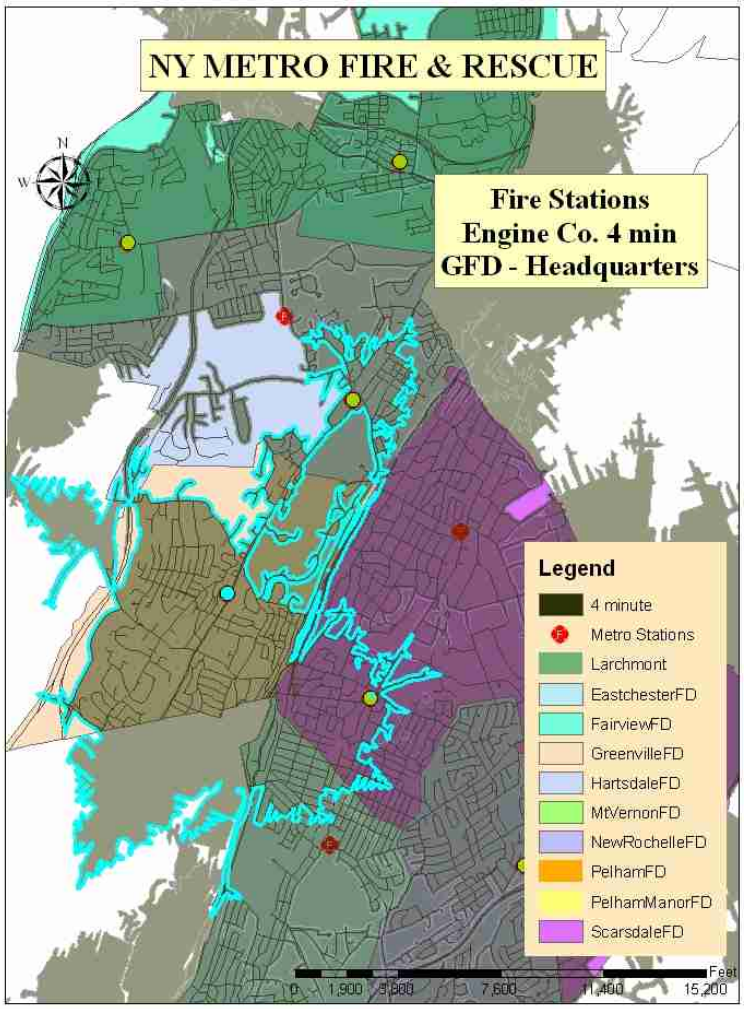
The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Fairview Fire Department's Station #2. The remaining green dots are Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 4 minute border from Fairview Fire Station #2. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all engine companies.

Note that about 10% of area inside the blue lines is grey and has no visible streets. This area is parts of Elmsford and Ardsley and while this unit may be the closest, that section is not part of this stations response area.

4 Minute Response Time – Greenville Headquarters Engine Coverage Area



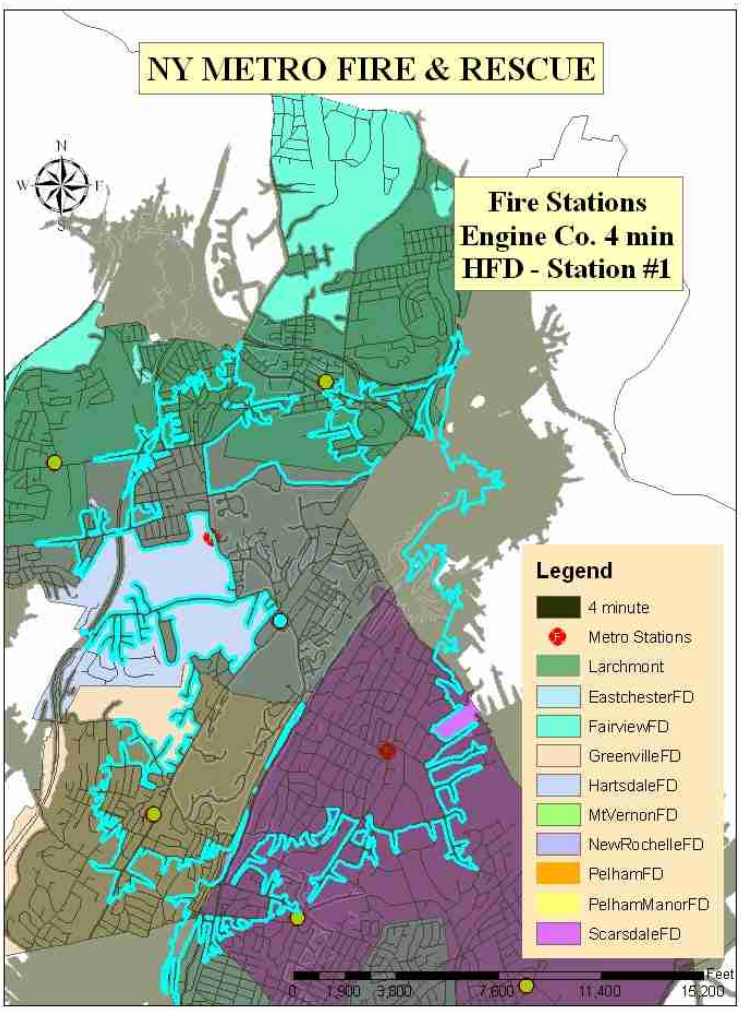
The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Greenville Fire Department. The green dots are Fire Stations with engine companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 4 minute border from the Greenville Fire Station. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all engine companies.

Note that about 20% of area inside the blue lines is grey and has no visible streets. This area is part of Yonkers and while this unit may be the closest, that section is not part of this stations response area.

4 Minute Response Time – Hartsdale Station #1 Engine Coverage Area



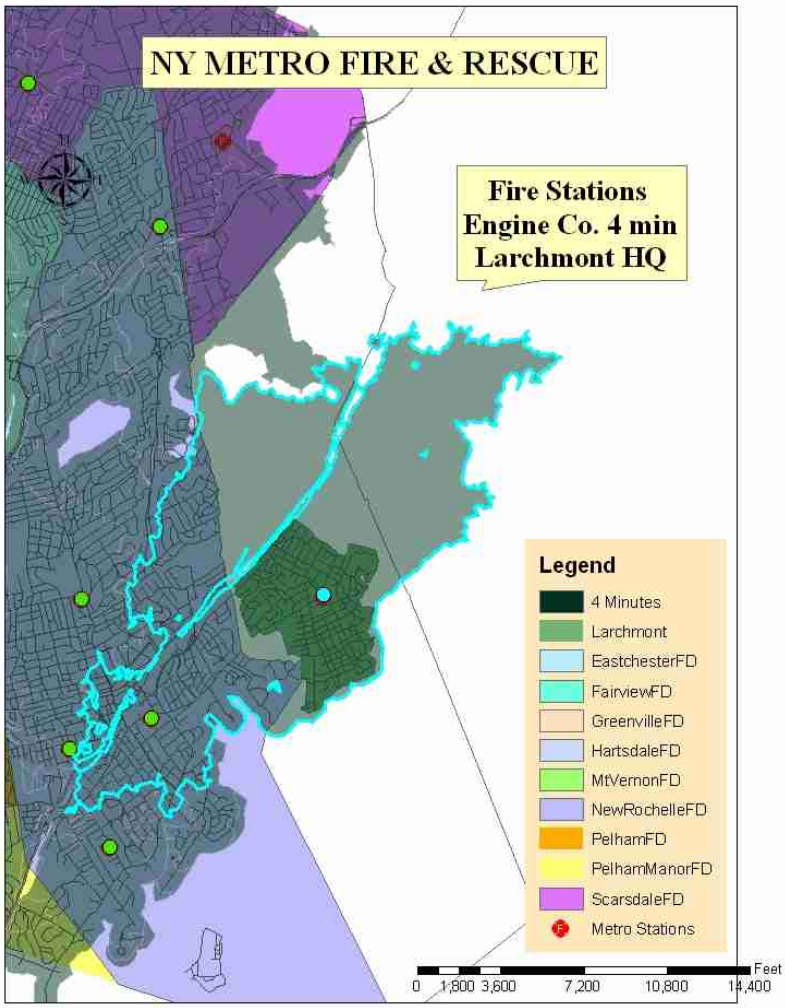
The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Hartsdale Fire Department's Station #1 (Central Ave.). The green dots are Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than engine companies.

The light blue lines are the 4 minute border from the Hartsdale Station #1. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all engine companies.

Note that about 10% of area inside the blue lines is grey and has no visible streets. This area is part of White Plains and while this unit may be the closest, that section is not part of this stations response area.

4 Minute Response Time – Larchmont Headquarters Engine Coverage Area

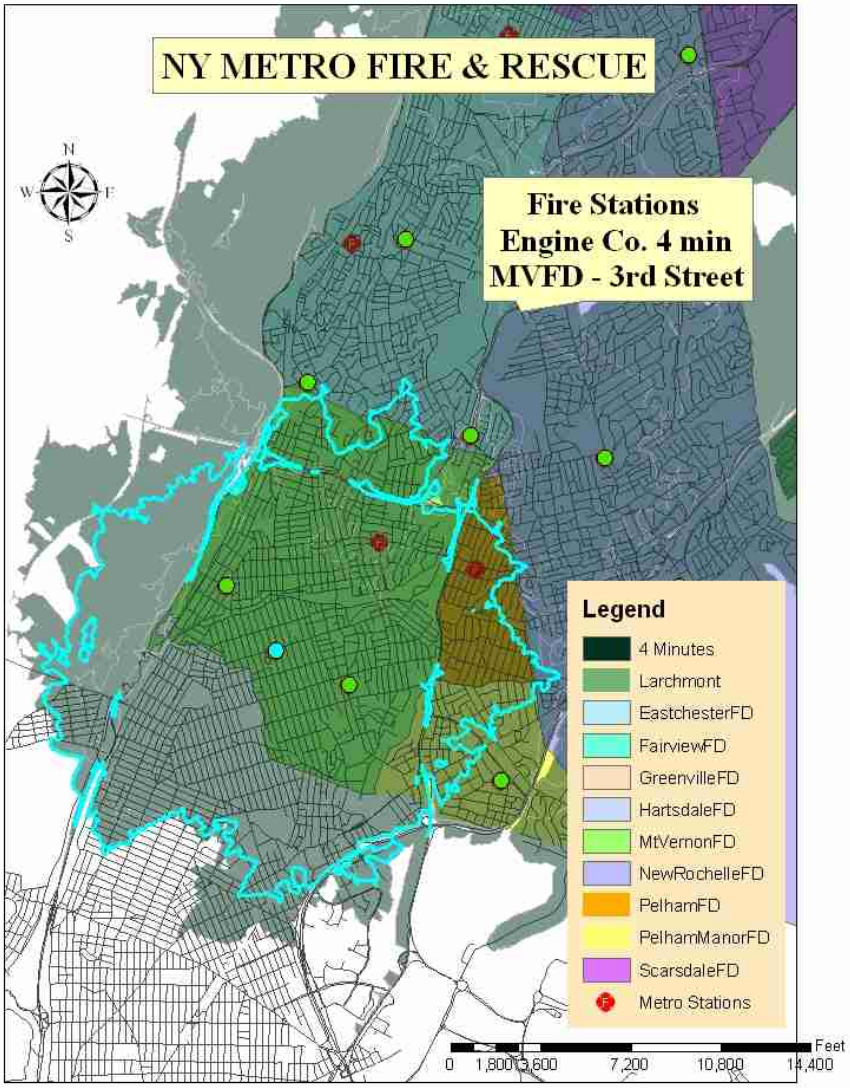


The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the Larchmont Fire Station. The one green dot is the other Engine within the 4 minute drive time, which can cover this station when its engine is committed to another incident. The remaining green dots are Fire Stations with Engine Companies. The red dots are the fire stations that have apparatus other than engine companies.

The light blue lines are the 4 minute border from the Larchmont Fire station. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all engine companies. Note that about 45% of area inside the blue lines is grey and has no visible streets. This area is part of the Town or the Village of Mamaroneck and while this unit may be the closest, that section is not part of this stations response area.

4 Minute Response Time – Mt. Vernon 3rd Street Engine Coverage Area



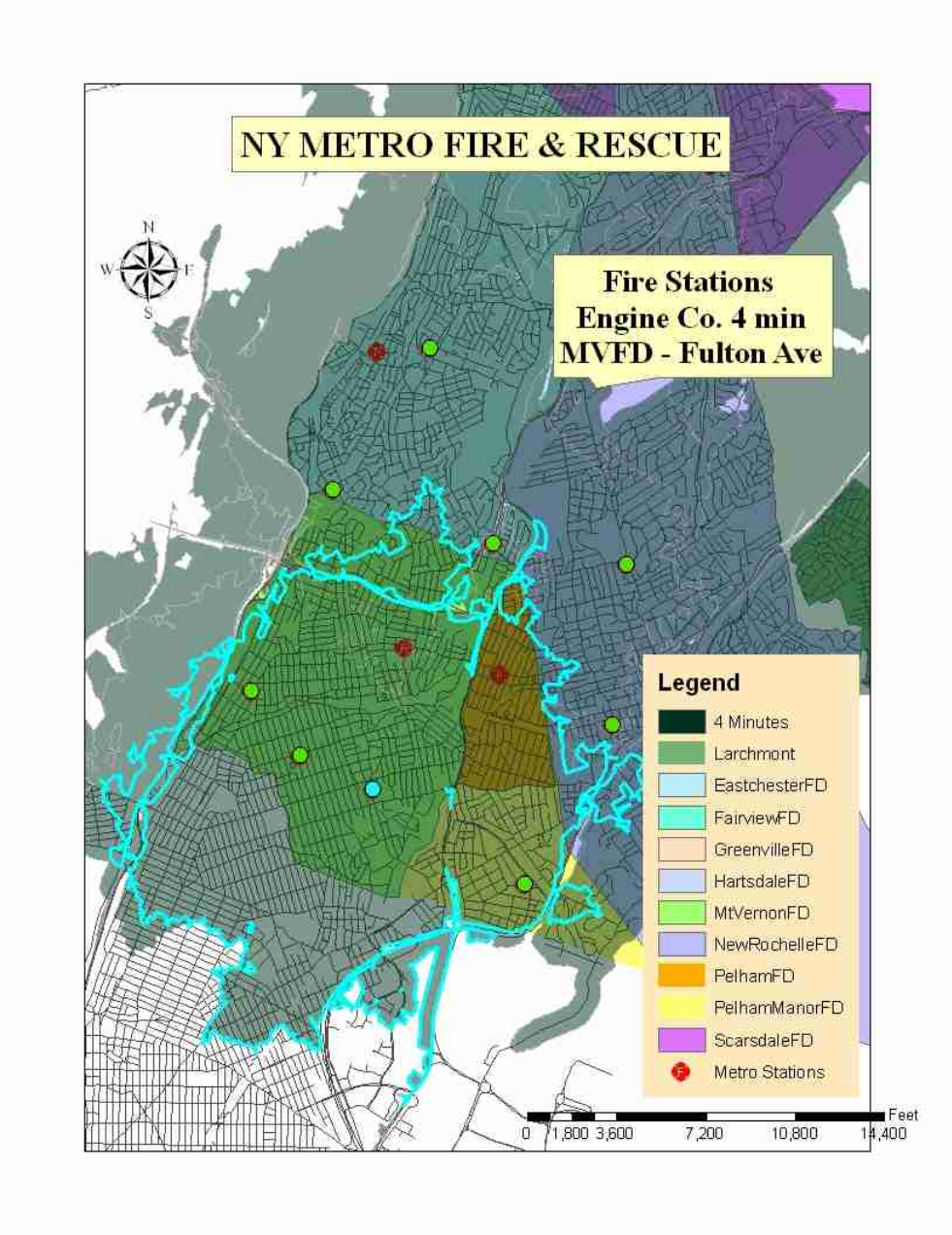
The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the Mt. Vernon 3rd Street Fire Station. The two green dots are the Engines within the 4 minute drive time, which can cover this station when its engine is committed to another incident. The remaining green dots are Fire Stations with Engine Companies. The red dots are the fire stations that have apparatus other than engine companies.

The light blue lines are the 4 minute border from the Mt Vernon 3rd Street Fire Station. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all Engine Companies. [58]Note that about 30% of area inside the blue lines is grey and some with and some without visible streets. This area is part of the Bronx and Yonkers and while this unit may be the closest, that section is not part of this stations response area.

[58] Sections with streets to the south is The Bronx, Without and to the west is Yonkers.

4 Minute Response Time – Mt. Vernon Fulton Street Engine Coverage Area

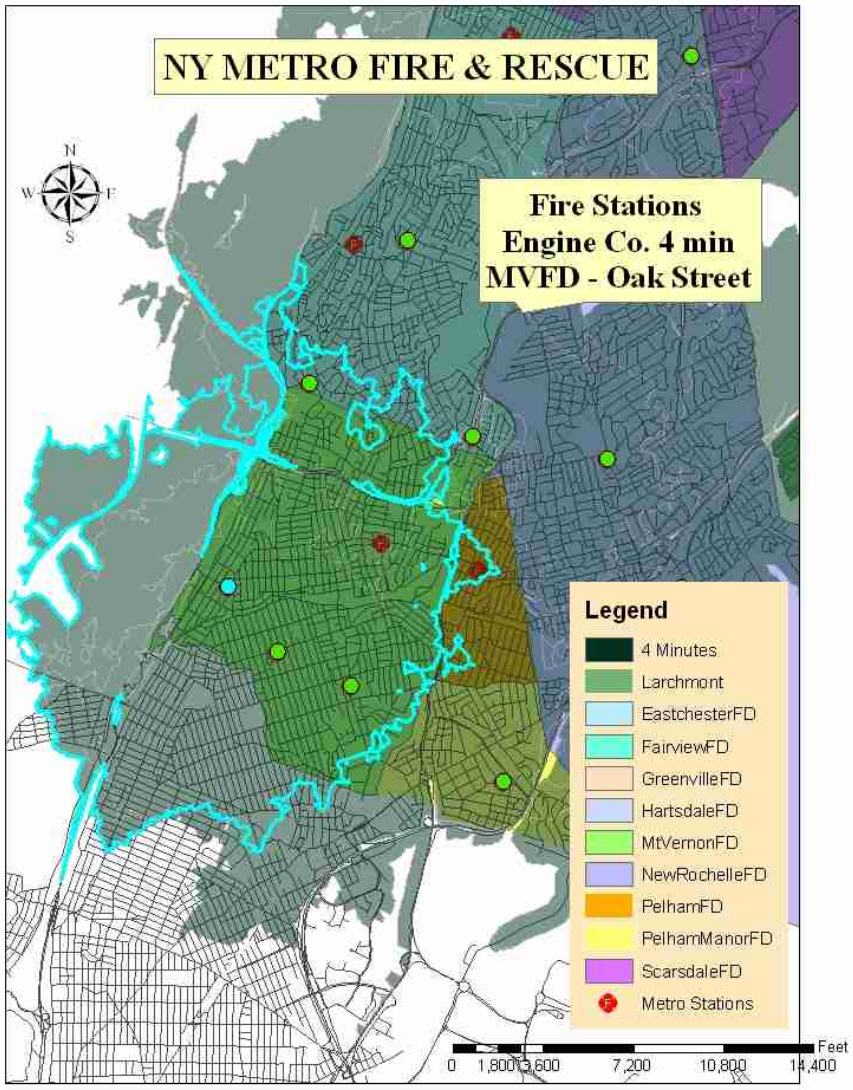


The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the Mt. Vernon Fulton Street Fire Station. The three green dots are the engines within the 4 minute drive time, which can cover this station when its engine is committed to another incident. The remaining green dots are fire stations with engine companies. The red dots are the Fire Stations that have apparatus other than engine companies.

The light blue lines are the 4 minute border from the Mt. Vernon Fulton Street Fire Station. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all engine companies. Note that about 20% of area inside the blue lines is grey with visible streets. This area is part of the Bronx and while this unit may be the closest, that section is not part of this stations response area.

4 Minute Response Time – Mt. Vernon Oak Street Engine Coverage Area



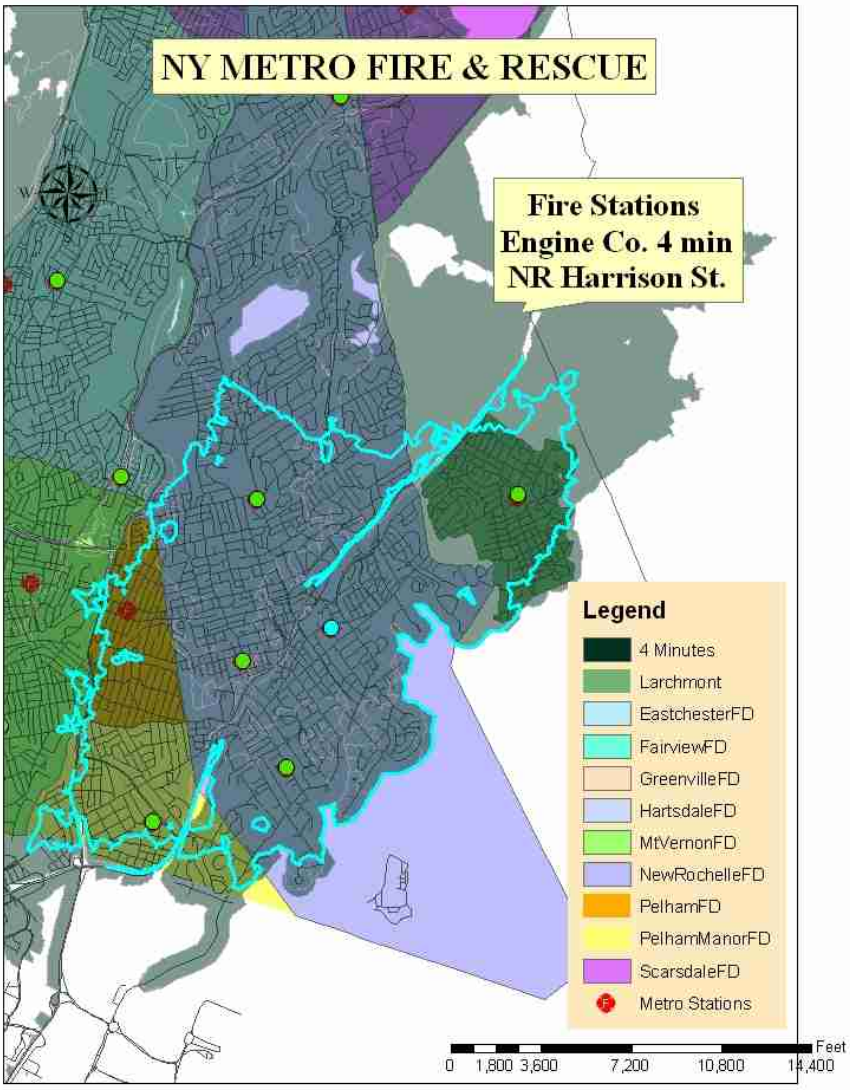
The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the Mt. Vernon Oak Street Fire Station. The three green dots are the engines within the 4 minute drive time, which can cover this station when its engine is committed to another incident. The remaining green dots are Fire Stations with Engine Companies. The red dots are the fire stations that have apparatus other than engine companies.

The light blue lines are the 4 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all Engine Companies. [59]Note that about 40% of area inside the blue lines is grey and some with and some without visible streets. This area is part of the Bronx and Yonkers and while this unit may be the closest, that section is not part of this stations response area.

[59] Sections with streets to the south is The Bronx, Without and to the west is Yonkers.

4 Min. Response Time – New Rochelle Harrison St. Engine Coverage Area

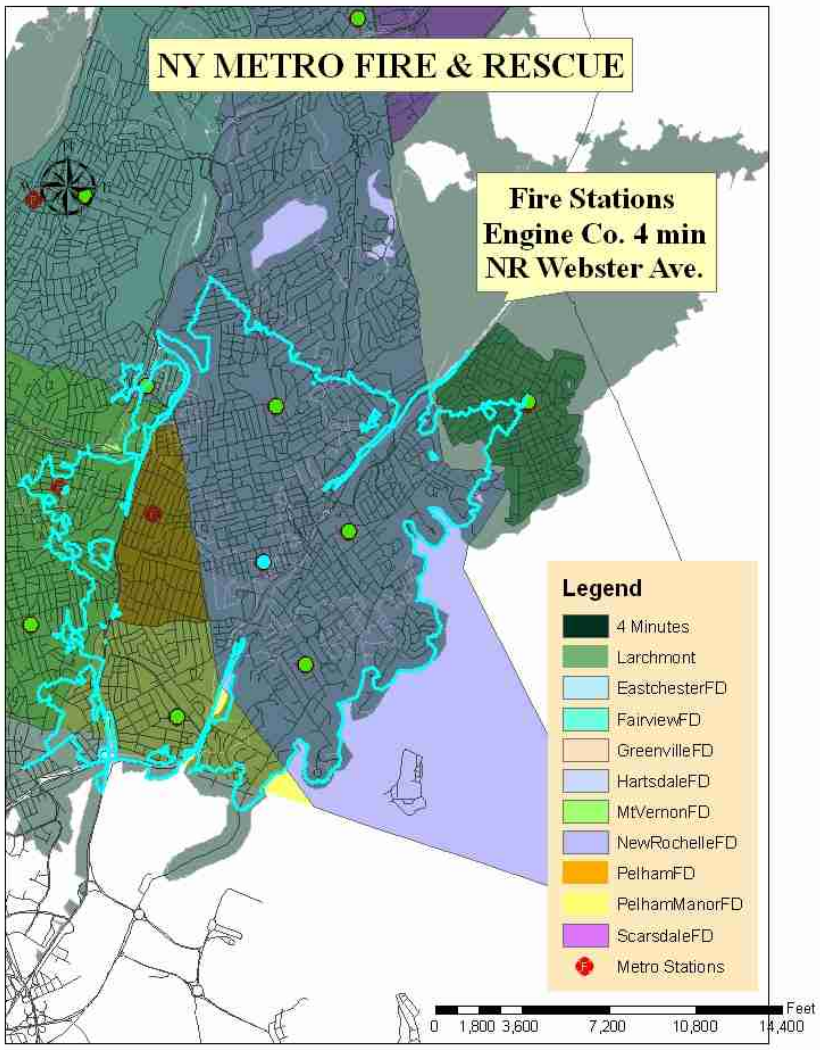


The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the New Rochelle Harrison Street Fire Station (Sta. #1). The five green dots are the Engines within the 4 minute drive time, which can cover this station when its engine is committed to another incident. The remaining green dots are Fire Stations with Engine Companies. The red dots are the fire stations that have apparatus other than engine companies.

The light blue lines are the 4 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all Engine Companies.

4 Min. Response Time – New Rochelle Webster Ave. Engine Coverage Area

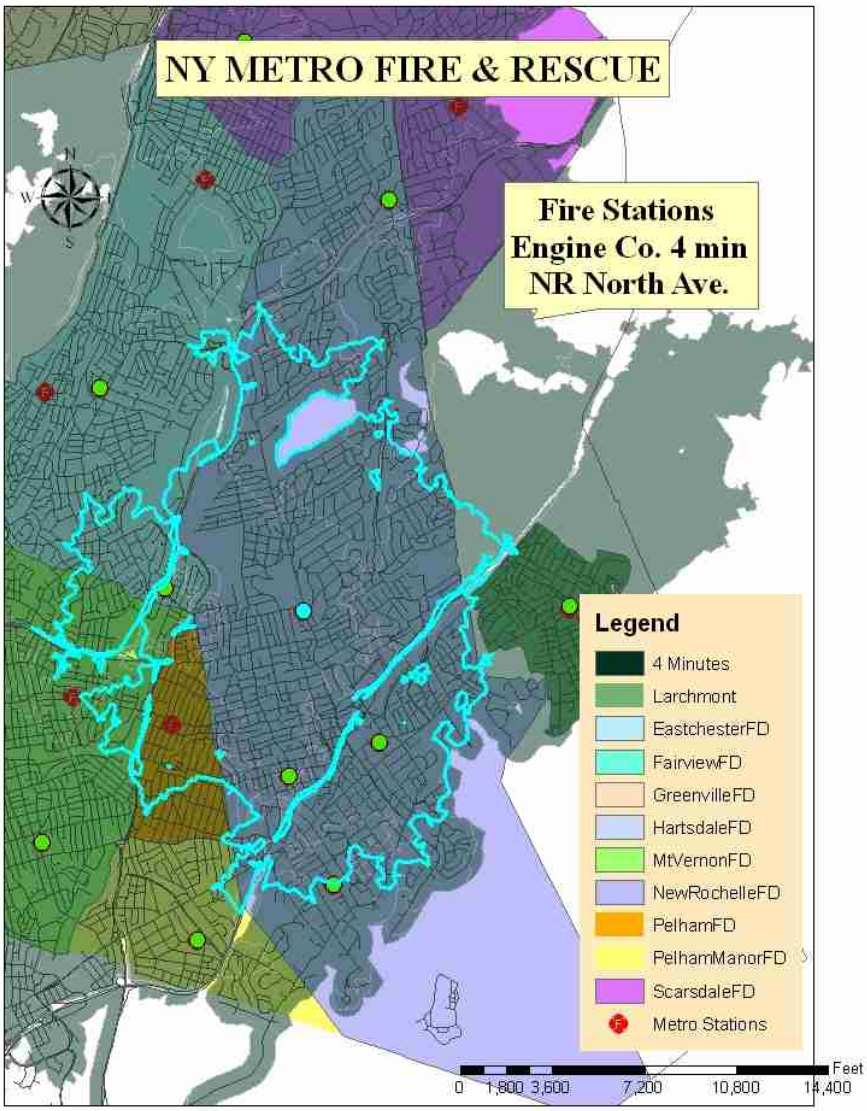


The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the New Rochelle Webster Avenue Fire Station (Sta. #2). The our green dots are the Engines within the 4 minute drive time, which can cover this station when its engine is committed to another incident. The remaining green dots are Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other thanEengine Companies.

The light blue lines are the 4 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all engine companies.

4 Min. Response Time – New Rochelle North Ave. Engine Coverage Area



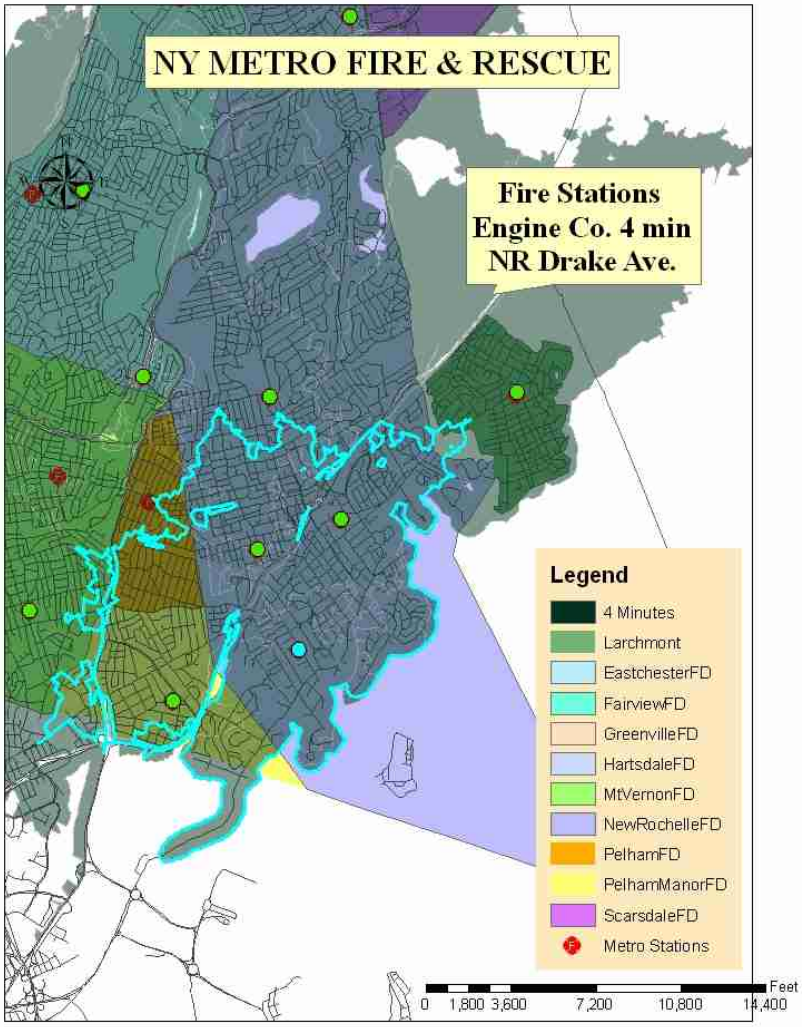
The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the New Rochelle North Avenue Fire Station (Sta. #3). The three green dots are the Engines within the 4 minute drive time, which can cover this station when its engine is committed to another incident. The remaining green dots are Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than engine companies.

The light blue lines are the 4 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all Engine Companies. Note: two coverage gaps exist, both are light purple, one is on the Wykagyl Country Club (due to no roads), the other is in the Bayberry Section. This is a gap in the New Rochelle model, no change exist in this coverage. The only improvement would be to add an additional station[60] on Quaker Ridge Road.

[60] Or relocate NRFD Station #5 (Stratton Road).

4 Min. Response Time – New Rochelle Drake Ave. Engine Coverage Area

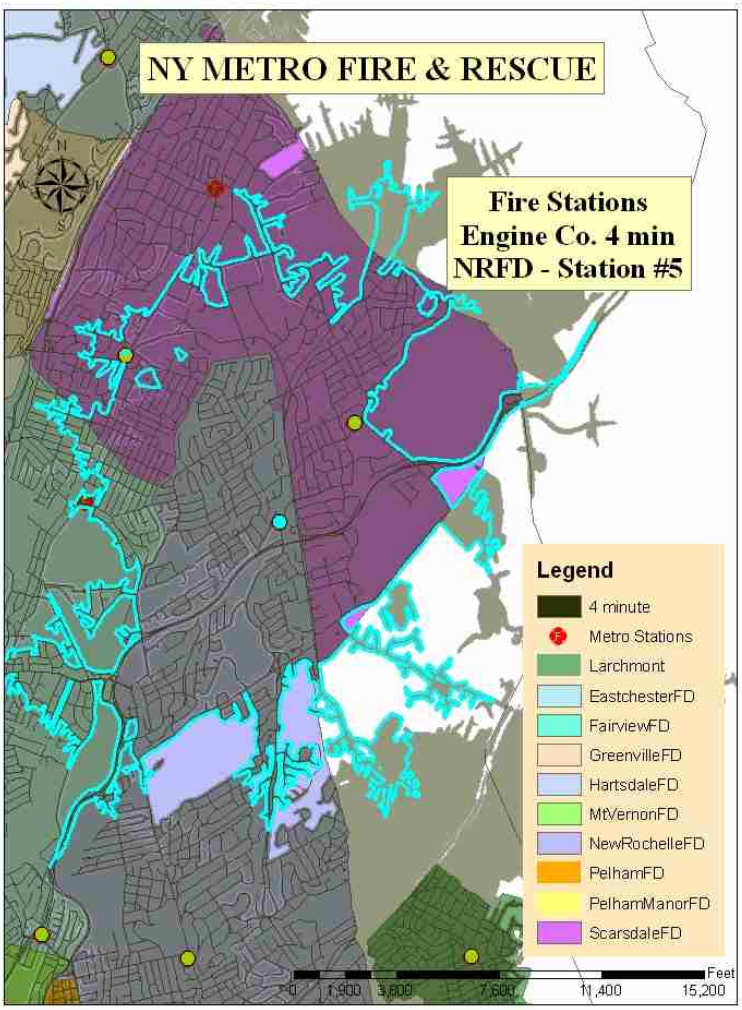


The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the New Rochelle Drake Avenue Fire Station (Sta. #4). The three green dots are the engines within the 4 minute drive time, which can cover this station when its engine is committed to another incident. The remaining green dots are Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 4 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all engine companies.

4 Min. Response Time – New Rochelle Stratton Rd. Engine Coverage Area

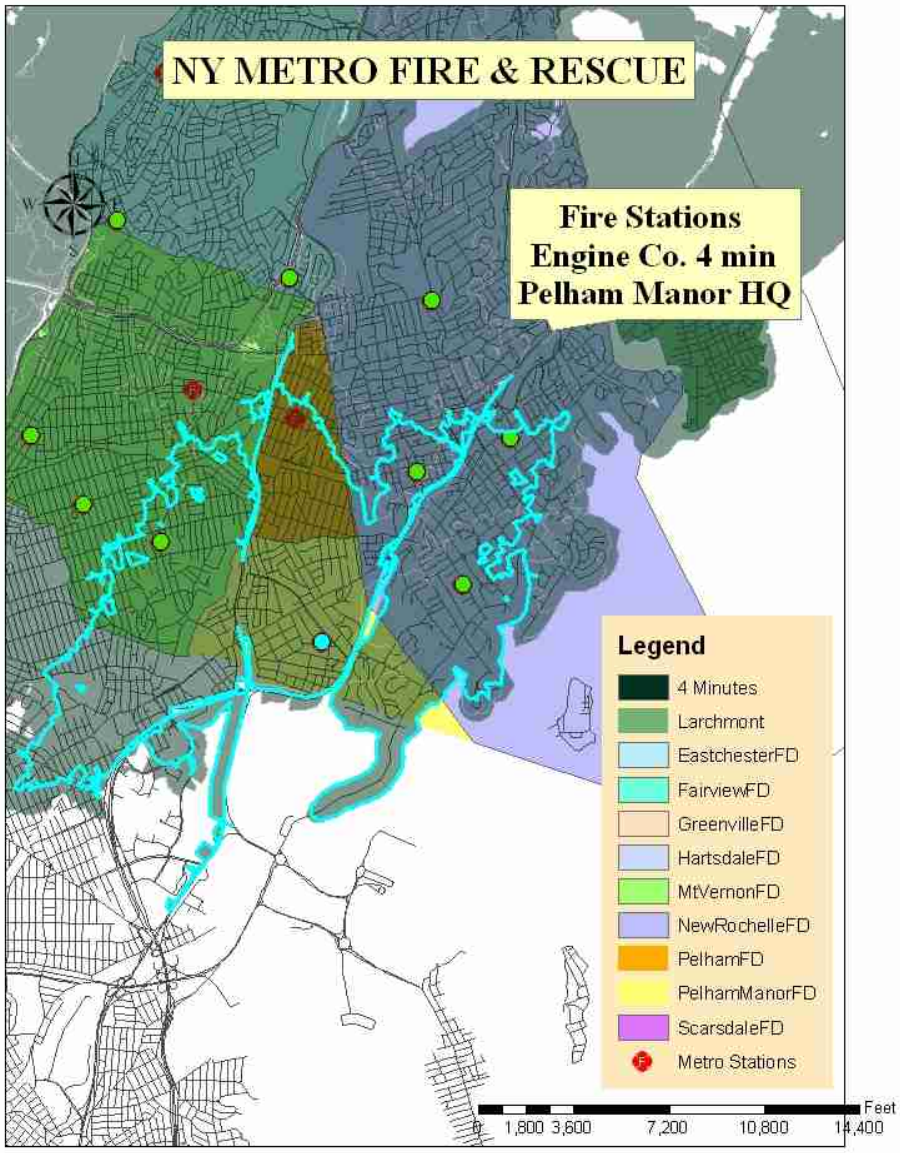


The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the New Rochelle Stratton Road Fire Station (Sta. #5). The green dots are Fire Stations with Engine Companies. The red dots are the fire stations that have apparatus other than Engine Companies.

The light blue lines are the 4 minute border from New Rochelle station #5. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all engine companies. Note that about 20% of area inside the blue lines is grey or blue grey and without visible streets. This area is part of the Town of Mamaroneck and parkland or a golf course and while this unit may be the closest, that section is not part of this stations response area.

4 Min. Response Time – Pelham Manor HQ Engine Coverage Area

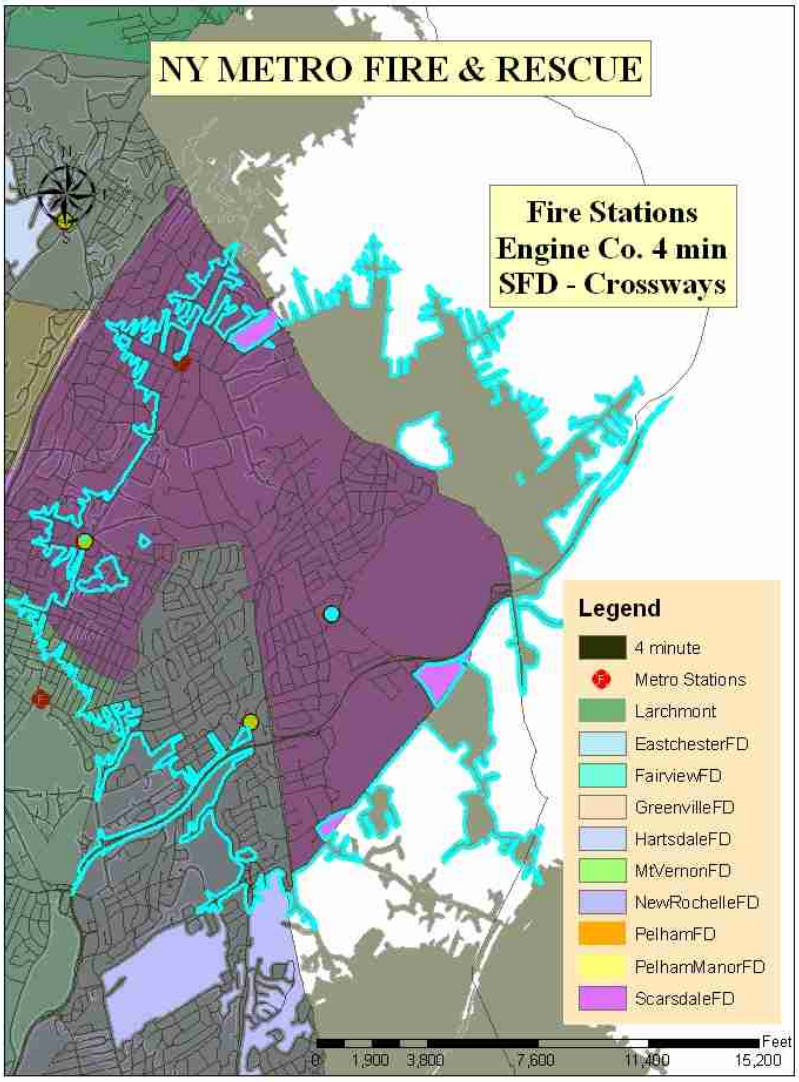


The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the Pelham Manor Fire Station (HQ). The four green dots are the engines within the 4 minute drive time, which can cover this station when its engine is committed to another incident. The remaining green dots are Fire Stations with Engine Companies. The red dots are the fire Ssations that have apparatus other than Engine Companies.

The light blue lines are the 4 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all Engine Companies. Note that about 15% of area inside the blue lines is grey with visible streets. This area is part of the Bronx and while this unit may be the closest, that section is not part of this stations response area.

4 Min. Response Time – Scarsdale Crossway Engine Coverage Area



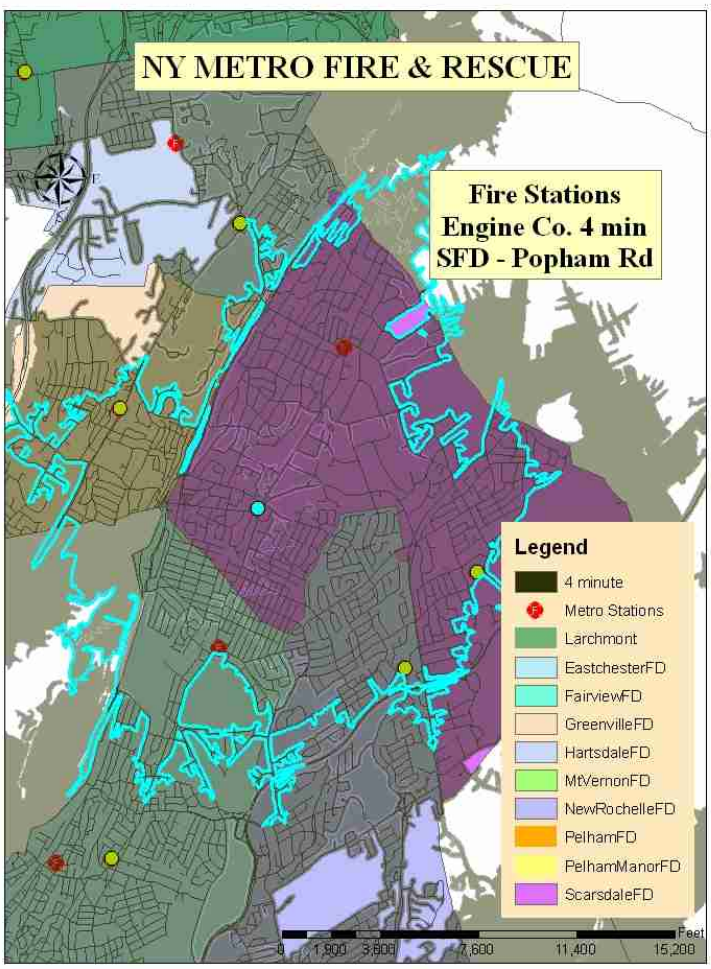
The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the Scarsdale Crossway Fire Station (Sta. #3). The green dots are Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than engine companies.

The light blue lines are the 4 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all engine companies.

Note that about 20% of area inside the blue lines is grey and without visible streets. This area is part of White Plains or the Town of Mamaroneck and while this unit may be the closest, that section is not part of this stations response area.

4 Min. Response Time – Scarsdale Popham Rd. Engine Coverage Area

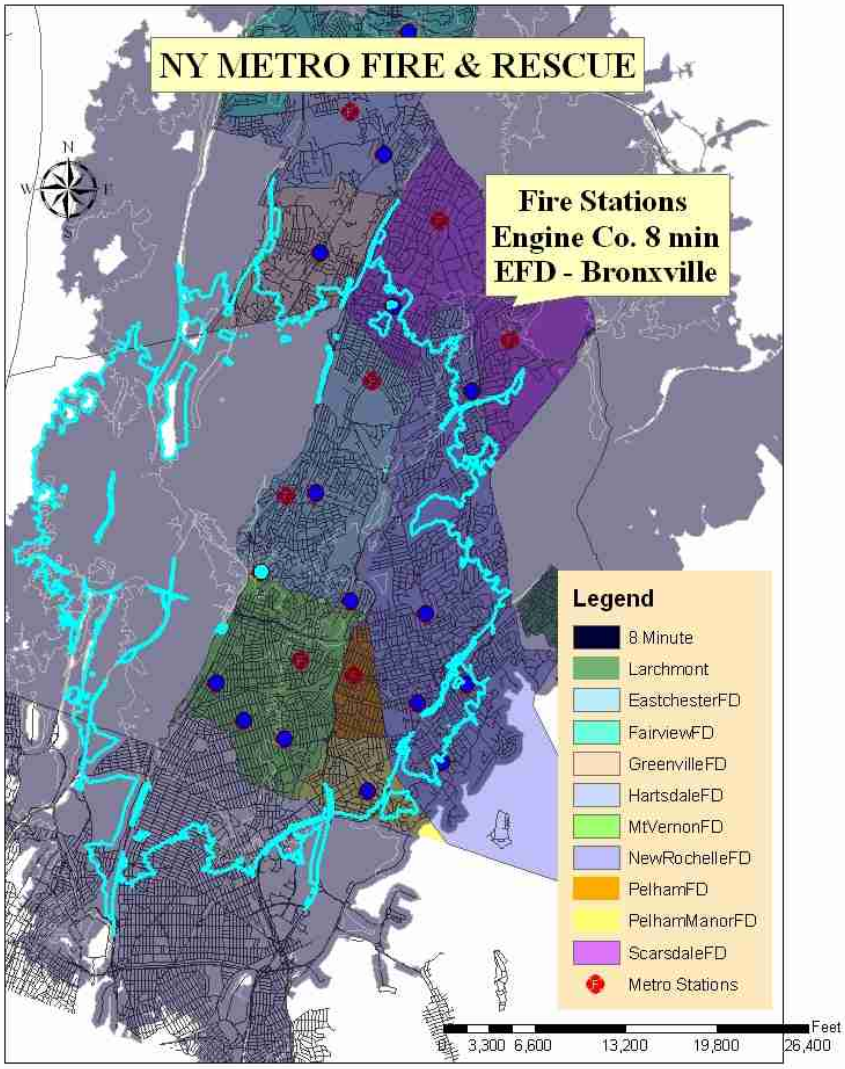


The response time of 4 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the Scarsdale Popham Road Fire Stati Fire Stations with Engine Companies. The red dots are the fire stations that have apparatus other than engine companies.

The light blue lines are the 4 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 4 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 4 minute response distance covered by all Engine Companies.

8 Minute Response Time – Bronxville Engine Coverage Area

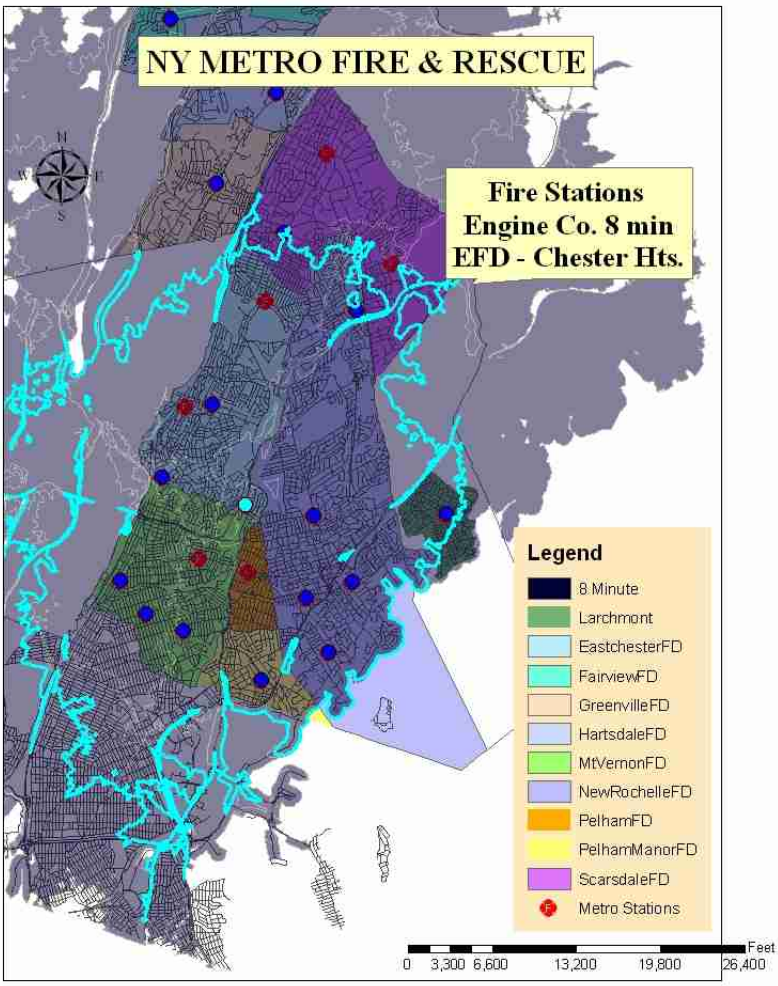


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Eastchester Fire Departments Bronxville Firehouse. The eight navy blue dots are the Engines within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining navy blue dots are Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 50% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of Yonkers and The Bronx and while this unit may be the closest, that section is not part of this stations response area.

8 Minute Response Time – Chester Heights Engine Coverage Area

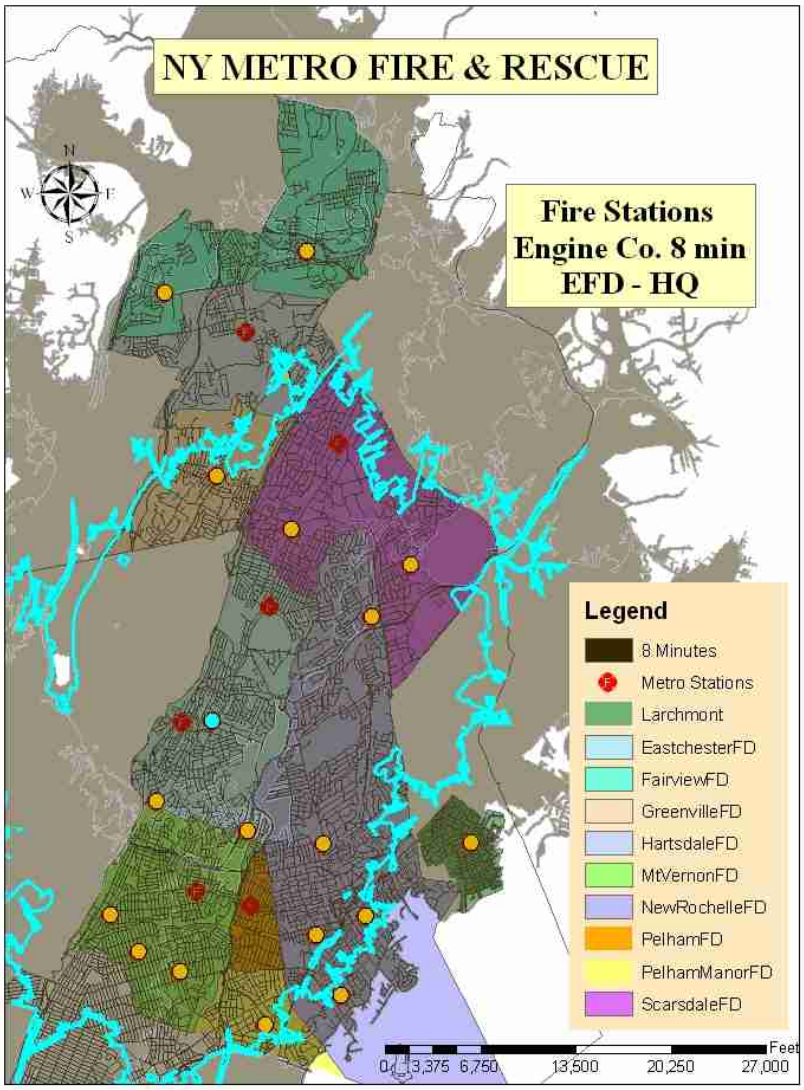


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Eastchester Fire Department's Chester Heights Firehouse. The twelve (12) navy blue dots are the Engines within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatch as 2nd due if it was closer than the other available units. The remaining navy blue dots are fire stations with engine companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 30% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of Yonkers, the Town of Mamaroneck and The Bronx and while this unit may be the closest (as 2nd due), that section is not part of this stations response area.

8 Minute Response Time – Eastchester HQ Engine Coverage Area

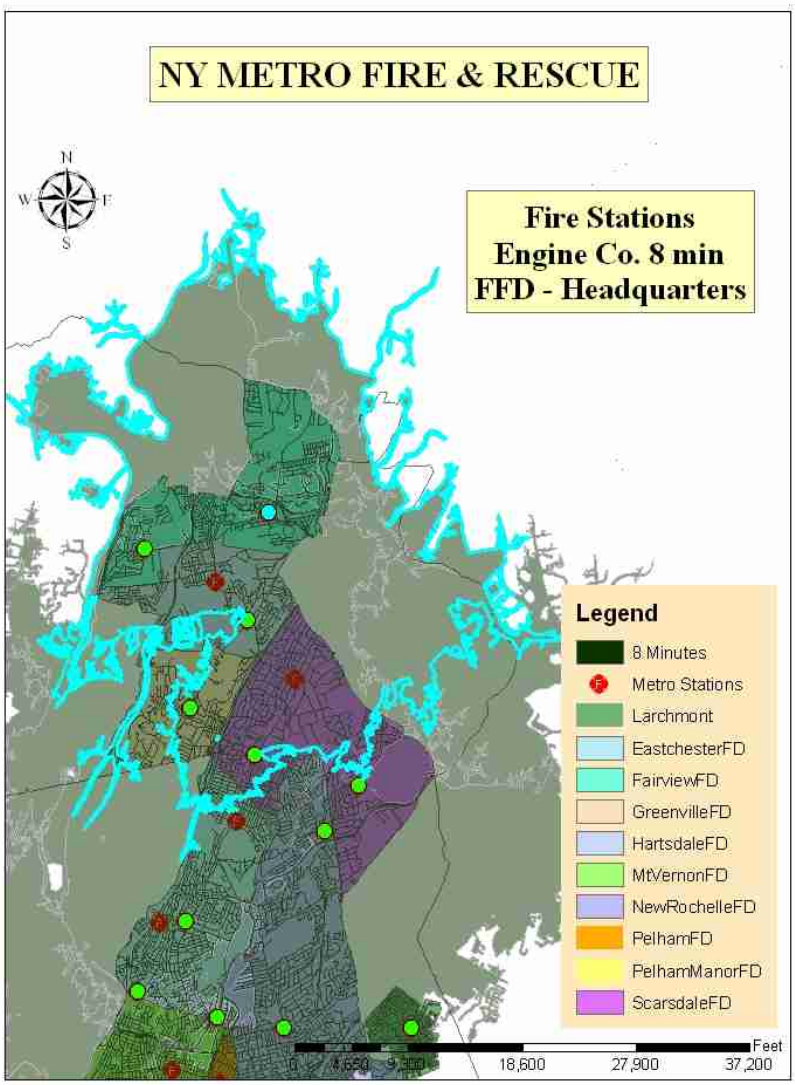


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Eastchester Fire Departments Headquarters Firehouse. The remaining orange dots are fire stations with engine companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 8 minute border from this station. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 40% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of Yonkers, the Town of Mamaroneck and The Bronx and while this unit may be the closest, that section is not part of this stations response area.

8 Minute Response Time – Fairview HQ Engine Coverage Area

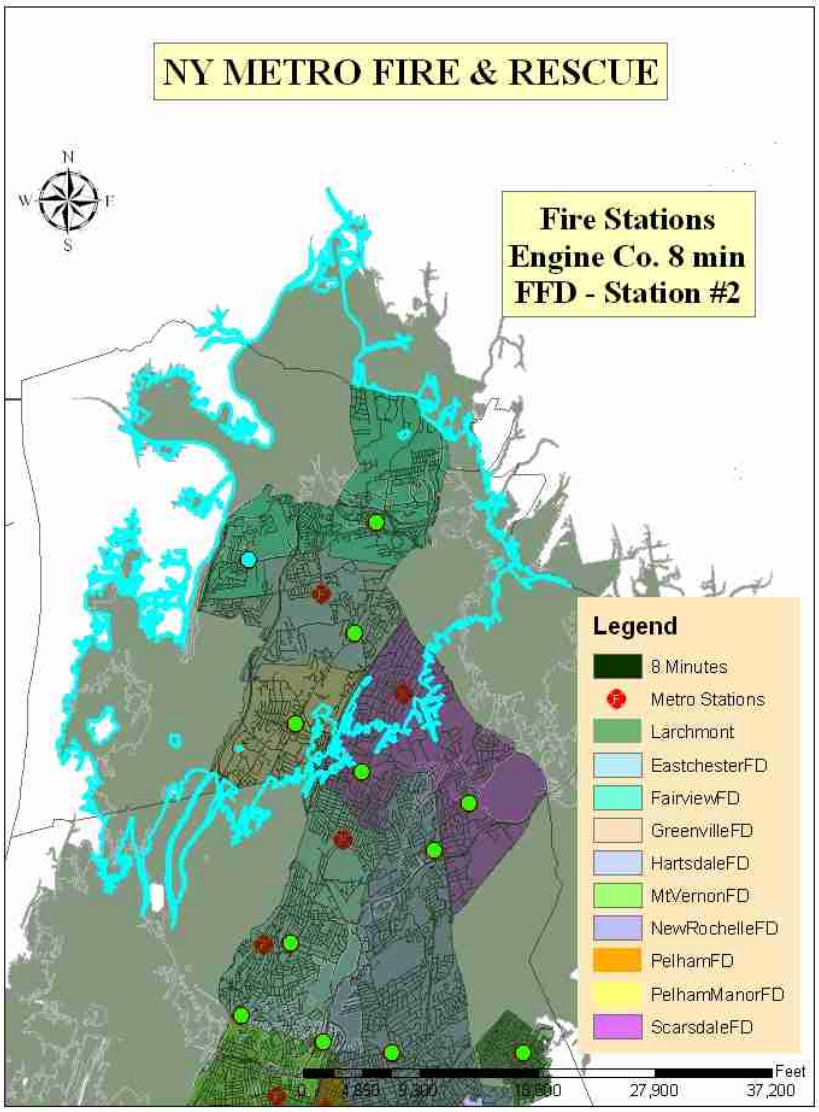


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Fairview Fire Departments headquarters. The green dots are Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 8 minute border from the station. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 50% of area inside the blue lines is grey and has non-visible streets. This area is part of White Plains, Elmsford and Valhalla and while this unit may be the closest, that section is not part of this stations response area.

8 Minute Response Time – Fairview Sta. #2 Engine Coverage Area

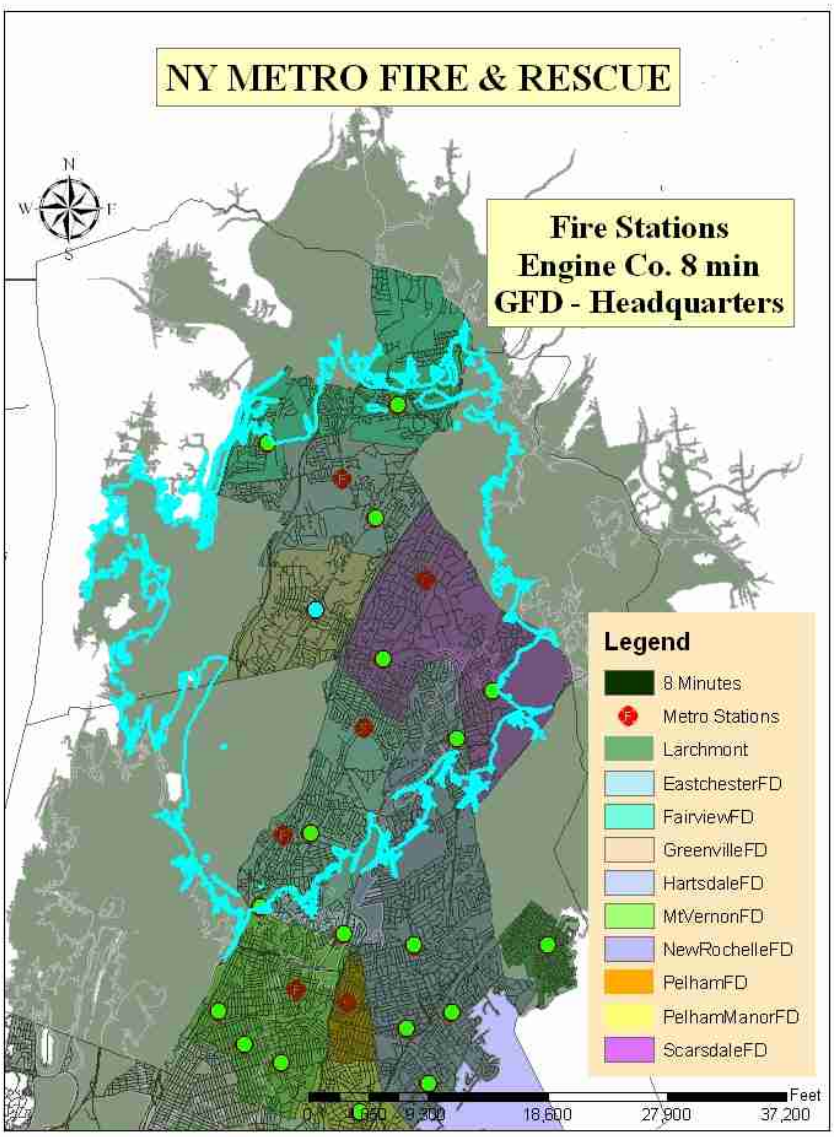


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Fairview Fire Departments Station #2. The green dots are Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 50% of area inside the blue lines is grey and has non-visible streets. This area is part of Ardsley, Elmsford, White Plains and Valhalla and while this unit may be the closest, that section is not part of this stations response area.

8 Minute Response Time – Greenville HQ Engine Coverage Area

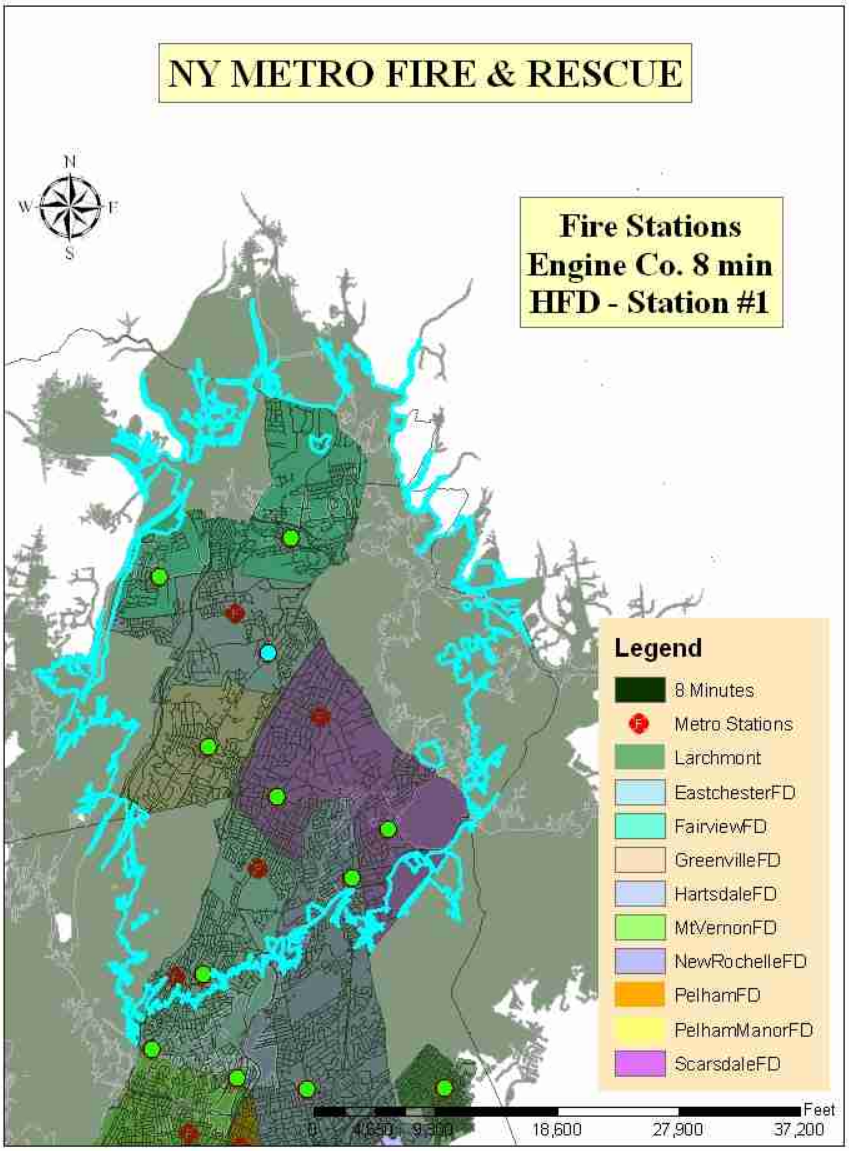


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the Greenville Fire Department. The green dots are Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 50% of area inside the blue lines is grey and has non-visible streets. This area is part of Yonkers, Ardsley and White Plains and while this unit may be the closest, that section is not part of this stations response area.

8 Minute Response Time – Hartsdale Sta. #1 Engine Coverage Area

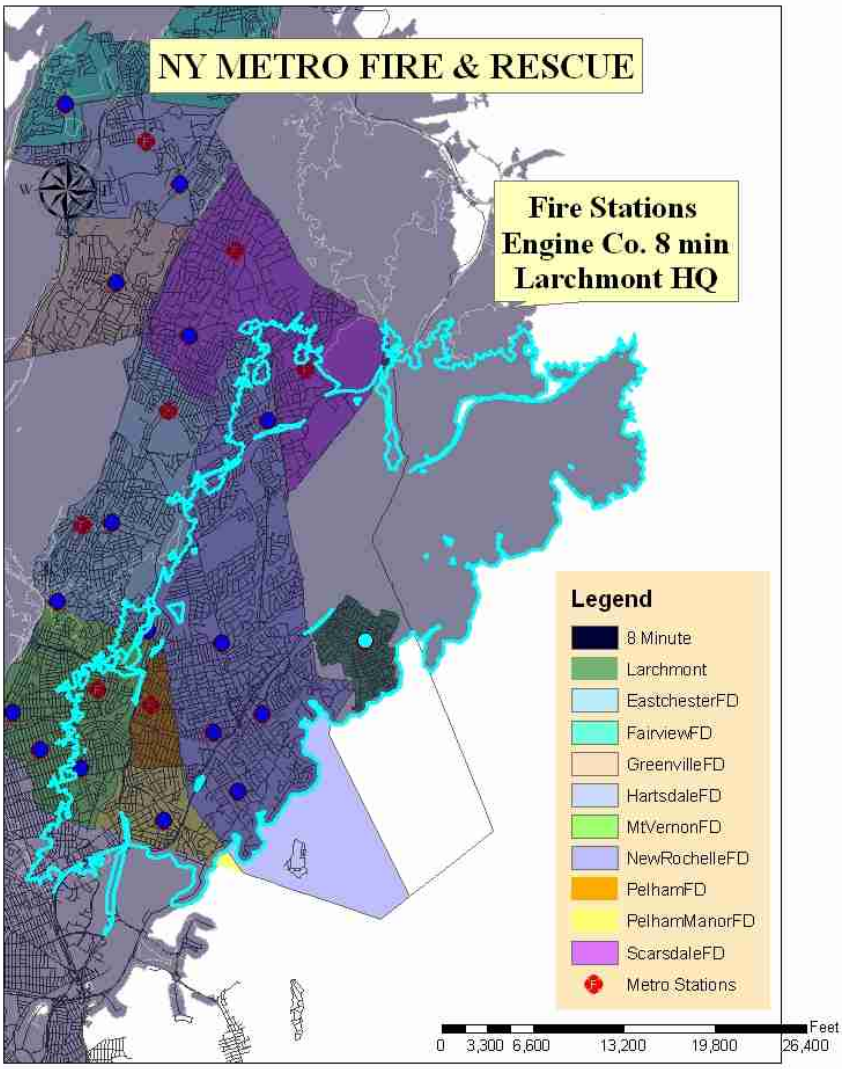


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Hartsdale Fire Department Station #1 (Central Ave). The green dots are Fire Stations with engine companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 8 minute border from the Hartsdale Station #1 (Central Ave). Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 50% of area inside the blue lines is grey with non-visible streets. This area is part of Yonkers, Ardsley, Elmsford and White Plains and while this unit may be the closest, that section is not part of this stations response area.

8 Minute Response Time – Larchmont HQ Engine Coverage Area

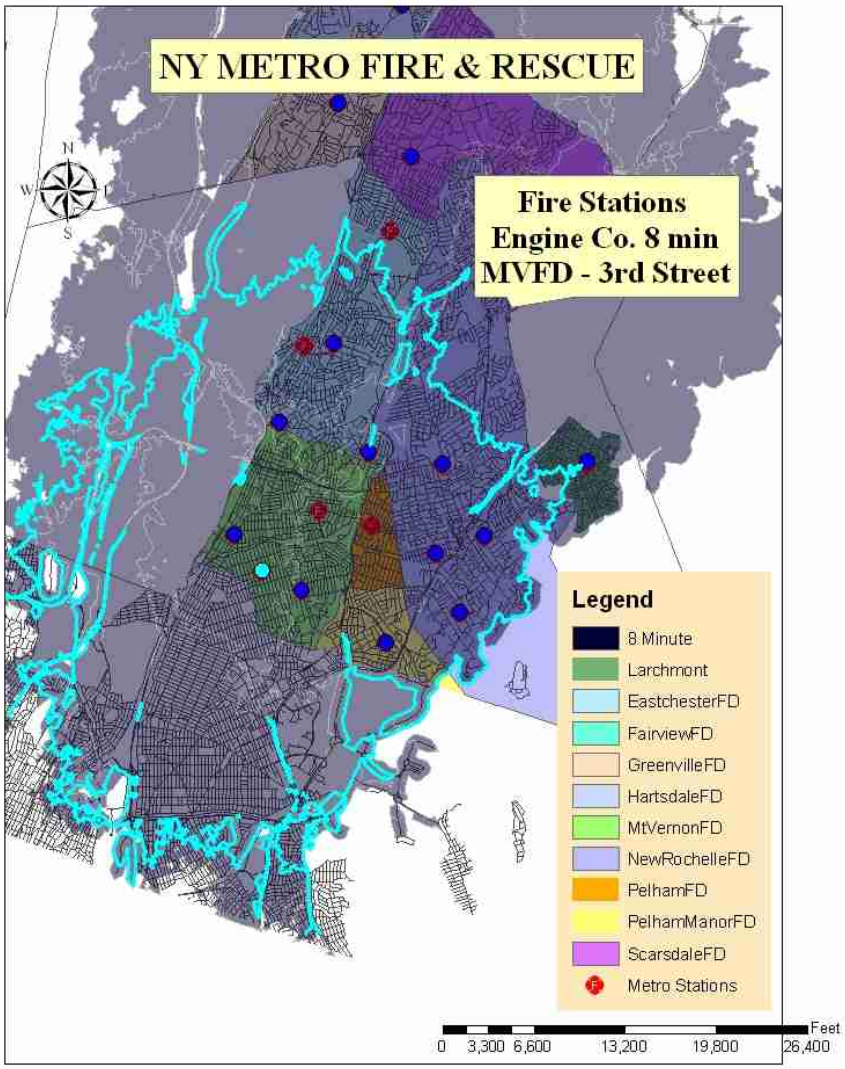


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Larchmont Fire Station. The eight navy blue dots are the Engines within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining navy blue dots are Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 40% of area inside the blue lines is grey and has non-visible streets. This area is part of the Town and Village of Mamaroneck, Rye and Harrison and while this unit may be the closest, that section is not part of this stations response area.

8 Minute Response Time – Mt. Vernon 3rd Street Engine Coverage Area

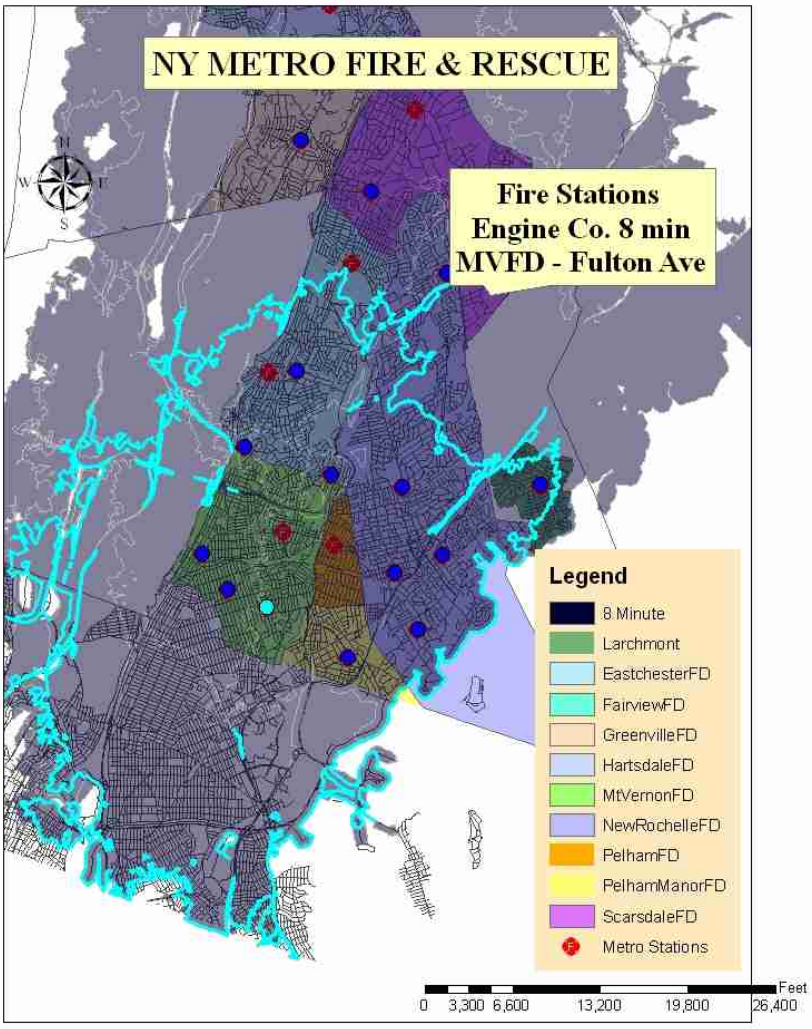


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Mt. Vernon Fire Department's 3rd Street firehouse. The 10 navy blue dots are the engines within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining navy blue dots are Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 50% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of Yonkers and The Bronx and while this unit may be the closest, that section is not part of this stations response area.

8 Minute Response Time – Mt. Vernon Fulton St. Engine Coverage Area

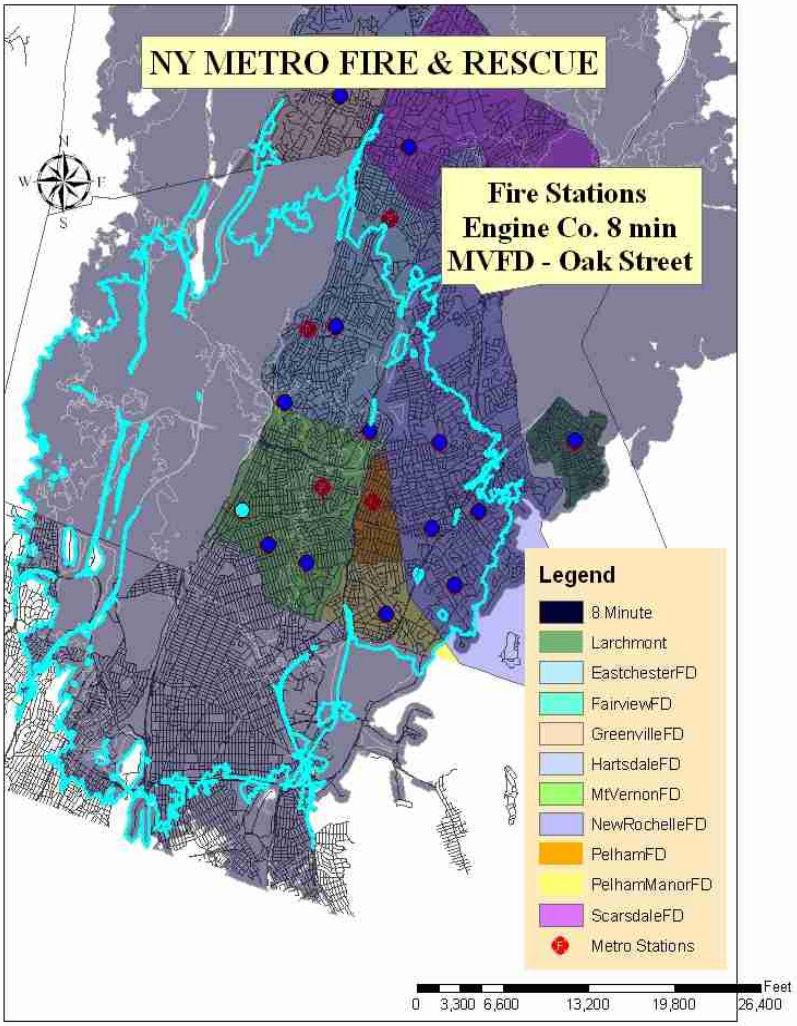


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Mt. Vernon Fire Department's Fulton Street firehouse. The eleven (11) navy blue dots are the Engines within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining navy blue dots are Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 40% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of Yonkers and The Bronx and while this unit may be the closest, that section is not part of this stations response area.

8 Minute Response Time – Mt. Vernon Oak Street Engine Coverage Area

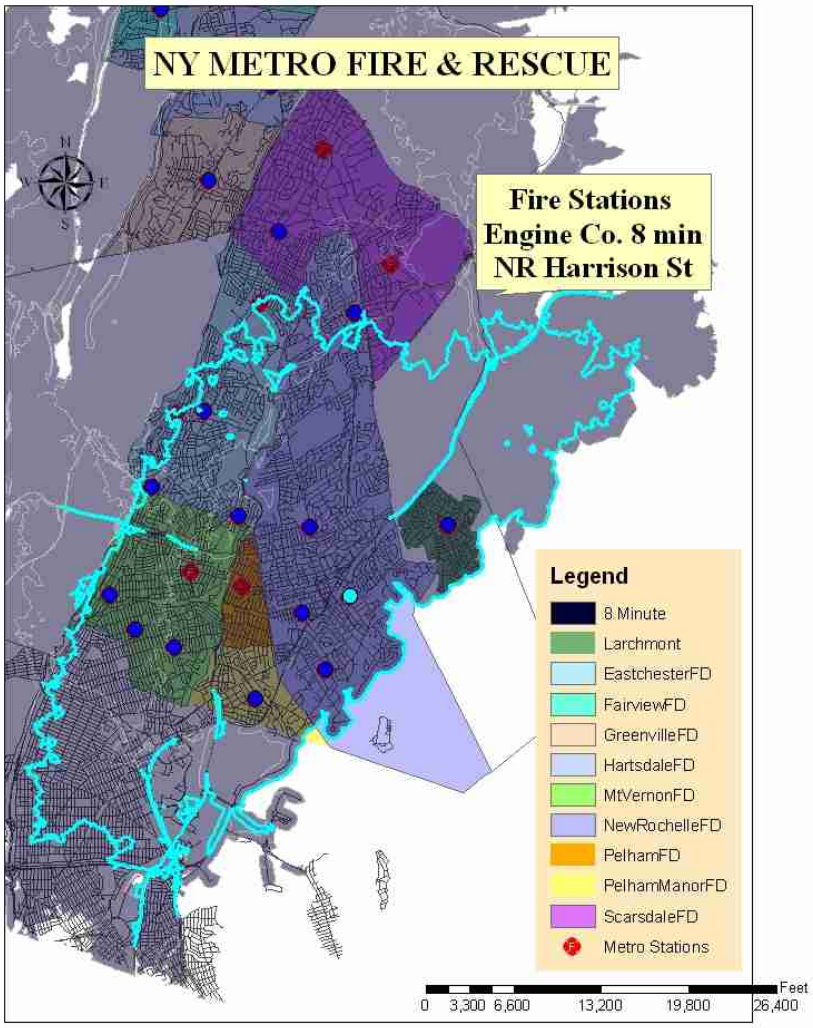


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Mt. Vernon Fire Department's Oak Street Firehouse. The 10 (10) navy blue dots are the Engines within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining navy blue dots are Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other thanEengine Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 60% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of Yonkers and The Bronx and while this unit may be the closest, that section is not part of this stations response area.

8 Minute Response Time – New Rochelle Harrison St. Engine Coverage Area

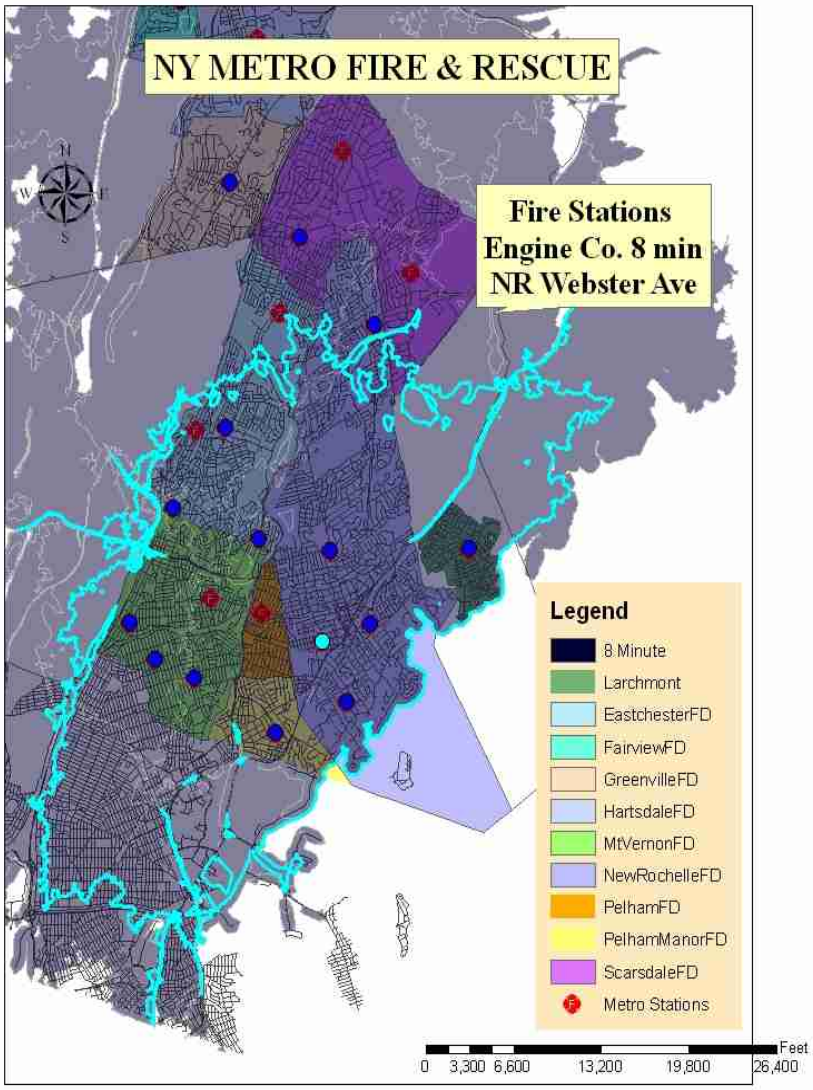


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is New Rochelle Fire Department's Harrison Street firehouse (Sta. #1). The eleven (11) navy blue dots are the Engines within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining navy blue dots are Fir Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 40% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of Town and Village of Mamaroneck and The Bronx and while this unit may be the closest, that section is not part of this stations response area.

8 Minute Response Time – New Rochelle Webster Ave. Engine Coverage Area

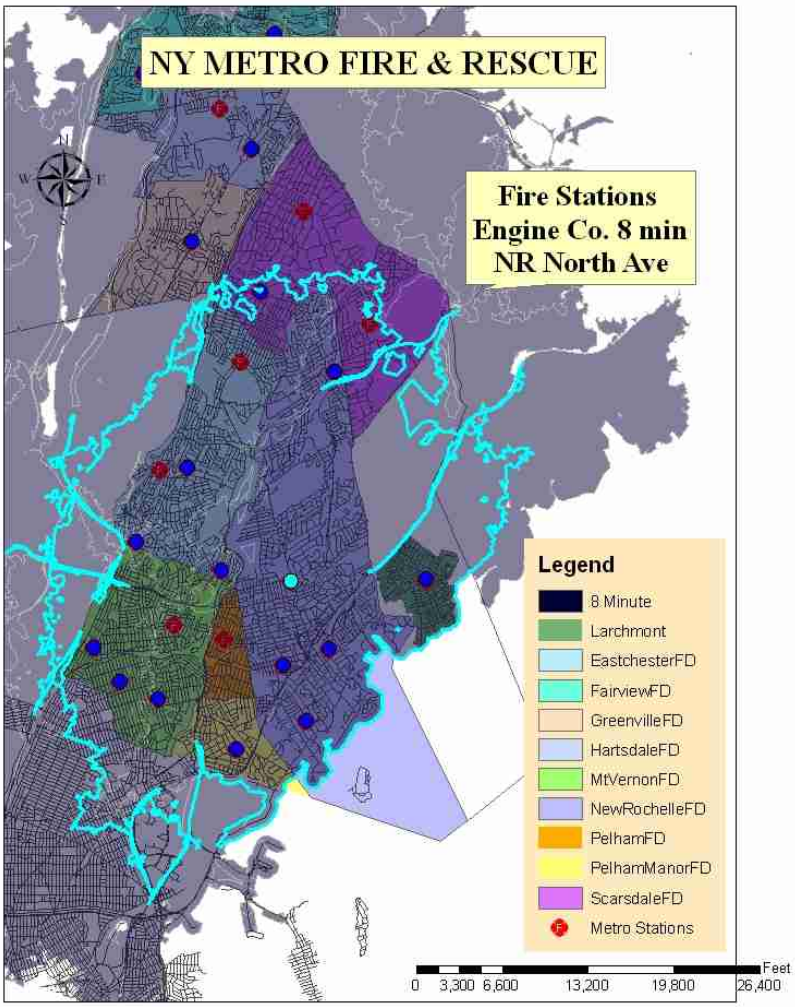


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is New Rochelle Fire Department's Webster Avenue Firehouse (Sta. #2). The eleven (11) navy blue dots are the Engines within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining navy blue dots ar Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 40% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of Town and Village of Mamaroneck and The Bronx and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time – New Rochelle North Ave. Engine Coverage Area

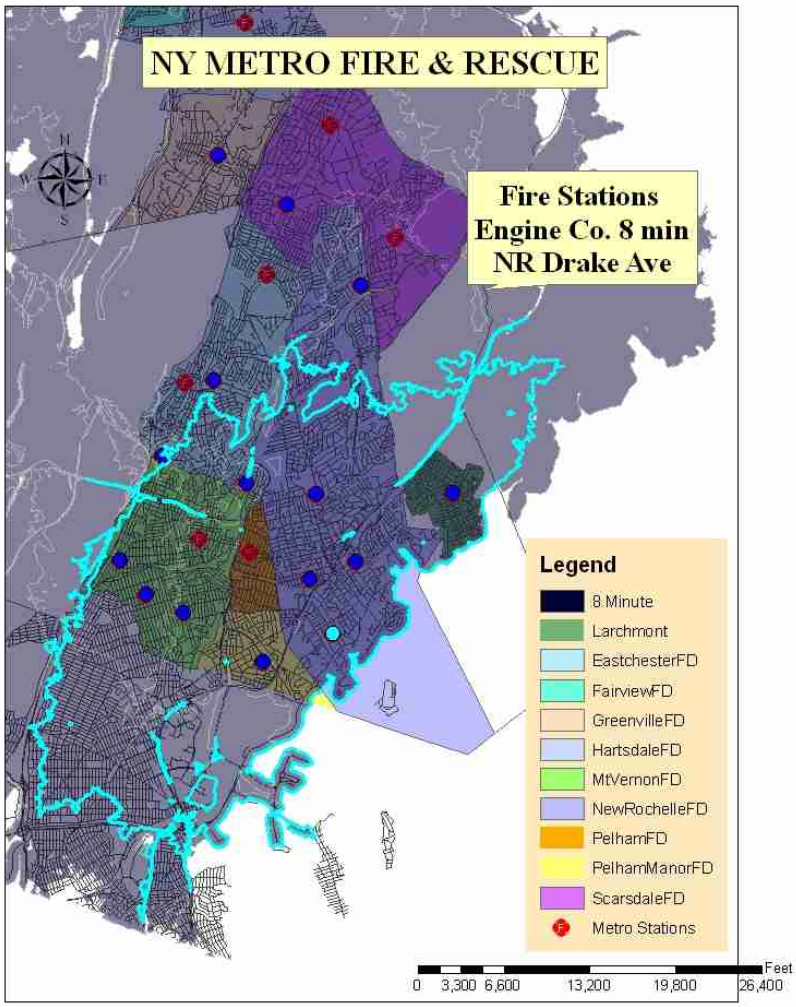


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is New Rochelle Fire Department's North AvenueFfirehouse (Sta. #3). The thirteen (13) navy blue dots are the Engines within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining navy blue dots are Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 20% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of Town and Village of Mamaroneck, Yonkers and The Bronx and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time – New Rochelle Drake Ave. Engine Coverage Area

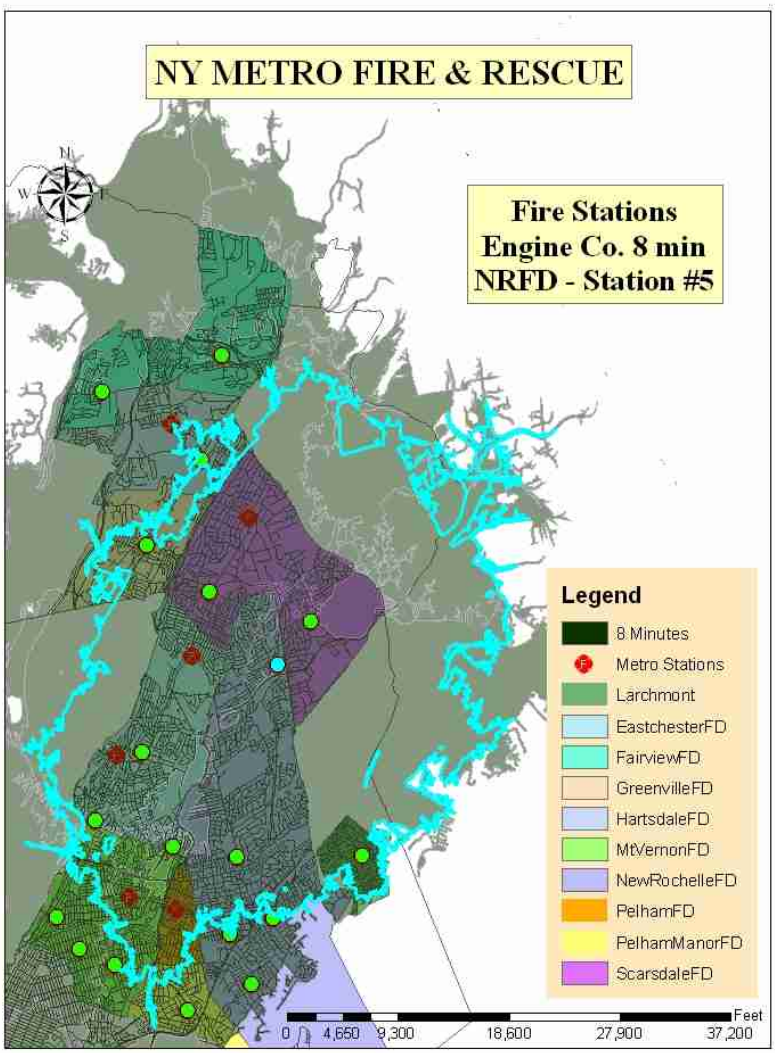


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is New Rochelle Fire Department's Drake Avenue Firehouse (Sta. #4). The nine (9) navy blue dots are the Engines within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining navy blue dots are Fire Stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 40% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of Town and Village of Mamaroneck and The Bronx and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time – New Rochelle Stratton Rd. Engine Coverage Area



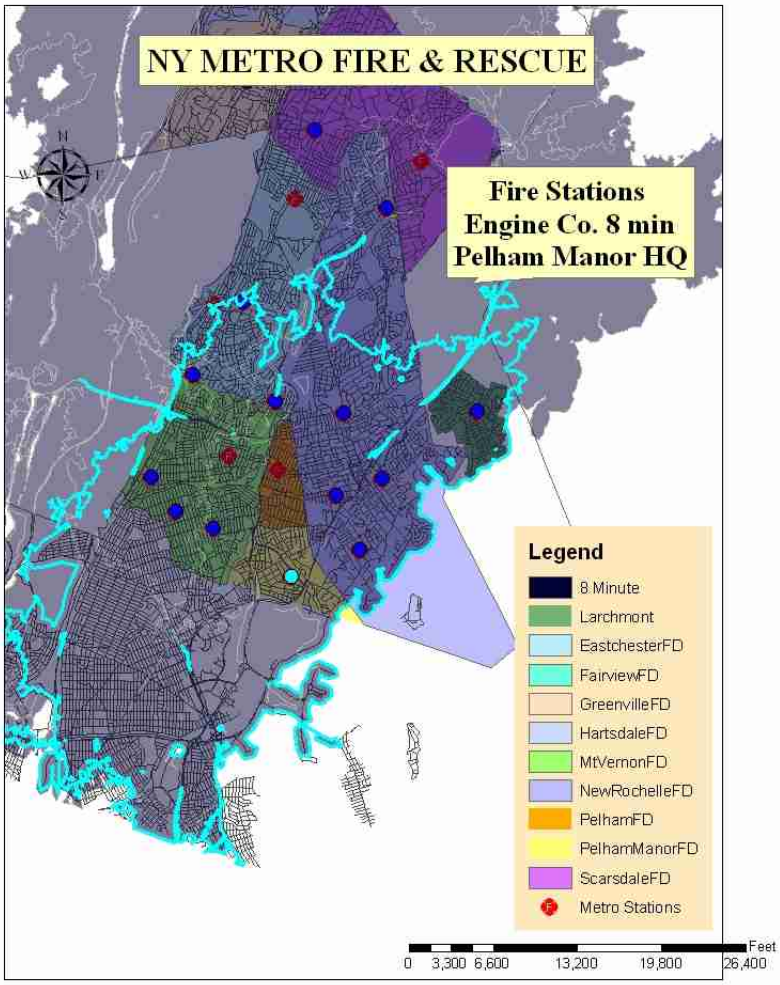
The response time of 8 minutes is used to determine the maximum time for the second (2^{nd}) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is New Rochelle Fire Department's Stratton Road Firehouse (Sta. #5). The green dots are fire stations with Engine Companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies.

Note that about 40% of area inside the blue lines is grey with non-visible streets. This area is part of Town and Village of Mamaroneck, Harrison, White Plains and Yonkers and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time – Pelham Manor HQ Engine Coverage Area

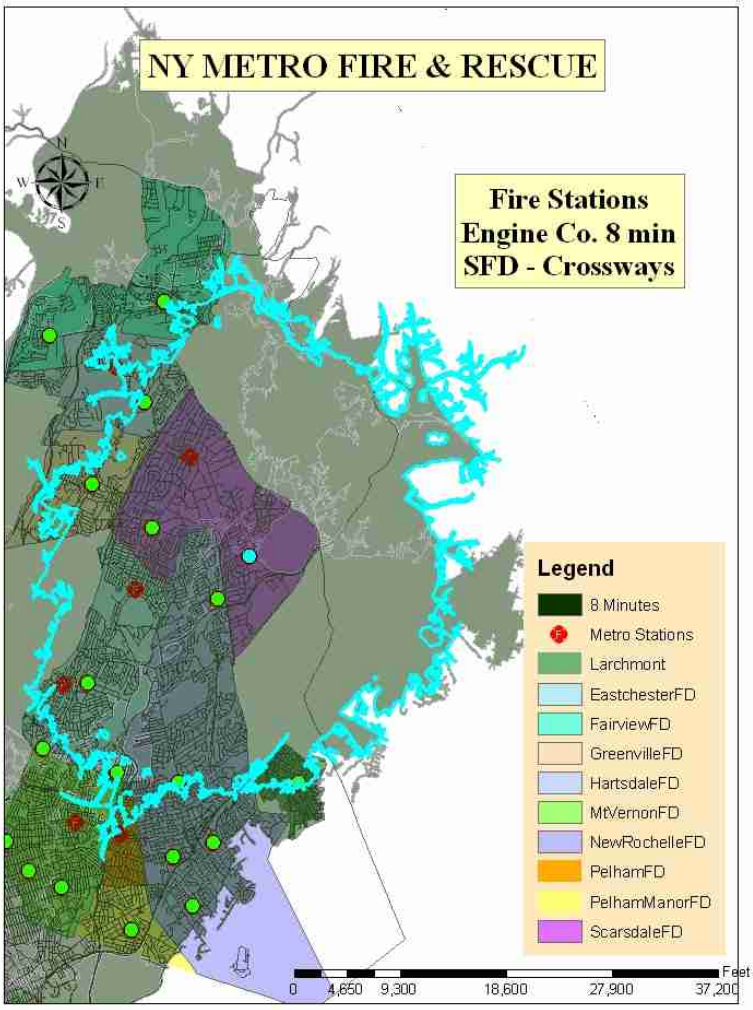


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Pelham ManorFfirehouse. The 10 (10) navy blue dots are the Engines within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining navy blue dots are fire stations with engine companies. The red dots are the fire stations that have apparatus other than engine companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 40% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of Town of Mamaroneck and The Bronx and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time – Scarsdale Crossway Engine Coverage Area

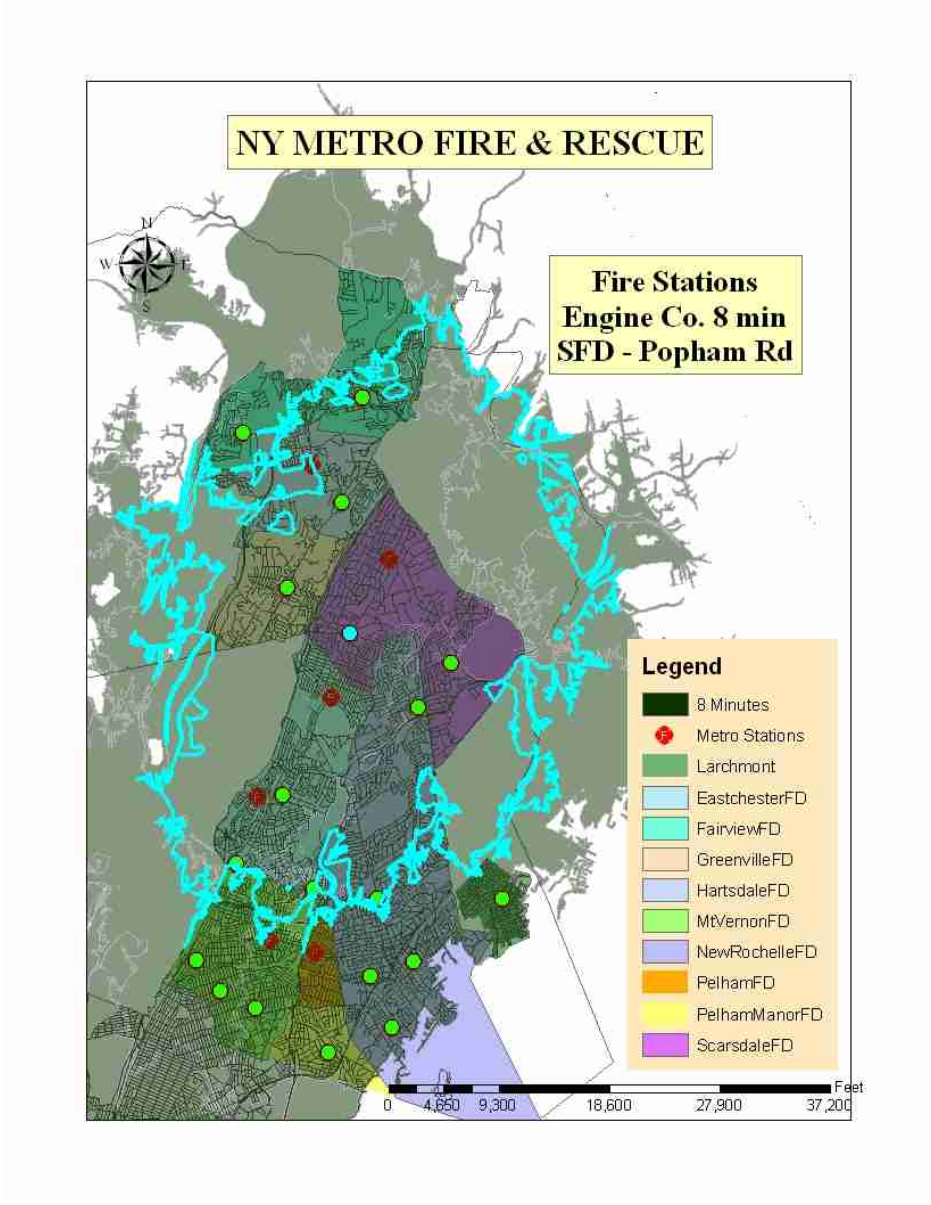


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Scarsdale Fire Department's Crossway Firehouse (Sta. #3). The green dots are Fire Stations with EngineCcompanies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 40% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of Town and Village of Mamaroneck, Harrison, White Plains and Yonkers while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time – Scarsdale Popham Rd. Engine Coverage Area

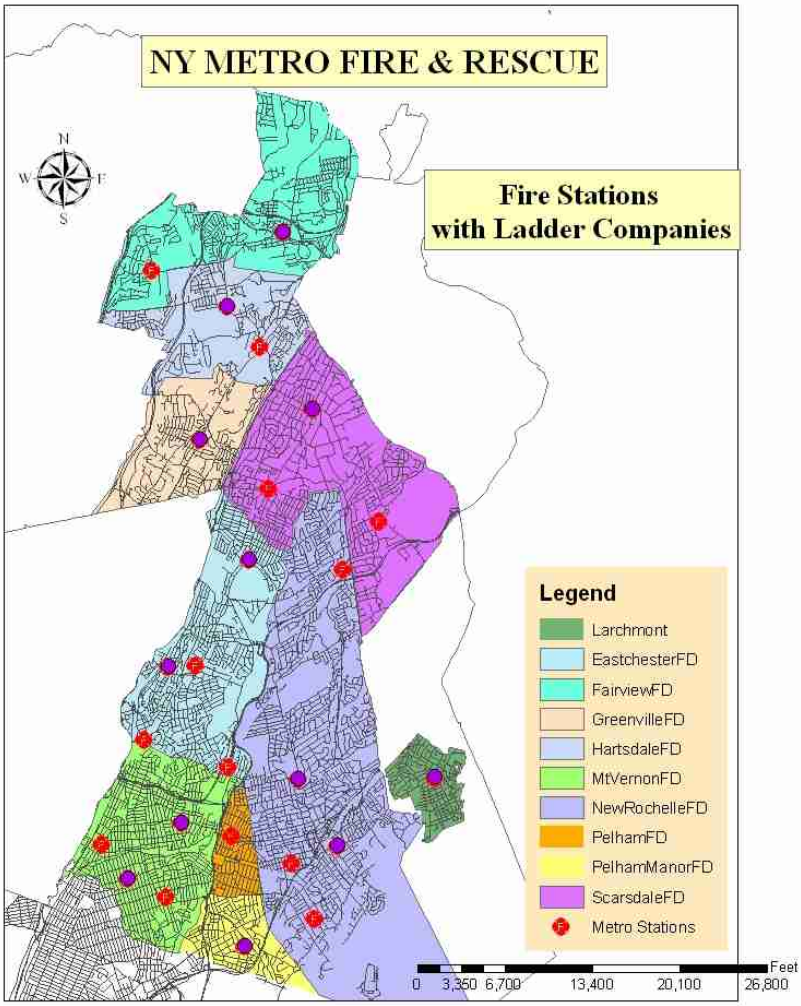


The response time of 8 minutes is used to determine the maximum time for the second (2nd) due Engine Company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Scarsdale Fire Department's Popham Road Firehouse (Sta. #1). The green dots are FirSstations with Engine Companies. The red dots are the Fire Stations that have apparatus other than Engine Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Engine Companies. Note that about 40% of area inside the blue lines that is grey and has non-visible streets. This area is part of Town of Mamaroneck, White Plains and Yonkers and while this unit may be the closest, that section is not part of this station's response area.

Ladder Response - Entire Coverage Area



The following stations have the ability to cover practically all response aspects for Ladder Companies as required under NFPA 1710[61]:

Eastchester: Tuckahoe and North End

Fairview: Headquarters

Greenville: Headquarters

Hartsdale: Station #2 (Headquarters)

Larchmont: Headquarters

Mt. Vernon: Fulton, 3rd St. and Lincoln Avenue

New Rochelle: Harrison St. and North Avenue

Pelham Manor: Headquarters

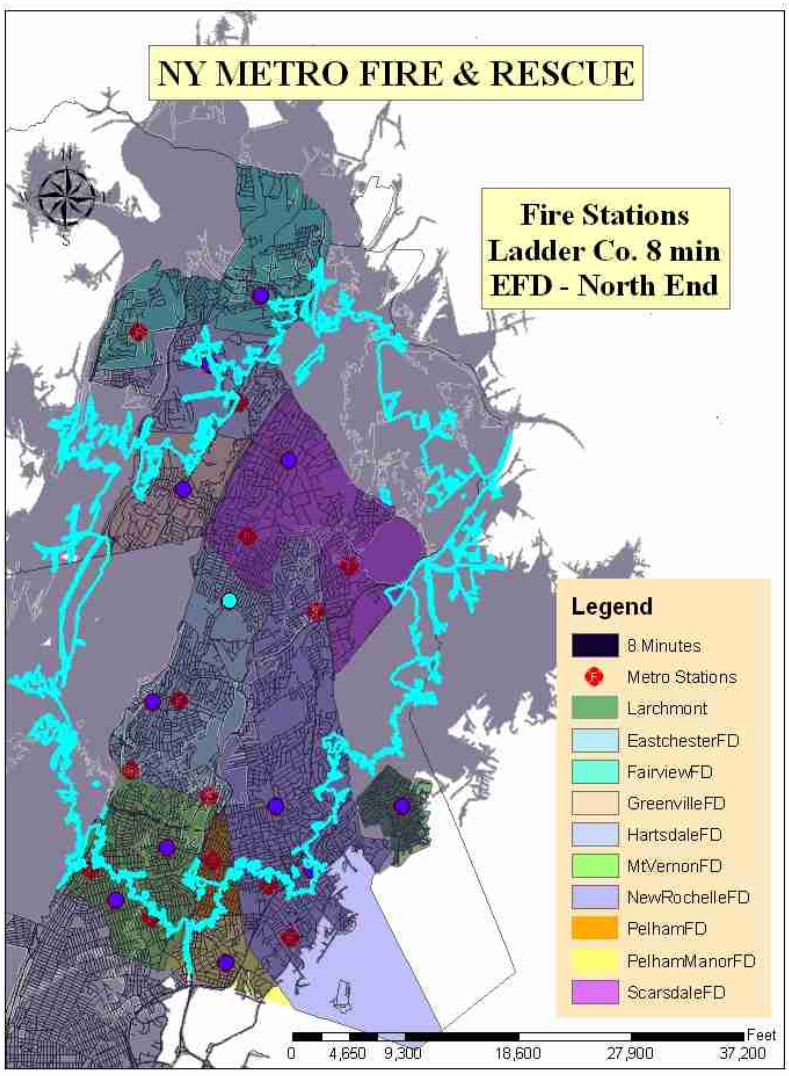
Scarsdale: Headquarters

The study determined that 12 ladder companies could provide dramatically better coverage than we collectively or individually could provide today.

The following maps show the area that can be covered in 8 minutes of drive time:

[61] Minor deficiencies will be covered in detail with each stations local mapping

8 Minute Response Time – Eastchester North End Ladder Coverage Area

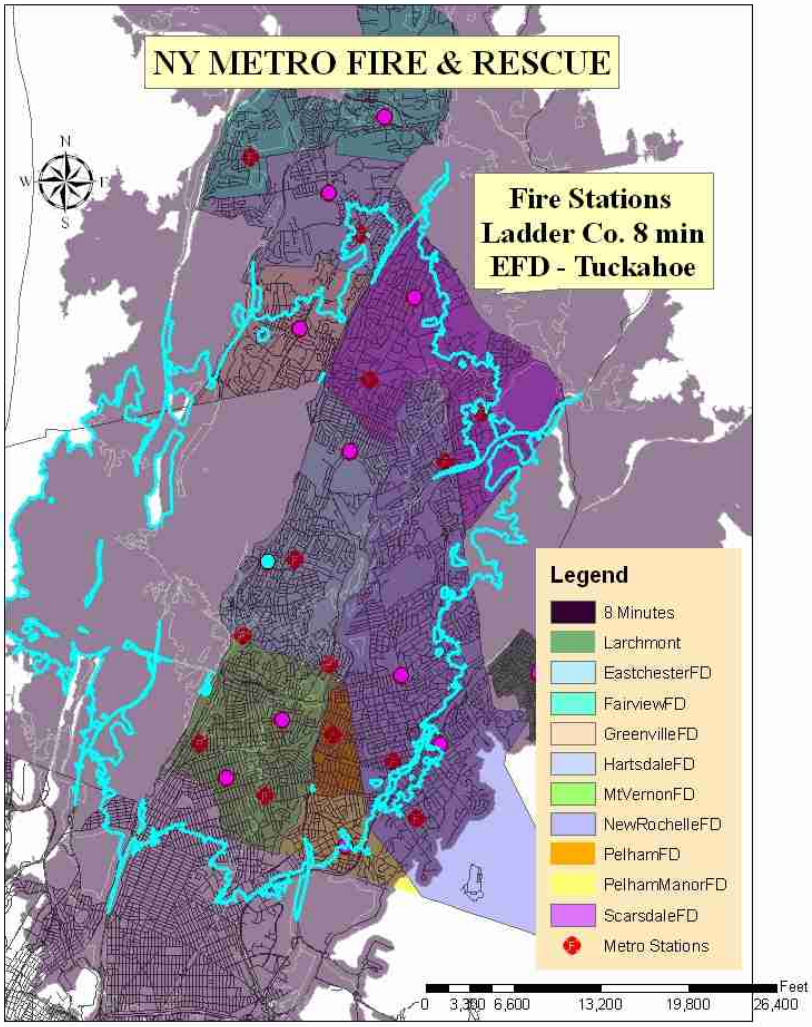


The response time of 8 minutes is used to determine the maximum time for the first (1st) and second (2nd) due ladder company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Eastchester Fire Department's North End Firehouse. There are five navy blue dots which are thelLadders within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining navy blue dots are Fire Stations with Ladder Companies. The red dots are the Fire Stations that have apparatus other than Ladder Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Ladder Companies. Note that about 30% of area inside the blue lines is grey with no visible streets. This area is part of Yonkers, White Plains and The Town of Mamaroneck and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time – EFD - Tuckahoe Ladder Coverage Area

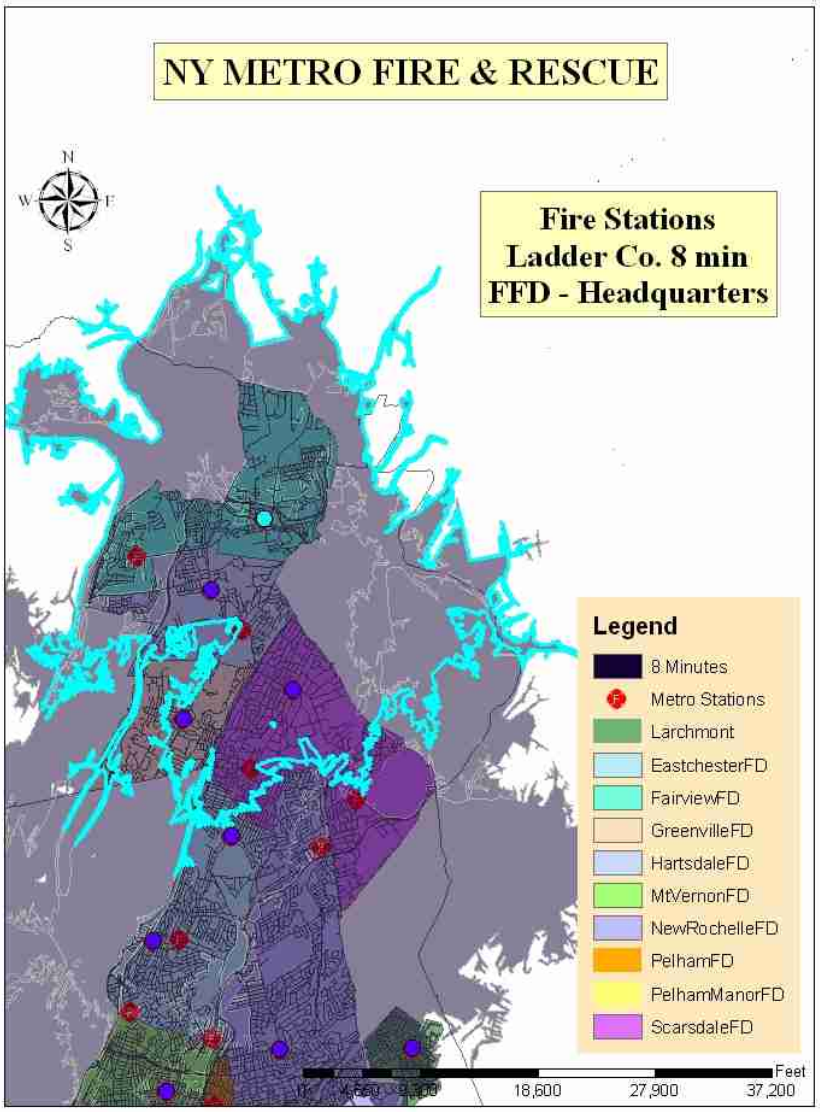


The response time of 8 minutes is used to determine the maximum time for the first (1st) and second (2nd) due ladder company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Eastchester Fire Department's Tuckahoe Firehouse. The six (6) pink dots are the ladders within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining pink dots are Fire Stations with Ladder Companies. The red dots are the Fire Stations that have apparatus other than Ladder Companies.

The light blue lines are the 8 minute border from the Tuckahoe station. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Ladder Companies. Note that about 35% of area inside the blue lines is grey and has no visible streets. This area is part of Yonkers and while this unit may be the closest, that section is not part of this station;s response area.

8 Minute Response Time – Fairview Headquarters Ladder Coverage Area

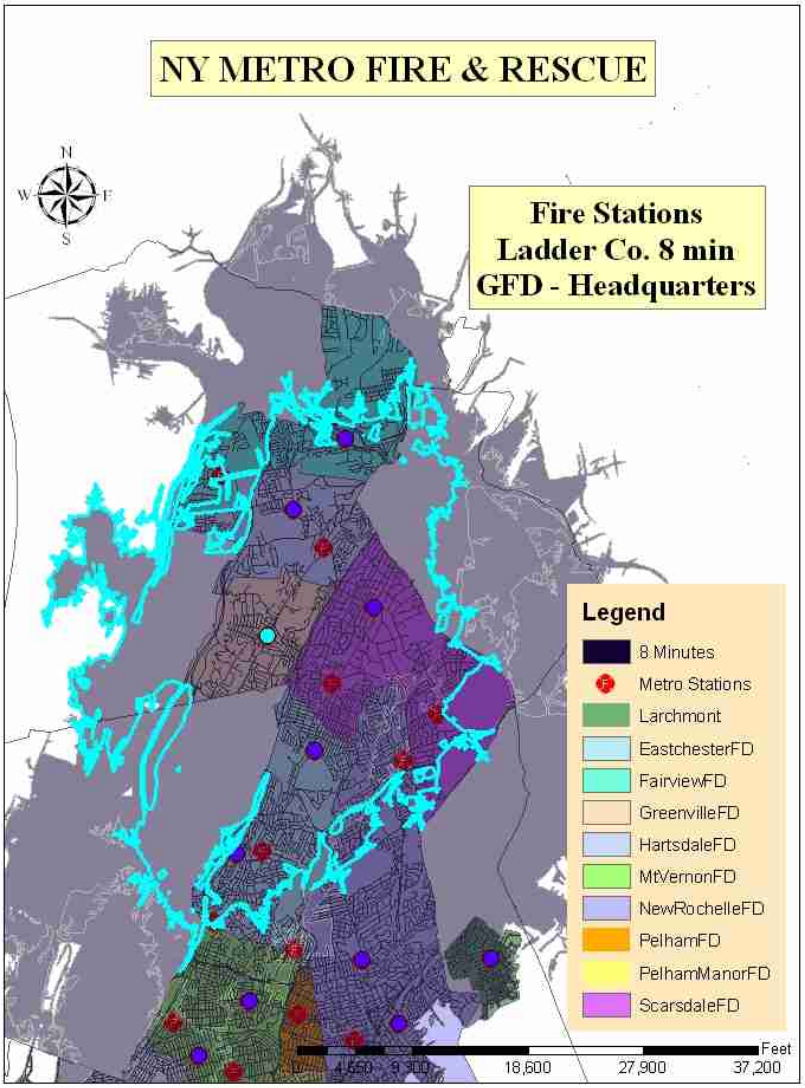


The response time of 8 minutes is used to determine the maximum time for the first (1st) and second (2nd) due ladder company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the Fairview Fire Department Headquarters. There are three navy blue dots which are thlLadders within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining navy blue dots a Fire Stations with Ladders Companies. The red dots are the Fire Stations that have apparatus other than Ladder Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Ladder Companies. Note that about 50% of area inside the blue lines is grey with no visible streets. This area is part of Ardsley, Elmsford, Valhalla and White Plains and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time – Greenville HQ Ladder Coverage Area

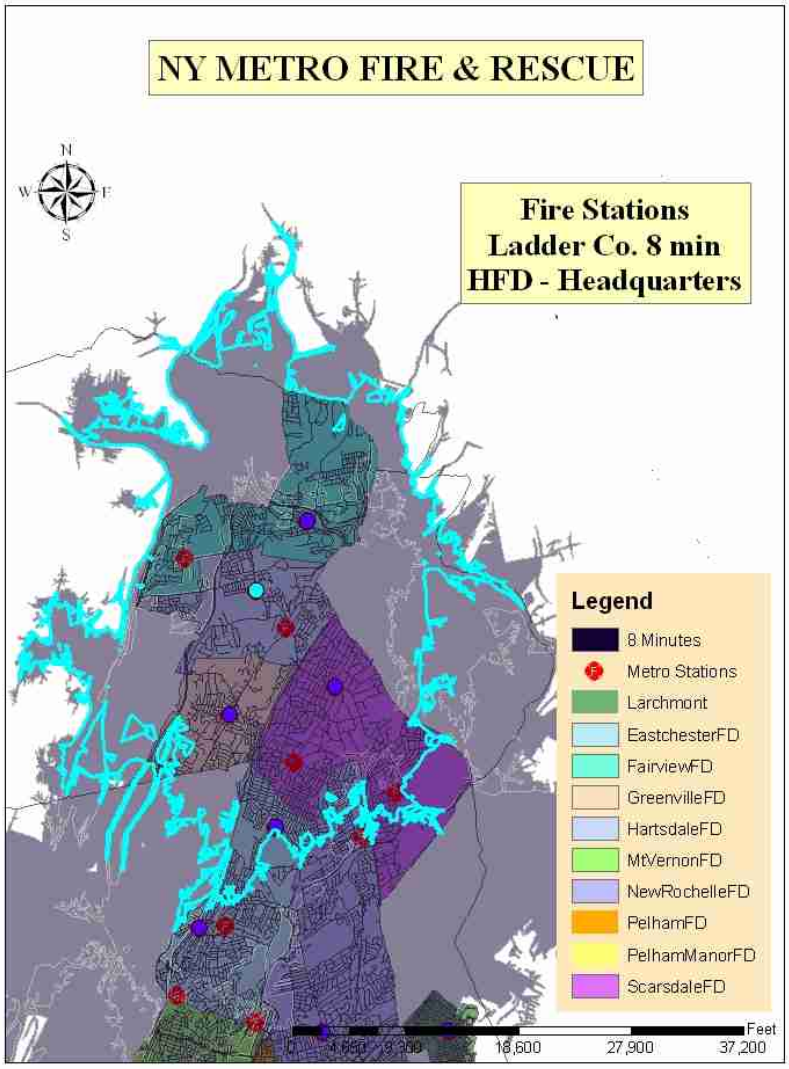


The response time of 8 minutes is used to determine the maximum time for the first (1st) and second (2nd) due ladder company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the Greenville Fire Department Headquarters. There are five navy blue dots which are the ladders within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining navy blue dots are Fire Stations with Ladder Companies. The red dots are the Fire Stations that have apparatus other than Ladder Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Ladder Companies. Note that about 40% of area inside the blue lines is grey with no visible streets. This area is part of Yonkers, Ardsley and White Plains and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time – Hartsdale HQ Ladder Coverage Area

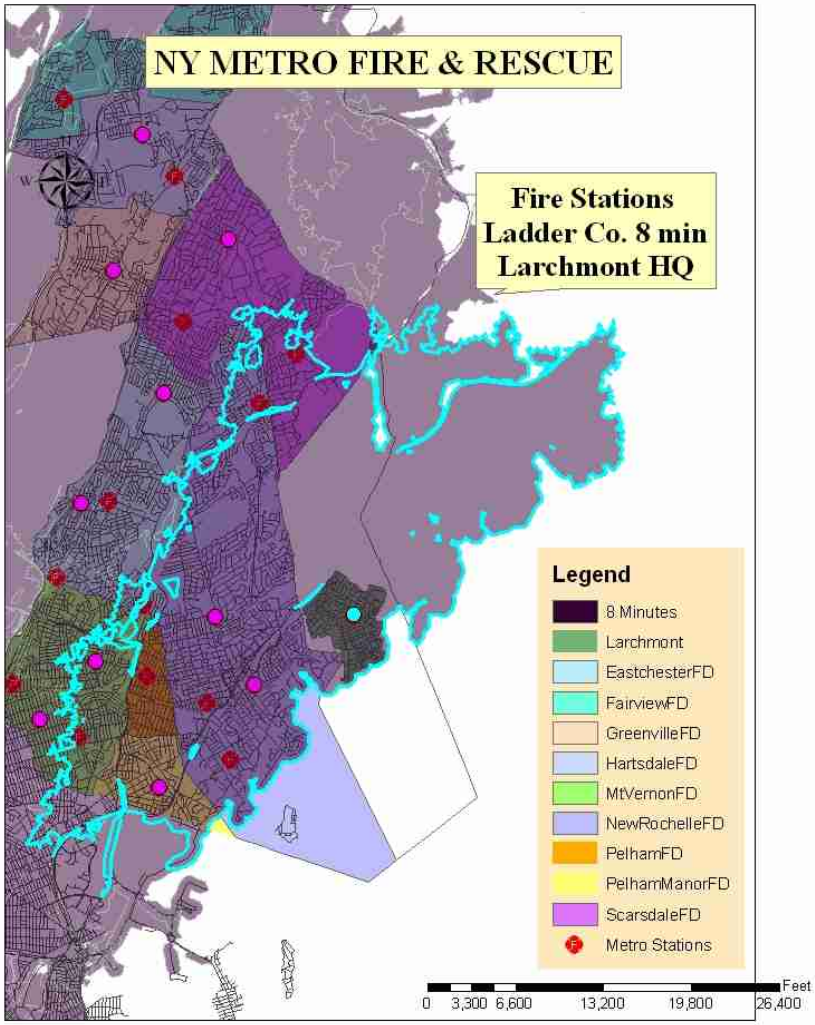


The response time of 8 minutes is used to determine the maximum time for the first (1st) and second (2nd) due ladder company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the Hartsdale Fire Department Headquarters. There are four navy blue dots which are the ladders within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining navy blue dots are FireSstations with Ladder Companies. The red dots are the Fire Stations that have apparatus other thanLladder Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Ladder Companies. Note that about 40% of area inside the blue lines is grey with no visible streets. This area is part of Ardsley, Elmsford, Yonkers and White Plains and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time – Larchmont Ladder Coverage Area

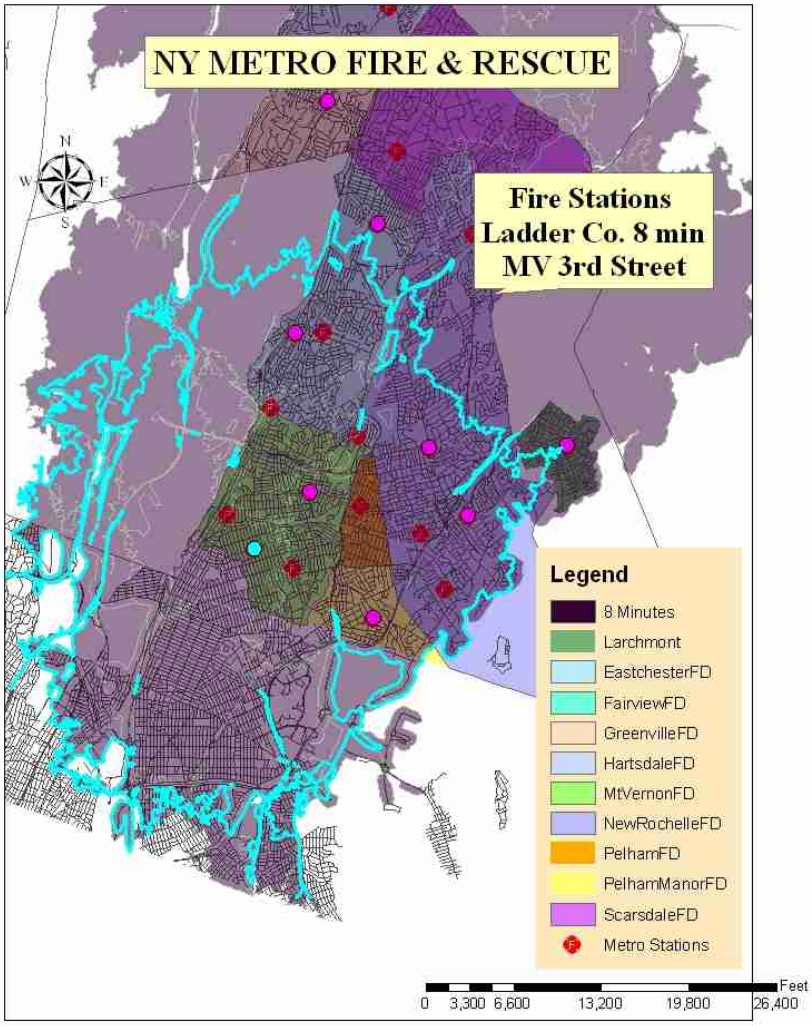


The response time of 8 minutes is used to determine the maximum time for the first (1st) and second (2nd) due ladder company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the Larchmont Firehouse. The four (4) pink dots are the ladders within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available Fire Stations with Ladder Companies. The red dots are the Fire Stations that have apparatus other than Ladder Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Ladder Companies. Note that about 50% of area inside the blue lines is grey and has no visible streets. This area is part of the Town and Village of Mamaroneck, Harrison and Rye and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time – Mt. Vernon 3rd Street Ladder Coverage Area

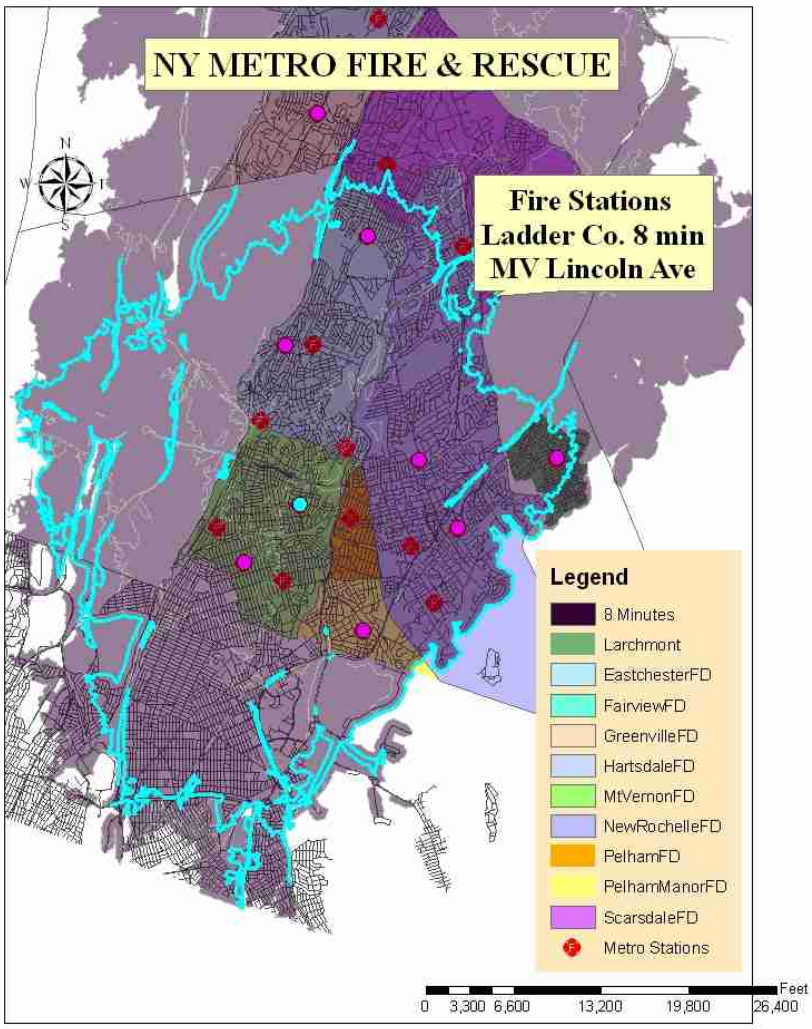


The response time of 8 minutes is used to determine the maximum time for the first (1st) and second (2nd) due ladder company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Mt Vernon Fire Departments 3rd Street Firehouse. The five (5) pink dots are the ladders within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining pink dots are Fire Stations withLladder Companies. The red dots are the Fire Stations that have apparatus other than Ladder Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Ladder Companies. Note that about 50% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of Yonkers and The Bronx and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time – Mt. Vernon Lincoln Ave Ladder Coverage Area

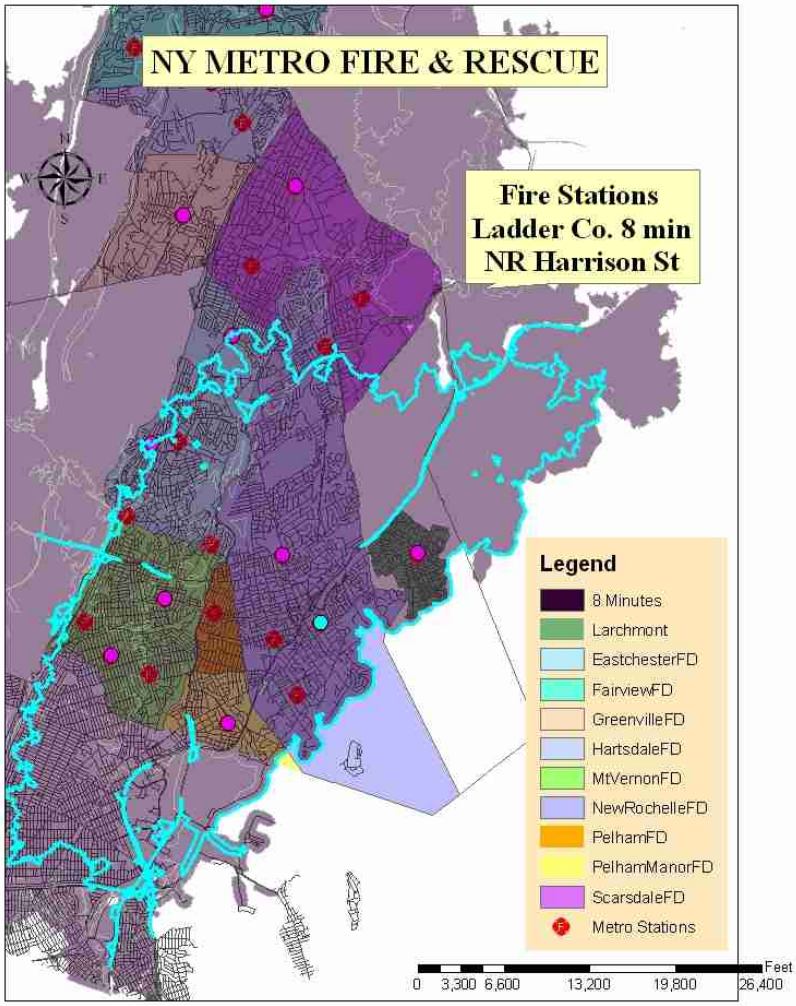


The response time of 8 minutes is used to determine the maximum time for the first (1st) and second (2nd) due ladder company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Mt Vernon Fire Departments Lincoln Avenue Firehouse. The seven (7) pink dots are the ladders within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining pink dots are Fire Stations with Ladder Companies. The red dots are the Fire Stations that have apparatus other than Ladder Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Ladder Companies. Note that about 40% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of Yonkers and The Bronx and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time – New Rochelle Harrison St. Ladder Coverage Area

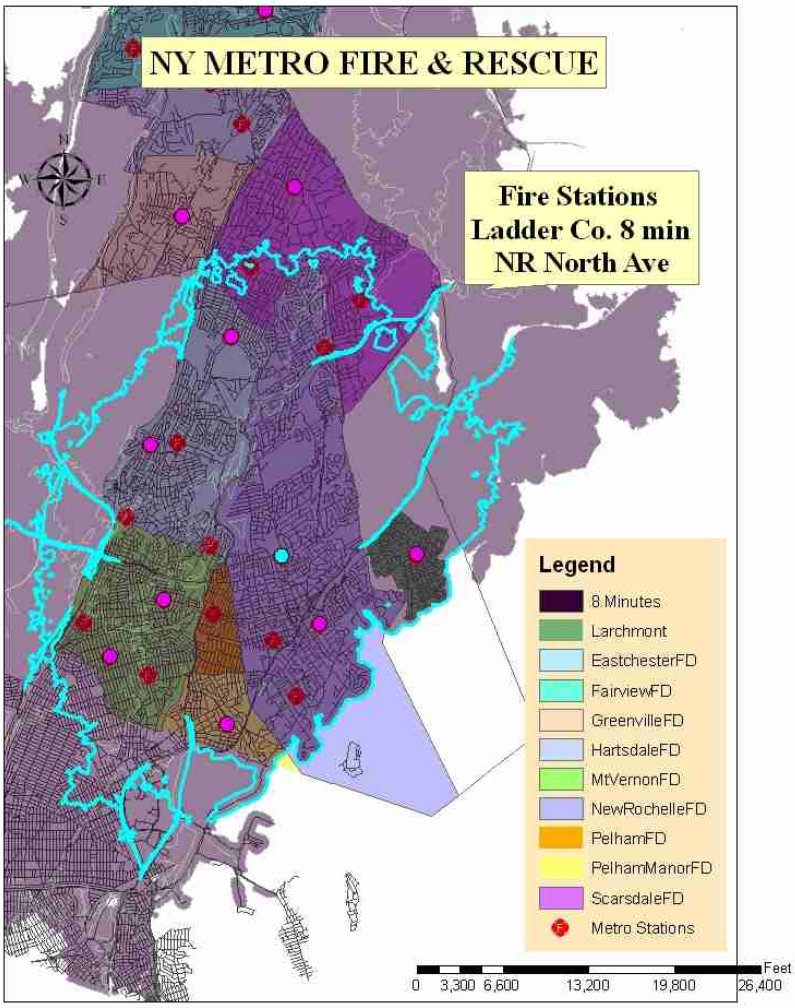


The response time of 8 minutes is used to determine the maximum time for the first (1st) and second (2nd) due ladder company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is New Rochelle Fire Departments Harrison Street Firehouse. The five (5) pink dots are the ladders within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining pink dots are Fire Stations with Ladder Companies. The red dots are the Fire Stations that have apparatus other than Ladder Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Ladder Companies. Note that about 50% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of the Town and Village of Mamaroneck and The Bronx and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time – New Rochelle North Ave. Ladder Coverage Area

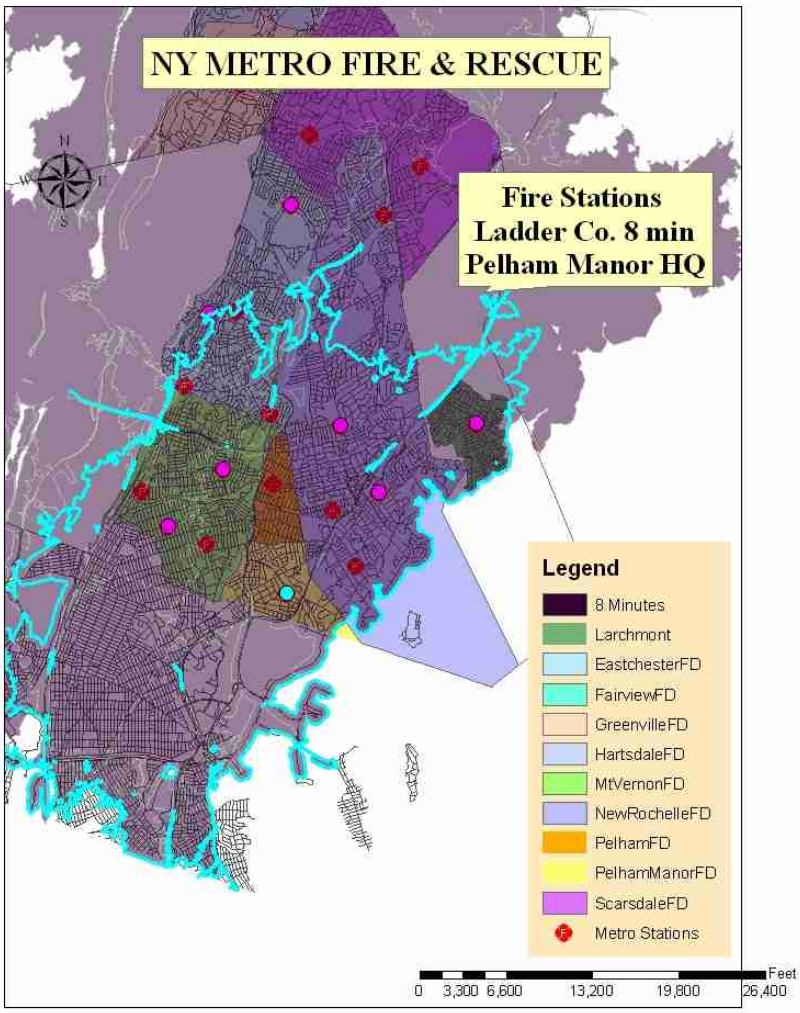


The response time of 8 minutes is used to determine the maximum time for the first (1st) and second (2nd) due ladder company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is New Rochelle Fire Departments North Avenue Firehouse. The seven (7) pink dots are the ladders within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining pink dots are Fire Stations with Ladder Companies. The red dots are the Fire Stations that have apparatus other than Ladder Companies.

The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Ladder Companies. Note that about 15% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of the Town and Village of Mamaroneck, Yonkers and The Bronx and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time – Pelham Manor HQ Ladder Coverage Area

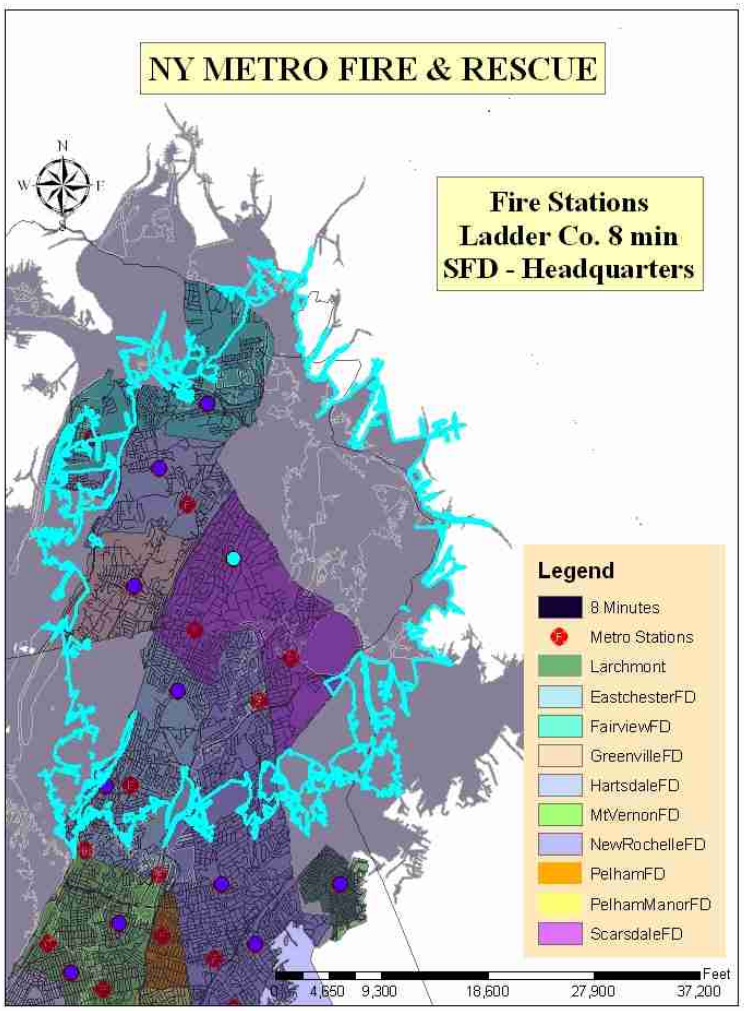


The response time of 8 minutes is used to determine the maximum time for the first (1st) and second (2nd) due ladder company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Pelham Manor's Firehouse. The five (5) pink dots are the Ladders within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining pink dots are Fire Stations with Ladder Companies. The red dots are the Fire Stations that have apparatus other than Ladder Companies.

The light blue lines are the 8 minute arder from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Ladder Companies. Note that about 45% of area inside the blue lines is grey and has visible streets. This area is part of The Bronx and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time – Scarsdale Headquarters Ladder Coverage Area



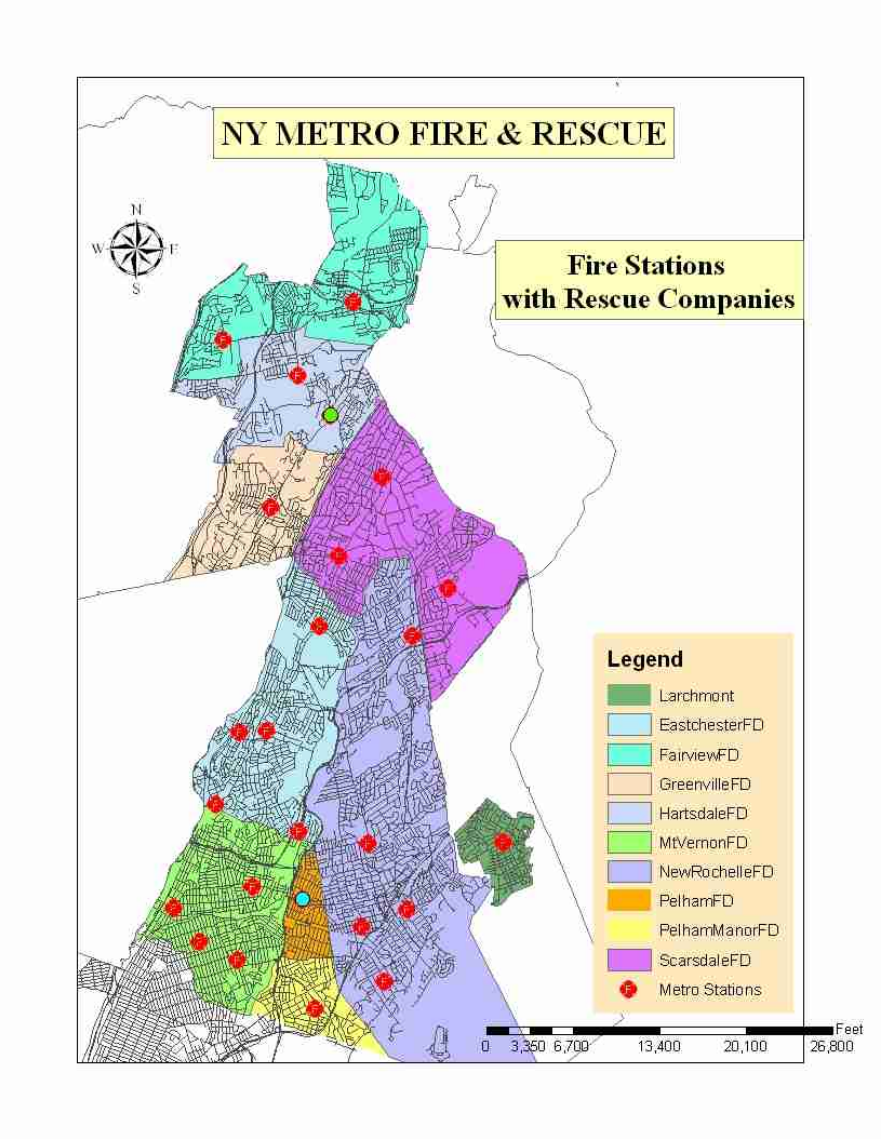
The response time of 8 minutes is used to determine the maximum time for the first (1st) and second (2nd) due ladder company during a structure fire. The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Scarsdale Fire Department's Headquarters Firehouse. The five (5) navy blue dots are the ladders within the 8 minute drive time, which this unit could be 2nd due to assist. It would normally be dispatched as 2nd due if it was closer than the other available units. The remaining navy blue dots are Fire Stations with Ladder Companies. The red dots are the Fire Stations that have apparatus other than Ladder Companies.

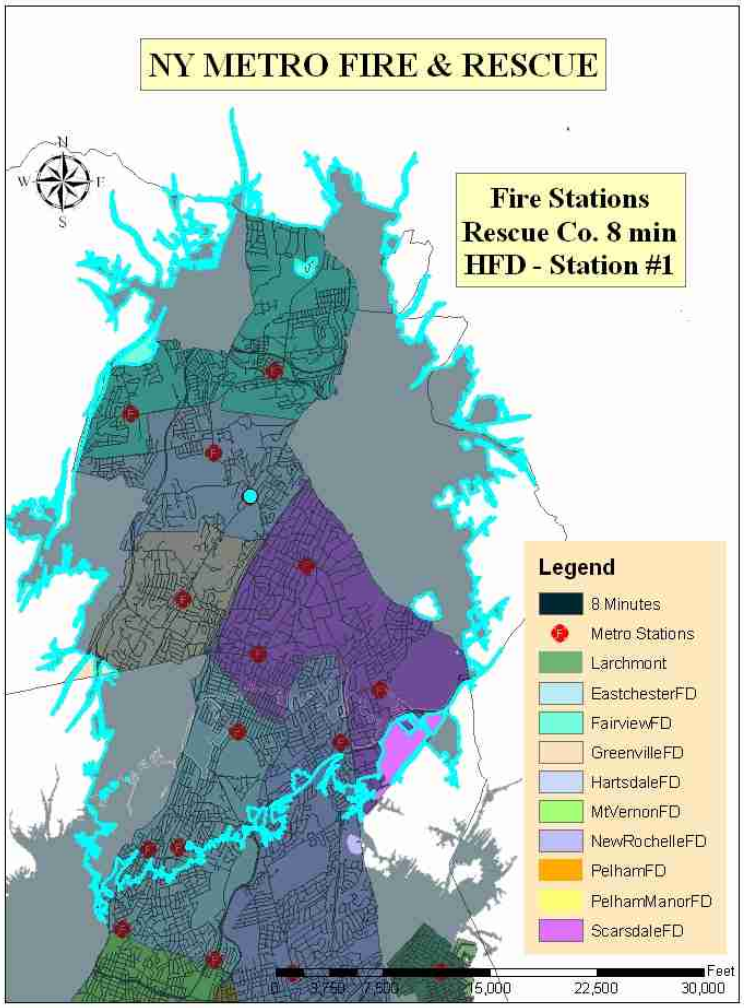
The light blue lines are the 8 minute border from the station listed in each map. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by all Ladder Companies.

Note that about 50% of area inside the blue lines is grey without visible streets. This area is part of the Town Mamaroneck, White Plains, Harrison and Yonkers and while this unit may be the closest, that section is not part of this station's response area.

Rescue Response - Entire Coverage Area



8 Minute Response Time – Rescue Coverage Area - Hartsdale Sta. #1



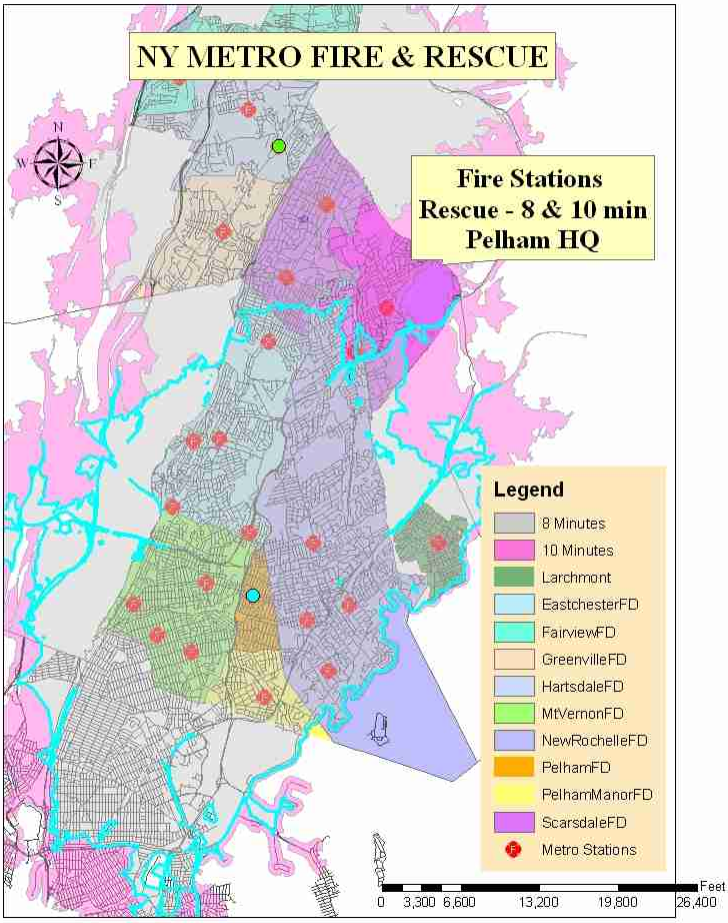
There is no response time standard for Rescue companies. We have considered maintaining one of 8 minutes and found we can cover about 99% of that time with two (2) rescue companies.

The two Rescue Companies we are proposing would be designed as our most elite units and capable of dealing with the most extreme emergencies. They will need to spend the majority of their time training. They will be assisted in a number of ways. All 12 ladder companies will be trained and equipped to handle most vehicular accidents. Most would be trained to handle rope rescue. At least 4 of the engine companies would be trained to assist in hazardous materials response. Specialties like water rescue, trench rescue, etc. will be designated to each station.

The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Hartsdale's Fire Station #1. The red dots are the Fire Stations that have apparatus other than Rescue Companies. The light blue lines are the 8 minute border from the Hartsdale station. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by both Rescue Companies, rose area is 10 minute area. Note that about 25% of area inside the blue lines is grey without visible streets. This area is part of Ardsley, Elmsford, Yonkers and White Plains and while this unit may be the closest, that section is not part of this station's response area.

8 & 10 Minute Response Time – Rescue Coverage Area
Pelham Fire Station



There is no response time standard for Rescue Companies. We have considered maintaining one of 8 minutes and found we can cover about 99% of that time with two (2) rescue companies.

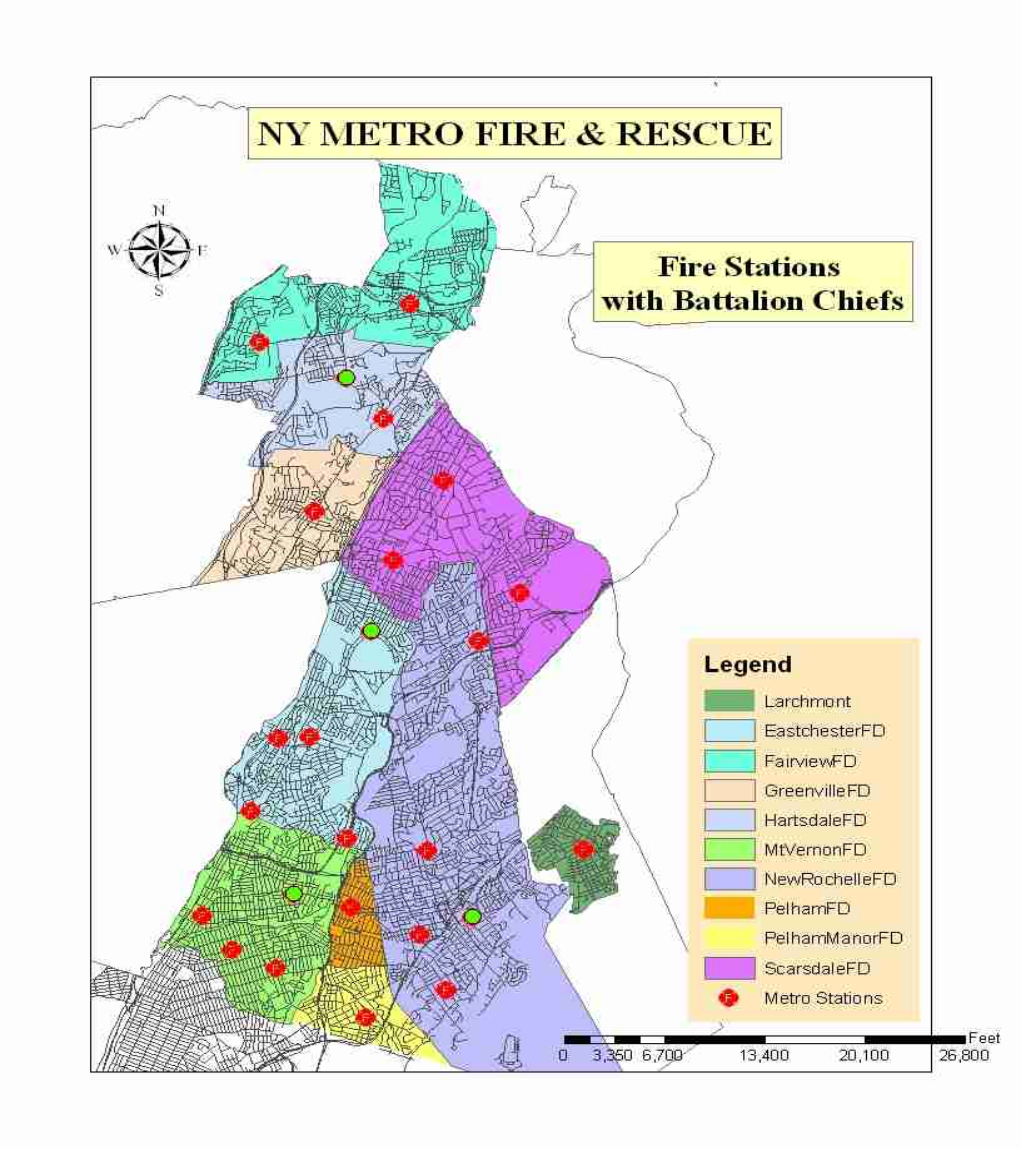
The two Rescue Companies we are proposing would be designed as our most elite units and capable of dealing with the most extreme emergencies. They will need to spend the majority of their time training.

They will be assisted in a number of ways. All 12 ladder companies will be trained and equipped to handle most vehicular accidents. Most would be trained to handle rope rescue. At least 4 of the engine companies would be trained to assist in hazardous materials response. Specialties like water rescue, trench rescue, etc. will be designated to each station.

The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets. The light blue dot is Pelham Firehouse. The green dot is the other Rescue. The red dots are the Fire Stations that have apparatus other than Rescue Companies.

The light blue lines are the 8 minute border from the Pelham Station. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by both Rescue Companies; rose areas are the 10 minute area. Note that about 25% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of Yonkers and The Bronx and while this unit may be the closest, that section is not part of this station's response area.

Battalion Coverage - Entire Coverage Area



Battalion coverage is approximate and needs more review. It is based on closest unit. It is intended to insure adequate supervision, both during emergencies and day-to-day activities. Closest apparatus always responds, regardless of which battalion it is in.

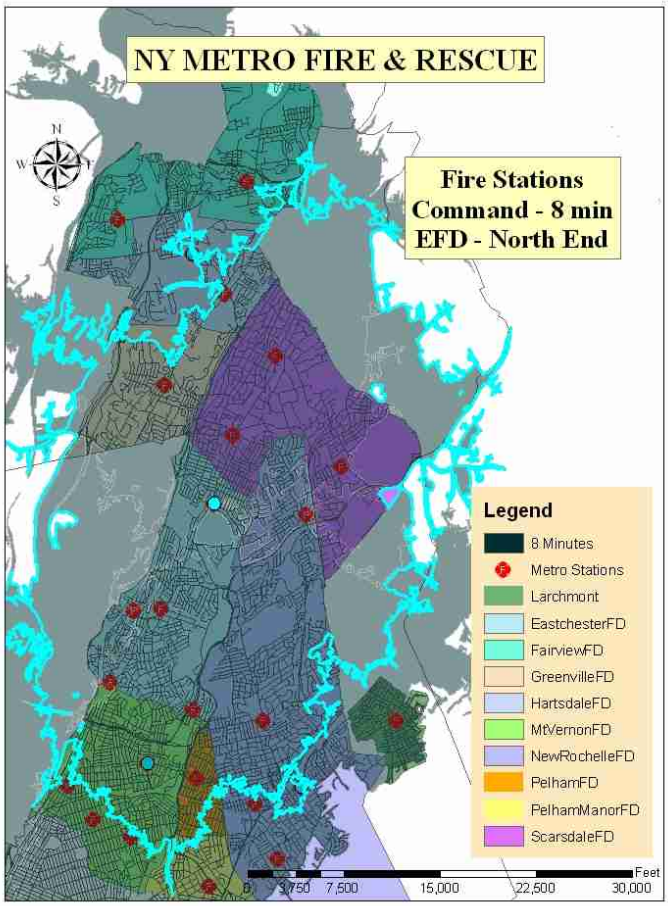
Battalion #1 – Larchmont, New Rochelle (South of Trenor Dr.) & Pelham Manor
6 Engines, 4 Ladders in 6 fire stations (10 units)

Battalion #2 – Southern Eastchester (Bronxville & Chester Heights), Mt. Vernon and Pelham
5 Engines, 2 Ladders and 1 Rescue in 7 fire stations (8 units)

Battalion #3 – Eastchester (North of Concordia College & Tuckahoe) New Rochelle (North of Trenor Dr), and Scarsdale. 4 Engines, 3 Ladders in 7 fire stations (7 units)

Battalion #4 - Fairview, Greenville and Hartsdale
4 Engines 3 Ladders 1 Rescue in 5 fire stations (8 units)

8 Minute Response Time –Battalion Coverage Area
Eastchester – North End Fire Station



The response time of 8 minutes is used to determine the maximum time for the first (1st) due incident commander during a structure fire.

The proposed district would be divided into four (4) battalions with each one run by a Deputy Chief. This chief would be responsible for the day-to- day operations in his battalion. He would be responsible for any fire within his battalion and would be able to cover as 2nd due to the other battalions.

Each battalion needs a firefighter assigned his or her primary role which is member accountability during emergencies. This is both an OSHA and NFPA 1710 requirement.

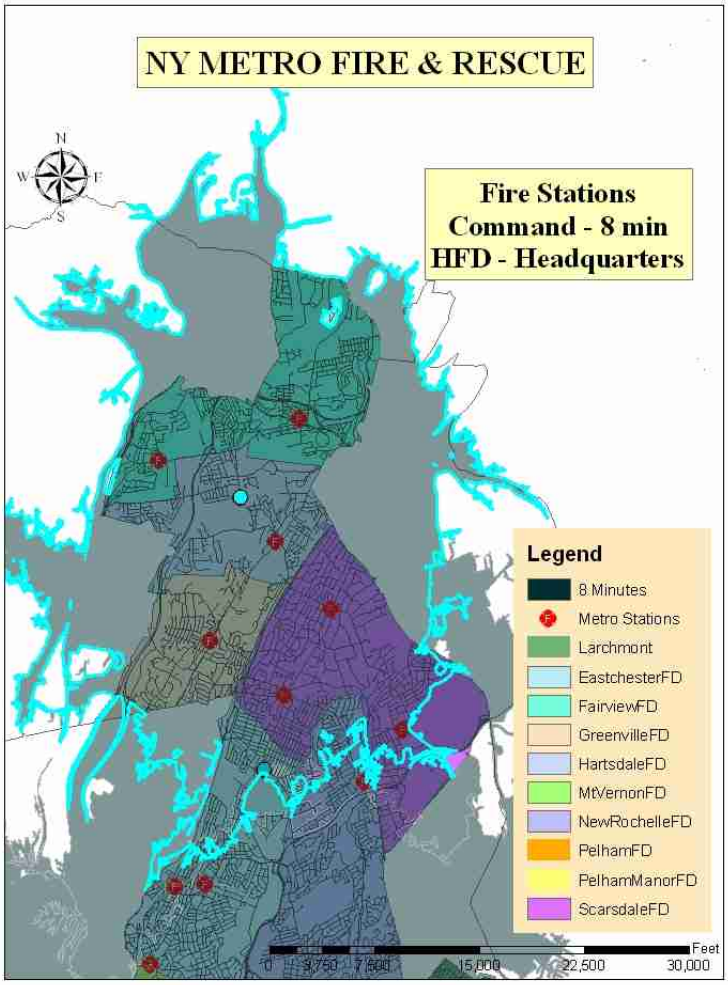
The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Eastchester's North-End Firehouse. The blue dots are the other battalions. The red dots are the fire stations that have apparatus other than battalions.

The light blue lines are the 8 minute border from the Eastchester's North End Station. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by the four battalions.

Note that about 30% of area inside the blue lines is grey without visible streets. This area is part of Yonkers, Ardsley, White Plains and The Town of Mamaroneck and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time –Battalion Coverage Area
Hartsdale – Fire Station #2 (HQ)



The response time of 8 minutes is used to determine the maximum time for the first (1st) due incident commander during a structure fire.

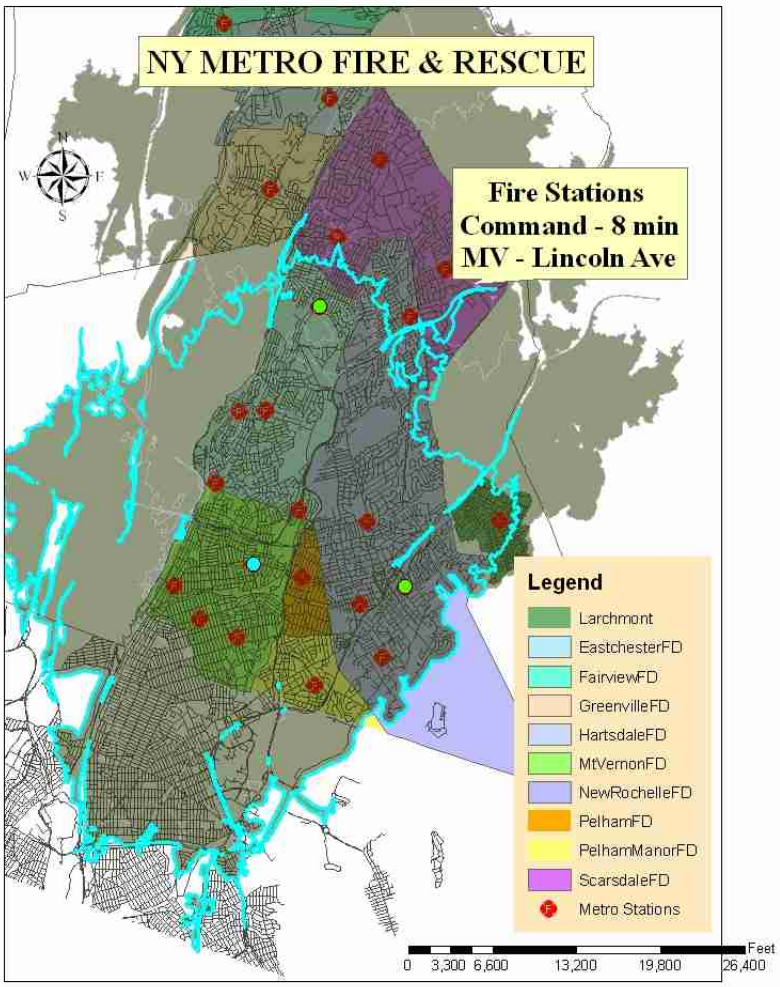
The proposed district would be divided into four (4) battalions with each one run by a Deputy Chief. This chief would be responsible for the day-to-day operations in his battalion. He would be responsible for any fire within his/her battalion and would be able to cover as 2nd due to the other battalions.

Each battalion needs a firefighter assigned his or her primary role which is member accountability during emergencies. This is both an OSHA and NFPA 1710 requirement.

The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is Hartsdale's Headquarters Firehouse. The blue dots are the other battalions. The red dots are the Fire Stations that have apparatus other than battalions. The light blue lines are the 8 minute border from the Hartsdale Station #2 (Headquarters). Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by the four (4) Battalions. Note that about 35% of area inside the blue lines is grey without visible streets. This area is part of Ardsley, Elmsford, Yonkers and White Plains and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time –Battalion Coverage Area
Mt. Vernon – Lincoln Avenue Fire Station



The response time of 8 minutes is used to determine the maximum time for the first (1st) due incident commander during a structure fire.

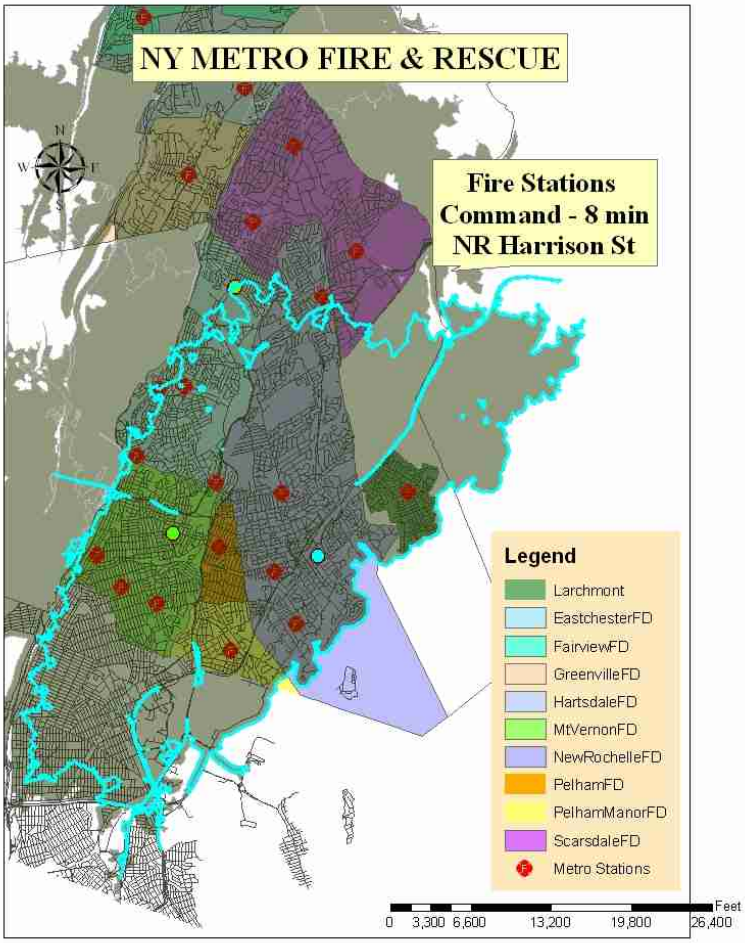
The proposed district would be divided into four (4) battalions with each one run by a Deputy Chief. This chief would be responsible for the day-to- day operations in his/her battalion. He would be responsible for any fire within his battalion and would be able to cover as 2nd due to the other battalions.

Each battalion needs a firefighter assigned his or her primary role which is member accountability during emergencies. This is both an OSHA and NFPA 1710 requirement.

The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets. The light blue dot is the Mt. Vernon Lincoln Avenue Firehouse. The green dots are the other three battalions. The red dots are the fire stations that have apparatus other than battalions.

The light blue lines are the 8 minute border from the Lincoln Avenue Station. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by the four battalions. Note that about 50% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of Yonkers and The Bronx and while this unit may be the closest, that section is not part of this station's response area.

8 Minute Response Time –Battalion Coverage Area
New Rochelle – Harrison Street Fire Station



The response time of 8 minutes is used to determine the maximum time for the first (1st) due incident commander during a structure fire.

The proposed district would be divided into four (4) battalions with each one run by a Deputy Chief. This chief would be responsible for the day-to-day operations in his battalion. He would be responsible for any fire within his/her battalion and would be able to cover as 2nd due to the other battalions.

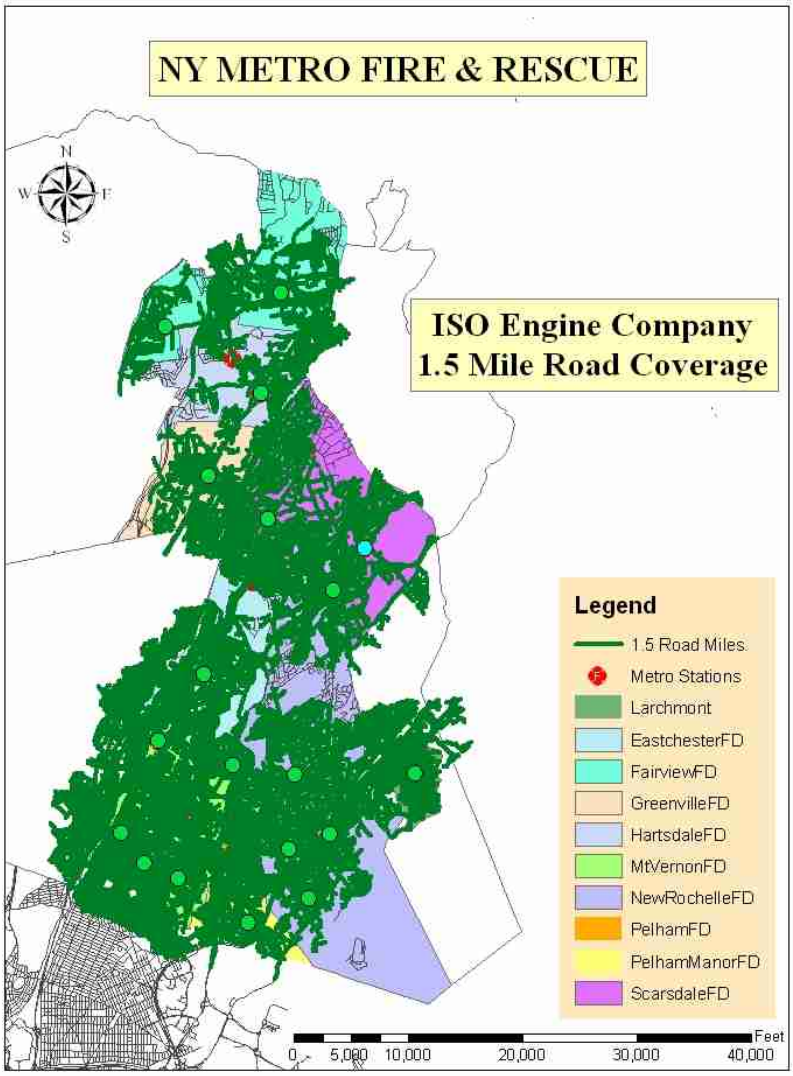
Each battalion needs a firefighter assigned his or her primary role which is member accountability during emergencies. This is both an OSHA and NFPA 1710 requirement.

The response time of 8 minutes is drive time only. For comparison purposes, dispatch time and turnout time is not included in this model. The drive time is based on an average speed of 30 MPH, with apparatus slowing down to make turns and go through controlled intersections (traffic lights). It considers highway speeds and one way streets.

The light blue dot is the New Rochelle's Harrison Street Firehouse. The green dots are the other three battalions. The red dots are the Fire Stations that have apparatus other than battalions.

The light blue lines are the 8 minute border from the Harrison Street Station. Light blue lines that are isolated (clearly not at the perimeter of the 8 minute zone) are isolated locations that can (if outside the district) or cannot be reached (if inside), generally they are limited access highways. Grey areas indicate the 8 minute response distance covered by the four battalions. Note that about 40% of area inside the blue lines is grey and has both visible and non-visible streets. This area is part of the Town and Village of Mamaroneck and The Bronx and while this unit may be the closest, that section is not part of this station's response area.

I.S.O. Engine 1.5 Mile Drive Distances



The Insurance Service Office (ISO) requires all insured properties to be within 1.5 driving miles of the closest engine company.

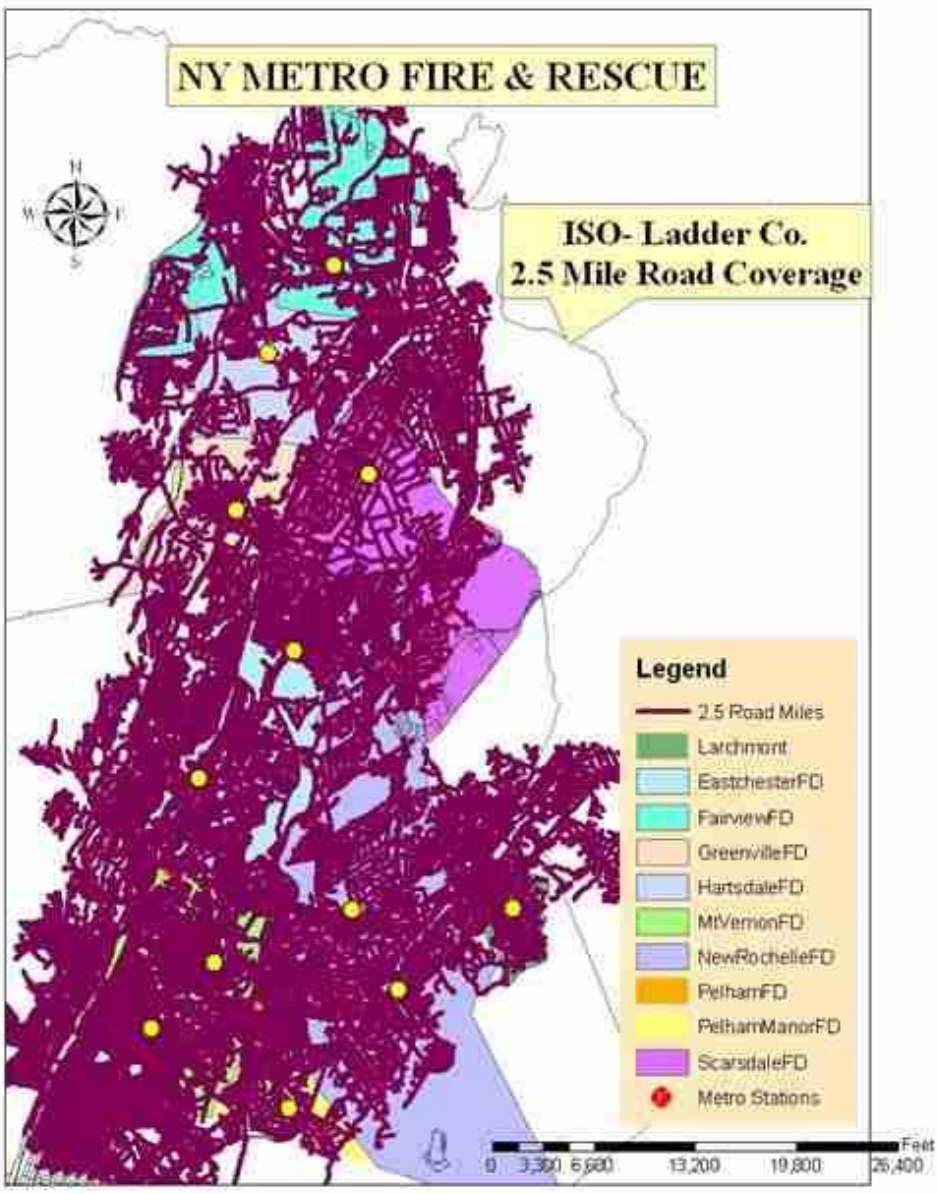
The calculations are made by driving outward from each fire station for a maximum of 1.5 miles without going the wrong way on any one way streets.

The grey lines are the roads driven in 1.5 miles by engines.

Fairview, Hartsdale, New Rochelle and Scarsdale have sections that are not within 1.5 road miles from engine companies. Fairview would require an additional station in the north. Hartsdale needs additional roads to connect to areas that are beyond 1.5 miles. New Rochelle needs to add an additional fire station along Quaker Ridge Road (as planned for in the 1960/70's), it is possible under this proposal to relocate station #5 to this location.

Fairview, Hartsdale and New Rochelle coverage short falls have not changed from existing to this proposal. Scarsdale has exchanged the 1.5 mile coverage short fall from its southern section to its northern one. This exchange is approximately equal. The distance short fall will not affect the rating (because of the percentage) and based on response time analysis we know it will not affect response times (in relation to NFPA 1710). Some areas without coverage have no roads as they are parks or golf courses.

I.S.O. Ladder 2.5 Mile Drive Distances



The Insurance Service Office (ISO) requires all insured properties to be within 2.5 driving miles of the closest ladder company.

The calculations are made by driving outward from each fire station for a maximum of 2.5 miles without going the wrong way on any one way streets.

The purple lines are all streets driven in 2.5 miles by ladders. Driving from the 12 fire stations (yellow dots) that have ladders assigned.

Blue roads are areas that are not within 2.5 miles from ladder companies. It is possible that that is due to a lack of roads in those areas, often they are parks or golf courses. There are a few isolated roads in both the northern and western sections of Fairview. The Winding Brook section of New Rochelle and the Griffin Road section of Scarsdale (note the large light purple section is roadless).

ISO Ladder Company coverage is improved in all areas under this model. The few areas beyond the 2.5 miles were beyond that range today. Some neighborhoods show dramatically better ladder company coverage after consolidation.

FINANCIAL DIMENSIONS

This section of the report examines the potential cost benefits of increased cooperation, an analysis of finances for a proposed consolidated district, and an examination of related issues involving tax issues, "two-percent" money, and accounting standards.

General Benefits of Increasing Cooperative Fire Service Efforts

From a financial perspective, fire services are logical candidates for shared services or consolidation. Absent the peculiarities of the communities that form a consolidated district or a more cooperative system, a general analysis of fire service operations identifies several promising areas for cost savings. In short, personnel, equipment, and facilities can be more rationally allocated to fit shifting needs and creating standards in each of these areas can generate synergies resulting in more efficient and effective service levels often at the same or lower costs.

Operating costs of joint or consolidated fire departments tend to be lower than several individual departments due to the ability to spread costs over a larger service area. A consolidated fire district could potentially realize savings benefits from greater purchasing power, centralized fire department management and reduced administrative costs, centralized dispatch and communication network (and other fire department support systems), standardized procedures for operation and training, reduced insurance premiums based on improvements in the insurance (ISO) rating, and improved fleet and facilities (building) management.[62]

Centralized procurement provides a basis for the development of sound purchasing policies and practices, and more effective planning and purchasing decisions. The use of state or county contracts can be optimized and costs associated with bids and requests for proposals can be driven down. Volume purchases and product/service standards provide for more attractive pricing, and a central purchasing system provides cost savings through expedited delivery and the reduction of paperwork. Good procurement policies and practices assist in the preparation of operating and capital budgets and prevent budget overruns. A consolidated fire district can maximize the benefits of operating and capital leases, with further advantages realized when leasing is incorporated into short- and long-term debt planning and management.

Centralized dispatch provides for cost savings through standardized equipment, supplies and procedures, and more efficient and effective use of dispatch personnel. A consolidated district allows assignment of personnel where and when needed and the ability to implement standard dispatch protocol across all participating communities.

Training of all personnel can be provided at less cost in a consolidated district, both through volume purchasing (generally discounts based on number of attendees can be negotiated) and scheduling (minimizing overtime costs to cover personnel in training).

[62] *Fire District Consolidation*, New York State Department of State, March 2008.

Generally, the sharing of facilities, equipment, and the operation and maintenance will result in cost savings. This includes both operating and capital costs. Much of the cost savings will be realized through standardized contracts for facility and equipment maintenance, and enhanced with the implementation of standardized specifications for such facilities and equipment. Supplies and services to maintain facilities can be purchased through competitive bids, and bulk purchases can provide savings for both facilities and equipment.

A General Cost Analysis for Districts Included in This Study

Fire services are currently provided by 10 districts or municipalities (Eastchester, Fairview, Greenville, Hartsdale, Larchmont, Mount Vernon, New Rochelle, Pelham, Pelham Manor, and Scarsdale), which we will refer to as "units". In developing the financial analysis for this study, annual operating budgets and other relevant information was collected and reviewed concerning these units. Some useful information concerning the costs of providing fire services can be found in Appendix H.

Staffing for the current units consists of 623 full-time equivalent positions, of which 599 are firefighting staff and 24 are non-firefighting ("civilian" administrative, dispatch, and mechanical). Career firefighters (including officers) have bargaining agreements with the municipalities having jurisdiction over the fire service area, and these agreements vary in terms of the individuals represented (officer and non-officer) and the benefits provided.

There are 25 fire service facilities (firehouses, headquarters, etc.) and some 130 pieces of firefighting apparatus (ladder trucks, engines, rescues, cars, trailers, etc.).

Comparative financial analysis of New York State municipal budgets and bargaining agreements presents certain challenges that require a number of adjustments and assumptions. For instance, towns and cities have a calendar (January 1 through December 31) fiscal year, while villages generally have a June 1 through May 31 fiscal year. Periods covered by bargaining agreements differ from one municipality to another. What is, or is not included in a fire services budget (such as employee benefits) can vary from one municipality to another.

The budgets used in the analysis were the 2006 budgets as adopted (January 1, 2006 – December 31, 2006 for calendar year entities and June 1, 2005 – May 31, 2006 for others). The fire services budgets for Larchmont, Mount Vernon, Pelham, Pelham Manor and Scarsdale as adopted did not include costs for retirement, social security or health benefit costs and were adjusted for amounts representing the average percent per salary for each benefit budgeted by other municipalities. The budgets for Larchmont, Pelham, Pelham Manor and Scarsdale budgets did not show an amount for workers compensation costs and were adjusted for average amount budgeted by other municipalities as a percentage of salaries. Likewise, the amounts budgeted for workers compensation for Mount Vernon and New Rochelle appeared significantly below the norm budgeted by other municipalities and were adjusted to reflect the average amount budgeted.

With the above adjustments in place, the amounts related to fire services for the 10 municipalities totals $88.1 million, with $51.6 million (59%) allocated to salaries and wages; $28.8 million (33%)

to employee benefits, and the remaining $7.7 million (8%) provided for equipment, capital financing, administrative and training costs, fleet and facilities maintenance and repair costs, and other operating costs. Total costs are offset by some $1.4 million of revenues specifically associated with fire services.

As with appropriations, municipalities can differ widely in where they allocate revenues, and revenues that could be attributed to fire service may be understated in the budgets used in this study. Further to this particular issue, revenues other than property taxes would most likely increase with a fire district, whose main mission and purpose is fire prevention and suppression.

There are many ways to view the pro rata cost of fire services. One could use a "per thousand taxable assessed value," and using the average or mean taxable assessed value of all parcels in a district arrive at what the average or mean property would pay for such services. This approach is appropriate when a new fire district is formally established, but the research required to develop such a role is unnecessary for purposes of this study. One could use a per parcel or per capita rate. For purposes of this study we have chosen to use the per capita rate, given that population figures are readily available and that the resulting comparisons are easily understood.

There is a total population of 247,094[63] in the areas serviced currently by the 10 fire districts or municipalities. Dividing the total appropriated budgets of $88.1 million, we arrive at an annual per capita current cost of $357.

Pro Forma Operating Finances for a Proposed Consolidated Fire District

As discussed earlier, a consolidated fire district could find cost savings and efficiencies through the sharing of facilities and equipment. This analysis assumes that the current 25 fire service facilities would remain in place and that operating costs would be equal or less than current costs. Likewise, this study will consider that the 8% of budgets representing costs other than salaries and benefits would remain the same or less than current costs. Appendix B identifies existing staff and different staffing scenarios for a consolidated district.

Over time, the current inventory of major firefighting apparatus (ladder, engine, rescue, and command vehicles) could be reduced from 71 pieces to 37 pieces. This would result in significant long-term savings in both purchases and annual maintenance, considering that today's average cost for an engine or ladder can easily run over $500,000. However, since a complete and detailed inventory and disposition plan is beyond the scope of this study, these costs will be considered neutral in the analysis.

As presented earlier, salaries and benefits comprise 92% of the operating budgets. It is important to note that current staffing across the municipalities and districts is broad and diverse with varying levels of rank, longevity, pay scales, benefits, and other bargaining agreement provisions. This study evaluates two staffing options that can be considered, with schedules that would consider, 1) staffing that meets NFPA 1710 standards using four person shift staffing arrangement and estimates 20% overtime required to cover for contractual leave time, and 2) staffing that meets

[63] Sources: *Census 2000* and/or as provided by fire service units.

NFPA 1710 standards using a 5.25 person shift staffing arrangement. These staffing alternatives include an increase in non-firefighter ("civilian") staffing from the current 24 full time equivalent (FTE) positions to a proposed 50 full time equivalents (FTE).

Municipalities vary significantly in how they allocate and report overtime. Some include it as part of salaries and wages in one lump sum while others break it down into several distinct components. Some municipalities ensure that all firefighter overtime is charged to the fire services budget while others may be more lax in such allocations. A quick review of those municipalities that do allocate and track overtime for fire services reveals that in general, overtime averages from 12% to 15% of base salaries. This is important when considering the "NFPA 4" option, which provides for a staffing structure that will probably require 20% overtime to cover contractual leave time. In calculating the impact, this study first calculated the total salaries and wages (including overtime) currently budgeted for the 10 municipalities involved, divided that number by 1.15 (assuming that overtime averages 15% of base salaries), and then multiplied that number by 1.20 to arrive at the salaries, including overtime of 20%.

To facilitate meaningful analysis of a consolidated fire service district, this study uses a current "cost per full time equivalent" of $129,139, which is derived by dividing the total cost of current salaries and benefits ($80,453,812) by the total current staffing (623). This same cost per full time equivalent can be multiplied by the total proposed staffing in each of the two options, with specific adjustments to overtime for the NFPA 4 option (requiring 20% overtime over base), and the resulting total can then be added to the other operating costs to arrive at a revised budget for each option. Dividing each revised budget by the population served by the district (247,094) produces a per capita cost that can be compared against the current situation and the two options.

Option one – NFPA 1710 Five Person Staffing

Option one is a staffing option that reflects staffing as recommended by the National Fire Protection Association, where full time equivalent staffing consists of 5.25 career firefighters per seat per shift plus 50 civilian support positions. Staffing under this option would have the most material effect on all requirements and costs. Staffing requirements would rise from 623 to 828; total salaries and benefits requirements would increase from $80.4 million to $106.9 million; total budget would increase from $88.1 million to $114.6 million and annual per capita cost from $357 to $464.

Option two – NFPA 1710 Four Person Staffing

Option two is a staffing option that reflects staffing as recommended by the National Fire Protection Association, where full time equivalent staffing consists of four career firefighters per seat per shift plus 50 civilian support positions, plus 20% additional overtime to cover required leave time. Under this option, staffing requirements would rise from 623 to 653; total salaries and benefits requirements would increase from $80.4 million to $86.7 million; total budget would increase from $88.1 million to $94.4 million and annual per capita cost from $357 to $382.

It should be noted that most of the civilian position increases are currently covered by outsourcing those services and these cost may be transferred from other operational funds (i.e. fleet and building maintenance and information technology).

It should be noted that the cost of meeting NFPA 1710 compliance individually by fire service areas would be significantly more expensive, as exhibited in the following chart:

		NFPA 5.25			NFPA 4		
Fire Service	Population	Staffing	Budget	Per Capita	Staffing	Budget	Per Capita
Eastchester	31,386	141	$ 19,764,178	$ 630	110	$ 16,084,957	$ 512
Fairview	25,142	87	15,523,899	617	68	12,669,354	504
Greenville	3,800	87	16,322,918	4,296	68	13,239,544	3,484
Hartsdale	9,830	87	17,148,404	1,744	68	13,885,462	1,413
Larchmont	6,485	87	10,634,784	1,640	68	8,537,032	1,316
Mt Vernon	67,924	163	18,197,921	268	127	14,616,471	215
New Rochelle	73,000	266	32,715,991	448	207	26,710,699	366
Pelham	5,400	87	11,120,154	2,059	68	8,943,958	1,656
Pelham Manor	6,364	87	12,277,623	1,929	68	9,874,235	1,552
Scarsdale	17,763	98	12,813,609	721	76	10,316,676	581
Total	247,094	1,189	$ 166,519,481	$ 674	926	$ 134,878,388	$ 546

Additional Financial Issues of Concern

Special Taxation Issues

A special issue of concern is the equity in property taxes, especially as it applies to large tracts or parcels that are tax-exempt under the Real Property Tax Law. Real property which is exempt from special ad valorem levies to the extent provided in section 490 is exempt from fire district charges, regardless of the location of the property.[64] For example, the IAFF Local 2623 Poughkeepsie website notes that "The Fairview Fire District[65] has a unique tax situation. About 80% of the fire district is tax exempt property. This means that 20% of the property owners pay 100% of the tax levy." [66] Educational institutions, mental health facilities, places of worship, special centers for people with disabilities and other not-for-profit organizations are all exempt from paying fire district property taxes.

Municipal governments in New York State are not required to reassess properties within their boundaries on any given schedule. The assessment records of municipalities that have recently assessed would reflect current or near-current market values, while the assessment records of municipalities that have not reassessed for some time might reflect property values that existed decades ago. As a result, inequities in property valuations increase as the span of time from the last municipal-wide assessment increases. Combine this with the fact that New York State laws

[64] *Volume 7: Opinions of Counsel SBEA No. 119*, Office of Counsel, New York State Office of Real Property Services, April 1, 1983.
[65] The Fairview Fire District (FFD) mentioned is not the same as the FFD in this study.
[66] http://www.iaff2623.org, "Tax issues", accessed April 18, 2008.

prohibit "spot" or individual property reassessments (other than when significant improvements are made to the property), and we find that the values appearing on the assessment rolls of one municipality often differ significantly from the values appearing on the rolls of a neighboring community. To provide some form of equity when taxes are levied against an area comprised of two or more municipalities, the New York State Office of Real Property Services (ORPS) annually develops an "equalization rate" for each municipality. Theoretically, dividing the assessed value of a property by the equalization rate should equal the current market value of the property. As such, property taxes to be raised by the proposed fire district would be calculated by first "equalizing" the values of the properties in the district, and then dividing the amount to be raised by taxes by these equalized values.

Foreign Fire Insurance "Two Percent" Money

Sections 9104 and 9105 of the New York State Insurance Law mandate that any foreign or alien insurance company that writes fire insurance in New York State must contribute two (2%) percent, and excess line brokers licensed to write business under section 2118 of Insurance Law must contribute three (3%) percent, of the fire premiums written on property located in New York State. These contributions, commonly known as "fire tax money" or "two percent money", are distributed to the fire departments and fire districts within New York State. The treasurer or other fiscal officer of the fire department affording fire protection in such city, village, or fire district receives the fire tax money. If the department or district does not have its own treasurer, then the fiscal officer of the municipality having jurisdiction or control of the fire department or district receives the money.

Generally, fire tax money is allocated between and among the fire companies proportional to the number of active members in each fire company. If a department is comprised of both paid and volunteer members, each group would be entitled to fire tax money on a pro rata basis. Fire tax money is to be used for any purpose that benefits the fire department and the membership as a whole and must be voted on by the members of that department. These purposes include, but are not limited to, department social functions, materials and supplies including food and beverage, appliances and furniture for the firehouses, uniforms and equipment, and life and disability insurance policies.

It is important to note that it is the membership of a fire department or company, and not the municipality that determines how fire tax money will be spent. In fact, a municipality may not compel the members of a fire department or company to use these monies to defray ordinary operating expenses of the municipal fire department.[67]

The formation of a single fire district might result in the creation of new fire companies and the reorganization or elimination of existing fire companies within the district, which in turn would impact the distribution and allocation of fire tax monies. The impact on individual fire departments and companies cannot be determined until the composition of the proposed district has been

[67] Opn St Comp No. 87-88, supra; 1979 Opns St Comp No. 79-680, p 138; MacIsaac v City of Poughkeepsie, supra; Watertown Firemen's Benevolent Association, 134 NYS2d 465.

developed. However, the issue of how much fire tax money is received and how it is spent is probably of great importance to those currently receiving these funds.

Accounting and Financial Standards for Inter-Municipal Services

There is a significant amount of literature currently available that addresses the accounting and financial considerations for inter-municipal cost-sharing and consolidation.

In addition to the cost saving possibilities already noted, a single consolidated fire district has the following advantages over several independent fire districts serving the same area:

- Economies of scale – an increase in an organization's scale results in a decrease in the long-run average cost of each unit of service.
- Economies of scope – when the range of services is expanded, average total costs are reduced.
- Greater uniformity of service and higher service levels, as well as a reduction in duplicated services.
- Optimizing the use of less-frequently used facilities, equipment, and services.
- Operational improvements resulting from greater flexibility and stability.
- A successful consolidated district can encourage expansion of the district and/or further inter-municipal cooperative efforts.
- Facilitation of efficient and effective large scale projects.
- Greater training and promotional opportunities.
- New services can be provided at lower incremental costs.
- The ability to take advantage of unique internal and external expertise.[68]

In 2008, the New York State Commission on Local Government Efficiency and Competitiveness released a notice that $29.4 million of funding in Local Government Efficiency Grants (LGEG) was approved in the State's 2008-2009 budget for local government cost-sharing and consolidation initiatives. This amount represented a $4.4 million increase from the prior year, and continues the State's efforts to encourage savings through sharing and consolidation. In addition to this information, the Commission's website (http://www.nyslocalgov.org) provides additional information and resources supporting and assisting those municipalities considering or implementing cost-sharing and/or consolidation efforts.

In March 2008 the New York State Department of State published a brochure entitled *Fire District Consolidation* that provides an overview of the options and benefits of consolidation, as well as State Aid programs available for such consolidations. A copy of the brochure is available online at http://www.dos.state.ny.us/lgss/smsi/What's%20New%20Addition/Fire/Fire%20District%20Consolidation.pdf.

In April 2008, the New York State Commission on Local Government Efficiency & Competitiveness released a report entitled *21st Century Local Government*. The report provides the findings and recommendations of the Commission, which was charged to "examine ways to strengthen and streamline local government, reduce costs and improve effectiveness, maximize

[68] *Intergovernmental Service Sharing*, Ruggini, John. GFOA: Chicago, 2007, pp. 18-21.

informed participation in local elections, and facilitate shared services, consolidation and regional governance". A copy of the report is available at http://www.nyslocalgov.org/pdf/LGEC_Final_Report.pdf.

All of the above publications support cost-sharing and consolidation. However, as this study has shown, the financial implications of consolidation must be viewed in conjunction with the legal and managerial issues involved.

In meeting with the Commission Director, it was determined that this consolidation would potentially be eligible for upwards of $2,000,000 in the first two years, this money could be used for additional studies, initial administration costs during development of a consolidated district and equalization of union contracts. The director was very enthusiastic over this study and made it clear that the State would be very interested in supporting this project.

We now turn our attention to the legal issues regarding the creation of a consolidated fire district.

LEGAL DIMENSIONS

This section of the report examines legal issues and provisions of New York State Law dealing with the creation of joint fire districts. Specifically, we address the following legal questions:

1. Will existing State legislation that enables the creation of a joint fire district authorize the creation of a proposed Southern Westchester Joint Fire District to provide fire services that are currently being provided by the Eastchester Fire District, Fairview Fire District, Greenville Fire District, Hartsdale Fire District, and the Fire Departments of the Cities of Mount Vernon and New Rochelle and the Villages of Pelham, Pelham Manor, Larchmont and Scarsdale.
2. Would General Municipal Law Section 207-a disability cases in the aforementioned fire departments and fire districts be transferred to the Joint Fire District?
3. How would the *Vulcan* consent judgments entered into by the cities of New Rochelle and Mount Vernon affect the Joint Fire District?
4. How would capital assets be transferred from the existing municipal fire departments and fire districts to the Joint Fire District?
5. Can the union contracts of the municipalities and fire districts be merged into the new Joint Fire District?

The following analysis, in turn, addresses each one of these concerns:

Legal Provisions to Establish a Joint Fire District

Article 11-A of the Town Law and Article 22-A of the Village Law provide for the establishment and operation of a Joint Fire District to provide fire protection services within its geographical boundaries. The provisions of Article 11 of the Town Law governing fire districts generally may apply to the extent that its provisions are not inconsistent with the provisions of Article 11-A. 2004 N.Y. Op. Atty. Gen. (Inf) No. 6; see Town Law §§ 189-a (2) (d), (3) (d), (4) (e), 189 – f.

The enabling legislation authorizes adjoining towns and villages located within those towns to create joint fire districts, provided that all territory in the joint fire district be contiguous. Town Law § 189-a (1); Village Law § 22-2100. Once created, the joint fire district "is an independent political entity serving the property and property owners included within the district." 2004 N.Y. Op. Atty. Gen. (Inf) No. 6.

No provisions in New York Law have been found enabling a city to establish a joint fire district with other cities, towns or villages. Enactment of State enabling legislation would be required to accomplish this objective. The discussion that follows therefore pertains mostly to how adjoining towns and villages within those towns may establish a joint fire district. Enactment of the State legislation required to authorize the establishment of the proposed Southern Westchester Joint Fire District may provide exceptions, amendments or additions to existing State law which may address and/or affect the issues pertaining to transfer of capital assets, liability for Section 207-a disability cases and merger of union contracts.

Establishing a Joint Fire District

To establish a joint fire district, each town board and each village board of trustees that a proposed Joint Fire District would contain must hold a joint meeting at a location within the proposed district to propose and discuss the establishment of a joint fire district. Town Law § 189-a (2) (a). If the respective boards of each town and village determine by majority vote to make a proposal to establish a joint fire district, each board must within 30 days hold a joint public hearing at one location within the proposed district. Town Law §189-a (2) (b). Notice of such public hearings must be published, posted and served by mail as provided in Town Law § 189-a (2) (b). After public hearings, if the boards of each town and village determine that it is within the public interest to establish such a joint fire district, "subject to permissive referendum, each town board and village board of trustees shall by resolution, duly adopted by a majority of each board, establish a joint fire district." Town Law § 189-a (2) (c). The procedure for adding a portion of the territory of an adjoining town to a joint fire district prior to the establishment of the district, but after the joint meeting for the establishment of the original joint fire district, parallels the requirements of § 189-a (1) and (2). Town Law § 189-a (3).

Recording Requirements

Within 10 days of the establishment of a joint fire district, the clerk of such town or village designated by the town and village boards participating in creating the joint fire district must cause a certified copy of the determination to establish a joint fire district to be filed with the State Department of Audit and Control in Albany, NY, and to be recorded in the county clerk's office. Town Law § 189-d. Once recorded, there will be presumptive evidence of the regularity and validity of the creation of the joint fire district and of the acts of the joint fire district's board of commissioners relating thereto. Town Law §189-d.

Board of Commissioners

The property and affairs of a joint fire district are managed by a board of not less than three, but not more than seven, fire commissioners. Town Law § 189-e. The town and village boards, in their resolution to establish a joint fire district, may provide for the fire commissioners to be elected by the voters as provided in Town Law Article 11 or appointed jointly by the town and the village boards. *Id; See* 1991 N.Y. Op. Atty. Gen. (Inf.) No. 44 (stating that the determination to elect or to appoint fire commissioners is made at the time of establishing the joint fire district and may not be reconsidered at a later date).

A joint fire district board of commissioners may exercise the same powers that fire district commissioners may exercise. Town Law § 189-f. Like a fire district board of commissioners, a joint fire district board of commissioners may make expenditures, collect revenue, dispose of and purchase property, elect officers, and contract with outside fire departments or volunteer fire departments to provide fire protection within the joint district. *See generally* Town Law § 176.

For each fiscal year beginning January 1 the board of commissioners must prepare and adopt an annual budget. Within three days of its adoption, the board of commissioners shall deliver to the town clerk of each town and file with the village clerk of each village in which the joint fire district is located two copies of the annual budget. The joint fire district budget may not be changed by any town or village board or official. The method of assessment and collection of joint fire district taxes is as detailed in Town Law Section 189-h.

Extending a Joint Fire District

A joint fire district may be extended from time to time provided that the area to be included is contiguous with the already existing district, and not located in a city. Town Law § 189-a (4). To extend a joint fire district, the boards of each town and of each village encompassing any part of the proposed area where the joint district is to be expanded shall meet jointly to propose the extension of the district. Town Law 189-a (4) (a). The procedures for extending a joint fire district follow the procedures for establishing a joint fire district—after notice and public hearing, if the affected town and village boards determine it is in the public interest to extend the joint fire district, then subject to permissive referendum (or mandatory referendum if the newly formed joint district will sponsor a service award program), the affected town boards and the village boards of trustees, by resolution duly adopted by majority vote, shall extend the joint fire district. Town Law § 189-a (4) (b).

Dissolving an Existing Fire District, Fire Alarm District or Fire Protection District

If town boards and village boards of trustees determine to establish a joint fire district, and the territory within the proposed joint fire district is a part of an existing fire district, fire alarm, or fire protection district, the boards may dissolve the existing districts pursuant to § 185 of Article 11,

except that the requirement for a petition shall not apply. Town Law § 189-c. Section 185 provides that after appropriate notice and public hearing, if it is in the public interest, the town board may dissolve the existing fire district, fire alarm or fire protection district. Town Law § 185 (1). In a case where a district comprises more than one town, any action to dissolve the district must be taken by the town boards acting jointly. Town Law § 185 (1-a).

If the district to be dissolved has been located within a village incorporated since the district was created, "all of the property of such district shall be and become the property of any fire corporation organized by the trustees of such village, and such village shall upon delivery thereof assume and pay all of the debts of such fire district. Town Law §185 (1). Where the district is not wholly located within one village incorporated since the district was formed, all the district property shall be sold at public sale and the proceeds first applied to any bonded or other indebtedness of the district, with any remaining proceeds to be credited to the taxable real property located in the district. *Id.*

In the event that there remains outstanding indebtedness, a sum sufficient to meet the principal and interest of such indebtedness shall be set aside as a sinking fund for the redemption of the indebtedness at maturity. If the proceeds of the sale of the district's assets are insufficient to redeem outstanding indebtedness at maturity, sums necessary to pay principal and interest to redeem the indebtedness at maturity, shall be levied and collected in annual installments from the district.

At the hearing on a petition to dissolve a fire protection district or a fire alarm district, the town board may terminate any contracts, then in force relating to fire protection, either at their expiration or forthwith. Town Law §185 (2). Once the town board determines to dissolve a fire alarm or a fire protection district forthwith, the contracts shall be terminated immediately upon the payment of any amounts that became due based on fire protection services provided prior to the district's dissolution. *Id.* Finally, nothing prevents a town board from merging a proceeding to dissolve an existing fire protection district with a proceeding to establish a new fire district that "embraces all or any portion of the territory contained within the boundaries of the fire protection district to be dissolved." Town Law § 185 (4).

Continuation of Service Award Programs

If upon its establishment, the joint fire district encompasses an area in which a constituent town(s) or village(s) maintained a service award program for volunteer firefighters, the service award program shall be continued pursuant to General Municipal Law Section 216-b and shall be overseen by the Board of Fire Commissioners. Gen. Mun. Law § 216-b (2) (a)-(b). As of the date of the first meeting of the elected or appointed Board of Fire Commissioners for the joint fire district, the town, village, or fire district that previously administered and funded the service award program will no longer have any administrative or funding responsibilities. *Id.* The joint fire district will then become the sponsor of the service award program and be responsible for its funding and administration. *Id.* The Board of Fire Commissioners must develop a management plan for the continued administration of the assets of the service award program and submit same to designated town, village and/or district officials within 60 days of the date on which the joint

fire district becomes the sponsor of the award program previously sponsored by the town, village, or fire district. Gen. Mun. Law § 216-b (d). The designated town, village or district officials must promptly comply with the list of actions required by the board of fire commissioners to transfer records and assets necessary to administer the service award program. *Id.* Upon failure of the board of commissioners to timely submit such management plan, the designated town, village or district officials may submit to the board of fire commissioners all records relating to the administration of the service award program and the town, village and/or district will thereby be discharged of any further responsibility for administering the assets of the program. *Id.*

Transfer of Capital Assets

The Board of Trustees of a village or the Board of Commissioners of a fire district lying entirely within the territory of the new joint fire district may authorize the transfer of an existing firehouse, including the land on which the firehouse sits, fire apparatus and other firefighting equipment to the newly formed joint fire district at such consideration, or no consideration, and upon such terms and conditions as the governing bodies of those entities determines are appropriate. Town Law § 189-b. The New York State Comptroller has cautioned that even though a village board may authorize the transfer of firefighting equipment to the newly formed joint fire district without consideration, "the village board may wish to take into account the village's continuing responsibility to pay interest and principal" for outstanding debt service on the equipment. 1991 Opns. N.Y. St. Cptr. No. 4. Appendix C lists all apparatus by community while Appendix E lists existing equipment and stations by community.

General Municipal Law § 207-a Obligations to Disabled Firefighters

The New York State Comptroller has opined that the rights of disabled firefighters under General Municipal Law § 207-a vest at the time of disability and the right to continue receiving such benefits may not be divested thereafter except by the firefighter's own act, unless otherwise expressly provided by that statute. 1990 Op. St. Comp. 55; 1988 Op. St. Comp 27; *See Pease v. Colucci*, 59 A.D. 2nd 233 (4th Dept 1977). Appendix D list open 207-a cases by municipality.

General Municipal Law § 207- a (1) states that a paid fireman injured in the line of duty is entitled to be paid the full amount of his regular salary or wages, until the disability resulting from the injury ceases. During the period of disability, the municipality or fire district that employed the injured firefighter is liable for the firefighter's medical treatment and hospital care.

Subdivisions 2 and 4 of General Municipal Law § 207- a outline circumstances when the disability payments may be discontinued or reduced. For example, a municipality may apply for accidental disability, retirement, retirement disability incurred in the line of duty or similar accidental disability pension if the firefighter does not apply. In such case, the municipality remains liable for the difference between the amount received under such pension or allowance and the amount of the firefighter's regular salary or wages until the firefighter reaches mandatory retirement age or attains the age or performs the period of service specified by applicable laws for the termination of

his or her service. The municipality may terminate salary payments upon the disabled firefighter's reaching mandatory retirement age.

However, these provisions do not authorize a municipality which abolishes its fire department to cease making statutory payments to disabled firefighters. 1988 Op. St. Comp. 27; see 1990 Op. St. Comp 55 (notwithstanding the abolition of a police department, the municipality remains obligated to pay statutory benefits under General Municipal Law § 207-c to disabled police officers). [69] Unless the municipality and the firefighter enter into an agreement to the contrary, the municipality remains liable as if the fire department had continued in existence. Id.

The statutory provisions governing the establishment of Joint Fire Districts are silent as to this issue. Given that new state laws enabling legislation will be required to authorize the establishment of a Joint Fire District including one or more cities, the transfer of responsibility for § 207-a payments to the Joint Fire District could be addressed in that legislation. Otherwise, it would appear that the municipalities in which the fire departments were discontinued and the fire districts that were dissolved would remain obligated to make such payments in accordance with General Municipal Law § 207-a. See Town Law § 185.

[69] General Municipal Law § 207-c contains provisions applicable to police officers disabled in the performance of duties that are analogous to § 207-a benefits for firefighters.

Vulcan Consent Judgments and the Proposed District

In 1978, the Vulcan Society of Westchester County Inc. and certain other named individuals sued the Cities of Mount Vernon, New Rochelle, White Plains and Yonkers and the New York State Department of Civil Service, together with various officials and agencies of those defendants, in Federal District Court alleging that the defendants unlawfully discriminated against Blacks in hiring and promotion of firefighters and deprived them of equal employment opportunity through the use of tests and other selection standards which had a disparate impact on Blacks that were neither valid nor job related in violation of Titles VI and VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 1901, 42 U.S.C. § 1981, 42 U.S.C. § 1983 and the Fourteenth Amendment to the United States Constitution.

In 1981, the Federal District Court approved Consent Judgments for the Cities of New Rochelle, Mount Vernon and White Plains settling the litigation. *Vulcan Society of Westchester County Inc. v. The Fire Department of the City of White Plains, etc*., 505 F. Supp. 955 (S.D.N.Y. 1981). The Consent Judgments incorporated procedures for future selection and promotion of firefighters, hiring goals, improvement of future written tests,,recruitment and training procedures.

The Federal Court retained jurisdiction over the action for purposes of issuing further orders as it deemed necessary and appropriate. However, the Consent Judgments provided that, five years after their entry, the city or state defendants could move to dissolve the decrees. In considering such an application, the Court would take into account whether the defendants had complied with the consent judgment and whether the objectives of that decree had been achieved.

We are advised that the Consent Judgments for Mount Vernon and New Rochelle have not been dissolved and remain in full force and effect. Presumably, upon the establishment of the Joint Fire District, Fire Departments of the Cities of New Rochelle and Mount Vernon will be dissolved and jurisdiction over the performance of fire fighting services in those municipalities, including the responsibility for hiring and promotional decisions, will be transferred to the Joint Fire District. At this point, the affected cities will have to return to federal court to attempt to dissolve or amend the Consent Judgments based upon the termination of their respective city fire departments and the divestment of their powers to hire and promote firefighters as provided in the Consent Judgments.

Union Contracts

The proposed Southern Westchester Joint Fire District would encompass multiple fire districts and municipalities. Each of the constituent entities has a collective bargaining agreement with its firefighters. Neither Article 11-A of the Town Law and Article 22-A of the Village Law providing for the establishment of joint fire districts, nor any other New York State statute, addresses the status of the individual collective bargaining agreements between those fire districts and municipalities and their firefighters upon the transfer of firefighting services from those public employers to the joint fire district. Absent such statutory direction, this memorandum reviews case laws and decisions of the New York State Public Employment Relations Board (PERB) discussing the status of public employers and public employee representatives, and their collective bargaining

agreements, when the public employer(s) no longer exist(s) due to consolidation, merger or annexation.

In the *Matter of Cuba-Rushford Central School District*, 182 A.D.2d 127 (1992), the Court considered the effect of annexation of one school district by another on the collective bargaining agreement of the teachers of the school being annexed. There, the Court stated that the collective bargaining agreement of the annexed district did not survive the annexation. *Id.* Nor was there an obligation of the successor employer to recognize substantive provisions of the negotiated collective bargaining agreement of its predecessor, such as grievance and arbitration provisions, absent an agreement by the successor employer to recognize the bargaining agreement or provisions thereof. *Id.* Moreover, the Court opined that a collective bargaining agreement is not a "property right" that is assumed by the successor, as are other debts and property. *Id.*

While a successor employer may not be obligated to assume the collective bargaining agreement of the predecessor employer, the question of the successor employer's obligation to negotiate with the existing employee bargaining units must be addressed. In cases of "mergers, consolidations and transfers of functions between public employers, determinations as to the obligations of successor public employers have, in some respects, followed the tests applied to private sector employers." *Matter of Genesee Valley BOCES School Related Personnel Association*, 29 PERB ¶ 4584 (1996). The private sector rule consists of an analysis of whether there has been "'substantial continuity' between enterprises" and whether the negotiating unit has "remained substantially intact under the successor and continued to be an appropriate unit." *Id.* "Where a former unit configuration has been found to be inappropriate after a merger, the employer has not been required to assume the obligations of the [collective bargaining agreements], and in such situations an employer could require its employees to seek new representation." *Id.*

In the *Matter of Public Employees Federation, AFL-CIO and State of New York (Department of Environmental Conservation) and Olympic Regional Development Authority*, 20 PERB ¶ 3046 (1987), PERB recognized that transfers between public employers generally result from statutory changes and do not entail the same policy considerations inherent in transfers in the private sector. Rather, in the public sector context, the obligations of the successor entity must be based upon "the policies and provisions of the [Taylor] Law and other statutes relevant to the conduct of the affected public employees." *Id*. Indeed, the Board suggested that the most important factor of the private sector rule regarding successor employers as applied to the public employer would be the determination of the most appropriate negotiating units under Civil Service Law § 207(1). Under § 207(1)(a) a negotiating unit "shall correspond to a community of interest among the employees," and "shall be compatible with the joint responsibilities of the public employer and public employees to serve the public."

In this case, the Olympic Regional Development Authority (ORDA), a public-benefit corporation, took over operation of a public ski facility from the State. Public Employees Federation (PEF), the negotiating unit representing seasonal ski instructors at the facility, charged that the State and ORDA had violated subsections of Civil Service Law § 209-a(1) in not transferring the existing collective bargaining agreement and refusing to recognize PEF as the employees negotiating unit. PERB found that in taking over the ski area, ORDA was not required to recognize obligations under the State-union contract, and further it was not required to negotiate with the union

representing the several ski instructors. *Id*. The largest unit consistent with the standards of the Taylor Law is ordinarily the "most appropriate" unit for representation. *Id.* PERB found that there was "no basis relating to ORDA's operations for concluding that these employees should continue to have separate unit status" from the other ORDA employees, working at a separate ski facility. *Id.*

By contrast, in the *Matter of City of Amsterdam*, 17 PERB ¶ 3045 (1984) *appeal dismissed* 17 PERB ¶ 7015 (Sup. Ct. Albany Co. 1984), the City unsuccessfully challenged PERB'S dismissal of a petition filed by the City seeking to create a single negotiating unit of all employees of a new water and sewer department. The employees were previously employed by two separate employers in separate departments and were represented in separate bargaining units. The Supreme Court, Albany County in dismissing the City's case for lack of standing upheld PERB'S decision to maintain distinct separate negotiating units.

In reaching this result, PERB stated that "nothing in the Taylor Law precludes the representation of employees of a single department in more than one negotiating unit." Here, PERB found that the "undisputed long history of effective representation in both negotiating units" reflected separate communities of interest under Civil Service Law § 207.1 which outweighed the City's claim of administrative convenience.[70] However, in *Matter of Public Employees Federation*, discussed above, PERB declined to extend their decision in *City of Amsterdam* because that case dealt with "discrete" complete units transferred from one employer to another as opposed to a transfer of a segment of a state-wide unit in *Public Employees Federation*.

Although a successor employer may be under no obligation to recognize existing collective bargaining agreements, in some cases the employer will choose to temporarily recognize the existing agreements, while representative status is sorted out. In the *Matter of Genesee-Livingston-Steuben-Wyoming BOCES v. PERB*, 30 PERB ¶ 7009 (1997), two BOCES divisions were consolidated under an order of the New York State Commissioner of Education. By order of the commissioner, existing collective bargaining agreements were to remain in effect until their expiration. *Id.* After expiration of the existing collective bargaining agreements, BOCES made certain unilateral changes to the employment conditions. *Id.* The Supreme Court found that BOCES unilateral changes to employment conditions made during the pendency of a representation petition were in violation of the Taylor Law. *Id.* A public employer must continue to recognize all terms of an expired agreement, until a new agreement has been negotiated. McKinney's Civ. Serv. Law § 209-a(1)(e). BOCES attempt to change employment conditions upon expiration of the original collective bargaining agreements was invalid. BOCES was required to negotiate with any new negotiating unit, while in the interim maintaining the status quo by recognizing an obligation to the expired agreements.[71]

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[70] Contrast *Matter of County of Schenectady*, 25 PERB ¶ 3043 (1992) where PERB opined that City of Schenectady nurses transferred to the County should be included in the County's larger existing bargaining unit and that the County was not obligated to deal with the transferred employees as a separate unit.

[71] *See Matter of Civil Service Employees Association and Avon Central School District*, 36 PERB ¶ 3032 (2003), where upon dissolution of an employee association, the association-district agreement became null and void and the employees were unrepresented, until certification of the new association. Although the employees "have no independent right under the Act to enforce the terms of the [a]ssociation-[d]istrict agreement," the district is obligated

Synthesis

The cities, villages and fire districts seeking to create a Southern Westchester Joint Fire District seemingly have no statutory grant of authority to do so. While New York law enables towns and villages to establish joint fire districts, no such provisions exist for cities, towns, and villages that wish to create a joint fire district. Any legislation drafted to enable establishment of the desired fire services district should include specific provisions that address the municipalities that may join to establish joint fire districts, the disposition of assets and liabilities, the status of existing labor agreements and the process for negotiating future contracts, and the responsibility for providing continuing benefits under General Municipal Law § 207-a to previously disabled firefighters.

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to maintain the status quo, (the conditions in effect at the time the new union filed for representation), until a new agreement is negotiated.

ADDITIONAL CONSIDERATIONS

This section of the report indentifies and discusses numerous political considerations—unions, volunteers, other departments, role of NYS, Mutual Aid-- which may affect the process of fire service cooperation or consolidation in the subject communities.

Union Issues

The career firefighters of the ten (10) departments are represented by eight (8) local unions[72] which are made up of fourteen (14) bargaining units. Deputy and/or Assistant Chiefs and in some cases other officers are represented by different bargaining units within the same union. This includes Fairview, Greenville and New Rochelle. Hartsdale's officers are in a separate bargaining unit, but are not in the union.

The union locals, currently with the exception of Mt. Vernon (which is expected to rejoin), are all members of the 5th District of The New York State Professional Fire Fighters Association (NYSPFFA) and the 1st District of the International Association of Fire Fighters (IAFF).
The union officers have expressed concerns for their members' safety and the contracts that provide compensation, working conditions and job security. During meetings with the Career Fire Chiefs Association, the following parameters were provided to the study group:

- No members would go backward in overall compensation. Some contracted benefits would have to be converted to streamline new contracts, i.e. some locals receive a uniform allowance to replace/maintain uniforms while other locals have a quartermaster system. Both have a monetary value.

- The study would be "standards driven" meaning the study would be based on NFPA 1710: manning, the location and number of apparatus would be dictated by the standards.

- Volunteers would not be added to communities that currently do not have volunteers in service. But, volunteers would be included in this study and would continue to provide services, with increased roles and responsibilities (see "Volunteer Issues" below for details).

From a union perspective, there are numerous advantages to consolidation and one major disadvantage.

[72] Fairview, Greenville and Hartsdale firefighters are all members of the Greenburgh firefighters union. Fairview and Greenville officers are in the union, but have a separate bargaining unit. Hartsdale officers are not part of the union.

Consolidation Advantages

1. Manning per unit would be a minimum of three firefighters and one officer (Lieutenant or Captain) an improvement in all departments by one to three additional members.

2. Manning per response on a 1st Alarm (structural fire) would improve to a minimum of 16 firefighters and 6 officers (including a chief officer). This is an improvement of 6 to 19 additional firefighters and officers per response.

3. Improved supervision. All apparatus to have an officer. All stations to have a company commander who will be responsible for the station.

4. The improved manning and supervision dramatically improves the safety.

5. Increased chance for promotion. Due to insufficient numbers of officers, we anticipate the creation of a minimum of 74 new lieutenant positions along with an undetermined number of additional officers at all ranks. Currently, in many of the departments, we found little or no chance for promotion, due to lack of positions or lack of movement (due to small numbers and no retirements). The size and scope of this proposed department would increase the chances of promotion, particularly to members who prove to be capable, but have been unable to advance due to lack of opportunity.

6. Members at the low end of the pay scale and benefits will receive better compensation in the consolidated plan than they currently receive. Members at the upper end will not drop or become stagnant (they will not have to wait for the low end to "catch up").

7. Apparatus and station conditions (both safety and comfort) shall improve. This will be due to the ability to focus on these issues as the district will be responsible for fire protection and life safety only and not have to consider other municipal responsibilities. Improved ability to group purchase and perform maintenance through an expanded maintenance program. Standardization of apparatus and equipment will reduce purchase and maintenance cost and improved availability.

8. Pension options will expand. Under consolidation the ability to reconfigure the pension plans will become available.

9. Currently, some members receive large amounts of overtime to cover members on contractual leave. In other departments the members receive little or none. The study has determined that it is less costly to use this overtime for maintaining minimum manning for contractual leave model. We anticipate that members who enjoy this overtime will not see any decrease, while it will become available to the members who currently see little or none.

10. We expect that with the increased availability of overtime that many members who are eligible may consider retirement. This benefits both the member and the department, as the cost to replace these members with new recruits is significantly less. One of the advantages of a larger department is that special services that require additional training and/or equipment can be provided by assigning these special services to specific stations. Smaller departments may not be able to provide these services due to time, financial or space constraints. Some of these special services include; Rope Rescue, Water Rescue, Hazmat Ssupport, Decontamination, Foam Units, Mask Service Units (Breathing Air), Dewatering Units, etc.

Consolidation Disadvantages

1. Loss of local union autonomy; if the different communities agree to be a part of this regional service, the individual fire departments will no longer exists as they currently do. One lesson learned from the North Hudson Fire Consolidation (Northern NJ) is that to be truly successful the eight (8) separate unions should merge.

2. Each of the 10 departments provides varying services beyond fire response. These services include, but are not limited to, emergency medical service (EMS), code enforcement, technical rescue and hazardous materials. Service levels in a consolidated department will need to be equal in all areas. Additional training may need to be provided to some members. In many cases, these additional services are compensated for under the contractual labor agreements. Other services beyond those listed above would need to be identified and evaluated to determine if they are appropriate and could be provided by this organization.

Volunteers

Volunteers provide or have provided service to each of the fire departments in this study. Some communities, including Eastchester, Mount Vernon and New Rochelle no longer have volunteers that participate in emergency response; others have dwindling numbers while Scarsdale has a strong volunteer group.

One of the most important issues for combination departments is the classification of the volunteers. We looked to large regional combination departments for guidance. Fairfax County in Virginia, Baltimore and Montgomery Counties in Maryland have established very active volunteer stations and apparatus which can be achieved in a consolidated Westchester district. For successful integration to occur, more collaborative input from the volunteers and subject departments is needed with the understanding that volunteers will remain attached to the houses in which they currently exist.

A workable classification system employed in other regional departments involves three (3) established levels: Associate, Exterior and Interior.

Associate Members – These volunteers are "social" members and will not be allowed to participate in emergency operations. They can participate in other aspects such as meetings and social events as well as non-emergency administrative projects, such as fire prevention education.

Exterior Members – These volunteers are permitted to respond to certain types of emergencies and assist in non-hazardous areas. In most departments this group represents at least 50% of all volunteers. This group is often not given specific duties and responsibilities, and they often appear to have little or no supervision.

We are proposing that the exterior members should be organized into more formal companies and give them specific support duties and responsibilities. We have identified a number of different functions that include but are not limited to the following:

- Mask Service Unit (MSU),
- Dewatering Unit (DU),
- Rehabilitation Unit (Rehab),
- Canteen Unit,
- Fire Police (Traffic Control),

These units would be assigned specialty apparatus, and the members would be trained to operate these units. The members would be required to respond with two (2) to ten (10) members (depending on the function) within 15 to 30 minutes. Specific training will be required for these functions. These units would respond to major emergencies both within the current department's area, as well as other areas in the district. They would be responsible for all aspects of the apparatus and equipment that is assigned to them.

Interior Members – These volunteers are permitted to respond to most emergencies and assist in hazardous areas. In most departments, this group represents about 30% of all volunteers. All interior members need to meet state mandated training and medical standards. This group often complains about not having specific duties and responsibilities, and that they do not get a chance to get on the nozzle and fight the fire.

A more prudent approach would have interior members organized around specific apparatus. In other words, if there is an active group in Station #3 of department "X", then assign an engine company to that group. Let them man it and be responsible for it. In some departments the volunteers currently do not operate apparatus. We are suggesting that they should and we will need to train them to drive and to pump. If they do not have enough members to man an engine, then maybe they need to be combined with another group that does not have enough members. If the interior members

want to participate, which we are encouraging, then we want them to be equal to career members.

In addition to operating an engine company, another function for interior certified volunteers, could be to operate a proper salvage company. This would still require the use of SCBA and other interior skills. A dedicated salvage company is something that does not exist anywhere in Westchester and would be of great use to this new department.

Obviously, more details need to be worked out as to how to make this a successful combination department. A consolidated district will need more input from the volunteers in each department to develop a complete strategic and operational plan.

Neighboring Departments

Since this study is based on NFPA 1710 which requires firefighters to be on-duty in the fire station (due to a 60 second responding on the rig requirement), departments that did not meet this criteria were not considered. An additional consideration was that departments needed to be geographically contiguous or nearly contiguous to be able to provide sufficient resources. This study does not close the door on departments neighboring the proposed consolidated district to be considered if it is determined beneficial to all parties.

White Plains Fire Department (WPFD) – WPFD determined that their city was best protected by the current model, a public safety model (Police and Fire Combined). They did express their commitment to make this process a success and have been cooperative throughout the study process.

Yonkers Fire Department (YFD) – YFD determined that their city was best protected by the current model, and merging would not improve fire protection in Yonkers. They express their commitment to make this process a success and would assist in any way they could.

The Town of Mamaroneck (TMFD) – TMFD was not considered during this study because of the department structure. TMFD could be a major component to a combined district, but initial assessments discovered it unlikely TMFD wanted to participate in the study.

Outside Pressures

During this study, we heard from a number of people that the *status quo* was sufficient. They were happy with the current system, or if they felt that the department was not receiving the resources (in personnel, equipment, structures, etc.), they should just “force” the political leadership into giving them what they felt they deserved. Of major concern is the lack of understanding that outside forces may change the way fire departments do business and that the political pressure for forced municipal service mergers is mounting. However, the results of this study pave a way for

consolidation to occur on the terms the career chiefs believe is in the best interest of the fire service, the public and the firefighters.

National examples of outside threats include property tax legislation and forced consolidation:

- California Proposition 13. In the mid 1980's the residents of the State of California had a ballot proposition designed to limit property tax increases. It passed overwhelmingly. The public never considered how it would affect services, only what effect it would have on taxes. In the last 20 years, all municipal services were cut and to maintain the same level of service, most of the fire departments "merged" into county fire authorities. These mergers did not improve service like this study outlines; they just helped to maintain them.

- Massachusetts Proposition 2½ - in the mid 1980's was Massachusetts Prop 2½. This ballot initiative passed and legally mandated a maximum annual property tax increase of no more than 2½ %. Home rule is at least as strong in the "Bay State" than in Westchester and the result was no departments consolidated. Instead, every year when the cost of running a department goes up (fuel, medical, salary's, etc.) the departments would just cut services, including personnel. Currently, the normal staffing in many suburban departments around Boston is one or two firefighters and no volunteers. Last year, a serious fire started across the street from one of Gloucester's Fire Stations. The community was outraged when they discovered that the ladder company only had one firefighter on it and he needed help from two police officer to raise a ground ladder to rescue a trapped resident. After the fire, when the public asked where were the rest of the firefighters, he answered they were laid off 20 years ago after prop 2½.

- New York State Proposals – This year and in previous year's former governors Pataki, Spitzer and Patterson unsuccessfully proposed that town law be modified to eliminate fire districts as a political entity. This would have forced the merging of Fairview, Greenville and Hartsdale under the control of the Town Supervisor and Town Board. In Eastchester the Board of Fire Commissioners would be disbanded and the department would be transferred to the town's control. While previously unsuccessful, it is expected that Albany will continue to propose this concept.

A California or Massachusetts style property tax relief has been circulating in Albany and appears to have growing support, particularly in upstate areas. While it has not made it out to either the floor of the legislature, as local property taxes continue to rise, the potential for this legislation increases.

New Rochelle experienced this style of tax cap for 14 years starting in the early 1990's. It resulted in reduced budgets, reduced manning, and delays in all capital projects. Either of these proposals or others like them will affect the departments in this study. They will be forced to change. This study exists to improve services and to put the fire protection in these 10 communities ahead of any potential mandates. There are no guarantees that the *status quo* can remain. The subject districts/departments have the unique opportunity and ability to craft a new and substantially improved entity set up in a way to work best for communities, the fire service and the members.

New York State's Role

This study was commissioned and funded through a NYS Legislative member item. Additionally, there exists additional funds to assist in consolidation efforts. So, the State has viewed municipal cooperation and consolidation efforts as a policy priority.

Since the creation of a consolidated department will need special state enabling legislation, the comitties involved need to consider additional items that would be beneficial. In addition to the legal issues raised in the previous section of this report, some other examples could include:

- Ability to bill end users for special services.
- Potential to use sales tax to lower the property tax.
- Converting pension plans, so they are similar. Making the benefit package fair for everyone.
- This district would be much larger and with a budget that's 10 times larger than any fire district in the state. Because of this we consider that a greater number of commissioners, each representing specific districts would be appropriate.
- Defining the role of the fire commissioners. It is believed that as an elected body they should be responsible for setting policy and approving the budget. Professional administrators shall be responsible for the day to day operations of the department.

This list is just a start and additional items need to be explored.

Mutual Aid and Regionalization

The creation of a consolidated department has several implications for the current mutual aid system, namely;

1. Mutual Aid will no longer exist between the departments that actually merge. Responses will be more seamless and the boundaries that exist today will no longer be there.

2. Currently, some departments cannot provide adequate mutual aid, due to limited manning. In other cases, departments outside the study area believe that they should not be providing aid, because some of their departments do not provide sufficient manning. A consolidated department creates more equalized strength and eliminates one of the criticisms for providing mutual aid.

3. What happens to mutual aid if one community ops out? Currently, if a community has a fire, they call and receive one to two units from each of its neighbors. For example, Pelham receives an engine and ladder from New Rochelle, Mt Vernon and Pelham Manor. They receive an engine or ladder from Eastchester and Greenville. That's a total of four (4) engines and four (4) ladders and at least 24 firefighters and officers. If all the departments around them merge, they will continue to get a similar level of mutual aid that they give or one (1) engine and one (1) ladder and a total of eight firefighters.

PROCESS MODEL FOR INCREASING FIRE SERVICES COOPERATION AND CONSOLIDATION

A seminal work in the field of enhanced cooperative fire services is provided by Retired Chief Jack W. Snook and Chief Jeffery D. Johnson, Cooperative Service Through Consolidations, Mergers, and Contracts: Making the Pieces Fit[73]. Snook and Johnson seek to demystify and guide the process of increasing cooperative efforts through an examination and presentation of all aspects of the process, from conception to effective execution. They examine the history of the trend of cooperation, differentiate between the types of cooperative efforts, help guide departments towards the path that is right for them, explain the keys to success, describe the pitfalls, and create a model for successful execution. The text provides a seven step process for the complicated act of merging or consolidating fire departments.

The *first step*, which Snook and Johnson label as "Getting Started," is initiated when fire chiefs come together in a cooperative effort to see if there is a way for them to improve efficiencies, effectiveness, or reduce costs through joining efforts. If such areas for improvement are identified it is then necessary to seek support and/or approval from higher authority or conduct further research. In instances where fire chiefs work directly with policy makers, Snook and Johnson advise chiefs to gain support from the officials before proceeding and to avoid unnecessary problems, they suggest not involving elected officials in the details until a proposal is prepared and for accountability purposes to be conservative with figures and timelines.

The *second step* of the process, as described by Snook and Johnson, deals with information and education. Once the proposal has been endorsed by the proper authorities, it is necessary and critical that all staff and personnel involved be thoroughly briefed on the process and informed on how transition/changes will impact them. Good, continuous communication on the progress of the plan must be practiced to ensure ownership, cooperation, and support at all levels.

In this step they explain that chiefs must be prepared for the media to get involved. For the best outcome, they urge chiefs with good relationships with media outlets to provide them with accurate information, potentially making them an effective ally.

The *third step* of the process as described by Snook and Johnson is a feasibility analysis (such as the type provided in this report), which seeks to validate the need and ability to consolidate or merge through the examination of the systems and resources possessed by the organizations involved. The analysis is most effective when focused on areas that have a high probability of being consolidated. Before examining the feasibility of a consolidation or merger, they suggest that objectives be clearly defined; helping to ensure everyone involved is working towards the same end.

[73] Snook, J.W. & Johnson, J.D. (1997). The Process of Merging and Consolidating. In M.J. Wagner (Ed.), *Cooperative Services Through Consolidations, Mergers and Contracts: Making the Pieces Fit.* (pp.57-64). West Linn, Oregon: ESCG.

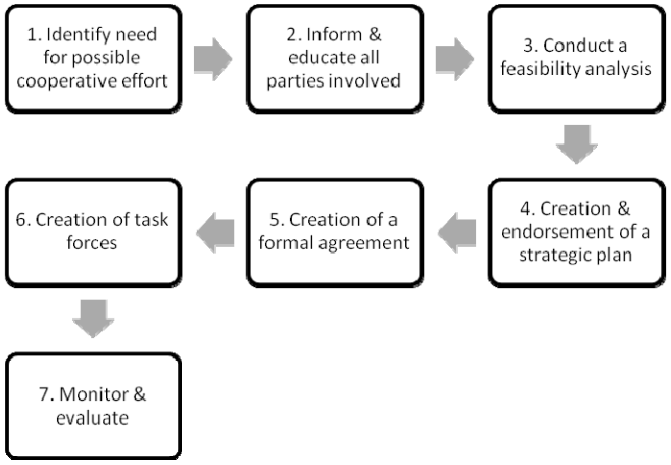
The *forth step* deals with the endorsing of a strategic plan. In order to develop a short-term strategic plan, helping to identify objectives and timelines, contact with elected officials must be established once again. At this time the process is often delayed or stalled. Clear communication and a strategic plan can act as tools to keep the project moving.

The *fifth step* highlighted by Snook and Johnson, is the creation of a formal agreement. Once a formal plan is completed and endorsed, all parties involved must formally agree to proceed with the consolidation or merger. Those having second thoughts have the opportunity to rethink their course of action or can choose not to participate any further, opting for independence. To help get through this step in the process, they suggest preparing cost/benefit reports, defining the strategic plan, and the utilization of strong leadership.

The *sixth step* expressed by Snook and Johnson, deals with the creation of task forces. Once a formal agreement is approved, chiefs' needs to create task forces, made up of members of each organization, with the goal of developing timelines and plans of action that correspond with the strategic plan. An assigned chairperson must clearly identify the group's goals, objectives, and membership needs and criteria. Final reports created by task forces must utilize common formats and timelines. It is important to adopt procedures that are accepted by all involved, in order for them to be properly and effectively utilized. To increase program efficiency, it is important to utilize the best aspects of what each organization involved has to offer. Through all of this it is important for the organizations involved not to lose sight of their overall mission, to serve the interest of the citizenry.

The *seventh step* of the process is what Snook and Johnson call "the final frontier". This step involves reviewing, monitoring, and adjusting the organization once the consolidation or merger is complete. They note that the first attempt of merging departments may not be perfect and may require further examination and ultimately retooling. It is important to keep restructuring until those involved are confident that the department(s) is properly structured, ultimately leading to the desired results. They suggest the use of open communication to help aid in this process.

Figure 1: Suggested Process for Consolidation/Merger



Source: Snook, J.W. & Johnson, J.D. (1997).

Moreover, Snook and Johnson highlight 10 *keys to success* for cooperative efforts of fire departments. These keys to success are (1) to educate and inform, (2) communication, (3) involving stakeholders, (4) maintaining an open-mind, (5) focusing on the mission of serving the citizenry, (6) identifying levels of service early in the process, (7) effectively utilizing task forces, (8) capitalizing on strengths, both individual and organizational, (9) patience, and (10) good timing.

Snook and Johnson stress that information and education are extremely important aspects to the success of cooperative efforts. They state that everyone must be thinking like-mindedly and approach the situation with an open mind. Fire chiefs need to dissect and examine their departments and act accordingly. Weaknesses and strengths must be identified and discussed. Past experiences must be built upon and used advantageously. It may be helpful to study and learn from instances of success of other departments, from both in and outside of the area. All this can help those involved to be aware of obstacles that may arise and devise plans to overcome or avoid them, saving much time and effort.

They state that both external and internal communications are crucial to the success of any consolidation or merger. They suggest that day-to-day communication be multiplied during a cooperative effort. Formal and informal communication must be used to ensure that everyone is kept up to speed on the process. Departments must figure out what means of communication work best and be consistent in their application. This can minimize rumors and resistance, helping the process to move more smoothly.

Snook and Johnson express the importance of having well educated, informed stakeholders involved in the process. Open and wide involvement in the development and design of the process can help to encourage the long-term success of the plan. Proponents who can help sell the proposal should be identified, provided with information, and involved in the process. All players involved should be invited to participate in the process, increasing the chance of endorsement.

Another suggestion is that the process focuses on the citizenry. Snook and Johnson suggest that those involved in the process continually ask “What is in the best interest of the citizens served?” They say that focusing on this question will lead to easier decision-making and make the overall process smoother.

It is stated that it is important to identify services and service levels early in the process, with the overall goal being to provide quality, cost effective services in an efficient and effective manner. Identifying services and service levels early will make goal oriented system design easier.

The experts emphasize the importance of personnel in process and encourage those involved to capitalize on department strengths. Through the creation of a new organizational structure, chiefs will have the to opportunity to capitalize on individual skills, strengths, and areas of expertise. In this period of transition it is important not to participate in what the authors call “position bargaining,” when resistance arises.

Snook and Johnson emphasis the use of task forces to help ensure the success of the process. Tasks forces allow for the creation of standardized systems, processes, and programs, ultimately avoiding

organizational confusion. It is important that task forces have clear leaders, scope of action, and plans for achieving specified goals.

The importance of patience throughout the process is heavily emphasized. The merger or consolidation process by nature is unlike any other project fire chiefs are involved in and will likely be the most time-consuming and difficult administrative activity of their careers. It is important that chiefs understand the length and difficulty of the project and have the commitment to see it through. The authors suggests that chiefs develop "victory lists," marking milestones helping to encourage and track progress and to communicate with others who have already been through the process, proving reassurance.

The positive and negative effects that timing can have on the process of consolidation is vital. The authors believe it is important to avoid commencing the process during periods of time or events that create a climate that might work against the cooperative efforts and to take advantage of timing that can be advantageous to the process.

Finally, Snook and Johnson stress that those in leadership roles must be champions of the process. They must emphasize professionalism and the importance of the participation of all those involved. To ensure success, it is important to rise above what the authors call the "big four" (turf, power, politics, and control) through trust, honesty, and accurate information. The creation of a single organizational culture must be achieved through the intermingling of people from the once separate departments.

However, as there are several success factors, Snook and Johnson point out that not all cooperative efforts are successful. Those involved in cooperative efforts face numerous obstacles, and to help ensure success, all obstacles must be addressed.

One common pitfall revolves around personalities and interpersonal dynamics. To overcome this, those involved must trust each other and foster good working relationships which requires open communication, a free flow of ideas, and a clear, consistent flow of accurate information.

One of the greatest pitfalls is a lack of vision, a situation where goals and objectives are not clearly defined from the start of the effort. This leads to a situation where it is difficult to gain definitive support for the process. To help avoid this situation, the authors suggest the creation of task forces with clear expectations and goals, helping to direct the efforts.

Another major pitfall is poor communication. It is imperative that employees, stakeholders, and elected officials are provided with accurate information and are fully informed on the process, helping to avoid damaging rumors and misinformation. To avoid poor communication, the authors suggest creating a written communications plan describing how to respond to questions and how to effectively disseminate accurate information.

Failure to include stakeholders in the process is another pitfall mentioned by the authors. This has the potential to create dissention in the process; while effectively including stakeholders can have the opposite effect. It is important to include stakeholders closest to the process such as, employees, volunteers, and oftentimes the media.

Another pitfall, which can be rather embarrassing if encountered, is when issues of deficient and poor staff work become apparent. To receive the support from key players and to avoid skepticism, all work must be accurate and complete.

Pitfalls stem from the financial and legal aspects of the process. In dealing with the finances it is important to present accurate, consistent information. It is important not to underestimate the projected timelines or overestimating the savings (be conservative with figures). A second financial pitfall is the over examination of minor financial details. It is important not to lose sight of improved efficiencies for the sake of focusing on minute financial details. In dealing with the legal aspects, it is important to make sure that cooperative efforts are not rendered impossible due to state and local statutes. Legislative solutions are available if such a situation arises, but they are often difficult to obtain.

The possible hidden agendas of those involved can act as a pitfall to the effort to consolidate or merge. Although those involved may have ulterior motives, flexibility is needed to find solutions that work for everyone and time is needed to work through these issues.

A final pitfall associated with cooperative efforts arises when there is a loss of focus in regards to the mission of fire departments. Throughout the process, there exists the tendency to lose focus on what is important, which is serving the citizenry. It may be necessary to consciously focus on continuing and improving upon effective and efficient service.

APPENDICES

Appendix A: Organization and Study Team

The Michaelian Institute's mission is to foster the improvement of public and not-for-profit sector management and policy. In pursuing this mission, the Institute has been responding since 1973 to the needs of public and not-for-profit organizations by conducting a variety of educational forums, such as conferences, policy seminars, supervised field visits/work, and management workshops. The Institute conducts government and community-based research entailing a variety of methods such as survey research, questionnaires, focus groups, and meta analyses.

The study team for this project consisted of:

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- **Barry Nechis,** BA, MPA (Candidate), EMT-P, Fire Captain, Paramedic Instructor, Office of Emergency Management and EMS Coordinator for the New Rochelle Fire Department.

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- **Michael A. Genito,** MBA, MPA**,** is a Research Associate of the Michaelian Institute and an Adjunct Professor with the Pace MPA Program.

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Appendix B: Staffing Scenarios

2005 - 07 Metro Fire Department Current Staffing											
	Eastchester	Fairview	Greenville	Hartsdale	Larchmont	Mt Vernon	New Rochelle	Pelham	Pelham Manor	Scarsdale	Total
Firefighters	58	36	24	28	10	110	125	11	12	40	454
Lieutenants	11	0	0	0	3	23	29	0	0	0	66
Captains	5	4	5	4	2	5	8	4	3	7	47
Deputy Chief	0	6	0	4	0	5	5	0	0	0	20
Asst. Chief	1	0	0	0	0	0	0	0	1	0	2
Chief	1	1	1	1	1	1	1	1	1	1	10
	76	47	30	37	16	144	168	16	17	48	599
Mechanic	2	0	0	1	1	1	2	0	0	0	7
Administrative	1.5	1	1	1	1	2	2.5	0	0	2	12
Dispatch	0	0	0	0	0	5	0	0	0	0	5
	3.5	1	1	2	2	8	4.5	0	0	2	24

The above chart shows the average number of employees in each department during 2005 - 2007

Option #1

Full Staffing (3 firefighter & 1 officer per apparatus) and minimal OT to cover contractual time off										
5.25		On-Duty Staffing/Per Unit			Min. On-Duty Staffing/Total			Total Staffing		
NFPA 1710	Vehicles	DC	Capt/Lt	FF	DC	Capt/Lt	FF	DC	Capt/Lt	FF
Engine	19	0	1	3	0	19	57	0	100	299
Ladder	12	0	1	3	0	12	36	0	63	189
Rescue	2	0	1	3	0	2	6	0	11	32
Command	4	1	0	1	4	0	4	21	0	21
					4	33	103	21	173	541
									Total	735

Based on 5.25 employees per position and minimal OT

	Chief	AC	DC	Capt	LT	FF			
Command	1	4	21	0	0	0			
Station Command	0	0	0	24	0	0			
Station Staff	0	0	0	0	149	541			
Training	0	0	1	2	2	2			
Dispatch	0	0	1	4	0	0			
Code Enforcement	0	0	1	3	0	0			
Fire Prevention	0	0	0	0	2	2			
Safety	0	0	1	4	2	0			
EMS	0	0	1	1	2	0			
Rescue /HM	0	0	1	2	2	2	Total	Current	Required
	1	4	27	40	159	547	**778**	599	1108+

This chart lists the staffing needed for each of the 19 engine companies, 12 ladder companies, 2 rescue companies and 4 command units, plus staff positions. It calculates the number of personnel needed to on-duty at all times (4 Deputy Chiefs, 33 Captains or Lieutenants and 103 Firefighters).

In the top left corner is the number 5.25 which is the number used to calculate the total number of employees needed if members work a 40 hour (approximate) work week. The contractual time off that needs to be covered requires 1.25 employees for every 4 employees assigned to apparatus. In this model no overtime is needed. An additional 179 uniformed personnel would be needed in this model (beyond what is currently employed). This chart reflects the 599 current Uniformed Employees and number of firefighters we are short if each department was to meet NFPA 1710 without consolidation. That number is listed as 1108+. The 1108 is what is needed for manning apparatus, an additional 30 to 45 positions are needed in support services (Training, Codes, Safety, etc.) that number is not as clear to calculate. In meeting NFPA 1710, this model will require 360 to 375 fewer firefighters than meeting NFPA 1710 without consolidation. This is a cost savings of approximately $55 million per year.

Option #2

Full Staffing (3 ff's & 1 officer per apparatus) & OT to cover all contractual time off										
4		On-Duty Staffing/Per Unit			Min. On-Duty Staffing/Total			Total Staffing		
NFPA 1710	Vehicles	DC	Capt/Lt	FF	DC	Capt/Lt	FF	DC	Capt/Lt	FF
Engine	19	0	1	3	0	19	57	0	76	228
Ladder	12	0	1	3	0	12	36	0	48	144
Rescue	2	0	1	3	0	2	6	0	8	24
Command	4	1	0	1	4	0	4	16	0	16
					4	33	103	16	132	412
Based on 4 employees per position and OT to cover contractual time off									Total	560

	Chief	AC	DC	Capt	LT	FF			
Command	1	4	16	0	0	0			
Station Command	0	0	0	24	0	0			
Station Staff	0	0	0	0	108	412			
Training	0	0	1	2	2	2			
Dispatch	0	0	1	4	0	0			
Code Enforcement	0	0	1	3	0	0			
Fire Prevention	0	0	0	0	2	2			
Safety	0	0	1	4	2	0			
EMS	0	0	1	1	2	0			
Rescue /HM	0	0	1	2	2	2	Total	Current	Required
	1	4	22	40	118	418	**603**	599	1108+

This chart lists the staffing needed for each of the 19 engine companies, 12 ladder companies, 2 rescue companies and 4 command units, plus staff positions. It calculates the number of personnel needed to on-duty at all times (4 Deputy Chiefs, 33 Captains or Lieutenants and 103 Firefighters).

In the top left corner is the number 4 which is the number used to calculate the total number of employees needed if members work a 40 hour (approximate) work week. The contractual time off that needs to be covered is not calculated in this model. It would need to be covered with overtime. This model is currently used by a number of departments since the cost for overtime is less than the cost for additional personnel salaries and benefits. An additional 4 uniformed personnel would still be needed in this model (beyond what is currently employed). This chart reflects the 599 current Uniformed Employees and number of firefighters we are short if each department was to meet NFPA 1710 without consolidation. That number is listed as 1108+. The 1108 is what is needed for manning apparatus, an additional 30 to 45 positions are needed in support services (Training, Codes, Safety, etc.) that number is not as clear to calculate. In meeting NFPA 1710, this model will require 535 to 550 fewer firefighters than meeting NFPA 1710 without consolidation. This is a cost savings of approximately $81 million per year.

Needed Civilian Positions		
Mechanic		6
Maintenance		6
Administrative	Administrative	See Below
	Chief's Secretary	1
	Board Secretary	1
	Payroll	1
	Purchasing	1
	Budget	1
	H.R. Benefits	1
	Accounts Payable	1
	Grant Manager	1
	EMS/DOH	1
	Training/Safety / ISO	1
	Fire Prevention	1
Code Enforcement		4
Dispatch		15
IT	IT	See Below
	Network Administration	2
	CAD Operations	1
	Tech Support	3
	GIS	1
	WEB	1
	Total	50

The mechanics will be responsible for maintaining a fleet of 130 vehicles. Currently this fleet is maintained by three full time and one part time mechanis plus three outside companies. The maintenance staff will be responsible for maintaining 25 fire stations and other facilities. Currently this is performed by other municipal departments and outside service companies. Positions needed include; general maintenance, electrical and plumbing. Administration staff includes; secretarial and financial staff to deal with the day to day administrative work for 600 to 700 personnel. The EMS, Training and Fire Prevention (FP) staff will be responsible for maintaining documentation for statutory requirements and field staff. Four Code Enforcement civilians are needed to perform new construction building review, inspection and specialty enforcement.

Currently four of the departments have dispatchers or firefighters assigned as dispatchers. Totaled, that's the equivalent of 24 personnel. The remaining departments utilize Westchester County Department of Emergency Services (DES) for dispatch. We believe that 15 civilian and 5 uniformed officers will be able to provide better continuity than what we currently receive and at a lower price. This will provide us with the number of dedicated, on-duty dispatchers that is required by ISO for improved insurance rates. Coordinated Information Technology (IT) services are invaluable to the efficient and effective delivery of emergency services. Currently we see a patchwork of services, including outside contracting and multiple part time services. We see a current lack of Geographic Information Systems (GIS or Mapping) and Computer Added Dispatch (CAD) Administration. These positions are critical to rapid response and minimizing the time needed to find an address.

Appendix C: Apparatus

Current Apparatus Count											
	Eastchester	Fairview	Greenville	Hartsdale	Larchmont	Mt Vernon	New Rochelle	Pelham	Pelham Manor	Scarsdale	Total
Engine	4	2	1	2	2	5	5	2	2	3	28
Spare Engine	1	1	1	1	1	2	2	0	0	1	10
Ladder	2	1	1	1	1	2	3	1	1	1	14
Spare Ladder	1	0	0	0	0	1	1	0	0	1	4
Rescue	0	1	1	0	1	1	1	0	0	0	5
Spare Rescue	0	0	0	0	0	1	0	0	0	0	1
Squad (Bus)	1	1	0	0	0	1	1	0	0	0	4
Command	1	1	1	1	1	1	2	0	0	1	9
Utility	3	2	0	1	0	1	5	0	0	0	12
Cars	4	2	2	1	2	5	8	2	1	5	32
Trailers	1	3	1	0	0	1	5	0	0	0	11
	18	14	8	7	8	21	33	5	4	12	130

The above list is the total fleet as currently operated by the 10 departments. Below is the list of apparatus in frontline service that would be needed. Spare and specialty apparatus is discussed below, but not in the same level of detail. The proposed apparatus list is based on the map study.

Proposed Apparatus				
	Engine	Ladder	Rescue	Command
Eastchester	3	2	0	1
Fairview	2	1	0	0
Greenville	1	1	0	0
Hartsdale	1	1	1	1
Larchmont	1	1	0	0
Mt Vernon	3	2	0	1
New Rochelle	5	2	0	1
Pelham	0	0	1	0
Pelham Manor	1	1	0	0
Scarsdale	2	1	0	0
Total	19	12	2	4

The proposed fleet requires 9 fewer frontline engines and one or two fewer spare engines, while it is unlikely that the current units would be eliminated, it is highly probable they would not be replaced. Current cost for a fully equipped engine is approximately $550,000 so the total savings would be about $5.5 million. There would be two fewer frontline ladders. Replacement cost is between $800,000 for a straight ladder and $1,200,000 for a tower ladder (plus equipment). Two (2) fewer Rescues at $600,000 each. There are approximately 10 cars more than would be needed. The potential fleet reduction would save $1,689,500 per year. Additional savings in insurance and maintenance would need to be considered. An additional savings of $20,000 - $40,00 per vehicle (approximately $75,000 per year) will be realized due to fleet purchasing discounts.

	Engine	**Tower Ladder**	**Ladder**	**Rescue**
Current	28	9	5	5
Annual Purchased	3	1	1	0.33
Cost each	$535,000	$1,200,000	$875,000	$650,000
Annual Cost	$1,605,000	$1,200,000	$875,000	$214,500
Current Annual Cost				$3,894,500

	Engine	**Tower Ladder**	**Ladder**	**Rescue**
Proposed	19	7	5	2
Annual Purchased	2	0.6	0.4	0.1
Cost each	$535,000	$1,200,000	$875,000	$650,000
Annual Cost	$1,070,000	$720,000	$350,000	$65,000
Current Annual Cost				$2,205,000

Annual cost savings: $1,689,500

Appendix D: General Municipal Law § 207-a Cases by Community

Eastchester: Has one (1) member on 207-a and eight (8) members awaiting a determination from the state as to their status.

Fairview: Has six (6) members on 207-a

Greenville: Has two (2) members on 207-a and one (1) member awaiting a determination from the state as to their status.

Hartsdale: Has one (1) member on 207-a

Larchmont: Has one (1) member on 207-a

Mt. Vernon: Has twenty-three (23) members on 207-a and five (5) members awaiting a determination from the state as to their status.

New Rochelle: Has nineteen (19) members on 207-a and four (4) members awaiting a determination from the state as to their status.

Pelham: Has one (1) member on 207-a and one (1) member awaiting a determination from the state as to their status.

Pelham Manor: Has one (1) member on 207-a

Scarsdale: Has one (1) member on 207-a

Note:All 207-a obligations end when the member reaches the normal retirement age (62 or 70 years old, based on which retirement plan)

Appendix E: Status of Stations by Community

Eastchester

Sta. #	Location	Community	Status	Housing Needs
#1	255 Main Street	Eastchester	Good	None
#2	25 Underhill Avenue	Tuckahoe	Good, needs new ramp	None
#3	Midland Avenue	Bronxville	Some structural floor work	None
#4	10 Oregon Avenue	Chester Hgts.	Major structural work needed	Needs expansion from 2 to 4 ff's
#5	Wilmot Road	Eastchester	Renovation Needed	Needs expansion from 4 to 6 ff's plus DC space

Fairview

Sta. #	Location	Community	Status	Housing Needs
#1	19 Rosemont Boulevard	Fairview	Needs Major Work	Needs one add. officer space
#2	170 Worthington Road	Fairview	Needs Replacement	None

Greenville

Sta. #	Location	Community	Status	Housing Needs
HQ	711 Central Avenue	Greenville	Newly Renovated, needs brick pointing	None

Hartsdale

Sta. #	Location	Community	Status	Housing Needs
#1	25 So. Central Avenue	Hartsdale	Work in Progress, May need door expanded.	Has 4 ff & 1 off, needs 6 ff, 2 off.
#2	300 W. Hartsdale Avenue	Hartsdale	Newly Renovated	None

Larchmont

Sta. #	Location	Community	Status	Housing Needs
HQ	120 Larchmont Avenue	Larchmont	Good	Needs expansion from 3 to 8 ff's

This building is part of village hall, court and police dept.

Mt. Vernon

Sta. #	Location	Community	Status	Housing Needs
#1	470 E. Lincoln Avenue	Mt. Vernon	Needs Replacement	None
#2	So. Fulton Avenue	Mt. Vernon	Needs Renovations	None
#3	3rd Street	Mt. Vernon	Needs HVAC	None
#4	Oak Street	Mt. Vernon	Major Structural issues	None

New Rochelle

Sta. #	Location	Community	Status	Housing Needs
#1	45 Harrison Street	New Rochelle	Needs painting & general work	None
#2	145 Webster Avenue	New Rochelle	Needs Structural Floor Work, Door Widening	None
#3	746 North Avenue	New Rochelle	Minor Cosmetic, Floor Sealing	None
#4	155 Drake Avenue	New Rochelle	Minor Cosmetic, Basement Sealing/Moisture Control	None
#5	456 Stratton Road	New Rochelle	Minor Cosmetic, Painting	None

Pelham

Sta. #	Location	Community	Status	Housing Needs
HQ	5th Avenue	Pelham	Needs Renovations	None

Pelham Manor

Sta. #	Location	Community	Status	Housing Needs
HQ	4 Penfield Place	Pelham Manor	Needs Plymo Vent, cosmetic.	Needs expansion from 4 to 8 ff's

This building is part of village hall, court and police dept.

Scarsdale

Sta. #	Location	Community	Status	Housing Needs
#HQ	50 Tomkins Road	Scarsdale	Unsound, work scheduled	None
#1	Popham Road (1001 Post Road)	Scarsdale	Needs structural work (apparatus floor & apron). New roof	None
#3	56 Crossway	Scarsdale	Restricted vertical clearance. Addition planned.	None

Sta. #1 is part of police dept.

Larchmont, Pelham Manor and Scarsdale's Headquarters are all part of municipal offices, police and/or court facilities, and as such they cannot be transferred to the new district, however, they could be leased.

Of the 25 fire stations we estimate, based on what has been spent in other communities to repair or replace old fire stations currently we need $45.5 million to bring all buildings up to safe and energy efficient buildings. This does not include the current needs for expansion that will no longer be an issue under consolidated services.

Under the consolidation plan approximately $19 million worth of work does not need to be done.

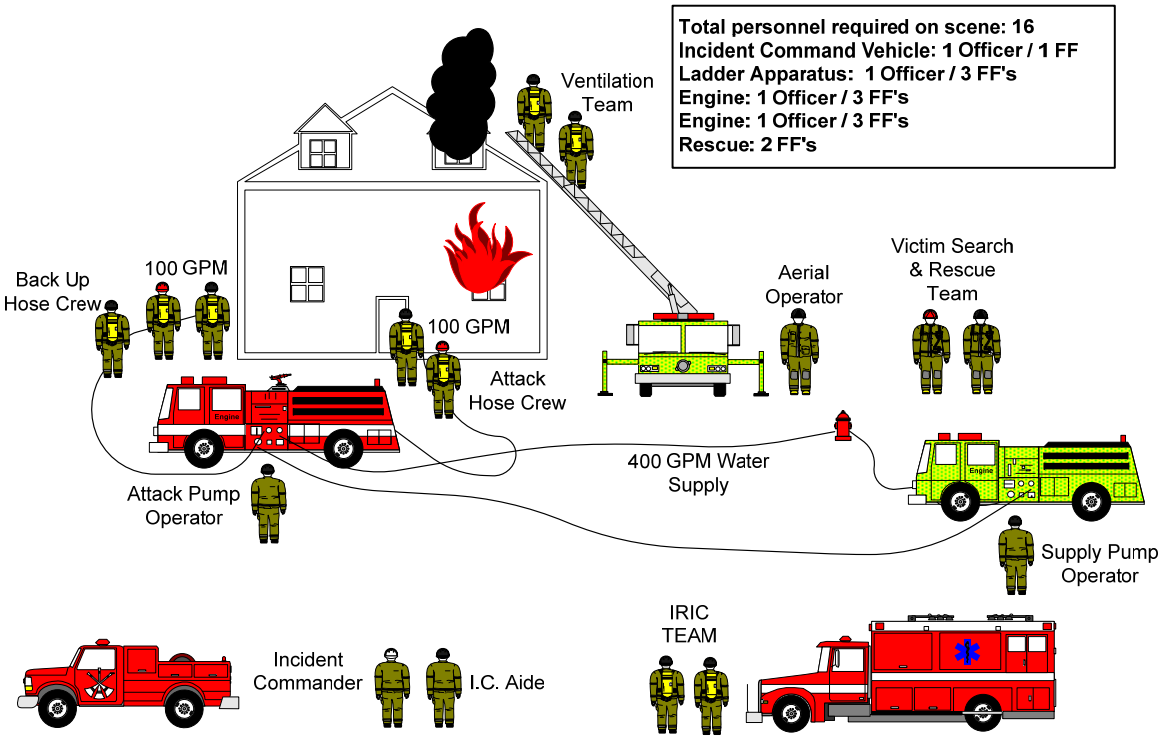
Appendix F: Why So Many Firefighters on a First Alarm?

Some of our departments respond with as few as one engine and one ladder. Some with as few as three firefighters. Why do we need more?

ISO requires at least two engines and one ladder or one rescue on every structure fire (regardless of how minor). They require a minimum of 12 firefighters and 1 incident commander (chief). They base the number of apparatus on 4 firefighters (including a company officer) on each. They do not consider the life safety of either civilians or firefighters. There rating is based on property conservation only.

NFPA 1710 requires a minimum of 16 firefighters and officers responding to a fire in a structure that is smaller than 95% of the structures that exist in Southern Westchester. But 1710 lays out a format for evaluating manpower needs on the fire ground. This is shown below along with a description of our manpower needs.

5.2.3.2.2 Initial Full Alarm Assignment Capability Deployed Within 8 Minutes



a.	Incident Commander*	1 ff	e.	SAR Team	2 ff
b.	Pump Operator	1 ff	f.	Vent Team	2 ff
c.	Attack & Backup Lines	4 ff	g.	Aerial Operator	1 ff
d.	Line Support/Hydrant etc.	2 ff	h.	IRIC Team	2 ff
* (5.2.1.2.5) IC shall have an aid assigned & is not counted in the above numbers				Total	16 ff's

For a working fire, this list does not include a Safety Officer and two additional firefighters to upgrade the IRIC to the required FAST team. The aerial operator needs to be two firefighters if the unit is a tower ladder. Eight (8) of our sixteen (16) ladders are tower ladders.

Note: This manning is based on a structural fire in a typical 2,000 ft², two story, and single-family occupancy without a basement and with no exposures. (NFPA 1710 A.5.2.3.2.1). This is smaller than 99% of the structures we respond to.

Metro Response Proposal: 1st Alarm Job Descriptions

Job	Roll	# of FF's	Unit Assigned
Incident Commander	Manages Resources	1 DC	Command Car
Chiefs Aid	FF Accountability /Communications	1 FF	Command Car
Pump Operator #1	Runs attack fire pump	1 FF	1st Engine
Pump Operator #2	Runs supply fire pump	1 FF	2nd Engine
Attack Lines	Attacks Fire	1 FF, one Lt	1st Engine
Backup Lines	Protects Attack Line & Exposures	1 FF, one Lt	2nd Engine
Line Support/Hydrant etc.	Stretches Hose, Attaches to Hydrant	1 FF 1 FF	1st Engine 2nd Engine
SAR Team (fire floor)	Searches for Victims	1 FF, one Lt	1st Ladder
SAR Team (floor above)	Searches for Victims	1 FF, one Lt	2nd Ladder
Vent Team	Vents heat & smoke	2 FF's	1st Ladder
Aerial Operator	Ladders the building	2 FF's	2nd Ladder
FAST Team	Prepares to Rescue Firefighters	3 FF's, one Lt	Rescue

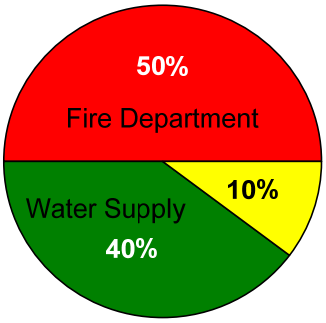
Note: This level of manning only provides the capability to search and rescue 2-4 victims. If it is determined to be a working fire, a 2nd Chief would be dispatched to handle the roll of Safety Officer. For larger buildings additional units will be needed immediately. This chart should clearly indicate why the current manning and unit assignments are substandard.

Appendix G: Insurance Service Office (ISO)

The ISO Public Protection Classification (PPC) is an objective review of those features of available public fire protection that have significant influence on minimizing damage once a fire has occurred. Notice that ISO does not consider Life Safety Issues! These issues are covered in NFPA 1710.

ISO evaluates and assigns an overall percentage in the following three categories:

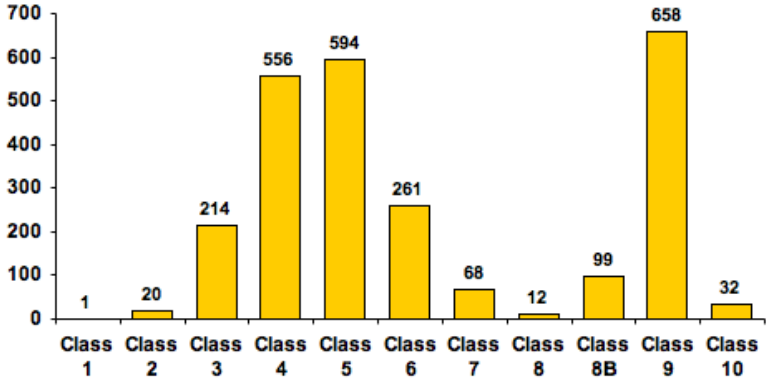
Communications 10%
Water Supply 40%
Fire Department 50%



Communications>

ISO then calculates the difference between water supply and the fire department and makes adjustments. This Adjustment is called Divergence and it is worth 20% (sometimes for and sometimes against).
All 34,000 Fire Departments in the U.S. are rated by the Insurance Service Organization. They rate on a 1–10 scale with 1 the best and 10 is no fire department. This rating is the primary factor in setting fire insurance premiums. Less than 55 departments are rated #1. For private residential properties NYS is one of the few states that group the numbers. PPC 1-3 is a residential "A", 4-6 is a "B" and 7-10 is a "C". Thus improving from a three to a two may not result in any savings. ISO is trying to get NYS to change this policy as we are one of only three states that does this.

In NYS the ratings are broken down as follows:



The rating is performed like an open book test and the score determines the rating. For the 10 departments, those with a PPC two scored between 80 and 90%, PPC three scored between 70 and 80% and those with a PPC four between 60 and 70%.

ISO's rating system is the oldest fire service standard. The ISO standard is only concerned with limiting property damage and does not concern itself with life safety. Studies have indicated that departments with better ratings have reduced death and injury rates of both fire service personnel and civilians.

Financial Incentive

Fire Protection is the ONLY municipal service where improved capability can result in savings to taxpayers through reduced property insurance premiums.

Improvements in PPC help in economic development. It is an indicator of a community's commitment to the Fire Department.

In 1997 New Rochelle improved from a PPC three to a PPC 2. Developer Louis Cappelli had just completed the construction of New Roc City. He advised the city that the ISO improvement reduced his premiums by $40,000 per year. That reduction did not include the insurance savings to each of the businesses that are located in this building.

Potential Insurance Savings based on improved ISO ratings

Listed below are the potential savings in each community in this study. The basic property information was obtained from the Tax Assessor in each community whenever possible. In a few cases information was gathered from U.S. Census information. In the case of Fairview, Greenville, Hartsdale and Scarsdale, the local assessors do not maintain property value data (which was needed to calculate insurance premiums), so in those cases we used the average values found in Eastchester, Larchmont, New Rochelle, Pelham and Pelham Manor. We believe these should be relatively accurate in portraying the values. Mt. Vernon information was only available in regards to private and multiple dwelling. Once we have additional information on the commercial buildings we will amend the figures for them.

Financial Overview:

The ten (10) fire departments currently protect 46,104 single and two family homes and 10,995 commercial properties[74]. The average values are $987,423 for the single and two family homes and $1,447,330 for commercial properties. The total property values are $39,893,837,371 for the single and two family homes and $14,948,273,091 for commercial properties[75]. The total property value protected by the fire departments in this study is $54,842,110,462[76] or about 55 million dollars.

Under consolidation the new district would easily become a PPC #2. This would reduce residential property insurance by $1,177,601 per year in three of the communities and an additional $13,777,072 per year for commercial properties in eight of the communities[77].

[74] Excluding Mt. Vernon commercial properties.
[75] Ibid
[76] Ibid
[77] Additional savings for Mt Vernon have not been included, due to lack of data from Mt Vernon.

Within three years the consolidated department should be able to improve to an ISO PPC #1. All components would exist excluding documentation, which would require this time frame to develop. With an ISO PPC #1 the commercial properties would save an additional $16,370.396 per year. This is a total insurance premium savings of $30,147,467 per year for commercial properties in all 10 communities[78].

If the NYS Department of Insurance changes to the full range ISO for residential properties (which ISO believes they will) the residential property owners in the 10 communities should see an annual reduction of $3,808,570 for PPC #2 and an additional $13,041,084 for PPC #1 or a total of $16,849,654.

Under consolidation the potential cost savings for insurance premiums would be approximately $47 million dollars per year.

ISO #2 Savings		ISO #1 Savings	
Residential	Commercial	Residential	Commercial
$3,808,570	$13,777,072	$13,041,084	$16,370,396
Total ISO #2	$17,585,642		
Total ISO #1	$29,411,480		
Total Both:	$46,997,121		

Note: These figures do not include Mount Vernon Commercial Savings

Note: These figures assume residential savings based on NYS Insurance changes

Without the state changes $15 million is the minimum savings expected with potential improvements of an additional $16 million within three (3) years.

There is a fair amount of controversy as to the amount of savings associated with changes in ISO PPC levels. Savings listed are based on ISO's suggested savings and different insurance companies may give different savings from one another and are an average found from previous savings in this region. It has been commonly found that local insurance agents downplay these savings, in a few cases until they are formally questioned. Unfortunately, the actual savings are only found in the year following a PPC change, the study group believes that these numbers represent the best estimate we can establish.

[78] Ibid

Eastchester has an ISO Public Protection Class (PPC) of 3.

Eastchester has 1,655 properties that are rated as commercial with an average resale value of $1,335,692 and a total resale value of $2,210,570,260.

Eastchester has 6,517 properties with private dwellings. They have an average resale value of $914,944 and a total resale value of $5,962,690,048

The current estimate of insurance premiums is as follows:

Commercial Properties: The average annual premiums are $4,966 with 178 properties the estimated annual commercial premiums are $883,901.

Residential Properties: The average annual premiums are $2,699 with 1,604 properties the estimated annual residential premiums are $4,280,687.

With an improvement to an ISO #2, the commercial savings would be between 16% and 40% or $658 to $1,646 per property, or an average total savings of $2,451,080 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building. This improvement would reduce residential rates by approximately 8% or $160 per home. This is an average town wide savings of $1,039,893 per year, if the state adopts the full range ISO for residential properties. This does not include tenants insurance which is impossible to calculate. Under consolidation the property owners in the Town of Eastchester would save between **$2,451,080 to $4,726,953** in annual premiums, plus additional savings on merchandise and tenants premiums.

If we were to improve that to an ISO #1 the commercial savings would be an additional 8% or a total savings to commercial properties in the town of $2,647,167 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building.

If NYS Department of Insurance changes to the full range ISO for residential properties (which ISO believes they will) each residential property owner in Eastchester should see an annual reduction of approximately $319 per year or a town wide savings of $2,079,786 per year. This does not include renters insurance, which there is no way to calculate the savings value.

Fairview has an ISO Public Protection Class (PPC) of 3.

Fairview has 1,947 properties that are rated as commercial with an average resale value of $1,702,741[79] and a total resale value of $3,315,236,727.

Fairview has 3,798 properties with private dwellings. They have an average resale value of $1,174,294[80] and a total resale value of $4,459,968,612

The current estimate of insurance premiums is as follows:

Commercial Properties: The average annual premiums are $5,244 with 1,947 properties the estimated annual commercial premiums are $10,210,929.

Residential Properties: The average annual premiums are $2,560 with 3,798 properties the estimated annual residential premiums are $4,459,968,612.

With an improvement to an ISO #2, the commercial savings would be between 16% and 40% or $839 to $2,098 per property, or an average total savings of $3,675,934 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building. This improvement would reduce residential rates by approximately 8% or $205 per home. This is an average district wide savings of $777,819 per year, if the state adopts the full range ISO for residential properties. This does not include tenants insurance which is impossible to calculate. Under consolidation the property owners in the Fairview Fire District would save between **$3,675,934 to $5,525,646** in annual premiums, plus additional savings on merchandise and tenants premiums.

If we were to improve that to an ISO #1 the district of $3,970,009 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building.

If NYS Department of Insurance changes to the full range ISO for residential properties (which ISO believes they will) each residential property owner in Fairview should see an annual reduction of approximately $410 per year or a district wide savings of $1,555,637 per year. This does not include renters insurance, which there is no way to calculate the savings value.

[79] The Town of Greenburgh Assessor's Office does not maintain these figures. This figure is based on the average property values in (Eastchester, Larchmont, New Rochelle, Pelham and Pelham Manor).
[80] Ibid

Greenville has an ISO Public Protection Class (PPC) of 4.

Greenville Fire District has 504 properties that are rated as commercial with an average resale value of $1,702,741[81] and a total resale value of $858,181,464.

Greenville has 1,884 properties with private dwellings. They have an average resale value of $1,174,294[82] and a total resale value of $2,212,369,896.

The current estimate of insurance premiums is as follows:

Commercial Properties: The average annual premiums are $5,244 with 504 properties the estimated annual commercial premiums are $2,643,199.

Residential Properties: The average annual premiums are $2,560 with 1,884 properties the estimated annual residential premiums are $4,822,966.

With an improvement to an ISO #2, the commercial savings would be between 16% and 40% or $839 to $2,098 per property, or an average total savings of $1,268,735 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building. This improvement would reduce residential rates by approximately 8% or $205 per home. This is an average district wide savings of $417,573 per year. If the state adopts the full range ISO for residential properties that would double to $835,146. This does not include tenants insurance which is impossible to calculate. Under consolidation the property owners in the Greenville Fire District would save between **$1,686,308 to $2,205,381** in annual premiums, plus additional savings on merchandise and tenants premiums.

If we were to improve that to an ISO #1 the commercial savings would be an additional 8% or a total savings to commercial properties in the district of $1,307,234 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building.

If NYS Department of Insurance changes to the full range ISO for residential properties (which ISO believes they will) each residential property owner in Greenville should see an annual reduction of approximately $410 per year or a district wide savings of $835,147 per year. This does not include renters insurance, which there is no way to calculate the savings value.

[81] The Town of Greenburgh Assessor's Office does not maintain these figures. This figure is based on the average property values in (Eastchester, Larchmont, New Rochelle, Pelham and Pelham Manor).
[82] Ibid

Hartsdale has an ISO Public Protection Class (PPC) of 3

Hartsdale Fire District has 2,158 properties that are rated as commercial with an average resale value of $1,702,741[83] and a total resale value of $3,674,515,078.

Hartsdale has 2,273 properties with private dwellings. They have an average resale value of $1,174,294[84] and a total resale value of $2,669,170,262.

The current estimate of insurance premiums is as follows:

Commercial Properties: The average annual premiums are $5,244 with 2,158 properties the estimated annual commercial premiums are $11,317,506.

Residential Properties: The average annual premiums are $2,560 with 2,273 properties the estimated annual residential premiums are $5,818,791.

With an improvement to an ISO #2, the commercial savings would be between 16% and 40% or $839 to $2,098 per property, or an average total savings of $4,074,302 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building. This improvement would reduce residential rates by approximately 8% or $205 per home. This is an average district wide savings of $465,503per year, if the state adopts the full range ISO for residential properties. This does not include tenants insurance which is impossible to calculate. Under consolidation the property owners in the Hartsdale Fire District would save between **$4,074,302 to $5,331,254** in annual premiums, plus additional savings on merchandise and tenants premiums.

If we were to improve that to an ISO #1 the commercial savings would be an additional 8% or a total savings to commercial properties in the district of $4,400,247 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building.

If NYS Department of Insurance changes to the full range ISO for residential properties (which ISO believes they will) each residential property owner in Hartsdale should see an annual reduction of approximately $410 per year or a district wide savings of $931,007 per year. This does not include renters insurance, which there is no way to calculate the savings value.

[83] The Town of Greenburgh Assessor's Office does not maintain these figures. This figure is based on the average property values in (Eastchester, Larchmont, New Rochelle, Pelham and Pelham Manor).
[84] Ibid

Larchmont has an ISO Public Protection Class (PPC) of 3

The Village of Larchmont has 133 properties that are rated as commercial with an average resale value of $2,225,600 and a total resale value of $296,004,800.

Larchmont has 1,582 properties with private dwellings. They have an average resale value of $1,260,431 and a total resale value of $1,994,001,842.

The current estimate of insurance premiums is as follows:

Commercial Properties: The average annual premiums are $6,855 with 133 properties the estimated annual commercial premiums are $911,695.

Residential Properties: The average annual premiums are $2,748 with 1,582 properties the estimated annual residential premiums are $4,346,924.

With an improvement to an ISO #2, the commercial savings would be between 16% and 40% or $1,097 to $2,742 per property, or an average total savings of $328,210 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building. This improvement would reduce residential rates by approximately 8% or $220 per home. This is an average district wide savings of $603,048 per year, if the state adopts the full range ISO for residential properties. This does not include tenants insurance which is impossible to calculate. Under consolidation the property owners in the Village of Larchmont would save between **$328,210 to $971,205** in annual premiums, plus additional savings on merchandise and tenants premiums.

If we were to improve that to an ISO #1 the commercial savings would be an additional 8% or a total savings to commercial properties in the village of $275,697 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building.

If NYS Department of Insurance changes to the full range ISO for residential properties (which ISO believes they will) each residential property owner in Larchmont should see an annual reduction of approximately $440 per year or a district wide savings of $695,508 per year. This does not include renters insurance, which there is no way to calculate the savings value.

Mt. Vernon has an ISO Public Protection Class (PPC) of 3.

Mt. Vernon has 1,691 properties that are rated as multiple dwellings, which would be insured as commercial structures. At this time we do not have the number of commercial buildings without residential components. This number is substantial to the total amount of insurance in Mt. Vernon. Those that we do have information on have an average resale value of $851,371 and a total resale value of $1,439,667,516.

Mt. Vernon has 9,745 properties with private dwellings. They have an average resale value of $479,874 and a total resale value of $4,676,372,130.

The current estimate of insurance premiums is as follows:

Commercial Properties: The average annual premiums are $2,622 with 1,691 properties the estimated annual commercial premiums are $4,434,176.

Residential Properties: The average annual premiums are $1,046 with 9,745 properties the estimated annual residential premiums are $10,194,491.

With an improvement to an ISO #2, the commercial savings would be between 16% and 40% or $420 to $1,049 per property, or an average total savings of $1,596,303 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building. This improvement would reduce residential rates by approximately 8% or $84 per home. This is an average district wide savings of $815,559 per year, if the state adopts the full range ISO for residential properties. This does not include tenants insurance which is impsiable to calculate. Under consolidation the property owners in the City of Mt. Vernon would save between **$1,596,303 to $3,355,127** in annual premiums, ***not including the savings on thousands of commercial buildings for which the data is currently unavailable*.** Plus additional savings on merchandise and tenants premiums.

If we were to improve that to an ISO #1 the commercial savings would be an additional 8% or a total savings to commercial properties in the city of $1,724,008 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building.

If NYS Department of Insurance changes to the full range ISO for residential properties (which ISO believes they will) each residential property owner in Mt. Vernon should see an annual reduction of approximately $167 per year or a City wide savings of $1,631,119 per year. This does not include renters insurance, which there is no way to calculate the savings value. Based on the savings seen in other communities, Mt. Vernon's savings should be double what is being reported here.

New Rochelle has an ISO Public Protection Class (PPC) of 2.

New Rochelle has 2,506 properties that are rated as commercial with an average resale value of $1,070,014 and a total resale value of $2,681,456,207.

New Rochelle has 11,567 properties with private dwellings. They have an average resale value of $739,269 and a total resale value of $8,551,131,250

The current estimate of insurance premiums is as follows:

Commercial Properties: The average annual premiums range from $3,296 to $6,602 with 2,506 properties the annual commercial premiums range from $8,258,881 to $16,544,612.

If we were to improve that to an ISO #1 the savings would be about 8% or $264 to $528 per property, or a total savings of $660,710 to $1,323,569 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building.

If NYS changes to the full range ISO for residential properties (which ISO believes they will): The average annual premiums are $1,612 with 11,567 properties the annual premiums are $18,641,466. If ISO improvement were accepted by the NYS Department of Insurance the savings would average $128.93 per house or $1,491,316. This does not include renters insurance, which there is no way to calculate the savings value.

Pelham has an ISO Public Protection Class (PPC) of 4

Pelham has 178 properties that are rated as commercial with an average resale value of $1,146,821 and a total resale value of $204,134,132.

Pelham has 1,604 properties with private dwellings. They have an average resale value of $778,063 and a total resale value of $1,248,013,636

The current estimate of insurance premiums is as follows:

Commercial Properties: The average annual premiums are $4,966 with 178 properties the estimated annual commercial premiums are $883,901.

Residential Properties: The average annual premiums are $2,699 with 1,604 properties the estimated annual residential premiums are $4,280,687.

With an improvement to an ISO #2, the commercial savings would be between 16% and 40% or $795 to $1,986 per property, rr a total savings of $141,424 to $353,560 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building. This improvement would reduce residential rates by approximately 8% or $185 to $214 per home. This is a village wide savings of $296,528 to $342,455 per year. This does not include tenants insurance which is impossible to calculate. Under consolidation the property owners in the Village of Pelham would save $437,952 to $694,015 in annual premiums, plus additional savings on merchandise and tenants premiums.

If we were to improve that to an ISO #1 the commercial savings would be an additional 8% or a total savings to commercial properties in the village of $152,738 to $382,845 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building.

If NYS Department of Insurance changes to the full range ISO for residential properties (which ISO believes they will) each residential property owner in Pelham should see an annual reduction of $428 per year or a village wide savings of $684,910 per year. This does not include renters insurance, which there is no way to calculate the savings value.

Pelham Manor has an ISO Public Protection Class (PPC) of 4

Pelham Manor has 166 properties that are rated as commercial with an average resale value of $1,032,837 and a total resale value of $171,451,000.

Pelham Manor has 1,515 properties with private dwellings. They have an average resale value of $1,004,468 and a total resale value of $1,521,768,700.

The current estimate of insurance premiums is as follows:

Commercial Properties: The average annual premium per property is $4,472 with 166 properties the total annual commercial premiums cost $742,383.

Residential Properties: The average annual premiums per property is $3,445 with 1,604 properties the total annual residential premiums cost is $5,219,667.

With an improvement to an ISO #2, the commercial savings would be between 16% and 40% or $716 to $1,789 per property, or a total savings of $118,781 to $296,953 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building. This improvement would reduce residential rates by approximately 8% or $276 per home. This is a village wide savings of $417,573 per year. This does not include tenants insurance which is impossible to calculate. Under consolidation the property owners in the Village of Pelham Manor would save $536,355 to $714,526 in annual premiums, plus additional savings on merchandise and tenants premiums.

If we were to improve that to an ISO #1 the commercial savings would be an additional 8% or a total savings to commercial properties in the village of $128,284 to $320,709 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building.

If NYS Department of Insurance changes to the full range ISO for residential properties (which ISO believes they will) each residential property owner in Pelham Manor should see an annual reduction of $551 per year or a village wide savings of $835,147 per year. This does not include renters insurance, which there is no way to calculate the savings value.

Scarsdale has an ISO Public Protection Class (PPC) of 2.

The Village of Scarsdale has 57 properties that are rated as commercial with an average resale value of $1,702,741 and a total resale value of $97,056,237.

Scarsdale has 5,619 properties with private dwellings. They have an average resale value of $1,174,294 and a total resale value of $6,598,357,986.

The current estimate of insurance premiums is as follows:

Commercial Properties: The average annual premiums are $5,244 with 57 properties the estimated annual commercial premiums are $298,933.

Residential Properties: The average annual premiums are $2,560 with 5,619 properties the estimated annual residential premiums are $6,598,357,986.

Since Scarsdale is already an ISO #2, there are no additional commercial savings. If the state adopts the full range ISO for residential properties an additional $205 per residence or a village wide savings of $1,150,754 could be realized. This does not include tenants insurance which is imposiable to calculate. Under consolidation the property owners in the Village of Scarsdale would only see savings when the ISO one was achieved.

If we were to improve that to an ISO #1 the commercial savings would be an additional 8% or a total savings to commercial properties in the village of $27,741 per year. This does not include insurance on merchandise or other material stored within the building, which may be worth more than the building.

If NYS Department of Insurance changes to the full range ISO for residential properties (which ISO believes they will) each residential property owner in Scarsdale should see an annual reduction of approximately $410 per year or a district wide savings of $2,301,507 per year. This does not include renters insurance, which there is no way to calculate the savings value.

The consolidation would result in all 10 communities becoming an ISO PPC #2 and would clearly position the new department to become an ISO PPC #1 within 3 to 5 years (The time needed to establish the ISO documentation needed).

Appendix H: The Cost of Fire Protection

The Water Supply
+
The Fire Department
+
Building Construction & Code Enforcement
+
Fire Insurance

These 4 components add up to the total cost of fire protection.

If you spend more in one category another category drops,
often the drop can be more than the additional cost.

Example #1:

Adding automatic fire sprinklers to single family dwelling causes the insurance premium to drop. Generally the savings equal the sprinkler cost after seven years. If the structure has a 30 year mortgage, the owner will have spent less for 23 years because of the sprinklers. Since most buildings last far longer, after the buildings 7^{th} year it's all savings.

Example #2:

Improving the fire department may cost millions, but the savings on the insurance often offsets the Fire Department's cost, sometimes by 5 to 10 times.

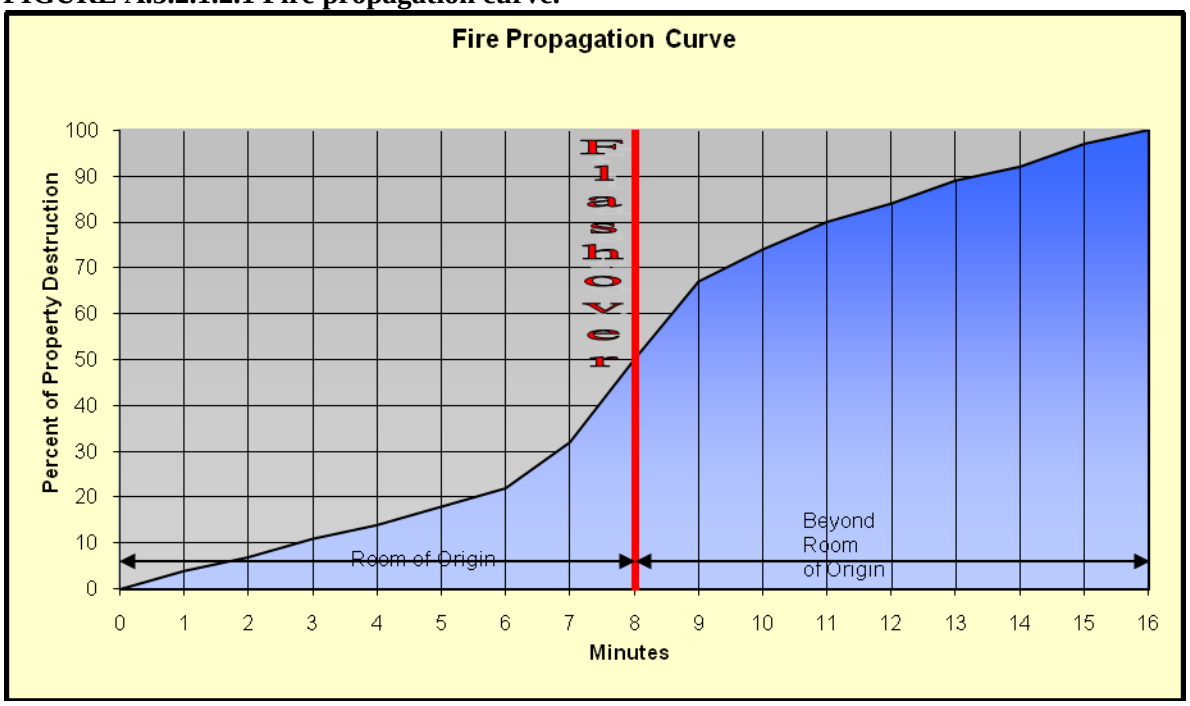
Example #3:

Failing to inspect your water supply to the AWWI (American Water Works Institute) standards may save the cost of hiring an inspector, but it can drop the insurance rating and cost the community millions of dollars.

Appendix I: NFPA 1710 Excerpts

5.2.1.2.1* The fire department shall identify minimum company staffing levels as necessary to meet the deployment criteria required in 5.2.3 to ensure that a sufficient number of members are assigned, on duty, and available to safely and effectively respond with each company.

FIGURE A.5.2.1.2.1 Fire propagation curve.



A.5.2.1.2.1 An early aggressive and offensive primary interior attack on a working fire, where feasible, is usually the most effective strategy to reduce loss of lives and property damage. In Figure A.5.2.1.2.1 the line represents a rate of fire propagation, which combines temperature rise and time. It roughly corresponds to the percentage of property destruction. At approximately 10 minutes into the fire sequence, the hypothetical room of origin flashes over. Extension outside the room begins at this point. Consequently, given that the progression of a structural fire to the point of flashover (i.e., the very rapid spreading of the fire due to superheating of room contents and other combustibles) generally occurs in less than 10 minutes, two of the most important elements in limiting fire spread are the quick arrival of sufficient numbers of personnel and equipment to attack and extinguish the fire as close to the point of its origin as possible. For more information, refer to *Fire Service Today*, "Reduced Staffing: At What Cost," and NIST, "Hazard I Fire Hazard Assessment Method." Also, refer to National Fire Academy, "Fire Risk Analysis: A Systems Approach," and Office of the Ontario Fire Marshal, *Shaping the Future of Fire Ground Staffing and Delivery Systems Within a Comprehensive Fire Safety Effectiveness Model.*

The ability of adequate fire suppression forces to greatly influence the outcome of a structural fire is undeniable and predictable. Data generated by NFPA provides empirical data that rapid and aggressive interior attack can substantially reduce the human and property losses associated with structural fires *(see Table A.5.2.1.2.1)*.

Table A.5.2.1.2.1 Fire Extension in Residential Structures 1994–1998

	Rate per 1000 Fires		
Extension	**Civilian Deaths**	**Civilian Injuries**	**Dollar Loss per Fire**
Confined to the room of origin	**2.32**	**35.19**	**3,185**
Beyond the room but confined to the floor of origin	**19.68**	**96.86**	**22,720**
Beyond the floor of origin	**26.54**	**63.48**	**31,912**

Note: Residential structures include dwellings, duplexes, manufactured homes (called mobile homes), apartments, row houses, townhouses, hotels and motels, dormitories, and barracks.
Source: *NFPA Annual Fire Experience Survey and National Fire Incident Reporting Syste*m.

5.2.1.2.2 Each company shall be led by an officer who shall be considered a part of the company.

5.2.1.2.3* Supervisory chief officers shall be dispatched or notified to respond to all full alarm assignments.

A.5.2.1.2.3 The assignment of specific response districts to command officers should be based on the number of companies, workload, and response distances. Department administrative procedures should indicate clearly the jurisdiction of command officers.

5.2.1.2.4 The supervisory chief officer shall ensure that the incident management system is established as required in Section 6.2.

5.2.1.2.5* Supervisory chief officers shall have staff aides deployed to them for purposes of incident management and accountability at emergency incidents.

A.5.2.1.2.5 For further information on staff aides, see 3.3.37.

5.2.2.1 Fire companies whose primary functions are to pump and deliver water and perform basic fire fighting at fires, including search and rescue, shall be known as engine companies.

5.2.2.1.1 These companies shall be staffed with a minimum of four on-duty personnel.

5.2.2.1.2 In jurisdictions with tactical hazards, high hazard occupancies, high incident frequencies, geographical restrictions, or other pertinent factors as identified by the authority having jurisdiction, these companies shall be staffed with a minimum of five or six on-duty members.

5.2.2.2 Fire companies whose primary functions are to perform the variety of services associated with truck work, such as forcible entry, ventilation, search and rescue, aerial operations for water delivery and rescue, utility control, illumination, overhaul, and salvage work, shall be known as ladder or truck companies.

5.2.2.2.1 These companies shall be staffed with a minimum of four on-duty personnel.

5.2.3.1.1 The fire department's fire suppression resources shall be deployed to provide for the arrival of an engine company within a 4-minute response time and/or the initial full alarm assignment within an 8-minute response time to 90 per-cent of the incidents as established in Chapter 4.

5.2.3.2.1* The fire department shall have the capability to deploy an initial full alarm assignment within an 8-minute response time to 90 percent of the incidents as established in Chapter 4.

A.5.2.3.2.1 For the purposes of this standard, the initial full alarm assignment capability is for a response to a structural fire in a typical 264 m two (2000 ft two), two-story, single-family occupancy without a basement and with no exposures (detached home). All communities respond to fire incidents in this type of structure on a regular basis and therefore the hazards presented by this scenario are not unusual. Other occupancies and structures in the community that present greater hazards should be addressed by additional fire fighter functions and additional responding personnel on the initial full alarm assignment. For further information on the classification of hazards, see NFPA *Fire Protection Handbook*, 18th edition.

5.3.3.4.2 The fire department's EMS for providing first responder with AED shall be deployed to provide for the arrival of a first responder with AED company within a 4-minute response time to 90 percent of the incidents as established in Chapter 4.

NFPA 1710 is clearly based on many previous studies of fire ground manning for both safety of responders and effectiveness of fire suppression and rescue efforts. All of these studies, including, but not limited to, Dallas, Providence, Columbus, Phoenix, Seattle, American Insurance Association, ISO, International Fire Chiefs, International Association of Fire Fighters and the International City/County Managers Association all agree that manning levels are the key to fire ground safety and survival. This proposal gives a greater margin of safety and allows to either meet or justify the additional resources (beyond those proposed) that are needed to meet NFPA 1710.

Appendix J: Accreditation

In 1986 the International Association of Fire Chiefs (IAFC) and the International City-County Management Association (ICMA) met to develop the concepts for continuous improvement of the fire service industry. Ten (10) years later the IAFC and the ICMA executed an agreement and declaration of trust for the Commission on Fire Accreditation International Inc. (CFAI). This commission was created to award accreditation to fire and emergency service agencies and to pursue scientific research and educational purpose in the public interest. In 2006 the corporation name was changed to the Center for Public Safety Excellence (CPSE). The Commission on Fire Accreditation International became an entity under the CPSE.

The process of Accreditation is a very complex undertaking that looks at all aspects in the administration of the fire service. It is designed as an all encompassing review that uses a strategic self-assessment, followed by an outside inspection, which is geared toward continuous quality improvement and enhancement of service delivery. The two most critical components are the transition from tactical deployment of resources (the current model in Westchester) to strategic response and the concept of Standards of Cover. Standards of Cover look at how fire departments deploy their resources, and how they cover subsequent requests for service. This study solidly addresses the first issue and starts to look into the second. Prior to this study, only minimal work has been done on the first and none of the departments have addressed the second issue except to hope that mutual aid will manage to cover it.

None of the departments in this study are currently accredited, and excluding New Rochelle, none have the ability to become accredited in the near future. Accreditation can result in lower liability insurance costs for the departments. In addition the Insurance Service Office (ISO) is considering including accreditation in its formula for the Public Protection Classification (PPC) System, which as previously detailed determines the insurance premium rates for property owners.

Appendix K: Possible Organizational Structure for a Consolidated District