

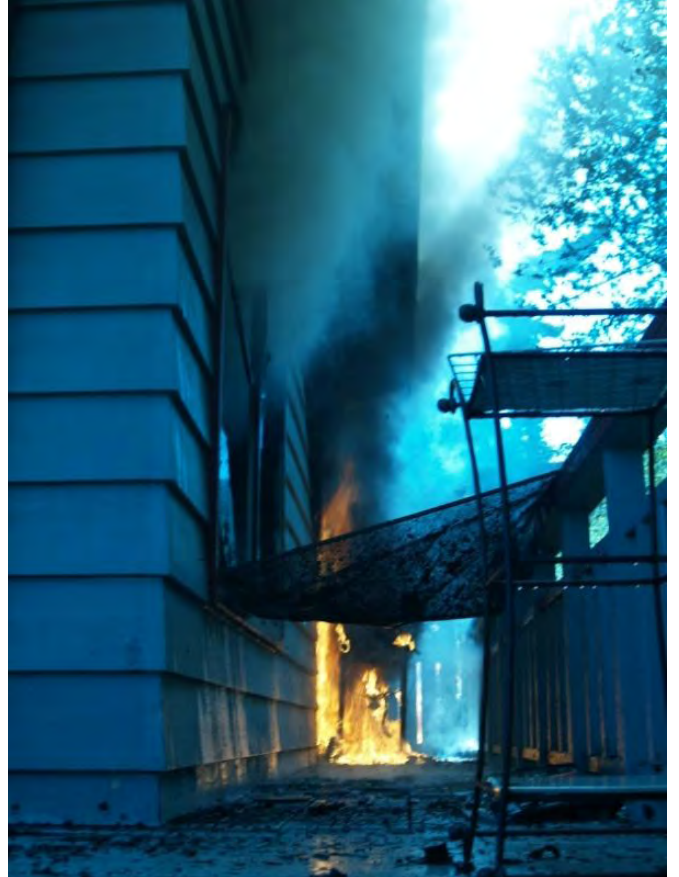
# 2008 ANNUAL REPORT



**JUNE 1, 2009**

**PREPARED BY:**

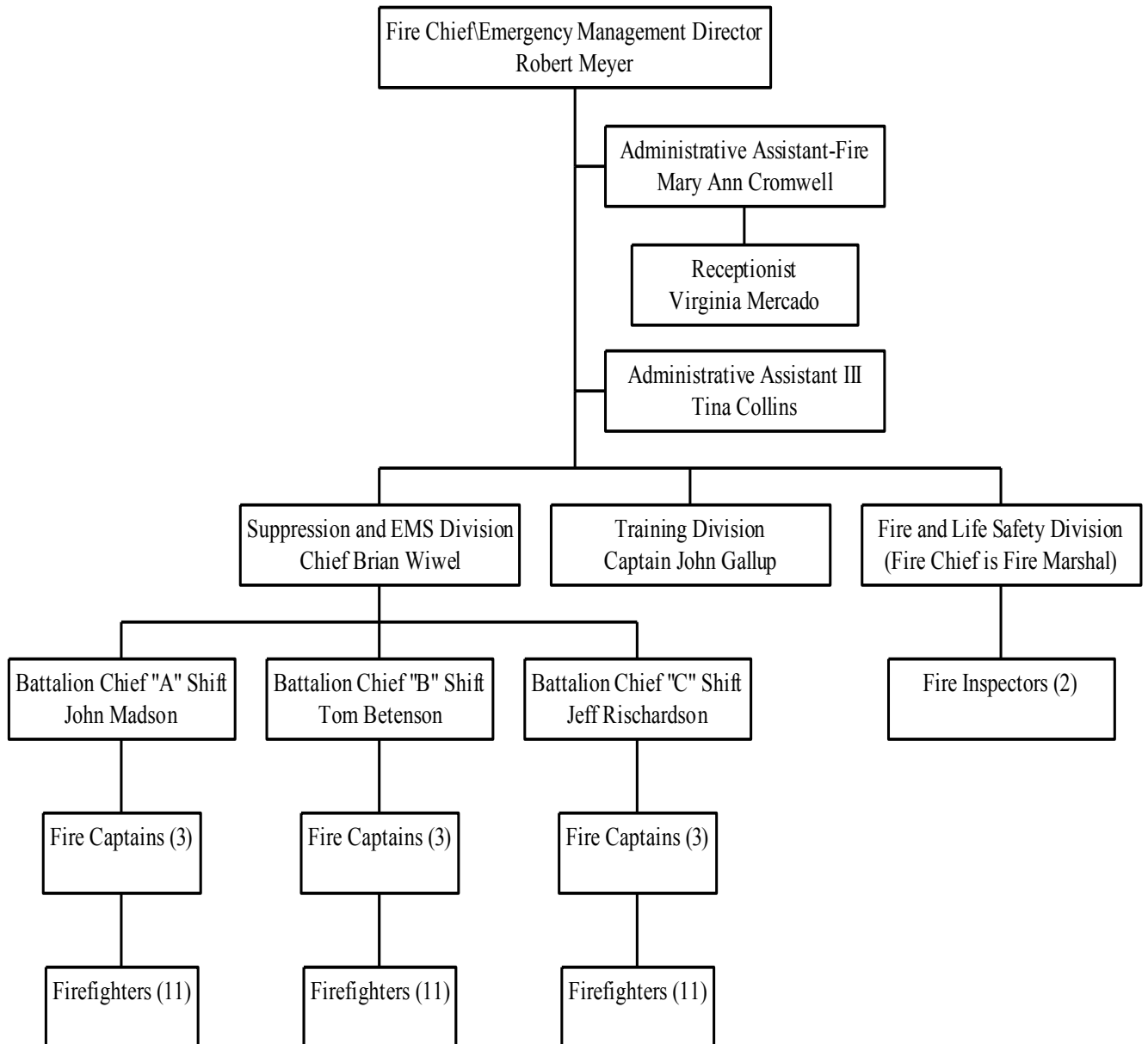
**FIRE CHIEF ROBERT W. MEYER,  
ASSISTANT FIRE CHIEF BRIAN WIWEL  
CAPTAIN JOHN GALLUP  
TINA COLLINS, ADMINISTRATIVE ASSISTANT III  
ALL FIRE DEPARTMENT PERSONNEL**



## **TABLE OF CONTENTS**

<b>TABLE OF CONTENTS</b> .....	3
<b>ORGANIZATIONAL CHART</b> .....	4
<b>EXECUTIVE SUMMARY</b> .....	5
<b>SECTION ONE: ACCOMPLISHMENTS 2008</b> .....	12
<b>SECTION TWO: INCIDENT RECAP</b> .....	13
<b>SECTION THREE: RESPONSE RECAP</b> .....	23
<b>SECTION FOUR: MUTUAL AID RESPONSES AND REQUESTS</b> .....	33
<b>SECTION FIVE: CONCURRENT REQUEST FOR SERVICE</b> .....	35
<b>SECTION SIX: RELIABILITY OF FIRE STATIONS</b> .....	37
<b>SECTION SEVEN: AID CAR REPORT</b> .....	39
<b>SECTION EIGHT: FIRE DISTRICT 24 INCIDENT DATA</b> .....	42
<b>SECTION NINE: GIS MAPPING INFORMATION</b> .....	44
<b>SECTION TEN: MEDIC ONE</b> .....	50
<b>SECTION ELEVEN: FIRE AND LIFE SAFETY DIVISION</b> .....	55
<b>SECTION TWELVE: TRAINING DIVISION</b> .....	62
<b>SECTION THIRTEEN: OPERATIONS DIVISION</b> .....	68
<b>SECTION FOURTEEN: FIRE CHIEF’S OFFICE</b> .....	79
<b>SECTION FIFTEEN: IMPROVEMENT STRATEGIES</b> .....	81

# ORGANIZATIONAL CHART



## **EXECUTIVE SUMMARY**

This report is submitted to the City of SeaTac's City Council, Public Safety and Justice Committee, Fire District #24 Board of Commissioners and the community for their review. The Fire Department provides an annual report to summarize their ability to achieve benchmarks and compliance with standards, along with the activities accomplished for the three divisions during the year. For 2008 the City is reporting performance measures for assuring compliance with the Revised Codes of Washington (RCW) §35A.92. The times and data for the performance measures come directly from Valley Communications Computer Aided Dispatch (CAD) system. The City of SeaTac contracts with Valley Communications for dispatch services. The King County Sherriff's Office (KCSO) still acts as the Public Safety Access Point (PSAP) for all 9-1-1 calls. The City of SeaTac Fire Department does not enter the response times or information; it is a direct download to our Records Management System (RMS) from the CAD.

The department uses several performance measures relating to incident response and Fire and Life Safety issues. For measuring effectiveness in emergency operations response time is one performance measure or benchmark. Response time is critical in both Fire and EMS responses. The quicker the proper service delivery is at the scene, the better the outcome. Outcomes for fire are measured as property loss and property saved. For EMS responses the performance measure is survivability of the patient. King County and the Seattle Metro area, in general, have a high percentage of surviving patients from a heart attack. This is credited to quick response from Fire Departments equipped with Automatic External Defibrillators and citizen CPR. Another performance indicator is the number of injuries to civilians and firefighters while responding or at the scene of an emergency. Fortunately, in 2008 the City suffered zero fire related fatalities. There were 3 civilian injuries and 1 firefighter injuries fighting structure fires; a decrease from 2007.

The City of SeaTac Comprehensive Plan states the "average response time for the City's Fire Department is 5 minutes 95% of the time." For 2008 the department responded below the benchmark, with the response time being an average of 4:46 minutes. Over the years national standards have changed to be measured in fractal time

frames. A fractal measurement is more definitive on overall effectiveness. The criteria used in this determination is priority responses (lights and siren), first arriving units from their station, and only within the City of SeaTac city limits. No mutual aid or other types of service calls are used in the response criteria.

The Revised Codes of Washington (RCW) outline performance requirements to be adopted by each jurisdiction in the state. These performance measures for the City of SeaTac are as follows: Turnout time is 2 minutes and thirty-five seconds (2:35), response time for RCW §32A.92 (also known as travel time for National Standards such as CFAI, and NFPA) is five minutes and twelve seconds (5:12), and Effective Response Force (ERF) time is ten minutes (10:00). RCW §32.90 requires standards be set for both Suppression and Emergency Medical calls. The turnout time (2:35) and the response time (5:12) are identical for Suppression and Emergency Medical Service calls. The ERF is only for structure fires in the City of SeaTac. The City's turnout time for 2008 is two minutes and thirty two seconds (2:32) 90% of the time for fire and EMS responses. Response time (travel time) for fire is four minutes and thirty four seconds (4:34) and EMS times are four minutes and fifty-nine seconds (4:38). The department has once again met the RCW requirements and the City of SeaTac standards.

Fire District #24 is mandated to establish standards as well. The Chief has elected to use the City standards for Fire District #24 as well. In fact, our travel/response time and Effective Response Force time for residential and commercial fires exceeded the standards significantly. The district meets its performance measures.

Another performance indicator is Total Reflex Time. This time indicates the total time, from receipt of call until on scene time. Total reflex time is seven minutes and forty two seconds (7:42) 90% of the time.

Emergency Medical Services (EMS) calls are 73.4% of the number of incidents the department responds to. EMS requests for service have increased in 2008 over 2007.

Historically, Station 45 has had the majority of the responses for the City. Data indicates that this has continued in 2008. Station 45 has 51% of the requests for service, Station 46 has 30% and Station 47 has 19%.

Requests for service have been analyzed in many ways. An important data piece is how long the department spends on a call. This data is important in determining how

often we have more than one request for service at a time. The time period of thirty-three minutes and forty-six seconds (33:46) is the average time spent on an emergency call in 2008. During 2008 the Aid Car was staffed on 116 days.

Concentration of resources in SeaTac assures that the initial Effective Response Force (ERF) arrives within the parameters established by the local jurisdiction; in this case the ERF is ten minutes (10:00) The ERF reports, generated from Fire View, indicate the ERF arrives well before the 10:00 minute criteria 90% of the time.

The distribution of resources in SeaTac appears to be adequate. Data from Fire View indicates that the units are distributed correctly for the best response travel times to 90% of the City of SeaTac. However, the distribution of a ladder truck is not good. We must receive aid from an outside agency, increasing our ERF time significantly. The distribution and concentration of resources was also reviewed by the City's consultant ESCi and they concurred not with fire station locations.

The department continues to review reliability of their fire stations. Reliability is defined as the ability (in percentages) of a fire station to meet its goals of responding to incidents in its primary response area. Reliability impacts response times for our citizens when the primary response unit is not available and a second due company must respond in its place; increasing response time. Fire Station 46's reliability is 72% and Fire Station 47 reliability is 73%. Over the past year reliability for Fire Station 46 and 47 has declined. In Fire Station 47 it is believed due to the amount of mutual aid they give to Tukwila and North Highline, fire District 11. This is an expected standard and consistent with national recommendations. Fire Station 45 has a reliability of 72% when staffed with only Engine 45. When the Aid Car is staffed, which was 31% of the time (116 days) in 2008, the reliability went to 90%.

Mutual aid continues to be given to our neighbors more than we receive back at a significant difference. Again, the leading department receiving substantially more mutual aid than we receive is Tukwila. In 2008 the department sent mutual aid 245 times to Tukwila and received it back 55 times. Mutual aid requests continue to creep up over the past several years, although mutual aid given to other organizations increases the workload for the City and diminishes the ability for SeaTac units to respond to their own calls, requiring another SeaTac unit to respond.

The three divisions (Training, Fire and Life Safety and Operations) continue to be busy providing quality customer service to the community and City staff.

The Training Division has begun a journey to improve and decentralize training. With the use of a member on light duty the Division continues to develop computerized training and videos the staff can do while in their station. This allows the department to keep units available in their first due area, while getting required training. The City allocated the Department money to place three large screen video monitors in each station for viewing training videos. In 2008 the Training Division developed four video training classes. This was a huge accomplishment and it allowed personnel to stay in their respective stations to do training where in the past they would all have to get together at Fire Station 46 or City Hall.

The Fire and Life Safety Division implemented the use of tablet computers for use by Fire Inspectors and Engine Company crews. These tablet computers allow data input in the field and wireless connections when the crews or inspectors return to the station. This system has reduced the work load of the Division staff by not having to enter data twice. The Division is also the records keeper for the Fire Department. This past year the Administrative Assistant was sent to classes on preparing detailed reports for the department to measure performance and benchmarks.

During the year, staff continued to instruct Community Emergency Response Team (CERT) training for over 40 citizens, as well as hosted a community meeting for disaster preparedness. In conjunction with the Neighborhood Coordinator the city has worked with Bow Lake Mobile Home Park to institute the Map Your Neighborhood program and get adequate emergency supplies for their residents. Staff also conducted training of all City staff assigned to the ECC during an emergency. This assured compliance with federally mandated NIMS training. In 2008 the department staff re-trained a cadre of City Hall employees in CPR and the use of Public Access Defibrillators. A public access defibrillator was also added to the 2<sup>nd</sup> floor of City Hall for the FAAS and other tenants. Fire department staff trained those employees as well. Also, other City Hall tenants received training on the defibrillators and CPR. City staff continues to be sent to the National Emergency Management Institute for ECC training.



The Operations Division is the largest division in the department. This division delivers direct service to our citizens, citizens in Fire District #24 by contract, mutual aid to our neighbors, on duty training, community blood pressures, community activities such as the Easter Egg Hunt, Angle Lake July 4<sup>th</sup> parade, Bow Lake Annual breakfasts and numerous other activities.

This was the first year completed under the agreement with the City of Kent Fire Department to provide vehicle maintenance for our larger vehicles. This agreement has had great success and our apparatus continues to be improved and better maintained.

## DEFINITIONS

**CFAI:** Commission on Fire Accreditation International

**Code Green:** When a unit is dispatched and cancelled enroute, never arriving at the location.

**Code Yellow Responses:** Response to a non-emergent situation not requiring red lights and siren.

**Concentration:** The spacing of multiple resources arranged so that an initial effective Response Force can arrive on scene in the timelines determined by the jurisdiction.

**Concurrent Call:** The number or percentage of times that there is more than one call (request for service) occurring at the same time within the City

**Distribution:** Distribution is measured by the percent of the jurisdiction covered by first due units.

**EMS:** Emergency Medical Services

**EMT:** Emergency Medical Technician

**ESCi:** Emergency Services Consulting Incorporated

**Effective Response Force:** The number of people and time for arrival of all forces to adequately mitigate the incident.

**Fire View:** A GIS software package used to determine reporting of times and incident numbers.

**Fractile Measurement:** The measurement of times in percentage instead of average; giving a more detailed analysis of performance. For example, a statement of “5 minutes or less 90% of the time”.

**Hot Spot:** Hot spots are defined as where numerous requests for service appear in a concentrated area.

**Mutual Aid:** This is aid given or received by the SeaTac Fire Department to or from another agency.

**NFPA:** National Fire Protection Association

**Priority Response:** Unit responding with red light and siren; an emergent situation.

**RCW:** Revised Codes of Washington. Specifically §35A.92.

**Reaction Time:** Also known as turnout time. This is the time it takes firefighters to start rolling to a scene from the time they were notified from dispatch.

**Response Reliability:** The probability that the required amount of staffing and apparatus that is regularly assigned will be available when an emergency call is received for that station.

**Response Time:** As defined in RCW §35A.92 is the time from turnout time to arrival on scene. As defined in other national standards it is known as travel time.

**RMS:** Records Management System of the SeaTac Fire Department.

**Total Reflex Time:** The total time from the receipt of call by dispatch until the unit is on scene.

**Zone Three:** The Fire Departments of SeaTac, Kent, Burien, North Highline, Tukwila, Valley Regional Fire Authority, South King Fire and Rescue, Black Diamond, Port of Seattle, Renton, Maple Valley and Enumclaw.

## **SECTION ONE: ACCOMPLISHMENTS 2008**

The Department accomplished the following activities in 2008:

- ✓ Conducted Live Fire Training.
- ✓ Completed ESCi fire study.
- ✓ Placed a replacement service pick up in service.
- ✓ Continued to research and apply for grant funding successfully receiving a 1.3 million dollar grant from FEMA (which was not accepted due to economic issues).
- ✓ Reported annually on the performance measures for Fire Department service delivery to comply with RCW §35.103.010.
- ✓ Upgraded the tablet portable computers used for fire inspections.
- ✓ Continued with CERT training for the community.
- ✓ Conducted ICS (Incident Command System) training for Fire and City staff.
- ✓ Reviewed and update the City's Disaster Plan and Department SOP's as needed.
- ✓ Continued to revise the Department's policies and guidelines.
- ✓ Continued with the Joint Apprenticeship Training Program.
- ✓ Placed in service a new fit testing machine for employee respiratory protection.
- ✓ Purchased a new rescue truck and placed in service at Station 45.
- ✓ Placed the new replacement fire engine in service earlier than anticipated.
- ✓ Purchased and placed in service a replacement hydraulic rescue tool.
- ✓ Continued construction on a replacement building for Fire Station #46.
- ✓ Upgraded and trained city staff on WebEOC (ECC Software).
- ✓ Implemented and Used Code Red Software (reverse 911).
- ✓ Continued required NIMS courses and training.
- ✓ Continued in service training with Zone 3 fire departments.

