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**FIRE STATION DEPLOYMENT ANALYSIS
AND MASTER PLAN IMPLEMENTATION
FOR THE**

**NAPA COUNTY
FIRE DEPARTMENT**

ERNIE LOVELESS, FIRE CHIEF



***“Working together for your safety:
Proudly serving our community with
courtesy, integrity and compassion”***



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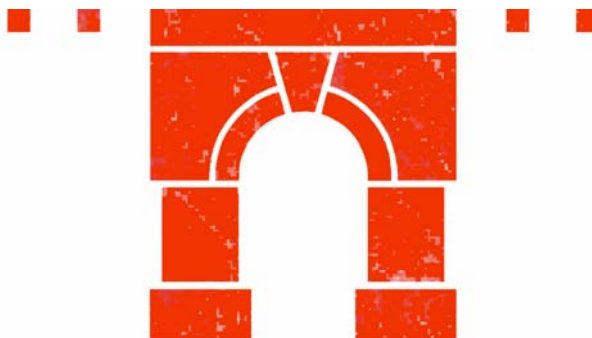
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Draft Report

VOLUME 3 OF 3 – STATS APPENDIX

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**THIS REPORT AND ANALYSIS WAS
PERFORMED BY:**



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NAPA COUNTY FIRE DEPARTMENT

CITYGATE ASSOCIATES RESPONSE STATISTICS ANALYSIS

Dataset Identification

The Napa County Fire Department has furnished CAD data for 25,853 apparatus responses dated for the 2-calendar years of 2005 and 2006. Since a new NFIRS 5 incident reporting system was just placed in service, no historical NFIRS 5 data was available for analysis.

Of the 25,853 apparatus responses submitted 11,836 (45.78%) actually reached the incident scene. Of those 4,963 apparatus were first on the scene. This “first apparatus on scene” calculation was used to identify distinct incidents.

Data Quality

The Napa County Fire Department only recently began using the NFIRS 5 incident reporting standard.

Dataset strengths include the following:

1. Use of seconds in all time fields.

Dataset weaknesses include the following:

1. No historical NFIRS 5 data available
2. No use of standard NFIRS 5 incident type coding
3. Distinct incidents needed to be reconstructed from apparatus responses
4. Many valuable incident data fields not available from CAD data only
5. CAD data contained many non Napa County apparatus responses.

Data Processing

Two years of apparatus response data from CAD was imported for analysis. The first arriving company was calculated and incidents were reconstructed from first arriving company data.

Demand for Service

Over the 24-month data period the Napa County Fire Department responded to an average of 6.8 incidents per day. There were 4.8 EMS incidents per day and 6.14 fire incidents per week. For the 24-month time period 16.72% of incident responses were to the CAD-defined fire category, 70.88% to medicals and 12.40% were to other types of incidents.

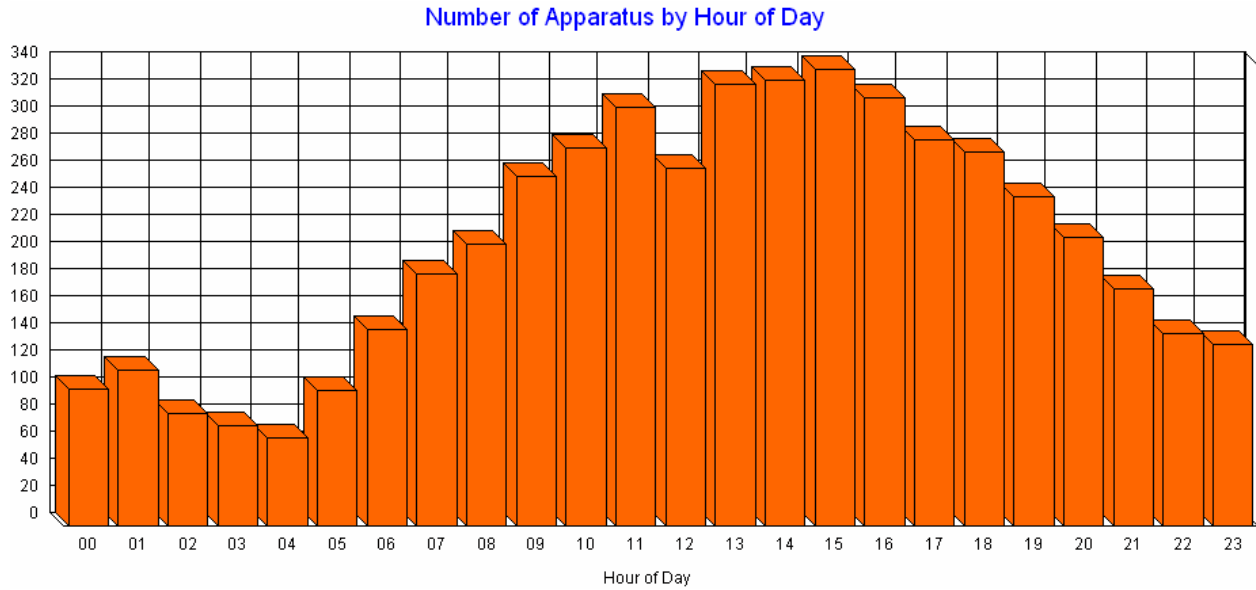
The two years of available data break down as follows:

	2005	2006	Total
Incidents	2,416	2,547	4,963
Fire Category	430	400	830
Medicals	1,699	1,819	3,518
Others	287	328	615

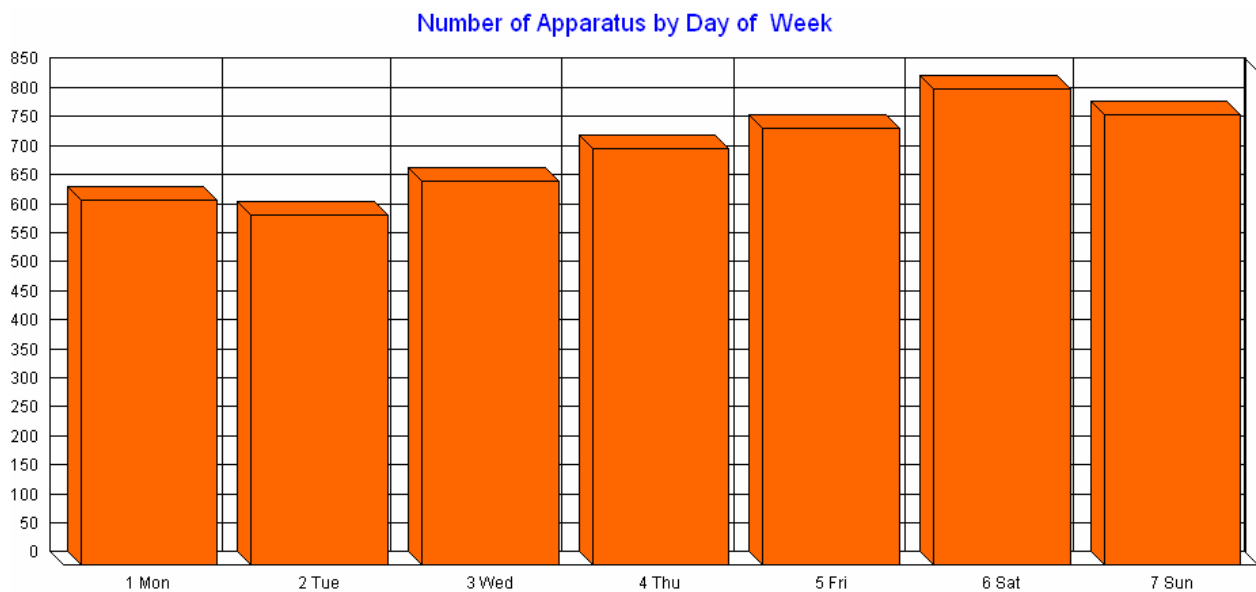
The 2005 to 2006 trends show a strong increase in medicals and a slight decrease in the fire category.

Chronological Distributions

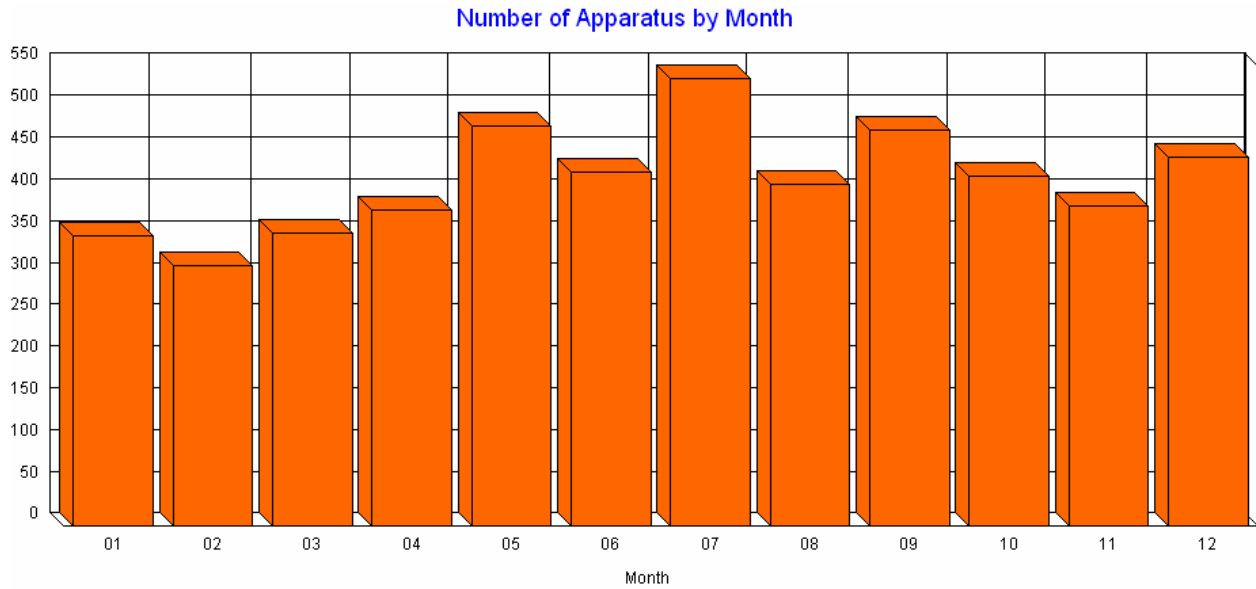
The following graph illustrates the number of incidents by hour of the day, day of week and month of year for the 2 years of available data. Notice a minimal number of incidents in the early morning. After 4:00am the number of incidents grows. Incidents increase through the late morning remaining fairly consistent until a rapid drop-off beginning in the evening. This response graph is a fairly typical representation of hourly fire department activity:



The number of incidents rises toward the weekend with a minimum of incident activity on Tuesday. This trend is illustrated in the following graph:



The following graph illustrates the number of incidents by month. With the exception of a spike in July the monthly incident counts remain fairly consistent with the first quarter of the year having less incident activity:



Below is a list of the top CAD-defined incident types for the 24-month period.

CAD Incident Type	Count
MEDICAL	2,441
MED, TRAFFIC COLLISION	1,029
FIRE, FALSE ALARM	230
PA, PERSON	184
FIRE, WILDLAND	141
FIRE, SMOKE CHECK	101
FIRE, COMMERCIAL ALARM	100
HAZ, ELECTRICAL	64
FIRE, RESIDENTIAL	61
FIRE, VEH PASSENGER	50
HAZ, FIRE MENACE STANDBY	50
PA, OTHER	48
FIRE, RESIDENTIAL ALARM	46
FIRE, DEBRIS	44
HAZ, GAS	32
OTH, MISCELLANEOUS	27
PA, AGENCY	27
FIRE, COMMERCIAL	24
PA, FLOODING	24
HAZMAT	22
HAZ, ASSIST	20
OTH, ASSIST	17

CAD Incident Type	Count
MED, MEDICAL ASSIST	16
OTH, REFERRAL	16
PA, INVESTIGATION	16
MED, WITH EXTRACATION	14
FIRE, OTHER	13
MED, VIOLENCE INVOLVED	13
OTH, FLIGHT FOLLOWING	8
FIRE, ASSIST	7
FIRE, VEH COMMERCIAL	7
PA, SEARCHandRESCUE	7
OTH, OUT OF UNIT	5
PA, ARSON BOMB	5
HAZ, AIRCRAFT	3
HAZARD, AIRCRAFT. ALERT 2	3
MED, MEDICAL TRANSPORT	3
OTH, COVER	3
FIRE, AIRCRAFT	2
FIRE, MULTI FAMILY	2
MEDICAL - RESCUE	2
OTH, TRANSFER	2
OTH, VEG MGMT	2
FIRE, IMPROVEMENT	1
FIRE, MULTI FAMILY ALARM	1
HAZ, BOMB THREAT	1
HAZARD, AIRCRAFT. ALERT 1	1
OTH, SERVICES	1
OTH, STAFFING PATTERN	1

The CAD data also provided information about the distribution of Incidents by City.

