THE EFFICIENCY AND EFFECTIVENESS OF
FIRE AND EMERGENCY MEDICAL SERVICES
CITY OF NEW ROCHELLE, NEW YORK

Prepared by:
Public Safety Solutions, Inc.
Public Safety Management Consultants
Fire & EMS Division
106 Schooner Way, Suite 110
Chester, Maryland 21619
(301-580-1900)
November 20, 2013

Mr. Charles B. Strome, III
City Manager
City of New Rochelle
515 North Avenue
New Rochelle, NY 10801

Dear Mr. Strome:

I am pleased to submit with this letter our Report on the Fire and Emergency Medical Services Study of the Fire Department, City of New Rochelle, New York.

The Study Team would like to acknowledge the excellent cooperation that we received from City officials and the members of the New Rochelle Fire Department. If you have any questions relative to this Fire and Emergency Medical Services Study, please contact my office.

Sincerely,

[Signature]

Leslie D. Adams
President
# CONTENTS

## TABLE OF FIGURES

CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>xv</td>
</tr>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>E-1</td>
</tr>
<tr>
<td>CHAPTER ONE — INTRODUCTION</td>
<td></td>
</tr>
<tr>
<td>THE SETTING</td>
<td>1</td>
</tr>
<tr>
<td>History of the City</td>
<td>1</td>
</tr>
<tr>
<td>New Rochelle Today</td>
<td>1</td>
</tr>
<tr>
<td>CITY GOVERNANCE</td>
<td>4</td>
</tr>
<tr>
<td>NEW ROCHELLE FIRE DEPARTMENT</td>
<td>4</td>
</tr>
<tr>
<td>Mission Statement</td>
<td>5</td>
</tr>
<tr>
<td>Fire Chief/Commissioner</td>
<td>5</td>
</tr>
<tr>
<td>Current Position Structure</td>
<td>6</td>
</tr>
<tr>
<td>Sworn Workforce</td>
<td>6</td>
</tr>
<tr>
<td>Civilian Staff</td>
<td>6</td>
</tr>
<tr>
<td>NRFD Staffing</td>
<td>6</td>
</tr>
<tr>
<td>Fire Department Budget Totals</td>
<td>7</td>
</tr>
<tr>
<td>Grants</td>
<td>7</td>
</tr>
<tr>
<td>CURRENT FIRE STATION LOCATIONS</td>
<td>8</td>
</tr>
<tr>
<td>NRFD Apparatus</td>
<td>10</td>
</tr>
<tr>
<td>STUDY METHODOLOGY</td>
<td>10</td>
</tr>
<tr>
<td>Fire Department Accreditation</td>
<td>10</td>
</tr>
<tr>
<td>Standards and Accepted Practices</td>
<td>12</td>
</tr>
<tr>
<td>STUDY COMPONENTS</td>
<td>13</td>
</tr>
<tr>
<td>City Risk Assessment</td>
<td>13</td>
</tr>
<tr>
<td>Fire Service Operations</td>
<td>13</td>
</tr>
<tr>
<td>Emergency Medical Services</td>
<td>14</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
</tr>
<tr>
<td>CHAPTER TWO — FIRE DEPARTMENT ORGANIZATION</td>
<td></td>
</tr>
<tr>
<td>OVERVIEW</td>
<td>15</td>
</tr>
<tr>
<td>ACCEPTED PRINCIPLES AND PRACTICES—ORGANIZATION</td>
<td>16</td>
</tr>
<tr>
<td>NFPA 1201 - Standard for Developing Fire Protection Services</td>
<td>16</td>
</tr>
<tr>
<td>CFAI Governance and Administration Criteria</td>
<td>17</td>
</tr>
</tbody>
</table>
## Contents

APPARATUS AND EQUIPMENT POLICIES AND PROCEDURES................................. 181
OPTIONS AND RECOMMENDATIONS .................................................................. 184

### CHAPTER SIX — OPERATIONS, COMMUNICATIONS & ISO

INTRODUCTION ........................................................................................................... 186
THE FIRE PROBLEM .................................................................................................. 187
    A “Snapshot” of National Fire Data ................................................................. 188
NEW YORK FIRE PROBLEM .................................................................................. 189
NEW ROCHELLE FIRE DEPARTMENT WORKLOAD ANALYSIS ....................... 190
EMERGENCY MANAGEMENT .................................................................................. 196
    New Rochelle Emergency Management ............................................................ 196
    Emergency Management Operations Planning ............................................... 197
    Emergency Management — Operations ............................................................ 198
    Emergency Management — Training ............................................................... 198
    Suggested Emergency Management Upgrades ................................................. 199
        Planning ........................................................................................................ 199
        Operations ................................................................................................... 199
        Training ....................................................................................................... 200
    Resource Documents ....................................................................................... 200
SPECIAL OPERATIONS SERVICES ....................................................................... 200
    Overview of Special Operations Services ......................................................... 201
    Hazardous Materials Response .......................................................................... 202
    Vehicle Extrication Service ................................................................................ 204
    Technical Rescue Services ................................................................................ 204
        Confined-Space Rescue ................................................................................ 205
        Trench Collapse Rescue .............................................................................. 205
    The Westchester Special Operations Task Force .............................................. 206
    Technical Rescue Training ................................................................................ 207
    Summary of Special Operations ....................................................................... 207
COMMUNICATIONS AND DISPATCH .................................................................... 208
    Communication Center Objectives .................................................................... 210
    Cascade of Events and Performance Measures ................................................ 212
    Organization and Management for Communication Centers ......................... 216
        Approaches to Model Dispatch Center Organization .................................... 216
Radio Systems ............................................................................................................ 217
   Typical Radio System Configurations ................................................................. 217
   800MHz Trunking System ................................................................................... 218
   New Rochelle Radio System ............................................................................. 220
   New Rochelle Fire and EMS Dispatch ............................................................... 221

INSURANCE SERVICES OFFICE REVIEW ...................................................................... 222
   Insurance Services Office .................................................................................. 222
   ISO Fire Suppression Rating Schedule ............................................................... 222
   The Assessment .................................................................................................. 223
   Receiving and Handling Fire Alarms ................................................................. 223
   Fire Department Operations ............................................................................. 223
   Water Supply ..................................................................................................... 224
   Summary of ISO ................................................................................................ 224

SUMMARY .................................................................................................................... 224

OPTIONS AND RECOMMENDATIONS ........................................................................... 226

CHAPTER SEVEN — EMERGENCY MEDICAL SERVICES

OVERVIEW .................................................................................................................... 227
COMMISSION ON FIRE ACCREDITATION INTERNATIONAL (CFAI) .......................... 229
HISTORY OF EMS IN THE FIRE SERVICE .............................................................. 230
THE MODERN EMS AGENCY .................................................................................. 232
THE IDEAL CHAIN OF SURVIVAL EVENTS ........................................................... 232
HISTORY OF EMS IN NEW ROCHELLE ............................................................... 234
NEW ROCHELLE EMS MODEL .............................................................................. 236
   Discontinuing Fire EMT Service Delivery ......................................................... 237
NEW ROCHELLE EMS ISSUES .............................................................................. 238
   Reduced Fire Apparatus Response on Non-Life-Threatening Calls .................. 238
   Day-to-Day Transcare Oversight ........................................................................ 239
   Use of Per Diem Staff by Transcare ................................................................... 239
   Private EMS Services Contracts ...................................................................... 239

SUMMARY .................................................................................................................... 241
OPTIONS AND RECOMMENDATIONS ........................................................................... 242
CHAPTER EIGHT — FIRE AND RESCUE TRAINING

OVERVIEW OF FIRE SERVICES TRAINING ................................................................. 243
  Commission on Fire Accreditation International (CFAI) ........................................ 245
NATIONAL TRAINING STANDARDS AND PROGRAMS ........................................ 247
  National Professional Qualifications System ...................................................... 247
  National Fire Academy ...................................................................................... 248
STATE TRAINING PROGRAMS .............................................................................. 249
  Medical Qualification ........................................................................................ 250
  Minimum Annual In-Service Training ............................................................... 250
  Apparatus Operators ....................................................................................... 251
  Fire Officers ...................................................................................................... 252
  Additional Fire Officer Training ......................................................................... 253
  Instructor Training ............................................................................................ 254
  EMS Training .................................................................................................... 254
NEW ROCHELLE FIRE DEPARTMENT TRAINING .................................................. 255
  NRFD Training Officer ...................................................................................... 256
  Training Records ............................................................................................. 257
  Training Certifications ...................................................................................... 258
  Firefighter Training .......................................................................................... 259
  Command Officer Training ............................................................................... 261
  Incident Management Training ........................................................................ 261
  Skill Maintenance Training ............................................................................... 262
  Performance-Based Measurements ................................................................... 262
  Interoperability Training .................................................................................. 266
  Driver Operator Training .................................................................................. 266
  Training Facilities ............................................................................................. 267
SUMMARY ............................................................................................................... 268
OPTIONS AND RECOMMENDATIONS ................................................................. 271

CHAPTER NINE — HEALTH AND SAFETY

OVERVIEW ............................................................................................................... 273
  Commission on Fire Accreditation International (CFAI) .................................... 274
NATIONAL FALLEN FIREFIGHTER SAFETY INITIATIVES ..................................... 275
NATIONAL STANDARDS AND REGULATIONS .................................................. 277
  OSHA Regulations ........................................................................................... 277
  National Standards .......................................................................................... 278
COMPLIANCE WITH STANDARDS AND REGULATIONS ........................................ 278
  NFPA 1500 ................................................................................................. 279
  Fire Department Administration ................................................................. 279
  Training and Education .............................................................................. 285
  Fire Apparatus, Equipment and Driver/Operators ...................................... 286
  Protective Clothing and Equipment ............................................................ 288
  Emergency Operations ............................................................................... 289
  Facility Safety ......................................................................................... 291
  Medical and Physical Requirements ......................................................... 292
    Member Assistance and Wellness Program ............................................... 294
SUMMARY ...................................................................................................... 295
OPTIONS AND RECOMMENDATIONS ............................................................ 297

CHAPTER TEN — FIRE PREVENTION
BACKGROUND ................................................................................................ 300
CFAI FIRE PREVENTION/LIFE SAFETY CRITERIA .................................... 302
  State of New York ...................................................................................... 302
  City of New Rochelle – Fire Department and Chief of the Fire Department ... 304
  Code of the City of New Rochelle ............................................................. 305
NRFD FIRE PREVENTION/INVESTIGATION ................................................. 306
  Permit Fees Required ................................................................................ 307
NRFD PLANS REVIEW .................................................................................. 308
  Code of the City of New Rochelle– Inspections ....................................... 309
  NRFD Property Inspections ...................................................................... 310
    Inspections by “In-Service” Fire Companies ......................................... 311
FIRE INVESTIGATION ...................................................................................... 314
  CFAI Fire Investigation Criteria ................................................................. 314
  Code of the City of New Rochelle – Investigations ................................... 315
    Fire Investigation Organization and Staffing ......................................... 316
  Fire Investigation Response and Workload .............................................. 318
LIFE AND FIRE SAFETY PUBLIC EDUCATION .......................................... 322
  CFAI Public Education Criteria ................................................................. 322
  Public Education - Generally ................................................................. 323
  NRFD Life and Fire Safety Education Program ....................................... 323
  Public Fire and Life Safety Education ................................................... 324
    Community Risk Reduction Components & Fundamentals .................. 324
NRFD RISK REDUCTION DATA COLLECTION AND ANALYSIS .................. 325
# Contents

PROPOSED RE-ORGANIZATION OF THE NRFD FIRE PREVENTION/RISK REDUCTION PROGRAM ............................................................. 326
- Deputy Chief-Fire Marshal ............................................................... 327
- Administrative Aide ........................................................................ 328
- Code Enforcement ......................................................................... 328
- Fire Investigations ....................................................................... 329
- Public Education .......................................................................... 329
SUMMARY ......................................................................................... 330
OPTIONS AND RECOMMENDATIONS .................................................. 332

CHAPTER ELEVEN — COOPERATIVE SERVICES PROVISION
CITIZENS’ PANEL ON SUSTAINABLE BUDGETS ........................................... 335
POTENTIAL COOPERATIVE SERVICES BENEFITS ........................................... 336
OPTIONAL LEVELS OF COOPERATIVE SERVICES ........................................ 337
FUNCTIONAL CONSOLIDATION ................................................................. 337
- Basic Region-Wide Functional Consolidation .................................... 338
  - Emergency Dispatching ............................................................... 338
  - Training Facility & Programs ..................................................... 339
  - Hazardous Materials Service Provision ..................................... 340
- Functional Consolidation of Adjacent Fire Services ......................... 340
  - Automatic Mutual Aid ............................................................... 341
- Fire Prevention Functions ............................................................... 341
- Provision of Incident Command .................................................... 342
- Standard Incident Operating Procedures ....................................... 342
- Apparatus Dispatch Assignments ................................................... 343
- Availability of Reserve Apparatus .................................................... 343
- Apparatus Type ............................................................................ 343
- Cooperative Provision of Training .................................................. 344
- Pre-Fire Plan Development and Use ............................................... 344
- Fire Safety Education .................................................................... 345
  - Joint Purchasing in Quantity ....................................................... 345
CONTRACTUAL COOPERATIVE SERVICES ................................................ 345
FULL FIRE SERVICES DELIVERY AGENCY CONSOLIDATION ....................... 349
  - Fiscal Impact — Savings ............................................................. 349
COOPERATIVE FIRE SERVICES INITIATIVES IN NEW YORK STATE ............ 350
  - It Does Not Have To Be “All Or Nothing” .................................... 352
FIRE SERVICES IMPROVEMENT BENEFITS ............................................. 352
COOPERATIVE SERVICES IMPLEMENTATION.....................................................353
SUMMARY ....................................................................................................................353
OPTIONS AND RECOMMENDATIONS.................................................................354

CHAPTER TWELVE — BLUEPRINT FOR THE FUTURE
EMPLOYEE AND STAKEHOLDER PARTICIPATION............................................357
CITIZENS’ PANEL ON SUSTAINABLE BUDGETS ..............................................357
ABILITY TO PAY ............................................................................................................357
TIMING ...........................................................................................................................358
REVIEW OF THE STUDY ............................................................................................358
STUDY OPTIONS AND RECOMMENDATIONS ..................................................359
UPGRADING THE NRFD ORGANIZATION .........................................................359
ACCREDITATION .........................................................................................................361
POTENTIAL OBSTACLES .........................................................................................361
RESPONSIVENESS TO THE COMMUNITY .........................................................361
ANTICIPATED OUTCOMES .......................................................................................361
FISCAL IMPACTS .........................................................................................................362
CUSTOMER ORIENTATION .....................................................................................363
SUGGESTED TIMELINE ............................................................................................363
ANNUAL UPDATES ....................................................................................................363
QUALITY OF PERSONNEL .......................................................................................363

CHAPTER THIRTEEN — OPTIONS AND RECOMMENDATIONS .................366

APPENDIX A — POLICIES AND PROCEDURES FORM ...................................A-1
APPENDIX B — POLICIES AND PROCEDURES POLICY .................................B-1
APPENDIX C — STATUS OF DEVELOPMENT OF SOPs .................................C-1
# TABLE OF FIGURES

**CHAPTER ONE — INTRODUCTION**
- Figure 1.1: City of New Rochelle Fire Dept. Study Base Map ........................................... 3
- Figure 1.2: New Rochelle Fire Department—FY 2013 Staffing Summary .......................... 7
- Figure 1.3: NRFD Approved Budgets for Past 4 Years .................................................... 7
- Figure 1.4: NRFD Grants—FY2007 to FY2013 ............................................................. 8
- Figure 1.5: New Rochelle Fire Stations & Apparatus ....................................................... 8
- Figure 1.6: New Rochelle Fire Station Locations ......................................................... 9
- Figure 1.7: Summary of Apparatus Type ................................................................. 10

**CHAPTER TWO — FIRE DEPARTMENT ORGANIZATION**
- Figure 2.1: Table of Organization — New Rochelle Fire Department ......................... 29
- Figure 2.2: Alternative Organization Chart ............................................................ 41

**CHAPTER THREE — FIRE SERVICE APPARATUS STAFFING**
- Figure 3.1: Total Firefighter/Officer Complement ..................................................... 55
- Figure 3.2: Total Platoon Firefighter/Officer Complement ......................................... 56
- Figure 3.3: NRFD Overtime Expenditures for the Past Six Years .............................. 59

**CHAPTER FOUR — RISK ANALYSIS AND FACILITIES**
- Figure 4.1: New Rochelle Fire Stations & Apparatus ................................................. 70
- Figure 4.2: City Skyline ............................................................................................ 71
- Figure 4.3: City of New Rochelle Fire Dept. Study Base Map .................................. 72
- Figure 4.4: Population Growth History .................................................................... 73
- Figure 4.5: Population Density ................................................................................. 74
- Figure 4.6: Current Population by Age Group ......................................................... 75
- Figure 4.7: Population Change ................................................................................. 76
- Figure 4.8: Housing by Occupancy ......................................................................... 77
- Figure 4.9: Housing Occupancy Changes ............................................................... 77
- Figure 4.10: City Fire Stations .................................................................................. 79
- Figure 4.11: ISO Engine Distance .......................................................................... 81
- Figure 4.12: ISO Ladder Distance and Multi-Storied Buildings ............................... 83
- Figure 4.13: ISO Ladder Distance and Large Area Buildings .................................. 84
- Figure 4.14: Comparative Response by Risk .......................................................... 85
- Figure 4.15: Land-Use Risk ...................................................................................... 86
- Figure 4.16: Target Risks ......................................................................................... 87
- Figure 4.17: Flashover Comparison ......................................................................... 89
- Figure 4.18: Travel Time Extent ............................................................................ 92
- Figure 4.19: Current First Alarm Assembly ............................................................. 94
- Figure 4.20: Service Demand .................................................................................. 96
- Figure 4.21: Service Demand Intensity ................................................................ 97
## Table of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.22</td>
<td>Historic Service Demand</td>
<td>98</td>
</tr>
<tr>
<td>4.23</td>
<td>Department Workload by Month of Year</td>
<td>99</td>
</tr>
<tr>
<td>4.24</td>
<td>Department Workload by Day of Week</td>
<td>100</td>
</tr>
<tr>
<td>4.25</td>
<td>Workload by Hour of Day 2012</td>
<td>101</td>
</tr>
<tr>
<td>4.26</td>
<td>Workload Differences Day/Night 2012</td>
<td>102</td>
</tr>
<tr>
<td>4.27</td>
<td>Concurrent Calls</td>
<td>103</td>
</tr>
<tr>
<td>4.28</td>
<td>2012 Unit Workload</td>
<td>104</td>
</tr>
<tr>
<td>4.29</td>
<td>Response Time Performance</td>
<td>106</td>
</tr>
<tr>
<td>4.30</td>
<td>Structure Fire Hourly Response Time</td>
<td>108</td>
</tr>
<tr>
<td>4.31</td>
<td>Critical Medical Response Time Performance</td>
<td>109</td>
</tr>
<tr>
<td>4.32</td>
<td>Mutual Aid To Other Jurisdictions by Type and Year</td>
<td>111</td>
</tr>
<tr>
<td>4.33</td>
<td>Mutual Aid by Jurisdiction 2012</td>
<td>111</td>
</tr>
<tr>
<td>4.34</td>
<td>Mutual Aid by All Types to Other Jurisdictions 2012</td>
<td>112</td>
</tr>
<tr>
<td>4.35</td>
<td>Closest Mutual Aid Travel Time Coverage</td>
<td>113</td>
</tr>
<tr>
<td>4.36</td>
<td>Mutual Aid Request Order for NRFD</td>
<td>115</td>
</tr>
<tr>
<td>4.37</td>
<td>Yonkers FD Mutual Aid Travel Capability</td>
<td>116</td>
</tr>
<tr>
<td>4.38</td>
<td>Greenville FD Mutual Aid Travel Capability</td>
<td>118</td>
</tr>
<tr>
<td>4.39</td>
<td>Eastchester FD Mutual Aid Travel Capability</td>
<td>119</td>
</tr>
<tr>
<td>4.40</td>
<td>White Plains FD Mutual Aid Travel Capability</td>
<td>120</td>
</tr>
<tr>
<td>4.41</td>
<td>Population Projections</td>
<td>123</td>
</tr>
<tr>
<td>4.42</td>
<td>Estimated Future Workload</td>
<td>125</td>
</tr>
<tr>
<td>4.43</td>
<td>Apparatus Reduction Table</td>
<td>126</td>
</tr>
<tr>
<td>4.44</td>
<td>ISO Distance Without Ladder In Station 1</td>
<td>128</td>
</tr>
<tr>
<td>4.45</td>
<td>First Alarm Assembly Without Ladder In Station 1</td>
<td>129</td>
</tr>
<tr>
<td>4.46</td>
<td>ISO Distance Without Ladder In Station 2</td>
<td>130</td>
</tr>
<tr>
<td>4.47</td>
<td>First Alarm Assembly Without Ladder In Station 2</td>
<td>131</td>
</tr>
<tr>
<td>4.48</td>
<td>ISO Distance without Ladder in Station 3</td>
<td>133</td>
</tr>
<tr>
<td>4.49</td>
<td>First Alarm Assembly Without Ladder In Station 3</td>
<td>134</td>
</tr>
<tr>
<td>4.50</td>
<td>ISO Distance with Only Ladder In Station 3</td>
<td>135</td>
</tr>
<tr>
<td>4.51</td>
<td>Loss of Ladder Performance Table</td>
<td>136</td>
</tr>
<tr>
<td>4.52</td>
<td>First Response Extent with Station 1 Closed</td>
<td>138</td>
</tr>
<tr>
<td>4.53</td>
<td>ISO Engine Distance with Station 1 Closed</td>
<td>139</td>
</tr>
<tr>
<td>4.54</td>
<td>First Alarm Assembly with Station 1 Closed</td>
<td>140</td>
</tr>
<tr>
<td>4.55</td>
<td>First Response Extent with Station 2 Closed</td>
<td>142</td>
</tr>
<tr>
<td>4.56</td>
<td>ISO Engine Distance with Station 2 Closed</td>
<td>143</td>
</tr>
<tr>
<td>4.57</td>
<td>First Alarm Assembly with Station 2 Closed</td>
<td>144</td>
</tr>
<tr>
<td>4.58</td>
<td>First Response Extent with Station 3 Closed</td>
<td>146</td>
</tr>
<tr>
<td>4.59</td>
<td>ISO Engine Distance with Station 3 Closed</td>
<td>147</td>
</tr>
<tr>
<td>4.60</td>
<td>First Alarm Assembly with Station 3 Closed</td>
<td>148</td>
</tr>
<tr>
<td>4.61</td>
<td>First Response Extent with Station 4 Closed</td>
<td>150</td>
</tr>
<tr>
<td>4.62</td>
<td>ISO Engine Distance with Station 4 Closed</td>
<td>151</td>
</tr>
<tr>
<td>4.63</td>
<td>First Alarm Assembly with Station 4 Closed</td>
<td>152</td>
</tr>
<tr>
<td>4.64</td>
<td>First Response Extent with Station 5 Closed</td>
<td>154</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>4.65</td>
<td>ISO Engine Distance with Station 5 Closed</td>
<td>155</td>
</tr>
<tr>
<td>4.66</td>
<td>First Alarm Assembly with Station 5 Closed</td>
<td>156</td>
</tr>
<tr>
<td>4.67</td>
<td>Station Closure Analysis Results</td>
<td>157</td>
</tr>
<tr>
<td>4.68</td>
<td>Potential Alternative Site for Fire Station</td>
<td>159</td>
</tr>
<tr>
<td>4.69</td>
<td>First Response Extent with Consolidated Station</td>
<td>160</td>
</tr>
<tr>
<td>4.70</td>
<td>ISO Engine Distance with Consolidated Station</td>
<td>161</td>
</tr>
<tr>
<td>4.71</td>
<td>First Alarm Assembly with Consolidated Station</td>
<td>162</td>
</tr>
<tr>
<td>4.72</td>
<td>Summary Table of Coverage Impact</td>
<td>163</td>
</tr>
</tbody>
</table>