## **SECTION TWO: INCIDENT RECAP**

Section two contains incident history for 2008<sup>1</sup>. Incident history is a numerical breakdown of the incidents responded to during that time period and what those incident types were.

The first graph is a comparison between population and response numbers. The population<sup>2</sup> has been slightly increasing, while requests for service for 2008 decreased a small amount. New developments for homes along Orillia Road account for the population growth.

In reviewing the data for incidents in the City of SeaTac versus the State of Washington's data, the City of SeaTac delivers service to a population greater than our population. The City had a Master Plan study completed by ESCi and they determined our daily population was 96,000, including traffic flows.

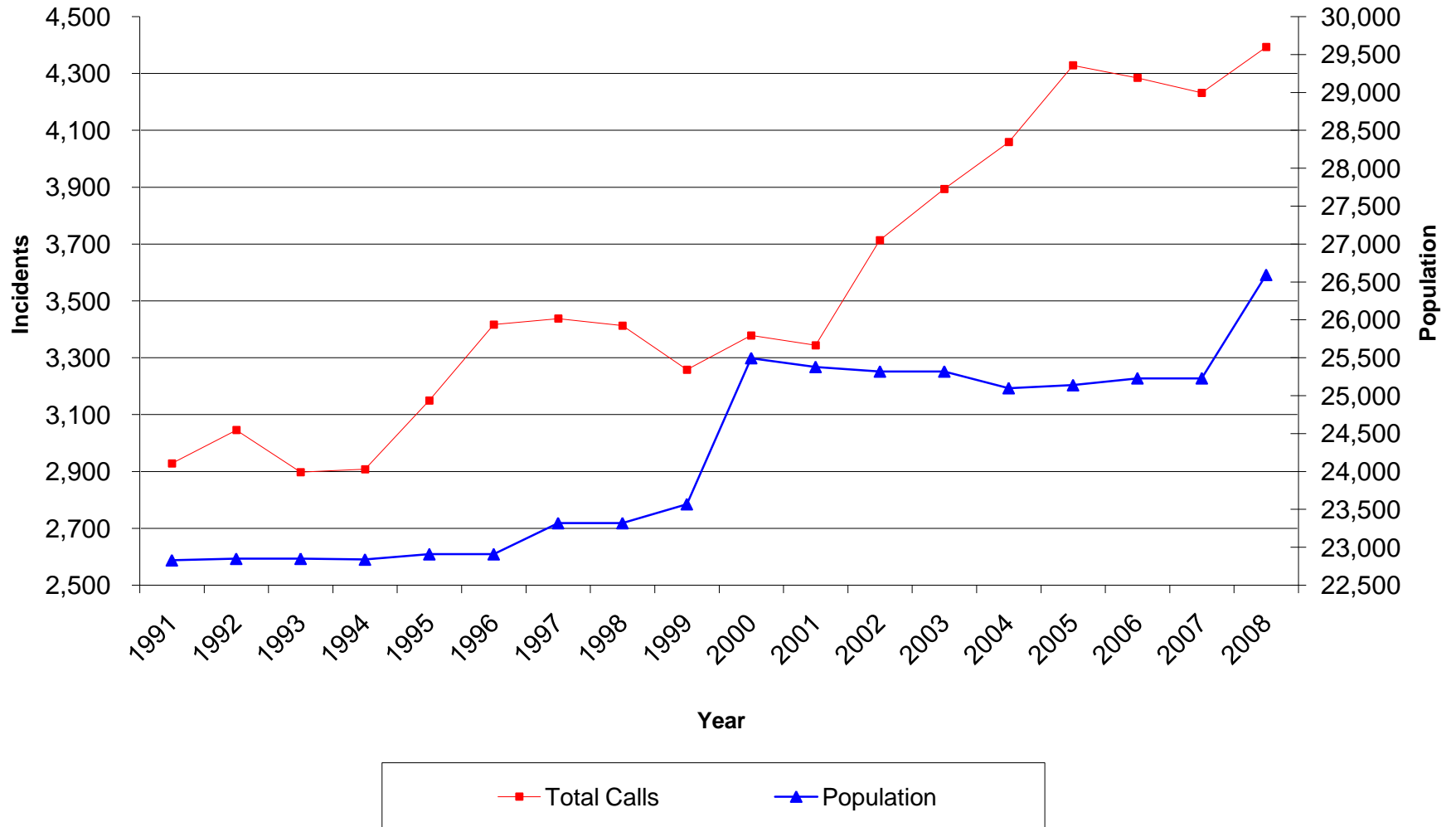
The number and type of incidents are illustrated both graphically and numerically. Our primary type of service request is for EMS. The number of EMS requests increased over 2007 as did fires. For the first time in years the false alarm rate decreased. We attribute this to a strong effort by the Fire and Life Safety Division to reduce those numbers. Also, in Section 8, incidents have been reported graphically using GIS Mapping. Fortunately in 2008 there were no fatalities in a structure fire; however, three civilians were injured this past year in structure fires and six firefighter injuries were reported while fighting fires, a large decrease from 2007.

---

<sup>1</sup> Incident data came from the Fire Department's Records Management System and Computer Aided Dispatch.

<sup>2</sup> Population numbers came from the City of SeaTac Annual Budget documents.

### Population / Incident Trends

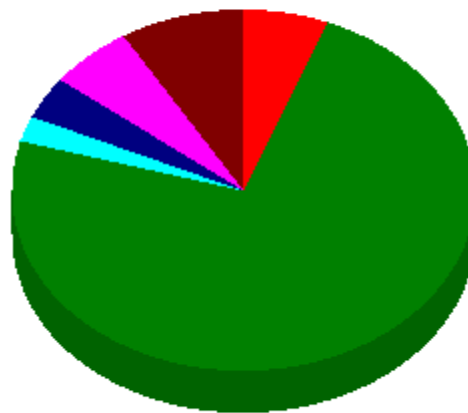


## Incident Summary by Incident Type

Date Range: From 1/1/2008 to 12/31/2008

Incident Type(s) Selected: All

<b>Incident Type</b>	<b>Incident Count</b>	<b>Total Loss</b>	<b>Total Value</b>
Fire	254	\$1,235,220	\$2,736,325
Rupture/Explosion	8		
EMS/Rescue	3,224		
Hazardous Condition	96	\$200	\$200
Service Call	173		
Good Intent	260		
False Call	375		
Other	3		
<b>Totals</b>	<b>4,393</b>	<b>\$1,235,420</b>	<b>\$2,736,525</b>



Fire	5.8%
Rupture/Explosion	0.2%
EMS/Rescue	73.4%
Hazardous Condition	2.2%
Service Call	3.9%
Good Intent	5.9%
False Call	8.5%
Other	0.1%
<b>Total:</b>	<b>100.0%</b>

## Incident Type Response Summary by Station

Date Range: From 1/1/2008 to 12/31/2008

Station Selected: 45, 46, 47

Incident Type Selected: All

<u>Incident Type</u> <u>Station ID</u>	<u>Incident</u> <u>Count</u>	<u>Total Loss</u>	<u>Total Value</u>
<b><u>Station: 45</u></b>			
Fire	107	\$270,820	\$822,775
Rupture/Explosion	5	\$0	\$0
EMS/Rescue	1,550	\$0	\$0
Hazardous Condition	45	\$0	\$0
Service Call	84	\$0	\$0
Good Intent	127	\$0	\$0
False Call	183	\$0	\$0
Other	1	\$0	\$0
<b>Totals:</b>	<b>2,102</b>	<b>\$270,820</b>	<b>\$822,775</b>
<b><u>Station: 46</u></b>			
Fire	49	\$652,300	\$1,358,450
Rupture/Explosion	1	\$0	\$0
EMS/Rescue	1,087	\$0	\$0
Hazardous Condition	26	\$200	\$200
Service Call	46	\$0	\$0
Good Intent	60	\$0	\$0
False Call	136	\$0	\$0
Other	2	\$0	\$0
<b>Totals:</b>	<b>1,407</b>	<b>\$652,500</b>	<b>\$1,358,650</b>
<b><u>Station: 47</u></b>			
Fire	91	\$312,100	\$555,100
Rupture/Explosion	2	\$0	\$0
EMS/Rescue	574	\$0	\$0
Hazardous Condition	24	\$0	\$0
Service Call	41	\$0	\$0
Good Intent	70	\$0	\$0
False Call	53	\$0	\$0
<b>Totals:</b>	<b>855</b>	<b>\$312,100</b>	<b>\$555,100</b>



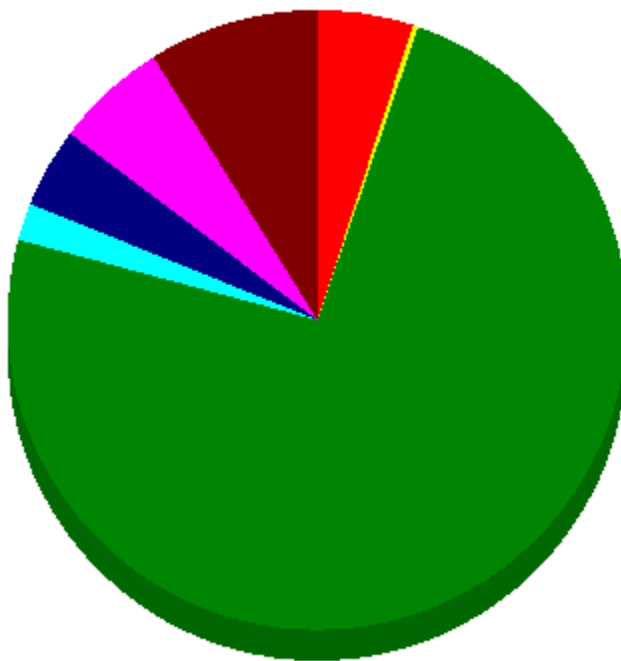
## Incident Type Response Summary by Station

Date Range: From 1/1/2008 To 12/31/2008

Station Selected: 45, 46, 47

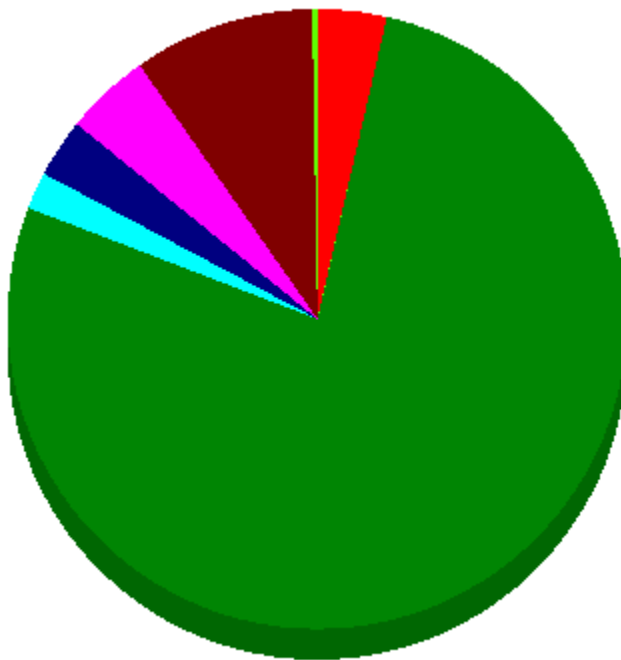
Incident Type Selected: All

<u>Incident Type</u> <u>Station ID</u>	<u>Incident</u> <u>Count</u>	<u>Total Loss</u>	<u>Total Value</u>
<b><u>Station: 45</u></b>			
Fire	107	\$270,820	\$822,775
Rupture/Explosion	5	\$0	\$0
EMS/Rescue	1,550	\$0	\$0
Hazardous Condition	45	\$0	\$0
Service Call	84	\$0	\$0
Good Intent	127	\$0	\$0
False Call	183	\$0	\$0
Other	1	\$0	\$0
<b>Totals:</b>	<b>2,102</b>	<b>\$270,820</b>	<b>\$822,775</b>



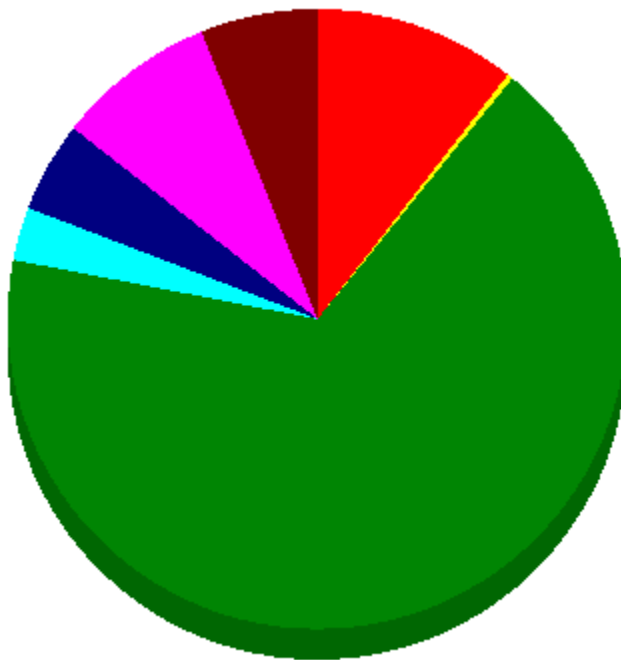
Fire	5.1%
Rupture/Explosion	0.2%
EMS/Rescue	73.7%
Hazardous Condition	2.1%
Service Call	4.0%
Good Intent	6.0%
False Call	8.7%
Other	0.0%
<b>Total:</b>	<b>100.0%</b>

<u>Incident Type</u> Station ID	Incident Count	Total Loss	Total Value
<b>Station: 46</b>			
Fire	49	\$652,300	\$1,358,450
Rupture/Explosion	1	\$0	\$0
EMS/Rescue	1,087	\$0	\$0
Hazardous Condition	26	\$200	\$200
Service Call	46	\$0.	\$0
Good Intent	60	\$0	\$0
False Call	136	\$0	\$0
Other	2	\$0	\$0
<b>Totals:</b>	<b>1,407</b>	<b>\$652,500</b>	<b>\$1,358,650</b>



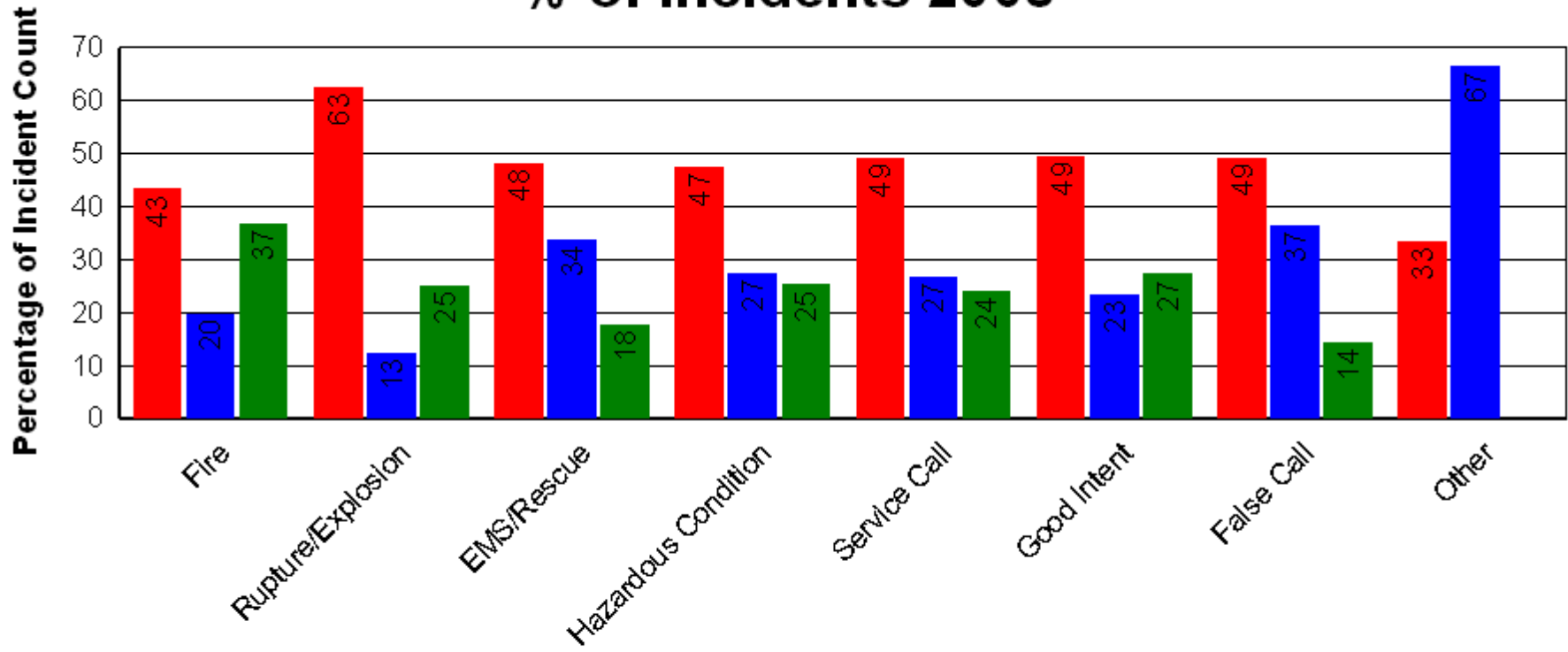
Fire	3.5%
Rupture/Explosion	0.1%
EMS/Rescue	77.3%
Hazardous Condition	1.8%
Service Call	3.3%
Good Intent	4.3%
False Call	9.7%
Other	0.1%
Total:	100.0%

<u>Incident Type</u> Station ID	<u>Incident</u> <u>Count</u>	<u>Total Loss</u>	<u>Total Value</u>
<b>Station: 47</b>			
Fire	91	\$312,100	\$555,100
Rupture/Explosion	2	\$0	\$0
EMS/Rescue	574	\$0	\$0
Hazardous Condition	24	\$0	\$0
Service Call	41	\$0	\$0
Good Intent	70	\$0	\$0
False Call	53	\$0	\$0
<b>Totals:</b>	<b>855</b>	<b>\$312,100</b>	<b>\$555,100</b>

