MEMORANDUM

TO: The Mayor & Members of Council
FROM: Nicole Sullivan, Deputy City Clerk
DATE: July 7, 2004
SUBJECT: Appendices to Report No. 04-220 – Kingston Fire & Rescue Services – Step 3 Service Review

Attached are Appendices “A” through “F” to Report No. 04-220 – Kingston Fire & Rescue Services – Step 3 Service Review. This is listed on the agenda as Clause (a) of the Committee of the Whole.

Yours truly,

Nicole Sullivan
Deputy City Clerk

Cc: Bert Meunier, CAO
    Executive Management Team
    Carolyn Downs, City Clerk
24 April, 2002

Fire Chief Harold Tulk,
City of Kingston Fire/Rescue
271 Brock Street
Kingston, Ontario K7L 1S5

Dear Sir,

Please find attached a list of apparatus for the Kingston Twp. Fire Department available at the time of our Tanker Shuttle test in 1996. We note that no new apparatus has been purchased in this area in the last 6 years and that tanker #3 was retired and not replaced as was understood by us at that time. The reduction in the number of tankers in the City of Kingston from six (6) at the time of the Superior Tanker Shuttle test has made it impossible for the City to maintain its Superior Tanker Shuttle rating in the former Kingston Township.

Yours truly,

Michael McKenna,
Senior Public Fire Protection Specialist,
Fire Underwriters' Survey
Apparatus in Kingston Twp. In 1996:

Fire Station #1 (Days Road)
- Pumper #6 - 1975 Ford with 12/1992 Almonte tank & body
  2 door cab, 1050 igpm/500 tank
- Telesquirt #4 - 1992 Pemfab/Almonte with 55' telesquirt, 4 door cab,
  1250 igpm/500 tank.

Fire Station #2 (Northwest area)
- Pumper #7 - 1975 Ford with 4/1991 Almonte tank & body
  2 door cab, 1050 igpm/500 tank
- Tanker #5 - 1996 Ford with Almonte tank & body
  2 door cab, 840 igpm rear mounted pump/3500 tank

Fire Station #3 (Woodbine)
- Pumper #3 - 1989 Mack with Almonte tank & body
  2 door cab/jumpseats, 1050 igpm/500 tank
- Telesquirt #9 - 1979 Scot with King-Seagrave tank & body
  2 door cab/jumpseat, 75' telesquirt, 1050 igpm/200 tank
- Rescue #1 - 1995 heavy rescue.
- Tanker #3 - 1969 GMC with Superior tank & body, 200 igpm PTO pump/1200 tank

Fire Station #4 (Division St./Unity Road)
- To be: Pumper #2 - 1979 Scot with 1/1994 Almonte tank & body
  2 door cab/jumpseat, 1050 igpm/500 tank
- Tanker #8 - 1987 Ford/Almonte tank & body
  2 door cab, 420 igpm PTO pump/1100 tank

**NOTE:** At the time of the test Station #4 was just opened and #2 was nearly completed. This apparatus distribution was given as that to be undertaken and was what we based the Tanker Shuttle grading on. We were also at that time informed that Tanker #3 (1969) was up for replacement with a modern vehicle in 1997.
11 November 2002

Fire Chief Harold Tulk
Kingston Fire Department
271 Brock Street
Kingston, Ontario K7L 1S5

Dear Sir,

Further to our Survey conducted of your Fire Department for Insurance Classification Purposes. We have serious concerns with the Department’s apparatus. Many of the vehicles are overage and as such can receive little or no credit in our insurance grading criteria. In addition, several of the more modern apparatus have not undergone an acceptable acceptance test by a recognized testing authority, which limits the credit which can be given. We realize that this is a long term on-going problem but it must be addressed as soon as possible with an acceptable plan to replace the older vehicles. In addition, the City must obtain testing for newer apparatus that currently lack this certification. These steps are necessary if the City wishes to retain a good insurance classification. This apparatus plan should be part of an overall Master Plan for the Fire Department.

Yours truly

Michael McKenna
Senior Public Fire Protection Specialist
March 3, 2004

Mayor Harvey Rosen and Members of Council
The City of Kingston
City Hall
216 Ontario Street
Kingston, Ontario K7L 2Z3

RE: Staffing of Emergency Responses to Reported Structure Fires

Dear Mayor Rosen and Council:

The Office of the Fire Marshal (OFM) has been monitoring reported structure fires in your municipality for some time. This was the result of concerns reported by the previous fire chief regarding the staffing of emergency responses in areas of the municipality served by volunteer firefighters.

Response data from September 15, 2003 to January 14, 2004 has been reviewed and analyzed. The information available to the OFM indicates that your fire service is not meeting the expectations described in Public Fire Safety Guideline 04-08-12 for Emergency Response Staffing. This guideline expects 10 firefighters to be assembled at the scene of a single-family dwelling fire, within 10 minutes of the fire service being notified, 90% of the time in urban areas. The OFM analyzed 106 responses to urban areas and 19 responses to rural areas. Responses were only analyzed for the eastern and western areas of the City of Kingston, and not the central core area.

During the period of September 15, 2003 to January 14, 2004 the fire department was able to assemble 10 or more firefighters in 80 of 106 calls (75.5%) within 10 minutes for responses to reported structure fires in urban areas.

Note: More complex fire risks such as health care facilities, industrial, commercial, and larger residential occupancies normally require additional resources than the ten firefighters expected for single-family dwelling fires in the Emergency Response Staffing Guideline.

1. The number of firefighters at the scene at the 10-minute mark as a percentage of the total number of calls over the review period for urban areas:
Total number of urban calls analyzed: 106

<table>
<thead>
<tr>
<th>Firefighter Count</th>
<th>Calls</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 or more</td>
<td>80</td>
<td>75.5%</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>2.8%</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>2.8%</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>1.9%</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>1.9%</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>5.6%</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>0.9%</td>
</tr>
<tr>
<td>0</td>
<td>9</td>
<td>8.5%</td>
</tr>
</tbody>
</table>

2. The OFM also reviewed the time required to assemble 10 or more firefighters for responses to reported structure fires in urban areas.

Time for 10 firefighters to assemble on scene in urban areas

<table>
<thead>
<tr>
<th>Time to Assemble</th>
<th>Calls</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 firefighters in 10 minutes or less</td>
<td>80</td>
<td>75.5%</td>
</tr>
<tr>
<td>10 firefighters in the 10th minute</td>
<td>8</td>
<td>7.5%</td>
</tr>
<tr>
<td>10 firefighters in the 11th minute</td>
<td>4</td>
<td>3.8%</td>
</tr>
<tr>
<td>10 firefighters in the 12th minute</td>
<td>2</td>
<td>1.9%</td>
</tr>
<tr>
<td>10 firefighters in the 13th minute</td>
<td>1</td>
<td>0.9%</td>
</tr>
<tr>
<td>10 firefighters in the 14th minute</td>
<td>3</td>
<td>2.8%</td>
</tr>
<tr>
<td>10 firefighters in the 17th minute</td>
<td>1</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

Cannot determine time achieved: 6 of 106 calls = 5.7%
Did not achieve 10 firefighters: 1 of 106 calls = 0.9%

3. For the rural areas of the City of Kingston the OFM reviewed the total number of firefighters assembled at the scene of a reported structure fire in a single-family dwelling. For the rural areas of a municipality the time required to assemble a fire attack team is not used in the determination of the fire department's effectiveness. Of the 19 calls analyzed the number of firefighters assembled on scene is distributed as follows:

<table>
<thead>
<tr>
<th>Firefighter Count</th>
<th>Calls</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 or more</td>
<td>5</td>
<td>26.3%</td>
</tr>
<tr>
<td>16-20 firefighters:</td>
<td>6</td>
<td>31.6%</td>
</tr>
<tr>
<td>11-15 firefighters:</td>
<td>7</td>
<td>36.8%</td>
</tr>
<tr>
<td>8-10 firefighters:</td>
<td>1</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

As a result of our review of the available information, the OFM is providing the City of Kingston with the following recommendation in the interest of improving the
Mayor Harvey Rosen  
March 03, 2004  
Page 2

Total number of urban calls analyzed: 106

10 or more firefighters in 10 minutes: 80 of 106 calls = 75.5%
9 firefighters in 10 minutes: 3 of 106 calls = 2.8%
8 firefighters in 10 minutes: 3 of 106 calls = 2.8%
6 firefighters in 10 minutes: 2 of 106 calls = 1.9%
5 firefighters in 10 minutes: 2 of 106 calls = 1.9%
4 firefighters in 10 minutes: 6 of 106 calls = 5.6%
2 firefighters in 10 minutes: 1 of 106 calls = 0.9%
0 firefighters in 10 minutes: 9 of 106 calls = 8.5%

2. The OFM also reviewed the time required to assemble 10 or more firefighters for responses to reported structure fires in urban areas.