City of Incident	Count
YOUNTVILLE	768
SODA CANYO	594
CAPELL VAL	462
CALISTOGA	432
NAPA	422
GREENWOOD	421
ST HELENA	409
ANGWIN	328
POPE VALLE	281
RUTHERFORD	277
EDGERLY IS	176
DEER PARK	157
DRY CREEK	126
GORDON VAL	63

City of Incident	Count
AMERICAN C	32
CLEARLAKE	2
MIDDLETOWN	2
COBB	1
COLUSA COU	1
CORDELIA	1
LOWER LAKE	1
SANTA ROSA	1
THE SEA RA	1
UPPER LAKE	1

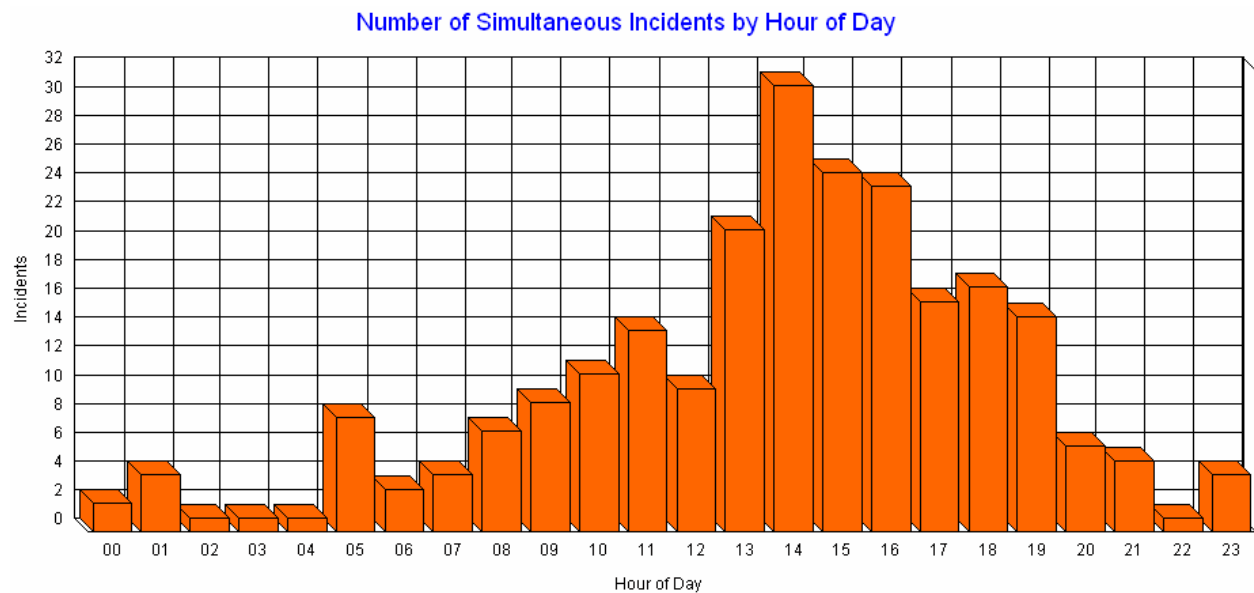
Simultaneous Incident Activity

Obviously incidents that occur at the same time tax fire department resources more than those occurring when there is no other fire department response activity. Examining incident data for the 24-month period shows 25.38% of incidents occurred when the fire department was already engaged in other response activity.

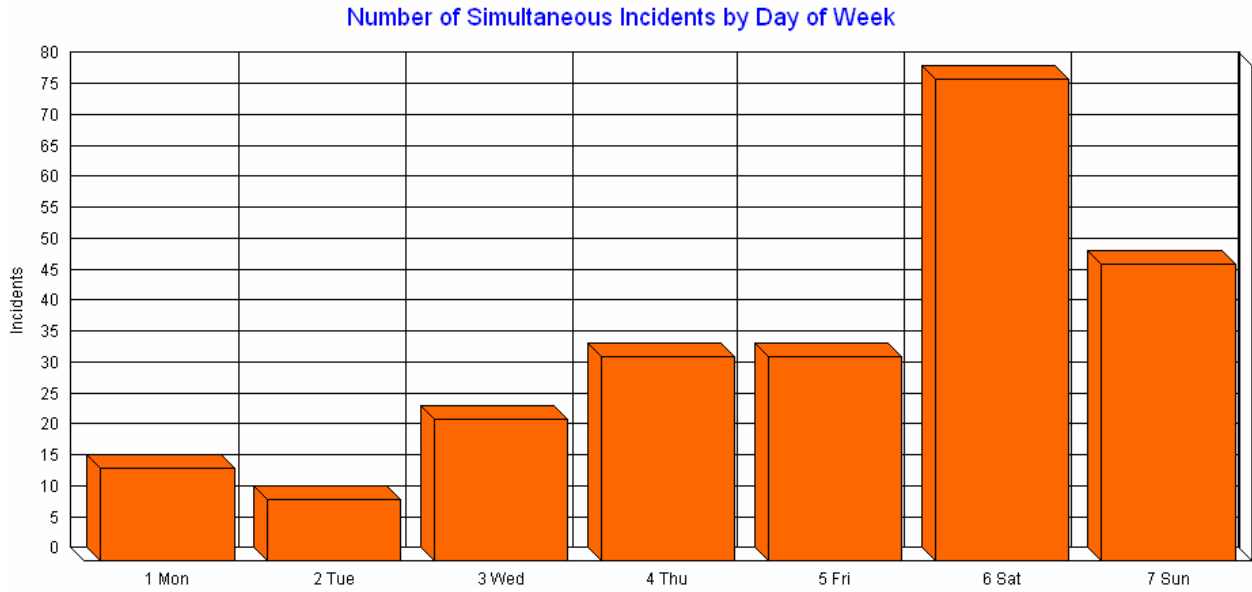
Here is the breakdown by number of incidents:

At least 2 Incidents occurring at the same time	25.38%
At least 3 Incidents occurring at the same time	4.83%
At least 4 Incidents occurring at the same time	1.12%

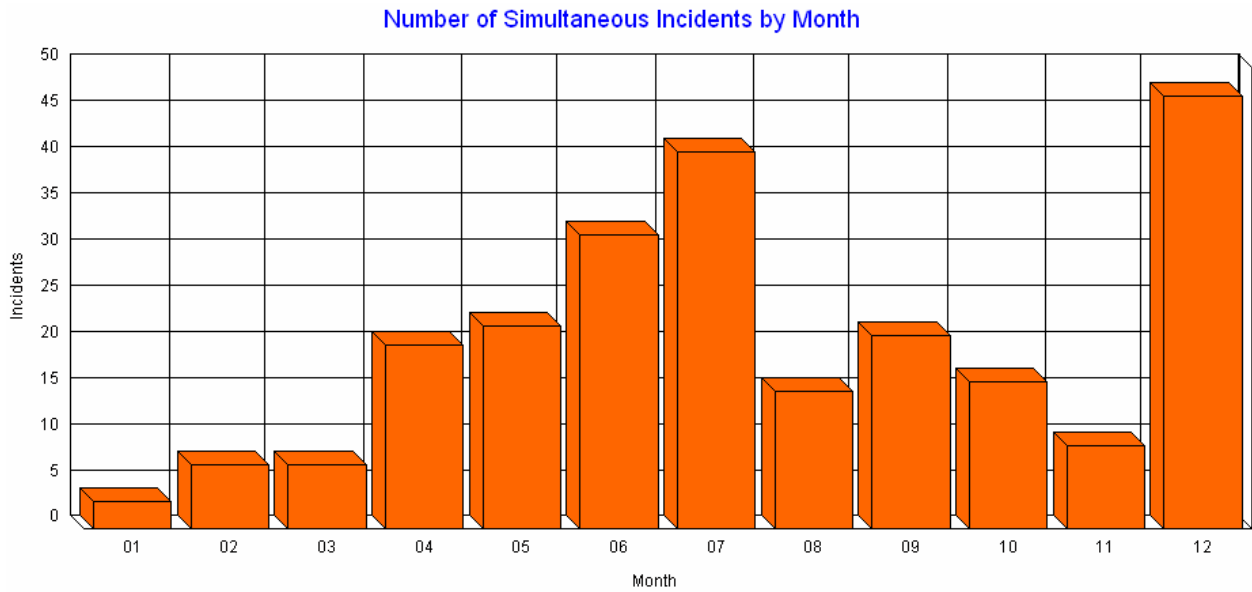
The graph below illustrates the hourly distribution of 3 or more (4.83%) simultaneous incidents. This graph very roughly follows the distribution frequency of incidents in general. The share of simultaneous incidents remains roughly constant with incident activity during the 24-hour day:



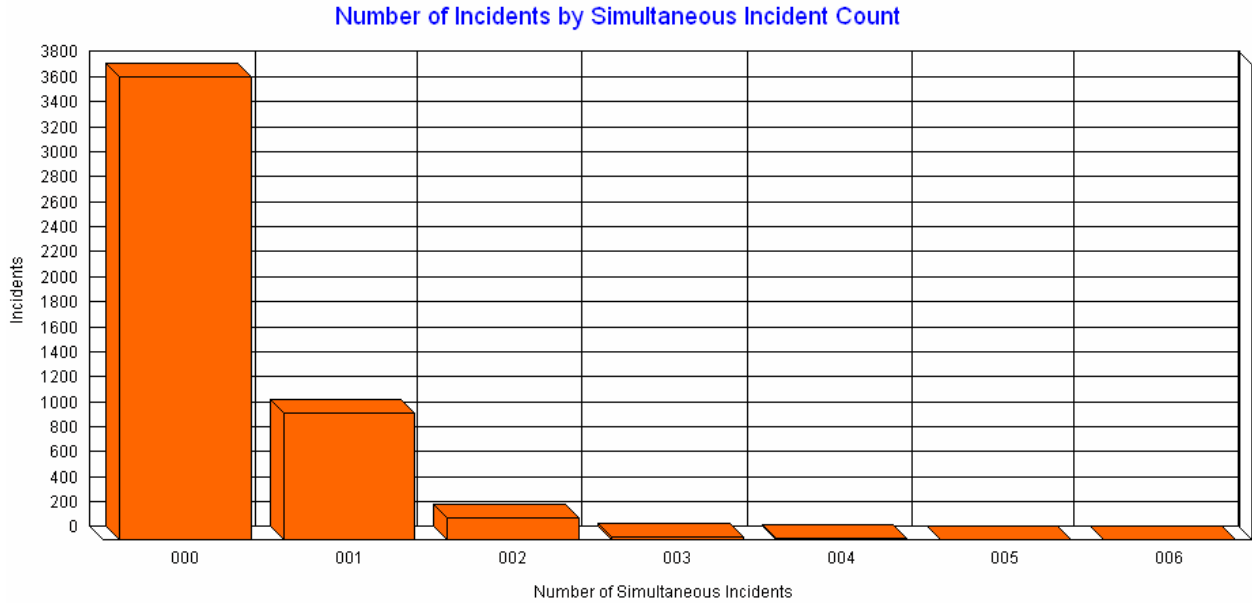
Saturday is the most likely day for simultaneous incident activity:



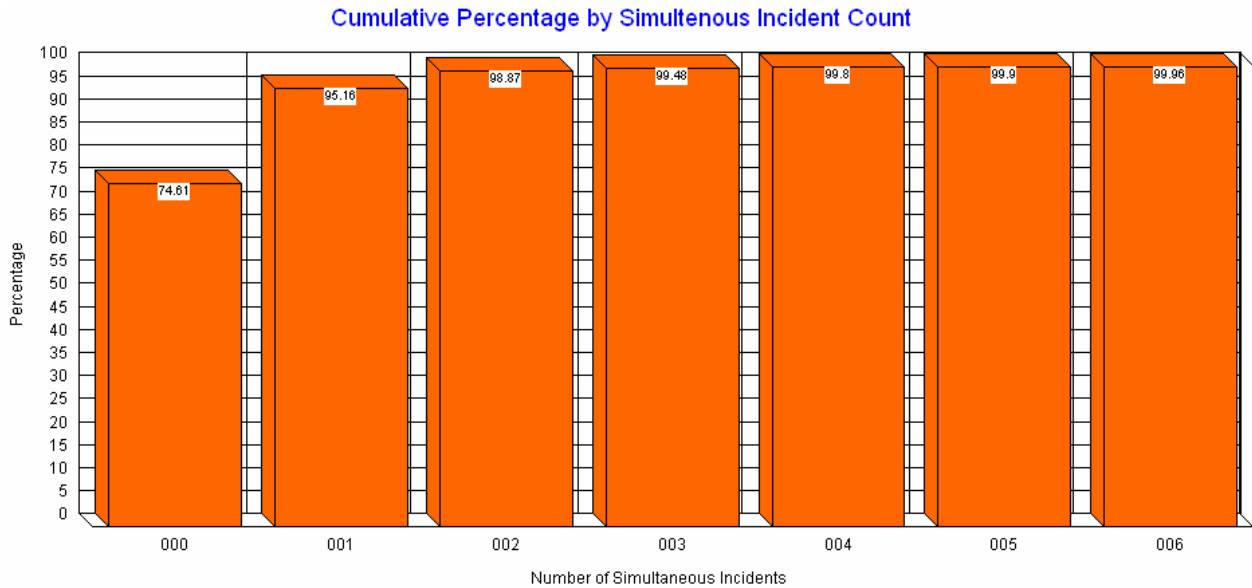
Monthly simultaneous activity shows spikes in December and July:



Let us shift gears to measure how simultaneous incidents affect performance. The following chart illustrates the number of incidents by simultaneous count:



This next graph is a cumulative percentage graph. This graph illustrates 95.16% of all incidents occur when there are no other incidents or one other incident underway. This illustrates simultaneous incidents have a very limited affect on overall operations:



Tactical Operations

This section moves from the analysis of broad trends over the 24-month dataset into a focus on company operations during 2006, the last 12 months of available data.

Normally this section would focus on an analysis of NFIRS 5 data that has been merged with CAD data. Unfortunately, Napa County's experience with NFIRS 5 is new and no historical NFIRS 5 data is available for analysis.

Despite this limitation some tactical calculations are possible.