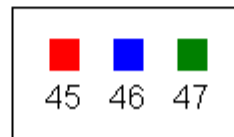


Fire	10.6%
Rupture/Explosion	0.2%
EMS/Rescue	67.1%
Hazardous Condition	2.8%
Service Call	4.8%
Good Intent	8.2%
False Call	6.2%
Total:	100.0%

## % of Incidents 2008



**Incident Type by Station**

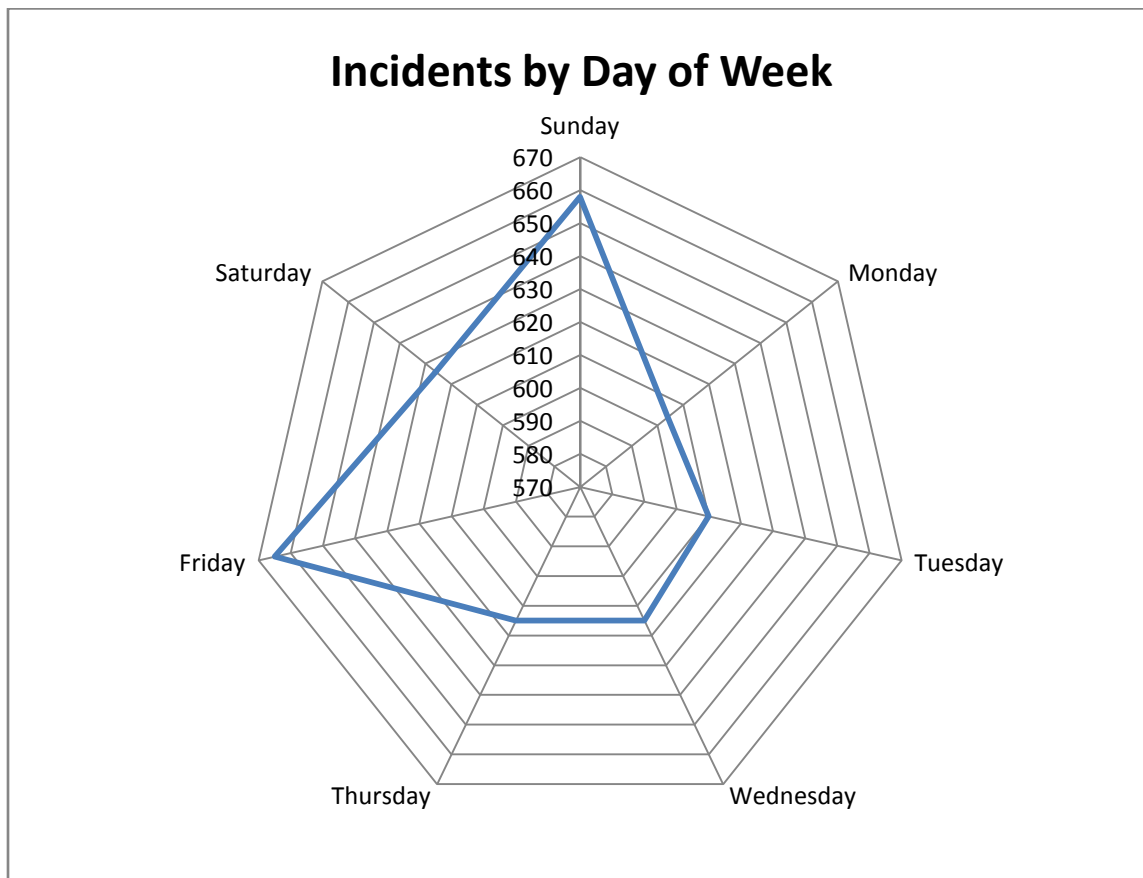


## Incidents by Day of Week

Date Range: From 1/1/2008 to 12/31/2008

---

Day of the Week	Number of Incidents
Sunday	658
Monday	604
Tuesday	610
Wednesday	615
Thursday	615
Friday	665
Saturday	626

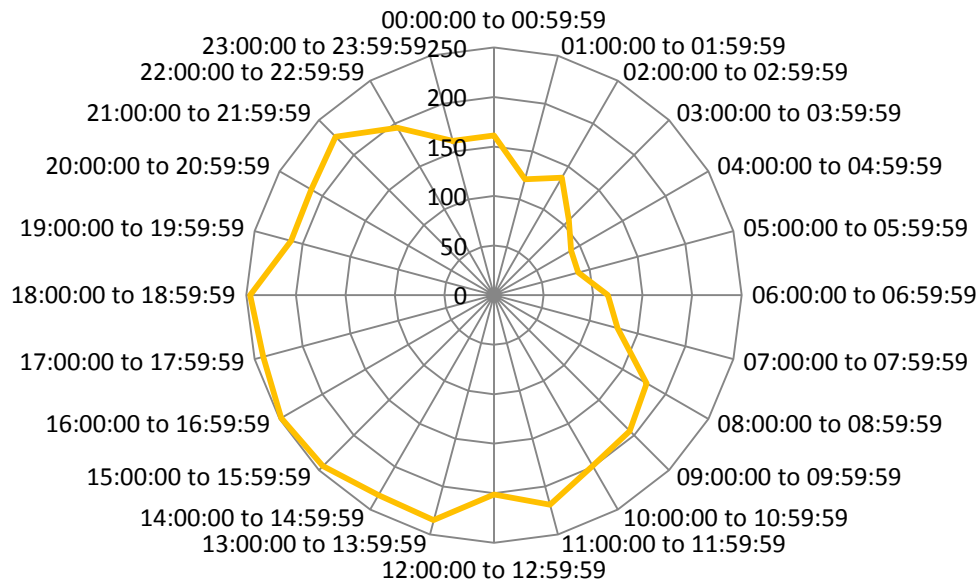


## Incidents by Time of Day

Date Range: From 1/1/2008 to 12/31/2008

Time of Day	Number of Incidents
00:00:00 to 00:59:59	161
01:00:00 to 01:59:59	121
02:00:00 to 02:59:59	137
03:00:00 to 03:59:59	107
04:00:00 to 04:59:59	90
05:00:00 to 05:59:59	88
06:00:00 to 06:59:59	115
07:00:00 to 07:59:59	129
08:00:00 to 08:59:59	178
09:00:00 to 09:59:59	194
10:00:00 to 10:59:59	199
11:00:00 to 11:59:59	219
12:00:00 to 12:59:59	201
13:00:00 to 13:59:59	235
14:00:00 to 14:59:59	233
15:00:00 to 15:59:59	244
16:00:00 to 16:59:59	248
17:00:00 to 17:59:59	241
18:00:00 to 18:59:59	246
19:00:00 to 19:59:59	212
20:00:00 to 20:59:59	213
21:00:00 to 21:59:59	226
22:00:00 to 22:59:59	195
23:00:00 to 23:59:59	161

**4,393**



## SECTION THREE: RESPONSE RECAP

The department uses very specific criteria to measure its response performance. This criterion is specific to the City of SeaTac boundaries. The criterion includes priority responses (red lights and siren), first arriving unit from quarters on scene; excludes all non-emergency responses, and all calls cancelled enroute. These criteria are identical to CFAI Accreditation, NFPA 1710 and consistent with the new RCW requirements of the State of Washington.

The City of SeaTac, for reporting purposes and response time tracking, has established the following criterion: Priority Responses (Red Lights and Siren) first arriving unit, only in the City limits of SeaTac, responding from quarters, and excluding mutual aid from outside the city except as noted. This allows a true reflection of what service delivery we provide in emergent situations to our citizens. The only exception to that is Call Processing time which reports all incidents.

Several nationally recognized standards, such as NFPA 1710 and CFAI Accreditation, break down response times into several different performance increments which can be managed and reviewed by the department. There are several pieces to response time or total reflex time. The call processing time (9-1-1 call receipt to dispatch time) is under the control of Valley Communications (our contracted dispatch center) and the Fire Department has no input or control over that piece, although the department does monitor their performance<sup>3</sup>. Valley Communications call processing time is defined as time of call receipt to time dispatched to the City of SeaTac Fire Department. The national standard for call processing time is one minute or less 95% of the time<sup>4</sup>. Valley Communications call processing time, measured fractiley is 90 seconds or less 95% of the time<sup>5</sup>. You will notice in the documents in this section we have included the Valley Communications average sheet and our fractal report. The other two pieces of total response time are reaction time or turnout time and travel time. These two pieces of response time or total reflex time are the only parts which the fire department can improve upon if needed.

Response time components which the fire department has control over for improvement are reaction time and travel time. Reaction time is the time it takes firefighters to start rolling to a scene from the time they were notified from dispatch. A national standard for reaction time is 1 minute or

---

<sup>3</sup> Data from CAD and Department's RMS

<sup>4</sup> NFPA 1221, Section 6.4

<sup>5</sup> Data from CAD and City's RMS

less 90% of the time<sup>6</sup>. This time is unreasonable, considering the time necessary to get to the apparatus and don protective equipment prior to responding. The reaction time for the City of SeaTac is high; 2:31 minutes or less 90% of the time<sup>7</sup>. The department's management team has been working to reduce this time to a more realistic time of less than 90 seconds or 1½ minutes 90% of the time. However, the reduction in reaction time is a huge, positive step towards reducing response time.

Travel time is defined as the time when wheels begin to roll and when wheels stop on incident arrival. A national standard for travel time is 4 minutes 90% of the time for compliance. The City of SeaTac travel time overall is 4:34 minutes or less 90% of the time. This is an excellent performance measurement. This indicates the Fire Stations are placed in good locations. A review was conducted of incidents that had long travel time, to see what factors were involved. The causes included: Incorrect location, where a bad address was given, calls on the freeway in heavy traffic, calls on snow days where response is slowed, calls on the borders of station areas, and concurrent calls. It is no surprise that calls near 128<sup>th</sup> and Des Moines Memorial Drive, and calls on Military Road south of 220<sup>th</sup> are long response times since they are at the edge of our city. In addition, calls for service in the area along South 182<sup>nd</sup> Street between 32<sup>nd</sup> Avenue South and Military Road South, also have long travel times. This is due to being on the border between the two closest stations and the lack of arterial streets in that area. One of the causes of long travel times is unique to Station 46 and 47 and that is covering concurrent calls. Many of the long travel times are related to Station 46 and 47 traveling out of their primary response areas to cover concurrent calls for service. Adding an Aid Car to Station 45 could help with this problem. Since our travel time is very good, our focus for improvement should be reaction time. The department's management team has been focusing on reaction times and trying to determine how to reduce them.

In 2006 the Department acquired a GIS mapping information program called Fire View. As part of the program a report for Total Reflex time is available. Total reflex time for the City, 90% of the time, is seven minutes twelve seconds (7:12) for a single unit priority response. This is the total response time from call receipt in Valley Communications until the first unit arrives on scene. This data is significant due to the fact it measures our total response time, including the call processing time which we have no control over. Additionally, it illustrates the fact that 90% of the time we can

---

<sup>6</sup> CFAI, NFPA 1710

<sup>7</sup> City's RMS and CAD data



arrive before flashover occurs and we can arrive in the needed amount of time for survivability of a patient with a heart attack, 8 minutes.

GIS mapping has become a very important piece of data collection for the department. This management tool is instrumental in monitoring responses, concentration of requests for service and distribution of units and call volume.

In addition to response times for units the department also monitors the Effective Response Force (ERF) times. In 2005 the department determined, based on task performances and needed personnel that an effective response force of 13 personnel was necessary for a Single Family structure fire (moderate risk) and 16 personnel were needed for a commercial fire on the first alarm assignment. In 2008 the Department identified a need to add one additional engine and a rehabilitation component for all working structure fires. This added the Medical Services Officer, a Medic Unit, an Aid car and the Explorers. These additional units and personnel were needed to assure compliance with all critical tasks needed to be accomplished on the fire ground and to assure that firefighters were not over worked and suffered injuries due to inadequate staffing. During 2008 the ERF for both residential and commercial fires arrived on scene 90% of the time within the ten (10) minute criteria.

Another response time we closely monitor is the response of Advanced Life Support (ALS) from King County Medic One. The primary provider for SeaTac is Medic 4, housed at our Station 47. The response times for Medic 4 are above the national standard of 8 minutes 90% of the time<sup>8</sup>. King County Medic One does not have any written response standards. During the past year King County Fire Chiefs have asked Medic One to report using fractal response times, not work load or call volume. To date the Medic One response times are in averages and not very specific; King County Chiefs will continue to work on this.

---

<sup>8</sup> National standards include NFPA 1710, CFAI Accreditation Manual.

**Fire Emergencies**

YEAR	2006	2007	2008
Call Processing Time	1:19	1:32	1:09
Turnout Time	2:27	2:34	2:33
Travel Time	4:51	5:05	4:04
Effective Response Force Time (Travel time only)	8:49	8:50	8:54

**Emergency Medical Services Emergencies**

YEAR	2006	2007	2008
Call Processing Time	1:12	1:07	1:03
Turnout Time	2:17	2:31	2:34
Travel Time	4:57	4:59	4:45

**Technical Rescue Responses**

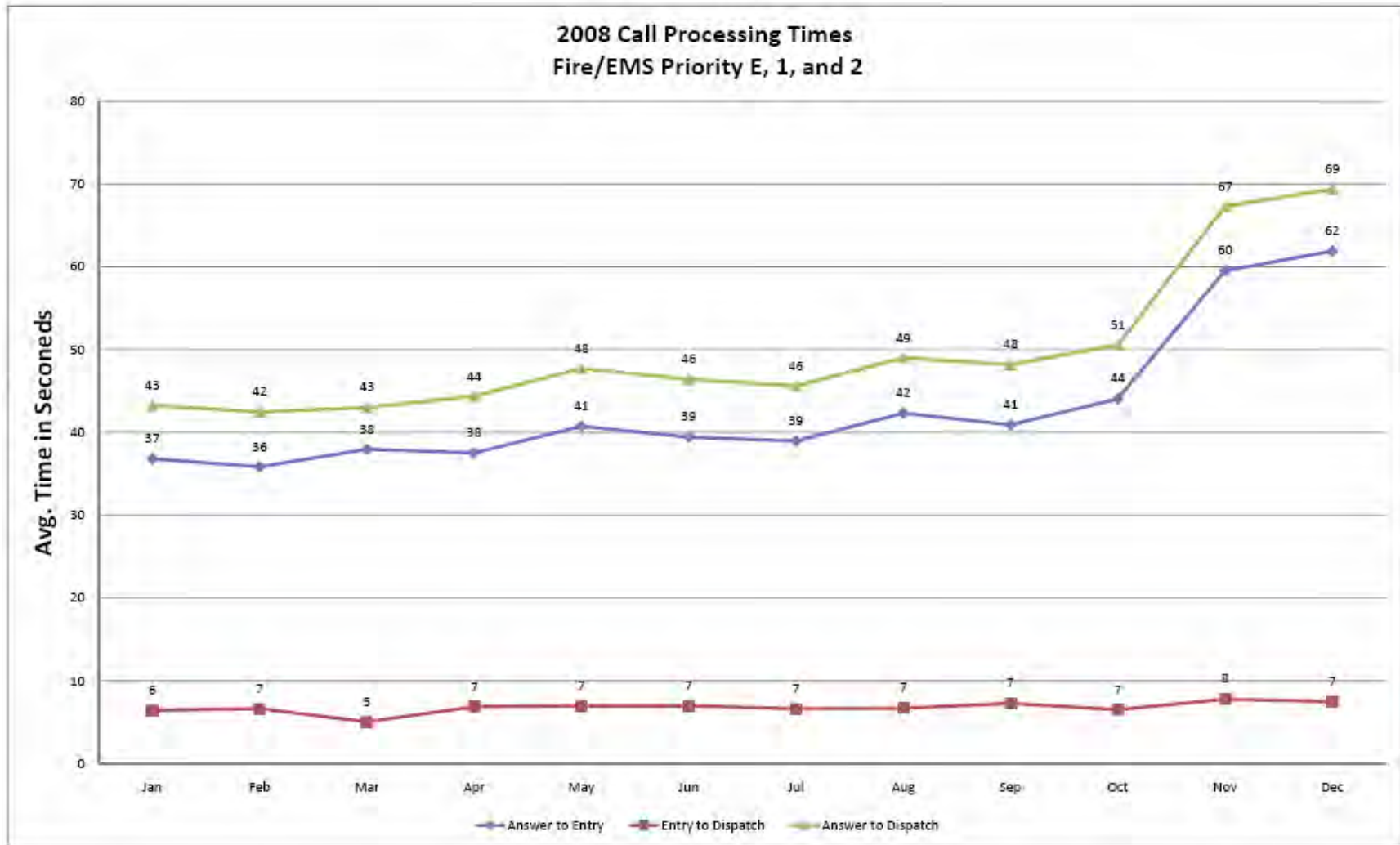
YEAR	2006	2007	2008
Call Processing Time	N/A	N/A	N/A
Turnout Time	N/A	N/A	N/A
Travel Time	N/A	N/A	N/A

**Hazardous Materials Responses**

YEAR	2006	2007	2008
Call Processing Time	1:45	N/A	N/A
Turnout Time	1:52	N/A	N/A
Travel Time	5:34	N/A	N/A

Both Technical Rescue responses and Hazardous Material responses have too limited a number to adequately collect good data. These are shown for reference purposes only.