Time for 10 firefighters to assemble on scene in urban areas

10 firefighters in 10 minutes or less: 80 of 106 calls = 75.5%
10 firefighters in the 10th minute: 8 of 106 calls = 7.5%
10 firefighters in the 11th minute: 4 of 106 calls = 3.8%
10 firefighters in the 12th minute: 2 of 106 calls = 1.9%
10 firefighters in the 13th minute: 1 of 106 calls = 0.9%
10 firefighters in the 14th minute: 3 of 106 calls = 2.8%
10 firefighters in the 17th minute: 1 of 106 calls = 0.9%

Cannot determine time achieved: 6 of 106 calls = 5.7%
Did not achieve 10 firefighters: 1 of 106 calls = 0.9%

3. For the rural areas of the City of Kingston the OFM reviewed the total number of firefighters assembled at the scene of a reported structure fire in a single-family dwelling. For the rural areas of a municipality the time required to assemble a fire attack team is not used in the determination of the fire department’s effectiveness. Of the 19 calls analyzed the number of firefighters assembled on scene is distributed as follows:

21 or more firefighters: 5 of 19 calls = 26.3%
16-20 firefighters: 6 of 19 calls = 31.6%
11-15 firefighters: 7 of 19 calls = 36.8%
6-10 firefighters: 1 of 19 calls = 5.3%

As a result of our review of the available information, the OFM is providing the City of Kingston with the following recommendation in the interest of improving the
2004-03-12

Mr. Jeffrey P. Dick
Fire Protection Specialist
Monitoring and Evaluations
Office of the Fire Marshall
2284 Nursery Road
Midhurst ON L0L 1X0

Dear Mr. Dick:

RE: Monitoring of City of Kingston Response Times

Thank you for your letter of March 3, 2004 in which you report on the results of the response time monitoring program that the Office of the Fire Marshall has been conducting in Kingston for the last 3-4 years. The information and insights you provide are invaluable to us as we strive to improve the response capabilities of our fire and rescue services.

Over the past 5 years Kingston has undertaken a number of significant initiatives to improve the responsiveness and level of service offered by our fire and rescue service, in an effort to meet standard. In 2002/03 we added 24 new full time career positions and over 40 volunteer firefighters; we have strengthened our fire prevention and public education programs; and, we are bolstering our capital investment program for vehicles and equipment. This effort to meet industry standard and community expectations continues.

As you know, the City of Kingston is in the midst of a comprehensive 4-step operational and organizational review of its fire and rescue services, with the aim of creating one truly integrated, composite fire and rescue service for the City. The OFM has been an important resource and contributor to that process to date and we thank you for that. We have completed the first two steps of the review process and are about to report to City Council on the results and recommendations of Step 3- Financial Impact Analysis, in April/04.
As you indicate in your letter, we are preparing a Base Response Plan that, once adopted by City Council, will serve to utilize our current resources more effectively across the City. This will serve as an essential interim policy and resource deployment framework until the City has the opportunity to complete a comprehensive Master Fire Plan over the next 2-3 years.

Kingston Fire and Rescue is a solid, well-performing force. As such, we are committed to continuous improvement in the overall quality and responsiveness of our services. City Council has adopted a sound multi-year strategy to address our known service challenges. Under the watchful and experienced stewardship of Chief Tulk I am confident that Kingston Fire and Rescue is being positioned to be among the top performing services in Ontario within a few short years.

Yours truly,

Lance Thurston, Commissioner

Copies
Mayor and Members of Council
Bert Meunier, CAO
Fire Chief Harold Tulk
John Cross, CEMC
TO: Bert Meunier, Chief Administrative Officer
FROM: Lance Thurston, Commissioner, Community Services
PREPARED BY: Harold Tulk, Fire Chief
DATE PREPARED: March 12, 2002
DATE OF MEETING: March 19, 2002
SUBJECT: Kingston Fire & Rescue Organizational Structure and Services

RECOMMENDATION:

It is recommended that Council hereby authorizes the Kingston Fire & Rescue division of the Department of Community Services to provide fire protection and public safety services as listed in attachment #1 to this report; and

It is further recommended that Council hereby approves the functional organizational reporting process as set out in attachment #2 and #3 to this report.

ORIGIN/PURPOSE:

The performance outcomes flowing out of the governance and policy review process in the Fire & Rescue organizational review must be approved by council before the internal divisional review. The services and organizational structure coupled with the benchmark performance outcomes provided by Council will provide leadership and direction to full time and volunteer staff as they proceed in their reviews.

OPTIONS/DISCUSSION:

The services as set out in attachment #1 coupled with the functional organizational reporting structure as recommended in attachment #2 and #3 represents the outcome from the governance and policy development review which was conducted by Senior Administrative Staff on March 8, 2002. This completes step #1 in the organizational review which has been disclosed to all interested parties.

The approval of the functional reporting structure as recommended will provide the appropriate base reference for all full time and volunteer staff as they proceed with the divisional reviews.
Kingston Fire & Rescue full time and volunteer staff will be provided with the list of services to be provided, the functional reporting chart which will organize the divisional units and the performance response times as approved by Council.

The staff will also be provided with the list of guiding principles as they proceed with their reviews which were approved by Council as “Project Assumptions”. They are as follows;

A. The organization will embrace the following delivery principles:
   i. Provide a service that is equally accessible to the community.
   ii. Provide a service that is fully integrated in the use of career and volunteer firefighters.
   iii. Provide a service that has appropriate quality assurance and accountability measures incorporated into its function.
   iv. Provide a service that responds to the changing needs and circumstances of The City of Kingston.

B. The participants will focus on actions required to form an integrated single fire service. Details of how certain functions are performed should be left to the transitional step however, it will be key to identify specific changes that must take place to meet the organizations mandate.

C. The participants in each step will summarize information in report form with recommendations identifying how their particular area will form part of or function within the approved organizational model.

➢ The organization is “urban/rural” in structure and that the desired base response times which will become known as the community standards are as follows:

   - Urban – 5 minutes
   - Sub-urban -10 minutes
   - Rural – 15 minutes
   - Remote -45 minutes

➢ Response times are suggested as maximums or upset limits and are targeted to be achieved 90% of the time. Council may adjust the suggested performance.

It must also be noted that three functional areas were discussed in detail and potential efficiencies where services could be integrated or supported using corporate existing services for support was identified and will be placed before Council for consideration at a later date yet to be determined. The functional areas for potential change are as follows;

A) Fire-EMS (Emergency Medical Response)

Fire-EMS can be split into two areas for discussion. The first being the first response fire medical assist support program currently being provided by all the fire services in Frontenac Lennox Addington. Although the program is effective in increasing the survival rates in cardiac arrest, it does not improve the response time performance statistics or the legislated 90th percentile performance of the ambulance service. This leaves the ambulance system “appearing” to be in
need of additional vehicles, more staff and/or other related organizational adjustments to bring the times up to the legislated standard. This of course carries a financial impact every time there is a change in organizational structure.

There are also opportunities to examine some form of integration between fire and ambulance services which will of course offer potential savings as well. The ability for ambulance to have vehicles serviced by our city fleet system and/or have ambulance vehicles housed in our buildings need to be discussed in more detail.

The final and probably the most important point in the Fire-EMS discussion is the issue of EMS Communications. It is well known amongst the emergency service providers that whoever controls communications, controls cost, efficient resource deployment and quality of service. Communications has and will have a major impact on systemic performance. Therefore, more discussion will be required with Council in the near future. The C.A.O. and Commissioner have directed the development of a discussion paper to outline Fire-EMS issues in more detail.

B) Fleet Maintenance of Vehicles and Other Specialized Equipment

Our current mechanics continue to perform to a very high standard of effectiveness in the maintenance of our vehicles. There is no doubt that independent quarters were required in the old three department system.

The new city brings with it opportunities to secure a facility that will have all the modern technologies built in for servicing large specialized equipment. We believe more research is required to identify the potential for a vehicle maintenance management program improvement by having the fire service operate in conjunction with our fleet system with a view of total integration in the long term.