**CHAPTER FIVE — FIRE RESCUE APPARATUS**

Figure 5.1 New Rochelle Fire Department Apparatus and Vehicle Fleet | 169
Figure 5.2: Sample Primary Apparatus Replacement Schedule Based on Fire Apparatus Manufacturer’s Association Data [Illustrative] | 175
Figure 5.3: New Rochelle Fire Department — Primary Apparatus Capital Plan Projections by Calendar Year Based on 15 [Engine]/18 [Ladder-Rescue] Year Replacement [Illustrative] | 176
Figure 5.4: Required Apparatus, Tools and Hose Tests | 180
Figure 5.5: Current Standard Operating Procedures Pertaining to Apparatus and Equipment | 181
Figure 5.6: Summary of NRFD Interface with CFAI Accreditation Criteria | 182

**CHAPTER SIX — OPERATIONS, COMMUNICATIONS & ISO**

Figure 6.1: Historic Service Demand | 190
Figure 6.2: Department Workload by Month of Year 2012 | 191
Figure 6.3: Department Workload by Day of Week 2012 | 192
Figure 6.4: Department Workload by Hour of Day 2012 | 193
Figure 6.5: Service Demand | 194
Figure 6.6: Service Demand Intensity | 195
Figure 6.7: Time vs. Products of Combustion | 213
Figure 6.8: Cascade of Events When Responding to a Fire or Medical Emergency | 214

**CHAPTER EIGHT — TRAINING**

Figure 8.1: Proposed NRFD Training Organization | 257
Figure 8.2: National Professional Development Model | 258
Figure 8.3: NRFD Monthly Probationary Report | 260
Figure 8.4: NRFD Training Class Hours — 2011 – 2013 (6/30) | 265
Figure 8.5: Summary of NRFD Compliance with the CFAI Accreditation Criteria | 269

**CHAPTER NINE — HEALTH AND SAFETY**

Figure 9.1: NRFD Standard Operating Procedures Relating To Safety and Health | 282
Figure 9.2: Reported NRFD Apparatus Collisions (2011 through 07/2013) | 283
Figure 9.3: First Report of Injury Reporting | 284
Figure 9.4: NRFD on the Job Medical Claims and Payments.................................284
Figure 9.5: Summary of NRFD Interface with CFAI Accreditation Criteria..............296

CHAPTER TEN — FIRE PREVENTION
Figure 10.1: Current NRFD Fire Prevention/Investigation Budget Document
Organizational Chart ..............................................................................................306
Figure 10.2: Permit Fees Required by the New Rochelle Municipal Code ..............307
Figure 10.3: Plans Reviews/System Inspections/System Test by NRFD Code
Enforcement, 2011-2013 (6/13) ............................................................................309
Figure 10.4: Inspections Completed by the New Rochelle Fire Department
(2011-2012) ........................................................................................................314
Figure 10.5: NRFD Annual Responses by Incident Type (2012-2008) .................319
Figure 10.6: Property Loss to Fire in Dollars for the City of New Rochelle
(2010-2012) ........................................................................................................320
Figure 10.7: Fire Investigator Cause Determinations and Hours of Investigation
(2012-July 2013) ................................................................................................321
Figure 10.8: Suggested Fire Prevention/Risk Reduction Organization Baseline ......327
Figure 10.9: Summary of NRFD Compliance with the CFAI
Accreditation Criteria ..........................................................................................330

CHAPTER ELEVEN — COOPERATIVE SERVICES PROVISION
Figure 11.1: ISO Engine Distance .........................................................................347
Figure 11.2: ISO Ladder Distance ........................................................................348

CHAPTER TWELVE — BLUEPRINT FOR THE FUTURE
Figure 12.1: Alternative Organization Chart ............................................................360
Figure 12.2: Recommendations with Suggested Priority and Timeline .................365
ACKNOWLEDGMENTS

The Study Team extends genuine appreciation to the City of New Rochelle officials and staff and members of the New Rochelle Fire Department and Transcare Ambulance for their cooperation and assistance in conducting this Study to develop this Fire and Emergency Medical Services Study of the New Rochelle Fire Department.

This project was unique given the extensive support and assistance provided to the Study Team by New Rochelle project members. A sincere “thank-you” is extended to these individuals for their contributions to the completion of this Study through their support and assistance.

EVALUATION METHODOLOGY

This Study (also called Plan) was developed through a process of interviews, data collection, research, literature review, on-site observations, analysis of data and comparative evaluations with “Best Business” practices and standards in fire protection and emergency medical services. The Study Team’s experiences as fire and EMS officials in Maryland and fire and EMS consultants in every region of the U.S. were incorporated as appropriate.

STRUCTURE OF THE STUDY REPORT/PLAN

This report contains 13 chapters. To assist the reader, the Study Team has included detailed background information on state-of-the-art fire and EMS practices and standards to assist in understanding the basis for some conclusions and suggestions.

In Chapters Two through Twelve, there are recommendations at the end of each chapter. The recommendations are numbered to correspond with the subject matter in the chapter.

Chapter Twelve contains a suggested Blueprint for the Future with abbreviated recommendations from preceding chapters and a suggested timeline for consideration.

For the reader, it is important to note that there are different terms for agencies providing fire and EMS in New Rochelle, such as department, platoon, companies, team and staff. These terms are used interchangeably or as specifically appropriate in the report for ease of reading.
STUDY TEAM MEMBERS

This Study of the fire protection services in City of New Rochelle was conducted by four consultants and three office staff of Public Safety Solutions, Inc. (PSSI). The consultants each have more than 20 years of fire and EMS experience, and they have supervised and served as fire and EMS services providers. Three of the four consultants have worked as a “Study Team” for more than 15 years. One has served as a Peer Assessor with the Commission on Fire Accreditation International (CFAI). They are hereinafter referred to as the Study Team.

Leslie D. Adams

Mr. Les Adams, Public Safety Solutions, Inc. (PSSI) President, served as the full-time project director. Mr. Adams, the former Deputy Fire Chief of the Montgomery County, Maryland Fire and Rescue Department, has 28 years of fire/EMS management experience. He has served as the operations deputy fire chief of a combined fire department that serves 850,000 residents. As a practitioner in the fire service, Mr. Adams has managed fire operations with 33 fire stations, 818 firefighters, 31 engines, 14 ladder trucks, 35 Basic Life Support units, 13 Advanced Life Support units and 120 paramedics. He has been responsible for all duties of fire services, including personnel management, planning and research, facilities, apparatus, training, dispatch, administration, and operations.

Mr. Adams has served as a paid firefighter/officer for 23 years and as a firefighter for more than 30 years. He has served as a fire/EMS consultant with Public Safety Solutions, Inc., for 19 years. Additionally, he is a certified peer fire department assessor with the Commission on Fire Accreditation International and Mr. Adams was qualified as an expert witness in the Rhode Island Superior Court regarding all facets of the Performance Study.

He has taught at the National Fire Academy on modern techniques in fire services operations and has been on the faculty of Montgomery Community College teaching Fire Science Administration.

Mr. Adams has served as the Chairman of the International Association of Fire Chiefs (IAFC) Personnel Management Committee.
He holds a B.S. in Business Administration from the Columbia Union College and a Master’s Degree in General Administration.

**Mark Davis**

Mr. Mark Davis has 21 years of fire, EMS and special services experience. He has served as a battalion fire/EMS chief, station commander and unit officer in a fire department with paid and volunteer personnel. Mr. Davis has been a member of a number of special operations teams, including Hazmat. He has served as an active volunteer member and officer of a number of volunteer fire departments in two states, including Pennsylvania where he started his fire and rescue training in the Montgomery County Fire Training Academy.

As a Level II Instructor and Fire Officer II, Mr. Davis developed instructor and fire officer training programs, as well as field operations and special operations training programs. Further, he has significant EMS operations experience as an EMT-B and former nationally certified paramedic.

As a fire/EMS officer, Mr. Davis participated in the planning and implementing of fire and EMS service delivery improvements for multiple fire agencies, including successful merger initiatives.

Mr. Davis has 14 years’ experience as a fire/EMS consultant conducting fire and EMS company/department assessments and providing a broad range of related specialized and industrial training and certification programs.

Mr. Davis holds a B.S. in Fire Science Education and an M.A. in State and Local Government.

**John M. Best**

Mr. John Best served as assistant project director for this Study. He is the former fire chief of an Orlando, Florida, fire, rescue and EMS department serving a diverse area, including Walt Disney World. As fire chief, he was responsible for the administration, management and fiscal control of a progressive fire services delivery agency with a $17
million budget and 165 employees. He previously served as the deputy chief of administration, fire marshal and arson investigations chief of a 600-square-mile urban/suburban/rural county adjacent to Washington, D.C.

Throughout his fire and EMS career, Mr. Best served as firefighter/paramedic, unit officer, station commander, captain, battalion chief and deputy fire chief. During his tenure as deputy chief, Mr. Best was responsible for training, communications and dispatch, fire prevention and arson investigations, budget management, personnel and procurement. As a volunteer, in a combination paid/volunteer system, he was an active operational member and officer in one of the busiest volunteer fire departments in Maryland.

As a consultant, Mr. Best provided public safety services to local governments involving fire, rescue and EMS management, organization, code application and enforcement. He also is a recognized strategic planning expert having completed more than 40 public safety agency analysis and strategic plans nation-wide.

Mr. Best has lectured as an adjunct faculty member of John J. College in New York City extensively in fire services curricula, including emergency management planning and response, risk analysis and management, fire prevention and education, administration and contemporary fire protection issues.

**Dan Warzoha**

Mr. Dan Warzoha was appointed by First Selectman James J. Lash as the Emergency Director of the Town of Greenwich in August 2007. His appointment was confirmed by the entire Board of Selectmen.

Mr. Warzoha previously served the Town of Greenwich for 32.5 years, most recently as Chief of the Greenwich Fire Department. Following his retirement from the Fire Department, he served for two years as Emergency Management Coordinator for Greenwich.

During his career, Mr. Warzoha was involved in the development of the Greenwich Emergency Medical Services, Fire Department upgrade, Hazardous Material Team implementation, 800 mhz Communications upgrade, Dive Team, Technical Rescue
Team, State Decon Trailer/Prime Mover program, as well as State Mass Decontamination program.

He currently serves as a State Fire Coordinator, member executive board Fairfield County Fire Chiefs Emergency Plan, Chairman Region 1 Emergency Planning Team, Region 1 U.A.S.I. Group, and 700 mhz Implementation Team.

He holds a Bachelor’s Degree in Education from Post College and a Master’s Degree in Public Administration from Rutgers University. He also holds Fire Officer 2 and Fire Service Instructor certifications from the CT Commission on Fire Prevention and Control.

**Robert K. McNally**

Mr. McNally provided the operational data & geographic information system (GIS) analysis for the project. He was integral in the planning of future deployment strategies. Mr. McNally has consulted for over 110 municipalities of all sizes across the United States and Canada.

Mr. McNally has a Master’s Degree from the University of North Carolina-Charlotte in Urban/Regional Planning. The emphasis of his academic research has been on the application of geographic information systems (GIS) in public safety and homeland security sectors. As an award-winning researcher, Mr. McNally has been a speaker at several academic conferences and industry seminars. In addition, he has been published in several academic journals and reports based upon his collegiate work that helped earn him the prestigious Graduate Research Award from the North Carolina Association of GIS. Earlier, he graduated magna cum laude from Kean University with a B.A. in Public Administration.

Mr. McNally has been involved in emergency services for over 20 years. Beginning in the volunteer ranks as a firefighter, his experience includes 14 years of urban emergency medical services (EMS) as a paramedic in Metropolitan Newark, New Jersey. He also served as an EMS manager in suburban New Jersey and as an EMS training officer in Charlotte, North Carolina. Mr. McNally has been the recipient of several professional awards in excellence for his EMS professional work.
EXECUTIVE SUMMARY

THE CITY

New Rochelle, located in the southeastern end of Westchester County, is the second largest city in County. It is a waterfront city located on the north shore of the western end of the Long Island Sound.

The City is two miles north of New York City and is bordered by the following municipalities:
- Pelham, Pelham Manor and Eastchester on the west;
- Scarsdale to the north and east; and
- Mamaroneck and Larchmont to the east.

The City is well within the New York City Metropolitan Area, just north of the Bronx. Its 11-square-mile, arrowhead-shaped geography is fully developed with a mix of urban and suburban neighborhoods.

City History

According to the City’s website “New Rochelle’s 300-year-old story reflects many of America’s national trends and social movements. Founded by Huguenots (French Protestants), who left their homeland of France in pursuit of religious freedom, the 6,000 acres the refugees purchased from John Pell in 1688 now comprise the seventh largest city in New York State. Over three decades of fascinating history continue to resound in many of the community’s neighborhoods, parks, waterfront, and its downtown.” The City celebrates its 325th anniversary in 2013.

Demographics

The population of the City includes 77,062 residents according to the 2010 U.S. decennial Census. This is an increase of approximately 7% from a decade earlier when the residential population was 72,182 persons. Historically, the City population had been decreasing steadily since 1960, reaching a low point in the 1980 Census. Since then, the City’s residential population has reversed the trend to exceed 1960s level.
Governance of the City

New Rochelle operates under a Council-Manager form of government. The City Council is the legislative body consisting of the Mayor and six council members. Since 1993, the City has had six council districts, with one council member elected from and by each district. The City Council, under the City Charter, is given certain specific duties:

- Set policy;
- Appoint the City Manager and the City Clerk;
- Approve the budget; and
- Enact local laws, resolutions and ordinances.

The City Manager is the chief administrative officer of the city selected to carry out the directives of the Council. The City Manager monitors the city’s fiscal condition and enforces its ordinances and laws.

THE NEW ROCHELLE FIRE DEPARTMENT

The New Rochelle Fire Department has a long and colorful history that began in 1861.

For budget and organizational purposes, the New Rochelle Fire Department (NRFD) consists of 14 functional areas as follows:

1. Office of the Fire Chief/Commissioner;
2. Fire and Emergency operations;
3. Support Services;
4. Planning and Research;
5. Training;
6. Safety;
7. Fleet Services;
8. Communications;
9. Facilities;
10. Fire Investigations;
11. Code Enforcement;
12. Fire Prevention;
13. Public Safety Education; and,
Mission Statement

The mission of the Fire Department, as stated in the City website, is as follows:

“The Fire Department has the primary tasks of:

• Providing adequate fire protection and extinguishment capability
• Initiating life rescue
• Rendering emergency medical assistance
• Controlling hazardous material situations including weapons of mass destruction incidents and providing related emergency services.”

NEW ROCHELLE FIRE DEPARTMENT ORGANIZATION

Fire Chief/Commissioner

The City Charter includes the following relating to the Fire Chief / Commissioner.

City Charter – Section 58.01

“The Chief of the Fire Department shall be appointed by the City Manager and shall also be known as the ‘Fire Commissioner.’ He shall be the executive head of the Fire Department and shall have charge and control of the administration and discipline of said Department and of the buildings and equipment thereof. He shall appoint, with the approval of the City Manager, such other officers and uniformed members of such force as he may deem necessary and as may be authorized by the Council. He shall have authority to administer oaths and take evidence, affidavits and acknowledgments in all proceedings relating to the Fire Department. He shall be responsible for the administration and enforcement of the Environmental Protection Code of the City.” [Enacted by Local Law No. 1-1964 (January 8, 1964); amended by Local Law No. 1-1984 (January 17, 1984).]

Current Position Structure

The following sections describe the uniformed/sworn and civilian workforce rank and position titles that comprise the NRFD.

Sworn Workforce

The primary operations rank structure of the Fire Department includes the following positions:

• Fire Chief / Commissioner
• Deputy Fire Chief
• Captain
Executive Summary

- Lieutenant
- Firefighter

Civilian Staff

The full-time staff of the NRFD includes three civilian staff members in different job title specialties, including:
- Master Mechanic
- Administrative Assistant
- Data Control Clerk

NRFD Staffing

The City of New Rochelle Fiscal Year 2013 approved budget includes a total of 158 employee positions, including 155 uniformed and three non-uniformed civilian employees.

NEW ROCHELLE FIRE DEPARTMENT—FY 2013 STAFFING SUMMARY

<table>
<thead>
<tr>
<th>Position/Org. Element</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uniformed</td>
<td></td>
</tr>
<tr>
<td>Fire Chief/Commissioner</td>
<td>1</td>
</tr>
<tr>
<td>Deputy Chief</td>
<td>5</td>
</tr>
<tr>
<td>Fire Captain</td>
<td>8</td>
</tr>
<tr>
<td>Fire Lieutenant</td>
<td>32</td>
</tr>
<tr>
<td>Firefighter</td>
<td>109</td>
</tr>
<tr>
<td><strong>Sub-Total Uniformed</strong></td>
<td><strong>155</strong></td>
</tr>
<tr>
<td>Non-Uniformed</td>
<td></td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td>1</td>
</tr>
<tr>
<td>Data Control Clerk</td>
<td>1</td>
</tr>
<tr>
<td>Automotive Mechanic</td>
<td>1</td>
</tr>
<tr>
<td><strong>Subtotal - Non-Uniformed</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td><strong>TOTAL EMPLOYEES</strong></td>
<td><strong>158</strong></td>
</tr>
</tbody>
</table>

Source: New Rochelle FY 2013 approved budget.
Executive Summary

Aspects of the Current Organization Chart

There are a number of primary aspects of the current NRFD Table of Organization that are noteworthy:

1. There are five deputy chief position, four of which are on the rotating 24-hour shift responsible for operations and one who heads up Support Services;
2. While on-duty, each of the four deputy chiefs, on the rotating 24-hour shift, are responsible to manage and oversee the on-duty 9 fire companies and respond on emergency incidents when dispatched, or otherwise needed;
3. The four deputy chiefs are not assigned major functional areas of responsibility, such as personnel, apparatus, hazmat, facilities, equipment, and uniforms;
4. Fire prevention functions, including code enforcement, public safety education and housing code enforcement, headed by a captain, are shown reporting to the Fire Chief;
5. The fire investigations unit, as shown, reports to the Fire Chief separate from fire prevention; and
6. Two civilian administrative personnel report to the Fire Chief.