Geographic Distributions

This section compares response times and incident duration minutes by geographic sector. The responses times below are for the first unit arriving on the scene of the incident in the sector. Only sectors with 10 or more incidents are listed:

Sector	Incidents	Min RT	Max RT	Avg RT
408_H6	154	.18	19.83	4.75
408_H5	114	.27	27.92	5.33
408_J5	64	.20	14.00	4.74
490_A2	62	.28	29.72	5.29
306/306/306/306	55	.20	34.63	12.61
449_D3	55	.43	19.43	5.32
329/22_T09N_R04	51	.30	31.08	12.18
430_A7	46	.92	30.40	5.41
347_B6	40	.25	58.62	15.28
347_E7	40	2.85	42.97	9.67
329	34	.57	25.48	12.37
367_H7	32	1.70	39.47	7.30
408_H4	32	1.95	11.42	5.53
469_J6	31	.17	16.13	5.77
408_H6/01_T06N	31	.27	23.02	5.75
330/26_T09N_R04	30	2.18	26.53	13.35
347_J2	30	.25	25.35	5.86
347_H2	30	.32	28.33	5.78
408_H5/01_T06N_R	29	2.02	22.12	5.65
469_H1	29	.28	8.55	3.67
450_B2	28	4.18	19.27	7.69
347_J3	28	.50	9.18	4.18
408_H5/408_H5	27	.30	9.05	4.47
450_A6	26	4.47	18.95	9.64
326_A4	26	.90	45.35	9.23
388_B4	26	2.23	14.77	7.21
429_J7	26	2.82	19.50	5.70
408_J7	26	.22	6.83	2.58
489_H2	25	1.38	17.05	5.97
469_H1/469_H1/46	25	.57	16.18	3.92
449_H2	24	.35	43.28	8.05
449_J1	24	2.32	29.27	6.80

Sector	Incidents	Min RT	Max RT	Avg RT
430_B6	24	2.02	13.53	6.50
429_A3	24	.55	17.50	6.32
429_J6/429_J6	24	2.68	9.27	5.40
490_A4	23	3.15	9.08	5.77
470_A1	22	1.50	15.10	5.76
306	21	.65	19.22	11.93
430_A4	21	3.40	15.50	7.51
347_G4	20	5.40	11.28	7.92
370_F3/20_T08N_	20	3.35	18.35	7.16
346_E3	20	3.22	18.07	6.85
347_G5/07_T08N_	20	.23	11.90	3.17
367_E2	19	2.93	10.93	7.35
450_B1	19	2.47	8.17	5.17
329/329/329/329	18	.80	17.98	11.04
345_J1	18	.47	47.67	10.10
409_A2	18	4.47	18.83	9.12
367_C2	18	.22	17.30	6.18
430_G2	17	.40	33.02	13.77
430_A6	17	2.87	16.62	6.83
450_A2	17	3.73	20.02	6.69
347_G5	17	.22	14.92	6.40
348_A3/05_T08N_	17	3.03	8.45	5.73
408_H6/01_T06N_R	17	2.15	25.08	5.72
350	16	4.47	15.78	8.95
367_F3	16	4.33	14.00	8.59
430_A5	16	4.50	11.92	7.96
350/07_T08N_R03	16	1.07	15.95	7.03
429_J6/23_T06N_	16	3.63	8.78	5.53
429_J6	16	1.97	8.98	4.92
450_D6	15	8.60	21.53	13.41
390_H7/21_T07N_	15	2.88	19.40	10.67
390_H6	15	2.55	44.33	10.01
387_H1	15	3.42	11.68	8.84
326_A6	15	3.92	9.27	6.83
490_D3/06_T04N_	15	2.20	12.58	5.45
468_H4	14	5.20	15.93	12.02
347_A2	14	.80	20.02	8.22
347_F7	14	.88	16.67	8.19
430_C6	14	1.43	20.58	7.13
490_A1	14	2.48	11.32	6.44
347_A6/15_T08N_	14	.17	29.67	4.58
371_G7/31_T08N_/	13	2.17	32.77	16.09
410_G5	13	8.77	28.33	15.55
469_A4	13	8.30	42.67	13.61
368_D7	13	3.82	31.70	10.76

Sector	Incidents	Min RT	Max RT	Avg RT
450_C6	13	7.05	14.95	9.77
429_G5	13	5.07	15.10	8.59
388_C6	13	3.50	13.78	8.44
367_F1	13	2.40	12.92	7.76
367_B1	13	1.45	20.27	7.28
489_J2	13	.25	17.83	7.10
429_G6	13	4.83	8.88	7.03
325_J7	13	1.07	14.75	6.49
388_D7	13	.45	9.87	6.41
408_G6/408_G6/40	13	1.22	18.82	5.97
287	12	7.57	19.63	14.50
390_H7	12	4.42	28.35	12.05
450_B6	12	6.50	31.15	11.37
387_J1	12	.35	19.55	10.26
429_E6	12	4.10	17.38	9.35
370_F3	12	.53	30.80	9.27
430_B5	12	4.12	23.32	8.43
325_H5	12	5.87	11.87	7.92
429_G4	12	4.37	10.07	7.51
388_D3	12	3.43	11.70	6.97
347_J3/347_J3	12	2.55	24.02	6.93
348_A4	12	.22	22.78	6.28
347_A5	12	.47	7.33	3.61
410_F4	11	9.75	34.00	18.19
428_E7	11	9.22	25.87	17.88
391_D6	11	2.60	27.87	15.46
449_B7	11	9.67	14.72	12.62
510_E3	11	6.13	17.53	9.40
408_G5	11	1.73	23.98	8.77
429_B5	11	3.52	12.02	7.90
347_J1	11	1.55	20.33	6.81
347_B5	11	2.70	10.93	6.47
388_B4/16_T07N_	11	.27	14.13	6.28
428_J1	11	2.88	10.40	6.07
469_H3	11	1.12	8.28	4.94
387_J2	11	1.13	8.75	4.67
408_H6/408_H6	11	.48	6.95	4.26
489_C2	10	6.32	15.45	11.73
368_C6/368_C6	10	6.98	30.35	11.54
431_C6	10	.75	15.17	9.96
450_A3	10	5.30	17.60	9.43
370_H6	10	2.08	20.62	8.48
367_E1	10	3.95	14.43	8.45
450_B7	10	5.62	9.90	8.13
346_H4	10	.17	15.48	7.21

Sector	Incidents	Min RT	Max RT	Avg RT
490_A2/01_T04N_	10	.45	7.98	3.66
408_J6/01_T06N_	10	.20	5.97	1.42

The durations below are for all apparatus arriving on the scene of incidents in the sector. Only sectors with 10 or more incidents are listed.

Sector	Count	Min Dur	Max Dur	Avg Dur	Total Dur
408_H6	170	4.73	362.65	61.93	10,528.89
408_H5	105	10.53	164.87	34.46	3,617.92
306/306/306/306	72	9.08	162.73	65.40	4,709.13
490_A2	71	6.17	89.03	33.86	2,404.21
388_B4	63	4.67	138.92	55.48	3,495.46
408_J5	63	3.55	180.75	43.71	2,753.72
329/22_T09N_R04	61	5.35	177.50	59.43	3,625.02
430_A7	59	11.22	84.27	31.31	1,847.37
430_B3	59	4.93	1,426.65	548.96	32,388.76
347_H2	58	15.02	152.82	43.43	2,519.04
408_G5	58	10.43	939.98	315.38	18,292.00
449_D3	58	6.58	85.40	26.92	1,561.64
347_J3	55	4.45	142.85	54.89	3,018.82
429_A3	53	12.77	1,069.87	266.35	14,116.65
347_E7	50	10.33	89.42	33.92	1,696.16
347_G5	50	10.90	112.83	60.68	3,034.20
430_B6	46	20.05	325.08	116.91	5,377.79
371_G7/31_T08N_	43	40.07	110.60	80.33	3,454.37
429_J6/429_J6	40	17.75	79.23	27.25	1,090.03
469_J6	39	3.13	113.28	40.14	1,565.65
347_J2	38	1.75	163.17	47.68	1,811.80
327_J7	37	20.65	176.45	77.08	2,852.04
306	36	19.32	159.40	71.04	2,557.53
367_E2	36	16.20	82.78	38.56	1,388.16
390_H7	36	24.77	1,383.03	280.47	10,096.92
410_F4	36	49.38	1,246.78	239.42	8,618.96
451_E2	36	.33	1,167.48	666.79	24,004.32
469_H1	36	2.05	123.28	33.48	1,205.33
326_A4	35	8.33	154.35	52.69	1,844.04
346_E3	35	7.28	70.13	35.54	1,244.05
347_B6	35	2.55	742.38	232.27	8,129.47
329/329/329/329	34	7.92	189.85	51.52	1,751.75
408_J7	34	1.38	91.65	32.86	1,117.15
448_D1	34	15.53	721.67	190.67	6,482.94
330/26_T09N_R04	33	27.83	225.60	83.20	2,745.61
469_A4	33	24.70	378.95	121.44	4,007.66
411_B1/411_B1/41	31	78.63	1,124.28	419.93	13,017.93
408_H5/408_H5	30	9.22	67.60	24.38	731.31
450_A2	30	12.82	168.60	41.21	1,236.21

Sector	Count	Min Dur	Max Dur	Avg Dur	Total Dur
368_D7	29	21.80	525.52	206.08	5,976.23
371_J5/29_T08N_	29	61.05	1,435.55	257.26	7,460.40
410_G5	29	30.85	128.12	70.54	2,045.80
490_D3/06_T04N_	29	4.65	99.15	47.46	1,376.28
286/286/286/286	28	31.63	1,381.92	357.47	10,009.26
450_B2	28	14.92	86.42	35.36	989.97
347_J3/347_J3	27	7.40	68.23	38.78	1,046.93
348_A4	27	5.75	309.33	65.28	1,762.50
367_H7	27	9.88	101.03	31.25	843.85
388_G3	27	19.52	133.25	62.35	1,683.53
408_H4	27	17.17	52.48	29.06	1,784.52
469_B4	27	13.60	1,002.33	188.82	5,098.17
/23_T07N_R05W_M	26	249.83	600.00	457.55	11,896.25
287	26	28.65	804.15	167.43	4,353.29
371_G7	26	47.90	1,290.37	370.54	9,634.16
388_C6	26	18.33	253.15	60.63	1,576.46
390_H7/21_T07N_	26	38.65	262.00	130.48	3,392.38
408_H6/01_T06N_	26	8.82	71.13	30.23	786.10
430_A4	26	19.85	170.65	64.36	1,673.37
429_J7	25	12.40	83.67	36.31	907.83
329	24	34.07	122.45	62.58	1,501.95
350/07_T08N_R03	24	23.72	98.45	68.38	1,641.15
388	24	22.93	63.60	42.19	1,012.58
430_G2	24	27.63	150.92	73.98	1,775.54
490_A4	24	13.82	108.47	36.37	872.79
345_J1	23	11.52	144.70	51.70	1,189.21
347_G5/07_T08N_	23	8.37	65.92	27.34	628.84
348_A3/05_T08N_	23	3.40	58.53	38.05	875.26
409_A2	23	19.22	92.67	50.63	1,164.47
228/228/228/228	22	54.42	1,417.52	310.97	6,841.30
325_H5	22	21.08	75.40	47.43	1,043.49
367_B1	22	5.93	133.37	30.52	671.51
391_D6	22	43.18	371.07	105.44	2,319.70
346_H4	21	16.15	74.08	44.26	929.48
347_G2	21	16.85	73.83	39.49	829.23
347_G4	21	14.85	193.07	60.17	1,263.55
367_F1	21	15.83	87.63	44.66	937.91
367_F3	21	16.05	57.13	36.42	764.79
368_C6/368_C6	21	28.63	195.92	87.18	1,830.75
469_G4/26_T05N_	21	58.77	142.27	111.56	2,342.84
469_H1/469_H1/46	21	7.03	61.53	23.93	502.52
326_A5	20	32.37	218.32	97.74	1,954.77
367_C2	20	20.18	164.45	59.76	1,195.23
428_A1	20	53.97	1,107.02	339.53	6,790.69
430_A5	20	16.73	61.42	34.68	693.62

Sector	Count	Min Dur	Max Dur	Avg Dur	Total Dur
449_J1	20	8.42	54.62	27.19	543.73
347_A2	19	12.45	139.45	44.77	850.58
388_A2/388_A2	19	27.03	98.72	43.87	833.59
388_A3	19	30.93	810.78	224.31	4,261.91
390_H6	19	38.22	99.37	67.99	1,291.90
430_A6	19	13.25	48.30	26.37	500.97
450_A6	19	17.40	77.48	38.85	738.10
370_F3/20_T08N_	18	13.07	93.05	64.75	1,165.53
387_H1	18	18.30	110.05	41.82	752.83
449_B7	18	35.80	352.78	114.10	2,053.76
449_H2	18	6.30	98.73	32.56	586.01
450_B1	18	16.02	89.33	39.16	704.80
307_G5	17	27.00	183.63	77.87	1,323.72
327_J6	17	18.13	111.48	62.84	1,068.29
388_D3	17	12.17	47.18	30.28	514.70
388_H4	17	21.78	67.92	38.90	661.36
430_B5	17	23.65	56.47	32.28	548.72
468_H4	17	27.87	163.80	68.52	1,164.84
468_J2/468_J2	17	40.97	320.47	160.45	2,727.58
470_A1	17	6.42	95.20	31.00	527.02
510_E3	17	28.83	218.83	123.49	2,099.30
306/306	16	5.77	96.75	66.81	1,068.94
388_B4/16_T07N_	16	.83	103.08	49.29	788.57
388_J1	16	52.70	504.08	276.04	4,416.61
407_J4	16	24.27	119.82	57.23	915.72
429_G5	16	22.62	81.75	42.59	681.37
429_G6	16	14.57	80.53	39.14	626.19
429_J6/23_T06N_	16	19.63	84.67	32.73	523.68
489_H2	16	15.42	140.22	34.65	554.33
489_J4	16	16.40	91.18	44.29	708.59
347_F5	15	24.33	137.88	58.71	880.61
347_F7	15	6.35	137.20	56.65	849.75
367_F3/30_T08N_	15	20.85	98.60	39.60	593.96
388_C6/388_C6	15	13.88	97.13	41.01	615.12
429_E2	15	157.38	695.93	373.24	5,598.53
429_E6	15	11.12	113.05	50.93	763.89
429_J6	15	16.27	65.83	37.55	563.18
347_J1	14	23.05	84.88	49.16	688.21
388_D7	14	17.50	62.90	38.10	533.42
388_H5	14	31.30	72.65	50.52	707.21
430_F5/430_F5	14	52.07	249.50	147.70	2,067.79
468_H5	14	28.32	93.97	58.31	816.36
326_A6	13	21.47	39.48	29.79	387.22
346_F3	13	21.18	119.70	57.91	752.88
346_G4	13	35.20	112.10	80.51	1,046.69