C) Fire & Rescue Communications

This area is more commonly known as a “dispatch service”; however, that is certainly a very limited description of the function of the communications division of fire services. The fire service relies on speed and efficient movement of large volumes of people and equipment to a specific location. High levels of coordination are required once a call is received which requires intervention in the form of a response to a specific site in a timely fashion which is essential to life, property conservation or both. The call for help cannot and must not be deferred for further examination to determine the level of commitment that is required. The technology associated with radio communications and computers is developing at a very fast pace. The fast development of technology coupled with the increases dependency on special equipment leaves all emergency services in a position where they must capture efficiencies within their corporations. There is no doubt that there has been a trend toward integration between fire/police communications systems in many jurisdictions. There have also been jurisdictions in Canada and the U.S. which have opened Corporate Communication Centres which remain under the care and control of the Corporation and Council and provide services to a wide range of corporate departments without compromising emergency service standards. Although we believe both systems have merit we need to explore all options in more detail in the near future particularly due to recent events associated with September 11th and the emergency planning amendments that are forthcoming from the Ontario legislature.
Having said all of that, we see no reason not to proceed as planned with the reorganization of the Kingston Fire & Rescue Services. We will provide full disclosure to the KPFFA and the two VFFA's as we proceed.

EXISTING POLICY/BY-LAW:

The existing practice maintains three separate fire and rescue services operating under one Fire Chief and three Deputy Fire Chief's. The current establishing and regulating by-laws are under review and will be repealed when a single by-law is prepared to set out how The Kingston Fire & Rescue Services are to be delivered as directed by Senior Staff and Council.

LINK TO THE STRATEGIC PLAN:

The Mission Statement of the Kingston Fire & Rescue Service is as follows:

"The primary mission of the Kingston Fire & Rescue Service is to prevent fires and provide a range of programs to protect the lives and properties of the inhabitants of the City of Kingston from the adverse affects of fire, accidents, sudden medical emergencies or exposure to dangerous goods or conditions created by man or nature."

It is clear that the three former departments were organized and delivered services based on the needs and circumstances of their respective jurisdictions.

The organizational review is particularly important as it will provide a base from which a Master Fire Plan can be developed. This will provide a comprehensive approach to the development of municipal fire and rescue services within the policy framework of the Municipal Strategic Plans.

It is noted that with respect to organizational matters there has not been a comprehensive approach taken that would examine linkages, develop overall standards and pull together the three fire delivery systems in a way that would provide a delivery model that meets the diverse needs of the community.

FINANCIAL CONSIDERATIONS:

N/A, at this time.

CONTACTS:

Lance Thurston, Commissioner of Community Services
Harold Tulk, Fire Chief
DEPARTMENTS/OTHERS CONSULTED AND AFFECTED:

City of Kingston, Chief Administrative Officer
Senior Staff Community Services – Social Services, Emergency Planning
Senior Staff Corporate Services – Finance, Human Resources
Senior Staff Corporate Planning – Planning Department, Building Department
Full-time Staff Kingston Fire & Rescue Services
Volunteer Staff Kingston Fire & Rescue Services
Kingston Professional Firefighters Association
Kingston Volunteer Firefighters Associations (3)
Kingston Ambulance Services
Ontario Fire Marshal’s Office – Solicitor General
Insurance Advisory Organization – Ontario Division

APPENDICES:

Attachment #1, Summary of Fire Services provided by Kingston Fire & Rescue
Attachment #2, Functional Organizational Chart
Attachment #3, Emergency Operations Organizational Chart
Attachment #4, Existing Kingston Fire & Rescue Organizational Chart

Lance Thurston
Commissioner, Community Services

Bert Meunier
Chief Administrative Officer
SUMMARY OF FIRE SERVICES

A summary of services by division is provided for reference and starting point for discussions. The list is therefore not restricted and may be amended as required.

ADMINISTRATION:
- Labour Relations – Collective Agreement; OHSA
- Human Resources – Union and Non Union staff
- Finance – Budget administration, purchasing, etc.
- Policy Development – Corporate and Operations
- Records Management – WSIB, payroll, policy, staff
- Buildings Management
- Fleet and Equipment Management
- Training and Education Administration
- Fire Cause Determination and Investigations
- Emergency Fire Service Plan Administration
- Environmental Response Administration
- Nuclear, Bio, Chemical Response Administration
- Rescue Services – Water, ice, High Angle, Confined Space
- Fire Communications and 911 Administration
- Fire Operations – Urban
- Fire Operations – Rural
- Other Services as determined by Senior Staff and Council

FIRE PREVENTION AND PUBLIC EDUCATION:
- Site Plan Review
- Building Plan Review
- Water Supply Analysis
- OFC Enforcement
- Public Information
- Public Education
- Single and Multi Residential Inspections
- Institutional and commercial Inspections
- Industrial Inspections
- Fire Investigations
- Risk Management Assessment
- Agricultural Inspections
- Other services as assigned by Chief Fire Official
FIREFIGHTING OPERATIONS:

➢ Respond To All Reported Emergencies In The Community Where It Is Essential To Life And Conservation Of Property

➢ Fire Suppression and Rescue Respond to:
  - single residential, multi residential, high rise
  - commercial/industrial
  - assembly/institutional
  - air
  - marine
  - environmental
  - road transportation
  - confined space
  - high angle
  - water/ice
  - others as required

➢ Fire Prevention
  - building inspections
  - public education

➢ Equipment
  - specialized test and maintenance programs
  - conduct training

➢ Vehicles
  - maintenance and testing
  - records development

➢ Training
  - attend regular training
  - attend specialized training both in house and Ontario Fire College

➢ Building
  - daily maintenance
  - periodic building renovations

➢ EMS
  - Answer all vital signs absent emergency medical calls
COMMUNICATIONS AND INFORMATION SYSTEMS:
- Emergency Call Taking – 911 Fires And Any Other Community Emergencies
- Pre-plan Documents High Hazard Buildings
- Municipal Address Administration
- Intelligence Support to Operational Crews In Field During Emergencies
- Reporting And Records Management For All Emergency And Non-emergency Occurrences In Kingston And Surrounding Area.
- Maintain All Attendance Management Records For Scheduled And Non-standard Emergency Events

FLEET AND EQUIPMENT:
- Maintain All Heavy Mobile Fire Apparatus During Regular Hours and After Hour Emergencies
- Respond To Major Fire And Other Emergencies
- Test And Maintain Essential Support Equipment
- Draft User Policies For all Apparatus In Consultation With Training Division
- Draft Specifications For All Heavy Equipment
- Draft Specifications For All Support Equipment
- Provide Training As Required By Training Division On Heavy Equipment

TRAINING AND EDUCATION:
- Adminstrate The Corporate Occupational Health And Safety Program Under The Direction Of The Fire Chief
- Establish All Training Programs And Policies for The Kingston Fire Services Within Applicable Legislation And Fire Industry Accepted Practices In North America
- Develop New Equipment Specifications
- Deliver All Required Training Programs To The Rural And Urban Fire Operations Group
- Facilitate Regular Crew Training In Conjunction With Operational Offices
- Assume Other Duties As Assigned By The Fire Chief
Kingston Fire & Rescue Service

Council -> C.A.O. -> Commissioner -> Fire Chief

Emergency Planning

Deputy Chief Urban Operations -> Deputy Chief Support Services

Platoon Chiefs On Duty

Platoon Chiefs On Call

Training Officers

Assistant Chief of Training

Assistant Chief of Prevention

Public Enforcement Investigation

Volunteer Firefighters On Call

Communication Services

Assistant Chief

Building Support Services

VFF Support Services

Equipment

Buildings

Fleet
Attachment #3

Kingston Fire & Rescue

Emergency Operations
Fire Chief – On Call

Urban
Deputy Chief – On Call

Platoon Chiefs
On Duty 24/7

Career Firefighters
On Duty

Rural
Deputy Chief – On Call
Deputy Chief – On Call

Platoon Chiefs
On Call 24/7

Volunteer Firefighters
On Call
MEMORANDUM

TO: L. Thurston, Commissioner, Community Services
FROM: Carolyn Downs, Manager, Council Support
DATE: 2002-03-21
SUBJECT: FIRE & RESCUE DIVISION – ORGANIZATIONAL STRUCTURE

This will confirm that City Council at its regular meeting held on March 19, 2002, approved the following resolution, being Clause 3., Report No. 37:

3. **THAT** Council hereby confirm and authorize the Kingston Fire and Rescue Division of the Department of Community Services to provide fire protection and public safety services as listed in Attachment # 1 the Report of the Commissioner of Community Services (C068); and;
**THAT** Council hereby approve the functional organizational structure and reporting process as set out in Attachment # 2 and # 3 to the same report.