Organizational Issues

A number of reasons were provided to the Study Team during interviews and discussions justifying the need to upgrade the organization of the New Rochelle Fire Department, including:

1. City Charter and Code related to New Rochelle Fire Department and Fire Chief responsibilities seem outdated and limited in scope;
2. Increasing cost to the City of funding the NRFD;
3. Seemingly inadequate staffing of some functions;
4. Minimal asset planning;
5. Lack of policies and procedures;
6. Limited sense of direction or planning;
7. Substantial functional responsibilities not assigned to deputy chiefs; and
8. Fire station facilities needing renovation and major repairs.
Fire Chief’s Span of Control

The NRFD Table of Organization and the Study Team’s discussions with staff indicate an appropriate level of span of control relating to the number of individual staff members and functions reporting directly to the Fire Chief.

The organization options and recommendations include:

1. Updating the City Charter and Code related to the responsibilities of the Fire Department and the duties and responsibilities of the Fire Chief;
2. Updating the NRFD organization chart;
3. Assigning one or more functional responsibilities to each of the five deputy fire chiefs;
4. Developing a revised mission statement and vision and values;
5. Maintaining the currently separate Police and Fire Departments; and
6. Pursuing the accreditation of the New Rochelle Fire Department.

The following alternative organization chart is suggested for consideration.
The key organizational changes that are reflected in the suggested New Rochelle Fire Department organization are as follows:

- A deputy chief assigned to daywork with responsibility for all fire prevention functions, facilities and all fire prevention programs;
- A platoon deputy chief responsible for scheduling and safety and health;
- A platoon deputy chief assigned to fleet services and shop maintenance;
- A platoon deputy chief assigned to fire and EMS training, hazmat and technical rescue and EMS data and emergency management;
- A platoon deputy chief assigned to planning, including facilitating the implementation of the Fire Department Study; and
- Civilian support assigned to fire prevention functions based on a suggested “desk audit” of civilian administrative support within the NRFD.

**Apparatus Staffing**

Important decisions made regarding the staffing of fire and EMS apparatus have a direct impact on the level of fire and EMS service delivered to the community. These decisions also have an impact on the relative safety of firefighters as they perform the many dangerous tasks associated with extinguishing fires and dealing with medical and other emergencies, such as hazardous materials incidents.

Further, decisions regarding staffing of fire services apparatus have significant fiscal implications since the major cost of a career fire department is salaries and wages for the personnel. For that reason, staffing levels become a crucial budget and service level issue in municipalities and their fire departments.

The Study Team was advised that the current complement of uniformed personnel (not including the Chief/Commissioner) in the Fire Department is 154. The following figure outlines total staffing by rank.
TOTAL FIREFIGHTER/OFFICER COMPLEMENT

<table>
<thead>
<tr>
<th>RANK</th>
<th>COMPLEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEPUTY CHIEFS</td>
<td>5</td>
</tr>
<tr>
<td>CAPTAINS</td>
<td>8</td>
</tr>
<tr>
<td>LIEUTENANTS</td>
<td>32</td>
</tr>
<tr>
<td>FIREFIGHTERS</td>
<td>109</td>
</tr>
<tr>
<td>TOTAL</td>
<td>154</td>
</tr>
</tbody>
</table>

Source: NRFD budgeted for Fiscal Year 2013.

Current Total Uniformed Platoon Staffing

The Study Team was also advised that the current complement of uniformed personnel (not including the Chief/Commissioner) in the Fire Department assigned to the four platoons for operations staffing is 148. These staff members are assigned to the eight fire services delivery units, the five engines, three ladder trucks and the platoon command vehicle. The well-equipped NRFD heavy rescue unit is not staffed, unless there are extra staff members working on any particular day. The tactical hazards, high hazard occupancies and geographic restriction (e.g., I-95, commuter railroad, high-rise and mid-rise senior housing) issues that must be dealt with by the NRFD require the specialized equipment on the heavy rescue squad and technical rescue skills provided by the highly specialized staff. When this specialized unit is not staffed, either the equipment is not available or there is a delay in the unit responding to the scene of an emergency. Every effort should be made to constantly staff the heavy rescue unit.

The following figure outlines total platoon operations staffing by rank.

TOTAL PLATOON FIREFIGHTER/OFFICER COMPLEMENT

<table>
<thead>
<tr>
<th>RANK</th>
<th>COMPLEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEPUTY CHIEFS</td>
<td>4</td>
</tr>
<tr>
<td>CAPTAINS</td>
<td>5</td>
</tr>
<tr>
<td>LIEUTENANTS</td>
<td>31</td>
</tr>
<tr>
<td>FIREFIGHTERS</td>
<td>108</td>
</tr>
<tr>
<td>TOTAL</td>
<td>148</td>
</tr>
</tbody>
</table>

Source: NRFD budgeted for Fiscal Year 2013.
The following figure illustrates overtime expenditures related to the NRFD over the last six years.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Overtime Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2013</td>
<td>$ 836,000*</td>
</tr>
<tr>
<td>FY 2012</td>
<td>$1,030,141</td>
</tr>
<tr>
<td>FY 2011</td>
<td>$ 784,584</td>
</tr>
<tr>
<td>FY 2010</td>
<td>$1,036,145</td>
</tr>
<tr>
<td>FY 2009</td>
<td>$ 963,492</td>
</tr>
<tr>
<td>FY 2008</td>
<td>$ 726,439</td>
</tr>
</tbody>
</table>

*Budgeted overtime amount.

In the experience of the Study Team, these levels of overtime expenditures seem unusually high for a fire department the size of New Rochelle’s.

The Study Team was apprised of the fact that a substantial amount of overtime is being expended each pay period by the Fire Department primarily for apparatus staffing requirements. A substantial portion of this overtime is likely due to staffing at the approved minimum apparatus staffing levels, but above the budgeted funding levels.

**Various OT Causal Factors**

In the analysis of the data, review of applicable documents, and discussions with City and NRFD officials and firefighters, the factors that result in the expenditure of overtime funds are numerous and varied. They include maintaining approved minimum staffing levels when the following could result in lower than approved apparatus staffing levels:

- Existing vacancies from resignations and/or retirements;
- Use of sick leave;
- Use of vacation time;
- Use of bereavement leave;
- Use of family sick leave;
- Holiday leave; and
- On-the-job injury.
Likewise, the following activities generated overtime income paid to off-duty firefighters and officers directly in that the service provider was paid OT compensation:

- Training activities take place, including drill school;
- SCBA maintenance;
- EMS supplies work;
- HazMat team response;
- Staff meetings;
- Perform admin duties; and
- Call back for major incidents.

**Potential Excessive OT Staffing of Apparatus**

The extent of fire apparatus staffing via OT was discussed and illustrated. There are a number of aspects or side effects of the excessive use of OT in the staffing of fire services apparatus that may result. These include:

- Increasing potential burnout;
- Reduced fire services unit teamwork and cohesiveness;
- Excessive use of OT in the course of providing services;
- Increased cost to the taxpayer for services provision;
- Reduced management and oversight of activities and tasks;
- Increasing philosophy that working for the NRFD is a “part-time job”;
- Reduced ability of supervisors to provide consistent employee oversight;
- Reduced accountability of staff; and
- Decreased discipline levels.

**Options for OT Reduction**

Many times it seems to be the opinion that OT is limitless and that is the way to do things. In the opinion of the Study Team, the following approaches may result in a reduction in future annual overtime costs.

- **Overtime Policy and Procedure**: Develop and implement a NRFD policy and procedure relating to the authorization, process for documentation and payment of overtime funds;
- **Staffing Calculation Formula**: Consider increasing budgeted unit staffing to reduce OT based on the formula;
Executive Summary

- Increase Reliance on Mutual Aid: Take actions with neighboring municipalities and fire and EMS departments, as outlined in the Cooperative Services Chapter of this Report, to increase reliance on automatic mutual aid support and reduce reliance on NRFD personnel callback;

- Conduct Administrative Duties while On-duty: Conducting administrative activities on duty rather than off-duty;

- Train while On-Duty: Conducting more training on duty;

- Tracking Sick Leave Usage: Strengthening and upgrading a sick leave usage monitoring program to identify and take action related to follow-up on misuse;

- Managing Sick Leave More Flexibly: Enhance the use of sick leave by allowing splitting a 24-hour shift for personnel to return to duty after 12 hours, if they recover or otherwise are ready to return to duty allowing any replacement overtime staff to be released from duty. (As recommended by the Citizens Panel)

- State-of-the-Art Scheduling Program: Enhanced use of the state-of-the-art automated fire services personnel scheduling program, e.g., Telestaff; and

- State of the Art Payroll Program: Fully automate the payroll processing system to provide comprehensive analysis of causes to support identification of solutions.

Implementing these and other staffing enhancement approaches will assist the NRFD in reducing the use of OT as an approach to unit and function staffing, as well as project accomplishment.

The apparatus staffing options and recommendations include:

1. Adopting the suggested staffing formula for determining needed staffing;

2. Developing and implementing an overtime reduction plan;

3. Implementing state-of-the-art firefighter scheduling/payroll software programs;

4. Consider NFPA 1710 four person staffing, as funding permits.

5. Creating “overstaff positions” to cover day-to-day vacancies resulting from long-term disabilities;
RISK ANALYSIS AND FIRE STATIONS

The New Rochelle Fire Department provides fire and EMS first responder services from the following fire station facilities with the vehicular apparatus indicated.

NEW ROCHELLE FIRE STATIONS & APPARATUS

<table>
<thead>
<tr>
<th>Station</th>
<th>Year Built</th>
<th>Address</th>
<th>Engine</th>
<th>Truck/Ladder</th>
<th>Ambulance*</th>
<th>Rescue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1966</td>
<td>45 Harrison St</td>
<td>Engine 21</td>
<td>Ladder 11</td>
<td>Transcare 30A1</td>
<td>Rescue 4</td>
</tr>
<tr>
<td>2</td>
<td>1926</td>
<td>170 Webster Ave</td>
<td>Engine 22</td>
<td>Ladder 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1902</td>
<td>756 North Ave</td>
<td>Engine 23</td>
<td>Ladder 13</td>
<td>Transcare 30A2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1911</td>
<td>155 Drake Ave</td>
<td>Engine 24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1960</td>
<td>456 Statton Rd</td>
<td>Engine 25</td>
<td></td>
<td>Transcare 30A3**</td>
<td></td>
</tr>
<tr>
<td>HQ</td>
<td>1962</td>
<td>90 Beaufort Pl</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The Ambulance service is provided by Transcare, Inc.

** This is a "half-unit" or "Day Unit" due to multiple calls, the unit is assigned not housed in Station 5 but is to roam the north end area near Quaker Ridge Road.

The number and type of fire, rescue and EMS risks, as well as workload, in a municipality typically drives the number and location of stations. As a general rule, response times are utilized in locating fire and rescue stations. In some instances, availability of land and funding have a major bearing on locations of stations.

The fire and EMS facilities options and recommendations include:

1. Establishing a policy of no fire apparatus response to routine medical calls unless criteria, such as cardiac arrest, major trauma;
2. Encouraging 60 Control to track units individually for enhanced data analysis;
3. Assuring that all three desired characteristics for mutual aid resources—proximity, availability, and readiness are utilized for mutual apparatus assignment decisions;
4. Should the City choose to close a Truck (Ladder) company, the truck apparatus in Station 2 should be considered;
5. Should the City choose to close a fire station, the least impactful station that can be closed is Station 2;
6. Considering a consolidated downtown fire station, as outlined in the “What-If Scenario” section of the Report Chapter, in order to provide the opportunity for the implementation of four-person staffing of fire apparatus; and
Executive Summary

7. Assessing all fire stations for conditions needing repair, maintenance or other upgrades and develop and implement a capital bond-funded project.

VEHICULAR APPARATUS

There are four basic types of fire services vehicular apparatus:

1. Pumpers deliver water from an internal tank, pressurized system, or static source (river, canal or pond) to the fire scene;
2. Aerial devices are vehicles with long extension ladders or platforms; and
3. Specialized rescue trucks with equipment for extricating individuals from vehicles, underground entrapment, high locations, entanglement in machinery, and difficult transportation accidents.

An apparatus replacement schedule to provide for long-term scheduling of fire and rescue apparatus replacement was reviewed and suggested for consideration.

The current primary fire services apparatus included in the fleet of the New Rochelle Fire Department are illustrated in the following table.

<table>
<thead>
<tr>
<th>APPARATUS</th>
<th>NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engines</td>
<td>7</td>
</tr>
<tr>
<td>Ladder Trucks</td>
<td>5</td>
</tr>
<tr>
<td>Rescue</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

Source: NRFD.

The vehicular apparatus options and recommendations include:

1. Implementing the “Department Shop Addition”;
2. Developing/implementing optimal replacement cycles policy for each type of apparatus replacement;
3. Developing/implementing optimal replacement cycle policies for required tools, appliances and equipment; and

4. Assuring that fire apparatus equipment inventory complies with NFPA 1900.

OPERATIONS, COMMUNICATIONS & ISO

On the scene of a fire or rescue emergency there is no time to make decisions by committee. Although some quick consultation can take place, time for deliberation is limited. Decisions made at the emergency scene may be irreversible and consequences of error can be disastrous. Such errors can lead to further property loss, as well as injury or death to civilians and firefighters. In many cases, the fire officers must make decisions based on information they gathered hastily. The fact is that all structure fire situations are different.

Emergency management (or disaster management) generally involves preparedness, response, and recovery in order to reduce the impact of disasters. All aspects of emergency management deal with the processes used to protect populations or organizations from the consequences of disasters, wars, and acts of terrorism.

The Office of Emergency Management (OEM), a function of the Fire Department, is responsible for developing plans for responding to, recovering from, and, in some instances, mitigating the results of natural, technical, and man-made disaster events. The NRFD Office of Emergency Preparedness (OEM) works closely with the City Manager’s Office, FEMA, SEMO (New York State), Westchester County OEM and the Red Cross.

In fire service jargon, the term “special operations” generally refers to those services that a fire department provides other than fire and EMS response. The traditional special operations services include hazardous materials (Hazmat) response, vehicle extrication service, and technical rescue service. The delivery models for special operations services can vary greatly from community to community across the United States. With the exception of vehicle extrication service, the other special operations services are seldom needed in most communities. Because special operations services are highly technical in nature and require specialized training and equipment, many communities opt not to deliver the services, or they elect to partner with neighboring communities to share resources in either a mutual aid or a regional team format.

To provide technical rescue service in a team approach as a basic regional and/or county-wide function the Westchester Special Operations Task Force was established a number
Executive Summary

of years ago to provide mutual benefits for nine Westchester County participating fire services delivery agencies working together with the support of a central County staff. Several of the special technical services provided are:

1. Hazmat team coverage;
2. Surface water rescue team coverage;
3. Building collapse/underground rescue team coverage;
4. Personnel/manpower squads; and
5. Technical/heavy duty rescue.

The NRFD Heavy Rescue is an important part of this Task Force, particularly as related to collapse-rescue services.

A radio system is generally comprised of the following primary components:

- Base station transmitter and receiver equipment;
- Antennae tower and equipment;
- Mobile radio equipment;
- Portable radio equipment;
- Applicable automation hardware and software; and
- Communications center control equipment and consoles.

New Rochelle Fire Department has developed a state-of-the-art radio system. The system has built-in redundancy with a back-up capability to ensure reliability.

The operations, communications and ISO options and recommendations include:

1. Actually transferring 911 calls for medical services to 60 Control;
2. Designating Fire Station 1 as the Department’s technical rescue location and Fire Station 2 as the HazMat and WMD location; and
3. Using the results of the 2013 Insurance Services (ISO) grading with the recommendations of this Report to improve the Fire Department.
Executive Summary

Emergency Medical Services

The placement of ambulance transport service in the NRFD should only be considered when and if consistent problems arise with the delivery of service through a private provider. Should that situation arise, the decision to return the transport business to NRFD must be carefully examined, as it will be costly both in terms of capital outlay and personnel costs and likely will not be overly successful in generating sufficient revenue to offset the operating costs.

New Rochelle firefighters and officers fight fires and are also fully trained and equipped to provide emergency medical services as EMTs. All New Rochelle firefighters are New York State Department of Health certified Emergency Medical Technicians. Each of the five firehouses has a basic life support EMS-equipped engine assigned. Many times an engine is closer to an emergency scene and is dispatched along with a private paramedic ambulance, which provides Advanced Life Support (ALS) care.

The City of New Rochelle contracts with a private ambulance service to provide dedicated paramedic-staffed ambulance transport units. Currently the City contracts with TransCare Ambulance Service for two ambulances—24 hours a day, 7 days a week. These units are stationed at Fire Station #1 on Harrison Street and Station #3 on North Avenue. A third Transcare ALS ambulance is on duty from 7 am to 7 pm (busiest time). This unit is not assigned to a fire station and is considered a “floater.” Typically this unit is staged on Quaker Ridge Road in order to be available to the more northern parts of the City.

With proper selection and contractual requirements in place, national experience involving private ambulance services provision working in teamwork with municipal fire services for first responder services is a proven EMS delivery model that should be continued into the future by the City of New Rochelle. Overall, the EMS service delivery in the City of New Rochelle appears to be adequate due to the quality of service provided by the NRFD and Transcare coupled with the quality of the City’s hospitals.

The emergency medical services options and recommendations include:

1. Maintaining the current public/private partnership with the NRFD and Transcare in the delivery of quality EMS delivery in the City;

2. Implementing a public access AED awareness program;
3. Having the third Transcare ambulance located in the downtown area;
4. Negotiating for Transcare to limit the use of per diem staff; and
5. Designing and administering an EMS customer service survey for New Rochelle.

**FIRE SERVICES TRAINING**

The main objective of the fire service is to prevent injury and loss of life and to protect property and the environment. Training is a key element to successful emergency scene operations and organizational effectiveness. Training in the fire, rescue, and EMS disciplines is also a career-long venture, starting with recruit and basic training programs and progressing to more sophisticated advanced training and participation in higher educational opportunities. Between formal training programs and educational courses there must be ongoing reinforcement of knowledge and hands-on skills provided to all ranks.

It is very apparent from speaking with NRFD officers and firefighters that they are committed to providing good service to their customers. It is also important for NRFD to remember that its members and employees are its customers as well. Like many other fire departments across the United States, there are some shortfalls in training.

The fire services training options and recommendations include:

1. Reviewing the process by which all company-level training data are recorded, stored, and retrieved and implement needed changes;
2. Develop and implement an emergency vehicle driver training program;
3. Implementing senior officers participating in the National Fire Academy;
4. Encouraging college-level course work as a requirement for all officer positions;
5. Implementing a performance-based training system to regularly evaluate the skills competency of all firefighters;
6. Implementing substantial mutual aid training;
7. Implement in-service training to include “night” drills; and
8. Initiate planning for a dedicated fire and rescue training facility within or near the City.
HEALTH AND SAFETY

The health and safety of firefighters and EMS personnel should be a major concern of those responsible for delivering the services, those receiving the services, and those helping to pay for the services.

Individuals working in public safety, particularly firefighting and EMS personnel, perform one of the most physically demanding and mentally stressful occupations in the nation. Quite often, fire and emergency medical personnel are subjected to environments that require rapid, physical, and mental responses with a minimum of preparation. The New Rochelle Fire Department lacks a comprehensive safety and health program and falls short in many areas of compliance with NFPA 1500.

The New Rochelle Fire Department needs to revisit all of its health and safety policies and work with the Local and the City to develop a comprehensive approach to improving the health and safety of all NRFD personnel. Many professionals in the fire service say that safety is an attitude that must be believed in, must be communicated, and, most importantly, must be enacted. Much work is needed in order for the NRFD to attain that position.

The health and safety options and recommendations include:

1. Implementing a written Departmental Risk Management Plan;
2. Developing a written safety and health policy and implementing an organized and effective safety and health program;
3. Developing and implementing an injury reporting program;
4. Initiating comprehensive written vehicle collision reporting program; and
5. Confirming that the duties and responsibilities of the NRFD Safety Officer are in accordance with NFPA 1500 and NFPA 1521.
FIRE PREVENTION

The funding and organizational culture of the New Rochelle Fire Department, with regard to fire prevention and community risk reduction, is focused on mandated fire protection system plans review, multi-family, tank and permit inspections and tests, with maintenance inspections by fire companies of existing properties and an ancillary approach to fire investigation.

“In-service” fire companies complete the bulk of the fire prevention code inspections of existing properties. This process is currently overseen by the officers of each of the fire stations with little or no centralized oversight or supervision. While an excellent program model, this phenomenon results in inconsistent implementation practices, data input and priority on a station-by-station, officer-by-officer basis.

The NRFD Fire Investigators are operating under a 1985 Department Policy that no longer relates to current operating practices. Fire Investigators serve on an ancillary basis in addition to their full-time shift Lieutenant responsibilities.

The priority of Life and Fire Safety Education in the Department wanes. This effort is not mentioned in the Department’s budget, management reports or organizational makeup. The current culture appears to be “no overtime, no life and fire safety education.”

The plans review, inspection, fire protection system test, fire investigation and life & fire safety education entities of the New Rochelle Fire Department need to be organized in a manner, complemented by fire suppression forces and community coalitions, to address the City’s fire problem in a coordinated effort.

This coordinated effort must include, among a number of things, the collection and analysis of all pertinent data resulting in regular management reports for the use of NRFD policy makers in determining activities, trends and planning for all aspects of the Department.

The Department needs to “redesign” its fire prevention and risk reduction culture and organization to engage the New Rochelle community as partners in life and fire safety.
Executive Summary

The fire prevention options and recommendations include:

1. Identifying the number of fire prevention code inspectable properties;
2. Providing dedicated clerical and administrative support to the Life and Fire Safety/Risk Reduction program;
3. Implementing a program where “in-service” fire companies effectively and efficiently complete maintenance inspections of all Fire Prevention Code inspectable properties;
4. Documenting the number of site plan reviews and the number of fire protection system plans reviews, test and inspections;
5. Initiating data collection and analysis to provide a resource for the Department to develop an effective fire prevention program;
6. Implementing a formal fire investigation call-out and standard operating policy;
7. Assigning, at a minimum, a certified ancillary Fire Investigator to each of the four rotating shifts;
8. Completing an analysis of the details of good intent calls and false calls;
9. Implementing a policy to cause the accurate reporting of the fire loss; and
10. Conducting a “desk audit” of the current NRFD Administrative Assistant and Data Control Clerk positions.

COOPERATIVE SERVICES PROVISION

Cooperative services provision initiatives and successes are a national trend in the provision of public safety services. The Study Team has extensive knowledge and experience with the consolidation and regionalization options and related benefits available to cities and towns for consolidation and regionalization of various functions, including fire and emergency medical services. It is for that reason that a full chapter of this Report is dedicated to this subject for consideration by City officials, services providers, and taxpayers.

There are many benefits that may be attained through fire, emergency medical, and dispatch services consolidation and regionalization, including:

1. Increased efficiency;
2. Improved effectiveness;
3. Seamless delivery of services;
4. Elimination of overlaps in positions;
5. Elimination of duplicate equipment;
6. Reduced response time for units dispatched;
7. Increased opportunity for staff specialization;
8. Upgrading recruit training programs;
9. Opportunity for increased promotional selectivity;
10. Increased promotional opportunity for personnel;
11. Potential revised perspective/outlook of personnel;
12. Enhanced or expanded services;
13. Improved safety of customers and services providers;
14. Reduced costs;
15. Improved incident command coverage;
16. Improved allocation and utilization of staffing;
17. Cost avoidance;
18. Coordination of planning;
19. Standardization of services and programs;
20. Improved and more effective training;
21. Potential improved ISO rating; and
22. Impact on future state and federal grant funding.

This Report outlines a number of fire, emergency medical, and dispatch cooperative services options available to the City for consideration.

The cooperative services provision options and recommendations include:

1. Implementing an appropriate form of cooperative fire protection services delivery and/or consolidation;
2. Expanding the regional planning effort with adjacent municipalities that could lead to substantial services delivery improvement and cost savings and/or avoidance;
3. Encouraging Westchester County officials to pursue an official Westchester 2000 type initiative for 2014; and
4. Establishing a cooperative services implementation task force.
CONSIDERATIONS FOR STUDY DECISIONS

There are many varied considerations that, either directly or indirectly, enter into any analysis and resulting plan involving a determination of the total number of firefighters and officers needed to staff a fire department. These may include:

1. The public’s fire services delivery expectations of the fire department, as determined by municipal or other decision makers;
2. How soon after arrival at the scene of a fire is the fire department to initiate interior firefighting, e.g., immediately or when the second fire unit arrives.
3. Geographic layout of the fire services area;
4. Geographic barriers to apparatus response, e.g., bays, lakes, rivers and creeks;
5. Age of the community and building stock;
6. Density of population and development;
7. Level of consistency with national standards/guidelines and accepted practices;
8. Number of fire stations in the service area;
9. Distance between fire stations;
10. Roadways and their design;
11. Type and age of fire apparatus;
12. General fiscal condition of the municipality;
13. Community water supply;
14. Type of staffing approach, paid, volunteer or combination;
15. Actual and projected response times of apparatus;
16. Availability of mutual aid fire apparatus response;
17. Unique aspects of the service area, e.g., waterfront, island services delivery;
18. Current and projected call workload;
19. Quality of dispatch agency;
20. Relative level of training of personnel;
21. Is the fire department to provide emergency medical first responder and/or transport services;
22. Is the fire department to provide unique services, e.g., boat service, airport rescue;
23. Is the fire department to provide light (vehicle extrication) and/or heavy rescue services;

24. Labor contract provisions;

25. Is the fire department to provide a level of fire prevention services, e.g., building inspections, fire investigations, building plans review and public fire education;

26. Is the fire department responsible for its own apparatus repair and maintenance;

27. Is the fire department responsible for its own radio maintenance and repair; and

28. Is there a street fire alarm box system that the fire department is responsible for maintaining.

The reader will come to understand, as this Report is reviewed, how these and other considerations enter into the determination of a fire department’s uniformed and civilian staffing levels. Further, the reader will come to understand that decisions regarding the overall staffing of a fire department are driven by many factors and considerations that are largely based on the nature of the service area; the type and quality of services to be delivered; and relative cost of fire and EMS services delivery. For these reasons, it should be understood there is no single factor in determining the appropriate overall staffing of a fire department and that municipal decision makers have a complex job to perform in determining the appropriate level of staffing for their fire and EMS department. A major goal of this New Rochelle Fire and Emergency Medical Services Study is to provide decision makers and services providers with the information and tools with which to make informed decisions.

ANTICIPATED OUTCOMES

When upgrading the personnel, operations, management and administration of a fire department, it is not possible to delineate all the positive outcomes. Improving the quality of life in a community and saving lives do not necessarily involve quantitative analysis.

A number of the anticipated returns on investment for the operations and management recommendations in this Study include:

1. Improved management of the New Rochelle Fire Department by upgrading the senior uniformed staffing through programmatic oversight;

2. Increased pride in the organization;
Executive Summary

3. Decreased apparatus response time through sending closest mutual aid units;
4. Reduced loss of time on the job through comprehensive firefighter safety programs;
5. Improved cost effectiveness through program revisions;
6. Improved EMS provision through increased Transcare ambulance coverage;
7. Enhanced fire protection of buildings through fire prevention program improvements;
8. Improved cost effective service through automatic mutual aid;
9. Improved firefighter effectiveness through upgraded training;
10. Increased awareness, planning for major fire incidents, safety and improved effective use of firefighters through building inspections by firefighters and officers in the fire stations;
11. Improved morale within the NRFD;
12. Improved image of the NRFD through program upgrades and accreditation;
13. Improved incident scene accountability;
14. More effective use of key senior staff members; and
15. Enhanced status of the City being served by an accredited fire agency.

Annual Updates

The City is encouraged to assign City staff and Fire Department staff to update this Study on an annual basis.

Quality of Personnel

In the conduct of comprehensive fire department studies, it is not unusual for fire department personnel to resent a study and/or fail to participate in the study. In the City of New Rochelle, the Study Team was most impressed with the attitudes and quality of Fire Department personnel. This positive impression includes members of IAFF Local. Firefighters and officers were very candid and open about their Fire Department. They expressed pride in a number of the very progressive programs and initiatives by the New Rochelle Fire Department. This pride and accomplishment are well deserved.
In the judgment of the Study Team, the stakeholders in the City of New Rochelle (residents, business officials, Mayor, City Council, and visitors) can be very proud of the employees of the New Rochelle Fire Department. It was a pleasure for the Study Team to work with members on current model programs as well as models that should be considered for the future.
CHAPTER ONE
INTRODUCTION

A brief overview of the City of New Rochelle in this Chapter includes: the setting, history and governance of the City; the organization, staffing and budget of the New Rochelle Fire Department; overtime; grant funding, revenue sources; comparative costs; comparative staffing; and prior fire studies.

This Chapter also summarizes the methodology for conducting this Performance and Management Study, referred to as the Study in this report.

THE SETTING

New Rochelle, located in the southeastern end of Westchester County, is the second largest city in County. It is a waterfront city located on the north shore of the western end of Long Island Sound.

History of the City

As stated on the City’s website, “New Rochelle’s 300-year-old story reflects many of America's national trends and social movements. Founded by Huguenots (French Protestants), who left their homeland of France in pursuit of religious freedom, the 6,000 acres the refugees purchased from John Pell in 1688 now comprise the seventh largest city in New York State. Over three decades of fascinating history continue to resound in many of the community’s neighborhoods, parks, waterfront, and its downtown.” The City celebrates its 325th anniversary in 2013.

New Rochelle Today

The City is well within the New York City Metropolitan Area, just north of the Bronx. Its 11-square-mile, arrowhead-shaped geography is fully developed with a mix of urban and suburban neighborhoods.
There are many small and uninhabited islands off the waterfront. The largest—David’s Island—was a former military installation. Today, only the unused street network remains. Glen Island is developed and reached via a bridge. Other small islands, which have structures on them, are reachable only by boat.

The City is two miles north of New York City and is bordered by the following municipalities, as illustrated in Figure 1.1:
- Pelham, Pelham Manor and Eastchester on the west;
- Scarsdale to the north and east; and,
- Mamaroneck and Larchmont to the east.

The population of the City includes 77,062 residents according to the 2010 U.S. decennial Census. This is an increase of approximately 7% from a decade earlier when the residential population was 72,182 persons. Historically, the City population had been decreasing steadily since 1960, reaching a low point in the 1980 Census. Since then, the City’s residential population has reversed the trend to exceed 1960s level.

New Rochelle includes a number subsections organized into neighborhoods that are generally recognized by residents, but with no legal or political authority.

The neighborhoods include:

- Bayberry
- Beechmont
- Bloomingdale Estates
- Bonniecrest
- Daisy Farms
- Davenport Neck
- Echo Manor
- Forest Heights
- Forest Knolls
- French Ridge
- Glen Island
- Glenwood Lake
- Heathcote
- Lake Isle
- Larchmont Woods
- Lyncroft
- Northfield
- North Ridge
- Paine Heights
- Pinebrook
- Premium Manor
- Ward Acres
- Quaker Ridge
- Residence Park
- Rochelle Heights
- Sans Souci
- Scarsdale Downs
- Shore Road
- Sutton Manor
- Vanneck Estates
- Ward Acres
- Wilmot Woods
- Wykagyl
Figure 1.1
CITY OF NEW ROCHELLE FIRE DEPT. STUDY BASE MAP
CITY GOVERNANCE

New Rochelle operates under a Council-Manager form of government. The City Council is the legislative body consisting of the Mayor and six council members. Since 1993, the City has had six council districts, with one council member elected from and by each district. The City Council, under the City Charter, is given certain specific duties:

- Set policy;
- Appoint the City Manager and the City Clerk;
- Approve the budget; and,
- Enact local laws, resolutions and ordinances.

Enactment of any City local law must be preceded by a public hearing. A majority vote of the Council is required to pass laws. Council members also make appointments to certain citizen advisory committees. The six Council members are each elected by district to a four-year term. The Mayor serves as the presiding officer of the Council.

The City Manager is the chief administrative officer of the city selected to carry out the directives of the Council. The City Manager monitors the city’s fiscal condition and enforces its ordinances and laws. The City Manager is involved in the discussion of all matters coming before Council, yet has no final vote.

NEW ROCHELLE FIRE DEPARTMENT

For budget and organizational purposes, the New Rochelle Fire Department (NRFD) consists of 14 functional areas as follows:

1. Office of the Fire Chief/Commissioner
2. Fire and Emergency operations
3. Support Services
4. Planning and Research
5. Training
6. Safety
7. Fleet Services
8. Communications
9. Facilities
10. Fire Investigations
11. Code Enforcement
12. Fire Prevention
13. Public Safety Educations
14. Housing Code Enforcement

These primary functional areas are outlined on the Fire Department Table of Organization

**Mission Statement**

The mission of the Fire Department, as stated in the City website, is as follows:

“The Fire Department has the primary tasks of:
- Providing adequate fire protection and extinguishment capability
- Initiating life rescue
- Rendering emergency medical assistance
- Controlling hazardous material situations including weapons of mass destruction incidents and providing related emergency services.”

**Fire Chief/Commissioner**

The City Charter includes the following relating to the Fire Chief / Commissioner.

**City Charter – Section 58.01**

“The Chief of the Fire Department shall be appointed by the City Manager and shall also be known as the ‘Fire Commissioner.’ He shall be the executive head of the Fire Department and shall have charge and control of the administration and discipline of said Department and of the buildings and equipment thereof. He shall appoint, with the approval of the City Manager, such other officers and uniformed members of such force as he may deem necessary and as may be authorized by the Council. He shall have authority to administer oaths and take evidence, affidavits and acknowledgments in all proceedings relating to the Fire Department. He shall be responsible for the administration and enforcement of the Environmental Protection Code of the City.” [Enacted by Local Law No. 1-1964 (January 8, 1964); amended by Local Law No. 1-1984 (January 17, 1984).]
Current Position Structure

The following sections describe the uniformed/sworn and civilian workforce rank and position titles that comprise the NRFD.

Sworn Workforce

The primary operations rank structure of the Fire Department includes the following positions:

- Fire Chief / Commissioner
- Deputy Fire Chief
- Captain
- Lieutenant
- Firefighter

Civilian Staff

The full-time staff of the NRFD includes three civilian staff members in different job title specialties, including:

- Master Mechanic
- Administrative Assistant
- Data Control Clerk

NRFD Staffing

The City of New Rochelle Fiscal Year 2013 approved budget includes a total of 158 employee positions, including 155 uniformed and three non-uniformed civilian employees (see Figure 1.2).

It should be noted that the non-uniformed complement includes an automotive mechanic position.
Figure 1.2
NEW ROCHELLE FIRE DEPARTMENT—FY 2013 STAFFING SUMMARY

<table>
<thead>
<tr>
<th>Position/Org. Element</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uniformed</td>
<td></td>
</tr>
<tr>
<td>Fire Chief/Commissioner</td>
<td>1</td>
</tr>
<tr>
<td>Deputy Chief</td>
<td>5</td>
</tr>
<tr>
<td>Fire Captain</td>
<td>8</td>
</tr>
<tr>
<td>Fire Lieutenant</td>
<td>32</td>
</tr>
<tr>
<td>Firefighter</td>
<td>109</td>
</tr>
<tr>
<td><strong>Sub-Total Uniformed</strong></td>
<td><strong>155</strong></td>
</tr>
<tr>
<td>Non-Uniformed</td>
<td></td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td>1</td>
</tr>
<tr>
<td>Data Control Clerk</td>
<td>1</td>
</tr>
<tr>
<td>Automotive Mechanic</td>
<td>1</td>
</tr>
<tr>
<td><strong>Subtotal - Non-Uniformed</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td><strong>TOTAL EMPLOYEES</strong></td>
<td><strong>158</strong></td>
</tr>
</tbody>
</table>

Source: New Rochelle FY 2013 approved budget.

Fire Department Budget Totals

The NRFD approved budgets for the last 4 years is shown in Figure 1.3.

Figure 1.3
NRFD APPROVED BUDGETS FOR PAST 4 YEARS

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Approved Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2013</td>
<td>$28,130,100</td>
</tr>
<tr>
<td>FY 2012</td>
<td>$27,517,259</td>
</tr>
<tr>
<td>FY 2011</td>
<td>$25,828,191</td>
</tr>
<tr>
<td>FY 2010</td>
<td>$25,512,937</td>
</tr>
</tbody>
</table>

Source: City of New Rochelle

Grants

The New Rochelle Fire Department has received a substantial number of grants to fund various initiatives. Figure 1.6 contains a listing of a number of grant awards provided to the Study Team.
INTRODUCTION

Figure 1.4

NEW ROCHELLE FIRE DEPARTMENT GRANTS - FY2007 TO FY2013

<table>
<thead>
<tr>
<th>Grant Title</th>
<th>Grant Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007 - Homeland Security SUASP</td>
<td>$325,000</td>
</tr>
<tr>
<td>2007 - Act grant</td>
<td>$112,000</td>
</tr>
<tr>
<td>2007 - SAFER</td>
<td>$828,000</td>
</tr>
<tr>
<td>2008 - Homeland Security SUASP</td>
<td>$140,000</td>
</tr>
<tr>
<td>2008 – FIRE Act grant</td>
<td>$280,000</td>
</tr>
<tr>
<td>2009 – FEMA Fire Assistance</td>
<td>$124,080</td>
</tr>
<tr>
<td>2011 – FEMA Mutual Aid</td>
<td>$352,236</td>
</tr>
<tr>
<td>2011 – FEMA Fire Assistance</td>
<td>$298,702</td>
</tr>
<tr>
<td>2012 – FEMA Urban Search &amp; Rescue</td>
<td>$122,440</td>
</tr>
<tr>
<td>2012 – Fire Assistance</td>
<td>$316,080</td>
</tr>
<tr>
<td>2012 – SAFER</td>
<td>$1,003,020</td>
</tr>
<tr>
<td>2013 – Critical Infrastructure</td>
<td>$20,500</td>
</tr>
<tr>
<td>2013 – FIRE Act grant</td>
<td>$51,512</td>
</tr>
</tbody>
</table>

Source: City of New Rochelle.

CURRENT FIRE STATION LOCATIONS

Currently, the New Rochelle Fire Department provides fire and first responder services from fire station facilities listed in Figure 1.5.

Figure 1.5

NEW ROCHELLE FIRE STATIONS & APPARATUS

<table>
<thead>
<tr>
<th>Station</th>
<th>Year Built</th>
<th>Address</th>
<th>Engine</th>
<th>Truck/Ladder</th>
<th>Ambulance*</th>
<th>Rescue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1966</td>
<td>45 Harrison St</td>
<td>Engine 21</td>
<td>Ladder 11</td>
<td>Transcare 30A1</td>
<td>Rescue 4</td>
</tr>
<tr>
<td>2</td>
<td>1926</td>
<td>170 Webster Ave</td>
<td>Engine 22</td>
<td>Ladder 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1902</td>
<td>756 North Ave</td>
<td>Engine 23</td>
<td>Ladder 13</td>
<td>Transcare 30A2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1911</td>
<td>155 Drake Ave</td>
<td>Engine 24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1960</td>
<td>456 Statton Rd</td>
<td>Engine 25</td>
<td></td>
<td>Transcare 30A3**</td>
<td></td>
</tr>
<tr>
<td>HQ</td>
<td>1962</td>
<td>90 Beaufort Pl</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The Ambulance service is provided by Transcare, Inc.
**This is a "half-unit" or "Day Unit" due to multiple calls, the unit is assigned not housed in Station 5 but is to roam the north end area near Quaker Ridge Road.

Figure 1.6 illustrates the City fire station locations.
Figure 1.6
NEW ROCHELLE FIRE STATION LOCATIONS
NRFD Apparatus
The current major fire and EMS apparatus included in the fleet of the New Rochelle Fire Department are listed in Figure 1.7.

### Figure 1.7
**SUMMARY BY APPARATUS TYPE**

<table>
<thead>
<tr>
<th>APPARATUS</th>
<th>NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engines</td>
<td>7</td>
</tr>
<tr>
<td>Ladder Trucks</td>
<td>5</td>
</tr>
<tr>
<td>Rescue</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

Source: NRFD.

**STUDY METHODOLOGY**

In conducting this Study for the City of New Rochelle, the Study Team utilized a proven and consistent approach to conduct and complete fire department analysis. This methodology incorporates eight distinct, but interrelated phases: data collection; interviews with key individuals; on-site observation; analysis of data; comparative analysis (which included the computerized fire station location analysis); alternatives and recommendations; submission of a written Study; and an oral briefing.

In addition, the following Study guides were considered.

**Fire Department Accreditation**

The framework for this analysis incorporated the model developed by the Accreditation Committee of the International Association of Fire Chiefs (IAFC) [now the Commission on Fire Accreditation International (CFAI)].

The Commission on Accreditation of Law Enforcement Agencies (CALEA) had previously developed a police department accreditation process for use by police departments. The Commission on Fire Accreditation International developed a similar
analysis model for fire department use on a voluntary basis. Inclusion of this model as a framework for this New Rochelle Study will assure that the “latest thinking” is considered in this Study.

There are ten major analysis categories included in this CFAI accreditation model. The analysis categories included in this CFAI accreditation model are as follows:

1. Governance and Administration
2. Assessment and Planning
3. Goals and Objectives
4. Financial Resources
5. Programs
6. Physical Resources
7. Human Resource
8. Training and Competency
9. Essential Resources
10. External Systems Relations

Within each of these categories, there are specific criteria and considerations weighed by the Study Team in the process of conducting this New Rochelle analysis.

The applicable performance indicators associated with these categories and criteria were considered and addressed where appropriate in this Study.

The CFAI’s manual entitled “Creating and Evaluating Standards of Response Coverage for Fire Departments” provides guidance and direction on the conduct of fire rescue station, apparatus, staffing, and related risk assessment studies. The Study Team utilized the latest (4th Edition) of this CFAI guide for this Performance and Management Study for the City of New Rochelle.

The reader will note that many of the chapters and sections of this Study include performance indicators for the respective subject covered in the material following the CFAI reference.
Standards and Accepted Practices

The Study Team also utilized published fire protection standards and information on accepted principles and practices for the operations and management of fire services as background and guidelines for the conduct of this New Rochelle Study.

Some of the key organizations with standards and publications that were utilized as part of this Study are the following:

- National Fire Protection Association (NFPA)
- ISO Commercial Risk Services, Inc. (ISO)
- International Association of Fire Chiefs (IAFC)
- American Heart Association (AHA)
- American Medical Association (AMA)

The National Fire Protection Association follows a nationally recognized process for the establishment of many standards that are applicable to fire protection operations and administration. In many jurisdictions, some of the NFPA standards have been adopted and fully implemented, while in others NFPA standards are utilized as general guidelines for pursuing further improvement in safety and services.

The following list includes some of the key NFPA standards utilized by the Study Team in conducting this Study for New Rochelle.

<table>
<thead>
<tr>
<th>Name of Standard</th>
<th>NFPA Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard for Fire Fighter Professional Qualifications</td>
<td>1001</td>
</tr>
<tr>
<td>Standard for Fire Officer Professional Qualifications</td>
<td>1021</td>
</tr>
<tr>
<td>Developing Fire Protection Services for the Public</td>
<td>1201</td>
</tr>
<tr>
<td>Fire Department Occupational Safety and Health Program</td>
<td>1500</td>
</tr>
<tr>
<td>Standard for the Organization and Deployment of Fire Ops.</td>
<td>1710</td>
</tr>
</tbody>
</table>

These and other written standards and nationally recognized documents, such as the *NFPA Fire Protection Handbook*, were utilized by the Study Team as reference materials.
STUDY COMPONENTS

The following are the specified components of the Study, as outlined in the City’s Request for Proposals and the PSSi Proposal to conduct the Study:

City Risk Assessment

- Housing stock;
- Population and demographic changes/movement (individuals, businesses, families);
- Demand on the system (current and projected);
- Identify risks in relation to the City’s ability to control and/or minimize such risks;
- Probability of event scenarios that require a response exceeding certain minimum manning levels, considering frequency of events, duration of events, personnel and apparatus required to respond, distribution of responses by fire house and distribution of response by hour;
- Response time;
- Impacts resulting from any potential closure or brownout of firehouse, or from any discontinuance of staffing for a particular apparatus; and,
- Probability of impact, if any, on ISO rating and associated private insurance costs resulting from any changes.

Fire Service Operations

- Overall deployment and supervision;
- Unit/station staffing;
- Use of overtime;
- New technologies;
- Safety (equipment, training, and operations);
- Special operations (Rescue, Hazmat, Disaster Response/Recovery);
- Training facilities and training programs;
- Capacity to call up additional personnel during rare major events;
- Mutual aid as both a supplement to and claim on city resources, noting that New Rochelle is presently a net exporter of mutual aid assistance;
- Potential reduction in false alarms, which are a major drain on resources;
Introduction

• Possible rebalance of staffing and overtime to optimize the cost of achieving manning thresholds;
• Potential for shared services with neighboring communities; and,
• Analysis of call volume versus manning levels during day shift (9:00 am to 9:00 pm) and night shift (9:00 pm to 9:00 am) and the potential impact of adjusting manning levels to meet call demands as illustrated in Attachment C of the RFP, and within the context of existing fire union contract provisions.

Emergency Medical Services

• System overview;
• Overall deployment and supervision;
• Unit/station staffing;
• New technologies;
• Performance evaluation;
• Safety (equipment, training, and operations); and,
• Risk and cost benefit analysis associated with discontinuing Fire EMS on a partial or total basis, noting increased cost to expand ambulance contract.

Other

PSSi will provide any other input or assessments of potential improvements to the NRFD.
CHAPTER TWO

FIRE DEPARTMENT ORGANIZATION

This Chapter includes a review of general aspects of the organization of the New Rochelle Fire Department (NRFD), including history, legal authority, mission, and the current structure of the NRFD. Options and recommendations suggested by the Study Team are included.

OVERVIEW

Organizing fire and emergency services within a community to provide the most efficient and cost effective delivery of quality service is one of the most important functions of local government. Historically, many fire/EMS services were developed and organized on the basis of local neighborhood need and initiative and, in many instances, volunteer fire departments were initially formed. However, as communities have become increasingly urban, calls for service have increased resulting in the need for increased coordination and direction of fire and rescue services and resources through paid services.

A key fire and EMS organizational principle relates to the basic responsibility for public safety within the community. In most areas of the United States, it is widely accepted that the provision of fire and EMS service is considered to be a local government responsibility. Local government is broadly interpreted to include municipalities, such as cities, towns, villages, and townships.

To attain the delivery of optimum fire and emergency medical service, it is essential that local government recognize and accept that responsibility and fulfill that obligation to provide appropriate guidance and direction in order to:

- Oversee the formation process of the organization of fire and EMS services;
- Ensure that the fire/EMS organization reflects the public interest;
- Protect the service from undesirable external interference;
- Determine basic policies for providing services; and,
- Legally define the duties and responsibilities of service providers.
Identification of this authority and responsibility is addressed in Section 3-1 of NFPA 1201, Developing Fire Protection Services for the Public, as follows:

“The government agency responsible for establishment and operation of the fire department shall adopt a formal statement (bylaw, statute) of purpose and policies for the fire department that includes the type and levels of services that are to be provided, the area to be served, and the delegation of authority to the fire chief and other officers to manage and operate the fire department.”

ACCEPTED PRINCIPLES AND PRACTICES—ORGANIZATION

Both the National Fire Protection Association (NFPA) standards and Commission on Fire Accreditation International (CFAI) criteria provide guidance to municipalities and fire departments relating to organization structure.

NFPA 1201 - Standard for Developing Fire Protection Services

NFPA 1201 provisions relate further to the organization structure of fire departments providing guidance to this Fire and Emergency Medical Services Study as follows:

“Chapter 5: Organizational Structure of the Fire Department

5-1 Purpose. The fire department shall have an organizational structure that facilitates efficient and effective management of its resources to carry out its mandate.

5-2 Management/Fire Chief.

5-2.1 The manager of the fire department shall be the fire chief. The fire chief shall be governed in the development of regulations and orders by the provisions of all applicable laws or ordinances and shall maintain a file of such documents.

5-2.2 The fire chief shall be appointed on the basis of merit and ability.

5-2.3 The fire chief shall communicate closely with the local government chief executive and governing body.
5-2.4 The governing body shall establish only the primary policies of the fire department and shall not act as an administrative agency or direct day-to-day management of the department.”

**CFAI Governance and Administration Criteria**

The CFAI accreditation criteria related to fire department organization governance and administration that is relevant to this Fire and Emergency Medical Services Study is as follows:

*Performance Indicators*

The governing Board and/or agency manager has been legally established to provide general policies to guide the agency, approved programs and services, and appropriated financial resources.

1. The agency has been legally established.
2. The governing body having jurisdiction over the fire service organization or agency periodically reviews and approves programs and ensures compliance with basic agency policies.
3. The governing body approves the administrative structure that carries out the agency’s mission.

There is an established administrative structure and environment for achievement of the agency’s mission, purpose, goals, strategies and objectives.

1. There exists an administrative structure that reflects the agency’s mission, goals, objectives, size and complexity.
2. Allocation of resources reflects the agency’s mission, goals and objectives.
3. The agency administration demonstrates compliance with legal requirements of local, state, and federal governments.
4. Personnel functions, roles and responsibilities are defined in writing and a current organization chart exists.

The Study Team considered these criteria as the organization of the NRFD was reviewed as part of this Fire and Emergency Medical Services Study.
The remainder of this Chapter addresses current legal authority to operate fire and emergency medical services in the City of New Rochelle, current organization of the NRFD, and appropriate conclusions and recommendations.

**LEGAL AUTHORITY**

This section of the Fire and Emergency Medical Services Study outlines the background and legal authority under which the NRFD is organized and operates.

The following sections address legal references in the Code of the City of New Rochelle relative to the organization of the fire protection related services.

**State of New York**

Cities in the State of New York are required to provide fire protection. It is typically provided through a municipal fire department, which may have paid and/or volunteer firefighters. According to the Firemen’s Association of the State of New York (FASNY), 42 cities have all or mostly paid fire departments, while 17 are all or mostly volunteer departments.

**City of New Rochelle**

Regarding the organization of the New Rochelle Fire Department, the City Charter provides the following:

City Charter – Section 59. Constitution of the Police and Fire Departments

_The Police and Fire Departments shall as to their membership and organization remain as now constituted until the same shall be changed by the Council. All members of the Police and Fire Departments, subject to the powers of removal hereinafter specified, shall hold their respective positions and offices during good behavior or until by age or disease they shall be permanently incapacitated, or for any reason become unfit to discharge their duties. [Enacted by Local Law No. 1-1964 (January 8, 1964).]_
Reportedly, the City Code does not include a delineation of the organization and responsibilities of the Fire Department. The City is encouraged to develop a more complete organizational description of the Fire Department in the Charter and a related City Code section, as appropriate.

**Fire Department Rules and Regulations - 2008**

The New Rochelle Fire Department Rules and Regulations states that “The Charter of the City of New Rochelle imposes upon the Fire Department the following major functions:

- The saving of lives and property.
- The suppression and control of fires.
- Providing related emergency services.
- Administration and Enforcement of applicable portions of the Fire Code and Property Maintenance Code of New York State.
- To promote Fire Prevention activities designed to reduce the incidence and probability of fire.”

It appears that the actual City Charter and the reference to the City Charter included in the latest version of the NRFD Rules and Regulations are inconsistent in that the Rules and Regulations attributes functions to the Fire Department that are not stated in the Charter.

**Fire Chief/Commissioner**

The City Charter includes the following relating to the Fire Chief / Commissioner.

**City Charter – Section 58.01**

“The Chief of the Fire Department shall be appointed by the City Manager and shall also be known as the ‘Fire Commissioner.’ He shall be the executive head of the Fire Department and shall have charge and control of the administration and discipline of said Department and of the buildings and equipment thereof. He shall appoint, with the approval of the City Manager, such other officers and uniformed members of such force as he may deem necessary and as may be authorized by the Council. He shall have authority to administer oaths and take evidence, affidavits and acknowledgments in all proceedings relating to the Fire
In reviewing the Charter relative to the Fire Chief’s current duties and responsibilities, it is clear that this statement of the role of the Fire Chief is not specific or consistent with the current expectations of the City in 2013.

The City is encouraged to appropriately revise and expand this section of the Charter and/or develop an appropriate more detailed section in the City Code that reflects the Fire Chief’s duties and responsibilities.

NRFD HISTORY

The New Rochelle Fire Department has a long and colorful history that began in 1861. A detailed and interesting history and tribute of and to the New Rochelle Fire Department, 1861-1961, entitled Red Shirt, Blue Shirt, was written by Thomas A. Hoctor and published in 1961. A short version of that book, which is included on the City’s website, is included in this section. It reads as follows:

“Thanks to a $2,400 appropriation in 1861 by the village fathers, New Rochelle’s first fire company — known as the Enterprise Hook and Ladder and Bucket Company No. 1 — was organized. Half the money paid for a hook and ladder, $400 for other equipment, and $800 for a firehouse. Shortly after, another group of citizens began to organize an independent fire company known as Huguenot Company No. 1, which became the first company to get its apparatus ahead of Enterprise.

With this, the history of the New Rochelle Fire Department began, but the early days of firefighting were not easy. Both companies had ladders, but no hoses. Neither had an engine to pump water and access to water was scarce.

The late 1800s saw many other volunteer fire companies form as well as the introduction of a hand pumping fire engine formerly used by the New York City Fire Department. In effect, this was the dawn of the modern era of fighting fires.

Shortly after the turn of the century, $50,000 was appropriated to fully modernize the department and set in motion the transition from a volunteer force to a paid
one. The monies were used for a new fire headquarters and the hiring of the first two paid firemen to drive the new equipment.

The late ’20s saw the last of the volunteer firemen and by 1929, there were 99 paid firemen in the department.

The ’30s, ’40s and ’50s were marked by continued modernization, but just as importantly, the department focused on fire prevention and received national recognition for its efforts. In the midst of all this, the department had to reach back to the days of volunteers. With the outbreak of World War II, many of the men who served in the department went to fight, and many of the positions in the department were filled by an auxiliary force.

The ’60s and ’70s saw the creation of the Emergency Reporting System, the movement of the fire headquarters to City Hall, the replacement of all of the City's fire apparatus, and heavy emphasis on mobile inspections and fire prevention. The early ’80s were marked by major steps in the emergency medical field with the introduction of EMT classes for firefighters and great improvement in the medical equipment on fire apparatus.

Today's Fire Department is a full service department, capable of handling fires, rescues, extrications, and hazardous material incidents. The department aggressively pursues fire prevention and code enforcement programs, and is responsible for plan reviews, underground tank installations, and control of all places of public assembly. The department also issues licenses and permits in an effort to control potentially hazardous or even dangerous situations.

Keeping buildings and other living areas in good, safe condition is a major responsibility of the department. By controlling illegal, dangerous occupancies and tenant overcrowding residents are kept safe.

The New Rochelle Fire Department is known as the premiere fire department in the area because of its wide range of services and its professionally trained staff. And, with five fire houses strategically stationed throughout the City, when a fire breaks out, or if there's a medical emergency or disaster, help is only a short distance away.”
NRFD MISSION, VISION AND VALUES

A number of documents and sources outline various versions or views of the mission and/or duties of the New Rochelle Fire Department. The Study Team identified the following.

Fire Department Strategic Plan – 2005

The 2005 draft *City of Rochelle 2005 Fire Department Strategic Plan, Executive Summary*, which was provided to the Study Team, included a Fire Department Mission Statement that reads as follows:

“The Fire Department has the primary task of providing adequate fire protection and fire extinguishment capability, initiating life rescue, rendering emergency medical assistance, controlling hazardous material situations including weapons of mass destruction incidents and providing related emergency services. The Fire Department has the responsibility for the administration and enforcement of the fire prevention code and housing code, and for promoting fire prevention activities designed to reduce the incidence and probability of fire.”

City Website

The mission of the Fire Department as stated in the City website is as follows:

“The Fire Department has the primary tasks of:
• Providing adequate fire protection and extinguishment capability
• Initiating life rescue
• Rendering emergency medical assistance
• Controlling hazardous material situations including weapons of mass destruction incidents and providing related emergency services.”
The “responsibilities” of the Fire Department, as outlined on the City website, read as follows:

“The Fire Department has the responsibility for the administration and enforcement of the Fire Prevention Code and the Housing Code, the City’s contracted ambulance service, and for promoting fire prevention activities designed to reduce the incidence and probability of fire.”

Apparently, neither the NRFD Rules and Regulations nor Standard Operating Procedures include information relating to the Fire Department’s mission, vision, or values.

The Study Team suggests that the Fire Chief conduct a process to revise the mission statement and develop a Department vision statement and a set of operating values in the near future to facilitate implementation of the Study recommendations. The following information is provided to guide the Fire Department in the process.

**Mission Statement Revision**

In order to evaluate the current mission statement and make revisions, it is important to review some basic principles regarding a mission statement.

1. It should summarize the spirit of the organization in a short statement;
2. The statement ideally should be less than 25 words and describe the life and work of the organization. It should be simple enough that it can be easily memorized and recalled;
3. It should describe the what, whom and how of a department and clearly reflect the major services provided and how they relate to the community it services;
4. It should be developed with input from many factions of the organization and have personnel buy-in;
5. Once adopted, the mission statement should be displayed prominently throughout the Department facilities; and,
6. A mission statement is never considered finished. It should be refined every few years to reflect changes in the organization or industry.

The mission statement is intended to describe the overall mission of the New Rochelle Fire Department. The current statement of NRFD’s mission is consistent with traditional objectives in fire departments. However, it does not appear to reflect the many changes that have taken place in New Rochelle. Changes have taken place in community
expectations and funding that have caused the transformation of most fire departments from a strict fire suppression orientation to an organization trained and prepared to provide a broader range of services to the communities, especially in the area of emergency medical services and prevention.

At one time, fire department services focused on emergency response, but this has broadened to include much more in community service. It is vital that fire service personnel develop excellent interpersonal skills in order to interact well with the public. Customer service—a key to success in business—is an important part of the fire service.

Americans are now looking for satisfaction not only in consumer products, but also in public services that they are funding, such as fire protection. In the future, fire departments will be held more accountable for the services to residents. This concept of accountability is likely to evolve into a quality assurance program, where a fire department's performance will be evaluated and measured against standards set by the community.

The impact of the past fiscal constraint will linger on into the future. Financial constraint has forced local governments to closely examine resources allocated to various services. Managers, including fire service managers, are being challenged with providing better and increased services with fewer resources. Progressive fire service leaders are accepting this challenge by working with government and the community in a partnership to provide necessary (and sometimes expanding) services without an increase in resource allocation.

These trends impacting the fire service today and in the future should result in an improved fire service; safer communities and customer-focused services; and should be considered when revising the mission statement to reflect the contemporary NRFD.

It is recommended that the Fire Chief assemble a cross representative group of as many Fire Department personnel as possible to review and revise the mission statement. The statement should not be finalized until it has been sent out for review and comment by all NRFD personnel, which will ensure buy-in from the Department staff. In conjunction with this process, the group should develop a vision statement for the Department as well as values. Having these in place will provide a stable foundation for the development of the Department’s goals and objectives.
Vision Development

While many fire departments have mission statements, very few, such as the NRFD, have defined vision statements. Yet, vision statements are common in private industry. Most books and articles on leadership discuss the importance of vision statements. Vision has many definitions. In reference to organizational vision, it is a statement that creates the future from a montage of current facts, hopes, dangers and opportunities.

A department’s vision serves many purposes:

- Determines its success or failure;
- Unites its strategy and culture;
- Inspires its personnel;
- Assists the department and its members to think in broad terms and achieve more than they imagined possible; and,
- Motivates and energizes.

An example of a fire department vision statement that has proven effective in meeting these purposes is one developed and adopted by the Los Angeles County Fire Department.

“The Los Angeles County Fire Department will be an exemplary organization acclaimed for our national reputation, our regional strength, and our hometown attentiveness as we provide fire protection and life safety services.”

There are ways of acquiring a vision.

1. Impose the personal vision of the leader — This approach has limitations. There is no ownership by the organization because its members had no part in the creation of the vision. The leader has to define why the vision is so compelling that it should be adopted by all.
2. Buy a vision — This will usually get the organization an off-the-rack vision statement. This method also lacks ownership by the people within the organization.
3. Forge a vision together (with the organization’s top managers and both formal and informal leaders) — This way probably leads to the most durable and effective results.
The Study Team suggests that the Fire Chief, in concert with his managers and representatives of various organizational elements, consider a Department vision. For the vision statement to be effective, the development team should identify keys to success that will help personnel visualize the meaning of the vision. Once finalized, the vision should be articulated at Department functions and at all levels of the organization. All Department activities and individual actions should be defined in terms of fulfilling the vision. This institutionalizes the vision and keeps the Department focused to make the vision reality.

**Values Development**

Values are guides for the organization to fulfill its mission. They serve as guiding principles for the daily conduct between department personnel and their customers. The behavior of individual members of an organization in dealing with each other and people outside of the agency should reflect the organization’s values.

Values are vital to an organization for several reasons:

1. They provide a guide so employees know the organization’s expectations and what they can expect from each other;
2. They inspire employees to do their best;
3. They provide a basis for daily communications and decision making; and,
4. They provide guidance for allocating resources and resolving personnel problems.

If values are new to an organization, the department leadership needs to pave the way for acceptance by marketing values. First, the department needs to have an updated mission statement in place for alignment. Next, the importance of values and how they fit into an organization needs to be discussed with key staff members to get their buy-in. The department leader should use success stories of organizations that have adopted values.

Once there is a commitment by the key staff, the leadership can work to develop the process for identifying and adopting the department values. Timing is an important consideration. The process should be scheduled when staff has time to dedicate attention to the process. It should not be undertaken during a time of crisis in the department. Depending on the size of the organization, the process of identifying values and adoption may take as long as three to six months.
Determining who will be involved in the process is another important decision the leadership must consider in the planning phase. The more inclusive the process, the higher the level of staff ownership. There are several ways to conduct the process to provide for mass review at different phases in the development. Fire departments that have history with values may provide insight as to effective ways of gaining input. There are also facilitators who can be brought in to assist with developing and conducting values development processes.