Sector	Count	Min Dur	Max Dur	Avg Dur	Total Dur
346_J4	13	20.93	44.48	31.75	412.79
346_J5	13	3.25	174.13	60.95	792.40
388_A2	13	28.85	60.25	44.27	575.52
408_G6/408_G6/40	13	9.52	108.28	39.87	518.29
408_H6/408_H6	13	13.10	38.67	29.97	389.58
429_F7	13	13.28	395.87	148.25	1,927.25
431_C6	13	35.67	84.78	58.84	764.87
451_H2	13	23.42	94.78	50.66	658.56
489_D3	13	26.13	220.18	102.78	1,336.17
489_H3/489_H3/48	13	9.23	72.08	51.02	663.32
325_J7	12	10.73	53.65	32.65	391.75
346_A1	12	25.92	59.63	44.28	531.39
368_B6	12	13.78	97.43	42.02	504.21
388_D1/388_D1	12	18.55	56.32	39.94	479.28
428_J1	12	13.85	238.65	52.60	631.17
430_D6/430_D6	12	12.83	107.77	71.00	852.00
450_C2	12	32.20	120.12	55.60	667.22
469	12	17.43	123.28	48.87	586.49
469_B4/30_T05N_	12	30.32	53.20	44.54	534.51
469_H3	12	7.68	65.78	38.67	464.08
489_C2	12	20.02	96.48	46.76	561.09
346_F2	11	20.23	68.10	40.94	450.36
347_A5	11	9.70	85.28	31.29	344.17
347_A6/15_T08N_	11	17.60	236.25	93.51	1,028.56
347_J3/08_T08N_	11	29.57	225.30	102.60	1,128.63
367_D3	11	16.70	112.75	57.38	631.20
388_B4/388_B4/38	11	12.35	40.38	24.13	265.40
388_B5	11	17.47	45.70	34.65	381.19
388_F4	11	35.25	330.75	124.55	1,370.07
428_E7	11	47.75	121.20	68.24	750.62
429_A2	11	20.12	70.58	33.57	369.30
429_D4	11	20.10	74.67	37.09	407.94
449_A7	11	25.17	95.65	45.34	498.75
451_F1	11	45.90	66.45	54.05	594.50
490_C2	11	13.02	46.25	30.61	336.74
490_E3	11	88.05	364.28	253.56	2,789.17
347_B4	10	19.93	88.18	44.24	442.41
347_B5	10	21.12	78.47	37.89	378.94
347_H1	10	45.35	86.17	63.03	630.28
367_E1	10	13.02	67.47	37.34	373.37
369_A6	10	70.27	224.75	102.98	1,029.75
387_J1	10	33.68	79.67	57.20	571.96
390_F5	10	40.05	132.25	67.37	673.65
408_H7/408_H7/40	10	8.48	37.00	24.37	243.68
408_J6	10	22.30	52.07	32.91	329.11

Sector	Count	Min Dur	Max Dur	Avg Dur	Total Dur
409_A1	10	37.17	176.98	57.46	574.64
410_C7	10	25.62	223.18	111.62	1,116.15
428_E7/428_E7	10	37.23	107.28	70.83	708.27
428_G3	10	32.45	71.98	50.47	504.71
429_G4	10	30.00	41.38	35.43	354.27
430_G5	10	51.42	187.62	104.48	1,044.84
448_J1	10	33.65	174.05	71.99	719.87
450_B5	10	17.77	46.53	33.38	333.75
469_H6/469_H6/46	10	16.98	100.38	44.69	446.91
490_A1	10	17.02	82.95	39.42	394.18

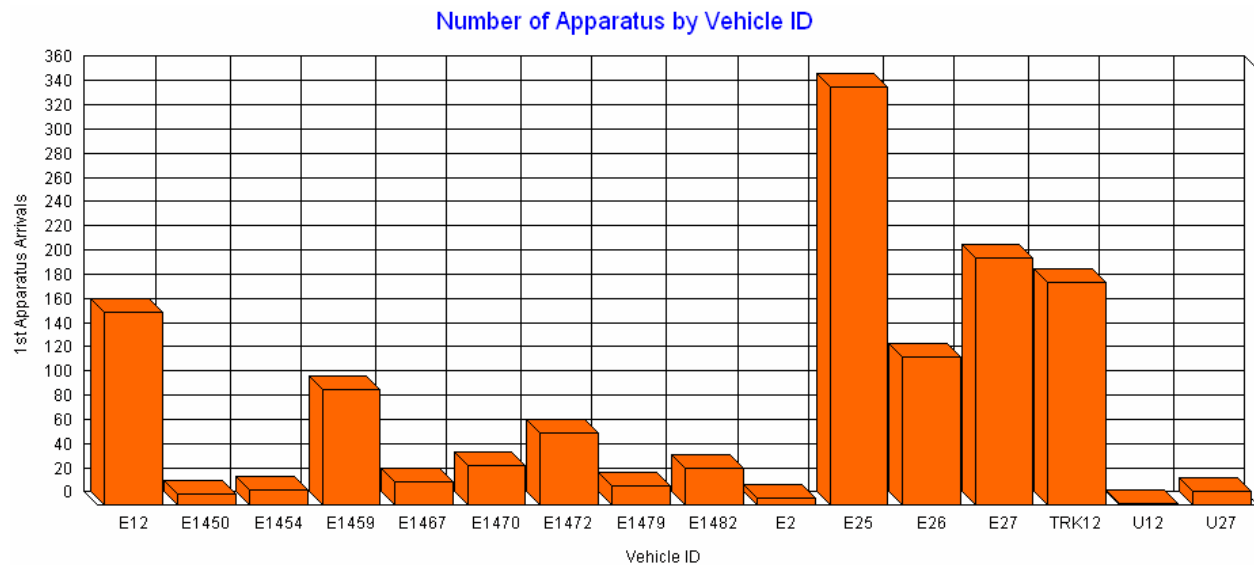
Career and Volunteer Resources

Napa County utilizes both career and volunteer resources. If 2006 data is examined it appears there were 4,497 career company responses. Of those responding companies, 2,694 (59.90%) reached the incident scene. Of the companies reaching the scene 1,316 (29.26%) arrived on the scene first.

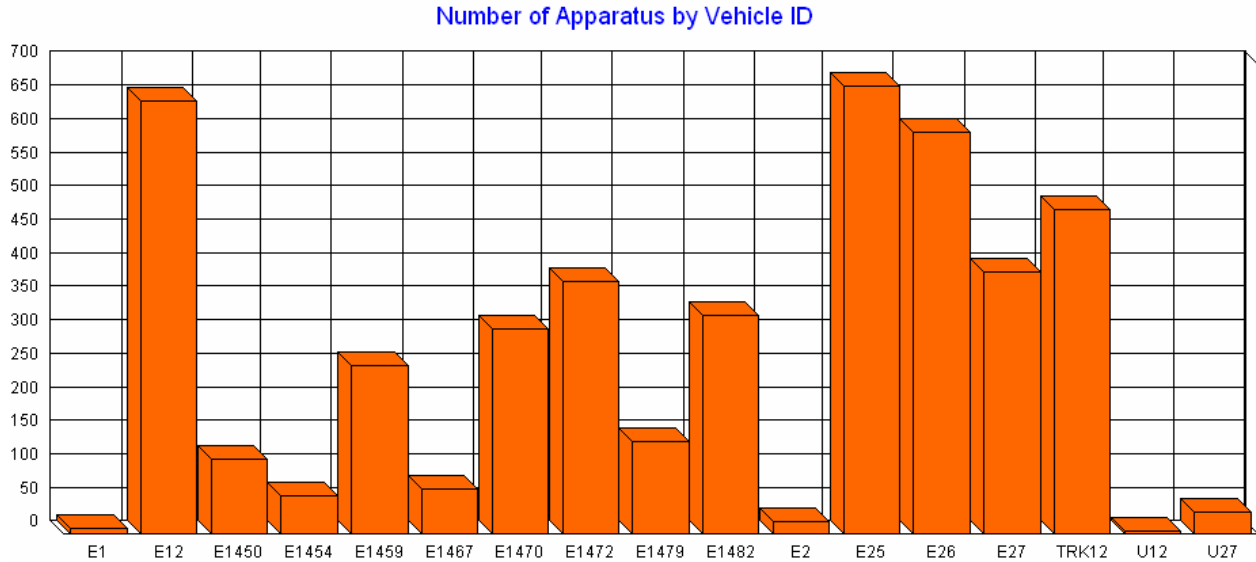
In the same time period there were 3,218 volunteer company responses. Of those responding companies, 901 (27.99%) reached the incident scene. Of the companies reaching the scene 331 (10.28%) arrived on the scene first.

Career Resource Analysis

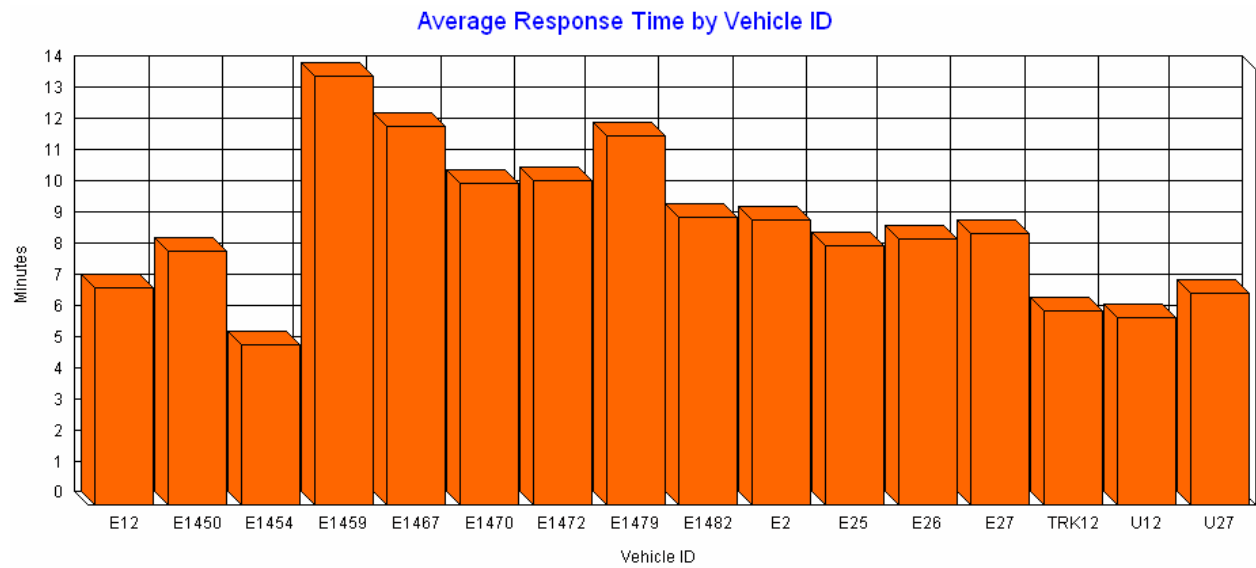
The most active career companies were located and separated-out for performance analysis. The following numbers represent data for companies arriving first on the scene of the incident:



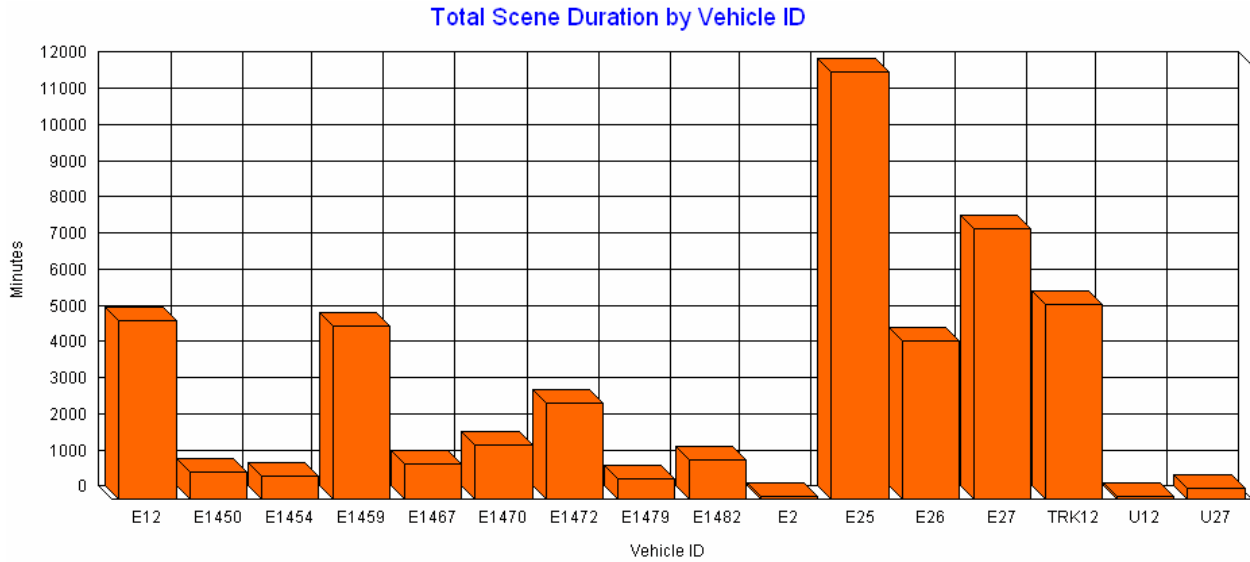
For comparison the following graph illustrates the number of apparatus responses in 2006 whether or not the apparatus reached the scene:



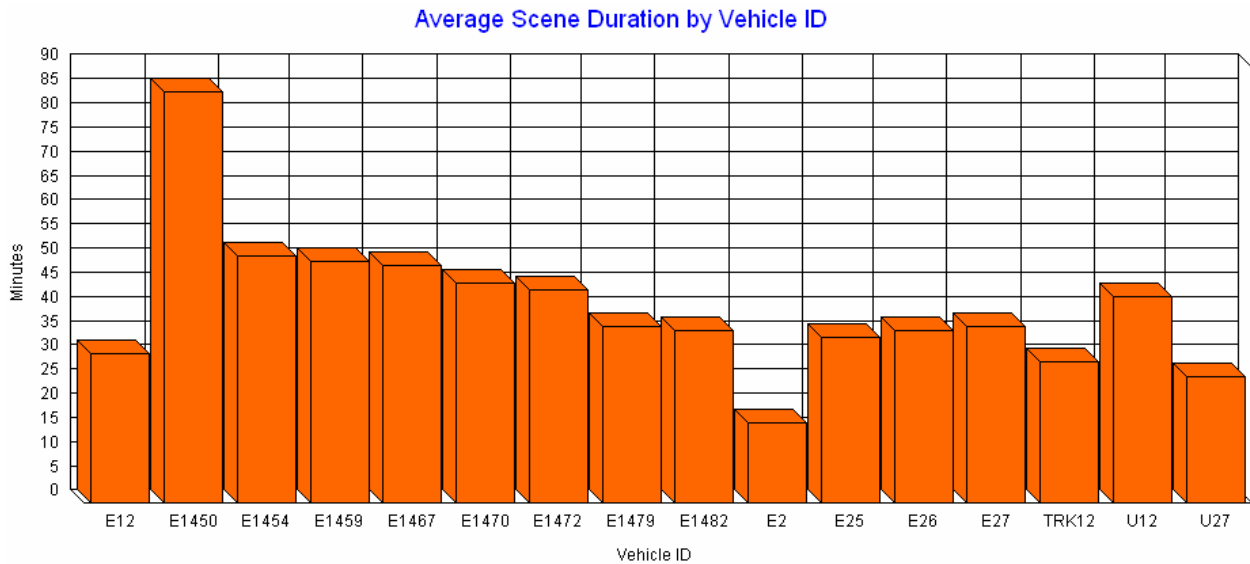
The graph below compares **first apparatus arrival** response time performance by company:



Here is the total scene duration for first arriving apparatus in 2006:



Here is the average scene duration for each company when it arrived first on the scene of an incident in 2006:



Career Call Processing Time

Here is an analysis of call processing time for first arriving career companies in 2006.

There are 1,316 Apparatus records being analyzed.

4 records were ignored because of a zero time value.

Call Processing <= 00:00:00 .0% (0)

Call Processing <= 00:00:15 31.3% (410)

Call Processing <= 00:00:30 56.9% (746)

Call Processing <= 00:00:45 71.3% (936)
 Call Processing <= 00:01:00 80.3% (1,054)
 Call Processing <= 00:01:15 84.8% (1,113)
 Call Processing <= 00:01:30 87.5% (1,148)
 Call Processing <= 00:01:45 89.0% (1,168)
Call Processing <= 00:02:00 90.2% (1,183)
 Call Processing <= 00:02:15 91.1% (1,195)
 Call Processing <= 00:02:30 91.8% (1,205)
 Call Processing <= 00:02:45 92.6% (1,215)
 Call Processing <= 00:03:00 93.2% (1,223)
 Call Processing <= 00:03:15 94.1% (1,234)
 Call Processing <= 00:03:30 94.4% (1,239)
 Call Processing <= 00:03:45 95.0% (1,247)
 Call Processing <= 00:04:00 95.4% (1,252)
 Call Processing <= 00:04:15 96.3% (1,263)
 Call Processing <= 00:04:30 96.9% (1,271)
 Call Processing <= 00:04:45 97.0% (1,272)
 Call Processing <= 00:05:00 97.1% (1,274)

Median Call Processing 00:00:25 (.42 minutes)

Average Call Processing 00:01:03 (1.04 minutes)

Career Turnout Time

Below is an analysis of turnout time for all career companies arriving first on the scene in 2006.

There are 1,316 Apparatus records being analyzed.

332 records were ignored because of a zero time value.

Turnout <= 00:00:00 .0% (0)
 Turnout <= 00:00:15 4.1% (40)
 Turnout <= 00:00:30 5.2% (51)
 Turnout <= 00:00:45 6.2% (61)
 Turnout <= 00:01:00 7.8% (77)
 Turnout <= 00:01:15 9.3% (92)
 Turnout <= 00:01:30 12.7% (125)
 Turnout <= 00:01:45 18.6% (183)
 Turnout <= 00:02:00 25.9% (255)
 Turnout <= 00:02:15 32.1% (316)
 Turnout <= 00:02:30 41.8% (411)
 Turnout <= 00:02:45 50.6% (498)
 Turnout <= 00:03:00 57.5% (566)
 Turnout <= 00:03:15 64.2% (632)
 Turnout <= 00:03:30 71.4% (703)
 Turnout <= 00:03:45 76.3% (751)
 Turnout <= 00:04:00 80.1% (788)
 Turnout <= 00:04:15 83.7% (824)
 Turnout <= 00:04:30 87.4% (860)

Turnout <= 00:04:45 89.5% (881)

Turnout <= 00:05:00 92.2% (907)
Turnout <= 00:05:15 93.1% (916)
Turnout <= 00:05:30 94.0% (925)
Turnout <= 00:05:45 95.1% (936)
Turnout <= 00:06:00 95.8% (943)
Turnout <= 00:06:15 96.4% (949)
Turnout <= 00:06:30 97.1% (955)
Turnout <= 00:06:45 97.5% (959)
Turnout <= 00:07:00 97.7% (961)
Turnout <= 00:07:15 97.8% (962)
Turnout <= 00:07:30 98.1% (965)
Turnout <= 00:07:45 98.2% (966)
Turnout <= 00:08:00 98.6% (970)
Turnout <= 00:08:15 98.8% (972)
Turnout <= 00:08:30 99.2% (976)
Turnout <= 00:08:45 99.3% (977)
Turnout <= 00:09:00 99.4% (978)
Turnout <= 00:09:15 99.4% (978)
Turnout <= 00:09:30 99.6% (980)
Turnout <= 00:09:45 99.7% (981)
Turnout <= 00:10:00 99.7% (981)

Median Turnout 00:02:44 (2.73 minutes)

Average Turnout 00:02:58 (2.96 minutes)

Career Travel Time

Here are travel time fractiles for career companies arriving first on the scene of incidents in 2006.

There are 1,316 Apparatus records being analyzed.

271 records were ignored because of a zero time value.

Travel <= 00:00:00 .0% (0)
Travel <= 00:00:15 2.3% (24)
Travel <= 00:00:30 3.8% (40)
Travel <= 00:00:45 5.2% (54)
Travel <= 00:01:00 8.1% (85)
Travel <= 00:01:15 11.7% (122)
Travel <= 00:01:30 15.6% (163)
Travel <= 00:01:45 18.7% (195)
Travel <= 00:02:00 22.5% (235)
Travel <= 00:02:15 25.9% (271)
Travel <= 00:02:30 29.2% (305)
Travel <= 00:02:45 33.7% (352)
Travel <= 00:03:00 36.1% (377)
Travel <= 00:03:15 39.6% (414)

Travel <= 00:03:30 42.8% (447)
 Travel <= 00:03:45 44.9% (469)
 Travel <= 00:04:00 47.9% (501)
 Travel <= 00:04:15 50.4% (527)
 Travel <= 00:04:30 52.4% (548)
 Travel <= 00:04:45 54.1% (565)
 Travel <= 00:05:00 56.0% (585)
 Travel <= 00:05:15 57.7% (603)
 Travel <= 00:05:30 60.4% (631)
 Travel <= 00:05:45 62.6% (654)
 Travel <= 00:06:00 64.0% (669)
 Travel <= 00:06:15 65.8% (688)
 Travel <= 00:06:30 67.2% (702)
 Travel <= 00:06:45 68.3% (714)
 Travel <= 00:07:00 69.6% (727)
 Travel <= 00:07:15 71.5% (747)
 Travel <= 00:07:30 72.8% (761)
 Travel <= 00:07:45 73.9% (772)
 Travel <= 00:08:00 74.8% (782)
 Travel <= 00:08:15 75.2% (786)
 Travel <= 00:08:30 76.0% (794)
 Travel <= 00:08:45 77.1% (806)
 Travel <= 00:09:00 78.4% (819)
 Travel <= 00:09:15 79.8% (834)
 Travel <= 00:09:30 80.8% (844)
 Travel <= 00:09:45 81.5% (852)
 Travel <= 00:10:00 82.3% (860)
 Travel <= 00:10:15 83.7% (875)
 Travel <= 00:10:30 84.8% (886)
 Travel <= 00:10:45 85.9% (898)
 Travel <= 00:11:00 86.5% (904)
 Travel <= 00:11:15 87.4% (913)
 Travel <= 00:11:30 87.9% (919)
 Travel <= 00:11:45 88.4% (924)
 Travel <= 00:12:00 89.0% (930)
Travel <= 00:12:15 90.0% (940)
 Travel <= 00:12:30 90.1% (942)
 Travel <= 00:12:45 90.4% (945)
 Travel <= 00:13:00 90.7% (948)
 Travel <= 00:13:15 91.2% (953)
 Travel <= 00:13:30 91.4% (955)
 Travel <= 00:13:45 91.7% (958)
 Travel <= 00:14:00 92.2% (963)
 Travel <= 00:14:15 92.9% (971)
 Travel <= 00:14:30 93.1% (973)
 Travel <= 00:14:45 93.4% (976)

Travel <= 00:15:00 93.7% (979)
Travel <= 00:15:15 93.9% (981)
Travel <= 00:15:30 94.2% (984)
Travel <= 00:15:45 94.5% (988)
Travel <= 00:16:00 94.8% (991)
Travel <= 00:16:15 95.3% (996)
Travel <= 00:16:30 95.6% (999)
Travel <= 00:16:45 95.7% (1,000)
Travel <= 00:17:00 95.8% (1,001)
Travel <= 00:17:15 95.9% (1,002)
Travel <= 00:17:30 96.0% (1,003)
Travel <= 00:17:45 96.1% (1,004)
Travel <= 00:18:00 96.2% (1,005)
Travel <= 00:18:15 96.2% (1,005)
Travel <= 00:18:30 96.3% (1,006)
Travel <= 00:18:45 96.5% (1,008)
Travel <= 00:19:00 96.5% (1,008)
Travel <= 00:19:15 96.6% (1,009)
Travel <= 00:19:30 96.7% (1,011)
Travel <= 00:19:45 96.8% (1,012)
Travel <= 00:20:00 96.9% (1,013)
Travel <= 00:20:15 97.0% (1,014)
Travel <= 00:20:30 97.1% (1,015)
Travel <= 00:20:45 97.2% (1,016)
Travel <= 00:21:00 97.2% (1,016)
Travel <= 00:21:15 97.2% (1,016)
Travel <= 00:21:30 97.3% (1,017)
Travel <= 00:21:45 97.3% (1,017)
Travel <= 00:22:00 97.5% (1,019)
Travel <= 00:22:15 97.6% (1,020)
Travel <= 00:22:30 97.6% (1,020)
Travel <= 00:22:45 97.7% (1,021)
Travel <= 00:23:00 97.7% (1,021)
Travel <= 00:23:15 97.9% (1,023)
Travel <= 00:23:30 97.9% (1,023)
Travel <= 00:23:45 98.0% (1,024)
Travel <= 00:24:00 98.1% (1,025)
Travel <= 00:24:15 98.1% (1,025)
Travel <= 00:24:30 98.1% (1,025)
Travel <= 00:24:45 98.1% (1,025)
Travel <= 00:25:00 98.1% (1,025)
Travel <= 00:25:15 98.2% (1,026)
Travel <= 00:25:30 98.3% (1,027)
Travel <= 00:25:45 98.4% (1,028)
Travel <= 00:26:00 98.6% (1,030)
Travel <= 00:26:15 98.6% (1,030)

Travel <= 00:26:30 98.6% (1,030)
 Travel <= 00:26:45 98.6% (1,030)
 Travel <= 00:27:00 98.6% (1,030)
 Travel <= 00:27:15 98.6% (1,030)
 Travel <= 00:27:30 98.6% (1,030)
 Travel <= 00:27:45 98.6% (1,030)
 Travel <= 00:28:00 98.6% (1,030)
 Travel <= 00:28:15 98.6% (1,030)
 Travel <= 00:28:30 98.7% (1,031)
 Travel <= 00:28:45 98.7% (1,031)
 Travel <= 00:29:00 98.8% (1,032)
 Travel <= 00:29:15 98.8% (1,032)
 Travel <= 00:29:30 98.8% (1,032)
 Travel <= 00:29:45 98.8% (1,032)
 Travel <= 00:30:00 98.8% (1,032)

Median Travel 00:04:10 (4.17 minutes)

Average Travel 00:06:01 (6.01 minutes)

Career Total Reflex Time

Here are total reflex time fractiles for career companies in 2006.

There are 1,316 Apparatus records being analyzed.