## Valley Com Average Call Processing Time



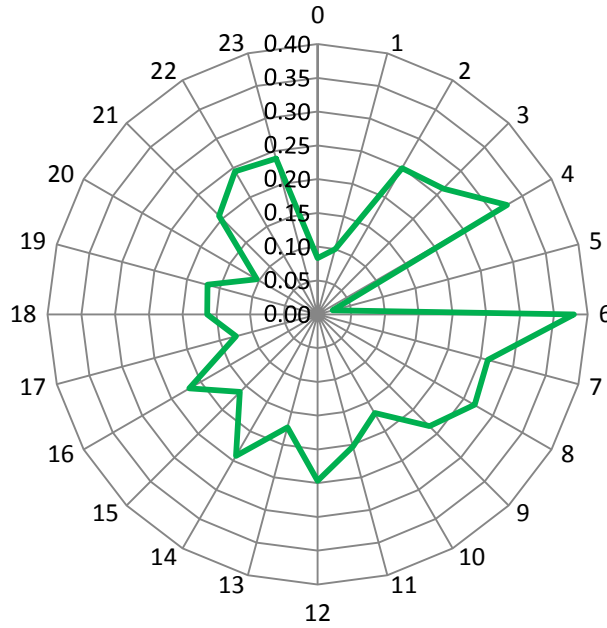
# Alarm to Dispatch Time

Date Range: From 1/1/2008 to 12/31/2008

First Due Priority Response  
Minus Code Green Calls  
SeaTac Districts

Average Dispatch Time (Alarm to Dispatch) = 0:33

## Alarm to Dispatch Time by Hour of Day



**90<sup>th</sup> Percentile Alarm to Dispatch Time is 1:11**

# Reaction Time Summary Report

Date Range: From 1/1/2008 to 12/31/2008

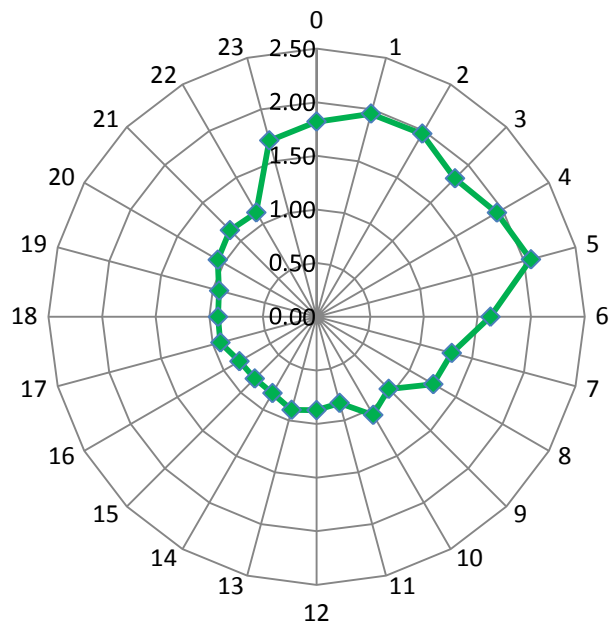
Station(s) Selected: All

Shift(s) Selected: All

Apparatus Selected: B45, A45, E45, A46, E46, E47

First Due Priority Response  
Minus Code Green Calls  
SeaTac Districts

## Reaction Time by Hour of Day (Dispatch to Enroute)



**The Department Meets the 90<sup>th</sup> Percentile Standard  
Reaction Time of 2:35 with a 2:32 Reaction Time**

# Travel Time Summary

Date Range: From 1/1/2008 to 12/31/2008

Station(s) Selected: All

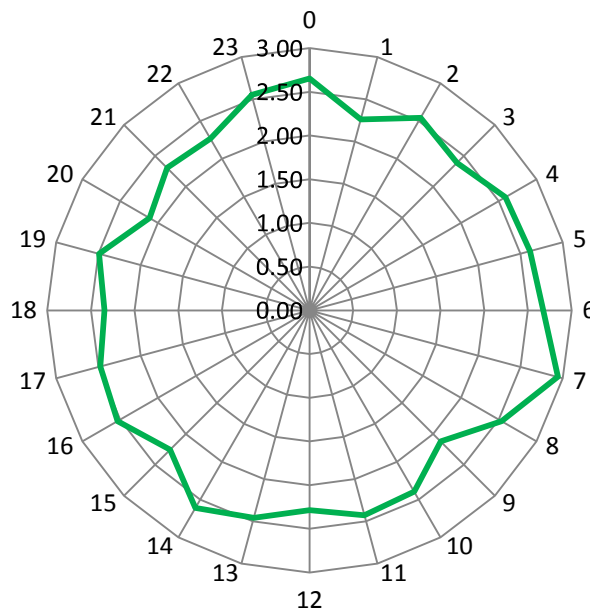
Shift(s) Selected: All

Apparatus Selected: B45, A45, E45, A46, E46, E47

First Due Priority Response  
Minus Code Green Calls  
SeaTac Districts

---

## Travel Time by Hour of Day (Enroute to Arrival)



**The Department Meets the 90<sup>th</sup> Percentile Response Time  
(Travel Time) of 6:35 with a 4:43 Response Time for  
RCW §35A.90 Compliance**

# Response Time Summary Report

Date Range: From 1/1/2008 to 12/31/2008

Station(s) Selected: All

Shift(s) Selected: All

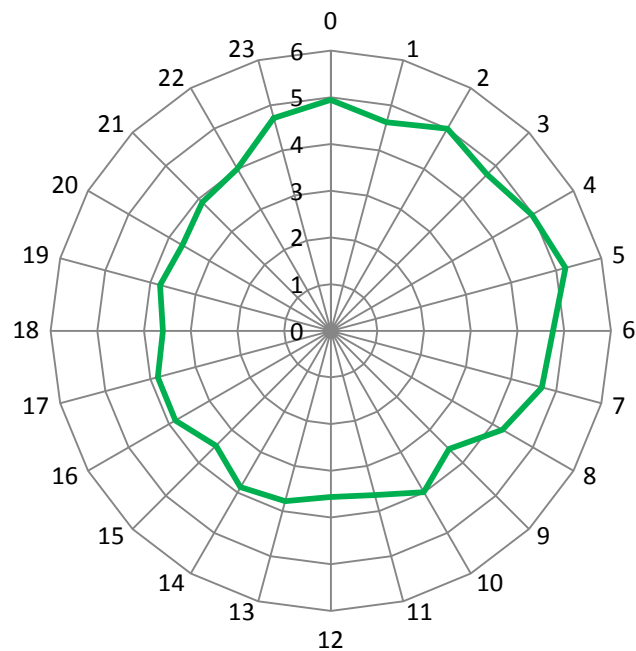
Apparatus Selected: B45, A45, E45, A46, E46, E47

First Due Priority Response

Minus Code Green Calls

SeaTac Districts

## Response Time by Hour of Day (Dispatch to Arrival)



**90<sup>th</sup> Percentile Dispatch to Arrival Time is 6:39**

# **Total Reflex Time Summary Report**

Date Range: From 1/1/2008 to 12/31/2008

Station(s) Selected: All

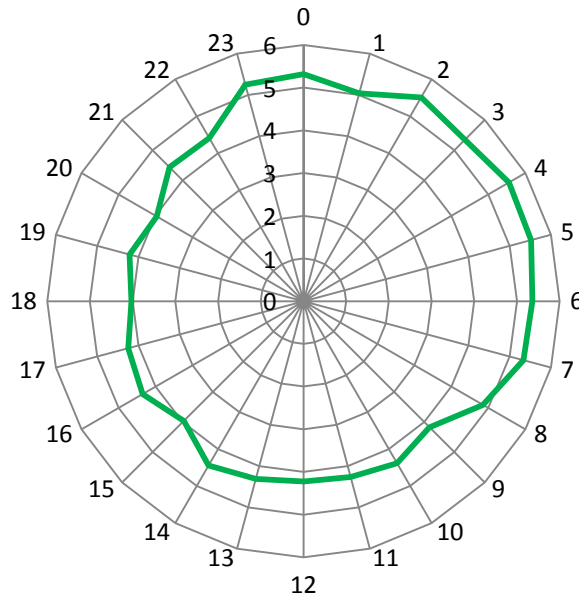
Shift(s) Selected: All

Apparatus Selected: B45, A45, E45, A46, E46, E47

Incident Alarm - Apparatus Arrival  
First Due Priority Response  
Minus Code Green Calls  
SeaTac Districts

---

## **Reflex Time by Hour of Day (Alarm to Arrival)**



**The Department Total Reflex Time is 7:12  
For First Arriving Unit on a Priority Response**

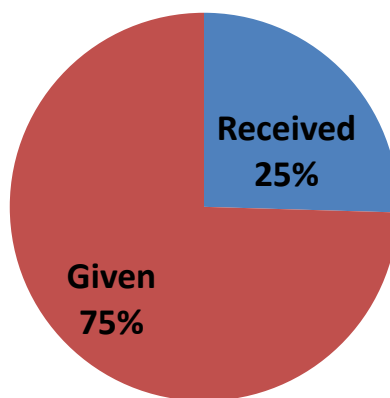


## **SECTION FOUR: MUTUAL AID RESPONSES AND REQUESTS**

Mutual Aid<sup>9</sup> has been used for many years in the City of SeaTac Fire Department. Mutual aid is an integral piece of providing service to the community. Without mutual aid the City of SeaTac would need additional resources and staff to provide an effective response force to all incidents. Mutual aid is also needed when incidents are too large to handle by ourselves or when we have multiple calls for service. With our RMS we are able to track the amount of mutual aid we receive and give to neighboring jurisdictions. This is a valuable tool to determine work load and use of resources.

The Fire Department continues to give more mutual aid than received from all the participating agencies. In 2008 the SeaTac Fire Department gave 315% more mutual aid than we received. Tukwila continues to be the largest recipient of mutual aid from the City of SeaTac. The City gives Tukwila 445% more aid than we receive. As the City knows, the City of SeaTac relies on Tukwila for the response of their ladder truck to our structure fires. Tukwila's ladder responded and arrived to SeaTac 13 times. However, the number of responses is minimal compared to the number of times we assist them.

### **2008 Total Mutual Aid Received vs. Given**



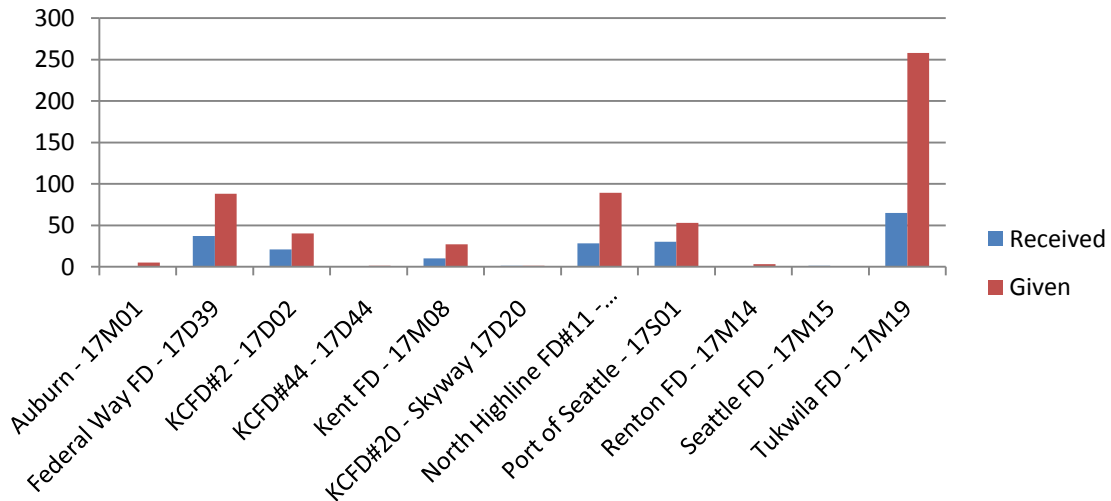
---

<sup>9</sup> Mutual Aid data comes from the Fire Department's RMS

# Mutual Aid Received vs. Given

Date Range: From 1/1/2008 to 12/31/2008

Department	Received	Received %	Given	Given %
Auburn	0	0%	5	1%
Federal Way FD	37	19%	88	16%
KCFD#2	21	11%	40	7%
KCFD#44	0	0%	1	0%
Kent FD	10	5%	27	5%
KCFD#20 - Skyway	1	1%	1	0%
North Highline FD#11	28	15%	89	16%
Port of Seattle	30	16%	53	9%
Renton FD	0	0%	3	1%
Seattle FD	1	1%	0	0%
Tukwila FD	65	34%	258	46%
<b>TOTAL</b>	<b>193</b>		<b>565</b>	



## **SECTION FIVE: CONCURRENT REQUEST FOR SERVICE**

A concurrent call is another performance indicator the department watches closely. A concurrent call for service is defined as the number of calls within a certain time period where the resources are depleted significantly in the city. To determine the concurrent call percentage the department must know the average time a unit spends on an incident. For SeaTac the average time spent on an incident is thirty three minutes and forty six seconds (33:46). This time is defined as from time of dispatch to clear or in service time. These times, as others, are derived from Valley Communications CAD system. To determine the concurrent call percentage the RMS was queried to determine the number of requests for service received during that 33:46 minute period and what that percentage turned out to be. This statistic tells the department the number of times only one engine is available for responses in the City.

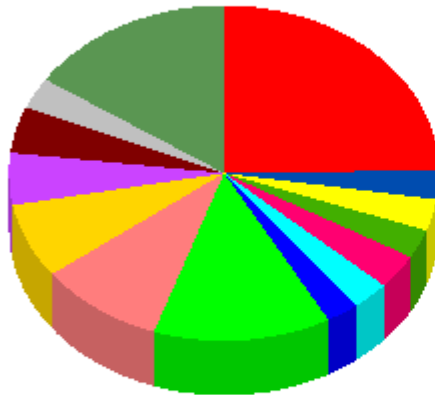
For SeaTac the percentage of concurrent calls is over 27.4%. This means that 27.4% of the time the department has two units tied up on separate incidents and there is only one Engine Company available for another response, resulting in a longer response time and less protection for the City and more reliance on mutual aid, creating longer response times.

Concurrent calls when no engines were left available in the City of SeaTac are 3% of the time. This means that during 3% of the time there are no engines available in the City of SeaTac to serve our community, and we must rely totally on mutual aid.

## Concurrent Incidents

Date Range From: 1/1/2008 to 12/31/2008

Average Call Time: 0:33:46



█		0.0%
█	0-31 minutes	24.8%
█	31-35 minutes	2.6%
█	35-40 minutes	3.1%
█	40-45 minutes	3.0%
█	45-50 minutes	3.2%
█	50-55 minutes	2.8%
█	55-59 minutes	2.5%
█	60-90 minutes	13.3%
█	90-120 minutes	9.3%
█	121-150 minutes	7.2%
█	151-180 minutes	5.1%
█	180-210 minutes	4.4%
█	211-240 minutes	3.1%
█	Above 4 hours	15.6%
	Total:	100.0%

Time Between Calls	Total
	0
0-31 minutes	1,088
31-35 minutes	116
35-40 minutes	134
40-45 minutes	132
45-50 minutes	142
50-55 minutes	123
55-59 minutes	111
60-90 minutes	584
90-120 minutes	410
121-150 minutes	317
151-180 minutes	222
180-210 minutes	194
211-240 minutes	134
Above 4 hours	685
Total	4,392

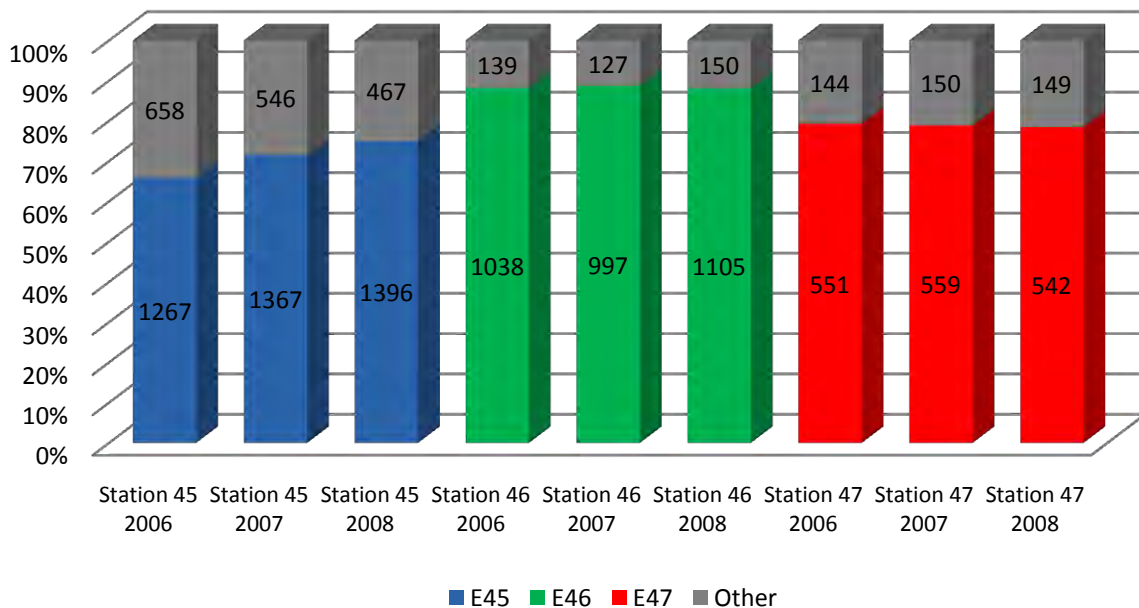
<b>Total Number of Incidents</b>	<b>4,393</b>
----------------------------------	--------------

## **SECTION SIX: RELIABILITY OF FIRE STATIONS**

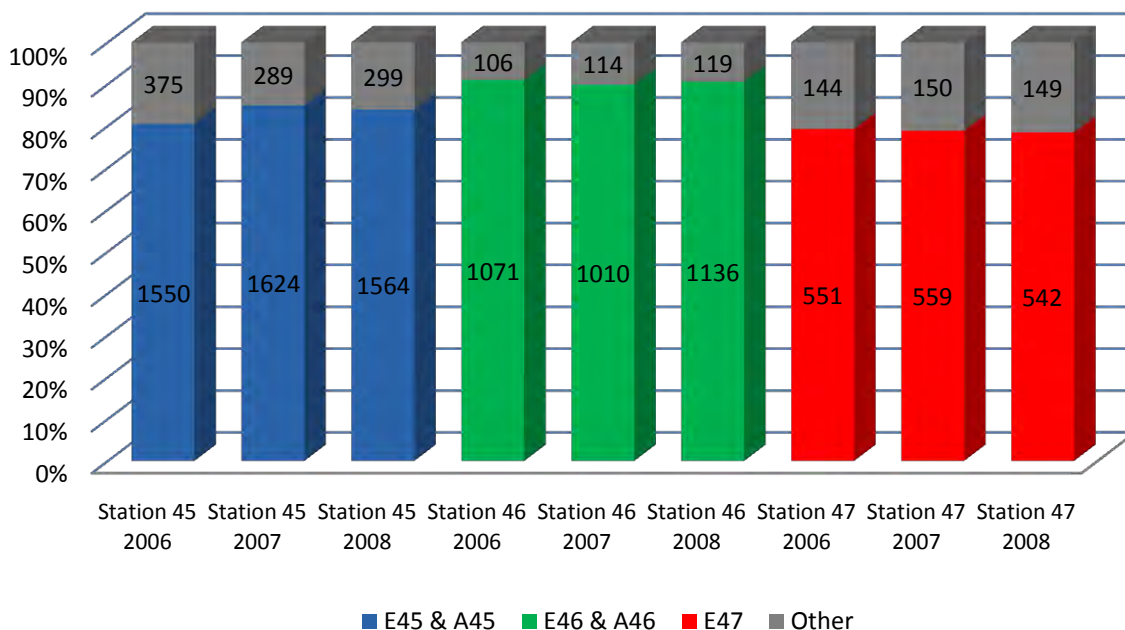
The City of SeaTac has determined the reliability of each fire station in their ability to respond to incidents within their area. The data collected for 2005-2008 indicates Fire Stations 46 meets their reliability 82% and Station 47 meet their reliability 71% of the time. The low number for Station 47 is due to the fact that 10% of their time is spent on mutual aid responses. Statistics indicate that when mutual aid calls are removed from the data the station meets the 90% standard. Station 45 meets its goal only 69% (2008) of the time. This is due to the fact that this station responds to 55% of all requests for service in the City and as indicated on the repeat calls graph has 50% of those addresses in their first due area. The department has reviewed response areas and determined that changes in the response districts would increase travel times, thus increasing response times.