It is recommended that an organization select its top five to seven values. Once the values are identified they should be concisely defined so all personnel have an understanding of the meaning of the values. Like the mission statement, the values should be straightforward and easily remembered.

The process does not end with the adoption of a list of values. This is when the most challenging phases of communicating the values throughout the organization and aligning the behavior with the values begin.

Listed below are ways of institutionalizing the values:

1. The leadership must model the values in its behavior on a consistent basis.
2. Values should be written and distributed to each member of the department.
3. Values can be printed on wallet cards, made into posters, added to department stationery, and published on department documents.
4. The leadership should use the values in daily communication and make reference to them in talks and correspondence. They should seek to find values in unexpected and critical events and bring them to the attention of staff.
5. The leadership should encourage discussion on ways staff are using the values in their work groups.
6. The leadership should make values part of the reward and recognition system.
7. All new hires should be oriented to the department values during their hiring process and initial training.

The revising of the mission statement and the vision and creating values will lay a solid foundation for the development of goals and objectives based on the recommendations
resulting from the NRFD Study. Further, this effort may be an important part of the effort to refocus the culture of the Department. The Study Team noted that the current Mission Statement is found on the Fire Department’s website. Many organizations place their mission statement in the front of the fire department’s policy and procedures manual as free-standing sheets of paper with no policy reference or explanation as to their purpose or having been officially adopted. Typically, such organizational statements are included as part of an official fire department policy.

**ORGANIZATION STRUCTURE**

The current organization structure of the New Rochelle Fire Department is outlined in the following sections of this Chapter.

**Current Ranks and Position Titles**

The following sections describe the uniformed and civilian workforce rank and position titles that comprise the NRFD.

**Sworn Workforce**

The primary operations rank structure of the Fire Department includes the following positions:

- Fire Chief / Commissioner
- Deputy Fire Chief
- Captain
- Lieutenant
- Firefighter

**Civilian Staff**

The full-time staff of the NRFD includes three civilian staff members in different job title specialties, including:

- Master Mechanic
- Administrative Assistant
- Data Control Clerk
Current Organization Chart

The following New Rochelle Fire Department’s Table of Organization (Figure 2.1) was provided to the Study Team to illustrate the Fire Department’s organization.

**Figure 2.1**
**TABLE OF ORGANIZATION — NEW ROCHELLE FIRE DEPARTMENT**
Aspects of the Current Organization Chart

There are a number of primary aspects of the current NRFD Table of Organization (Figure 2.1) that are noteworthy:

1. There are five deputy chief position, four of which are on the rotating 24-hour shift responsible for operations and one who heads up Support Services;

2. While on-duty, each of the four deputy chiefs, on the rotating 24-hour shift, are responsible to manage and oversee the on-duty 9 fire companies and respond on emergency incidents when dispatched, or otherwise needed;

3. The four deputy chiefs are not assigned major functional areas of responsibility, such as personnel, apparatus, hazmat, facilities, equipment, and uniforms;

4. Fire prevention functions, including code enforcement, public safety education and housing code enforcement, headed by a captain, are shown reporting to the Fire Chief;

5. The fire investigations unit, as shown, reports to the Fire Chief separate from fire prevention; and,

6. Although not shown, the two civilian administrative personnel report to the Fire Chief.

The Fire Chief should develop a revised NRFD Table of Organization for use by the Department as part of its comprehensive policies and procedures. The revised organization chart should reflect change/s as they are made based on implementation of options and recommendations contained in this Study Report and other changes that may be made in the future related to the organizational structure of the Fire Department.

ORGANIZATIONAL OBSERVATIONS

A number of the Study Team’s general observations are included in this section regarding the organization and operations of the Fire Department from departmental and organizational perspectives. These observations are based on a review of the organization chart; various NRFD documents; general orders; policies and procedures; job descriptions; personnel interviews; and consideration of national trends and principles and practices observed by the Study Team.
The Fire Department is governed by the provisions of the Charter and Code of the City of New Rochelle, as well as the established policies and procedures and the Rules and Regulations.

The Department is an all-paid fire department with all commissioned firefighting and three full-time civilian support personnel employed by the City of New Rochelle. The basic chain of command in the Department is similar to that used in other paid fire departments with one fire chief, a number of deputy fire chiefs, four platoons each with a deputy chief and a complement of captains, lieutenants and firefighters assigned to the five firehouses.

**Emergency Medical Services**

As described well on the City website, New Rochelle firefighters and officers fight fires and are also fully trained and equipped to provide emergency medical services. All New Rochelle firefighters are New York State Department of Health certified Emergency Medical Technicians. Each of the five firehouses has an EMS-equipped engine assigned. Many times an engine is closer to an emergency scene and is dispatched along with a private paramedic ambulance, which provides Advanced Life Support (ALS) care.

The City of New Rochelle contracts with a private ambulance service to provide dedicated paramedic-staffed ambulance transport units. Currently the City contracts with Transcare Ambulance Service for two ambulances, 24 hours a day, 7 days a week. These units are stationed at Fire Station #1 on Harrison Street and Station #3 on North Avenue. A third ALS ambulance is on duty from 7 am to 7 pm (busiest time). This unit is not assigned to a fire station and is considered a “floater.” Typically this unit is staged on Quaker Ridge Road in order to be available to the more northern parts of the City.

The Emergency Medical Services chapter of this Study Report provides details regarding the delivery of emergency medical services through a team effort involving Transcare Ambulance Service and the New Rochelle Fire Department.
Organizational Issues

A number of reasons were provided to the Study Team during interviews and discussions justifying the need to upgrade the organization of the New Rochelle Fire Department, including:

1. City Charter and Code related to New Rochelle Fire Department and Fire Chief responsibilities seem outdated and limited in scope;
2. Increasing cost to the City of funding the NRFD;
3. Seemingly inadequate staffing of some functions;
4. Minimal asset planning;
5. Lack of policies and procedures;
6. Limited sense of direction or planning;
7. Substantial functional responsibilities not assigned to deputy chiefs; and,
8. Fire station facilities needing renovation and major repairs.

Fire Chief’s Span of Control

The NRFD Table of Organization and the Study Team’s discussions with staff indicate an appropriate level of span of control relating to the number of individual staff members and functions reporting directly to the Fire Chief.

Emergency Management

For the City, the Fire Chief is responsible for emergency management functions within the City of New Rochelle. The Emergency Management chapter of this Report provides details regarding the handling of this important City function. Appropriate Emergency Management related revisions are included in the suggested Table of Organization later in this chapter.

Organization of Fire Prevention Functions

The Study Team considers the function of the provision of fire prevention services within a fire department to be extremely important to the overall control of the fire problem with
any community. The Fire Prevention chapter of this Report provides details on handling this important function for the City. Appropriate revisions to the Table of Organization are included later in this chapter.

**Administrative Aide Positions**

Currently the NRFD Fire Prevention/Risk Reduction effort does not have dedicated clerical or administrative support. This takes valuable time from the officers’ and inspectors’ primary responsibilities and contributes to extended plans review times, delayed inspection violation notice transmittals and administration, and adds overtime cost for Fire Investigators completing administrative tasks.

The Study Team recommends that the Fire Chief initiate a “desk audit” of the current NRFD Administrative Assistant and Data Control Clerk positions to confirm their duties, responsibilities and workload such that they may be of assistance to other support functions across the Department. It appears that the enhancement of their automation and technology resources would benefit the NRFD. The manual processing of the NFRD biweekly payroll appears to take several days alone.

**Station Assignment of Functions**

The Study Team has also observed that management of a well-organized and well-managed fire department requires a comprehensive approach to the accomplishment and distribution of essential fire/EMS tasks within the organization. In many fire departments, the personnel of appropriate fire stations are assigned one or more tasks that are essential to the day-to-day delivery of fire and EMS service.

The types of tasks that may be assigned include:

1. Repairing, issuing and tracking all fire hose;
2. Refilling and tracking EMS oxygen bottles;
3. Replacing EMS oxygen regulators, demand valves, bottle valves, and air powered suction units;
4. Laundering and coordinating the repair of protective clothing;
5. Repairing small hand tools;
6. Filling medical supply orders for all stations;
7. Sewing replacement backboard straps;
8. Managing hazmat supplies, and maintaining hazmat equipment;
9. Testing and maintaining all NRFD ground ladders in cooperation with the apparatus maintenance staff
10. Maintaining technical rescue equipment;
11. Conducting all pump tests on apparatus; and,
12. Self-contained breathing apparatus (SCBA) and pass device maintenance, testing, repair and fit tests.

*Note:* These items are listed as examples and may or may not apply to the NRFD.

This is a proven, cost-effective, and well-managed means of accomplishing essential fire/EMS service delivery tasks. On-duty station firefighters and officers may take these responsibilities seriously and take action to accomplish and improve the handling of their assigned functions. It is a very good use of station staff. In many fire departments studied, the labor unions seem to support this approach to task assignments.

**Cross-Functional Teams - Committees**

Nationally, as business and service organizations have worked to “flatten” and break down the functional organizational silos, the more progressive organizations and managers have found the use of cross-functional teams to be a very useful and productive tool. These organizations have found that the development, nurturing, and use of cross-functional teams may be a powerful organizational vehicle that brings together diverse talents to solve organizational issues or problems.

The idea of using cross-functional teams is a highly effective idea to streamline operations and define effective solutions to problems. The cross-functional team is simply a group of people who come from and often represent different parts of the organization and who are committed to a common purpose.

The Study Team was advised by NRFD officers and firefighters that a number of ongoing projects are being handled in a cross-functional team approach. Reportedly, this approach
has been utilized for certain NRFD functions or projects. Every effort should be made to accomplish as much of this “committee” work while on duty in order to reduce impact on NRFD overtime expenditures.

**A Public Safety Department**

The Study Team was apprised of the report entitled “Building a Balanced Path Forward for a Prosperous New Rochelle, Final Report & Recommendations of the Citizens’ Panel on Sustainable Budgets” submitted on September 12, 2012. The Report appeared to be a comprehensive review of a broad range of aspects of City services and operations and services conducted in an effort to identify potential improvements in City operations and increased cost effectiveness in the provision of services. The City is to be commended for involving its citizens in this manner, particularly at this time of fiscal constraint faced by many municipalities across the United States.

This Citizens’ Report recommended the consolidation of the New Rochelle Police and Fire Departments into a single Department of Public Safety. As stated in the Report, the benefits of this consolidation would be:

1. “Sharing administrative and clerical staff currently assigned to different departments would yield immediate savings, estimated at $50,000 per year, beginning in year two”;
2. “…a unified leadership structure would permit uniform management controls with respect to overtime, off-duty activities and other personnel oversight matters; and,
3. “…a consolidated Public Safety Department would help break down cultural barriers that often divide Police and Fire professionals, thereby facilitating a potential transition to cross-trained public safety personnel”.

The Citizens’ Report further recommends that the City “explore greater integration of public safety operations and services”.

The Study Team has assessed and reviewed more than ten municipalities that have been serviced by public safety departments. In exploring the public safety concept for the City the perceived advantages and disadvantages of implementing a public safety department approach to police and fire services delivery in New Rochelle is discussed below.
Basis for Advantages and Disadvantages

The Study Team’s perceptions of advantages and disadvantages of a public safety department are based on the following:
1. The fact that the City is essentially built-out related to development;
2. A City risk analysis related to police and fire services;
3. A review of public safety workload;
4. Interviews with City officials;
5. Interviews with City planning staff;
6. Interviews with police and fire service providers;
7. Interviews with officials in cities that had or have utilized the public safety concept;
8. Interviews with Westchester County dispatch staff;
9. Training records of public safety personnel;
10. Reviews of multiple organizational charts in the Department;
11. Observations of service delivery in the City;
12. Reviews of the written directive systems;
13. Review of the pay and compensation plans for public safety personnel;
14. Information on attrition in the departments;
15. Reviews of the efficiency indicators for the provision of police and fire/EMS services;
16. Staffing of specialty units in the delivery of police services;
17. A review of records procedures and constraints;
18. The number and location of fire stations;
19. The number and types of fire apparatus;
20. Overtime costs; and,

In addition, the Study Team based its perceptions and conclusions on experience in the following areas:
1. Evaluating public safety departments that utilize cross-trained personnel;
2. Evaluating police and fire departments in municipalities in every region of the nation: some larger, some smaller and some about the same size as New Rochelle;
3. Evaluating staffing and specialty units in “high tourist” areas;
4. Serving as “expert witnesses” for cities in major civil suits against cities for actions by public safety officers;
5. Managing function in public safety departments;
6. Managing every function in a fire department;
7. Serving as fire chief in a very large municipalities;
8. Overseeing a regional public safety academy;
9. Lecturing at the National Fire Academy;
10. Managing and evaluating combined police and fire dispatch centers;
11. Evaluating efficiency indicators in police and fire departments; and,
12. Evaluating police and fire staffing models.

**Advantages of the Public Safety Department**

The Study Team’s perceived advantages of implementing the public safety concept in New Rochelle are as follows:

1. If an adequate number of personnel are cross-trained as police officers and firefighters, the number of personnel immediately available for response to a fire could be higher. This advantage is actually dependent on the number of personnel who are needed for baseline police services and then staffing above that level to have personnel available for response to fire calls.

2. The potential for a “seamless” public safety services delivery system by the two primary public safety service providers. This perceived advantage relates to consistency in command and control in a pure public safety model; therefore, to realize the full potential from a seamless service delivery model would require some fundamental changes in the management structure and perhaps personnel changes in the Departments.

**Disadvantages the Public Safety Department**

The Study Team’s perceived disadvantages of implementing the public safety concept with public safety officers (PSOs) in New Rochelle are as follows:

1. The level of training for some PSOs to provide firefighting duties is typically inadequate.
2. The time for cross-training police and fire recruits delays the time that a new employee can provide public safety services in the City.

3. The in-service training requirements for cross-trained police and fire personnel take time away from police services. For example, a substantial part of fire training is hands-on in a fire station while working as a firefighter, fire lieutenant or fire captain. These fire employees can interrupt the training and respond to a fire and resume the training upon returning to the station. A police officer, sergeant or lieutenant would generally be taken out of patrol or investigative services while participating in training.

4. The attrition in public safety departments is typically much higher than in conventional police and fire departments assessed by the Study Team in every region of the nation. As a result of attrition, overtime is required to back-fill positions and/or meet minimum staffing of PSO qualified personnel to respond to a fire.

5. Personnel in some typical police functions, such as those investigating crimes or lecturing in schools, are faced with major constraints on their primary tasks. For example, interrupting an interview with a crime victim to respond to a fire does not seem practical or caring.

6. The removal of a PSO from duties involving the community to work in a fire station for one month (or other period of time) disrupts the service to residents, seems costly, and does not seem to represent the best interests of taxpayers.

7. The potential for liability exposure in a public safety concept places unique demands on the management of a cross-trained department, i.e., assuring that each employee knows the policies and procedures for both disciplines.

8. The potential of having to choose between the dispatch of PSOs to a fire or to a major crime, such as a robbery in progress, is a challenge faced by dispatchers and supervisors.

9. There is an increase in overall training and workload placed on police and fire personnel due to cross-training requirements.

10. In the typical public safety department, fire department personnel indicate that they feel they are treated as “second-class employees.”

11. Most cross-trained police personnel would prefer not to serve as PSOs.
12. Typically, there are reports that morale is low in the public safety departments.

13. The public safety concept approach may likely have a negative impact on ISO ratings, particularly in training and apparatus staffing.

In summary, although there may be a few potential advantages to the implementation of a combined police and fire public safety department with cross-trained police and fire public safety officers, it has been the experience of the Study Team that the potential for success primarily involves small, generally rural, communities. Such success would generally be related to the police and fire services workload being low to the extent that the potential for the number of incidents to be handled and available time for PSOs to be trained would be available.

Because each PSO would need to be trained and certified in both police and fire services delivery, the training time required of each individual PSO would be twice that of staff training and certified in either fire or police services. Both initial recruitment and ongoing in-service training involved for each cross-trained staff member would be double that of those in individual police and fire departments.

New Rochelle is an urban city in which both the Police and Fire Departments are very busy in delivering their respective essential public safety services. The Study Team is unaware of any urban city, such as New Rochelle, that provides police and fire services with a combined public safety department with cross-trained public safety officers. For these reasons, the Study Team does not consider the public safety department approach to be a viable services delivery model for the City of New Rochelle.

A Commissioner of Public Safety

The Citizens’ Panel on Sustainable Budgets suggested consolidating the New Rochelle Police and Fire Commissioner positions into a Commissioner of Public Safety.

Currently the City of New Rochelle has a Fire Chief/Commissioner, a Police Commissioner, and a Deputy Police Commissioner. Typically, with the transition to a Commissioner of Public Safety the police commissioner would most likely become the Public Safety Commissioner (PSC) with a Deputy Police Commissioner and a Deputy Fire Chief/Commissioner working for PSC. With additional responsibilities placed on the
PSC, it is likely that the position would require a higher level of compensation than is currently the case with the Police Commissioner. The Study Team sees no cost savings in the other positions, thus resulting in an increase in overall cost due to the increased compensation for the PSO.

Efficiencies from this change would likely require a facility that both departments’ staff would fit into. From 1962 until the 1990s the Fire Chief/Commissioner’s office was located in the Police headquarters. Fire Department offices were scattered in the building department and different fire stations. The lack of a single office for all staff functions reportedly increased cost and likely reduced Fire Department efficiency. The current Police/Court facility allowed the Fire Department to move all of its staff functions under one roof in the old facility. Splitting it up to “gain efficiencies” seems contrary to past experience.

The cultural boundaries between the Police and Fire Departments referred to in the Citizen’s Report are important, and studies have shown that when they are broken down, morale suffers and sick leave and disability retirements typically increase. The cultural boundaries provide a healthy competition and, unlike some other communities, the New Rochelle Fire and Police Departments seem to work very well together.

Having the current Police and Fire Departments represented by equal level commissioners provides the City Manager and the Mayor and City Council access to both department heads. A change to a Public Safety Commissioner would likely make the Fire Department a lower level organizational element with all information filtered through the PSC. In the experience of the Study Team, the PSC positions are most likely held by law enforcement personnel, which have very limited or no background in fire and EMS services delivery. Likewise, if the PSC position were to be held by a fire official, he/she generally would have limited or no law enforcement background. This PSO approach would result in one agency being at a great disadvantage with the results often causing complaints of “favoritism” resulting in perceived or actual poor management and poor performance.

**Alternative Organization Chart**

Figure 2.2 illustrates a revised NRFD organization chart based on alternatives suggested in this and other chapters of this Report highlighting the concept of functional
responsibilities being assigned to an existing Operations Deputy Chiefs. It is important to consider the accompanying narrative when reviewing this chart.

The above organization chart is illustrative in nature and does not represent individual assignment recommendations. NRFD policy makers have the resources and are aware of individual knowledge, skills, abilities and Civil Service requirements to effectively determine these assignments.

The Study Team determined that the current organizational decentralization, assignments and culture leaves the Deputy Fire Chiefs, on rotating shifts, significantly under-utilized. As outlined throughout this report, the lack of Department-wide oversight in functional areas; lack of appropriate data collection, analysis and meaningful management reporting; and lack of communication and Departmental cohesiveness could more
effectively be addressed by focusing the responsibility for the Department’s mission at the Deputy Chief level.

An explanation of these recommended functional assignments is outlined in the corresponding Apparatus, Training, Health and Safety, and Fire Prevention Chapters of this report.

The current Support Services Deputy Chief duties and responsibilities have been modified to the functional areas of Fire Marshal and Facilities. This “day-work” position, assigned to headquarters, is suited to providing the needed daily oversight of Department’s risk reduction, life and fire safety and development authorization review mission including the centralization of the goals and objective to do so. NRFD departmental facilities needs and responsibilities go “hand in hand” with this assignment especially when considering the requirement to coordinate with public works, station officers and outside contractors.

Fleet Services needs would be re-assigned to a “Group Deputy Chief” including the supervision of the Master Mechanic, maintenance of the NRFD fleet and equipment, and those duties and requirements of managing and formulating emergency apparatus specifications and acquisition including required tools, appliances and equipment. An effort to upgrade the “shop” facility or determine effective alternatives is sorely needed.

The fire, rescue emergency service does not have a reputation for efficient and effective research and planning as is, in many cases, true of the NRFD. This phenomenon, together with a significant need to update the current NRFD data collection, analysis and reporting program to a meaningful level; the overdue need to update Departmental policies, procedures and regulations; and the need to develop and implement a number of significant programs commensurate with national model standards, identifies a workload for the proposed Planning/Research Group Deputy Chief.

It is typical for the research and planning function of fire departments assessed by the Study Team to play a key role in tracking and facilitating the implementation of options and recommendations contained in study reports, such as this one.
Assigning the NRFD training program responsibility to a Group Deputy Chief would include bringing all of the necessary and varied departmental training “entities” under one focus, thus removing the current “stove-pipe” approach.

The NRFD EMS Training Officer, EMS Coordinator and OEM Coordinator positions are currently held by one individual. This phenomenon will need to be addressed by the NRFD leadership for future planning and implementation of staffing assignments and responsibilities. Coordinator responsibilities are often assigned to departmental planning and research depending upon the needs and requirements of the organization.

The Administrative Assistant clerically supports the Fire Commissioner/Fire Chief and facilitates the Department’s payroll. The NRFD payroll is formulated manually (citywide) and requires approximately 2-3 days every other week to manually complete. Automating the payroll in conjunction with the currently used Telestaff software could reduce this labor demand by up to a full day (20%).

The Data Control Clerk handles accounts payable/receivable and the paperwork and fee aspect of the NRFD permit process.

Considering the changing need for secretarial functions based on the increased use of computer systems for word processing and email, etc. by professionals, and the need for succession planning for the current, tenured Administrative Assistant and Data Control Clerk, NRFD should take this opportunity to redefine and confirm the duties and responsibilities of these positions as they relate to departmental wide needs.

**NRFD STANDARD OPERATING PROCEDURES (SOPS)**

The Study Team noted that, although significant efforts have been made to update NRFD standard operating procedures (SOPs) in the past, there is room for improvement, and there are many subjects that remain to be updated or developed and implemented. It was clear to the Study Team that this matter is a priority for the new Fire Department administration.

For the future, it is suggested that the Fire Chief continue to move ahead with the plan for upgrading NRFD’s SOPs via a committee process. In any fire EMS department, SOP development and implementation is a continuing work in progress with priorities for such
work to be set and followed. All SOP documents should be appropriately formatted, signed, and dated.

A suggested Standard Operating Procedures template format is included as Appendix A and a suggested SOP policy is included as Appendix B for consideration by the Fire Chief. For the reader’s information, the status of development of NRFD SOPs as of August, 2013, is included as Appendix C.

**NAME OF NEW ROCHELLE FIRE & EMS DELIVERY AGENCY**

The name of the City of New Rochelle’s fire services delivery agency is the New Rochelle Fire Department. However, the name does not reflect the actual services delivered to the public by the organization.

It is suggested that the City consider revising the name of the NRFD to include EMS or Emergency Medical Services. Many fire departments have been renamed to more fully recognize the involvement of emergency medical services as a very important function of the department. Examples of other names that could be considered might be: New Rochelle Fire and EMS Department or New Rochelle Fire and Emergency Medical Services Department. These types of changes can have a positive effect on the image of fire departments.

**FIRE DEPARTMENT ACCREDITATION**

Over a ten-year period, a committee of the IAFC, in cooperation with the International City Management Association, developed an analysis model for self-assessment fire departments and services. That fire department self-assessment process is now under the auspices of the Commission on Fire Accreditation International. The Study Team employed portions of this model as a framework for this City of New Rochelle Assessment to provide established criteria for review and provide the reader with information on the latest trends in the fire service.

In years past, standards available to the fire service have been the product of collaborative efforts involving organizations such as the National Fire Protection Association (NFPA). There have been other systems of standards and measurements for the fire and emergency services available. However, they were created to serve interests
relating to the fire service, but not specific to the fire service. A good example of this type of process is the Insurance Services Office (ISO) grading schedule.

In 1988, the International City/County Management Association (ICMA) and the International Association of Fire Chiefs (IAFC) executive boards signed a memorandum of understanding that committed both organizations to the development of a voluntary national fire service accreditation system. Over a period of the intervening years, the framework for a fire department accreditation model was developed, beta test fire department accreditations were conducted and an accreditation model was finalized and implemented under the management of the Commission on Fire Accreditation International.

According to the CFAI website there are currently 98 accredited fire departments in the United States.

The accreditation analysis categories included in the model are as follows:

1. Governance and Administration;
2. Assessment and Planning;
3. Goals and Objectives;
4. Financial Resources;
5. Programs;
6. Physical Resources;
7. Human Resources;
8. Training and Competency;
9. Essential Resources; and,
10. External Systems Relations.

The Study Team has considered appropriate aspects of this CFAI accreditation model for this Assessment. Two members of the Study Team have been involved with the CFAI since its inception and are peer fire department assessors. Additionally, the preparation made by the New Rochelle Fire Department for this Assessment and the data and information collected is very similar to that necessary for the Fire Department to pursue accreditation.
As stated in the CFAI accreditation manual, the City and the Fire Department could accrue a number of important benefits from becoming an accredited fire agency, including:

- Further promotion of excellence in the Fire Department;
- Quality improvement through self-assessment;
- Provision of assurance to peers and the public that the Fire Department has defined missions and objectives and strives to reach beyond them;
- Identification of strengths and weaknesses within the NRFD;
- Provision of detailed evaluation of the NRFD and its services;
- Establishes a method or system for addressing deficiencies and building on the strong points;
- Growth for the Fire Department and its personnel;
- Establishment of a forum for the communication of management and leadership philosophies;
- National recognition for the NRFD by peers and the public;
- Creation of a mechanism for developing concurrent documents, such as strategic and business plans and a “desktop manual” of everything the NRFD is involved in; and,
- Further development of pride in the organization, from NRFD members, community leaders and citizens.

The Study Team considers the New Rochelle Fire Department to exhibit a number of the characteristics of an excellent fire department. It appears that the City, the Fire Department, and stakeholders could benefit in many ways from the New Rochelle Fire Department becoming an internationally accredited fire and EMS agency with the CFAI.

SUMMARY

Organizing fire and EMS services within a community so as to provide the most efficient and cost-effective delivery of quality service is one of the most important functions of local government. Historically, many fire services have been developed and organized on the basis of local neighborhood need and initiative and, in many instances, volunteer fire
and EMS companies were formed—as was the case with the initial organization of the New Rochelle Fire Department.

A number of fire departments have found that an organizational mission statement and broad goals assist in setting a positive tone and atmosphere for the provision of services. The revision and establishment of such mission and goals statements could have a positive impact on the NRFD. This should be accomplished through a process of direct and comprehensive NRFD employee involvement, along with the establishment of a “customer service” program with a related training effort.

New Rochelle’s Fire Department is at a “crossroads” in its history and development. With the continual increase in emergency calls and changes in the NRFD that may have been driven in the past by the economic and fiscal conditions of the City and community, the City and the Fire Department have the opportunity to refocus resources and efforts toward saving lives and enhancing the fire and emergency medical services.

OPTIONS AND RECOMMENDATIONS

2-1 The City is encouraged to update the City Charter and Code related to the responsibilities of the Fire Department and the duties and responsibilities of the Fire Chief.

2-2 The Fire Chief should develop an updated organization chart, including revisions made as a result of the implementation of appropriate options and recommendations set forth in this Study Report.

2-3 The Fire Chief should assign one or more functional responsibilities to each of the five deputy fire chiefs.

2-4 The Fire Chief is encouraged to pursue the implementation of the upgrades in the organization structure of the NRFD as outlined in this Study Report.

2-5 The Fire Chief should consider the development of a revised mission statement and vision and values for the New Rochelle Fire Department.

2-6 The Fire Chief is encouraged to revise and update the Fire Department Rules and Regulations for consistency with the City Charter and Code.

2-7 The City should consider providing an appropriate number of civilian administrative support staff to the NRFD, as requested by the Fire Chief.
2-8 The City and the Fire Chief are encouraged to refocus the philosophy and resources of the NRFD to the provision of life-saving as the primary service to be delivered, while maintaining a high priority on property protection through other related services, such as fire suppression, EMS, hazmat and code enforcement.

2-9 The Fire Chief is encouraged to establish and enhance the progressive approach to the assignment of important daily tasks to the chiefs and staff members of the fire stations.

2-10 The Fire Chief is encouraged to make full use of committees and cross-functional teams in the planning and implementation of appropriate NRFD programs and tasks, with as much of such work as possible being done while on-duty in order to reduce overtime expenditures to the extent possible.

2-11 The Fire Chief should strengthen the effort to develop and implement state-of-the-art standard operating procedures for the NRFD.

2-12 The Fire Chief should consider using the Standard Operating Procedures template format and the suggested SOP policy.

2-13 The City, Fire Chief and the Fire Department are encouraged to pursue accrediting the New Rochelle Fire Department through the Commission on Fire Accreditation International model.

2-14 The City is encouraged to maintain the currently separate Police and Fire Departments.

2-15 The Fire Chief should initiate a “desk audit” of the current NRFD Administrative Assistant and Data Control Clerk positions to confirm their duties, responsibilities and workload such that they may be of assistance to other support functions across the Department with the goal of providing Fire Prevention with administrative aide support.
CHAPTER THREE
FIRE SERVICES APPARATUS STAFFING

This Chapter provides a review of fire services staffing practices generally in fire services; current New Rochelle Fire Department staffing and exploration of minimum and maximum/desired staffing of NRFD apparatus options; and related suggestions for the City and Fire Department to consider.

APPARATUS STAFFING GENERALLY

This Section reviews apparatus staffing generally as it relates to the staffing levels of fire services apparatus—engines, ladders and heavy rescue units. The Study Team has developed an overview of fire services staffing based on practical experience and fire consultant assistance in the United States.

The major cost of a fire rescue department is salaries and wages, including benefits, for the personnel, firefighters, and officers. For that reason, staffing levels become a crucial budget consideration, as well as service level issue, for municipalities and their fire departments. Depending on which of the various fire rescue service models is utilized, staffing has been justified by experts to include from three individuals per piece of apparatus to as many as six. The variables in this decision process involve:

1. The demographics of the community;
2. The numbers of fire services calls to which the units respond;
3. The location of the fire stations and their distance of travel and response time for back-up;
4. The type and age of buildings in the community, as well as the building occupancies—residential, commercial and industrial—that exist within the community; and,
5. The nature of the fire rescue protection and related risks in the service area.

From the perspective of operations, the Study Team believes the minimum staffing of any fire unit (engine, squad, and truck) should be at least three individuals. Specialty or multifunctional units, such as quints (combination pumper/truck units), may require increased staffing to upgrade safely and fully operational.
For water flows of 150 gallons per minute or less, it takes two individuals to maneuver the hose line and one operator at the pumper. For water flows higher than this amount, at least three firefighters are needed to maneuver the hose line into the correct position and hold the hose line in place during suppression activities.

Raising ladders for rescue requires two to three firefighters, depending upon the length of the ladder. Ground ladders longer than 35 feet, such as those carried on an aerial truck, require as many as four firefighters to raise the ladder in place. If a rescue is to be made, these ground ladders must be removed from their storage on the unit, carried to the correct location, and raised in place. Without sufficient personnel, this activity would likely be delayed, resulting in the potential for injury or death to civilians and firefighters.

The key objective is maintaining sufficient personnel on each piece of apparatus in order to use it effectively and safely.

Studies and staffing trials have shown that the performance of critical firefighting tasks can be performed in a safer and quicker manner with an increased number of firefighters and officers. The purpose of one such study, conducted in Milwaukee, was to determine the relative times required to lay and advance a hose line to the fourth floor using three-, four-, five-, and six-member engine companies. That study showed, for example, that it may take 34 percent more time for three firefighters to accomplish the work than it does four firefighters, and it may take 82 percent more time for two firefighters to complete the tasks.

The successful completion of critical tasks during emergency fire services operations has a direct impact on the overall success of incident mitigation (e.g., fire suppression and patient medical care) and upon the level and quality of service delivery to the public. Fire services tasks must be completed in both a timely and safe manner.

For reasons of economics, there are few fire rescue departments in the United States that operate with the optimum apparatus staffing (e.g., 5 or 6 firefighting staff members on engines and ladders). The actual number of firefighters and officers available to staff the fire rescue department apparatus will ultimately be a municipal policy decision and reflected in the fire department’s budget allotment for personnel. The fundamental policy decision must determine how many firefighters and officers are to be on duty for each fire services company (engines, ladders and heavy rescue squads) every day.
Firefighter Utilization

One might assume that if three personnel are on an engine or truck, all three of those personnel are available for interior fire attack when they arrive on the scene of a working fire. That perception is not accurate because, most often, the unit driver must remain with the unit to operate the pump, the aerial ladder, or set up equipment to support firefighting operations.

In a real situation, using engine operations as an example, the following are the functions initially performed by a crew of three:

**Driver/Operator**
- Sets and operates the pump
- Develops water supply
- Provides equipment to part of building
- Relays radio communications
- Guides apparatus placement for incoming units

**Officer**
- Provides initial incident command
- Sizes up the incident
- Performs circle check of building
- Directs crew of one in interior attack
- Is part of two person interior fire attack crew
- Handles radio communications for crew
- Provides interior command as necessary

**Third Person**
- Lays out supply line
- Pulls and advances hand lines
- Begins interior fire attack with officer as crew of two

This example presumes that there are no immediate incident complexities, such as medical or rescue emergencies. A similar example could be outlined for the staffing of a ladder truck.
The purpose of this discussion is to point out the justification of staffing engines and ladder trucks with three personnel as the absolute minimum. Personnel on units staffed by one or two personnel cannot function as independent crews on the scene of emergencies. Personnel responding on units staffed by one or two personnel must join up with other personnel from other units, after arriving on the scene, to develop crews for a fire attack.

Unit staffing of one or two firefighters may seriously hinder successful fire attack operations, in addition to creating significant safety risks for firefighters and increased liability exposure for the fire department and the City.

For these reasons, the Study Team suggests that the City and NRFD deploy no less than a total of three firefighters to ensure proper unit staffing of engines and ladders.

Staffing levels should be carefully monitored, with optional firefighter and officer absences (vacation leave, etc.) being controlled in order to maintain minimum staffing levels and assure that an excessive number of personnel are not authorized leave at the same time. This staffing information is invaluable in assessing the level of service.

**APPARATUS STAFFING GOALS**

The standard on Fire Department Deployment and Operations is NFPA 1710, which is discussed in the Fire Services Risks and Deployment chapter later in this report in relation to response times. It is an industry guideline that serves as a benchmark for the fire department organization and deployment of services.

NFPA 1710 addresses fire, EMS, special, wildland, airport, and marine operations. These various operational areas are addressed with benchmark requirements based on a fire involving a 2,000-square-foot detached single-family occupancy. Fire departments are expected, under the approach taken by 1710, to deploy additional resources according to occupancies and hazards in their jurisdictions.

This NFPA standard, which includes provisions relating to apparatus staffing, has been adopted and implemented, in whole or in part, in a number of cities, counties, and towns. It has also been utilized in many fire departments as a guide for goal-planning documents and policies and procedures, due largely to economic impact considerations.
Staffing of fire apparatus is a key component of NFPA 1710. In developing the staffing component of the standard, the NFPA Technical Committee reviewed numerous studies, evaluations, and stakeholder reports containing empirical data on departmental response and mitigation of fire. These studies clearly documented that for safe, effective, and efficient fire suppression, each responding company needs a minimum number of firefighters and officers.

NFPA 1710 specifies the following minimum staffing levels by type of company and function:

1. **Engine Companies**—Fire companies, whose primary functions are to pump and deliver water and perform basic firefighting at fires, including search and rescue, are known as engine companies to be **staffed with a minimum of four on-duty personnel**.

   In **jurisdictions with tactical hazards, high-hazard occupancies, high incident frequencies, geographical restrictions, or other pertinent factors are to be staffed with a minimum of five or six on-duty members**.

2. **Ladder Truck Companies**—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), are known as ladder or truck companies. Ladder truck companies are to be **staffed with a minimum of four on-duty personnel**.

   In **jurisdictions with tactical hazards, high hazard occupancies, high incident frequencies, geographic restrictions, or other pertinent factors shall be staffed with a minimum of five or six on-duty members**.

3. **Other Companies** (heavy technical rescue squads, etc.)—Other types of companies equipped with specialized apparatus and equipment shall be provided to assist engine and ladder companies (and provide other services, e.g., heavy rescue) deemed necessary as part of standard practice. These units shall be staffed with a minimum number of on-duty personnel required by the tactical hazards, high incident frequencies, geographic restrictions, or other pertinent factors.

4. **Quint Apparatus Companies**—Fire companies that deploy with quint apparatus, designed to operate either as an engine company or a ladder company, shall be
staffed with a minimum of four on-duty personnel. If the company is expected to perform multiple roles simultaneously, additional staffing, above the level of four, shall be provided to ensure that those operations can be performed safely, effectively and efficiently.

5. **EMS Units**—On-duty EMS units shall be staffed with the minimum numbers of personnel necessary for emergency medical care relative to the level of EMS delivery provided by the fire department. EMS staffing requirements shall be based on the minimum levels needed to provide patient care and member safety.

6. **Advanced Life Support (ALS)**—Personnel deployed to ALS emergency responses shall include a minimum of two members trained to the emergency medical technician-paramedic level and two members trained to the emergency medical technician-basic level arriving on the scene within the established response time. These staffing patterns ensure efficient and effective on-scene operations as evidenced and supported by the American Heart Association and the National Institutes of Health.

Based on these standards/guidelines and the apparent current and future projected nature of New Rochelle’s fire and emergency medical risks, tactical hazards, hazard of occupancies, incident frequencies and geographic restrictions, the Study Team suggests the following as a desired primary fire rescue per unit apparatus staffing level for the New Rochelle Fire Department, given the current general municipal fiscal climate.

<table>
<thead>
<tr>
<th>On-Duty Personnel</th>
<th>Apparatus</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Engines—including one paramedic.</td>
</tr>
<tr>
<td>4</td>
<td>Ladder trucks.</td>
</tr>
<tr>
<td>5</td>
<td>Quints operating as both engine and ladder.</td>
</tr>
<tr>
<td>4</td>
<td>Heavy rescue squad providing technical rescue services.</td>
</tr>
<tr>
<td>2</td>
<td>Shift command units.</td>
</tr>
</tbody>
</table>

All other fire rescue apparatus (i.e., SCBA air unit and boat) would be staffed on a cross-staffed basis by on-duty personnel assigned to primary units.
It should be noted that NFPA 1710 calls for engine and ladder staffing of a minimum of five or six on-duty members “in jurisdictions with tactical hazards, high hazard occupancies, high incident frequencies, geographic restrictions, or other pertinent factors.” In the opinion of the Study Team, a substantial portion of the City of New Rochelle would be considered to include tactical hazards, high hazard occupancies and geographic restrictions that could justify staffing engines and ladders at “five or six on-duty members.” Given the current City fiscal situation, the Study Team is not suggesting increasing engine and ladder staffing at these levels at this time. As the fiscal climate of the City improves in the future, the City should consider NFPA 1710 staffing levels.

**NRFD UNIFORMED STAFFING**

This Section reviews current New Rochelle Fire Department uniformed staffing.

**Current Total Uniformed Staffing**

The Study Team was advised that the current complement of uniformed personnel (not including the Chief/Commissioner) in the Fire Department is 154. Figure 3.1 outlines total staffing by rank.

![Figure 3.1: Total Firefighter/Officer Complement](image)

<table>
<thead>
<tr>
<th>RANK</th>
<th>COMPLEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEPUTY CHIEFS</td>
<td>5</td>
</tr>
<tr>
<td>CAPTAINS</td>
<td>8</td>
</tr>
<tr>
<td>LIEUTENANTS</td>
<td>32</td>
</tr>
<tr>
<td>FIREFIGHTERS</td>
<td>109</td>
</tr>
<tr>
<td>TOTAL</td>
<td>154</td>
</tr>
</tbody>
</table>

Source: NRFD budgeted for Fiscal Year 2013.

**Current Total Uniformed Platoon Staffing**

The Study Team was advised that the current complement of uniformed personnel (not including the Chief/Commissioner) in the Fire Department assigned to the four platoons for operations staffing is 148. These staff members are assigned to the eight fire EMS
services delivery units, the five engines, three ladder trucks and the platoon command vehicle. The well-equipped NRFD heavy rescue unit is not staffed, unless there are extra staff members working on any particular day. The tactical hazards, high hazard occupancies and geographic restriction (e.g., I-95, commuter railroad, high-rise and mid-rise senior housing) issues that must be dealt with by the NRFD require the specialized equipment on the heavy rescue squad and technical rescue skills provided by the highly specialized staff. When this specialized unit is not staffed, either the equipment is not available or there is a delay in the unit responding to the scene of an emergency. Every effort should be made to constantly staff the heavy rescue unit.

Figure 3.2 outlines total platoon operations staffing by rank.

![Figure 3.2 TOTAL PLATOON FIREFIGHTER/OFFICER COMPLEMENT](image)

<table>
<thead>
<tr>
<th>RANK</th>
<th>COMPLEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEPUTY CHIEFS</td>
<td>4</td>
</tr>
<tr>
<td>CAPTAINS</td>
<td>5</td>
</tr>
<tr>
<td>LIEUTENANTS</td>
<td>31</td>
</tr>
<tr>
<td>FIREFIGHTERS</td>
<td>108</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>148</strong></td>
</tr>
</tbody>
</table>

Source: NRFD budgeted for Fiscal Year 2013.

**A FORMULA FOR CALCULATING STAFFING NEEDS**

The Study Team typically utilizes a nationally recognized formula to assist in its determination of the adequacy of the total apparatus staffing of fire departments. That formula can provide a measure of budgetary accuracy in determining the actual number of firefighters and officers required to staff the fire services apparatus, given the minimum staffing levels approved by the municipality.

**Forty-Two-Hour Work Week—Current Hours**

Using current New Rochelle apparatus minimum staffing levels, that formula is outlined as follows. To staff one position on a 24-hour basis and allow time off for training, vacations, sick leave and on-the-job injuries requires 5.2* employees. The Study Team was provided with actual time “off-the-floor” hours for all platoon employees in 2012.
Based on actual time taken/required for vacation, sick, holiday, on and off the job injury and other similar reasons for firefighters and officers not being available to staff apparatus, the average annual time “off the floor” for firefighters and officers has been determined to be 500 hours. Based on this average number of hours off, the number of personnel required could be calculated as follows for the NRFD:

*The 5.2 number is calculated as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Calculation</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total hours in a year</td>
<td>8,760</td>
<td></td>
</tr>
<tr>
<td>Firefighters work 42 hours × 52 weeks</td>
<td>2,184</td>
<td></td>
</tr>
<tr>
<td>Minus average time “off the floor”</td>
<td>-500</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL HOURS AVAILABLE</strong></td>
<td><strong>1,684</strong></td>
<td></td>
</tr>
</tbody>
</table>

\[
\frac{8,760 \text{ (total hrs in a yr)}}{1,684 \text{ (total hrs is available)}} = 5.2 \text{ staff to cover one 24-hour constant staffed position}
\]

Based on this approach to calculating firefighter and officer staffing requirements for the current fire station and apparatus deployment model it appears that 140.4 firefighters and officers are needed.

**Current Five-Station Model**

The following calculations illustrate the application of this calculated formula to determining fire services field operations employment needs.

\[
\begin{align*}
4 \text{ engines} \times 3 \text{ staff} \times 5.2 &= 62.4 \text{ staff} \\
1 \text{ engine} \times 4 \text{ staff} \times 5.2 &= 20.8 \text{ staff} \\
3 \text{ ladder trucks} \times 3 \text{ staff} \times 5.2 &= 46.8 \text{ staff} \\
1 \text{ rescue} \times 0 \text{ staff} \times 5.2 &= 0.0 \\
1 \text{ deputy chief} \times 1 \text{ staff} \times 5.2 &= 5.2 \text{ staff} \\
1 \text{ deputy chief asst.} \times 1 \text{ staff} \times 5.2 &= 5.2 \\
\text{TOTAL} &= 140.4 \text{ staff}
\end{align*}
\]

It should be noted that the currently approved Fiscal Year 2013 budget for staffing of the current fire stations and apparatus includes 148 firefighter and officer positions, including deputy chiefs, captains, lieutenants and firefighters assigned to one of four platoons. Chiefs, officers and firefighters assigned to other functions of the NRFD are not included. Further, it should be noted that there typically are 6-8 firefighters and officers on long-term disability awaiting official retirement approval by the New York State Fire and Police Pension System having been agreed to by the employee and City. When these long-term disability cases occur, overtime is typically required to cover the resulting lack
of staffing for the apparatus. Many municipalities create “overstaff positions” to cover these day-to-day vacancies in order to avoid excessive overtime costs. The City should consider this approach in an effort to reduce overtime funds expended.

Based on this approach to calculating firefighter and officer staffing requirements for the current fire station and apparatus deployment model it appears that 140.4 firefighters and officers would be needed in order for there to be the proper number of positions approved in the budget to cover the approved staffing levels, thus avoiding excessive overtime hours needed for coverage.

Reducing Apparatus Staffing Levels At Night

The 2012 Report by the Citizen’s Panel on Sustainable Budgets suggested that cost savings could be attained by reducing the number of firefighters and officers from the then current 27 to 24 due to clear patterns of reduced service demand during the hours of 9:00 pm to 9:00 am. The Study Team has not seen this approach to cost reduction in fire departments, except in the case of combination paid/volunteer fire departments where the volunteers would fill in the needed staffing during night hours and/or when the service area being protected is more suburban/rural in nature. The NRFD is an all-paid fire department protecting a high-density urban area with substantial hazards and risks that do not change at night. In fact the nighttime population increases due to residents returning from work for the night.

The Study Team suggests that apparatus staffing levels be maintained the same for both day and night. First, this suggestion is due to the all-paid nature of services provision (no volunteers to fill in). Secondly, it is typical, especially in high density service areas such as New Rochelle, for service demand (number of total fire services calls occurring) to decrease at night while the fire incidents occurring at night typically being larger and more serious requiring more apparatus and staff. Fires typically are larger at night due to longer time generally taken to report the fires since there are fewer people up and about. Finally, the applicable labor contracts and potentially the contract currently being finalized would preclude the proposed night-time reduction in staffing.

EXPENDITURE OF OVERTIME FUNDS

Figure 3.3 illustrates overtime expenditures related to the NRFD over the last six years.
In the experience of the Study Team, these levels of overtime expenditures seem unusually high for a fire department the size of New Rochelle’s. Related recommendations for reduction will be made in this report to attain substantial reductions.

**Figure 3.3**

NRFD OVERTIME EXPENDITURES FOR THE PAST SIX YEARS

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Overtime Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2013</td>
<td>$836,000*</td>
</tr>
<tr>
<td>FY 2012</td>
<td>$1,030,141</td>
</tr>
<tr>
<td>FY 2011</td>
<td>$784,584</td>
</tr>
<tr>
<td>FY 2010</td>
<td>$1,036,145</td>
</tr>
<tr>
<td>FY 2009</td>
<td>$963,492</td>
</tr>
<tr>
<td>FY 2008</td>
<td>$726,439</td>
</tr>
</tbody>
</table>

*Budgeted overtime amount.

**Expenditure of Overtime Funds**

The Study Team was apprised of the fact that a substantial amount of overtime is being expended each pay period by the Fire Department primarily for apparatus staffing requirements. A substantial portion of this overtime is likely due to staffing at the approved minimum apparatus staffing levels, but above the budgeted funding levels.

For the future, with a complete determination of time “off the floor,” including vacation, sick, training, on-the-job injuries, and details. The City and the NRFD should determine what its budgetary firefighter and officer position requirements are from year to year. This would also assist in assuring that the budgeted overtime requirements are appropriately funded for the NRFD, or necessary budget or staffing level decisions are made based on a planned verifiable approach rather than an historical approach to the determination of budget staffing requirements.

**Actual Overtime Expenditures**

The following sections provide information on the history of NRFD overtime (OT) expenditures.
Various OT Causal Factors

In the analysis of the data, review of applicable documents, and discussions with City and NRFD officials and firefighters, the factors that result in the expenditure of overtime funds are numerous and varied. They include maintaining approved minimum staffing levels when the following could result in lower than approved apparatus staffing levels:

- Existing vacancies from resignations and/or retirements;
- Use of sick leave;
- Use of vacation time;
- Use of bereavement leave;
- Use of family sick leave;
- Holiday leave; and
- On-the-job injury.

Likewise, the following activities generated overtime income paid to off-duty firefighters and officers directly in that the service provider was paid OT compensation:

- Training activities take place, including drill school;
- SCBA maintenance;
- EMS supplies work;
- HazMat team response;
- Staff meetings;
- Perform admin duties; and,
- Call back for major incidents.

Potential Excessive OT Staffing of Apparatus

Previously in this Chapter the extent of fire apparatus staffing via OT was discussed and illustrated. There are a number of aspects or side effects of the excessive use of OT in the staffing of fire services apparatus that may result. These include:

- Increasing potential burnout;
- Reduced fire services unit teamwork and cohesiveness;
- Excessive use of OT in the course of providing services;
- Increased cost to the taxpayer for services provision;
- Reduced management and oversight of activities and tasks;
- Increasing philosophy that working for the NRFD is a “part-time job”;
- Reduced ability of supervisors to provide consistent employee oversight;
• Reduced accountability of staff; and,
• Decreased discipline levels.

Options for OT Reduction

Many times it seems to be the opinion that OT is limitless and that is the way to do things. In the opinion of the Study Team, the following approaches may result in a reduction in future annual overtime costs.

• Overtime Policy and Procedure: Develop and implement a NRFD policy and procedure relating to the authorization, process for documentation and payment of overtime funds;
• Staffing Calculation Formula: Consider increasing budgeted unit staffing to reduce OT based on the formula;
• Increase Reliance on Mutual Aid: Take actions with neighboring municipalities and fire and EMS departments, as outlined in the Cooperative Services Chapter of this Report, to increase reliance on automatic mutual aid support and reduce reliance on NRFD personnel callback;
• Conduct Administrative Duties while On-duty: Conducting administrative activities on duty rather than off-duty;
• Train while On-Duty: Conducting more training on duty;
• Tracking Sick Leave Usage: Strengthening and upgrading a sick leave usage monitoring program to identify and take action related to follow-up on misuse;
• Managing Sick Leave More Flexibly: Enhance the use of sick leave by allowing splitting a 24-hour shift for personnel to return to duty after 12 hours, if they recover or otherwise ready to return to duty allowing any replacement overtime staff to be released from duty. (As recommended by the Citizens Panel)
• State-of-the-Art Scheduling Program: Enhanced use of the state-of-the-art automated fire services personnel scheduling program, e.g., Telestaff; and,
• State of the Art Payroll Program: Fully automate the payroll processing system to provide comprehensive analysis of causes to support identification of solutions.
Implementing these and other staffing enhancement approaches will assist the NRFD in reducing the use of OT as an approach to unit and function staffing, as well as project accomplishment.

LABOR – MANAGEMENT RELATIONS

There have been two agreements in place for firefighters and officers:

1. Agreement Between the City of New Rochelle, NY, and the Uniformed Fire Fighters Association, Inc., Local 273, I.A.F.F.; and,

Background

The subject of labor management relations covers a wide range of topics including: collective bargaining, contract negotiations, key contract clauses (e.g., no-strike), disciplinary processes, grievance processes, management rights, working conditions, and employee performance standards and expectations. Certainly, it is beyond the scope of this section to explore any of these topics at length. What is essential for the reader and fire executive to understand is that the interactions between representatives of labor and management interests are commonly adversarial in nature, where each wants to be in control of the work environment. The degree of oppositional energy evident among the principals will vary substantially from organization to organization. In some public safety departments, most disagreements will be resolved relatively painlessly, while in others the discourse will be very contentious.

Whether a formal labor management relations structure exists or not, controversial matters require discussion and resolution. Issues in dispute, if not resolved to at least some mutually acceptable degree, will be disruptive to the organization and the services it is charged to provide.

Employees, whether organized or not, are primarily concerned with matters of pay and benefits; job security; certain aspects of working conditions (e.g., safety, workload); and disciplinary procedures. Unions have often gone far beyond these concerns to include operational matters such as staffing levels, work schedules, performance standards, and transfer and promotion practices. Their successful invasion into these areas has often been a result of poor preparation for labor negotiations by management, and local
governments’ willingness to bargain away management rights in lieu of increases in compensation. Intrusions into management rights areas can and have been devastating to the effective and efficient delivery of public safety services.

Management, on the other hand, is primarily concerned with matters of effective service delivery, efficient service delivery, maintenance of administrative control over departmental operations, and employee accountability and responsibility. A comparison of the matters of concern to employees in contrast to those of management reveals very little commonality. Accordingly, the launching pad for controversy and disagreement is established. For example, while management sets performance standards for its employees, thus evidencing its employee accountability concerns, employees assert violations of past practice, thus evidencing their working conditions concerns.

It is important for labor groups and employees to have a forum for putting forth their concerns to management. Further, it is important for management to sincerely listen to those concerns and address them in a thoughtful and even-handed manner. Finally, it is important for management to maintain basic and critical management rights as those articulated below by a committee of the National Executive Institute:

• To plan, direct, and control all operations, and set departmental policy, goals, and objectives.
• To discipline and fire employees, and establish disciplinary procedures.
• To determine work and performance standards.
• To determine staffing levels.
• To determine work schedules, tours of duty, and daily assignments.
• To determine transfer policies.
• To hire employees and determine selection criteria.
• To promote employees and determine promotional procedures.
• To determine standards of conduct of employees, both on and off duty.
• To educate and train employees and determine criteria and procedures.
• To contract or subcontract out for goods and services.

The compromising of any of these management rights, whether through formal contract negotiations or through their informal surrender by management, will deteriorate the quality of public safety services. In reviewing the most recent agreements it appears to the Study Team that Article 3. Management Rights is one sentence long and reads as follows:
“ARTICLE 3. MANAGEMENT RIGHTS

1. Rules and Regulations. If a conflict exists between the rules and regulations of the Fire Department and the provisions of this AGREEMENT, then the provisions herein shall be controlling.”

This “management rights” provision contained in the New Rochelle / Local 273 contract is likely the shortest and weakest seen by members of the Study Team. The City should take every opportunity to strengthen this provision and provide the City and Fire Department management the opportunity to truly manage and guide fire and EMS services provided to the taxpayers, businesses and residents of New Rochelle. The Superior Officers agreement contains essentially the same “Rules and Regulations” provision stated above, but, also includes a section entitled “Fundamental Employer Rights” that outlines a more complete and appropriate management rights statement. A similar provision should be considered for inclusion, as appropriate, in the Fire Fighters Association Agreement.

AUTOMATION SUPPORT

There are a number of very important administrative processes (which are essential to effective staffing) that are mostly being handled manually by NRFD currently. With today’s high technology available in the workplace, there are opportunities to streamline and improve a number of administrative support functions, while at the same time reducing the time and effort required to perform these functions on the part of senior uniformed and civilian administrative staff. Providing high tech means to improve NRFD administrative functions will assist in the accomplishment of important tasks with limited personnel.

Automated Schedule and Payroll Management

The daily scheduling and payroll process utilized by the NRFD is reportedly largely manual. Scheduling firefighters and officers in a fire department, such as the NRFD, is a multifaceted, time-consuming, error-prone process. Even with the best efforts, mistakes are made that lower productivity, increase costs, and put the City at risk for litigation and fines.

Automated firefighter/officer scheduling programs let managers accurately create schedules that align labor with anticipated demand, while adhering to all department and
regulatory scheduling policies consistently. There is no such thing as a static schedule. When an employee unexpectedly calls in sick or needs leave, the automated system and associated mobile technology quickly identifies qualified substitutes, automatically notifies them, and selects one to fill the shift.

NRFD platoon commanders spend a considerable amount of time and effort, especially at the beginning of each daily work shift, adjusting the schedule for the day to make sure all slots are filled with qualified available staff. Many U.S. fire departments have found automated schedule management to be very beneficial and cost effective. The NRFD is encouraged to implement such a system.

Interfacing an automated schedule management solution with an automated payroll system would provide a fully integrated process that would be cost effective and would save time and effort for City and NRFD staff.

There are a number of well-established vendors that provide such software solutions for municipalities and fire departments. The NRFD has had some experience and success with the Telestaff product by Kronos. The Department’s use of Telestaff could be enhanced through more substantive access and use by NRFD staff.

PERFORMANCE EVALUATION

The periodic performance evaluation of all employees, regardless of rank/classification, is important. Employees must receive feedback from management as to how they are doing on the job because their performance will influence other management decisions, which will affect them (e.g., assignment, promotion). To the extent that employees want to influence their futures, they need to know how they are perceived by management. Further, they need to understand their strengths and their opportunities for improvement. Supervisors who are confident in their ability to provide negative feedback to subordinates in a constructive and caring way will be more likely to conduct accurate and honest performance evaluations than supervisors who are not comfortable in this role. Supervisors who do not want to convey “bad news” because it will hurt the employee’s feelings or is expected to result in some manner of confrontation will simply give higher ratings than deserved. In an effort to encourage both positive and negative feedback the performance measurement the performance evaluation should be reviewed and signed off by the evaluator’s supervisor.
It is essential then, that supervisors acquire the ability to constructively provide adverse information to subordinates in the course of conducting performance evaluations. **An undeserved high rating may result in the loss of life or property during some future incident.**

The nature of the performance evaluation “form” to be used, although important, is not a very difficult part of the system to be developed. In fact, when public safety people say, “We need a new form” as a way of explaining why the current system is not working, their understanding of the dynamics of performance evaluation is sorely lacking. Briefly described below are the essential elements of a potentially useful and respected performance evaluation system:

1. The identification and definition of those essential job performances that are to be evaluated. This information is derived from job analyses and descriptions for each rank/classification. Ordinarily, there would be eight to ten job performances.

2. Establishment of the **number and definition of ratings points** to be employed in evaluating the essential job performances. Ordinarily, three to five rating points are sufficient to permit meaningful differentiation in job performance quality.

3. Provision of **training** for all personnel in the conduct of performance evaluations. A minimum of two days of training is necessary, including an assessment and certification of each rater’s ability to provide feedback in a constructive manner.

4. Development of **quality controls** to govern operation of the performance evaluation system. These controls include, for example, a provision that requires each level of performance evaluations to be monitored by the next higher level (e.g., captains monitor the evaluations conducted by lieutenants), prior to delivery to the employee and for an appeals process to be in place.

5. Inclusion of a **documentation component** that ensures the objective connection of ratings to observed job performances. Performance notes must be maintained on critical positive and negative performances, which accrue throughout an evaluation period.

6. Specification of **operational characteristics** to include: frequency of performance evaluations, forms to be employed, records to be maintained, uses to which evaluations may be put, and any procedural matters.
**SUMMARY**

Decisions made regarding the staffing of fire services apparatus have a direct impact on the level of fire and EMS service delivered to the community. These decisions also have an impact on the relative safety of firefighters as they perform the many dangerous tasks associated with extinguishing fires and dealing with medical and other emergencies, such as hazardous materials incidents, that fire/EMS departments are expected to handle.

Additionally, decisions regarding staffing of fire services apparatus have significant fiscal implications since the major cost of a career fire department is salaries and wages, including benefits, for the personnel. For that reason, staffing levels become a crucial budget and service level issue in municipalities and their fire departments.

A number of optional approaches in apparatus staffing are presented for future consideration by New Rochelle. Further, a formula for determining future position needs, based on approved apparatus and station staffing, is outlined. The objective is to provide options for the safe and cost effective delivery of quality fire and EMS services to the residents and businesses in New Rochelle.

**OPTIONS AND RECOMMENDATIONS**

3-1 The City should consider adopting the suggested staffing formula for the determination of current and future staffing requirements for budget preparation purposes.

3-2 The City and Fire Chief should conduct a cost benefit analysis of staffing platoon assigned firefighter and officer positions with fulltime positions vs. overtime.

3-3 The City and Fire Chief should develop and implement an overtime reduction plan based on options and recommendations contained in this Study report.

3-4 The City and Fire Chief should consider conducting a complete determination of time “off the floor,” including vacation, sick, training, on-the-job injuries, and details, and use these data to accurately determine what its budgetary firefighter and officer position requirements are from year to year.

3-5 The City and Fire Chief should consider using the proposed staffing calculations formula for implementing reduced overtime expenditures.

3-6 The City should consider creating “overstaff positions” to cover day-to-day vacancies resulting from long-term disabilities in order to avoid excessive overtime costs.
3-7 In an effort to reduce the cost of related overtime, the City is encouraged to pursue actions with the State that could be taken by the New York State Fire and Police Pension System relating to the excessive time taken to finalize disability retirements when the City and employee agree that retirement is the only option.

3-8 The City is encouraged to enhance the use of sick leave by allowing the splitting of a 24-hour shift to for personnel to return to duty after 12 hours.

3-9 The City and Fire Chief should take actions with neighboring municipalities and fire and EMS departments, as outlined in the Cooperative Services Chapter of this Report, to increase reliance on automatic mutual aid support and reduce and subsequently phase out NRFD personnel callback related to emergency incident-related apparatus needs.

3-10 The Fire Chief is encouraged to pursue appropriate personnel evaluation process in order for a state-of-the-art process to be implemented with the resultant benefits for the employees and management.

3-11 The City and Fire Chief should implement a state-of-the-art firefighter/officer scheduling program that automates the full process.

3-12 The City should integrate the NRFD employee scheduling program with its payroll system for an improved, cost-effective, time-saving process.

3-13 As funding and priorities allow, the City should consider staffing engine and ladder companies to four as provided in the NFPA 1710 and staffing the well-equipped heavy duty rescue squad to at least three.

3-14 Due to the tactical hazards, high hazard occupancies and geographic restrictions, the City should consider NFPA 1710 staffing levels of five or six on-duty members as the fiscal climate improves.

3-15 The City should take every opportunity to strengthen the management rights provision of the Union contract to provide the City and Fire Department management the opportunity to truly manage and guide fire and EMS services provided to the taxpayers, businesses and residents of New Rochelle.