1st Apparatus On Scene <= 00:00:00 .0% (0)
 1st Apparatus On Scene <= 00:00:15 .8% (10)
 1st Apparatus On Scene <= 00:00:30 2.1% (27)
 1st Apparatus On Scene <= 00:00:45 2.4% (32)
 1st Apparatus On Scene <= 00:01:00 2.7% (36)
 1st Apparatus On Scene <= 00:01:15 3.1% (41)
 1st Apparatus On Scene <= 00:01:30 3.6% (48)
 1st Apparatus On Scene <= 00:01:45 3.9% (51)
 1st Apparatus On Scene <= 00:02:00 4.6% (61)
 1st Apparatus On Scene <= 00:02:15 5.7% (75)
 1st Apparatus On Scene <= 00:02:30 6.8% (90)
 1st Apparatus On Scene <= 00:02:45 8.3% (109)
 1st Apparatus On Scene <= 00:03:00 10.0% (131)
 1st Apparatus On Scene <= 00:03:15 11.8% (155)
 1st Apparatus On Scene <= 00:03:30 14.1% (185)
 1st Apparatus On Scene <= 00:03:45 16.6% (218)
 1st Apparatus On Scene <= 00:04:00 19.5% (256)
 1st Apparatus On Scene <= 00:04:15 22.6% (298)
 1st Apparatus On Scene <= 00:04:30 25.5% (336)
 1st Apparatus On Scene <= 00:04:45 28.5% (375)
 1st Apparatus On Scene <= 00:05:00 31.0% (408)
 1st Apparatus On Scene <= 00:05:15 33.8% (445)
 1st Apparatus On Scene <= 00:05:30 36.7% (483)

1st Apparatus On Scene <= 00:05:45 39.7% (523)
 1st Apparatus On Scene <= 00:06:00 42.6% (561)
 1st Apparatus On Scene <= 00:06:15 44.5% (586)
 1st Apparatus On Scene <= 00:06:30 47.3% (622)
 1st Apparatus On Scene <= 00:06:45 49.0% (645)
 1st Apparatus On Scene <= 00:07:00 50.6% (666)
 1st Apparatus On Scene <= 00:07:15 52.8% (695)
 1st Apparatus On Scene <= 00:07:30 54.5% (717)
 1st Apparatus On Scene <= 00:07:45 56.1% (738)
 1st Apparatus On Scene <= 00:08:00 58.1% (764)
 1st Apparatus On Scene <= 00:08:15 59.9% (788)
 1st Apparatus On Scene <= 00:08:30 61.6% (810)
 1st Apparatus On Scene <= 00:08:45 63.1% (831)
 1st Apparatus On Scene <= 00:09:00 64.4% (847)
 1st Apparatus On Scene <= 00:09:15 66.2% (871)
 1st Apparatus On Scene <= 00:09:30 67.6% (890)
 1st Apparatus On Scene <= 00:09:45 69.1% (909)
 1st Apparatus On Scene <= 00:10:00 70.8% (932)
 1st Apparatus On Scene <= 00:10:15 72.3% (951)
 1st Apparatus On Scene <= 00:10:30 73.0% (961)
 1st Apparatus On Scene <= 00:10:45 73.7% (970)
 1st Apparatus On Scene <= 00:11:00 74.7% (983)
 1st Apparatus On Scene <= 00:11:15 75.7% (996)
 1st Apparatus On Scene <= 00:11:30 76.5% (1,007)
 1st Apparatus On Scene <= 00:11:45 77.3% (1,017)
 1st Apparatus On Scene <= 00:12:00 78.1% (1,028)
 1st Apparatus On Scene <= 00:12:15 78.8% (1,037)
 1st Apparatus On Scene <= 00:12:30 79.7% (1,049)
 1st Apparatus On Scene <= 00:12:45 80.5% (1,059)
 1st Apparatus On Scene <= 00:13:00 82.0% (1,079)
 1st Apparatus On Scene <= 00:13:15 82.7% (1,088)
 1st Apparatus On Scene <= 00:13:30 83.5% (1,099)
 1st Apparatus On Scene <= 00:13:45 84.2% (1,108)
 1st Apparatus On Scene <= 00:14:00 84.7% (1,115)
 1st Apparatus On Scene <= 00:14:15 85.7% (1,128)
 1st Apparatus On Scene <= 00:14:30 86.2% (1,135)
 1st Apparatus On Scene <= 00:14:45 86.9% (1,143)
 1st Apparatus On Scene <= 00:15:00 87.2% (1,148)
 1st Apparatus On Scene <= 00:15:15 88.0% (1,158)
 1st Apparatus On Scene <= 00:15:30 88.5% (1,165)
 1st Apparatus On Scene <= 00:15:45 89.1% (1,173)
1st Apparatus On Scene <= 00:16:00 90.0% (1,184)
 1st Apparatus On Scene <= 00:16:15 90.3% (1,189)
 1st Apparatus On Scene <= 00:16:30 91.0% (1,198)
 1st Apparatus On Scene <= 00:16:45 91.9% (1,209)
 1st Apparatus On Scene <= 00:17:00 92.2% (1,214)

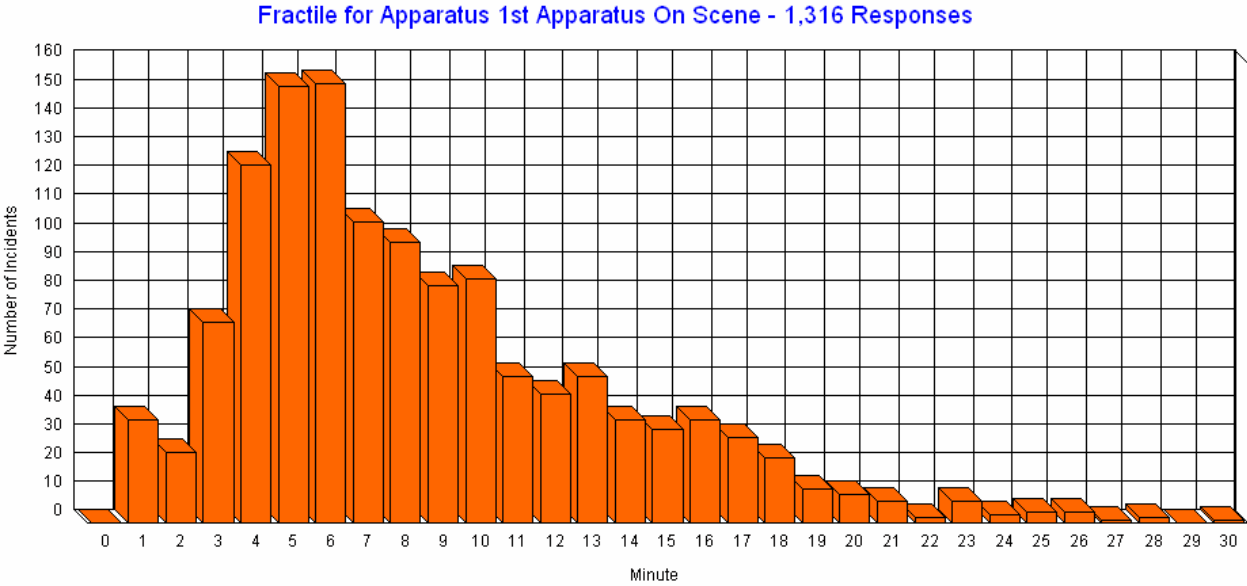
1st Apparatus On Scene <= 00:17:15 92.8% (1,221)
 1st Apparatus On Scene <= 00:17:30 93.2% (1,227)
 1st Apparatus On Scene <= 00:17:45 93.7% (1,233)
 1st Apparatus On Scene <= 00:18:00 94.0% (1,237)
 1st Apparatus On Scene <= 00:18:15 94.1% (1,239)
 1st Apparatus On Scene <= 00:18:30 94.4% (1,242)
 1st Apparatus On Scene <= 00:18:45 94.6% (1,245)
 1st Apparatus On Scene <= 00:19:00 94.9% (1,249)
 1st Apparatus On Scene <= 00:19:15 95.1% (1,251)
 1st Apparatus On Scene <= 00:19:30 95.3% (1,254)
 1st Apparatus On Scene <= 00:19:45 95.5% (1,257)
 1st Apparatus On Scene <= 00:20:00 95.7% (1,259)
 1st Apparatus On Scene <= 00:20:15 95.9% (1,262)
 1st Apparatus On Scene <= 00:20:30 96.0% (1,263)
 1st Apparatus On Scene <= 00:20:45 96.1% (1,265)
 1st Apparatus On Scene <= 00:21:00 96.3% (1,267)
 1st Apparatus On Scene <= 00:21:15 96.4% (1,268)
 1st Apparatus On Scene <= 00:21:30 96.4% (1,268)
 1st Apparatus On Scene <= 00:21:45 96.4% (1,268)
 1st Apparatus On Scene <= 00:22:00 96.4% (1,269)
 1st Apparatus On Scene <= 00:22:15 96.6% (1,271)
 1st Apparatus On Scene <= 00:22:30 96.8% (1,274)
 1st Apparatus On Scene <= 00:22:45 97.0% (1,276)
 1st Apparatus On Scene <= 00:23:00 97.0% (1,277)
 1st Apparatus On Scene <= 00:23:15 97.1% (1,278)
 1st Apparatus On Scene <= 00:23:30 97.3% (1,280)
 1st Apparatus On Scene <= 00:23:45 97.3% (1,280)
 1st Apparatus On Scene <= 00:24:00 97.3% (1,280)
 1st Apparatus On Scene <= 00:24:15 97.3% (1,281)
 1st Apparatus On Scene <= 00:24:30 97.3% (1,281)
 1st Apparatus On Scene <= 00:24:45 97.5% (1,283)
 1st Apparatus On Scene <= 00:25:00 97.6% (1,284)
 1st Apparatus On Scene <= 00:25:15 97.6% (1,285)
 1st Apparatus On Scene <= 00:25:30 97.7% (1,286)
 1st Apparatus On Scene <= 00:25:45 97.7% (1,286)
 1st Apparatus On Scene <= 00:26:00 97.9% (1,288)
 1st Apparatus On Scene <= 00:26:15 97.9% (1,288)
 1st Apparatus On Scene <= 00:26:30 97.9% (1,288)
 1st Apparatus On Scene <= 00:26:45 97.9% (1,289)
 1st Apparatus On Scene <= 00:27:00 97.9% (1,289)
 1st Apparatus On Scene <= 00:27:15 97.9% (1,289)
 1st Apparatus On Scene <= 00:27:30 98.0% (1,290)
 1st Apparatus On Scene <= 00:27:45 98.0% (1,290)
 1st Apparatus On Scene <= 00:28:00 98.1% (1,291)
 1st Apparatus On Scene <= 00:28:15 98.1% (1,291)
 1st Apparatus On Scene <= 00:28:30 98.1% (1,291)

1st Apparatus On Scene <= 00:28:45 98.1% (1,291)
 1st Apparatus On Scene <= 00:29:00 98.1% (1,291)
 1st Apparatus On Scene <= 00:29:15 98.2% (1,292)
 1st Apparatus On Scene <= 00:29:30 98.2% (1,292)
 1st Apparatus On Scene <= 00:29:45 98.2% (1,292)
 1st Apparatus On Scene <= 00:30:00 98.2% (1,292)

Median 1st Apparatus On Scene 00:06:57 (6.95 minutes)

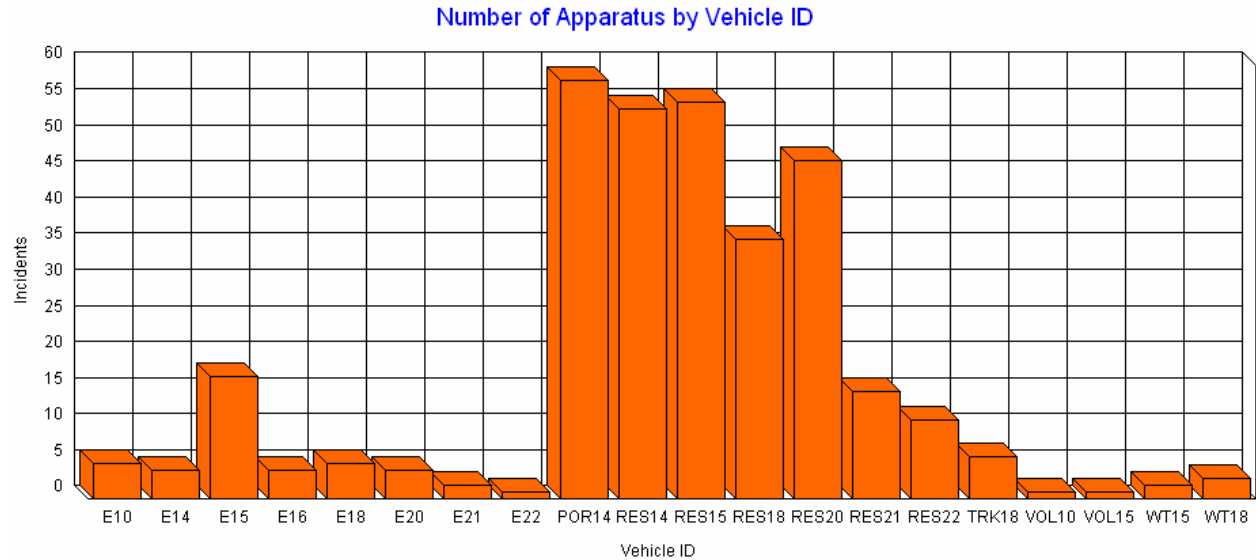
Average 1st Apparatus On Scene 00:08:36 (8.59 minutes)

Here is a graph for total reflex time using the same measurement above:



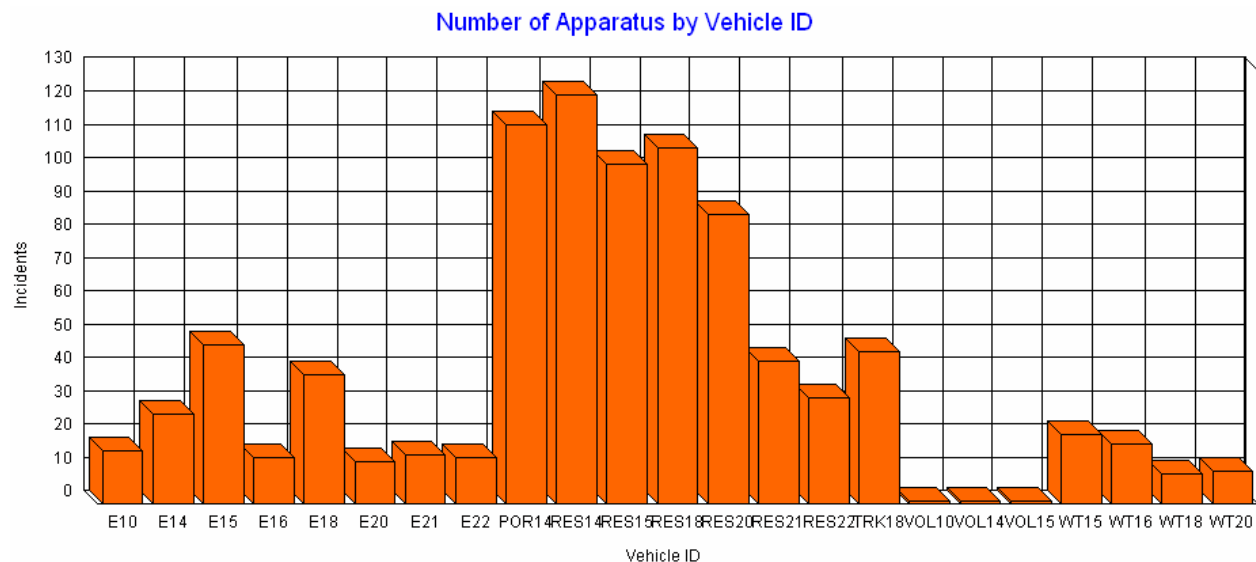
Volunteer Resource Analysis

The most active volunteer companies were located and separated-out for performance analysis. The following graph represents data for each company when it arrived first on the scene of an incident:

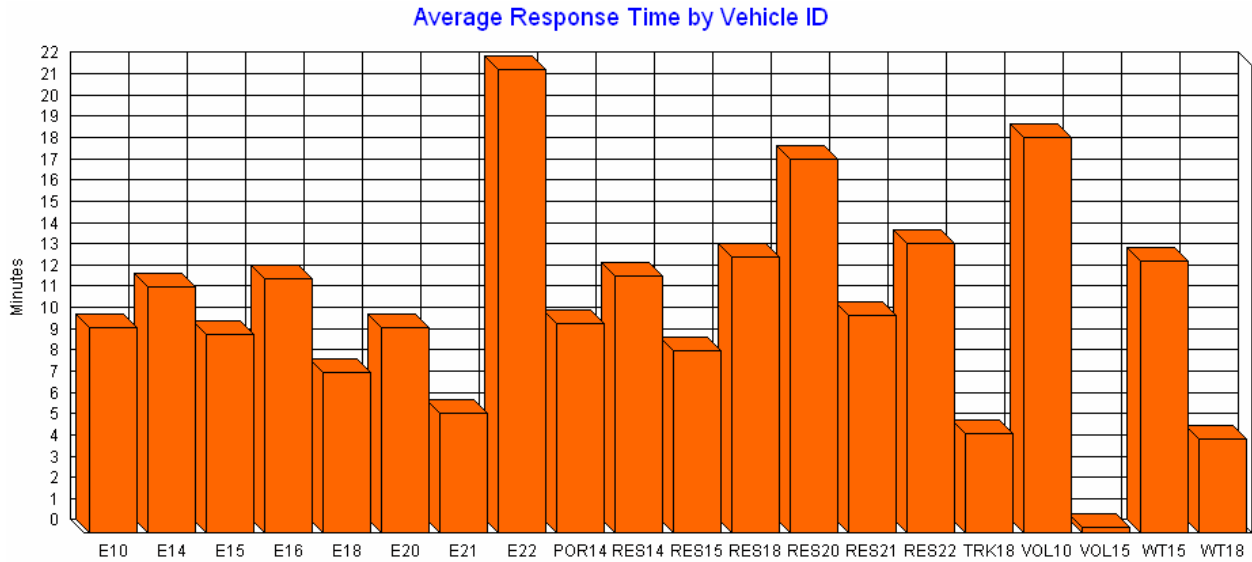


Notice the vast majority of volunteer responses arriving first on the scene are rescue responses.

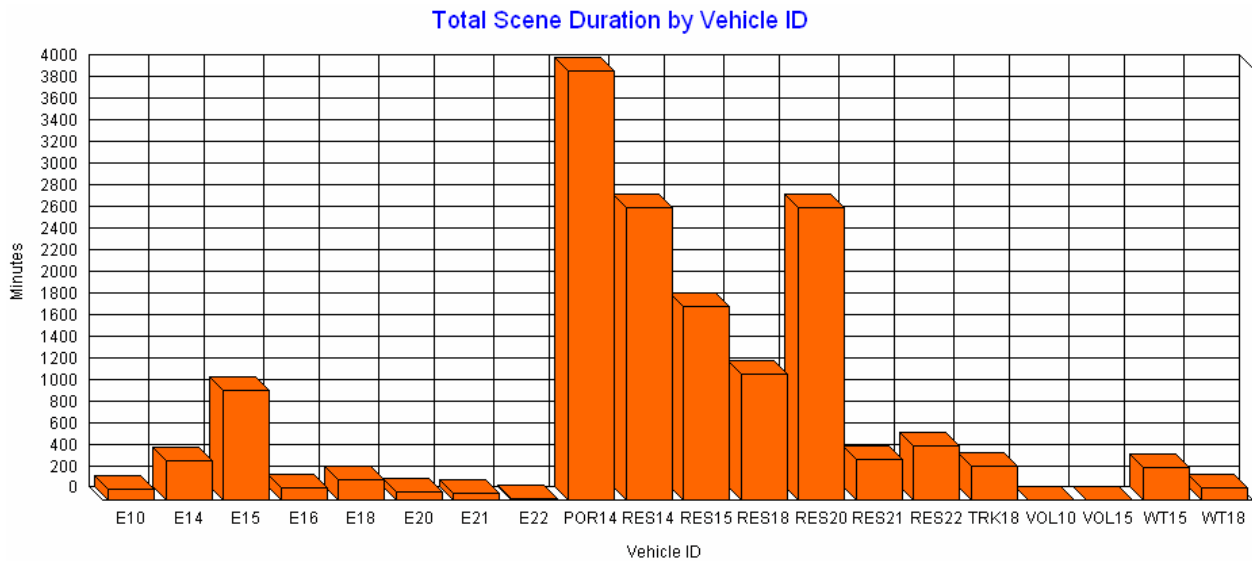
For comparison the following graph illustrates the number of volunteer apparatus responses in 2006 that arrived on the scene whether or not the apparatus reached the scene first. While there is significantly more engine company activity this category is still dominated by response:



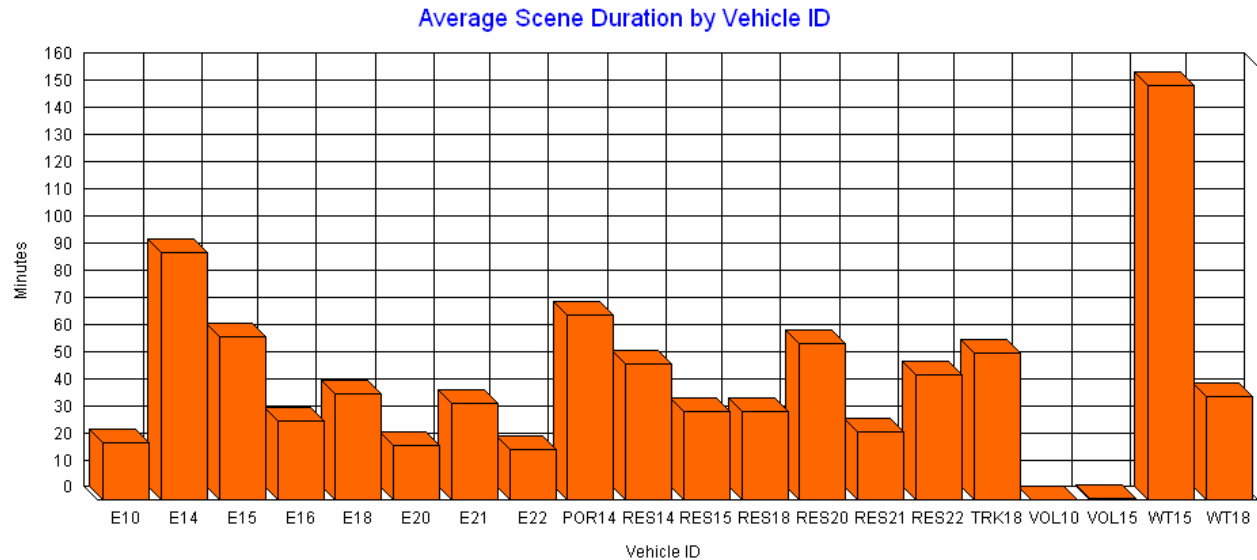
The graph below compares **first apparatus arrival** response time performance by company:



Here is the total scene duration for first arriving apparatus in 2006:



Here is the average scene duration for each volunteer company when it arrived first on the scene of an incident in 2006:



Volunteer Call Processing

Here is a fractile analysis of call processing time for first arriving volunteer companies in 2006. The call processing time is measured from the time a request for assistance is received until the apparatus is dispatched.

There are 331 Apparatus records being analyzed.

One record was ignored because of a zero time value.

- Call Processing <= 00:00:00 .0% (0)
- Call Processing <= 00:00:15 1.2% (4)
- Call Processing <= 00:00:30 2.7% (9)
- Call Processing <= 00:00:45 3.9% (13)
- Call Processing <= 00:01:00 5.2% (17)
- Call Processing <= 00:01:15 6.1% (20)
- Call Processing <= 00:01:30 9.4% (31)
- Call Processing <= 00:01:45 11.2% (37)
- Call Processing <= 00:02:00 13.6% (45)
- Call Processing <= 00:02:15 18.2% (60)
- Call Processing <= 00:02:30 22.4% (74)
- Call Processing <= 00:02:45 25.2% (83)
- Call Processing <= 00:03:00 28.2% (93)
- Call Processing <= 00:03:15 32.4% (107)
- Call Processing <= 00:03:30 37.0% (122)
- Call Processing <= 00:03:45 40.9% (135)
- Call Processing <= 00:04:00 44.5% (147)
- Call Processing <= 00:04:15 48.2% (159)
- Call Processing <= 00:04:30 51.2% (169)

Call Processing <= 00:04:45 55.8% (184)
 Call Processing <= 00:05:00 59.7% (197)
 Call Processing <= 00:05:15 62.4% (206)
 Call Processing <= 00:05:30 65.2% (215)
 Call Processing <= 00:05:45 67.0% (221)
 Call Processing <= 00:06:00 69.1% (228)
 Call Processing <= 00:06:15 71.5% (236)
 Call Processing <= 00:06:30 74.8% (247)
 Call Processing <= 00:06:45 76.4% (252)
 Call Processing <= 00:07:00 76.7% (253)
 Call Processing <= 00:07:15 78.5% (259)
 Call Processing <= 00:07:30 80.3% (265)
 Call Processing <= 00:07:45 82.4% (272)
 Call Processing <= 00:08:00 83.9% (277)
 Call Processing <= 00:08:15 86.1% (284)
 Call Processing <= 00:08:30 87.0% (287)
 Call Processing <= 00:08:45 88.8% (293)
Call Processing <= 00:09:00 90.0% (297)
 Call Processing <= 00:09:15 90.3% (298)
 Call Processing <= 00:09:30 91.2% (301)
 Call Processing <= 00:09:45 92.1% (304)
 Call Processing <= 00:10:00 92.7% (306)
 Call Processing <= 00:10:15 93.0% (307)
 Call Processing <= 00:10:30 94.2% (311)
 Call Processing <= 00:10:45 94.8% (313)
 Call Processing <= 00:11:00 94.8% (313)
 Call Processing <= 00:11:15 94.8% (313)
 Call Processing <= 00:11:30 94.8% (313)
 Call Processing <= 00:11:45 95.2% (314)
 Call Processing <= 00:12:00 95.2% (314)
 Call Processing <= 00:12:15 95.5% (315)
 Call Processing <= 00:12:30 95.5% (315)
 Call Processing <= 00:12:45 95.8% (316)
 Call Processing <= 00:13:00 95.8% (316)
 Call Processing <= 00:13:15 96.1% (317)
 Call Processing <= 00:13:30 96.1% (317)
 Call Processing <= 00:13:45 96.1% (317)
 Call Processing <= 00:14:00 96.4% (318)
 Call Processing <= 00:14:15 96.4% (318)
 Call Processing <= 00:14:30 96.4% (318)
 Call Processing <= 00:14:45 97.0% (320)
 Call Processing <= 00:15:00 97.3% (321)

Median Call Processing 00:04:18 (4.3 minutes)

Average Call Processing 00:06:01 (6.01 minutes)

This measurement is surprising. The expectation is career and volunteer call processing would be very similar. The significantly poorer performance for volunteer call processing may indicate a delay in the assignment of the apparatus to the incident. Possible scenarios would include the failure of the initially assigned apparatus to mobilize causing a second dispatch for new resources. This area requires closer examination.

Volunteer Turnout Time

Turnout time could not be calculated for the 331 volunteer companies arriving on the scene first in 2006 because all but 10 companies had a zero value in this calculation. If these volunteer responders had not received a timestamp at the start of their response, but instead had identical timestamps for both “dispatched” and “responding” it might explain the unexpectedly long call processing times noted above.

Volunteer Travel Time

Here are travel time fractiles for volunteer companies arriving first on the scene of incidents in 2006. Notice a significant number had “zero” travel times again indicating a potential problem with dispatch timestamps.

There are 331 Apparatus records being analyzed.

53 records were ignored because of a zero time value.