The City of SeaTac City Council in 2005 authorized the fire department to hire one additional person per shift to begin to analyze the impact of staffing an Aid Car at Station 45. During the processes of developing the Standards of Response Cover document we looked at reliability and response times. There was a marginal decrease in travel times with a staffed Aid Car thus a reduced response time. However, the biggest benefit came in the fact that with a staffed Aid Car Station 45 had increased the reliability factor of the station to 78% in 2008. This percentage is still below the desired 90%.

## Station Reliability



## Station Reliability with Aid Cars



## **SECTION SEVEN: AID CAR REPORT**

During 2005 the City of SeaTac City Council authorized hiring three firefighters to begin the process of staffing the Aid Car located at Station 45. During the 2008 year the Aid Car was staffed 116 days, responded to 174 incidents and transported 5 patients to local facilities. The Department will continue to staff the Aid Car when on duty staffing permits.

# Incident Transport Summary Report

Date Range: From 1/1/2008 to 12/31/2008

Station(s) Selected: All

Shift(s) Selected: All

Apparatus Selected: A45, A46

A45 & A46 Transports  
Priority Response  
Minus Code Green Calls

Apparatus	Average Call Time HH:MM:SS	Total Incidents	Incidents in Average	Receiving Facility
A45	00:50:44	1	1	
A46	00:58:51	4	4	
<b>Grand Totals:</b>	<b>00:57:13</b>	<b>5</b>	<b>5</b>	

Receiving Facility	A45	A46	Total
Highline Community Hospital	1	4	<b>5</b>
Total	1	4	<b>5</b>



# Incident Time Summary Report

Date Range: From 1/1/2008 to 12/31/2008

Station(s) Selected: All

Shift(s) Selected: All

Apparatus Selected: A45, A46

Transports  
Priority Response  
Minus Code Green Calls

Apparatus	Average Call Time HH:MM:SS	Total Incidents	Incidents in Average
A45	00:27:57	150	150
A46	00:39:14	24	24
<b>Grand Totals:</b>	<b>00:29:30</b>	<b>174</b>	<b>174</b>

Receiving Facility	A45 Transports	A46 Transports	TriMed Transports	AMR Transports	Medic Transports	POV Transports	No Transport	Others	Total
Highline Community Hospital	1	4	78	0	10	7	1	1	102
Valley Medical Center	0	0	23	0	4	0	0	0	27
St Francis Community Hospital	0	0	0	1	1	0	0	0	2
Harborview Hospital	0	0	1	0	2	0	0	0	3
Other	0	0	6	3	0	3	28	0	40
<b>Total</b>	<b>1</b>	<b>4</b>	<b>108</b>	<b>4</b>	<b>17</b>	<b>10</b>	<b>29</b>	<b>1</b>	<b>174</b>

## **SECTION EIGHT: FIRE DISTRICT 24 INCIDENT DATA**

Fire District #24 in 2008 continued to contract for fire and EMS services with the City of SeaTac. The boundaries of FD #24 are basically between the eastern edge of the City to the Green River and between 188<sup>th</sup> and 204<sup>th</sup> streets. Predominantly, the type of incidents continues to be EMS. Of those incidents the majority were vehicle accidents.

## **Fire District #24 Incident Summary by Incident Type**

**Date Range: From 1/1/2008 to 12/31/2008**

**Incident Type(s) Selected: All**

---

<b>Incident Type</b>	<b>Incident Count</b>	<b>Used in Ave. Resp.</b>	<b>Average Response Time hh:mm:ss</b>	<b>Total Loss</b>	<b>Total Value</b>
Fire	3	3	00:04:54	\$2,000	\$2,500
EMS/Rescue	15	14	00:05:46	\$0	\$0
Hazardous Condition	2	1	00:12:46	\$0	\$0
Service Call	2	0		\$0	\$0
<b>Totals</b>	<b>22</b>	<b>18</b>		<b>\$2,000</b>	<b>\$2,500</b>

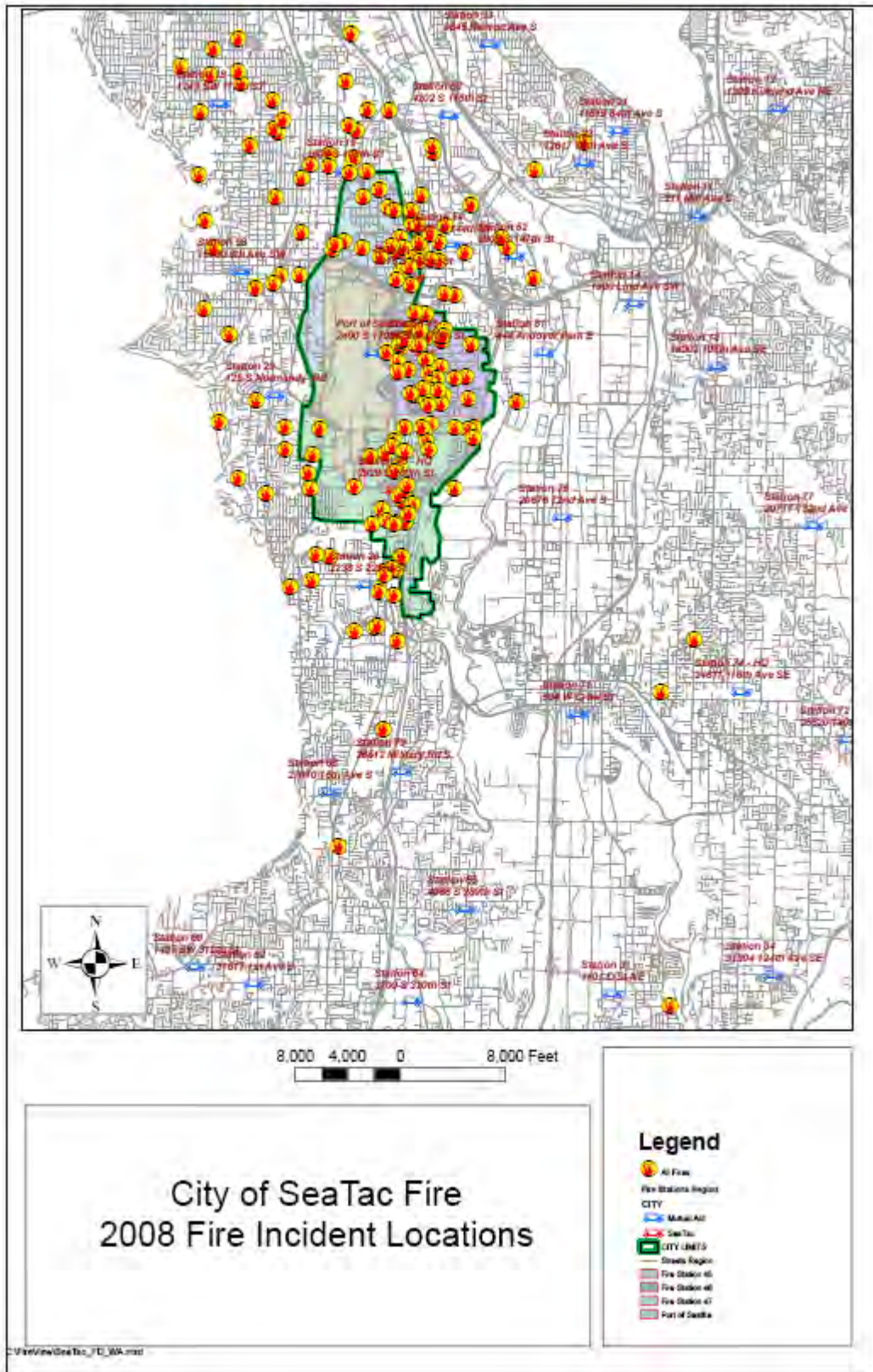
---

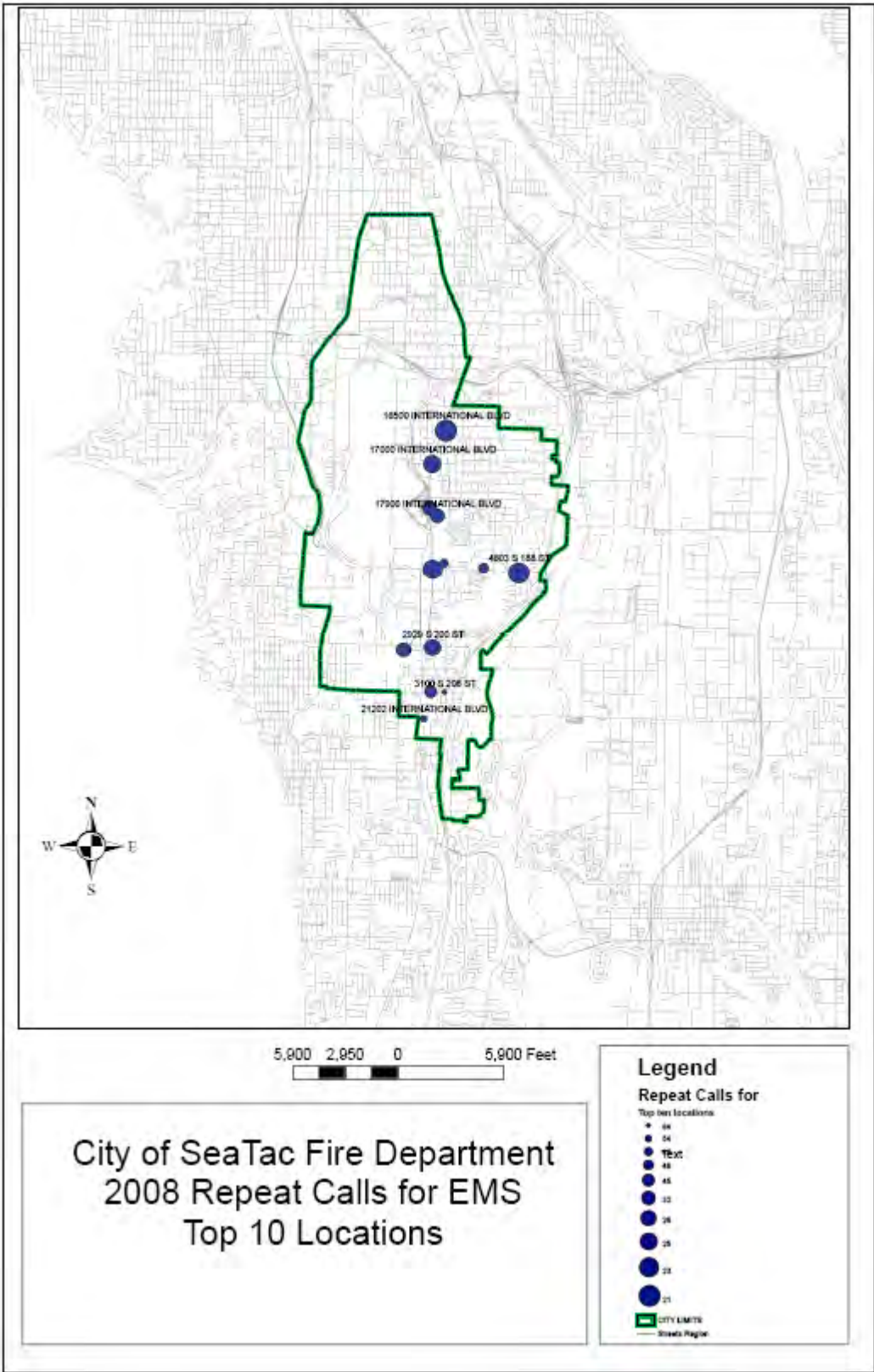
**Note:** The incident count used in averages does not include the following:  
Not completed incidents, Mutual Aid Given, Other Aid Given, and Cancelled in Route, Not Priority, Fill-In Standby, No Arrival and Invalid Dates/Times.

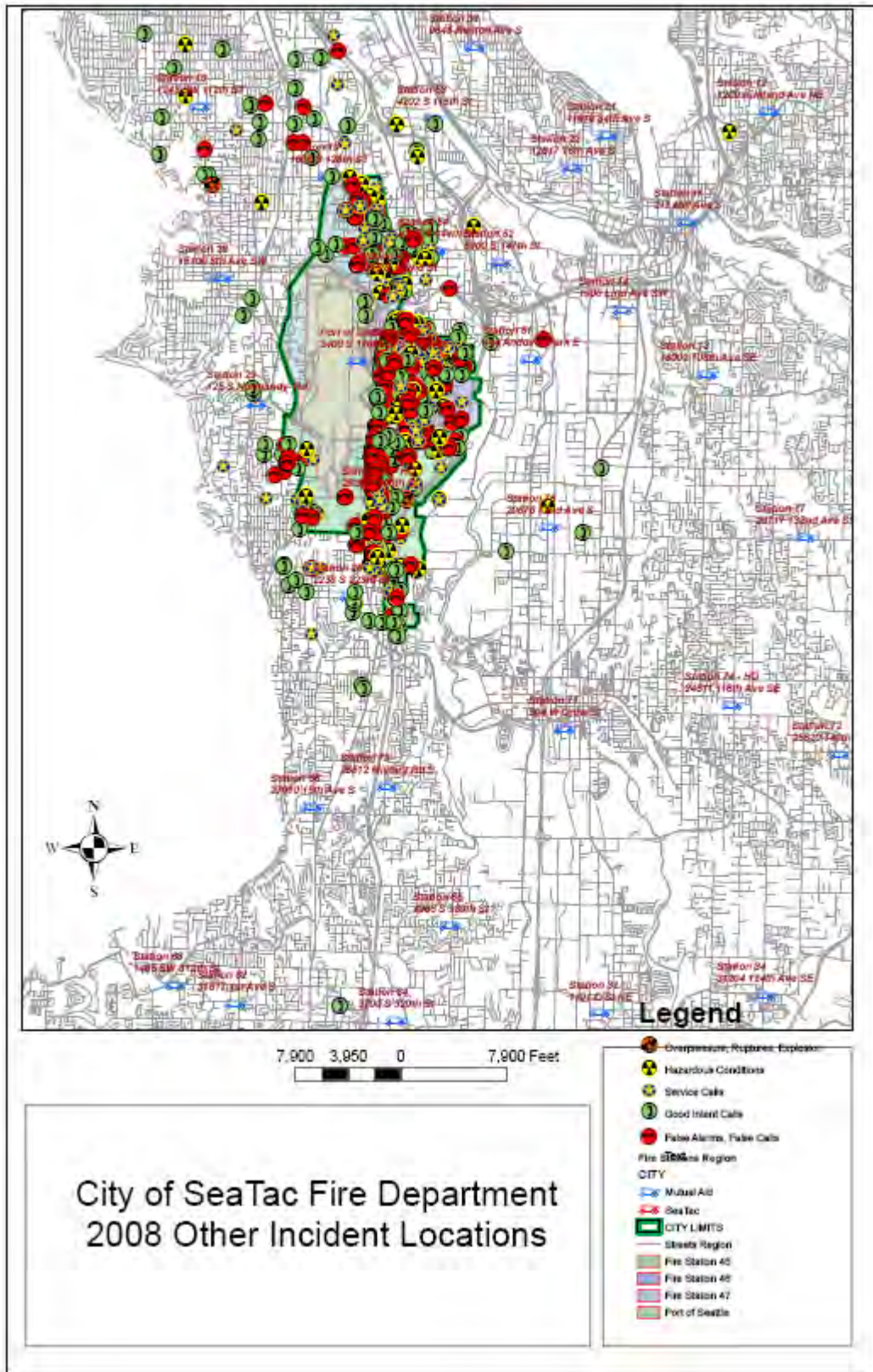
Printed: 02/03/2009 15:49:46

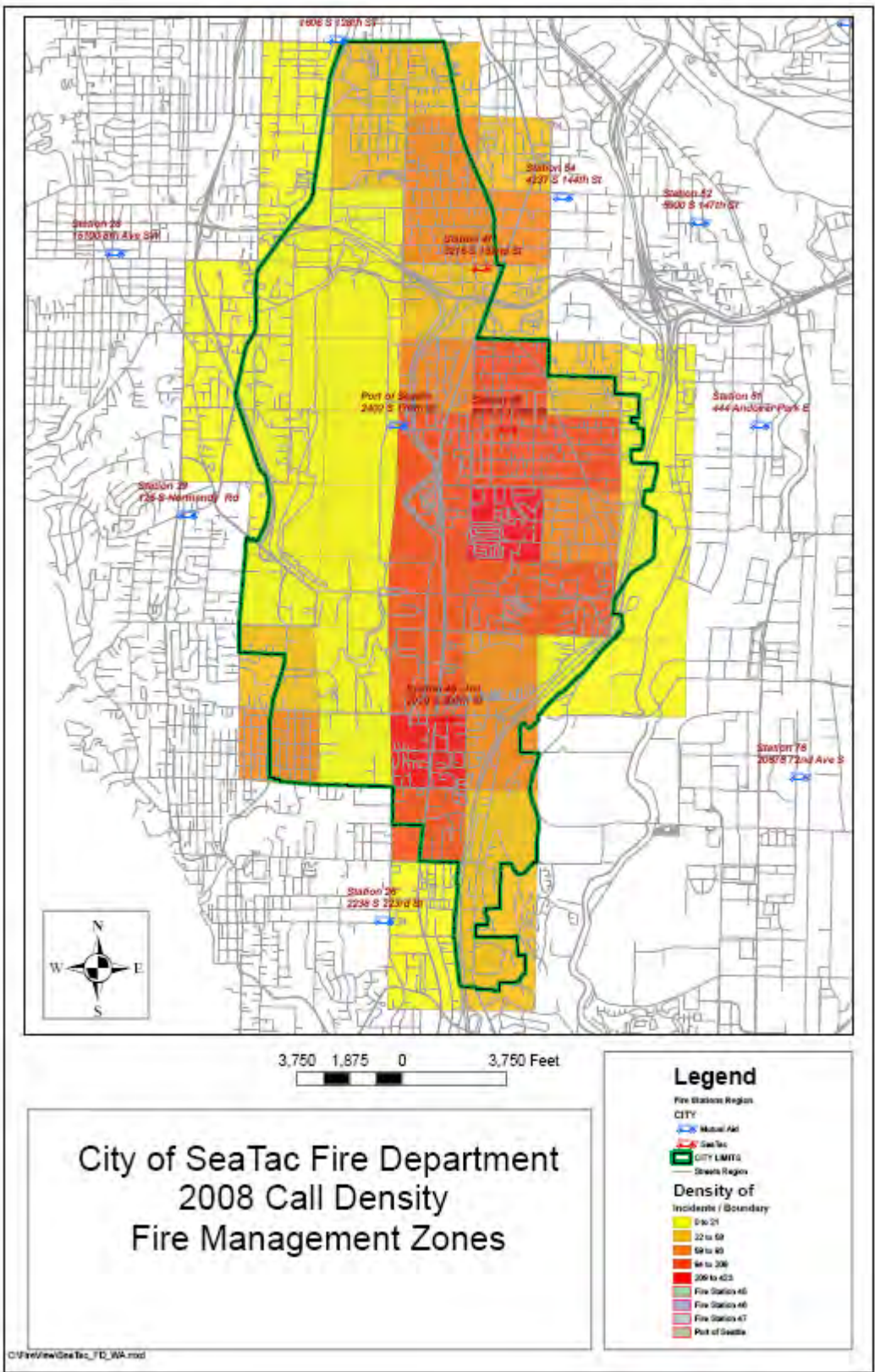
## **SECTION NINE: GIS MAPPING INFORMATION**

This section has detailed GIS Maps showing locations of different types of incidents we responded to during the year, locations where we respond to often, and locations where numbers of incidents are considered to be very high. This software program, allows the department to visually portray locations of incidents for the reader. The maps we have included in this years report include maps illustrating locations of different types of incidents the department responded to in 2008 map of “hot spots” where there are a large number of service requests in an area, a density map showing the locations throughout the city that receive a high number of responses and a map on repeat calls where we respond to specific locations often.

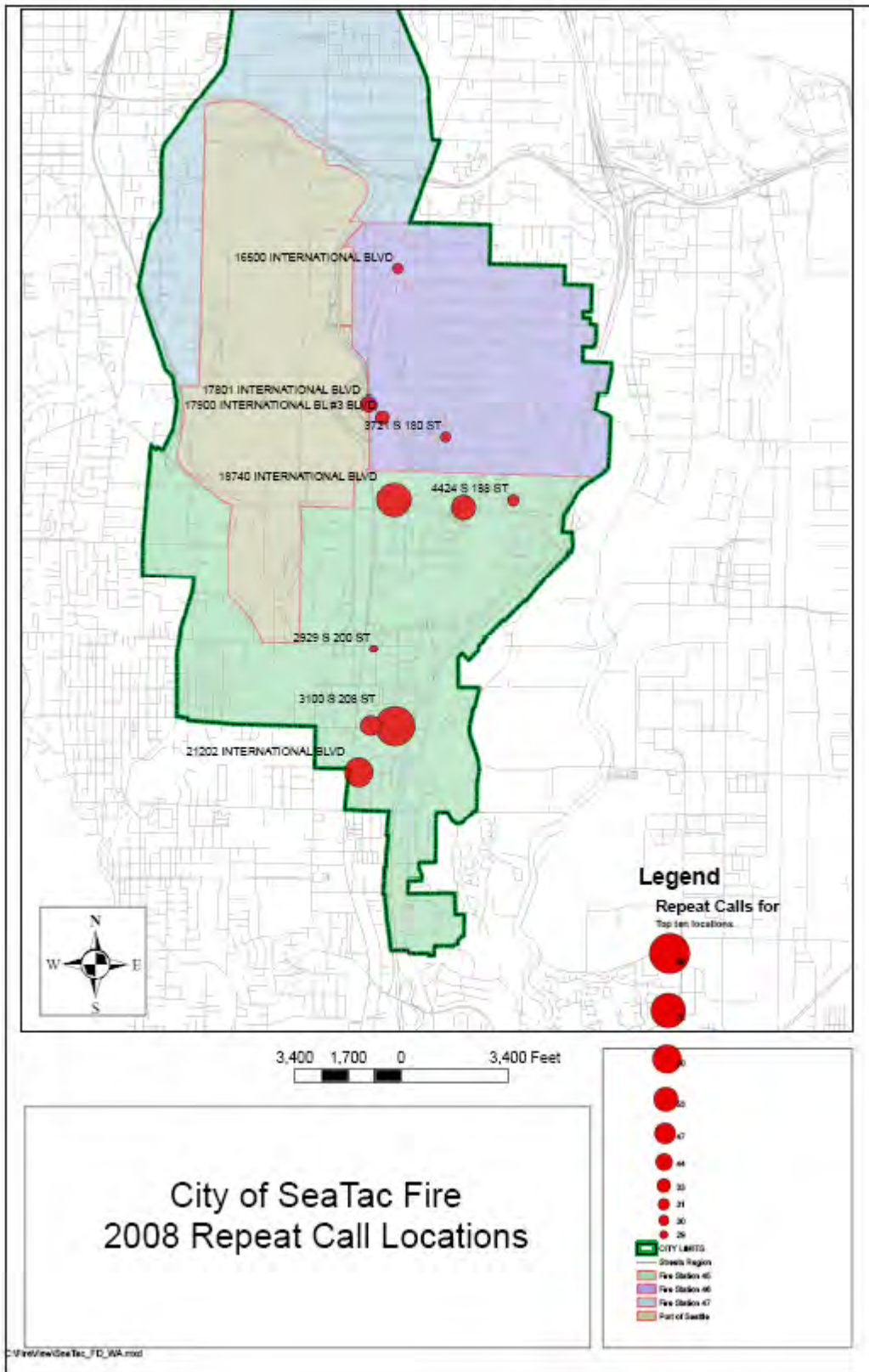












## **SECTION TEN: MEDIC ONE**

The King County Medic One program provides regional Advanced Life Support to the City of SeaTac. This regional service is provided by a County wide levy for funding.

Predominately, Medic 4 provides the majority of services to the City. Medic 4 is housed at the same location as Fire Station 47 and is one of the busiest medic units in the County system. In September 2006 a part time staffed medic unit was added to South King County. Medic 13 has made an impact on service delivery by reducing some response times.

Medic unit performance continues to be measured by the County in terms of unit per hour work ratio. In other words how busy the unit is in a given 24 hour period. King County Medic One also tracks response times in averages, not fractiley. During recent meetings between the King County Fire Chiefs and King County Medic One personnel they are beginning to track fractal response times. And, as we suspected, they are not as good as we would all like. SeaTac continues to collect data in fractal times and has given those to KC Medic One for several years. These response times, measured fractiley, are 10:25 minutes 90% of the time for our primary response unit Medic 4. All units that respond to SeaTac are tracked.

# Response Time Summary Report

Date Range: From 1/1/2008 To 12/31/2008

Station(s) Selected: All

Shift(s) Selected: All

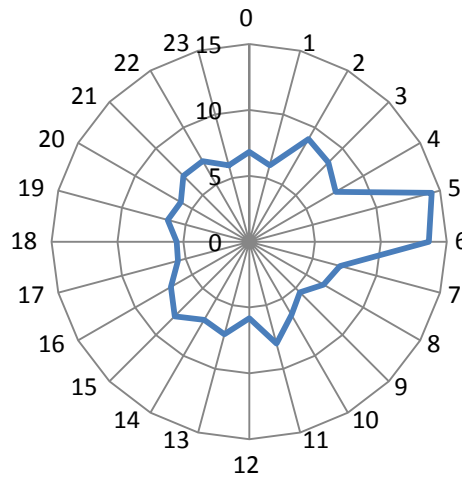
Apparatus Selected: M4

Priority Response  
Minus Code Green Calls  
SeaTac Districts

Apparatus	Average Response Time HH:MM:SS	Total Incidents	Incidents in Average
2008			
M4	00:07:46	285	278
<b>Grand Totals:</b>	<b>00:07:46</b>	<b>285</b>	<b>278</b>

90<sup>th</sup> Percentile Dispatch to Arrival Time is 10:25

## M4 Response Time by Hour of Day



< 5 minutes	18.9%
5.01 - 6 minutes	16.5%
6.01 - 7 minutes	21.8%
7.01 - 8 minutes	15.4%
8.01 - 9 minutes	11.2%
9.01 - 10 minutes	4.2%
10.01 - 11 minutes	3.5%
11.01 - 12 minutes	1.8%
12.01 - 13 minutes	1.8%
13.01 - 14 minutes	0.4%
14.01 - 15 minutes	0.4%
15.01 - 16 minutes	0.4%
17.01 - 18 minutes	0.4%
21.01 - 22 minutes	0.4%
22.01 - 23 minutes	0.4%
23.01 - 24 minutes	0.4%
Above 25 minutes	2.5%
<b>Total:</b>	<b>100.0%</b>

Note: The incident count used in averages does not include the following:

Not Completed incidents, Mutual Aid Given, Other Aid Given, Cancelled in Route, Not Priority, Fill-In Standby, No Arrival and Invalid Dates/Times.

Printed 02/03/2009 16:58:30

# Response Time Summary Report

Date Range: From 1/1/2008 to 12/31/2008

Station(s) Selected: All

Shift(s) Selected: All

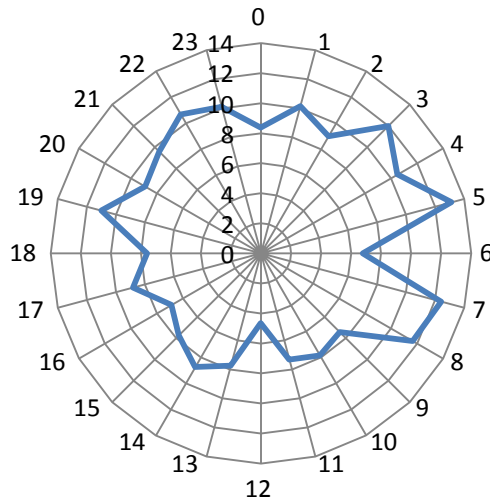
Apparatus Selected: M7

Priority Response  
Minus Code Green Calls  
SeaTac Districts

Apparatus	Average Response Time HH:MM:SS	Total Incidents	Incidents in Average
2008			
M7	00:11:23	73	73
<b>Grand Totals:</b>	<b>00:11:23</b>	<b>73</b>	<b>73</b>

90<sup>th</sup> Percentile Dispatch to Arrival Time is 13:30

## Medic 7 Response Time By Time of Day



< 5 minutes	1.4%
5.01 - 6 minutes	1.4%
6.01 - 7 minutes	5.5%
7.01 - 8 minutes	6.8%
8.01 - 9 minutes	9.6%
9.01 - 10 minutes	15.1%
10.01 - 11 minutes	17.8%
11.01 - 12 minutes	15.1%
12.01 - 13 minutes	11.0%
13.01 - 14 minutes	4.1%
15.01 - 16 minutes	2.7%
17.01 - 18 minutes	2.7%
19.01 - 20 minutes	1.4%
23.01 - 24 minutes	1.4%
Above 25 minutes	4.1%
<b>Total:</b>	<b>100.0%</b>

Note: The incident count used in averages does not include the following: Not Completed incidents, Mutual Aid Given, Other Aid Given, Cancelled in Route, Not Priority, Fill-In Standby, No Arrival and Invalid Dates/Times.

# Response Time Summary Report

Date Range: From 1/1/2008 to 12/31/2008

Station(s) Selected: All

Shift(s) Selected: All

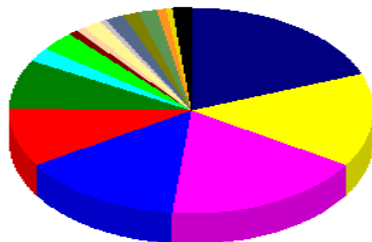
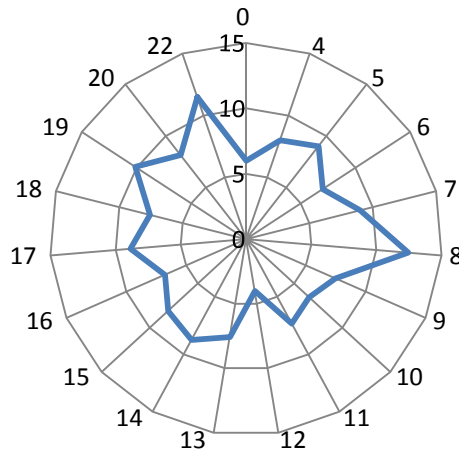
Apparatus Selected: M13, M15, M17, M5, M6, M8, MSO1

Priority Response  
Minus Code Green Calls  
SeaTac Districts

Apparatus	Average Response Time HH:MM:SS	Total Incidents	Incidents in Average
<b>2008</b>			
M13	00:07:27	104	102
M15	00:04:42	1	1
M17	00:17:24	2	2
M5	00:14:38	4	4
M8	00:10:19	1	1
MSO1	00:08:24	18	18
<b>Grand Totals:</b>	<b>00:07:58</b>	<b>130</b>	<b>128</b>

90<sup>th</sup> Percentile Dispatch to Arrival Time is 13:03

## Medic Response Time by Time of Day



< 5 minutes	19.2%
5.01 - 6 minutes	14.6%
6.01 - 7 minutes	17.7%
7.01 - 8 minutes	14.6%
8.01 - 9 minutes	9.2%
9.01 - 10 minutes	7.7%
10.01 - 11 minutes	2.3%
11.01 - 12 minutes	3.1%
12.01 - 13 minutes	0.8%
13.01 - 14 minutes	0.8%
14.01 - 15 minutes	1.5%
15.01 - 16 minutes	0.8%
16.01 - 17 minutes	1.5%
17.01 - 18 minutes	1.5%
19.01 - 20 minutes	1.5%
23.01 - 24 minutes	0.8%
24.01 - 25 minutes	0.8%
Above 25 minutes	1.5%
<b>Total:</b>	<b>100.0%</b>

**Note:** The incident count used in averages does not include the following:  
Not Completed incidents, Mutual Aid Given, Other Aid Given, Cancelled in Route, Not Priority, Fill-In Standby, No Arrival and Invalid Dates/Times.

02/03/2009 16:14:03



## **SECTION ELEVEN: FIRE AND LIFE SAFETY DIVISION**

The Fire and Life Safety Division includes fire prevention, public education and emergency management.

The activities for the division in 2008 included continued restructuring the fire inspection process for the engine companies. We had some technical difficulties implementing the mobile data collection and had to collect data with hard copy and transfer that to the Department's Records Management System. The fire prevention inspectors continued responsibility for the permit inspections. The majority of the 2008 year we were short a fire inspector and continue to be short a fire marshal. The Fire Chief performs numerous plan checks, attends the city's DRC meetings and performs all SEPA and short plat reviews.

In addition, the Division staff, as well as the Fire Chief, spent many hours with Sound Transit for the Airport Link project. City staff, in conjunction with Port of Seattle Fire Department's staff, collaboratively determined the level of fire and life safety needed for the project. Link light rail has begun construction and staff monitored the fire protection systems and trained on the guideway with funding provided by Sound Transit. In 2009 staff will spend numerous hours with plan review, system integrity verification, suppression personnel training, and construction inspections.

Staff continues to be busy with rather large projects this past year. Polygon Homes completed a large complex and plans for two more are underway. Additional projects included the Residence Inn, Hilton Garden Hotel and a new Hampton Suites all on 28<sup>th</sup> Ave. Apartment complexes, mixed use developments, surface parking lot expansions, large parking garage, warehouse projects and others.

As indicated in the accomplishments section the department has steadily maintained work loads for inspections, plan checks and permits. In 2008 the division continued collecting data that identifies the number of fire code violations and number of those violations corrected. These numbers were used as a performance measure to determine the effectiveness of the divisions' inspection program. There is no quantifiable method to determine if the violations corrected actually prevented a fire. However, as

each violation is a fire hazard, we believe that the success with correcting violations has a direct relationship in preventing fires.

The fire inspector continued using a tablet computer to perform his inspections, reducing the workload on staff for having to input the data in the RMS. It also assures the crews have accurate contact information in the event of an incident. Additionally, three tablet computers were purchased to allow the engine crews to perform their fire and life safety inspections beginning in 2008. A new software system for Fire Inspection records will be implemented in 2009 to assist the suppression staff with fire inspections.

As part of the King County Sheriffs Department contract the City of SeaTac contracts for fire investigation services. The annual cost is approximately \$24,000. The tables listed as part of this section detail the number of investigations conducted by the Fire Investigation Unit in King County. In the City of SeaTac five arson fires were reported and investigated; there were no convictions.



**Fire District Report /Fires for 2008**

From: 01/01/2008 to 12/31/2008

15-Jan-09

**FIRE DISTRICT M20**

FCR CODE	KCPD CASE NUM	DATE	LOCATION	FD	PD	UCR CODE	SOURCE OF REPORT	TOTAL LOSS
<b><u>450</u></b>								
450-E-0	08-232911	9/21/2008	3786 S 166TH ST	M20	L2	J	FM	\$0.00
450-E-0	08-100307	4/26/2008	3606 S 180 ST #C32	M20	L3	A	FM	\$15,000.00
450-E-0	08-201923	8/17/2008	3256 S 204th St	M20	L4	H	FM	\$4,000.00
450-E-0	08-088222	4/12/2008	1100 Block S. 194th Street	M20	L4	H	FM	\$0.00
450-E-0	08-130879	5/31/2008	19215 28th Ave S	M20	U4	F	FM	\$100,000.00
	5							<b>\$119,000.00</b>
<b><u>452</u></b>								
452-B-0	08-042342	2/20/2008	15027 30th Ave S.	M20	L1	A	FM	\$150,000.00
452-B-0	08-283588	11/18/2008	13622 28 PL S	M20	L1	A	FM	\$130,000.00
452-B-0	08-226322	9/13/2008	3200 Block S. 154th	M20	L1	H	FM	\$3,500.00
452-B-0	08-028103	2/3/2008	3207 S 164TH ST	M20	L2	A	FM	\$0.00
452-B-0	08-036974	2/13/2008	4024 S 173 st	M20	L2	A	FM	\$0.00
452-E-0	08-296065	12/3/2008	17840 32nd Ave S	M20	L3	B	FM	\$220,000.00
452-E-0	08-191522	8/6/2008	19830 32nd Ave S	M20	L4	A	FM	\$85,000.00
452-B-0	08-177673	7/21/2008	19322 10th Court S.	M20	L4	A	FM	\$0.00
	8							<b>\$588,500.00</b>
<b><u>453</u></b>								
453-D-0	08-064130	3/16/2008	12900 Roseburg Ave.	M20	K1	H	FM	\$0.00
453-E-0	08-058189	3/9/2008	17049 37th Ave S	M20	L2	A	FM	\$80,000.00
453-E-0	08-148356	6/20/2008	16720 International Blvd	M20	L2	B	FM	\$10,200.00
	3							<b>\$90,200.00</b>
<b>Grand Total:</b>		16						<b>\$797,700.00</b>

---

---

**Fire District Report /Fires for 2008**

From: 10/01/2008 to 12/31/2008

14-Jan-09

**FIRE DISTRICT M20**

---

---

FCR CODE	KCPD CASE NUM	DATE	LOCATION	FD	PD	UCR CODE	SOURCE OF REPORT	TOTAL LOSS
<b>452</b>								
452-B-0	08-283588	11/18/2008	13622 28 PL S	M20	L1	A	FM	\$130,000.00
452-E-0	08-296065	12/3/2008	17840 32nd Ave S	M20	L3	B	FM	\$220,000.00
		2						<hr/> \$350,000.00
<b>Grand Total:</b>		2						<hr/> <hr/> \$350,000.00

**MONTHLY ALL FIRES - CITY OF SEATAC**

1/1/2008 to 12/31/2008

14-Jan-09

FCR CODE	DATE	KCPD CASE	LOCATION	F.D.	P. D.	UCR CODE	DISP	DATE CD	INV	LOSS
<b>450-E-0</b>										
	4/12/2008	08-088222	1100 Block S. 194th Street	M20	L4	H	CA	7/29/2008	DEVINE	\$0
	4/26/2008	08-100307	3606 S 180 ST #C32	M20	L3	A	OPEN	4/29/2008	O'TOOLE	\$15,000
	8/17/2008	08-201923	3256 S 204th St	M20	L4	H	INFO	8/18/2008	ANDREWS	\$4,000
	9/21/2008	08-232911	3786 S 166TH ST	M20	L2	J	INFO	1/12/2009	KENNY	\$0
FCR GROUP COUNT			4							\$19,000
<b>452-B-0</b>										
	2/3/2008	08-028103	3207 S 164TH ST	M20	L2	A	ACCI	2/20/2008	KENNY	\$0
	2/13/2008	08-036974	4024 S 173 st	M20	L2	A	ACCI	2/21/2008	kenny	\$0
	2/20/2008	08-042342	15027 30th Ave S.	M20	L1	A	ACCI	2/26/2008	DEVINE	\$150,000
	7/21/2008	08-177673	19322 10th Court S.	M20	L4	A	ACCI	7/23/2008	DEVINE	\$0
	9/13/2008	08-226322	3200 Block S. 154th	M20	L1	H	INFO		DEVINE	\$3,500
	11/18/2008	08-283588	13622 28 PL S	M20	L1	A	ACCI	11/19/2008	POMEROY	\$130,000
FCR GROUP COUNT			6							\$283,500
<b>452-E-0</b>										
	8/6/2008	08-191522	19830 32nd Ave S	M20	L4	A	ACCI	8/7/2008	ANDREWS	\$85,000
	12/3/2008	08-296065	17840 32nd Ave S	M20	L3	B	ACCI	12/8/2008	ANDREWS	\$220,000
FCR GROUP COUNT			2							\$305,000

**MONTHLY ALL FIRES - CITY OF SEATAC**

10/1/2008 to 12/31/2008

14-Jan-09

<b>FCR CODE</b>	<b>DATE</b>	<b>KCPD CASE</b>	<b>LOCATION</b>	<b>F.D.</b>	<b>P.D.</b>	<b>UCR CODE</b>	<b>DISP</b>	<b>DATE CD</b>	<b>INV</b>	<b>LOSS</b>	
<b>452-B-0</b>											
	11/18/2008	08-283588	13622 28 PL S	M20	L1	A	ACCI	11/19/2008	POMEROY	\$130,000	
FCR GROUP COUNT			1								\$130,000
<b>452-E-0</b>											
	12/3/2008	08-296065	17840 32nd Ave S	M20	L3	B	ACCI	12/8/2008	ANDREWS	\$220,000	
FCR GROUP COUNT			1								\$220,000
<b>TOTAL COUNT</b>			<b>2</b>								<b>\$350,000</b>

<b>PROPERTY CLASSIFICATION</b>	
<b>S T R U C T U R A L</b>	<b>A. Single Occupancy Residential:</b> Houses, Townhouses, Duplexes, etc.
	<b>B. Other Residential:</b> Apartments, Tenements, Flats, Hotels, Motels, Inns, Dormitories, Boarding Houses, etc.
	<b>C. Storage:</b> Barns, Garages, Warehouses, etc.
	<b>D. Industrial/Manufacturing</b>
	<b>E. Other Commercial:</b> Stores, Restaurants, Offices, etc.
	<b>F. Community/Public:</b> Churches, Jails, Schools, Colleges, Hospitals, etc.
	<b>G. All Other Structure:</b> Out Buildings, Monuments, Buildings, Under Construction, etc.
	<b>TOTAL STRUCTURE</b>
<b>M O B I L E</b>	<b>H. Motor Vehicles:</b> Automobiles, Trucks, Buses, Motorcycles, etc. UCR Definition
	<b>I. Other Mobile Property:</b> Trailers, Recreational Vehicles, Airplanes, Boats, etc.
	<b>TOTAL MOBILE</b>
	<b>J. TOTAL OTHER</b> Crops, Timber, Fences, Signs, etc.

**FCR CODE DEFINITION:**

450 ARSON  
452 ACCIDENTAL  
453 UNDETERMINED  
PD PATROL DISTRICTS

## **SECTION TWELVE: TRAINING DIVISION**

During 2008, Captain John Gallup has remained as the Department Training Officer and Health and Safety Administrator. As in previous years the major roles performed were Health & Safety Officer, Fire/Rescue/EMS Training Officer and Incident Safety Officer. These three roles encompass the following duties and responsibilities; Health and Safety Officer manages the following programs including Department Safety, Infection Control, Respiratory Protection, Accident Prevention Program and Hearing Conservation. The Training Officer responsibilities include coordinating department training activities and opportunities for Fire/Rescue/EMS, maintenance of skills and certifications, compliance with mandated training, developing/assisting professional development and record keeping. The Incident Safety Officer duties include responding to all major incidents and other alarms that may require additional assistance. All of these roles and functions are referenced in the consensus standards created by the National Fire Protection Association (N.F.P.A.) and in the Washington State Administrative Code 296-305 Vertical Safety Standards for Fire Fighters.

During 2008, the Training Division has continued an audit that was begun in 2007 of the major roles of the Training Officer to assess the effectiveness and explore alternatives for completing the work. Because of the large scope of work, this audit is continuing even as changes and options are explored.

The Division continues to implement a Training Plan that was prepared as a part of the Fire Service Master Plan study conducted by ESCI at City Council direction in 2007. The plan contains both the on-going plan for the department consistent with past years and changes and advancements that the Division would like to see incorporated. The plan was developed using both NFPA and WAC 296-305 as references. The Division also has begun to use video conferencing and decentralized training as much as possible

### **Health & Safety Officer Accomplishments**

The Training Division completed annual safety training and meetings, including subjects such as Self Contained Breathing Apparatus, Fire Behavior, Vehicle Collisions and Policy and Procedures review. The Safety Committee meetings include review of property accidents and personal injuries. The Training Division will continue to send out Monthly Incident Case Studies for Shift Captains and Battalion Chiefs to use during the Monthly Crew Safety Meetings.

Completed annual infection control training and preventive measures to again raise awareness of potential diseases. We monitor employees through testing for certain exposures and incorporate preventive inoculations.

All operational personnel in the department received their annual fit testing of their respiratory protection equipment. This annual requirement assures that personal respiratory protective equipment is functional and fits employees properly. It also gives the department the opportunity to assess employee knowledge of proper donning and doffing procedures, care and maintenance and perform an annual inspection of equipment.

Personnel received their annual hearing tests and hearing protection training as required by state law. This training and testing is designed to raise awareness of a potential costly debilitating disease that can affect long term quality of life issues.

In 2008, the Division continued issuing “Safety Alerts” regarding issues that pose significant safety risks to Fire Fighters. These „Alerts’ are sent to each individual within the department and are posted for easy review on the Division web page.

### **Training Officer Accomplishments**

Fire Fighters Breidenbach, Longley and Renn became Fire Fighter I as of their anniversary dates and completed training as Engine Company Driver/Operators. Fire Fighters Clausnitzer and Phillips began their training to achieve Engine Company Driver/Operator status.

Completion of our 11<sup>th</sup> Annual Live Fire Training exercises at North Bend by department members to meet state requirements. This program was initially funded by Council in 1998 and has greatly improved our fire fighting skills. It also gives the department an opportunity to incorporate new concepts and procedures during fire ground operations and annually evaluate our operational abilities.

Many outside training opportunities were completed by our members. These outside training classes and seminars assisted the department in learning new efficient techniques for improvement of our service delivery. Most of these classes and seminars were attended on the employee’s personal time. Of specific note, 14 Department members attended and completed training to become Rope Rescue Technicians in accordance with NFPA standards. This will greatly enhance our ability to respond and operate at emergencies where the use of rope rescue techniques is needed for patient access, victim rescues and patient removal. This training was coordinated with the Port of Seattle Fire Department and Sound Transit in conjunction with the Department Training Plan. Captain Mark Hill spent a considerable amount of time to bring this training opportunity together and his efforts were much appreciated.

This year employees completed 7,965.58 hours of training with the majority of those hours (2,315.5) being delivered by the Shift CBT Instructors.

Eighteen of our Emergency Medical Technicians completed recertification with the State of Washington. This is a triennial license renewal process that requires completion of seven mandatory classes each year for a total of 21 classes for the three year cycle. Each of these classes requires a successful completion of a written and practical evaluation. The Training Officer reports to King County EMS and the state prior to the end of the three year cycle that all classes have been completed and the employee submits an application for renewal.

In 2008 the Training Division continued the development and maintenance of the “Fire Training Website”. Fire Fighter Ron Wieland has continued to work this project and maximize its potential. As part of the plan to make training and information more accessible, the Division purchased and installed large monitors and computers in common areas in the Fire Stations. This will allow an entire crew to be able to participate in group training. In addition, this will enable the Department to share information Department-wide in real time. The Division will continue to work on the implementation of this program in 2009.

The Division has continued posting “Training Alerts” in 2008. These „Alerts’ are sent to each individual and are accessible through the web site. They cover fire training topics which may be new advancements in method or technology or simply “tricks of the trade.”

### **Incident Safety Officer Accomplishments**

As Incident Safety Officer the Training Captain responded to several incidents throughout the year. This included incidents that occurred during the work day and responses from home on days off. The Division continues to work on providing training for all Department Officers on the role of the Incident Safety Officer within the Incident Management System during emergencies.

The Division continues its emphasis on „near miss reporting’ and also encourages all members to utilize the website, [www.firefighternearmiss](http://www.firefighternearmiss), to not only report near misses but research other reports from our industry.



## **Technology**

### **1) Mobile Data Computers.**

- i) Address Updates on Layers – Worked with City GIS department to provide prompt updates for addresses and infrastructure when found by fire department in the field.
- ii) Temporary Address for new Buildings - Implemented new system of data collection to allow the fire department to allow prompt turn around on new addresses and occupancy information for maps and information to field units of the fire department.
- iii) Stations Work orders for Service on MDC's
- iv) 128 Requests for service or help were received in 2008. These ranged from data error searches, temporary street additions to Business additions to the database.
- v) Remote Access (Our mapping program in the apparatus) Training to crews
- vi) Update of Video Vignettes of Operation and Training of MDC use.
  - (a) Occupancy Maps
  - (b) Occupancy Information
- vii) Continued Addition of City of Tukwila Prefire Occupancy Maps for Major Businesses and Apartments in Station 46's and 47's response Zone.
- viii) Addition of maps for Sound Transit Rail system.
  - a) These were then linked to the Company Records Data Base for Access to Building and Owner information in the field.
- ix) Updated Ra Files – New version update for Remote Access installed on all computers in the fire department.

### **2) Fire RMS**

- i) Interface to Remote Access – Continued the process of compiling all data collected in the Department Fire Records Management Systems for use in the field by Fire units. All data from RMS transferred to RA
- ii) Interface to Mobile Fire Records Management (Mobile RMS) – Continued records mapping for interface to Remote Access for Records in our existing Records Management system.
- iii) Upgrade and purchase of Tablet PC for field inspections.
- iv) Integration of daybook, to do list into the incident and training Modules.
- v) Updating of training class catalog and integration of Standards and Objectives to meet National, State, and L&I requirements for mandatory training.

### **3) Rescue Net Upgrades (FireRMS System)**

- i) Mobile FireRMS (SunPro)
  - a) Updates
  - b) Change over to Fire RMS in January 2009 for field collection and dissemination of information to Fire Prevention Database.
  - c) Building Information
  - d) Data Mapping – Went thorough Fire RMS (Sunpro) to determine information collection need to fill out Remote Access Mapping.
  - e) Collection – Prepare startup for training in 2008 of collection in Mobile RMS of Building information, type, size, fire systems, security,
  - f) Printing in Apparatus – Started consultation with firefighters on use of printers for apparatus. As of end of 2008 in the process of deciding where in each rig to place and secure the printers purchased with the Fire Act Grant. Working with Sunpro to provide the software necessary for this.

### **4) Graphic Information Systems (GIS)**

- i) Layer Modifications
- ii) Update program

### **5) Remote Access – Program used by firefighters to access maps and information of City and outlying areas.**

- i) New Graphic Information Systems (GIS) Layers. Increased area to include all of king county south of Spokane street.
- ii) Hydrants – Addition of Federal Way and Kent cites to maps
- iii) Address- Update address point on parcels to reflect all address in complexes
- iv) Street Center Line- Upgrade of maps to Nav Tech mapping in conjunction with The City GIS department.
- v) Temporary Street Center Line – Addition of streets in new developments not yet on Nav Tech Maps. Forward the information to GIS for inclusion in updates.
- vi) Building- adding temporary building maps, pictures, video, and information collect in Rescue Net (SunPro).
- vii) Parcels
- viii) Building Address Points
- ix) Water Mains
- x) Schools

- xi) Fire Stations
- xii) Historical Sites
- xiii) Topographical Contours Lines
- xiv) Sewer and Storm water Run off
- xv) Hospitals
- xvi) Mapping Roads, Occupancies, and Hydrants outside City of SeaTac – Worked on providing information for our firefighters regarding the following cities Buildings, Occupancies, and infrastructure.
  - (1) Tukwila
  - (2) North Highline
  - (3) Renton
  - (4) Kent
  - (5) Federal Way
  - (6) Des Moines
  - (7) Normandy Park
  - (8) Burien

**6) Information Systems**

- i) Afaria
- ii) Error Search Logs for Dispatch and Mapping

**7) Fire Training Website and Virtual Classroom**

- i) Forms and Documents
- ii) Videos for Training
- iii) One place for all information pertaining to training support for Fire Department
- iv) Set up monitors for use as training classroom at each station. Each monitor is connected to a computer for online training developed by our Fire Training Division.
- v) Webcasting accounts set up for video on line training between stations using existing IP phone for audio and Upstream for Video.
- vi) Set up Screen saver that streams upcoming events, training classes, and pictures that acts as Digital Signage for department information updates.

## **SECTION THIRTEEN: OPERATIONS DIVISION**

The Operations Division, under the leadership of the Assistant Fire Chief, has the majority of personnel in the organization and performs the emergency responses to the community (see response data). Additionally, the Battalion Chiefs, Captains, and Firefighters are also responsible for managing various programs in the organization. Without the operations forces performing the additional duties and administrative workload; the majority of tasks, assignments, and many functions would not be accomplished.

Operations personnel manage programs such as Personnel Protective Equipment, Uniforms, Self Contained Breathing Apparatus, Breathing Air Compressor Testing and Maintenance, Vehicle Purchasing, Maintenance and Repair, Extinguisher Testing and Maintenance, Radio Repair and Maintenance, Ladder Testing, Hose Testing, Safety Committee, Fire Equipment Repair and Maintenance, Pre-Fire Plan Mapping, Driver Training, and Emergency Medical Services (EMS). Staff spends numerous hours managing these programs, and without the members managing and monitoring these programs they would not get accomplished.

In 2008 a new Engine (Pumper) and Rescue Truck were delivered. These projects included construction inspections, acceptance testing, equipment installation and driver's training. A pickup truck with mobile refueling system was also purchased and placed in service. Other notable purchases included replacement thermal imaging cameras and two new sets of hydraulic rescue tools (Jaws of Life). Construction began on the replacement for Station 46 and the rewriting of the department's Standard Operating Guidelines began.

Working with the Zone 3 and King County Operations Chiefs, new Standard Operating Guidelines for Fire Ground Practices, Technical Rescue Deployment, Decontamination Strike Team Response, and Wind Speed Threshold were created and adopted. These guidelines help ensure that all departments can work safer across the entire county. As part of the Zone 3 Rescue Response, SeaTac units responded to technical rescue responses around the zone including a car into the Green River. Some other notable events were:

- A three-alarm fire at the former Angle Lake Elementary School
- A twelve patient multi-casualty incident (MCI) motor vehicle accident on I-5.
- A nine patient MCI from carbon monoxide poisoning.
- A hazardous materials incident at the Tyee education complex.

- A ten patient MCI bus rollover with fire on I-5.
- A two alarm apartment fire.

Community events that operations personnel participated in included the Bow Lake community pancake breakfast, National Night Out, Community Parades, the Muscular Dystrophy “Fill the Boot” drive, the International Festival, as well as serving Thanksgiving and Christmas lunches at the Community Center.

Each shift is responsible for many projects. Without the firefighters and Captains managing programs, the safety of firefighters and service delivery to the citizens would be greatly hampered. Following is the description of programs that are managed by each shift.

---

## **A Shift**

---

### **Mapping**

In 2008, there were 7 new pre-fire maps created and 8 pre-fire maps updated which resulted in 200 pages inserted into the 12 pre-fire map books. All apparatus Mobile Data Computers reflect these changes as well. New 2008 Thomas Guides were also purchased and distributed to all apparatus. Mutual aid pre-fire map books were updated with the new Riverview Townhome complex located in Kent. Currently, there are 33 occupancies listed in Station 47’s first due of which 23 are new. 67% of the needed updates are now complete. The focus for 2009 will be continuing to update 47’s first due occupancies.

### **New Pre-Fire Maps**

Corinthian Apartments-Site Plan

Corinthian Apartments-Floor Plan

Four Plex- Site

Crystal Manor Apartments- Site

Crystal Manor Apartments- Floor

Morning View Townhomes- Site

Olympic View Apartments- Floor

## **Safety Gear and Uniforms**

Everyday uniforms continue to be replaced as needed in a timely manner. No new uniform items were added in 2008. Towards the end of the year the department had an opportunity to work with the State Of Washington Auditors Office. The Auditor's office offered and gave us new insights to the bidding process. This insight will be very helpful in the upcoming budget year.

In 2008 continued our safety gear replacement programs continued. In 2008 we also continued our purchase of updated water rescue equipment, all first out engines and the new Rescue Truck are equipped with water rescue equipment according to NFPA standards. After training was received for the new equipment, the equipment was placed on the apparatus and has already seen use.

---

## **B Shift**

---

### **Facilities**

Many upgrades and repairs to the buildings, appliances and equipment were completed in 2008.

### **Accreditation**

Work continues in this area. Progress has been slow due to other priorities.

### **Fire Equipment**

The following items were completed in 2008:

- Annual service was completed on selected power tools.
- Replaced one chainsaw that were not repairable.
- Continued replacing nozzle shutoffs with solid bore slugs with regular shutoffs.
- Purchased and placed in-service 2 sets of hydraulic Combi-Tools for E45 and E47.
- Serviced and repaired numerous other hand tools and equipment.
- Purchased and placed in-service four (4) new Thermal Imaging Cameras.
- Continued refurbishment of nozzle inventory.
- Maintained inventory of maintenance supplies for small equipment repairs conducted in-house.
- Purchased and placed in-service replacement command boards that are compatible with other departments throughout our Zone.

## **Ground Ladders**

Each year our ground ladders are inspected and tested to insure compliance with the State of Washington Safety Standards for Firefighters, 296-305 WAC and NFPA Standard 1932. Our ladders are tested by an independent testing company, Underwriters Laboratories, Inc. All 24 ladders in our inventory completed the testing without a single failure.

## **Fire Extinguishers**

Fire extinguishers must undergo annual servicing to insure their operation. AAA Fire Safety, Inc performs this annual service for us. All extinguishers in each fire station as well as the ones carried on our response apparatus were serviced as required.

## **EMS**

- Recertified 3 Shift CBT Instructors.
- Maintained quantities of medical supplies for the anticipated pandemic flu.
- \$13,500 was spent on disposable supplies in 2008.
- The annual service of 5 LifePak 12 Defibrillation Units owned by the department was completed. Each received preventative maintenance, service as required and software upgrades.
- Updated and replaced numerous EMS equipment including medical kits, suction units, etc.
- The department continued the R.O.C. program in conjunction with King County EMS.

## **Fire Hose**

- **Testing**

The WAC 296-305, requires that all suppression fire hose be service tested on an annual basis. To meet this requirement our hose is tested to meet the National Fire Protection Association (NFPA) Standard 1962, Chapter 6 and Appendix A. Suppression hose owned by the SeaTac Fire Department is service tested by Pacific Northwest Hydro.

Pacific Northwest Hydro performed the suppression hose service testing between June 12 and June 13, 2008. All testing was conducted at the SeaTac Maintenance facility.

20,325 feet of hose was tested. 36 sections failed, of which five can be repaired and the rest will be destroyed or surplus. Another 13 sections of hose were removed due to age. Hose over 15 years old is taken out of service.

- **Hose Purchased**

This year we purchased:

10 100' sections of 5" supply hose

3 25' sections of 5" supply hose

4 50' sections of 1 3/4" attack hose

6 50' sections of 1" attack hose

- **Hose Repairs**

Hose that fails the annual service test or is identified in the field as having some failing is inspected to see if it can be repaired. Leaky couplings and damage close to the couplings can be repaired. The cost of repairing a section of hose is 1/8 of the cost of a new section of hose. This year we repaired five sections of hose. We utilize American Fire Protection to affect our repairs.

- **Double Jacket Polyester Fire Hose**

For the last twenty years the department has used rubber jacket 5" supply hose. Over the last several years concerns were raised on the ability of our rubber jacket hose to withstand operating pressures above 200 psi. In 2007 STFD began replacing our rubber supply hose with 5" polyester hose. The polyester hose can withstand operating pressures to 300 psi and weighs 20 lbs. less per 100' section. Due to the high cost involved, a five year plan was adopted to replace our rubber 5" hose. In 2008 our newest engine was outfitted with polyester hose. Each year we hope to switch over one engine to the new hose.

## **Technical Rescue**

In partnership with Sound Transit and the Port of Seattle Fire Department, we trained 14 of our personnel to be Rope Rescue Technicians. This will increase our ability to effectively respond on a wide range of emergency calls.

Water rescue training was conducted for all crews. This was aimed at the Awareness Level, (State and National standards) that cover what to do prior to the arrival of qualified rescue swimmers and dive teams. There was an emphasis on how to best work with our local dive teams, which was later used during mutual aid responses.

Our department continues to participate in the Zone 3, (South King County), Technical Rescue Committee. As part of that committee we co-hosted an annual confined space rescue drill open to all of the departments in our mutual-aid group. We also attended drills for rope and trench rescue.



Recent drills have confirmed a need for us to standardize the equipment that we carry. This will improve our ability to function with our neighboring departments.

We continued to upgrade and replace our cache of Technical Rescue equipment, ropes, hardware, etc. Most significant was the upgrading of our supplied air breathing apparatus (SABA) used in Confined Space Rescues to meet national standards for Chemical, Biological, Radiological and Nuclear (CBRN) events. In addition, many of our safety and reliability concerns with the previous model were addressed with this latest generation.

---

## **C Shift**

---

### **Vehicles:**

Fleet maintenance includes the purchasing of parts and operating supplies, routine maintenance, breakdowns, apparatus upgrades, and collision damage.

The “Big Change” for vehicle maintenance in 2008 was the Inter-Local Agreement (ILA) for Fire Apparatus Service with the Kent Maintenance Shop. It provides for the labor costs of the required preventative maintenance and repair of apparatus. A contract amount of \$80,000 per year provides service for our fire engines, aid cars, rescue truck, command units and explorer van. In addition to the labor, we had budgeted an additional \$27,000 for the parts, fluids and supplies needed. The program started in May of 2008 and was prorated accordingly.

### **Supplies:**

We continue to purchase normal supply items such as oil, batteries, bulbs, anti-freeze, snow chains and tires. Our required supply stock has decreased with the ILA.

### **Staff Vehicles:**

Our staff cars received normal services in 2008. These vehicles are not part of the ILA and we continue to use a variety of vendors to provide these services.

### **New Vehicles:**

We replaced three fire department vehicles in 2008 as follows:

- Apparatus 101, a 1987 Pierce Lance Fire Engine, was replaced with 2008 Pierce Quantum Engine.

- Apparatus 114, a 1982/1977 Ford/Hackney Support Truck, was replaced with 2008 International/SVI Rescue Truck complete with on-board generator and mobile air compressor. These allow the apparatus to provide lighting, breathing air, and rehab at emergency scenes. This apparatus also carries our technical rescue equipment and has already been on several responses.
- Apparatus 14, a 1992 Ford ¾ Ton Pickup, was replaced with 2008 Ford ¾ Ton Pickup. This includes an in-bed refueling system that allows the truck to act as a mobile fuel depot, refuel apparatus operating at extended emergency scenes, and fill emergency generators at the city facilities.

### **Notable Repairs:**

Most notable was the exhaustive initial service that each of our engines received. The apparatus had a large backlog of issues addressed and upgrades made to improve the condition and serviceability of the apparatus. Not every item was completed on the first service, but the time spent and attention to detail reinforced the benefit of the decision to go with the ILA.

- Apparatus 112 had its annual UL testing for the aerial, rear spring work, PTO pressure switch and new shoreline wiring.
- Apparatus 115 received new tires, new batteries, rear springs, front spring hangers and weld repairs to flip up steps.
- Apparatus 117 had just minor repair work to the flip up steps, light bar, generator voltage adjustments and exhaust work.
- Apparatus 118 had a block heater replaced, auto eject replaced, several flip up step leaks repaired.
- Apparatus 101 had a major repair to the engine as it would not idle at a stop.
- Apparatus 110, 116 and 119 received normal services.
- Apparatus 19 and 22 our command units received normal services.
- Apparatus 120 and 121 received acceptance inspections and fluid changes.

## **Self Contained Breathing Apparatus (SCBA)**

- The department maintained and serviced:
  - Forty-Two MSA Firehawk SCBA's
  - Seven Rapid Intervention Team (RIT) Kits
    - These are located on all Engine and both Battalion Chief vehicles, to be used in the event of a Firefighter rescue.
  - Five Supplied Air Breathing Apparatus (SABA)
    - These are used for confined space emergencies
- All SCBA's were check in accordance with a fitting recall, requiring the replacement of multiple URC fittings.
- Approximately ten of the SCBA's received replacement harnesses due to the extensive wear and degradation of the harness assemblies.
- Ten SCBA cylinders were hydrostatically tested for continued service.
- SCBA's, RIT Kits and SABA's received annual flow tests to verify proper operation.
- Three personnel received training in the service and repair procedures of the SCBA's.

## **Compressors and Cascade Systems**

In 2008 the SCBA compressors and cascade systems received Quarterly Air Sample testing as required by the WAC. The air quality was tested to NFPA standards resulting in all systems passing well within standards. Additionally, both compressors received semi-annual preventative maintenance. These maintenance checks encompass a complete inspection of the compressors of general operation, along with oil and filter changes. Six SCBA cascade cylinders were hydro tested and placed on the new Rescue Truck as part of the mobile SCBA fill system.

## **Radios and Pagers**

- Purchased 10 portable radios for the Public Works Department and the ECC, for disaster operations.
- 10 new station pagers were purchased to replace aging and failing pagers.
- Began replacing all the department's personal pagers due to frequency changes.
- Researched and purchased intercom system for the new engine.
- Maintained supplies and parts for the dept's mobile and portable radios.

- Routine maintenance and repairs of portables and mobile radios, as well as purchasing of routine maintenance supplies.

### **Physical Fitness Equipment**

The fire department provides exercise facilities within each of its three fire stations as part of its physical fitness program. The exercise facilities contain equipment for both strength training and cardio endurance training.

Quarterly preventive maintenance is performed by an outside vendor, Integrated Fitness Services. The maintenance includes a Safety/Operations test, cleaning/lubrication of the equipment, adjustments and calibration. Repairs are also performed by Integrated Fitness Services as needed.

In 2008, the fire department received some donated exercise equipment from “24 Hour Fitness” when one of their gyms was relocating to a new facility. The items that were donated included three treadmills, two life cycles, two sit up benches, a leg press, a front lat pull down, a shoulder press, a pull down, an incline press, a shoulder shrug, a four stage gym and an adjustable bench. These items are currently being stored at the Public Works Maintenance Facility until the new Station 46 is completed.

---

### **SeaTac Chaplaincy**

---

The Chaplaincy program consists of 5 local Chaplains who were able to assist the SeaTac community in a variety of ways in 2008. They responded to eight calls in 2008. Their bimonthly training provided an opportunity to learn and encourage each other. They also attended “Compassion Fatigue” course. The Chaplains enjoyed participating in the Easter Egg Hunt, the International Parade and Santa Run. The Chaplains appreciate the opportunity to serve the SeaTac community. Bimonthly socials were hosted for the personnel. One Chaplain has moved out of state.

---

## SeaTac STARS

---

The STARS (SeaTac Amateur Radio System) program is a group of volunteer amateur radio operators designed to assist the city with communications during emergencies. This group was originally established in the early 1990's and has disbanded due to membership issues. With the resurgence of this program, we currently have 15 active STARS members, and are branching out into the Highline area. They operate weekly "net" as well as regular business meetings. They have improved our infrastructure by adding two repeaters at Station 46. This provides the ability to talk with handheld amateur radios from anywhere in the city. These members have been eager to learn and most have completed the ICS 100 and 700 courses, which are required to operating within the ECC. This has proven to be an ambitious group with a common interest.

---

## Fire Explorers

---

The Explorers participated in 44 drills, 24 responses and 73 miscellaneous activities. Notable events include:

- January- Flag ceremony for the first Council Meeting of the year.
- January 5<sup>th</sup> – Continued assistance with Chehalis flood recovery.
- January 15<sup>th</sup> – Commercial structure fire rehab standby in Kent.
- February 9<sup>th</sup> - Continued assistance with Chehalis flood recovery.
- March 25<sup>th</sup> - Commercial structure fire rehab standby in Tukwila.
- April 26<sup>th</sup> – Explorer Muster '08.
- May 9<sup>th</sup> – Amateur Radio Class.
- May 31<sup>st</sup> – Commercial structure fire rehab standby in SeaTac.
- June 9<sup>th</sup> – Two alarm structure fire rehab standby in Skyway.
- June 29<sup>th</sup> – Commercial structure fire rehab standby in Burien.
- June 27, 28, 29 – International Festival.
- July 4<sup>th</sup> – Angle Lake Manor parade.
- July 9<sup>th</sup> - Commercial structure fire rehab standby in Auburn.
- July 26<sup>th</sup> – Hazardous Material call rehab standby in Kent.
- July 30<sup>th</sup> – Port of Seattle plane crash drill.
- August 5<sup>th</sup> – National Night Out.
- August 7<sup>th</sup> – Logistical support for the funeral of Chief Dan Packer.
- September 29<sup>th</sup> - Commercial structure fire rehab standby in Tukwila.
- October 4<sup>th</sup> – Explorer fall challenge.
- October 18<sup>th</sup> - Residential structure fire rehab standby in SeaTac.
- December 3<sup>rd</sup> - Commercial structure fire rehab standby in SeaTac.
- December 20<sup>th</sup> – Santa Runs

- December 21<sup>st</sup> - Commercial structure fire rehab standby in Skyway.
- December 30<sup>th</sup> - Commercial structure fire rehab standby in Tukwila.

Throughout the year provided rehab support to activities around the zone, including RIT drills, CERT drills, MCI drills, Hazardous Materials drills, Trench Rescue drills, Confined Space Rescue drills, Zone 3 Suppression drills, Zone 3 Rescue Team drills, Active Shooter drill, Live Fire training,

## **SECTION FOURTEEN: FIRE CHIEF'S OFFICE**

The Fire Chief's Office consists of the Fire Chief, Administrative Assistant-Fire and the Receptionist. The Administrative Assistant III is also assigned to the Fire Chief for data collection. This office manages all payroll, budgeting, accounts receivable and payable, inventory tracking, blanket purchase orders, contracts for the department, grant funding preparation, and all fiscal matters for the department. In addition, the Fire Chief is responsible for direct management of the Fire and Life Safety Division, Training Division and continues to be the City's Fire Marshal and Emergency Management Director

During 2008, the department applied for several grants. The department received a grant from the EMS Trauma council. The Department also applied for a SAFER Grant from FEMA for staffing a ladder truck. We were successful with that grant. Unfortunately, the City elected not to accept the SAFER grant funding which would have paid a portion of the ladder truck staffing. We were not successful in acquiring a ladder truck grant. The Department continues to pursue accreditation. Battalion Chief Tom Betenson is responsible for this project and it is progressing.

The Fire Chief and staff continued to work with ESCi assisting them in completing their study on Fire Services and a joint venture with Tukwila. At the conclusion ESCi determined there were benefits in doing joint ventures but not a consolidation. Both departments currently have joint training and automatic aid for responses. ESCi made several recommendations to improve communication between the management and staff that were implemented.

### **Emergency Management**

The City continued with the ILA with the Cities of Burien, Des Moines and Normandy Park in the use of an Emergency Preparedness Coordinator to assist the four cities in better preparing for a disaster. The City of SeaTac's contribution is \$33,000 annually.

Under guidance of the Fire Chief City Departments revised and updated their Standard Operating Procedures and reviewed their call out lists for personnel.

The city participated in several exercises to test their ability to respond to emergencies. These included Sound shake 08 and several table tops.

The department completed set up of the alternate ECC at the Public Works Maintenance facility in case the primary ECC at Fire Station 45 is not able to be used. The alternate ECC is equipped identically to the ECC at Fire Station 45.

The Department staff helped design the new ECC at Fire station 46. When finished it will be state of the art and bigger than our existing one. We are very excited about this new addition for our preparedness.

The City held three Disaster Preparedness Committee meetings in 2008. This committee comprised of Councilmembers and key City staff addresses issues with the City's Emergency Plan and guide the Emergency Management Director in emergency management planning and response.

City employees continue to attend the course on Earthquake Preparedness and Response at the National Emergency Training Center in Emmitsburg Maryland.



## **SECTION FIFTEEN: IMPROVEMENT STRATEGIES**

There are several areas where the department should improve its customer service.

1. Response time. In reviewing the data it is clear the travel time is very good in most cases and reaction time needs significant improvement. The department management team is reviewing the reaction times to identify how to improve those times. We are discussing different strategies to improve. Reaction times have significantly improved over the 2006 data; a very positive sign. Longer than acceptable travel times usually occur during concurrent calls for service when another unit from another station is needed. Additionally, a response to the station response area fringes such as 220<sup>th</sup> and Military and 128<sup>th</sup> and Des Moines Memorial Dr creates longer travel times for companies. Relocating Fire Station 47 further north may help reduce response time to the area of 128<sup>th</sup> and Des Moines Memorial Dr.
2. Continue to improve our GIS mapping program to include more information for mutual aid responses to improve response times to our neighbors.
3. Replacement Fire Station 46 will start construction in 2008 and estimated completion is mid 2009. Replacement for Fire Station 45 will begin architectural design in 2009.
4. Reliability of Fire Station 45 continues to become a problem. The reliability is 72% without a staffed Aid Car. Fire Station 47's reliability is also a problem. In order to improve reliability, Tukwila will be required to improve their ability to respond to their own requests for service. The City should consider staffing a full time Aid Car at Station 45 to improve reliability.
5. Valley Communications will continue on the purchase of a new Computer Aided Dispatch (CAD). The implementation date will most likely occur in the January of 2009. This has significant potential to change our management tools for reporting of incidents. Chief Meyer will continue on the steering committee for this project. This new CAD system will have better data collection and it is anticipated that the call processing time will increase and turnout times will improve with better technology.
6. For Emergency Management, the Department will continue to be tasked with full control of the Emergency Management Program. During 2009 the City will be required to submit its EOP to the State of Washington for review and approval.