CARRIED

Yours truly,

Carolyn Downs
Manager, Council Support

/ki

cc: H. Tulk, Fire Chief

Our Ref. No.  P16
TO: Bert Meunier, Chief Administrative Officer
FROM: Lance Thurston, Commissioner, Department of Community Services
PREPARED BY: Harold Tulk, Fire Chief
DATE PREPARED: 2003-02-23
DATE OF MEETING: 2003-03-04
SUBJECT: Kingston Fire & Rescue Reorganization

RECOMMENDATION:

1) That Council receives the findings of Step 2 of the Fire and Rescue Organizational Review process as the basis for proceeding to Step 3 of the process – Financial Analysis.

2) That Council authorizes the Fire Chief under the direction of the Commissioner of Community Services, and in consultation with Legal Services, to prepare the necessary Establishing and Regulating By-Law to formalize Kingston Fire & Rescue Services as a single Urban/Rural composite fire service.

ORIGIN/PURPOSE:

This is the third report to Council summarizing outcomes that are flowing out of the Kingston Fire & Rescue Organizational Review. The Review, as approved by Council, has four steps and is predicated on the approval of the outcome of each step before moving forward in the analysis process. Council previously adopted the results of Step 1 – Governance Framework and Policy Development, including community performance standards in the urban, suburban, rural and remote areas of the City.

This report provides a summary of the results of Step 2 of the organizational review process- Review of Operational Procedures and Services, and seeks Council’s approval to proceed to Step 3 – Financial Analysis.

OPTIONS/DISCUSSION:

(a) Summary of Step #1 Governance Framework and Policy Development

Staff Participating: Bert Meunier, CAO; Lance Thurston, Commissioner; Denis Leger, Commissioner, Department of Corporate Services; Fire Chief Harold Tulk; Bill Bishop, Director, Human Resources; Deputy Fire Chief Gary Bullock; Deputy Fire Chief Neville Murphy; Deputy Fire Chief Carl Young;
Debbie LaVallee, Manager, Employee Relations and Development; Gerard Hunt, Manager of Finance; John Cross, Community Development Facilitator; Tara Perry, Fire and Rescue Administrative Assistant; Cynthia Cook-Brown, Fire and Rescue Clerk; Elizabeth Cashman, Acting Assistant to the Commissioner of Community Services.

The Fire Chief acted as the facilitator in review of “the current state of fire protection” in Kingston with the group. The group recognized that the proposed growth and make-up of the new city coupled with the existence of both career and volunteer forces left it clear, in conclusion, that Kingston should embrace the composite delivery model of fire protection. It was recognized that tentative steps had been made to move the three former departments into a single force in recent years. The time had arrived however, for initiating basic rationalization of the three organizational functions into one fire rescue service with “full regard for cultural differences that prevail in the three fire delivery models currently serving the City of Kingston”.

The organizational structure of the new Kingston Fire & Rescue Services (attachment #1) was recommended and approved by Council at its regular meeting on March 19, 2002. Council also approved a full list of services to be provided by the new organization, which would serve as a base benchmark for the operational review, which would be conducted by front line staff in Step #2 of the organizational analysis.

It was further recognized that of the many factors that influence the provision of fire protection and the conversion of financial resources into predictable performance outcomes, proper “system design” is crucial. Performance-based service delivery models that specify the results expected within prescribed standards, have more influence on successful results than any other single element in the provision of fire protection.

**Current Fire Service Standards**

There is no legislated standard prescribing the level of service a municipality must provide. Response time performance continues to be identified as the critical issue, regardless of who is responsible (career or volunteer) for delivery of services.

There are many accepted practices as it relates to fire industry standards, and several consensus standards including the recently published National Fire Protection Association (NFPA) Standards 1710 and 1720 for both urban and rural emergency response. The NFPA Standards are applied to different components of fire operations once the decision is made to provide those services as an urban and rural delivery model.

It is essential to note that each municipality has its own fire risk characteristics and service priorities; however, the ultimate responsibility for fire protection resides with Council. Council determines the overall level of fire services, fire protection and acceptable performance within the local community. Once Council provides direction, the fire and rescue service must provide an efficient and effective fire protection package with the resources provided. Guidelines are provided for reference on emergency scene staffing in the following summaries.
National Fire Protection Association Standards 1710 (Urban) and 1720 (Rural)
The 1710 and 17220 standards were formally issued by NFPA in July 2001. The purpose of these standards was to improve operational applications in providing fire protection and to establish appropriate safeguards against the loss of life and property.

These two standards provide a measurement by which a department can measure its performance – to assess its effectiveness and efficiency based on minimum response times.

Both NFPA 1710 and 1720 are relatively short standards with similar scopes and purposes to provide minimum requirements for organization, deployment and managing resources within systems by addressing functions and outcomes with strategic and system issues. More briefly they deal with most if not all aspects of the internal management practices that govern how we will respond to emergencies. 1710 and 1720 do not address fire prevention, community education, fire investigations, support services (equipment maintenance), personnel management or budgeting.

Both 1710 and 1720 address effectiveness in protecting the citizens. Interestingly, only 1710 addresses the occupational health and safety of employees. The most controversial sections of NFPA 1710 appear to be those related to initial response times, initial attack capabilities and staffing.

The 1710 (Urban) standard requires an engine company to arrive at a fire suppression incident within four minutes, or a full first alarm assignment must arrive in eight minutes (15 persons). An engine company must be able to pump and deliver water as well as implement an “initial rapid intervention team” (IRIC). The response time objective must be achieved 90% of the time.

While 1710 has a minimum response time attached it appears 1720 is more concerned with function that mirrors 1710 without prescriptive time frames.

The National Fire Protection Association has empirical evidence supporting “the ability of adequate fire suppression forces to greatly influence the outcome of a structural fire” which supports the notion of adopting the standard.

For structural fires, Council must ultimately decide what the priorities are in the community. In October of 2001 major fire services in Canada were surveyed by the Hamilton Fire Department to determine the level of endorsement that the new NFPA Standards were receiving. It is our understanding that there are no municipalities incorporating these standards within “Community Standard” of performance at this time.

Having said that, although we are not recommending full adoption of the standards at this time we intend to use the standards as a guideline in determining “best practices” which will enable Kingston Fire and Rescue Services to have some flexibility with respect to meeting local needs and circumstances.

Office of the Fire Marshal Guidelines
The Office of the Ontario Fire Marshal states in its Public Safety Guidelines of Emergency Responses – “Staffing for fire in single family dwellings”, that there are many optional methods of assembling fire attack teams for different situations. Any one or a combination of the options are considered satisfactory, provided that the fire attack team is operational within a time frame which allows for efficient, effective and safe conduct of emergency operations. The options utilized are to provide for a minimum of four firefighters to arrive for a single-family dwelling fire. The basic fire response model requires a minimum
staffing of no less than 10 firefighters (including supervisors) and if practical a minimum of two vehicles, one of which is a triple combination pumper, assembled on the fire ground within 10 minutes for 90% of the reported emergencies.

The guideline further states that Chief Officers or designates shall be available and held accountable for command of all fire companies at each fire or emergency scene. It is assumed within the guideline that additional firefighters are available as required.

Further to all of this, in a background report from the Office of the Fire Marshal entitled “Fire Ground Staffing and Delivery Systems within a Comprehensive Fire Safety Effectiveness Model”, the following conclusion is made: *It is recognized that fire service effectiveness, essentially the level of service provided to the community, and firefighter safety are inextricably linked. A Municipal Council determines the resources that will be provided to its Fire Service. The fire service has an obligation to utilize those resources to provide the highest possible level of service which can be safely and effectively delivered to the community.*

Insurers Advisory Organization (Formerly Fire Underwriters)
The Insurer’s Advisory Organization conducts surveys of municipal fire protection to establish risk of property loss due to fire and assign an insurance grade. The risk grading is filed with the member insurance companies through the Insurance Bureau of Canada and is referenced when assigning insurance rates on properties.

Mr. Mike McKenna of the Insurer’s Advisory Organization visited the City of Kingston in April 2002 and November 2002. He has examined our fire stations, fire apparatus and conducted preliminary reviews of our operations (administration, fire prevention). He understands that Kingston Fire & Rescue is in the formative stages of reorganization and has graciously reserved his final analysis to a time when we have a final organizational report approved by Council, before he assigns the final gradings to the new City of Kingston.

Mr. McKenna, however, has made some preliminary recommendations related to operations and apparatus replacement, for information and reference. He recommended that a formal response plan and program be instituted immediately, utilizing resources from the three former fire departments as one urban/rural fire service. He further recommended a replacement schedule for our aging fire vehicles, which will be tabled with Council at Step #3 (financial considerations) of reorganization.

Basic Risk Management and a Community Standard of Response
Fire Services require the complex coordination of a multitude of stakeholders. We know fire prevention and firefighting operations delivery system design will be the most powerful force influencing organizational performance.

Response time continues to be identified as a critical issue, regardless of who delivers the services. Council approved a “community standard” for response time performance in the urban/rural delivery model:

- 5 minutes – Urban
- 15 minutes – Suburban
- 30 minutes – Rural
- 45 minutes – Remote
This standard has been used as the benchmark in our Step 2 assessment and will allow for the formalization of deployment policies that ensure the appropriate number of personnel respond to all emergencies. It will also allow sufficient resources to respond to subsequent emergencies. At least two pumping-capable companies and additional apparatus are required including a senior officer to respond, ensuring that a minimum of 10 personnel arrive to a reported structural fire in the urban and rural community.

It will further ensure that response programs are formalized to meet the current standard for response set out by the Office of the Fire Marshal. The new National Fire Protection Association Standards 1710 and 1720 will be used as guidelines as we develop our urban/rural fire service delivery model.

**Volunteer/Career Firefighters**

Several issues will drive the future of fire protection services and tiered response capabilities, including but not limited to: population density/demographics; frequency of emergency responses; and risk associated with growth in housing and commercial expansion. The model that currently is in place, where career firefighters and volunteer firefighters do not “mingle”, leaves our fire protection delivery model vulnerable to failure and leaves a false sense of security of delivery system reliability.

We remain committed to a composite fire format (career and volunteer firefighters), and will continue to support the traditional response program of our volunteer firefighters, where the need dictates. This allows for a level of protection that meets the demands of our rural communities and provides the standing reserves of both staff and equipment when a major incident challenges the resources of the Kingston Fire & Rescue Service.

The new delivery model set out in the base response plan ensures that the appropriate staff and apparatus respond as required within a reliable delivery system.

**(b) Summary of Operational Reviews**

All career staff and volunteers were invited to participate in a division-by-division review of services to be provided by the new Kingston Fire & Rescue Service (KFR). Independent fire industry professionals chaired the reviews, while receiving advice and assistance on local culture from Assistant Deputy Chief Barry Leaver, District Chief Peter Gould and District Chief Bill Larson. Notes were taken at each meeting to capture the key comments from KFR members.

It is important to note that staff was provided with the governance and policy framework summaries from Step #1 of reorganization, which set out direction to be a Composite Urban/Rural delivery model providing a list of services directed by Council. Senior Staff (Chief, Deputy Chiefs and Assistant Chiefs) were excluded from participating in the reviews so that staff would feel free to interact with the Chair and participate fully in the discussions.

The services were reviewed with a view of confirming the community currently receives the service, what priority ranking the service held in terms of importance to employees, and where within the organization the service should be based for structure and development. In short, employees reviewed “who” should provide the service as opposed to providing details on “how” to provide the service. The “how” will be addressed at Step #4 of the review process.
Key divisional functions were set out by administration to enable the employees to respond to the development and implementation of some of the activities (i.e. training and education, base response plan, etc.).

Kingston Fire and Rescue personnel at all levels of the organization have demonstrated commitment to the change process. This is demonstrated in their response to areas that have already been adjusted to prepare for the significant shift in organizational behaviour that will be required to move forward as one composite force. For example: radio procedures have been standardized to reflect fire industry accepted practices; incident command programs are in draft format; and, recruit training programs for our volunteers have been amended to ensure consistency with the fire service standards in Ontario.

All of these activities are positive indicators that change is taking place within the organization. Experience suggests that our staff and volunteers will demonstrate a will, spirit and energy to move forward quickly. They may however, become frustrated from time to time with the pace of change (too fast for some, too slow for others). It is our challenge therefore to maintain the energy and momentum of the process and level of engagement of all staff and volunteers.

Summary of Inter-divisional reviews:

Fire Prevention Service Group Review Summary:

- A full review of current industry trends were provided to staff by Assistant Deputy Fire Marshal Tony Mintoff who acted as Chair of the Fire Prevention Review. A number of outcomes are worth noting from the review.

- Fire Inspections are a valued component in the overall provision of fire protection in the City.

- Fire Inspectors have had workload increases to meet the expanded needs of the amalgamated areas as a collective unit.

- Inspections are required to be conducted frequently in specialized occupancies (industry, institutions, schools, etc.) and the City of Kingston is not meeting the desired frequency requirements.

- The fire prevention needs were underestimated in terms of number of staff combined from area municipalities once placed in a single Fire Prevention Division with a broad base workload.

- Fire code enforcement is deficient in many areas as fire prevention extends inspection practices into amalgamated areas.

- There are multi-residential buildings that have not had a fire code “Part 9” retrofit inspection conducted and others that were unknown to any property registry system as complaints came in.

- This has led to some issues with current building owners who assumed they must have been in compliance because of past practice; yet find that there are corrections required to their occupancy creating fallout for inspectors conducting site visits.
Staffing requirements will need to be examined to determine our availability to ensure that the legislative requirements for inspections/re-inspections are met across the broader municipal area of the new City. A divisional plan setting out goals and objectives of this very special area will be developed by the director, in consultation with the Office of the Fire Marshal.

Comprehensive Public Education program is mandatory and must be developed in this year.

Training Division Group Review Summary:

- The potential for a major shift in the way we do business in training and education of our firefighters was identified as a priority by staff.

- The need for a full review in this area is consistent with all fire service delivery models in the Province.

- Our training program must fit within accepted practices recognized by the Ontario Fire Marshal’s Office and the Ministry of Labour.

- It is much easier to understand the full nature of the required changes when they are broken down into two parts:

1) Certification Requirements

   a) Training and Education Programs within KFR must be certified within OFM and Ministry of Labour Standards.

   b) Firefighter “Certification” to the Ontario Professional Standards is voluntary; however, all firefighters must participate and demonstrate competencies within the accepted standards. They may volunteer to write exams for formal certification.

2) Mandatory Training Programs

   a) The firefighting standard from the “Ontario Firefighter Standards” shall be the base reference for firefighter competency and required performance outcomes.

   b) IFSTA 4 Edition is the acceptable support curriculum.

   c) Delivery of basic training to the FIF Standard will be the responsibility of the Senior Officers of each crew utilizing the skills of certified trainer facilitators available on shift.

   d) Training records shall be maintained and filed in accordance with department policies. (see draft on next page):
KFR TRAINING REPORT

SUBJECT ___________________________ DATE ___________________________

NAME ___________________________ SESSION NUMBER ___________________________

TRAINER FACILITATOR ___________________________

Is the training you received satisfactory? __________________________________________

__________________________________________

Do you require additional training on subject? ______________________________________

__________________________________________

Comments: __________________________________

__________________________________________

__________________________________________

__________________________________________

__________________________________________

__________________________________________

Employee Signature ___________________________ Date ___________________________

Officer I/C Signature ___________________________ Date ___________________________

Senior Officer Signature ___________________________ Date ___________________________

CC: Shift Copy
   Training Division
   Employee

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
e) Specialized Modules
- Will be compulsory based on services to be provided as approved by Council.
- The Ontario firefighter standard is the base reference with the companion special modules i.e. medical assist, pumps, high angle rescue, confined space, hazardous materials response, etc.
- Training to be provided in special modules will be based on the services approved by Council as part of the Kingston Fire & Rescue delivery model.
- Assistant Chief of Training shall manage and facilitate the delivery of the specialized modules utilizing staff from the division and fire crews.
- Specialized programs will be delivered to a core group of trainer facilitators who in turn will deliver the specialized curriculum to the firefighting crews.
- In some circumstances training may be delivered directly to the practitioner.
- Training records shall be maintained and filed in accordance with division policies (copy on shift, copy to training, and copy to employee).

We have work to do at the implementation level to resolve scheduling issues. A good starting point for discussion is that basic fire operations training is to be scheduled by company officers whereas, specialized training is scheduled “annually” in consultation with training and senior officers.

Simulated Fire and Rescue Complex:
- Current training sites (Centennial Drive, Railway Street and Joyceville) have been in service for many years. (Note: Centennial Drive site has since been sold by the City).
- With the expanded amalgamated service training, our staff is being hampered due to the limitations of our sites.
- There is no indoor training facility that allows the sites to be used beyond temperate weather periods. The sites are closed in November/December and not reopened until late spring.
- Conversely a large percentage of training is lost in the summer due to unavailability of staff due to family commitments and extreme weather.
- Since amalgamation there remains a severe need to provide standardized training to ensure skill sets meet the legislated obligations and ensure consistent emergency response practices are applied within the organization.

Additional Points of Interest:
- The current live fire training process utilizes traditional methods of burning hydro carbons, fuel, etc. to simulate actual condition, as well as straw, old furniture and scrap wood within the burn structures. This is an unfriendly activity from the environmental perspective and safety can be an issue if not adequately supervised.
- An indoor facility, adjacent classrooms and appropriate offices are required to meet the needs of a large composite force. The use of cameras and video equipment would eliminate the need for unfriendly environmental applications and provide a much safer environment to teach firefighters and any other groups that may require ‘hands on training’ in the city (i.e. confined space entry, etc).
- Equally important is the need to develop a site that is commensurate with the actual service demands on the new amalgamated service.
Simulated fire rescue training complexes often serve as sub-fire stations and in many circumstances are located in the heart of the built up areas for ease of access.

- It is for this reason as well as the fact that unfriendly environmental activities are discouraged in today’s fire service that a new modern training facility is recommended.
- We believe this subject merits further consideration in the very near future.

**Communications Division Group Review Summary:**

- It is well known in Emergency Services that he or she who controls communications, controls quality of service, cost of service and effective deployment and the safety of those responding to the emergencies as well as those that receive service.
- The City of Kingston is the fire coordinating base for the Frontenac Lennox and Addington Mutual Fire Aid System.
- We have equipment that is dated and needs to be upgraded to be more functional and consistent with the addition of a modern Computer Aided Dispatch program.
- Radios must be reprogrammed to enable full inter-vehicle communications across the Kingston fire response area as well as inter-agency function for emergency planning with operations department and police.
- Computer Aid Dispatch programs have become common place in the fire service. They accomplish a number of essential tasks associated with resource deployment and records management, civic addressing, preplans, AVL etc.
- In as much as they enhance response procedures and records management have a tendency to be maintenance intensive and require information systems staff to sustain systemic acceptable performance outcomes in all divisions of fire service and emergency planning.
- Staff have identified a number of key issues for further review and direction early in the New Year. The issues are as follows:

1) A supervisor is recommended for this division and a suitable candidate having background experience in the following would be required:
   - Project Management – to determine the current and ongoing future organizational infrastructure needs.
   - Administrator - management of electronic data and computer related data systems to allow for skill sets required to administer and oversee both the computer aided dispatch and records management system for the handling, storage and retrieval of electronic data through all standard mediums.
   - Knowledge of Radio Systems/Communications – to ensure appropriate understanding of the intricacies and nature of the business of emergency service radio needs.
   - Function as a management staff member overseeing all staff operations within this division also serving as the emergency planning communications officer for peacetime emergency communications.

2) It is recommended that a Computer Aid Dispatch System should be purchased without delay to assist communications staff in resource deployment and identifying problem areas in civic addressing. Records management could be standardized and the risk of error minimized.
3) There is a severe need to upgrade the communications console and standardize frequencies across the Kingston Fire & Rescue services. A digital VHF radio application is recommended to replace the existing aged analog radio system.

- If the recommendations are received by Council they will be moved forward for further analysis and discussion in financial analysis in step #3 of reorganization. This will require a more detailed report to Council at that time.

- Opportunities exist where services may be enhanced through partnerships with other corporate agencies and they will be identified during financial analysis and implementation. One must first accept the notion that a need has been expressed and validated at the base level of communications as a department function before all options for delivery are explored.

**Mechanical Services and Equipment Maintenance Group Review Summary:**

- Emergency Service fleets and related equipment maintenance are a specialized and highly technical.
- There are industry standards that are constantly being upgraded due to the health and safety impacts and vigorous service demands due to the nature of the business.
- Emergency service technicians are constantly required to extend their educational and practical knowledge beyond the basic requirements of diesel and gasoline licensing.
- An intimate knowledge of the users of the equipment and what their needs are so that proper designs, tolerances and equipment are considered for use and application in providing fire protection is required.
- They will be responsible for leadership and Staff consultation in equipment purchases reporting to our executive officer in charge of project management.
- In addition to the base fleet issues the mechanical division maintains servicing for all self contained breathing apparatus, maintenance of all firefighting personal equipment, hose test and repair and small equipment repair.
- We have recently encouraged the mechanics to interact with the Corporate Fleet process and we will move into the future increasing the interaction to achieve efficiencies in equipment and vehicle maintenance.

**Firefighting Division Group Review Summary:**

- We currently have approximately 130 career staff scheduled to provide services from 4 of our 10 fire stations.
- We currently have approximately 130 volunteer staff scheduled to provide service for the remaining 6 fire stations.
- The groups have predominately remained in the old geographic areas in terms of response plans and programs with a few exceptions where “Mutual Aid” was activated using old operational principles when assistance was required.
- Full disclosure of fire industry standards for response planning have been provided during the review.
- There is clear by the OFM facilitator a need to integrate the deployment of resources to ensure our community receives a reliable, efficient and effective fire protection service.
A community standard for base response to specific areas has been recommended.
A master response plan must be developed and approved to ensure that the services are provided in a predictable fashion in each of the identified urban and rural areas within the City of Kingston.
The desired performance outcome for reported structural fires is recommended as follows:

- **Urban** – 5 minutes (commercial, industrial, institutional and multi residential occupancies and single storey res.): Career Stations.
- **Sub-urban** – 15 minutes (single storey residential.): Career & Volunteer Stations.
- **Rural** – 30 minutes (agricultural and single storey resident.): Career & Volunteer Stations.
- **Remote** – 45 minutes (cottages on private roadways, remote, islands, etc.): Career & Volunteer Stations.

*Response performance must be achieved 90% of the time.*
*A base master response plan is provided for reference.*
*A sub committee of practitioners will finalize before implementation.*

<table>
<thead>
<tr>
<th>Area and Call Type</th>
<th>Vehicle Assignments</th>
</tr>
</thead>
</table>
| Rural – reported structural fire: Career and Volunteer | ■ 3 tankers: min 3 staff  
■ 2 pumps* min 8 staff  
■ 1 squad: min 1 staff  
■ Senior Officer  
-----------------------------------------------|
| ■ 1st alarm                                           | ■ Discretion of senior officer based on assessment of need. |
| ■ 2nd alarm                                           |                                                          |
| Sub-urban – reported structural fire: Career and Volunteer | ■ 2 pumps*  
■ 1 squad  
■ 1 tanker where water supply is known to be inadequate  
■ Senior Officer |
| Urban – confirmed single residential structure: Career | ■ 2 pumps  
■ 1 squad  
■ Senior Officer |
| Urban – confirmed multi residential high-rise/institutional/industrial/commercial: Career | ■ 1 ladder  
■ 1 aerial  
■ 2 pumps  
■ 1 squad  
■ Senior Officer |

*Career / Volunteer – Alarms ringing assignments may be assigned to a single firefighting unit.*
NOTE:

- Pre-approved master response plans and programs shall be in place and published in department operational policy manuals.
- All stations must be back filled when there is confirmation of long term commitment to structural fires or emergencies.
- One full-time pumper shall be mobilized with every rural call.
- Standardized incident command system must be in place before implementing plan.
- Standardized radio procedures must be in place before implementation.
- A number of table top exercises are required before the plan is implemented with all staff participating (Chief to Firefighter).
- Standard operating procedures for equipment and vehicle assignments must be in place.
- Reporting protocols must be published in the SOP’s before response plans are being put in place to ensure smooth transition of command when necessary.

EXISTING POLICY/BY-LAW:
Current by-laws are out-dated and need to be repealed and replaced, as is being recommended in this report.

LINK TO THE STRATEGIC PLAN:
While not formally or specifically linked with a strategic priority area, this is very much a matter of “getting our house in order”.

FINANCIAL CONSIDERATIONS:
Step 3 of the review process will examine the financial pressures on the fire and rescue service and make recommendations for going forward. The cost of undertaking this review to date has been minimal, apart from staff and volunteer time.

CONTACTS:
Lance Thurston, Commissioner 546-4291, ext. 1250
Harold Tulk, Fire Chief, 548-4001, ext. 204

DEPARTMENTS/OTHERS CONSULTED AND AFFECTED:
Ontario Fire Marshal’s Office
Insurance Advisory Organization
National Fire Protection Association
All staff and volunteers, Kingston Fire & Rescue
Kingston Professional Firefighters Association
Kingston Volunteer Firefighters Association

APPENDICES:
1) Kingston Fire & Rescue Divisional Structure
2) Kingston Fire & Rescue Summary of Services
<table>
<thead>
<tr>
<th>Signature</th>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td></td>
<td>Lance Thurston</td>
<td>Commissioner</td>
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<td></td>
<td>Department of Community Services</td>
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<td></td>
<td>Bert Meunier</td>
<td>Chief Administrative Officer</td>
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</tbody>
</table>
As approved by Council on March 19, 2002, Clause 3, Report No. 37
Kinston Fire & Rescue Divisional Structure
Appendix #1, Council Report 03-052
SUMMARY OF FIRE SERVICES

A summary of services by division is provided for reference and starting point for discussions. The list is therefore not restricted and may be amended as required.

ADMINISTRATION:
- Labour Relations – Collective Agreement; OHSA
- Human Resources – Union and Non Union staff
- Finance – Budget administration, purchasing, etc.
- Policy Development – Corporate and Operations
- Records Management – WSIB, payroll, policy, staff
- Buildings Management
- Fleet and Equipment Management
- Training and Education Administration
- Fire Cause Determination and Investigations
- Emergency Fire Service Plan Administration
- Environmental Response Administration
- Nuclear, Bio, Chemical Response Administration
- Rescue Services – Water, ice, High Angle, Confined Space
- Fire Communications and 911 Administration
- Fire Operations – Urban
- Fire Operations – Rural
- Other Services as determined by Senior Staff and Council

FIRE PREVENTION AND PUBLIC EDUCATION:
- Site Plan Review
- Building Plan Review
- Water Supply Analysis
- OFC Enforcement
- Public Information
- Public Education
- Single and Multi Residential Inspections
- Institutional and commercial Inspections
- Industrial Inspections
- Fire Investigations
- Risk Management Assessment
- Agricultural Inspections
- Other services as assigned by Chief Fire Official
Appendix #2
Report to Council 03-052

COMMUNICATIONS AND INFORMATION SYSTEMS:

- Emergency Call Taking – 911 Fires And Any Other Community Emergencies
- Pre-plan Documents High Hazard Buildings
- Municipal Address Administration
- Intelligence Support to Operational Crews In Field During Emergencies
- Reporting And Records Management For All Emergency And Non-emergency Occurrences In Kingston And Surrounding Area.
- Maintain All Attendance Management Records For Scheduled And Non-standard Emergency Events

FLEET AND EQUIPMENT:

- Maintain All Heavy Mobile Fire Apparatus During Regular Hours and After Hour Emergencies
- Respond To Major Fire And Other Emergencies
- Test And Maintain Essential Support Equipment
- Draft User Policies For all Apparatus In Consultation With Training Division
- Draft Specifications For All Heavy Equipment
- Draft Specifications For All Support Equipment
- Provide Training As Required By Training Division On Heavy Equipment

TRAINING AND EDUCATION:

- Administate The Corporate Occupational Health And Safety Program Under The Direction Of The Fire Chief
- Establish All Training Programs And Policies for The Kingston Fire Services Within Applicable Legislation And Fire Industry Accepted Practices In North America
- Develop New Equipment Specifications
- Deliver All Required Training Programs To The Rural And Urban Fire Operations Group
- Facilitate Regular Crew Training In Conjunction With Operational Offices
- Assume Other Duties As Assigned By The Fire Chief
Appendix #2  
Report to Council 03-052

FIREFIGHTING OPERATIONS:
- Respond To All Reported Emergencies In The Community Where It Is Essential To Life And Conservation Of Property
- Fire Suppression and Rescue Respond to:
  - single residential, multi residential, high rise
  - commercial/industrial
  - assembly/institutional
  - air
  - marine
  - environmental
  - road transportation
  - confined space
  - high angle
  - water/ice
  - others as required
- Fire Prevention
  - building inspections
  - public education
- Equipment
  - specialized test and maintenance programs
  - conduct training
- Vehicles
  - maintenance and testing
  - records development
- Training
  - attend regular training
  - attend specialized training both in house and Ontario Fire College
- Building
  - daily maintenance
  - periodic building renovations
- EMS
  - Answer all vital signs absent emergency medical calls
Council Support
MEMORANDUM

TO: L. Thurston, Commissioner, Community Services
FROM: Carolyn Downs, Manager, Council Support
DATE: 2003-03-05

SUBJECT: KINGSTON FIRE & RESCUE REORGANIZATION

This will confirm that at the regular meeting of City Council held on March 4, 2003, the following resolution, being clause 2., Report No. 30, was approved:

2. **THAT** Council receive the finding of Step 2 of the Fire & Rescue Organizational Review process as the basis for proceeding to Step 3 of the process - Financial Analysis, and;

**THAT** Council authorize the Fire Chief, under the direction of the Commissioner of Community Services and in consultation with Legal Services, to prepare the necessary Establishing & Regulating By-Law to formalize Kingston Fire & Rescue Services as a single Urban/Rural composite fire service.

**CARRIED**

Yours truly,

Carolyn Downs
Manager, Council Support

/ki

cc: H. Tulk, Fire Chief

Our Ref. No. H08
<table>
<thead>
<tr>
<th>Water/Ice</th>
<th>Ladders</th>
<th>Tankers</th>
<th>Squads</th>
<th>Pumps/Aerials</th>
<th>Staffing (On Site)</th>
<th>Community Standard</th>
<th>Military</th>
<th>Airport</th>
<th>NFPA</th>
<th>OEM</th>
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<td>5 People</td>
<td>2 People</td>
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<td>2 People</td>
<td>4 People</td>
<td>Remote – 5 mins Rural – 15 Mins Suburban – 10 Mins</td>
<td>5/10</td>
<td>5/5</td>
<td>1710</td>
<td>1720</td>
<td>10/10</td>
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</tbody>
</table>
Vehicles In District Respond

Water/Ice Rescue

Public Assistance

Medical Calls

And Building Type

Resource Assignment By Risk
<table>
<thead>
<tr>
<th>2 Career Stations Committee, Backfill</th>
<th>Career Stations Cooperatives</th>
</tr>
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<tr>
<td>INCLUDES ALL DISTRICTS</td>
<td></td>
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<tr>
<td>TO</td>
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<tr>
<td>2 Career Air/Rescue, 1 Tanker, 1</td>
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</tr>
<tr>
<td>Squad, 1 Senior Officer</td>
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</tr>
<tr>
<td>RURAL</td>
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<td>2 Air/Rescue, 2 Tankers, 1 Squad, 1</td>
<td></td>
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<tr>
<td>Urban (Minimum)</td>
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<tr>
<td>HAZ MAT - 2 Air/Rescue, 1 Tanker,</td>
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<tr>
<td>1 Squad, 1 Senior Officer</td>
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<td>Vehicle Collision Rescue - 1</td>
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<tr>
<td>Air/Rescue, 1 Squad, 1 Tanker</td>
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<td>Water/Ice Rescue - Water/Ice Team, 1</td>
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<tr>
<td>Public Assist - Air/Rescue, 1</td>
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<td>Pump with 4 Minimum Staff on Site</td>
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<td>Medical Assist - Air/Rescue, 1</td>
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<td>Pump with 2 Staff, Minimum Staff On Site</td>
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</table>

**1st Alarm Responses**
2nd Call Support - Water Ice Rescue Team as Required
Water/Ice Team, 1 Aerials/Pumps, 1 Squad (11, 42, 72)

District 1

District 2

District 3

Water/Ice Rescue Ist Alarm
<table>
<thead>
<tr>
<th>East County Line</th>
<th>Transdowne</th>
<th>Front of Leeds and</th>
<th></th>
<th>Stn 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joyceville Road</td>
<td></td>
<td></td>
<td></td>
<td>Stn 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Stn 3/S 41</td>
</tr>
<tr>
<td>Hwy 15 E</td>
<td></td>
<td></td>
<td></td>
<td>Stn 5/S 41/Tanker 81</td>
</tr>
<tr>
<td>Montreal St.</td>
<td></td>
<td></td>
<td></td>
<td>Stn 6/S 41/Tanker 91</td>
</tr>
<tr>
<td>Division St.</td>
<td></td>
<td></td>
<td></td>
<td>Stn 5/S 41/Tanker 81</td>
</tr>
<tr>
<td>Sir John A.</td>
<td></td>
<td></td>
<td></td>
<td>Stn 6/S 41/Tanker 91</td>
</tr>
<tr>
<td>Sydenham Road</td>
<td></td>
<td></td>
<td></td>
<td>Stn 7/S 71/Tanker 91</td>
</tr>
<tr>
<td>Hwy 38</td>
<td></td>
<td></td>
<td></td>
<td>Stn 7/S 71/Tanker 91</td>
</tr>
<tr>
<td>West County Line</td>
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<td>Stn 7/S 71/Tanker 91</td>
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<td>West Lanes</td>
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<td></td>
<td>Stn 7/S 71/Tanker 91</td>
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<tr>
<td>Hwy 401 Responses</td>
<td></td>
<td></td>
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<td>Site</td>
</tr>
<tr>
<td>Highway</td>
<td>Location</td>
<td>Station</td>
<td>Station</td>
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<tr>
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<tr>
<td>Hwy 15</td>
<td>East County Line</td>
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<tr>
<td></td>
<td>Joyceville Road</td>
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<tr>
<td></td>
<td>Hwy 6</td>
<td></td>
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<tr>
<td></td>
<td>Montreal St. W</td>
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<tr>
<td></td>
<td>Division St.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sir John A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sydenham Road</td>
<td></td>
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<tr>
<td></td>
<td>Hwy 38</td>
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<td>West County Line</td>
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<td></td>
<td>West Lanes</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hwy 401 Responses</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
No Hydrants - 2 Aerial/Pumps, 2 Tankers, 1 Squad, 1 Career Aerial/Pumper

Hydrants - 2 Aerial/Pumps, 1 Squad and 1 Career Aerial/Pumper

Station #7
Primary Response Assignment - Reported Structural
Station #9
Primary Response Assignment - Reported Structural

1 Career/Agri/Pump, 2 Air/Pumps, 2 Tankers, 1 Squad

- Location 1: 1 Tanker, 1 Pump, 1 Aerial
- Location 2: 1 Tanker, 1 Pump, 1 Aerial
- Location 3: 1 Squad, 1 Aerial, 1 Ladder
- Location 4: 1 Squad, 1 Aerial, 1 Ladder
- Location 5: 1 Squad, 1 Aerial, 1 Pump
- Location 6: 1 Squad, 1 Aerial, 1 Pump
- Location 7: 1 Ladder, 1 Tanker (Proposed 04)
- Location 8: 1 Tanker, 1 Pump
- Location 9: 1 Tanker, 1 Pump

Note: The map includes key positions and equipment placements for a disaster response scenario.
## APPENDIX "E"

### Summary

**Current budget costs of Fire and Rescue Division**

<table>
<thead>
<tr>
<th></th>
<th>Option A</th>
<th>Option B</th>
<th>Option C</th>
<th>Option D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>03 deficit included in '04 budget</td>
<td>04 budget (w/o</td>
<td>03 deficit included in '04 budget</td>
<td>04 budget (w/o</td>
</tr>
<tr>
<td>East</td>
<td>21,886</td>
<td>1,232,700 8%</td>
<td>1,210,814 7%</td>
<td>1,013,629 7%</td>
</tr>
<tr>
<td>West</td>
<td>154,538</td>
<td>3,981,977 27%</td>
<td>3,744,540 26%</td>
<td>3,764,910 26%</td>
</tr>
<tr>
<td>Central</td>
<td>346,802</td>
<td>9,790,971 65%</td>
<td>9,719,068 67%</td>
<td>9,701,882 67%</td>
</tr>
<tr>
<td></td>
<td>525,227</td>
<td>15,005,648</td>
<td>14,480,421</td>
<td>14,480,421</td>
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</tbody>
</table>

**Option A:** Status Quo (2004 Budget less '03 deficits)

**Option B:** Capital status quo with common costs (2004 Budget less deficit)

**Option C:** Capital considered as common costs at current levels (2004 Budget less deficit)

**Option D:** Equipment and Capital considered as common costs at current levels (2004 Budget less deficit)

### Projected costs of Fire and Rescue Division (2004 $)

<table>
<thead>
<tr>
<th></th>
<th>Option A1</th>
<th>Option B1</th>
<th>Option C1</th>
<th>Option D1</th>
</tr>
</thead>
<tbody>
<tr>
<td>East</td>
<td>1,496,814 9%</td>
<td>1,332,306 8%</td>
<td>1,294,258 8%</td>
<td>1,294,258 8%</td>
</tr>
<tr>
<td>West</td>
<td>4,604,838 28%</td>
<td>4,581,774 28%</td>
<td>4,853,466 30%</td>
<td>4,691,684 29%</td>
</tr>
<tr>
<td>Central</td>
<td>10,076,569 62%</td>
<td>10,264,141 63%</td>
<td>10,030,497 62%</td>
<td>10,192,279 63%</td>
</tr>
<tr>
<td></td>
<td>16,178,221</td>
<td>16,178,221</td>
<td>16,178,221</td>
<td>16,178,221</td>
</tr>
</tbody>
</table>

**Option A1:** Status Quo (2004 Budget less '03 deficits plus 16 career and 30 volunteer)

**Option B1:** Capital status quo with common costs (2004 Budget less deficit plus 16 career and 30 volunteer)

**Option C1:** Capital considered as common costs at current levels (2004 Budget less deficit plus 16 career and 30 volunteer)

**Option D1:** Equipment and Capital considered as common costs at current levels (2004 Budget less deficit plus 16 career and 30 volunteer)
APPENDIX "F"

**RESIDENTIAL Tax Impact**

IF 2004 ASSESSMENT = $181,226

<table>
<thead>
<tr>
<th>2004</th>
<th>CENTRAL</th>
<th>WEST</th>
<th>EAST</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>374</td>
<td>180</td>
<td>250</td>
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</table>

2004 costs reallocated based on this report

<table>
<thead>
<tr>
<th>Option</th>
<th>CENTRAL</th>
<th>WEST</th>
<th>EAST</th>
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<tbody>
<tr>
<td>A</td>
<td>361</td>
<td>173</td>
<td>246</td>
</tr>
<tr>
<td>B</td>
<td>371</td>
<td>169</td>
<td>206</td>
</tr>
<tr>
<td>C</td>
<td>371</td>
<td>170</td>
<td>206</td>
</tr>
<tr>
<td><strong>D</strong></td>
<td><strong>371</strong></td>
<td><strong>177</strong></td>
<td><strong>176</strong></td>
</tr>
<tr>
<td>Without area rates (for comparison)</td>
<td>271</td>
<td>271</td>
<td>271</td>
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</table>

Fire review recommendations (costed in 2004 dollars)

<table>
<thead>
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<th>CENTRAL</th>
<th>WEST</th>
<th>EAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>385</td>
<td>208</td>
<td>304</td>
</tr>
<tr>
<td>B1</td>
<td>392</td>
<td>207</td>
<td>270</td>
</tr>
<tr>
<td>C1</td>
<td>383</td>
<td>219</td>
<td>262</td>
</tr>
<tr>
<td><strong>D1</strong></td>
<td><strong>389</strong></td>
<td><strong>212</strong></td>
<td><strong>262</strong></td>
</tr>
<tr>
<td>Without area rates (for comparison)</td>
<td>302</td>
<td>302</td>
<td>302</td>
</tr>
</tbody>
</table>

Fire recommendations - increase per average residential property (2004 $)

<table>
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<th>CENTRAL</th>
<th>WEST</th>
<th>EAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>24</td>
<td>35</td>
<td>58</td>
</tr>
<tr>
<td>B1</td>
<td>21</td>
<td>38</td>
<td>64</td>
</tr>
<tr>
<td>C1</td>
<td>13</td>
<td>49</td>
<td>57</td>
</tr>
<tr>
<td><strong>D1</strong></td>
<td><strong>19</strong></td>
<td><strong>35</strong></td>
<td><strong>86</strong></td>
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</table>

Impact on the average residential tax bill

<table>
<thead>
<tr>
<th>Increase over 2004 approved budget</th>
<th>CENTRAL</th>
<th>WEST</th>
<th>EAST</th>
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</thead>
<tbody>
<tr>
<td>15</td>
<td>32</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

Average residential property tax bill (municipal)

<table>
<thead>
<tr>
<th></th>
<th>CENTRAL</th>
<th>WEST</th>
<th>EAST</th>
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</thead>
<tbody>
<tr>
<td>$2,216</td>
<td>$2,040</td>
<td>$2,092</td>
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% increase

<table>
<thead>
<tr>
<th></th>
<th>CENTRAL</th>
<th>WEST</th>
<th>EAST</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.7%</td>
<td>1.6%</td>
<td>0.6%</td>
<td></td>
</tr>
</tbody>
</table>