Travel <= 00:00:00 .0% (0)
Travel <= 00:00:15 2.5% (7)
Travel <= 00:00:30 3.6% (10)
Travel <= 00:00:45 5.4% (15)
Travel <= 00:01:00 6.5% (18)
Travel <= 00:01:15 10.1% (28)
Travel <= 00:01:30 14.0% (39)
Travel <= 00:01:45 18.0% (50)
Travel <= 00:02:00 21.6% (60)
Travel <= 00:02:15 24.8% (69)
Travel <= 00:02:30 29.1% (81)
Travel <= 00:02:45 31.7% (88)
Travel <= 00:03:00 33.8% (94)
Travel <= 00:03:15 37.8% (105)
Travel <= 00:03:30 39.2% (109)
Travel <= 00:03:45 39.6% (110)
Travel <= 00:04:00 43.2% (120)
Travel <= 00:04:15 46.0% (128)
Travel <= 00:04:30 47.5% (132)
Travel <= 00:04:45 49.6% (138)
Travel <= 00:05:00 50.4% (140)
Travel <= 00:05:15 53.2% (148)
Travel <= 00:05:30 54.7% (152)
Travel <= 00:05:45 56.5% (157)
Travel <= 00:06:00 58.6% (163)
Travel <= 00:06:15 60.4% (168)

Travel <= 00:06:30 62.6% (174)
 Travel <= 00:06:45 63.7% (177)
 Travel <= 00:07:00 63.7% (177)
 Travel <= 00:07:15 64.4% (179)
 Travel <= 00:07:30 65.8% (183)
 Travel <= 00:07:45 68.0% (189)
 Travel <= 00:08:00 70.1% (195)
 Travel <= 00:08:15 71.9% (200)
 Travel <= 00:08:30 71.9% (200)
 Travel <= 00:08:45 72.7% (202)
 Travel <= 00:09:00 73.7% (205)
 Travel <= 00:09:15 74.8% (208)
 Travel <= 00:09:30 75.2% (209)
 Travel <= 00:09:45 79.1% (220)
 Travel <= 00:10:00 79.5% (221)
 Travel <= 00:10:15 80.2% (223)
 Travel <= 00:10:30 81.3% (226)
 Travel <= 00:10:45 81.7% (227)
 Travel <= 00:11:00 82.4% (229)
 Travel <= 00:11:15 83.8% (233)
 Travel <= 00:11:30 84.9% (236)
 Travel <= 00:11:45 84.9% (236)
 Travel <= 00:12:00 85.3% (237)
 Travel <= 00:12:15 86.0% (239)
 Travel <= 00:12:30 87.1% (242)
 Travel <= 00:12:45 88.1% (245)
 Travel <= 00:13:00 88.5% (246)
 Travel <= 00:13:15 88.5% (246)
Travel <= 00:13:30 89.9% (250)
 Travel <= 00:13:45 89.9% (250)
 Travel <= 00:14:00 91.4% (254)
 Travel <= 00:14:15 91.7% (255)
 Travel <= 00:14:30 91.7% (255)
 Travel <= 00:14:45 93.2% (259)
 Travel <= 00:15:00 93.2% (259)
 Travel <= 00:15:15 93.5% (260)
 Travel <= 00:15:30 93.9% (261)
 Travel <= 00:15:45 94.2% (262)
 Travel <= 00:16:00 94.2% (262)
 Travel <= 00:16:15 94.2% (262)
 Travel <= 00:16:30 94.2% (262)
 Travel <= 00:16:45 94.6% (263)
 Travel <= 00:17:00 95.0% (264)
 Travel <= 00:17:15 95.7% (266)
 Travel <= 00:17:30 96.0% (267)
 Travel <= 00:17:45 96.8% (269)

Travel <= 00:18:00 96.8% (269)
Travel <= 00:18:15 97.1% (270)
Travel <= 00:18:30 97.1% (270)
Travel <= 00:18:45 97.1% (270)
Travel <= 00:19:00 97.5% (271)
Travel <= 00:19:15 97.8% (272)
Travel <= 00:19:30 98.2% (273)
Travel <= 00:19:45 98.2% (273)
Travel <= 00:20:00 98.6% (274)
Travel <= 00:20:15 98.9% (275)
Travel <= 00:20:30 98.9% (275)
Travel <= 00:20:45 98.9% (275)
Travel <= 00:21:00 98.9% (275)
Travel <= 00:21:15 99.3% (276)
Travel <= 00:21:30 99.3% (276)
Travel <= 00:21:45 99.3% (276)
Travel <= 00:22:00 99.3% (276)
Travel <= 00:22:15 99.3% (276)
Travel <= 00:22:30 99.3% (276)
Travel <= 00:22:45 99.3% (276)
Travel <= 00:23:00 99.3% (276)
Travel <= 00:23:15 99.3% (276)
Travel <= 00:23:30 99.3% (276)
Travel <= 00:23:45 99.3% (276)
Travel <= 00:24:00 99.6% (277)
Travel <= 00:24:15 99.6% (277)
Travel <= 00:24:30 99.6% (277)
Travel <= 00:24:45 99.6% (277)
Travel <= 00:25:00 99.6% (277)
Travel <= 00:25:15 99.6% (277)
Travel <= 00:25:30 99.6% (277)
Travel <= 00:25:45 99.6% (277)
Travel <= 00:26:00 99.6% (277)
Travel <= 00:26:15 99.6% (277)
Travel <= 00:26:30 99.6% (277)
Travel <= 00:26:45 99.6% (277)
Travel <= 00:27:00 99.6% (277)
Travel <= 00:27:15 99.6% (277)
Travel <= 00:27:30 99.6% (277)
Travel <= 00:27:45 99.6% (277)
Travel <= 00:28:00 99.6% (277)
Travel <= 00:28:15 99.6% (277)
Travel <= 00:28:30 100.0% (278)
Travel <= 00:28:45 100.0% (278)
Travel <= 00:29:00 100.0% (278)
Travel <= 00:29:15 100.0% (278)

Travel <= 00:29:30 100.0% (278)
Travel <= 00:29:45 100.0% (278)
Travel <= 00:30:00 100.0% (278)

Median Travel 00:04:47 (4.78 minutes)

Average Travel 00:06:17 (6.28 minutes)

Volunteer Total Reflex Time

Here is the total reflex time fractile for volunteer companies arriving first on the scene in 2006.

There are 331 Apparatus records being analyzed.

1st Apparatus On Scene <= 00:00:00 .0% (0)
1st Apparatus On Scene <= 00:00:15 .6% (2)
1st Apparatus On Scene <= 00:00:30 1.5% (5)
1st Apparatus On Scene <= 00:00:45 1.8% (6)
1st Apparatus On Scene <= 00:01:00 2.4% (8)
1st Apparatus On Scene <= 00:01:15 3.0% (10)
1st Apparatus On Scene <= 00:01:30 3.3% (11)
1st Apparatus On Scene <= 00:01:45 3.6% (12)
1st Apparatus On Scene <= 00:02:00 3.9% (13)
1st Apparatus On Scene <= 00:02:15 4.8% (16)
1st Apparatus On Scene <= 00:02:30 6.0% (20)
1st Apparatus On Scene <= 00:02:45 6.6% (22)
1st Apparatus On Scene <= 00:03:00 7.6% (25)
1st Apparatus On Scene <= 00:03:15 8.2% (27)
1st Apparatus On Scene <= 00:03:30 9.7% (32)
1st Apparatus On Scene <= 00:03:45 10.9% (36)
1st Apparatus On Scene <= 00:04:00 12.1% (40)
1st Apparatus On Scene <= 00:04:15 13.6% (45)
1st Apparatus On Scene <= 00:04:30 13.9% (46)
1st Apparatus On Scene <= 00:04:45 15.7% (52)
1st Apparatus On Scene <= 00:05:00 18.1% (60)
1st Apparatus On Scene <= 00:05:15 20.8% (69)
1st Apparatus On Scene <= 00:05:30 22.1% (73)
1st Apparatus On Scene <= 00:05:45 24.5% (81)
1st Apparatus On Scene <= 00:06:00 26.3% (87)
1st Apparatus On Scene <= 00:06:15 27.2% (90)
1st Apparatus On Scene <= 00:06:30 29.3% (97)
1st Apparatus On Scene <= 00:06:45 30.8% (102)
1st Apparatus On Scene <= 00:07:00 33.2% (110)
1st Apparatus On Scene <= 00:07:15 34.4% (114)
1st Apparatus On Scene <= 00:07:30 35.3% (117)
1st Apparatus On Scene <= 00:07:45 36.9% (122)
1st Apparatus On Scene <= 00:08:00 38.7% (128)
1st Apparatus On Scene <= 00:08:15 39.9% (132)
1st Apparatus On Scene <= 00:08:30 42.3% (140)

1st Apparatus On Scene <= 00:08:45 45.9% (152)
 1st Apparatus On Scene <= 00:09:00 47.1% (156)
 1st Apparatus On Scene <= 00:09:15 49.2% (163)
 1st Apparatus On Scene <= 00:09:30 50.8% (168)
 1st Apparatus On Scene <= 00:09:45 52.6% (174)
 1st Apparatus On Scene <= 00:10:00 54.4% (180)
 1st Apparatus On Scene <= 00:10:15 55.3% (183)
 1st Apparatus On Scene <= 00:10:30 56.5% (187)
 1st Apparatus On Scene <= 00:10:45 58.9% (195)
 1st Apparatus On Scene <= 00:11:00 59.5% (197)
 1st Apparatus On Scene <= 00:11:15 61.6% (204)
 1st Apparatus On Scene <= 00:11:30 62.2% (206)
 1st Apparatus On Scene <= 00:11:45 63.1% (209)
 1st Apparatus On Scene <= 00:12:00 65.0% (215)
 1st Apparatus On Scene <= 00:12:15 67.1% (222)
 1st Apparatus On Scene <= 00:12:30 68.0% (225)
 1st Apparatus On Scene <= 00:12:45 68.3% (226)
 1st Apparatus On Scene <= 00:13:00 68.6% (227)
 1st Apparatus On Scene <= 00:13:15 71.9% (238)
 1st Apparatus On Scene <= 00:13:30 73.4% (243)
 1st Apparatus On Scene <= 00:13:45 74.9% (248)
 1st Apparatus On Scene <= 00:14:00 75.2% (249)
 1st Apparatus On Scene <= 00:14:15 75.2% (249)
 1st Apparatus On Scene <= 00:14:30 76.1% (252)
 1st Apparatus On Scene <= 00:14:45 77.6% (257)
 1st Apparatus On Scene <= 00:15:00 78.2% (259)
 1st Apparatus On Scene <= 00:15:15 78.5% (260)
 1st Apparatus On Scene <= 00:15:30 78.5% (260)
 1st Apparatus On Scene <= 00:15:45 80.1% (265)
 1st Apparatus On Scene <= 00:16:00 80.1% (265)
 1st Apparatus On Scene <= 00:16:15 80.7% (267)
 1st Apparatus On Scene <= 00:16:30 81.0% (268)
 1st Apparatus On Scene <= 00:16:45 81.9% (271)
 1st Apparatus On Scene <= 00:17:00 82.2% (272)
 1st Apparatus On Scene <= 00:17:15 83.4% (276)
 1st Apparatus On Scene <= 00:17:30 83.7% (277)
 1st Apparatus On Scene <= 00:17:45 84.3% (279)
 1st Apparatus On Scene <= 00:18:00 84.6% (280)
 1st Apparatus On Scene <= 00:18:15 85.5% (283)
 1st Apparatus On Scene <= 00:18:30 86.7% (287)
 1st Apparatus On Scene <= 00:18:45 88.5% (293)
 1st Apparatus On Scene <= 00:19:00 88.5% (293)
 1st Apparatus On Scene <= 00:19:15 88.8% (294)
 1st Apparatus On Scene <= 00:19:30 88.8% (294)
 1st Apparatus On Scene <= 00:19:45 89.7% (297)
1st Apparatus On Scene <= 00:20:00 90.3% (299)

1st Apparatus On Scene <= 00:20:15 90.6% (300)
 1st Apparatus On Scene <= 00:20:30 91.2% (302)
 1st Apparatus On Scene <= 00:20:45 91.5% (303)
 1st Apparatus On Scene <= 00:21:00 92.4% (306)
 1st Apparatus On Scene <= 00:21:15 93.7% (310)
 1st Apparatus On Scene <= 00:21:30 93.7% (310)
 1st Apparatus On Scene <= 00:21:45 94.3% (312)
 1st Apparatus On Scene <= 00:22:00 94.9% (314)
 1st Apparatus On Scene <= 00:22:15 95.2% (315)
 1st Apparatus On Scene <= 00:22:30 95.5% (316)
 1st Apparatus On Scene <= 00:22:45 95.8% (317)
 1st Apparatus On Scene <= 00:23:00 96.1% (318)
 1st Apparatus On Scene <= 00:23:15 96.4% (319)
 1st Apparatus On Scene <= 00:23:30 96.4% (319)
 1st Apparatus On Scene <= 00:23:45 96.4% (319)
 1st Apparatus On Scene <= 00:24:00 96.4% (319)
 1st Apparatus On Scene <= 00:24:15 96.4% (319)
 1st Apparatus On Scene <= 00:24:30 96.4% (319)
 1st Apparatus On Scene <= 00:24:45 96.7% (320)
 1st Apparatus On Scene <= 00:25:00 96.7% (320)
 1st Apparatus On Scene <= 00:25:15 96.7% (320)
 1st Apparatus On Scene <= 00:25:30 97.0% (321)
 1st Apparatus On Scene <= 00:25:45 97.0% (321)
 1st Apparatus On Scene <= 00:26:00 97.6% (323)
 1st Apparatus On Scene <= 00:26:15 97.6% (323)
 1st Apparatus On Scene <= 00:26:30 97.6% (323)
 1st Apparatus On Scene <= 00:26:45 97.9% (324)
 1st Apparatus On Scene <= 00:27:00 97.9% (324)
 1st Apparatus On Scene <= 00:27:15 97.9% (324)
 1st Apparatus On Scene <= 00:27:30 97.9% (324)
 1st Apparatus On Scene <= 00:27:45 97.9% (324)
 1st Apparatus On Scene <= 00:28:00 97.9% (324)
 1st Apparatus On Scene <= 00:28:15 97.9% (324)
 1st Apparatus On Scene <= 00:28:30 98.2% (325)
 1st Apparatus On Scene <= 00:28:45 98.5% (326)
 1st Apparatus On Scene <= 00:29:00 98.5% (326)
 1st Apparatus On Scene <= 00:29:15 98.5% (326)
 1st Apparatus On Scene <= 00:29:30 98.5% (326)
 1st Apparatus On Scene <= 00:29:45 98.5% (326)
 1st Apparatus On Scene <= 00:30:00 98.5% (326)

Median 1st Apparatus On Scene 00:09:20 (9.33 minutes)

Average 1st Apparatus On Scene 00:11:28 (11.47 minutes)

Here is a graph for total reflex time using the same measurement above:

