Running Head: PAID-ON-CALL

Evaluating Paid-on-Call as a Means to Increase Membership

In the

Alpha Fire Company

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CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that the appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

Signed:_____

Abstract

The purpose of this descriptive and evaluative research was to examine paid-on-call as a means to increase membership in the Alpha Fire Company. Paid-on-call was identified as a means to make fire company membership more attractive to a broader number of people, particularly those who work part time. The problem is that the Centre Region has not identified a viable staffing alternative to its present volunteer system. The following questions were explored: How does fire department membership for communities using paid-on-call compare to membership in the Alpha Fire Company?, To what degree might a paid-on-call benefit attract part time workers thereby increasing fire company membership within the region?, What is the projected cost to implement a paid-on-call system?, To what degree might a paid-on-call system be competitive with part time employment?. Paid-on-call departments in New Hampshire were compared to the Alpha Fire Company, literature and web based searches were conducted, and data was collected from interviews of persons working part time. Using this information the author concluded that there is evidence that paid-on-call is an incentive that would increase membership rates. However, it does not appear to be feasible to make paid-on-call competitive with current part time employment without jeopardizing the members' volunteer status. It is recommended that paid-on-call remain an option to consider, but less costly options that protect the volunteer status should be explored in earnest.

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Introduction

Since the early 1980's Pennsylvania has experienced a steady and significant decline in the number of active volunteer firefighters. This has resulted in a range of negative consequences including increased service demands being placed on fewer personnel, and in some cases entire companies unable to provide their communities with reliable fire protection. Ensuring sufficient numbers of capable personnel into the future is an omnipresent problem for fire chiefs and municipalities statewide. The Centre Region is no exception. The problem is that the Centre Region has not identified a demonstrably viable staffing alternative to its present volunteer system.

The purpose of this research is to evaluate the viability of paid-on-call staffing as a means to increase the number of active firefighters in the Centre Region. Descriptive and evaluative research will be used to assess local viability of the paid-on-call system. Current reports and publications will be reviewed and an internet data search will be conducted. The author will develop a mathematical model to express viability in quantitative terms and will further assess viability by comparing current staffing conditions between the Centre Region and regions with similar demographics. Specifically, this paper will answer the following research questions:

1. How does fire company or department membership for communities using paid-on-call as a financial benefit compare to fire company membership in the Centre Region?
2. To what degree might a paid-on-call benefit increase fire company membership within the Centre Region?
3. What is the projected cost to implement a paid-on-call system within the Centre Region?

4. To what degree might a paid-on call system be competitive with other part time employment within the region?

For purposes of clarity, and owing to differences in terminology throughout the nation's fire service, the term "fire company" as used in this paper is synonymous with ""fire department". It describes the entire organization versus a component of the suppression force. In Pennsylvania, fire companies often have different categories or degrees of membership and participation, thus the term "member" as used in this paper is synonymous with "active firefighter".

Background and Significance

The Regional Fire Protection Program of the Centre Region is primarily comprised of, and responsible for, the Office of the Centre Region Fire Marshal, and the Alpha Fire Company. The program shares responsibilities for public education, administration and enforcement of fire codes, and emergency management with other agencies of the Centre Region Council of Governments.

The Alpha Fire Company is a volunteer company providing fire, rescue, and related services to the municipalities of State College Borough; all or portions of Benner, College, Ferguson, and Patton Townships; and University Park, main campus of the Pennsylvania State University. The company protects its first-due area of approximately 104 square miles and a population of just under 85,000 from three stations housing modern equipment including four engines, two platform aerials, two tenders, a quint, a medium rescue, two traffic units, a dedicated command unit, two staff sedans and a utility vehicle. The company responds to over 1000 calls annually and through its partner agencies participates in a variety of public education and public service

activities. The program is well funded through the municipalities, the university, State College Fireman's Relief Association (SFCRA), state grants, and direct donations to the Alpha Fire Company. The operating and capital budgets for FY2011 total just over $1,650,000, the majority of which comes through local taxes. The Regional Fire Protection Program is managed by a career Fire Director and a part-time paid Fire Administrator (largely responsible for apparatus and equipment), with a full time Administrative Assistant for support. With the exception of the career Director and part time Administrator, the Alpha Fire Company relies solely on volunteers for fire suppression and service delivery. The performance of the program is monitored quarterly using NFPA 1720 (suburban standard) and it participates in the ICMA CPM program.

Fire company membership is comprised of two distinct groups; Penn State students, and full time Centre Region residents. Participation of Penn State students is fairly constant year to year, their total membership is capped at 40 students, and the company makes no significant investments to specifically recruit students. The second group, Centre Region residents, is deemed critical to the long term viability of the Alpha Fire Company and they are the primary focus of recruiting and retention activities. In 2010 the total membership stood at 109 with 38 students and 71 residents. Like many fire companies in Pennsylvania, Alpha experienced a significant decline in membership reaching a critical level in 2004 to the point of affecting service delivery. After a third party review of the program in 2005 some modest improvements were attained through 2006. By the end of 2007 several best practices for recruiting and retention were identified and adopted, an aggressive advertising and recruiting campaign had been

launched, and professional management was established. Since 2007 the company has increased non student membership by 25% and has reduced non student attrition by 15%, although overall the total number of members has remained relatively flat after a significant gain in 2008. Adopted best practices include volunteer time scheduling in which 62% of the volunteers participate, robust supplemental insurance on members including AD&D and cancer coverage, generous reimbursement of training expenses (100% tuition, fees, equipment, lodging, travel and meals), expansion of an existing live-in program, increasing the annual stipend from $300 to just over $500, upgrades to the in-house fitness center, paid biannual physical exams, and addition of numerous other amenities. Alpha members do not engage in fundraising, which has been identified as a cause of attrition in Pennsylvania fire companies. The degree to which any of these particular attributes has increased the total membership roster or reduced the annual attrition rate was not evaluated as part of this research.

Despite maintaining membership numbers throughout this period of continued statewide decline, the long term viability of the volunteer system continues to be of great concern in the Centre Region. Analysis of performance to NFPA 1720 and member response characteristics has identified a desired total membership of 125, or 16 additional members above the present roster. The addition of 16 members would improve quarterly performance in two of the townships by 15 to 20 percentage points, often the difference between meeting and failing the NFPA 1720 standard. Since total membership has appeared to have reached a plateau, it is unclear that increasing membership by 16 within the current system is achievable. Another concern is future

attrition. The average age of existing nonstudent members has increased every year since 1995, with the current average at 43. (Figure 1)

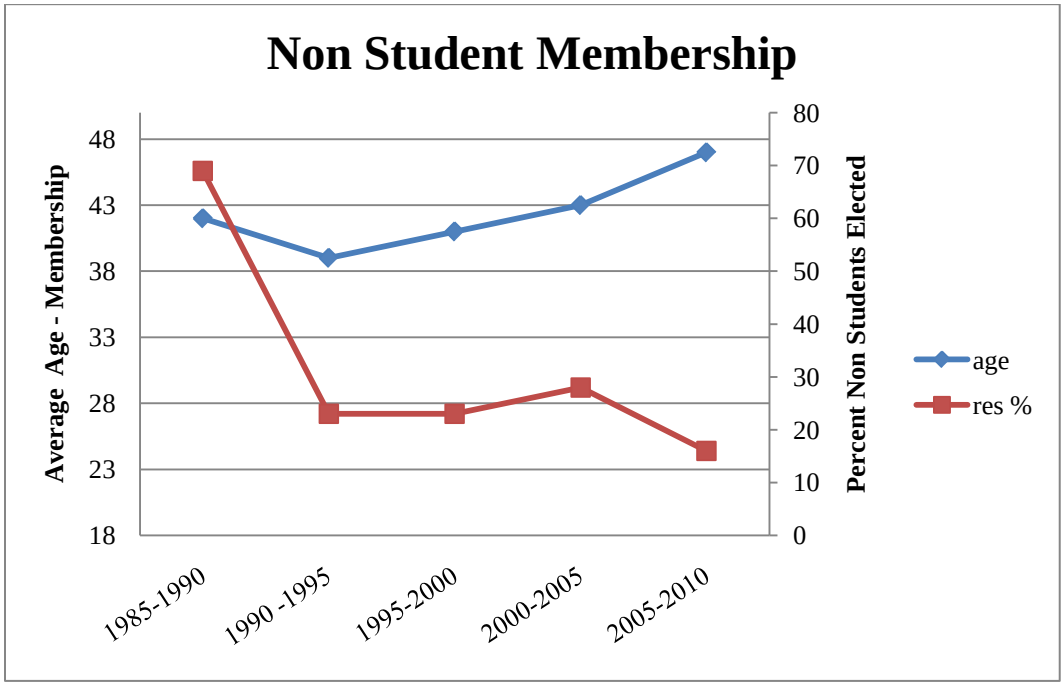

Figure 1

Absent a change in this trend, non student membership will reach a critical level shortly after 2018 as most of the company's involuntary and voluntary attrition starts at age 50. The final concern is that the last two rounds of recruitment experienced a slight decline in resident interest. The company will be unable to cover its future attrition losses should this trend continue. The current average annual attrition of Alpha Fire Company non student members is five.

The selection of any particular system or combination of systems to mitigate these concerns must be carefully considered. Adopting paid-on-call will introduce additional costs, all of which would be borne by local taxpayers. It is also highly probable that any change to the current volunteer system will entail cultural risks that may impact member participation. It is therefore critical to fully understand the costs,

benefits, and risks associated with any proposed system. This research is also significant in that it seeks to describe the organizational benefit of paid-on-call in quantitative versus qualitative terms. This author could find no text or paper in the NFA Learning Resource Center that moved beyond simply identifying paid-on-call as an alternative to be explored.

This research supports the objectives of the Executive Analysis of Community Risk Reduction class in that there is no greater risk to this community, and wholly within the purview of the Regional Fire Protection Program, than loss of the community's fire suppression capability. Similarly, this research directly supports the USFA goal to improve the fire and emergency services' capability for response to and recovery from all hazards.

Literature Review

The Corporation for National & Community Service (CNCS) reports that nationally, in 2009, volunteering is at an all time high and is the highest it has ever been since 2003. They report the rise is primarily fueled by increased volunteerism by women ages 45 to 54. The four most common volunteer activities (among all volunteers) are fundraising, preparing and distributing food, providing transportation, and tutoring or teaching. These activities account for 89.6% of all volunteer activity (CNCS, 2010, p. 3). The report further identifies community factors that exhibit inverse relationships to volunteering. These include larger percentages of multi-unit housing and increased numbers of those who rent (CNCS, 2010, p. 5). CNCS identified a relationship between volunteerism and unemployment. With higher unemployment come lower volunteerism rates (CNCS, 2010, p. 8). The volunteerism rate in Pennsylvania from 2007 to 2009 was

27.9%. The volunteerism rate in New Hampshire for the same period was 29.3% (CNCS, 2010, p. 11).

In 2006 the International Association of Fire Chiefs (IAFC) described the importance of organizational culture and environment upon retention of volunteers. Specifically, the report describes the ideal volunteer experience as “hassle free” where conflict is minimized and the organizational environment is encouraging and positive in nature (IAFC, 2006, p. 6). In the period from September 2004 to September 2005, only 7.4% of all volunteers nationwide did so in a volunteer fire company, EMS, or related service (IAFC, 2006, p. 7). The report emphasized that the best recruiting tool for volunteers is a high retention rate. To achieve high retention rates, a number of factors were identified. The most emphasized were the inclusion of family and truly satisfying the volunteer’s need to be a part of something that matters. In evaluating any organization against these criteria it is important to understand other organizations competing for volunteers in the same local area (IAFC, 2006, p. 7). Benefits and incentives are important recruiting and retention tools. Benefits should clearly demonstrate a commitment to the safety and security of the individual volunteer and his or her family. The report included a list of monetary and non monetary benefits with the monetary benefits primarily focused on insurance protections, tax breaks, and expense reimbursements (IAFC, 2006, p. 17). Financial reimbursement for time such as pay-per-call, stipends, and paid-on-call is becoming a popular method of attracting new members. When using these types of financial benefits the organization must be mindful of IRS limits and tax consequences for the volunteer (IAFC, 2006, p. 19).

The IAFC describes paid-on-call as the third stage of a natural, six stage progression from a volunteer to career department (IAFC, 2005, p. 2). Factors driving this progression are generally beyond the control of the organization and include significantly higher standards of performance, community service expectations, community growth, and community aging. The timing of these factors and their rate of influence vary among localities. The occurrence of service delivery problems, including scratches and extended response times, are clear indicators that the next step in the progression is warranted (IAFC, 2005, p. 3). In high growth areas volunteers are often priced out of the community, unable to afford housing and related costs (IAFC, 2005, p. 5). Younger people are interested in immediate feedback, including the receipt of benefits and incentives (IAFC, 2005, p. 6).

In a 2004 report, the IAFC noted that with a paid-on-call system in place Tinley Park, IL enjoyed a firefighter retention average of 6 years versus the national average of 4 years (IAFC, 2004, p. 8).

The United States Fire Administration (USFA), reporting results from St Joseph's University identified individual life or family changes and organizational issues as the two most frequent reasons for leaving the volunteer fire service (USFA, 2007, p. 26). The USFA notes that the benefits of financial incentives far outweigh the costs associated with high turnover and full time personnel. Paid-on-call was among the financial incentives described, but insurance protection and tax incentives were ranked higher in importance than cash payments for response. The report cautions on relying on cash payments as the primary motivation to join a volunteer fire company since high demands often drive low hourly returns. On the other hand it is acknowledged that cash

payments enable the volunteer to rationalize his or her involvement to family by getting a tangible benefit for the investment of their time (USFA, 2007, p. 100,101). It is recommended that when making cash payments, lump sum payments have more psychological impact than smaller, frequent payments (USFA, 2007, p. 105). With respect to retention the St. Joseph's survey identified financial benefits; state/local tax credits, length of service awards, and tuition credit/reduction, as the top three factors under "What Keeps Volunteers Serving" (USFA, 2007, p. 177).

A Fireman's Fund Insurance Company study conducted through February and March 2009 found that 57% of all volunteer fire departments are losing volunteers who need to look for other jobs (Fireman's Fund, 2009).

The Pennsylvania Fire and Emergency Services Institute (PFESI) has lobbied for numerous financial incentives at the state level, none of which include cash compensation for services. PFESI has identified financial incentive priorities to include tax credits, tuition credit/reduction, and state grants for physical assets. Cash compensation, such as paid-on-call is not addressed (PFESI, 2009).

D'Intino authored a study for the Center for Rural Pennsylvania examining issues affecting fire companies in rural counties throughout Pennsylvania. This report identified leadership issues as the number one retention problem affecting volunteer fire companies, with changes in economic and social conditions of rural and suburban areas following. Referencing data from a prior study in 1992, altruism was identified as the number one reason people joined volunteer fire companies; the value of financial benefits was discounted. However, the Center report acknowledges that "Most published reports suggest financial benefits be used to retain volunteer firefighters."

(D'Intino, 2006, p. 6). Reporting on a survey conducted from 2003 to 2004 on interviews of 701 Pennsylvania volunteer firefighters, 74% would like to receive some type of financial benefit for their time and efforts (D'Intino, 2006, p. 13). The report cautions that financial incentives alone are not enough to keep people volunteering (D'Intino, 2006, p. 13-15).

Marinnuci (2003) also identified the direct relationship between high retention and successful recruiting. He states that organizations should focus on respect and non monetary recognition.

Compton (2003) uses Maslow's Hierarchy of Needs to make the point that failure to provide for an individual's safety and security (food, shelter, clothing) compromises one's ability to provide for higher order needs such as affiliation and acceptance and esteem.

Edwards (2000) identifies a shrinking population and workforce within the United States as a clear threat to the vitality of fire companies in the 21st century due to the existence of a smaller pool of available candidates.

Hipple (2010) discussed multiple jobholders at length. Multiple jobholding data nationwide since 1994 shows no clear pattern relative to economic conditions despite significant changes in the economy. In 2009 the multiple jobholding rate was 5.3% of the workforce. The rate for women was 1.2% higher than that for men. Interestingly, the highest multiple jobholding rates among males were for those primarily employed as firefighters (28.6%) and EMS workers (20.1%). The lowest rates were among those employed in mining and construction. Self employment is the job of choice for 18% of those reporting a second job. Overall, 14% of multiple jobholders were primarily

employed in education or the health services and another 14% were from the retail and hospitality sector. Multiple jobholding varies significantly with age. Seventy two percent of those 16-19 worked multiple part time jobs, while that number dropped to 48% for those aged 20-24. The average total weekly hours worked by these two groups was constant at 46.8 hours. The top three reasons people hold multiple jobs are extra income (38%), the need to meet obligations (26%), and they simply enjoy the second job (18%). Those aged 16-24 are almost exclusively aligned to the top two reasons.

The United States Census Bureau estimates the total 2000 population age 15-34 for Alpha Fire Company's first-due area to be 64,789 persons. They report the 2005-2009 median household income for Centre County, PA at $45,959 and the median household income for Hillsborough County, NH at $53,384.

The Pennsylvania State University (PSU) reports a total student enrollment at University Park of 43,998 for 2009.

Citi-data.com reports State College Area High School enrollment at 2,519 students for 2009. It is unclear if this includes home schooled high school age students.

The United States Bureau of Labor Statistics reports that of a total 2008 workforce of 155,375 persons, 34,250 work part time (22.0%). An average of 5.8 part time hours was worked daily. The Bureau reported that the unemployment rate for Centre County, PA in October 2010 was 5.6%. (USBLS, 2010)

The New Hampshire Bureau of Employment Security reported that the unemployment rate in Southern NH was 5.4% in October 2010.

Yeager and Julian authored a report for the Center for Rural Pennsylvania examining underemployment in Pennsylvania and reports that in 2009, the part time

employment rate statewide was 20.7%. The proportion of women to men in the part time workforce is 2.22 to 1 (Yeager and Julian, 2009).

Hulett, Bendick,Jr., Thomas, and Moccio (2008) found that women should comprise 17% of the first responders workforce based on their participation in similar types of jobs. A smaller number of women seek firefighting employment than do men. In 2000, women comprised only 3.7% of the first responder work force (Hulett, et al., 2008)

City-Data.com reports that the December 2009 cost of living index for Hillsborough County, NH was 117.2. The same index for State College, PA was 104.3.

Babbie (1989) in discussing sampling states that to reduce error a homogenous population should be developed. A homogenous population will produce fewer sampling errors than a heterogeneous population. Stratified sampling is based on this principle (Babbie, 1989, p. 188-191).

Bailey (1978) identified several disadvantages of interview studies. He noted that they are costly, require a significant investment of time, they may introduce bias induced by the interviewer or the respondents reaction to characteristics of the interviewer, the respondent may be affected by the loss of anonymity, and access to respondents may be restricted. Bailey (1978) also identified several advantages to interview studies. Interview studies tend to have better response rates than mailed questionnaires. The interviewer is able to observe and assess nonverbal behavior, and maintains control over the question order. The interview ensures that only the respondent alone can answer and that all questions are addressed (Bailey, 1978, p. 157-159).

In a 2006 letter to then IAFC President Dipoli, the United States Department of Labor clarified the “Bright Line Test” for volunteer compensation. For an individual to be considered a volunteer firefighter, they may not earn more than 20% of the prevailing wage of a full time firefighter. (IAFC Bright Line, 2006).

Interestingly, most of the literature emphasizes the importance of non monetary benefits and incentives in lieu of cash compensation. No discoveries in literature were made that compared participation rates in paid-on-call departments to other systems. No discoveries in literature were made that identified unique characteristics of paid-on-call departments or that generally compared paid-on-call systems to any other system. The literature review did not yield opportunities for secondary analysis of existing data. This placed significant emphasis on collecting new data.

Procedures

Answering the first research question: How does fire company or department membership for communities using paid-on-call as a financial benefit compare to fire company membership in the Centre Region?, required the identification of an area that is demographically similar to the Centre Region and where all, or most, fire departments are paid-on-call. Data regarding the number of members, annual attrition, and community population for these departments was collected by the author throughout September and October of 2010 via telephone or email. The author then calculated the population per firefighter for each community for comparison to the same Centre Region data (Appendix A). The author identified a cluster of towns in Southern New Hampshire suitable for this comparison using data on household income, median home price, a cost of living index, firefighter certification requirements, and the 2010 unemployment

rate. The author used Minitab15, a commercially available statistical software analysis package to determine the characteristics of the data and facilitate comparison. No discoveries in literature were made that compared participation rates in paid-on-call departments to other systems. No discoveries in literature were made that identified unique characteristics of paid-on-call departments or that generally compared paid-on-call systems to any other system. Literature searches were conducted in the Learning Resource Centre of the National Fire Academy and the Pattee Library of the Pennsylvania State University. Similarly, internet-based searches using the keywords “paid-on-call”, “paid on call”, “volunteer benefits”, “volunteer incentives”, “part time employment”, and “fire department staffing” were conducted. Centre Region data is readily available since the majority of this data is generated by the author during the normal course of business. All Centre Region data are public records under Pennsylvania’s “Right to Know” law.

To answer the question: To what degree might a paid-on-call benefit increase fire company membership within the Centre Region?, data was collected to characterize part time employment in the Centre Region. Data for calendar year 2009 was collected using internet-based searches of local, state, and federal government websites to determine the total number of part time employees age 18 to 35 and residing within the Centre Region. Literature was reviewed to identify factors affecting the workforce, such as gender, to accurately characterize and estimate the workforce population. Using this data, the author constructed a mathematical model to quantify the population of the part time workforce available to be recruited by the Alpha Fire Company. This estimate appears in Appendix B. The author also constructed a questionnaire which was used to

conduct an interview survey, although this was not the original intent. The questionnaire was originally to have been made available as a self administered survey taken on-line using SurveyMonkey (Appendix C). This proved to be infeasible and the interview technique was then adopted, with a goal set for 125 useable interviews. Questions 1 through 5 are included to qualify the interviewee. Only those who are between 18 and 35 years of age, reside in the Centre Region, are not Penn State students, and work at least one part time job are considered qualified. Questions 5 through 8 are designed to identify the degree to which the interviewee works part time. Question 9 is a qualifying question to reduce double counting within the model of persons who already are volunteer firefighters. Question 10 serves to corroborate and give some insight into those who answer Question 11 in the negative or answer “Don’t Know”. Question 11, a Likert scale, is the key to the questionnaire and serves as the basis for using the part time employment model for predictive purposes. Once the data was collected it was analyzed by the author using Minitab15 to identify pertinent data characteristics. After analysis, data from the questionnaire was used to predict the responses of the total qualified part time workforce population within the Centre Region to project the probable number of persons expressing interest in joining the fire company due to the paid-on-call benefit (Appendix C, Figures 4, 5, and 6).

The third question: What is the projected cost to implement a paid-on-call system within the Centre Region? was addressed. Using 2009 response data of Alpha members as the basis, a model was developed to estimate the annual cost of a paid-on-call system within the Centre Region. With the aid of information discovered in literature review, a range of costs for probable conditions was calculated (Appendix D).

To answer the fourth question regarding competiveness, the mean part time hours worked identified from responses to Question 8 of the interview survey tool were used to establish a competitive minimum. Potential fire company earnings were calculated to assess competitiveness with other part time employment opportunities within the region. Parameters of the model, such as the Bright Line Test, were established from information discovered in the literature review.

Results

1. How does fire company or department membership for communities using paid-on-call as a financial benefit compare to fire company membership in the Centre Region?

Of 30 Southern New Hampshire fire departments contacted 16 responded and provided data. One of these departments, Candia, did not meet the qualification criterion of being a paid-on-call department and was subsequently removed from the data. The list of responding fire departments and associated data appears in Appendix A, Table 2. Statistical analysis of the data shows the mean for this group to be 216.5 persons per firefighter. However the data are not normally distributed, they are heavily skewed with the median occurring at 175 persons per firefighter. The Alpha Fire Company is significantly higher with 572 persons per firefighter, 150 above the maximum of the New Hampshire sample. (Note that the Alpha population base is adjusted for the Penn State student population, as is the number of Alpha firefighters.) Based on this sample, the New Hampshire paid-on-call departments enjoy higher fire department participation than that experienced in the Centre Region. Using the sample

mean, this participation difference is on the order of 2.6 to 1 in favor of the paid-on-call sample.

The New Hampshire fire departments generally had lower turnover rates than the Alpha Fire Company. The mean annual attrition rate for the sample population was three firefighters, the median was two firefighters. The sample data is not statistically normal (Appendix A, Figure 3). Amherst was the highest with seven firefighters, the only sample department above the Alpha Fire Company rate of five. Comparing the sample mean to Alpha, the paid-on-call departments enjoy lower annual attrition than that experienced in the Centre Region. This difference is on the order of 2 to 3 firefighters annually. To validate this comparison, the following information (Table 1) was obtained via internet search of the United States Census Bureau's American Factfinder tool (2005-2009) for Centre County, PA and Hillsborough County, NH; the U.S. Bureau of Labor Statistics (2009), Citi-Data.com (2009), and the Corporation for National & Community Service (2010).

Attribute	Centre Region	Southern New Hampshire
Median Home (2005-2009)	$167,200	$271,600
Median Household Income (2005-2009)	$45,959	$68,513
Mean Firefighter Wage (May 2009)	$22.54	$22.71
Unemployment Rate (2010)	5.6%	5.4%
Volunteerism Rate (2010)	27.9%	29.3%
Cost of Living Index (Dec 2009)	117.2	104.3

Table 1

No discoveries in literature were made that compared participation rates in paid-on-call departments to other systems. No discoveries in literature were made that identified unique characteristics of paid-on-call departments or that generally compared paid-on-call systems to any other system.

2. To what degree might a paid-on-call benefit increase fire company membership within the Centre Region?

Using data collected from official sources (Census, 2000), the estimated part time workforce within the Centre Region and between the ages of 18 and 35 is 3,782 persons. Adjusting for female participation rates within the part time workforce and the fire service specifically; the best case (maximum female participation) estimate falls to 1,618 persons and the worst case (minimum female participation) estimate falls to 1,271. This range represents the number of persons working part time within the Centre Region who might be induced by a compensation benefit such as paid-on-call. The calculations for this number appear in Appendix B.

A total of 52 persons were contacted, 31 were qualified and interviewed by the author or an assistant (roughly half) using the questionnaire and all 31 provided data (Appendix C, Table 3). This is significantly fewer than the goal of 125. Those disqualified did not reside in the first due area of the Alpha Fire Company. Because the questionnaire was ultimately used as a template to guide an interview, Questions 1 through 3, Question 5, and Question 9 became inconsequential since only qualified candidates were interviewed. For Question 4, “Do You have a Full Time Job?”, 11 responded YES, and 20 responded NO. Question 6 asked “On average, how many hours each week do you work part time?” with four range selection choices. Results

were that 18 interviewees selected “More than15”, four interviewees selected “Between 10 and 15”, 8 interviewees selected “Between 5 and 10” and 1 interviewee selected “Less than 5”. Because the question construction allowed overlapping values the interviewer recorded to the next highest category if the interviewee described periodically exceeding the category limit. (For example, an interviewee reports an average of 15 hours per week with the question categories being “Between 10 and 15” and “More than 15”. In follow-up if the interviewee described 15 as a fixed number or normal upper limit it was recorded as “Between 10 and 15”. If the interviewee described 15 as the average, periodically exceeded, then it was recorded as “More than 15”.) Question 7 asked “How many part time jobs do you work each week?”. Twenty eight interviewees reported “1”, three interviewees reported “2”, and no interviewees reported working more than two part time jobs. Question 8 asked “How many part time hours per week do you normally work at each of your jobs?” and the interviewees were provided the opportunity to record hours for up to 3 different employers. Data is presented in Table 3 of Appendix C as Q8A, Q8B, and Q8C with each letter representing a separate employer. Where interviewees reported multiple part time employers, the interviewer recorded the smallest number of hours reported in column Q8A. Data from Q8A shows that for this sample the mean part time weekly hours worked was 16.8 hours (Figure 6). The minimum number of hours worked was 4 (a single employer) and the maximum was 35 (also a single employer). Q8B had three entries and Q8C had none. Question 10 solicited a response to the statement “I do not currently serve as a volunteer firefighter, EMS or rescue responder because:” “I don’t know enough about it, but probably could serve.” (5 responses), “I have no time to serve due to non work related

issues.” (12 responses), “I cannot afford to serve, I need to maximize my paid hours.” (6 responses), or “I have no interest to serve or I am physically unable to do so.” (8 responses). Question 11 invited the interviewee to rate their agreement with the statement “If the position of firefighter was available as a part time employment opportunity I would apply.” Only 1 interviewee chose “Strongly Agree”, 7 interviewees chose “Agree”, 8 interviewees chose “Disagree”, 9 interviewees chose “Strongly Disagree” and 6 interviewees chose “Don’t Know”.

Scores for Questions 10 and 11 were coded for analysis. For Question 11 a sequential scale was used for coding with “Strongly Agree” coded as “4” and “Strongly Disagree” coded as “1”. The choice of “Don’t Know” was coded “0”. The data sample for this question is not normal. The mathematical mean of the sample is 1.61 with a standard deviation of 1.15 (Appendix C, Figure 4).

With regard to the degree to which paid-on-call might increase fire company membership within the Centre Region, the literature review did not offer specific information directly applicable to local conditions.

3. What is the projected cost to implement a paid-on-call system within the Centre Region?

The author refined an earlier mathematical model to more accurately estimate the cost of implementing paid-on-call within the Centre Region. The model uses response data for 2009, the most recent full year of data available at the time of writing and the highest total incident volume for the past three years, including 2010 (Appendix E). Using a range of paid-on-call hourly wages and conditions, cost estimates range from a high of $306,751 to a low of $94,853 in total funds. Accounting for the application

of currently budgeted stipend funds (2011 budget), the budget increase ranges from $242,679 to $30,781. The complete calculations appear in Appendix D.

4. To what degree might a paid-on call system be competitive with other part time employment within the region?

It will be difficult for a paid-on-call system to be competitive with part time employment within the region if the Bright Line Test limits volunteer compensation to approximately $4.50 per hour, a figure well below the national minimum hourly wage. Without the Bright Line Test cap, at wages on the order of $17 per hour, the annual volume of incidents is generally not capable of producing a competitive number of earning opportunities as compared to regular part time hours.

Discussion

1. How does fire company or department membership for communities using paid-on-call as a financial benefit compare to fire company membership in the Centre Region?

Census data was the primary source for making the demographic comparison between the Centre Region and the towns comprising the southern New Hampshire study sample. The most recent census estimates (2005-2009) are only available for larger metropolitan study samples. Thus the comparison values are for Centre County, Pennsylvania and Hillsborough County, New Hampshire versus the specific municipalities that make up the Centre Region (a borough and six townships), and the individual NH towns listed. The difference between the median household income for Hillsborough County, surrogate for the New Hampshire sample towns, is 62% higher than that for Centre County, surrogate for the Centre Region. This difference may be

considerably overstated since the Centre Region municipalities, particularly those protected by the Alpha Fire Company, are among the most affluent within Centre County. With the exception of the Centre Region, the vast majority of Centre County is very rural. Similarly, median income for Hillsborough County is 49% higher than that for Centre County. A comparison of public assistance figures for these two geographic areas might have been beneficial in assessing the quality of this community comparison. Interestingly, the statewide wages for firefighters are similar, a difference of less than one percent (USBLS, 2009). The volunteer rate differs by 1.4% suggesting that those living in New Hampshire are only slightly more civic minded than those in Pennsylvania (CNCS, 2010). However, it is important to note that this is statewide data and that Pennsylvania is considerably larger and more diverse than New Hampshire. It is difficult to assess the degree to which any individual fire department is integrated into its community's identity which may also affect department membership.

Accepting that there are probable differences between and within the samples that affect department membership, the paid-on-call departments enjoy a considerable membership advantage: 2.6 to 1 when Alpha is compared to the NH sample mean and 3.3 to 1 when compared to the median. Based on this comparison, the Alpha Fire Company would be expected to increase its membership by adopting a paid-on-call system.

When the NH sample was analyzed for average annual attrition, the Town of Amherst emerged as an outlier, with a reported turnover of seven versus the remaining towns reporting one to five. A follow-up discussion with Amherst Deputy Chief Matt Conley revealed that the reported value of seven was for 2009, a year in which Amherst

experienced the loss of some staff believed to be related to the selection of a new fire chief. Amherst has since made up this loss and Chief Conley reports that turnover in years prior to 2009 ranged from three to five members (M. Conley, personal communication, January 12, 2011). Reducing the Amherst value from seven to four in the sample changes the mean annual attrition rate from 2.9 to 2.5 members, while the median remains at 2. It also results in a normal data distribution for the sample ($\rho = 0.06$, $\alpha = 0.05$). Rounding to the nearest whole member, the NH attrition sample mean is three members per year, and the median is two. This is significantly better than the Alpha Fire Company attrition rate of five. Based on this comparison, the Alpha Fire Company would be expected to decrease its average annual membership attrition by adopting a paid-on-call system.

In their 2006 White Ribbon Report, the Volunteer & Combination Officer's Section of the IAFC reports that paid-on-call is among the financial benefits becoming a popular method for attracting new members (IAFC, 2006). The USFA report of 2007 also acknowledges that cash payments, such as paid-on-call, enable the volunteer to rationalize his or her involvement. This report also cautions reliance on cash payments since the amount of cash actually received for the time invested my ultimately yield a low return (USFA, 2007). Departments in the New Hampshire sample may be modifying the simple paid-on-call concept to assure competitiveness to other part time employment alternative, they may be experiencing high incident volumes or incidents of long duration, both of which would drive higher earnings; or they may be using a hybrid system with a combination of paid scheduled time supplemented by paid-on-call responses outside regularly scheduled hours. In any event, the cash payments resulting

from the paid-on-call systems appear to yield a significant membership advantage over a purely volunteer system. The St. Joseph's study referenced in the USFA report touts the desirability of state and local tax breaks for volunteers, and tuition credits or reductions as benefits to attract and retain volunteers. The St. Joseph's study involved volunteer fire departments nationwide (USFA, 2007). Pennsylvania currently has no legislation to facilitate either of these options. The Pennsylvania Fire and Emergency Services Institute has been lobbying for these types of incentives and has no activity focused on cash payments for services (PFESI, 2009). Since the PFESI is a statewide lobbying group addressing actions to be taken by the Pennsylvania State Legislature that would benefit volunteer fire companies, it has no compelling reason to consider cash compensation. Local municipalities are already free to offer such compensation, and volunteer fire companies operating as sovereign nonprofit corporations within the Commonwealth are free to compensate their members as they deem appropriate. The Center for Rural Pennsylvania report identifies leadership issues within the volunteer fire service as the primary reason for decline and suggests focus on this issue (Yeager and Julian, 2006). The Center is a legislative agency of the Pennsylvania General Assembly and may have a bias to focus on non monetary solutions to the state's continuing volunteer firefighting decline. References in this report regarding the significance of altruism as a volunteer benefit or incentive date to 1992 (Yeager and Julian, 2006). The eighteen years that have past are almost sufficient for an entire generational change. An IAFC report states that younger people "are interested in immediate feedback and that includes benefits and incentives" (IAFC, 2005, p.6). Despite its emphasis on nonmonetary issues, Yeager and Julian acknowledge that in

surveys conducted through 2003 and 2004, 74% of Pennsylvania volunteer firefighters would like to receive some type of financial benefit (Yeager and Julian, 2006). This may be a signal that the priorities of today's volunteers are moving from non tangible benefits to more tangible rewards such as cash compensation. In Maslow's Hierarchy of Needs the individual's safety and security form the basis for all higher order needs such as affiliation, acceptance, and self actualization (Compton, 2003). Systems that provide cash payments, such as paid-on-call, provide the means for the organization to assure or improve a member's safety and security. According to the IAFC, benefits should clearly demonstrate a commitment to the safety and security of the individual volunteer and his or her family (IAFC, 2006). Paid-on-call offers a readily available means to provide a tangible member benefit that does not require legislative change in Pennsylvania.

Just as safety and security provide a stable base for higher order needs, retention is routinely identified as the stable base necessary for effective recruiting. (Marinnuci, 2003; IAFC, 2004, 2006; USFA, 2007, et al.). The IAFC reports that Tinley Park, IL enjoys a firefighter retention rate higher than the national average owing to their paid-on-call system (IAFC, 2004). By enhancing retention through the adoption of a paid-on-call system, the Alpha Fire Company should experience improved recruiting.

Edwards warns of the future contraction of the U.S. workforce (Edwards, 2000) while the Corporation for National & Community Service reports high volunteer growth with Baby Boomers particularly age 45 to 54 (CNCS, 2010). The aging of the U.S. population will ultimately reduce the number of persons available for volunteer fire companies to recruit. Competition for younger people will probably intensify for both

employment and volunteer activity. Compensation, such as paid-on-call, could become a necessary tool to keep firefighting competitive with other opportunities.

In the author's opinion, adopting a paid-on-call system would increase Alpha Fire Company membership and member retention.

2. To what degree might a paid-on-call benefit increase fire company membership within the Centre Region?

To address this question the author has made two fundamental assumptions: those interested in volunteering have seen Alpha's advertising and invitation to become a member and have taken action to participate or determine they are unable to do so; and that those most likely to need or want additional income are already working part time. Thus the answer to this research question requires a robust approximation of the size and nature of the Centre Region's part time workforce; or more specifically, the size and nature of the part time workforce aged 18 to 35 years. Census data was readily available, but for age detail the only data sets available were for the 2000 census and the age ranges include persons 15 to 35 (U. S. Census, 2000). The author determined the ratio of those aged 15-35 in 2000 and applied this ratio to the 2009 total population estimate yielding a population of 64,789 (Appendix B, Line A). This assumes that the ratio has not significantly changed in almost a decade. To isolate the target group of non student residents, the population must be adjusted for Penn State students. Penn State reports 2009 enrollment at University Park at 43,998 (PSU, 2009) (Line B). The next adjustment reduces the population by eliminating persons under 18 years of age. The enrollment figure of 2,519 for the State College Area High School (Grades 9 -12) was used for this purpose (Citi-data, 2009) (Line C). These adjustments reduced the

population to 18,272 (Line D). The statewide rate for part time employment in 2009 is reported to be 20.7% (Yeager and Julian, 2009). Using this figure there are an estimated 3,782 Centre Region non student residents working part time (Line E).

The proportion of males to females in the part time workforce is not 1 to 1. In Pennsylvania it was 2.22 to 1 in 2009 (Yeager and Julian, 2009). Thus the part time workforce identified in Line E of the model is comprised of 2,607 females and 1,175 males (Model Line F). Approximately 3.7% of the fire service workforce in 2000 was female, with a best in class composition of 17% (Hulett, et al., 2008). Therefore, the probable range of females interested in a firefighting role within the Centre Region ranges between 96 and 443 (Line G). Summing the female range with the male estimate the total part time workforce available to the Alpha Fire Company for recruiting is calculated to be between 1,271 and 1,618 persons (Line H).

There are several areas of note relative to the part time workforce estimate beyond those already identified in the model description. The model does not account for people not currently working part time and who do not currently volunteer who might be attracted to a paid-on-call firefighting position. The nationwide estimate of part time within the workforce is 22% (USBLS, 2008). In this model 20.7% was used because it was a statewide number. Pennsylvania is demographically diverse which means there could be error in using either the statewide or national estimate, as neither may accurately reflect the Centre Region actual. In examining multiple jobholder rates nationwide, Hipple identified the workforce difference by gender at 1.2% in favor of women (Hipple, 2010). As evidenced by the survey sample, not all part time employees are multiple jobholders. In the model the author used the higher gender difference

based on Pennsylvania statewide underemployment data, resulting in a more conservative estimate (Yeager and Julian, 2009). Again, these statewide numbers may not accurately reflect local conditions in the Centre Region. Both sources described significant variations within gender by age. No attempt was made to improve the precision of the estimate by considering the gender differences in the workforce rates by age. Hipple reports that multiple jobholding rates vary by as much as 25% between age groups with the highest rates reported between ages 16 and 19 (72%) (Hipple, 2010). It is probable that underemployment rates are similarly influenced by age.

Using the workforce population estimate from the model in Appendix B, the answer to this question is extrapolated from the interview responses collected throughout the second half of 2010, with the information discovered in the literature review used to establish the parameters of the estimate. Ideally, the number of interviews completed would yield a statistically normal data set, or a statistically well defined data set, from which robust statistical analysis could be undertaken. This was not the case, and a relatively small set of data was achieved (n=31). The original plan for a web-based, self administered survey was a failure. Employers were contacted and requested to invite their employees to access the website and participate in the survey. After sixty days of personal contacts it became clear that larger employers would not participate. The local chamber of commerce was also not interested in participating. With the help of a local small business owner, the author was able to ultimately gain access to part time employees. This business owner personally contacted other small business owners and encouraged them to participate. Even with this assistance each interview required approximately two to three hours of time, which included explaining

the purpose to the business owner, reviewing the questionnaire to demonstrate the protection of privacy, travel to and from the business, and the interview itself. The time constraint for completion of this project forced closure of the exercise to facilitate analysis and use of the data. On a positive note, by using the questionnaire in an interview study format 60% of those contacted for interview yielded usable data. This is consistent with the success rates discussed in literature when considering study format (Bailey, 1978).

Social research methodology was reviewed prior to constructing the questionnaire. To reduce sampling error and bias, the questionnaire was constructed to qualify respondents (interviewees) to assure that they had the characteristics of interest; specifically Centre Region residents who work part time and are not Penn State students and who are not already serving a volunteer fire company or EMS service. The qualifying questions (1 through 3, 5, and 9) were straightforward and effective. The questionnaire qualifying questions produced a homogenous sample as desired (Babbie, 1989). Question four identified those who are also working part time, again straightforward and effective with no issues noted. Question 6 characterized the total weekly part time hours worked. This question was redundant and unnecessary since Question 8 identified the actual average weekly hours worked per employer. The ranges in Question 6 were also poorly matched to actual conditions. Question 7 proved of limited value since no interviewee worked for more than three different employers. Question 8 produced usable data for additional consideration by identifying the average number of hours worked for each employer. There appears to be a negative correlation between those that work 20 hours per week or more for a single employer and the level

of interest in firefighting as a part time job opportunity. Responses to Question 10, as to why the interviewee was not currently participating as a volunteer , appear to lend credence locally to the Fireman's Fund finding that 57% of volunteer departments are losing members who need to look for other jobs (Fireman's Fund, 2009). Six interviewees (19%) reported that they could not afford to volunteer; they need to invest their available time into employment. The exact question or series of questions asked in the Fireman's Fund survey are unknown. It is probable that the response to that survey included members displaced by loss of local employment, and those who are commuting greater distances as a result of local employment. Regardless, 19% locally is significant and it suggests that a financial benefit such as paid-on-call would encourage an increased number of individuals to explore Alpha Fire Company membership. Another interesting finding from Question 10 was the number of interviewees who knew very little about the fire company or the nature of the work (5 responses, 16%). This warrants further reflection and investigation since the question identifies people who may have the time to volunteer but don't know enough about it to actually step up and do so. Question 11 served as the key to answering the research question by identifying those part time workers who would consider firefighting as a part time opportunity.

The data sample from Question 11 is small and not statistically normal. However, a reasonable and useful analysis using this data can be completed. The Alpha Fire Company seeks to fill a membership gap of 16 members to reach the desired roster of 125, and continue to cover future attrition at the rate of five members per year. Because these numbers are relatively small, the analysis can tolerate a large margin of error.

Using the coding shown in Appendix C, Table 3 for Question 11, the mean is 1.61 with a standard deviation of 1.15 (Figure 4). By definition, one standard deviation to either side of the mean accounts for 68.3% of all data which leaves 15.85% of the data above the coded value of 2.76. Coded scores of 3 and 4 represent those persons expressing any interest in firefighting as an option for cash compensated employment. If we assume additional interviewees would respond in the same proportions as this sample, then approximately 15.83% of the interviewees will express interest. Applying this assumption to the total estimated range of non student, part time workforce of Centre Region residents age 18-35, the estimated total number of those expressing interest ranges between 201 and 256 persons.

If the data are contracted by combining “Strongly Disagree” with “Disagree” and Strongly Agree” with “Agree” while retaining “Don’t Know”, the data sample returns a different mean and standard deviation (Figure 5). Using this modified sample, the coded score mean is 1.06 and the standard deviation is 0.68. Again, using one standard deviation from the mean, 15.83% of the data lies above 1.74 with “2” representing those persons expressing interest. To be squarely at “2” or above, two standard deviations were used to account for 95.4% of all data leaving 2.3% of the data above 2.4. Assuming additional interview data will reflect similar proportions to this modified sample, we can assume that approximately 2.3% of all interviewees will express interest. Applying this assumption to the total estimated range of non student, part time workforce of Centre Region residents age 18-35, the estimated total number of those expressing interest ranges between 29 and 39 persons.

Considering the two analyses, the probable range minimum is 29 and the probable maximum will not exceed 256. Thus, the answer to research question two is between 29 and 256. This range appears capable of delivering the 16 people needed to close the membership gap.

The literature generally supports the concept that a cash compensation benefit such as paid-on-call will generate more interest in fire company membership than volunteering. Hipple notes that the top three reasons people hold multiple jobs are to generate additional disposable income (38%), generate income to meet obligations (28%), or because they simply enjoy the job (18%) (Hipple, 2010). Volunteering does not generate additional disposable income nor does it proved funds to meet obligations. In describing the natural transition from a volunteer to career department, the IAFC identifies one driving force as volunteers unable to afford housing or related costs in areas of high growth (IAFC, 2005). If the fire company can provide a source of additional income, some of these volunteers might be able to remain in the area.

3. What is the projected cost to implement a paid-on-call system within the Centre Region?

The cost estimate was constructed with an assumption that awarding cash compensation would create some increase in the number of members responding to any particular incident, the return travel times were understated and that some time for returning apparatus to service was necessary. A contingency to account for these issues was established at 10%, and was not based on any data source. The estimate was constructed by calculating paid-on-call hours from the times recorded into the National Fire Incident Reporting System (NFIRS). The total “paid” time is from the time

of dispatch to the time of return. The dispatch time (DT), time responding (RESP), time of arrival on scene (A), and the time of return to service (leaving the scene) (RET) are all common reporting fields in NFIRS. The time between responding and arriving was used to approximate the time required to return to quarters. Thus, the equation for total "paid" time is expressed as: (RET-DT) + (A-RESP) = Total Time. This value was calculated for 1,075 responses (2009 calendar year incident volume). To obtain total hours, the Total Time for each incident was multiplied by the number of personnel recorded as responders, regardless of whether the responder went to the scene, rode on apparatus, or stood by at the station. To obtain the total annual hours the equation used was: (Total Time) x (Number Personnel Responding) = Total Incident Hours. The Total Incident Hours for each incident were then simply summed for an annual total. For 2009 Total Incident Hours was calculated to be 16,222.50. This final number was then multiplied by an hourly rate of $17.19 which at the time was reported to be the mean Central Pennsylvania Wage of a Firefighter by the U.S. Bureau of Labor Standards for calendar year 2007. The resulting total estimated cost was then arbitrarily increased by 10% to capture unaccounted time needed to return apparatus to service, probable underestimation of the time it took to return to the station from the incident scene, and the possibility of higher response by members to collect compensation. Using this model, the annual cost to implement a paid-on-call system for the Alpha Fire Company would be $306,751 (rounded to the nearest dollar).

As a means to explore cost reduction, the 2009 response data was reexamined to determine the number of incidents occurring "on shift" versus "off shift". For the purposes of this discussion, "shift" is the period from 1800 to 0600 when volunteers are

encouraged to staff the station. Alpha Fire Company volunteers are normally staffing at least one full engine from 1800 until 0600 the next morning 7 days each week with the exception of major holidays. The volunteers are divided into five platoons for this purpose and each platoon serves a daily shift with weekends (Friday and Saturday nights) handled by platoons on a rotating basis. Platoon participation is voluntary and approximately 62% of the total membership participates in this shift scheduling scheme. For the purpose of cost estimating a full shift must be considered. The author has defined a full shift at 18 personnel: four each for three engines, an engine from each station; four for a truck, a duty chief, and a duty fire police officer. This staffing level demands 90 members participating in the shift scheme or roughly 81% of the current total membership (72% of the total desired membership of 125).

Only 5.3% of all incident responses for 2009 occurring on shift logged more than 18 personnel responding, while only 18 incidents, or 3.4%, logged more than 20 personnel. Therefore the vast majority of incidents could be handled with on shift personnel. To develop a range, costs were re-estimated with the parameter that during shift hours, only those members on shift would be paid-on-call. This would discourage members off shift from responding simply to collect the paid-on-call wage. All non shift responses would be paid-on-call without restriction. Using this method, the cost to implement a paid-on-call system actually increased from $360,751 to $309,720.

Decreasing the hourly wage to $10 reduces the non shift oriented costs to $162,225, or $178,448 with 10% contingency, while shift oriented costs rise to $163,795, or $108,175 with 10% contingency.

Alpha volunteers currently earn an annual stipend which would be supplanted by a paid-on-call system. In 2011, funds in the amount of $64,072 are budgeted for this purpose. Thus, adjusting the calculated cost ranges by the stipend amount to reflect actual budget impact, the estimates range from a high of $245,648 using the $17.19 hourly wage with shift orientation to a low of $114,376 using the $10 hourly wage, with no shift orientation and no contingency.

4. To what degree might a paid-on call system be competitive with other part time employment within the region?

Using 2009 data the average number of hours per incident is 1.15 hours (a minimum of one hour would be paid per call, with additional time credited in 15 minute increments). (Appendix E). The most active non student member logged 352 incident responses in 2009 which would result in an average of 7.8 hours weekly. This value is considerably less than the mean number of weekly hours worked for a single employer by the interviewees who participated in our questionnaire exercise. The mean for that group was 16.74 hours (Question 8A). This suggests that paid-on-call alone will not generate sufficient income to lure a part time employee to fire company membership unless the hourly wage for firefighting is roughly twice the average part time wage rate. Wage data for part time employees was not collected during this research, although later contact with local business owners report part time wages for semi-skilled positions in the range of $8.50 to $9.00 per hour (J. Gibson, personal communication, January 8, 2011.). A $17.00 hourly wage is twice the lower figure provided by the local business owners. Assuming a very active member being paid for 7.8 hours each week at $17 per hour, earnings would be $132.60 weekly. This is still less than the average part time

employee earning $8.50 per hour working 16.7 hours weekly for weekly earnings of $141.95. From the interviews conducted 19 of 31 interviewees (61%) worked less than the arithmetic mean of the full sample. For those working less than 16.7 hours, the average number of weekly hours is 10.6 with 16 hours as the upper limit. This suggests that paid-on-call would be competitive with approximately half of those working part time. It is important to consider that the sample size is small. As such no definitive determination on competitiveness can be made.

The Bright Line Test is a particular concern. It holds that compensation to a volunteer must be “nominal”; limited to 20% of the prevailing wage for a full time person performing the same service (IAFC Bright Line, 2006). Failure to meet the Bright Line Test would change members’ status from volunteer to part time employee and would probably affect state grant opportunities, Pennsylvania State Fireman’s Relief benefits and funding, and it could adversely affect community goodwill. The total annual paid-on-call earnings for the most active non student member described above would be approximately $6,882. The average hourly firefighter wage for the region of $22.54 (USBLS, 2009) translates to approximately $46,883 annually, 20% of which would be $9,377. However, the Bright Line Test letter to the IAFC discusses shift-based compensation and paid-per-call (flat fee per each individual response) and does not specifically discuss hourly compensation (IAFC Bright Line, 2006). If hourly compensation is determined to be “not nominal” for Bright Line testing, the hourly paid-on-call limit would be capped at 20% of $22.54 per hour, or $4.51 per hour. This value would significantly diminish competitiveness with other part time employment in the region.

Based on this research the author concludes that adopting a paid-on-call system within the Centre Region would probably result increased membership. However, if paid-on-call earnings must be capped to preserve the volunteer status of Alpha members, there is no compelling evidence that it will attract enough new members to achieve the roster target of 125 members and cover future attrition. This research suggests Alpha retention rates would be improved, albeit modestly. Implementing paid-on-call would involve significant costs and improving retention might be more effectively addressed through an increase of the existing volunteer stipend.

Recommendations

Based on this research, the following actions are recommended:

1. Models used to estimate the number of potential recruits should be reevaluated using 2010 census data, release of which is anticipated sometime in February 2011. It is possible that the region's demographics have shifted in a manner that may not support any type of long term volunteer-based staffing strategy.
2. Data to determine the region's part time wage structure should be collected.
3. Legal advice regarding the applicability and implications of the Bright Line Test to hourly compensation systems should be obtained.
4. Current advertising geared to recruiting should be assessed. The interviews identified a number of individuals who had little or no knowledge related to the role of firefighters or of the activities of the Alpha Fire Company.
5. Alternatives other than paid-on-call as a means to improve Alpha service levels, staffing, or long term viability should be thoroughly investigated.

6. Paid-on-call should continue to be considered as a viable long-term option to increase staffing if utilized as part of an overall part time employment system. As a supplement to a part time employment system, paid-on-call in and of itself would not need to be competitive with other part time employment in the region.

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Appendix A

Southern New Hampshire Data Sample

Department	Full Time FF Staff	Paid-on-Call FF Staff	First Due Population	Average Annual Attrition	Population per Paid-on-Call FF	Certification Required? (FFI)	Department Contact Person	Contact Person Title	Method of Contact
Amherst	2	28	11801	7	421.46	Y	Matt Conley	Deputy Chief	email
Milford	3	45	14792	5	328.71	Y	Frank Fraitzl	Chief	email
Plaistow	2	37	8000	2	216.22	Y	John McArdle	Chief	email
Brookline	1	34	5000	4	147.06	Y	Scott Knowles	Asst Chief	email
Sanbornton	2	19	2900	2	152.63	Y	John DeSilva	Chief	email
Dublin	0	12	1540	2	128.33	Y	Tom Vanderbilt	Chief	email
Mont Vernon	0	19	2400	1	126.32	Y	Jay Wilson	Chief	email
Peterborough	1	50	6600	3	132.00	Y	Joseph Lenox III	Chief	email
Epsom	4	15	4580	1	305.33	Y	R. Martin	Captain	Telephone
Hollis	9	35	7760	2	221.71	Y	A. Kelly	Admin Asst	Telephone
Weare	0	53	9090	3	171.51	Y	Mark Roarke	FF/Paramedic	Telephone
Hampstead	5	30	8952	2	298.40	Y	Steve Morse	FF	Telephone
Henniker	1	36	5051	3	140.31	Y	Mick Costello	Captain	Telephone
Hillsborough	1	41	5547	1	135.29	Y	Ken Stafford	Chief	Telephone
Tilton-Northfield	13	27	8693	2	321.96	Y	Kathy Pobine	Admin Asst	Telephone

Table 2

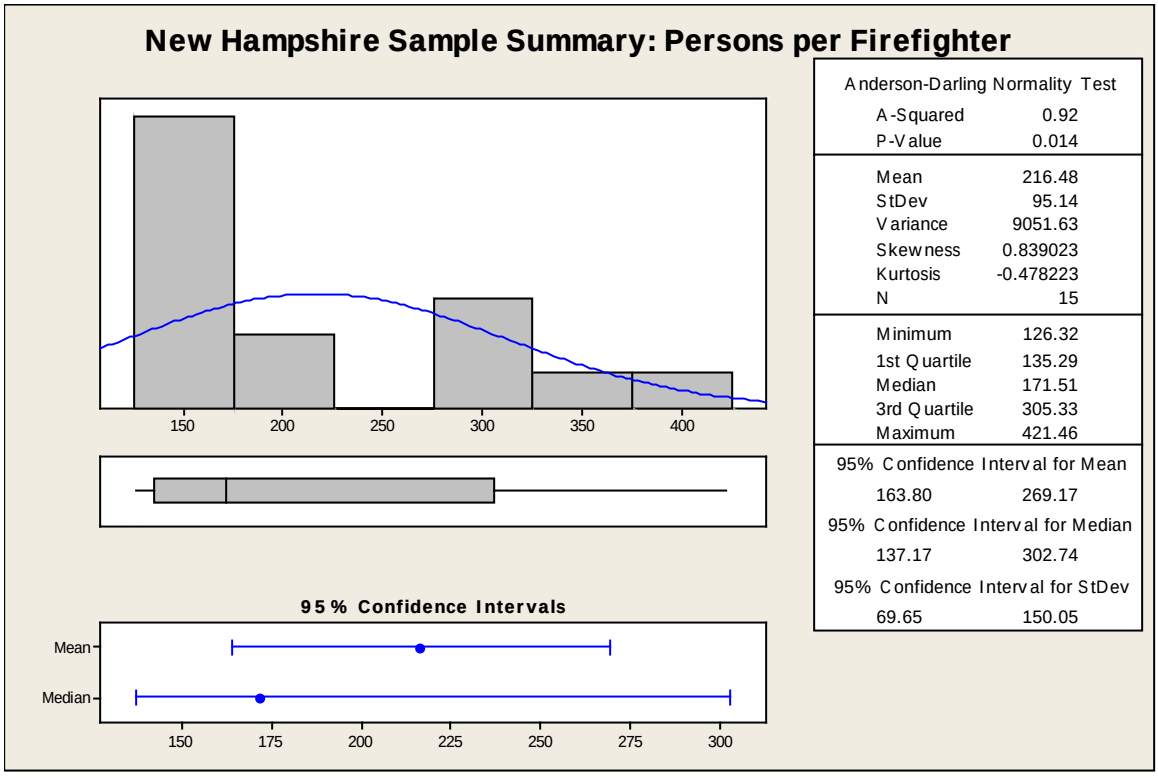


Figure 2

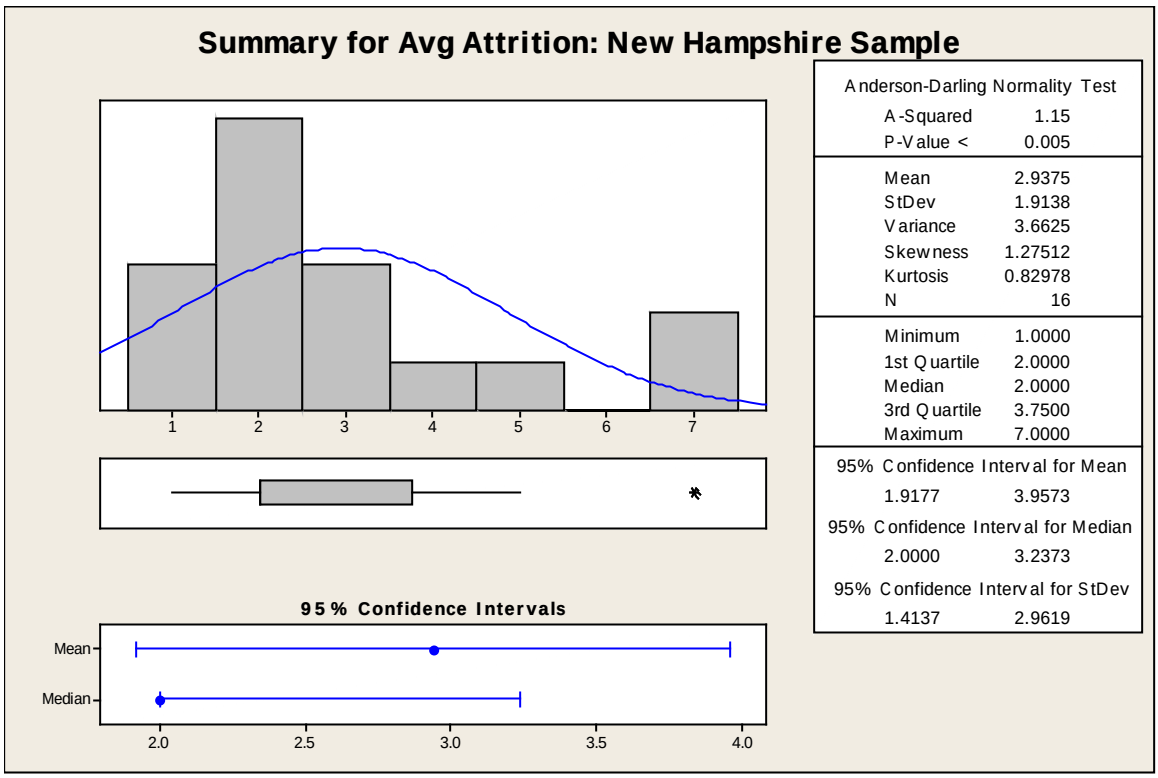

Summary for Avg Attrition: New Hampshire Sample
Anderson-Darling Normality Test
A-Squared 1.15
P-Value < 0.005
Mean 2.9375
StDev 1.9138
Variance 3.6625
Skewness 1.27512
Kurtosis 0.82978
N 16
Minimum 1.0000
1st Quartile 2.0000
Median 2.0000
3rd Quartile 3.7500
Maximum 7.0000
95% Confidence Interval for Mean
1.9177 3.9573
95% Confidence Interval for Median
2.0000 3.2373
95% Confidence Interval for StDev
1.4137 2.9619
1 2 3 4 5 6 7
95% Confidence Intervals
Mean
Median
2.0 2.5 3.0 3.5 4.0

Figure 3

Appendix B

Estimate for Non Student, Part Time Workforce of Centre Region Residents Age 18-35 Available to be Recruited

A. 2009 Estimate of Centre Region Population Age 15-35: 64,789

B. Less 2009 Penn State University Park Enrollment: (43,998)

C. Less 2009 SCASD High School Students: (2,519)

D. Centre Region Non Student Population Age 18-35: 18,272

E. Statewide Part Time Workforce Rate (20.7%) Adjustment

18,272 x 0.207 = 3,782 Total Part Time Non Student, Resident Workforce

F. Adjustment for Gender Proportions of Part Time Workforce (2.22 Female to Male)

Female = 2,607 Male = 1,175 Total = 3,782

G. Adjustment for National Female Fire Service Participation (3.7% to 17% likely to have interest)

At 3.7% Adjusted Female = 96 (96.46)

At 17% Adjusted Female = 443 (443.19)

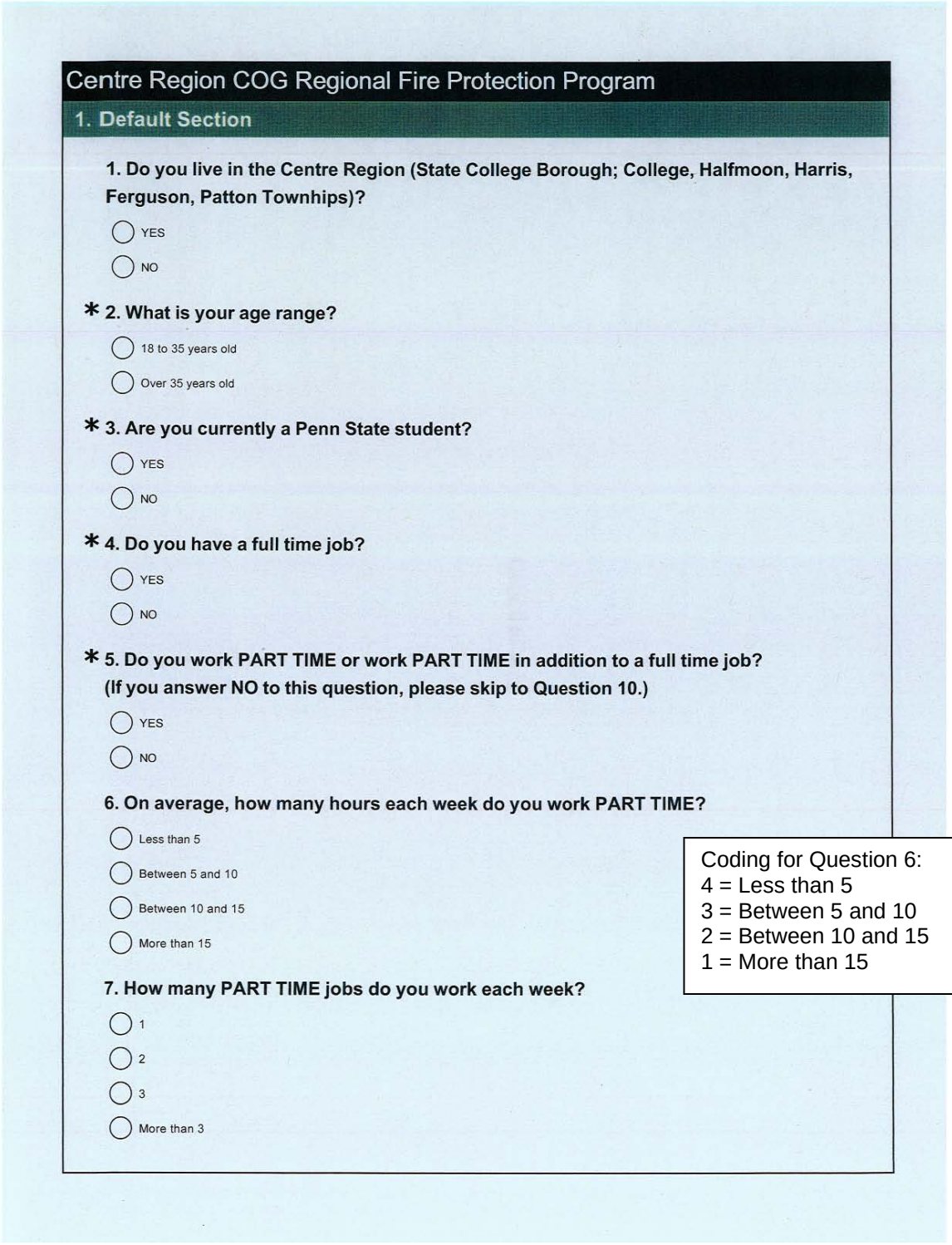
H. Estimate for Non Student, Part Time Workforce of Centre Region Residents Age 18-35 Available to be Recruited:

1,175 Male + 96 Female = 1,271 persons (Low Estimate)

1,175 Male + 443 Female = 1,618 persons (High Estimate)

Appendix C

Interview Results and Analysis



Centre Region COG Regional Fire Protection Program

1. Default Section

1. Do you live in the Centre Region (State College Borough; College, Halfmoon, Harris, Ferguson, Patton Townhips)?

- ◯ YES
- ◯ NO

*** 2. What is your age range?**

- ◯ 18 to 35 years old
- ◯ Over 35 years old

*** 3. Are you currently a Penn State student?**

- ◯ YES
- ◯ NO

*** 4. Do you have a full time job?**

- ◯ YES
- ◯ NO

*** 5. Do you work PART TIME or work PART TIME in addition to a full time job? (If you answer NO to this question, please skip to Question 10.)**

- ◯ YES
- ◯ NO

6. On average, how many hours each week do you work PART TIME?

- ◯ Less than 5
- ◯ Between 5 and 10
- ◯ Between 10 and 15
- ◯ More than 15

Coding for Question 6:
4 = Less than 5
3 = Between 5 and 10
2 = Between 10 and 15
1 = More than 15

7. How many PART TIME jobs do you work each week?

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ More than 3

Centre Region COG Regional Fire Protection Program

8. How many PART TIME hours per week do you normally work at each of your jobs? (If more than 3 part time employers, please provide hours for the three that you work at the most.)

Employer 1
Employer 2
Employer 3

9. Are you currently serving as an active member of a volunteer fire company, ambulance service, or rescue squad?
(If you answer YES, skip to Question 9)

- ◯ YES
- ◯ NO

10. I do not currently serve as a volunteer firefighter, EMS or Rescue responder because:

- ◯ I don't know enough about it, but probably could serve.
- ◯ I have no time to serve due to non work related issues.
- ◯ I cannot afford to serve, I need to maximize my paid hours.
- ◯ I have no interest to serve or I am physically unable to do so.

Coding for Question 10:
3 = I don't know…
2 = I have no time…
4 = I cannot afford…
1 = I have no interest…

11. If the position of firefighter was available as a PART TIME employment opportunity I would apply.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Disagree
- ◯ Strongly Disagree
- ◯ Don't Know

Coding for Question 11:
4 = Strongly Agree
3 = Agree
2 = Disagree
1 = Strongly Agree
0 = Don't Know

If you answered Don't Know, what factors would influence your likelihood to apply?

	Coded Responses for Interviews												
Interview Number	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8A	Q8B	Q8C	Q9	Q10	Q11
1				Y		4	1	32				4	2
2				Y		4	1	30				2	2
3				N		4	1	25				1	1
4				Y		2	1	8				2	1
5				N		4	2	7	25			4	0
6				N		4	1	20				1	1
7				N		4	1	15				1	1
8				N		4	1	20				2	0
9				N		3	1	15				2	0
10				Y		1	1	4				2	0
11				N		4	1	35				4	2
12				N		4	1	30				1	1
13				N		4	2	10	20			2	0
14				N		4	1	20				1	1
15				Y		2	1	8				4	3
16				Y		2	1	10				2	2
17				Y		2	1	12				3	3
18				Y		2	1	8				4	4
19				N		2	1	13				3	3
20				Y		3	1	15				4	3
21				N		4	1	35				2	2
22				N		4	1	28				3	3
23				N		4	1	16				1	1
24				Y		3	1	12				2	3
25				N		4	2	8	30			2	0
26				Y		2	1	8				3	3
27				N		2	1	6				1	1
28				N		3	1	10				3	2
29				N		4	1	24				2	2
30				N		4	1	20				2	2
31				N		4	1	16				1	1

Table 3

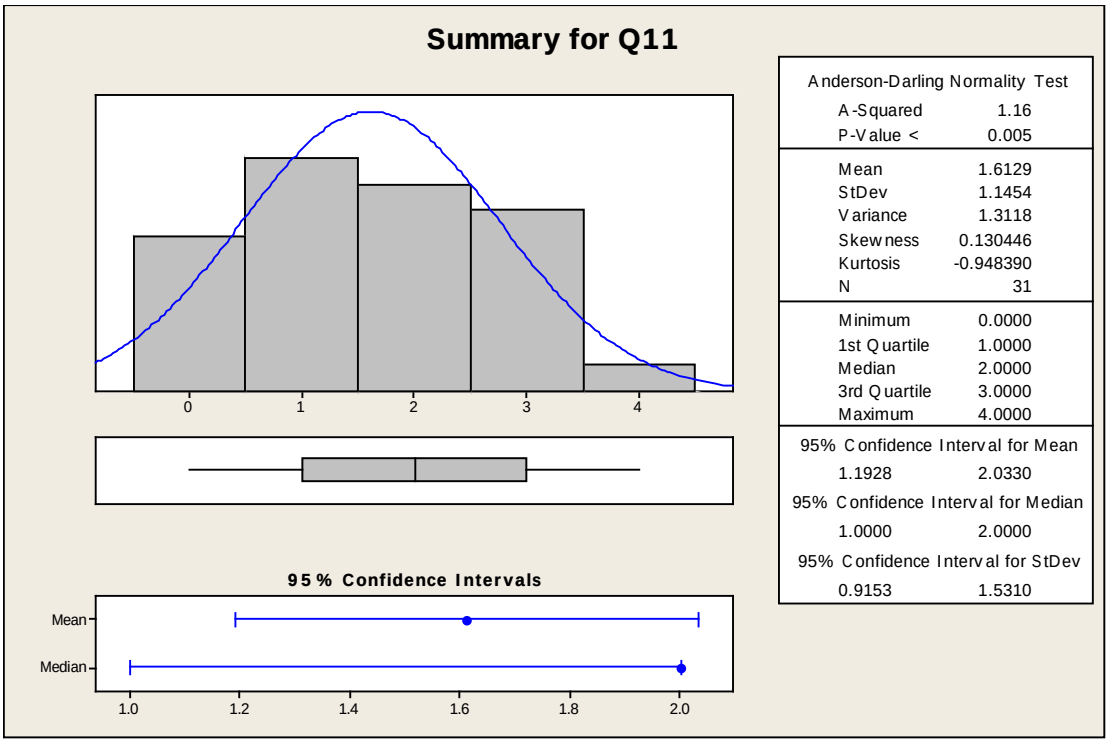


Figure 4

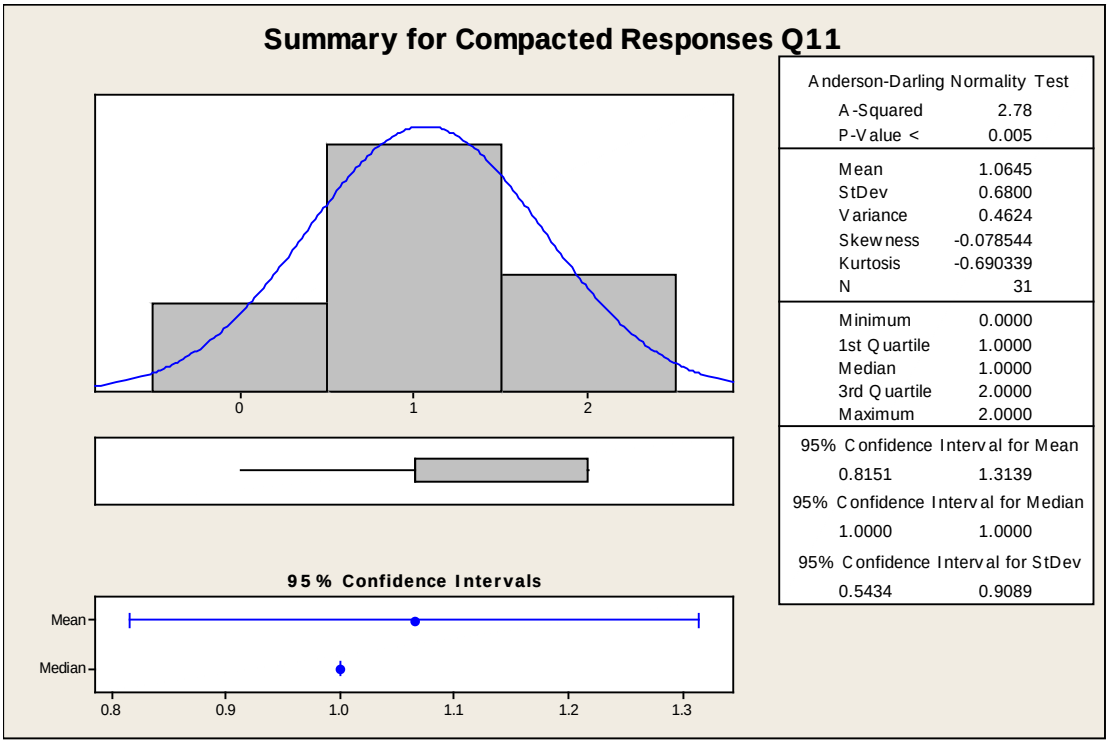


Figure 5

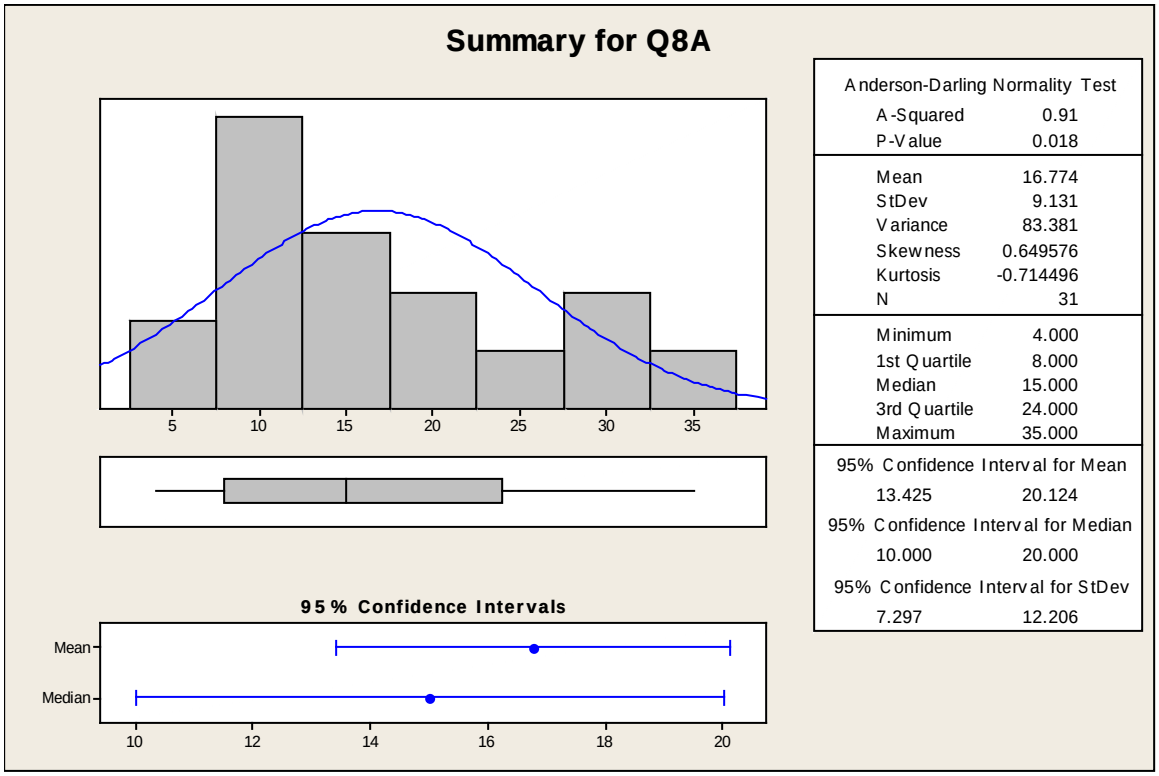

Summary for Q8A
5
10
15
20
25
30
35
95% Confidence Intervals
Mean
Median
10
12
14
16
18
20
Anderson-Darling Normality Test
A-Squared 0.91
P-Value 0.018
Mean 16.774
StDev 9.131
Variance 83.381
Skewness 0.649576
Kurtosis -0.714496
N 31
Minimum 4.000
1st Quartile 8.000
Median 15.000
3rd Quartile 24.000
Maximum 35.000
95% Confidence Interval for Mean
13.425 20.124
95% Confidence Interval for Median
10.000 20.000
95% Confidence Interval for StDev
7.297 12.206

Figure 6

Appendix D

Estimated System Cost

OPTION A

Simple paid-on-call all incidents (1,075 incidents, 2009):

For each incident: Total Incident Time x Number Responding = Total Incident Hours

Total Incident Hours 2009 = 16,222.50

(16,222.50) x ($17.19/hr) = $278,864.78

With 10% contingency added: ($278,864.78) x 1.10 = $306,751.26

OPTION B

Modified paid-on-call with on-shift/off-shift differentiation (1,075 incidents, 2009):

Paid-on-call for up to 18 personnel on-shift (chief only calls only duty chief paid); off-shift calls paid-on-call for all responding personnel.

Total Cost for Option = $281,563.61

With 10% contingency added: ($281,563.61) x 1.10 = $309,719.97

OPTION C

Part time paid shifts with paid-on-call for all off-shift activity.

(18 personnel) x (360 shift days) x (12 hours/shift) x ($17.19/hr) = $1,336,694

Paid on call off-shift = $137,515.70

Total cost for Option = $1,474,209.70

Total cost for option with contingency for paid-on-call: $1,618,876.97

All Options at differing hourly wages with contingency:

Option	$17.19 without contingency	$17.19 with contingency	$10.00 without contingency	$10.00 with contingency
A	$278,864.78	$306,751.26	$1622,225.00	$178,447.50
B	$281,563.61	$309,719.97	$163,795.00	$180,174.50
C	$1,474,209.70	$1,618,876.97	$857,597.50	$865,597.25

Appendix E

Alpha Fire Company 2009 Incident Data

Second Half 2009

DATE	I -NUMBER	INC TYPE	DISPATCH	ARRIVAL	CLEAR	RETURN	Total Time	Paid Hours	Personnel	Total Paid Hrs	Hourly Rate	Option A	Personnel	Shift?	18 on shift	Option B
8/13/2009	09-0000582	100	8:00:15	8:19:42	8:53:18	0:19:27	1:12:30	1.25	4	5	10.00	50.00	4	N	4	50.00
7/12/2009	09-0000492	111	4:27:23	4:36:36	5:32:53	0:09:13	1:14:43	1.25	27	33.75	10.00	337.50	27	N	27	337.50
8/5/2009	09-0000560	111	14:29:14	14:35:52	16:24:58	0:06:38	2:02:22	2.25	8	18	10.00	180.00	8	N	8	180.00
8/18/2009	09-0000604	111	16:36:31	16:50:29	17:57:47	0:13:58	1:35:14	1.50	40	60	10.00	600.00	40	N	40	600.00
8/24/2009	09-0000627	111	14:23:47	14:40:52	14:46:52	0:17:05	0:40:10	1.00	19	19	10.00	190.00	19	N	19	190.00
9/26/2009	09-0000726	111	12:56:14	12:59:24	13:10:30	0:03:10	0:17:26	1.00	33	33	10.00	330.00	33	N	33	330.00
11/23/2009	09-0000977	111	6:45:02	6:53:49	8:01:37	0:08:47	1:25:22	1.50	23	34.5	10.00	345.00	23	N	23	345.00
11/25/2009	09-0000978	111	16:34:22	16:42:29	17:02:40	0:08:07	0:36:25	1.00	17	17	10.00	170.00	17	N	17	170.00
7/20/2009	09-0000517	113	13:14:19	13:17:53	13:21:16	0:03:34	0:10:31	1.00	10	10	10.00	100.00	10	N	10	100.00
8/17/2009	09-0000594	113	8:42:12	8:51:18	9:20:47	0:09:06	0:47:41	1.00	21	21	10.00	210.00	21	N	21	210.00
9/12/2009	09-0000684	113	16:56:18	17:00:00	17:09:13	0:03:42	0:16:37	1.00	34	34	10.00	340.00	34	N	34	340.00
10/17/2009	09-0000849	113	15:14:06	15:19:50	15:28:47	0:05:44	0:20:25	1.00	7	7	10.00	70.00	7	N	7	70.00
10/30/2009	09-0000875	113	13:54:02	13:54:02	13:54:02	0:00:00	0:00:00	0.00	10	0	10.00	0.00	10	N	10	0.00
11/1/2009	09-0000890	113	13:46:32	13:59:57	14:08:24	0:13:25	0:35:17	1.00	37	37	10.00	370.00	37	N	37	370.00
11/6/2009	09-0000908	113	15:38:35	15:49:14	15:49:21	0:10:39	0:21:25	1.00	2	2	10.00	20.00	2	N	2	20.00
11/13/2009	09-0000941	113	15:13:29	15:19:04	15:37:45	0:05:35	0:29:51	1.00	17	17	10.00	170.00	17	N	17	170.00
11/18/2009	09-0000959	113	17:23:14	17:26:32	17:38:57	0:03:18	0:19:01	1.00	24	24	10.00	240.00	24	N	24	240.00
11/20/2009	09-0000971	113	11:57:43	12:00:33	12:26:10	0:02:50	0:31:17	1.00	24	24	10.00	240.00	24	N	24	240.00
12/10/2009	09-0001020	113	15:53:43	15:58:21	16:03:39	0:04:38	0:14:34	1.00	12	12	10.00	120.00	12	N	12	120.00
12/22/2009	09-0001058	113	17:30:00	17:45:25	17:53:22	0:15:25	0:38:47	1.00	17	17	10.00	170.00	17	N	17	170.00
11/19/2009	09-0000965	114	9:48:39	10:10:19	10:10:21	0:21:40	0:43:22	1.00	16	16	10.00	160.00	16	N	16	160.00
12/23/2009	09-0001059	116	16:53:30	16:58:41	17:30:51	0:05:11	0:42:32	1.00	30	30	10.00	300.00	30	N	30	300.00
11/3/2009	09-0000895	130	15:11:17	15:20:26	15:52:02	0:09:09	0:49:54	1.00	19	19	10.00	190.00	19	N	19	190.00
8/5/2009	09-0000562	131	17:12:46	17:21:55	17:51:00	0:09:09	0:47:23	1.00	17	17	10.00	170.00	17	N	17	170.00
7/23/2009	09-0000523	132	9:54:55	10:01:17	10:02:19	0:06:22	0:13:46	1.00	12	12	10.00	120.00	12	N	12	120.00
9/1/2009	09-0000655	132	11:14:54	11:31:42	13:06:07	0:16:48	2:08:01	2.25	18	40.5	10.00	405.00	18	N	18	405.00
7/7/2009	09-0000482	150	17:07:10	17:19:38	17:33:10	0:12:28	0:38:28	1.00	7	7	10.00	70.00	7	N	7	70.00
11/10/2009	09-0000933	150	11:07:16	11:14:49	11:22:06	0:07:33	0:22:23	1.00	8	8	10.00	80.00	8	N	8	80.00
11/13/2009	09-0000942	160	17:35:17	17:41:45	22:00:00	0:06:28	4:31:11	4.75	18	85.5	10.00	855.00	18	N	18	855.00
8/18/2009	09-0000605	163	17:57:01	18:02:39	19:48:02	0:05:38	1:56:39	2.00	38	76	10.00	760.00	38	N	38	760.00
9/4/2009	09-0000663	210	7:05:44	7:10:40	7:12:00	0:04:56	0:11:12	1.00	13	13	10.00	130.00	13	N	13	130.00
8/5/2009	09-0000561	300	16:45:36	16:52:37	17:24:13	0:07:01	0:45:38	1.00	18	18	10.00	180.00	18	N	18	180.00
8/20/2009	09-0000610	300	11:15:44	11:36:27	11:52:06	0:20:43	0:57:05	1.00	4	4	10.00	40.00	4	N	4	40.00
10/17/2009	09-0000847	300	8:11:58	8:22:43	8:40:41	0:10:45	0:39:28	1.00	15	15	10.00	150.00	15	N	15	150.00
9/6/2009	09-0000671	311	17:28:09	17:37:43	19:49:07	0:09:34	2:30:32	2.50	16	40	10.00	400.00	16	N	16	400.00
10/14/2009	09-0000783	311	16:13:50	16:25:11	16:33:50	0:11:21	0:31:21	1.00	18	18	10.00	180.00	18	N	18	180.00
11/1/2009	09-0000891	311	15:09:20	15:18:25	16:41:39	0:09:05	1:41:24	1.75	28	49	10.00	490.00	28	N	28	490.00
7/28/2009	09-0000542	322	8:16:09	8:28:27	9:36:49	0:12:18	1:32:58	1.75	16	28	10.00	280.00	16	N	16	280.00
7/31/2009	09-0000547	322	11:29:43	11:35:37	12:02:45	0:05:54	0:38:56	1.00	18	18	10.00	180.00	18	N	18	180.00
8/23/2009	09-0000621	322	15:39:31	15:52:27	16:36:45	0:12:56	1:10:10	1.25	18	22.5	10.00	225.00	18	N	18	225.00
9/2/2009	09-0000658	322	12:26:29	12:32:00	12:46:43	0:05:31	0:25:45	1.00	12	12	10.00	120.00	12	N	12	120.00
9/8/2009	09-0000675	322	9:22:21	9:33:34	12:10:12	0:11:13	2:59:04	3.00	23	69	10.00	690.00	23	N	23	690.00
9/21/2009	09-0000711	322	10:52:00	10:55:51	10:59:16	0:03:51	0:11:07	1.00	22	22	10.00	220.00	22	N	22	220.00
9/26/2009	09-0000725	322	12:32:25	12:34:30	13:10:13	0:02:05	0:39:53	1.00	22	22	10.00	220.00	22	N	22	220.00
11/5/2009	09-0000906	322	16:32:54	16:40:29	17:16:37	0:07:35	0:51:18	1.00	21	21	10.00	210.00	21	N	21	210.00
11/7/2009	09-0000916	322	10:43:44	10:50:18	11:01:41	0:06:34	0:24:31	1.00	20	20	10.00	200.00	20	N	20	200.00
11/8/2009	09-0000930	322	17:57:34	18:04:02	19:09:18	0:06:28	1:18:12	1.50	25	37.5	10.00	375.00	25	N	25	375.00
12/5/2009	09-0001003	322	9:30:40	9:45:46	9:56:04	0:15:06	0:40:30	1.00	25	25	10.00	250.00	25	N	25	250.00
12/20/2009	09-0001054	322	14:31:03	14:42:18	15:03:13	0:11:15	0:43:25	1.00	17	17	10.00	170.00	17	N	17	170.00
9/18/2009	09-0000698	324	14:22:04	14:29:51	15:12:28	0:07:47	0:58:11	1.00	26	26	10.00	260.00	26	N	26	260.00
12/5/2009	09-0001004	324	10:32:45	10:43:12	10:43:44	0:10:27	0:21:26	1.00	21	21	10.00	210.00	21	N	21	210.00
12/5/2009	09-0001005	324	12:04:44	12:14:23	13:04:28	0:09:39	1:09:23	1.25	27	33.75	10.00	337.50	27	N	27	337.50
12/13/2009	09-0001029	324	8:56:07	9:31:17	9:31:17	0:35:10	1:10:20	1.25	26	32.5	10.00	325.00	26	N	26	325.00
12/13/2009	09-0001032	324	9:46:53	9:58:36	9:58:43	0:11:43	0:23:33	1.00	27	27	10.00	270.00	27	N	27	270.00
12/18/2009	09-0001048	324	13:48:50	13:52:42	13:52:42	0:03:52	0:07:44	1.00	1	1	10.00	10.00	1	N	1	10.00
12/19/2009	09-0001049	324	10:30:19	10:31:31	10:36:52	0:01:12	0:07:45	1.00	8	8	10.00	80.00	8	N	8	80.00
9/19/2009	09-0000705	352	9:48:34	9:54:43	11:03:42	0:06:09	1:21:17	1.50	12	18	10.00	180.00	12	N	12	180.00
9/26/2009	09-0000728	352	13:54:46	13:59:29	14:21:22	0:04:43	0:31:19	1.00	22	22	10.00	220.00	22	N	22	220.00
12/2/2009	09-0000992	352	15:44:39	15:53:26	17:46:41	0:08:47	2:10:49	2.25	34	76.5	10.00	765.00	34	N	34	765.00

11/8/2009	09-0000928	745	15:40:29	15:42:29	15:43:37	0:02:00	0:05:08	1.00	15	15	10.00	150.00	15	N	15	150.00
11/27/2009	09-0000982	745	8:43:00	8:43:38	8:45:08	0:00:38	0:02:46	1.00	9	9	10.00	90.00	9	N	9	90.00
12/27/2009	09-0001068	745	17:47:00	17:51:37	18:03:36	0:04:37	0:21:13	1.00	3	3	10.00	30.00	3	N	3	30.00
7/23/2009	09-0000525	746	17:07:19	17:18:31	17:32:01	0:11:12	0:35:54	1.00	24	24	10.00	240.00	24	N	24	240.00
9/18/2009	09-0000697	746	6:33:48	6:51:47	7:16:36	0:17:59	1:00:47	1.00	12	12	10.00	120.00	12	N	12	120.00
9/23/2009	09-0000716	746	12:57:30	13:07:52	13:45:13	0:10:22	0:58:05	1.00	14	14	10.00	140.00	14	N	14	140.00
9/25/2009	09-0000718	746	6:19:50	6:39:42	6:50:45	0:19:52	0:50:47	1.00	17	17	10.00	170.00	17	N	17	170.00
10/13/2009	09-0000780	746	15:28:02	15:48:00	16:12:41	0:19:58	1:04:37	1.25	4	5	10.00	50.00	4	N	4	50.00
10/17/2009	09-0000850	746	15:31:32	15:58:01	16:15:38	0:26:29	1:10:35	1.25	1	1.25	10.00	12.50	1	N	1	12.50
10/17/2009	09-0000851	800	16:08:10	16:30:02	16:30:11	0:21:52	0:43:53	1.00	11	11	10.00	110.00	11	N	11	110.00
7/19/2009	09-0000515	900	8:10:03	8:28:00	8:28:03	0:17:57	0:35:57	1.00	4	4	10.00	40.00	4	N	4	40.00
10/22/2009	09-0000860	900	14:32:22	14:47:08	15:00:15	0:14:46	0:42:39	1.00	13	13	10.00	130.00	13	N	13	130.00
11/29/2009	09-0000987	900	17:59:14	18:02:46	19:37:09	0:03:32	1:41:27	1.75	9	15.75	10.00	157.50	9	N	9	157.50
9/26/2009	09-0000727	900B	13:54:04	13:54:04	13:54:04	0:00:00	0:00:00	0.00	27	0	10.00	0.00	27	N	27	0.00
11/6/2009	09-0000909	100	18:55:40	19:01:29	19:19:24	0:05:49	0:29:33	1.00	12	12	10.00	120.00	12	Y	18	180.00
11/6/2009	09-0000910	100	19:37:39	19:38:41	20:21:01	0:01:02	0:44:24	1.00	16	16	10.00	160.00	16	Y	18	180.00
11/6/2009	09-0000911	100	20:46:03	20:52:54	21:08:45	0:06:51	0:29:33	1.00	13	13	10.00	130.00	13	Y	18	180.00
11/6/2009	09-0000912	100	21:47:32	21:49:54	22:53:18	0:02:22	1:08:08	1.25	24	30	10.00	300.00	24	Y	18	225.00
11/7/2009	09-0000918	100	19:40:55	19:46:38	20:04:06	0:05:43	0:28:54	1.00	14	14	10.00	140.00	14	Y	18	180.00
8/13/2009	09-0000581	111	1:05:49	1:13:46	3:24:55	0:07:57	2:27:03	2.50	20	50	10.00	500.00	20	Y	18	450.00
8/14/2009	09-0000587	111	2:30:42	2:40:46	4:23:44	0:10:04	2:03:06	2.25	21	47.25	10.00	472.50	21	Y	18	405.00
10/3/2009	09-0000739	111	3:46:30	4:07:40	6:10:37	0:21:10	2:45:17	2.75	14	38.5	10.00	385.00	14	Y	18	495.00
10/28/2009	09-0000872	111	23:09:09	23:29:24	23:57:42	0:20:15	1:08:48	1.25	0	0	10.00	0.00	0	Y	18	225.00
11/27/2009	09-0000983	111	18:32:32	18:32:32	21:39:54	0:00:00	3:07:22	3.25	30	97.5	10.00	975.00	30	Y	18	585.00
12/17/2009	09-0001046	111	21:49:02	21:57:54	22:41:16	0:08:52	1:01:06	1.25	22	27.5	10.00	275.00	22	Y	18	225.00
12/22/2009	09-0001057	111	1:37:14	1:50:00	6:12:00	0:12:46	4:47:32	5.00	19	95	10.00	950.00	19	Y	18	900.00
12/23/2009	09-0001061	112	20:20:49	20:30:46	22:27:50	0:09:57	2:16:58	2.50	34	85	10.00	850.00	34	Y	18	450.00
7/11/2009	09-0000490	113	20:33:58	20:36:24	20:55:42	0:02:26	0:24:10	1.00	13	13	10.00	130.00	13	Y	18	180.00
7/13/2009	09-0000498	113	19:16:11	19:21:27	19:26:10	0:05:16	0:15:15	1.00	25	25	10.00	250.00	25	Y	18	180.00
7/17/2009	09-0000509	113	3:48:03	3:57:14	4:37:52	0:09:11	0:59:00	1.00	16	16	10.00	160.00	16	Y	18	180.00
8/3/2009	09-0000556	113	18:55:00	19:03:14	19:14:14	0:08:14	0:27:28	1.00	24	24	10.00	240.00	24	Y	18	180.00
9/11/2009	09-0000681	113	2:24:57	2:29:30	2:40:05	0:04:33	0:19:41	1.00	12	12	10.00	120.00	12	Y	18	180.00
9/12/2009	09-0000686	113	22:12:10	22:13:22	23:21:18	0:01:12	1:10:20	1.25	27	33.75	10.00	337.50	27	Y	18	225.00
9/20/2009	09-0000709	113	20:52:28	21:03:01	21:08:16	0:10:33	0:26:21	1.00	14	14	10.00	140.00	14	Y	18	180.00
9/23/2009	09-0000717	113	19:08:10	19:14:43	19:27:23	0:06:33	0:25:46	1.00	34	34	10.00	340.00	34	Y	18	180.00
9/25/2009	09-0000721	113	19:31:10	19:37:09	19:47:49	0:05:59	0:22:38	1.00	37	37	10.00	370.00	37	Y	18	180.00
10/8/2009	09-0000755	113	0:06:57	0:11:03	0:25:29	0:04:06	0:22:38	1.00	28	28	10.00	280.00	28	Y	18	180.00
10/15/2009	09-0000786	113	19:22:10	19:29:43	19:39:42	0:07:33	0:25:05	1.00	10	10	10.00	100.00	10	Y	18	180.00
10/18/2009	09-0000856	113	3:30:40	3:35:29	4:12:11	0:04:49	0:46:20	1.00	13	13	10.00	130.00	13	Y	18	180.00
10/30/2009	09-0000873	113	2:09:19	2:14:15	2:27:48	0:04:56	0:23:25	1.00	19	19	10.00	190.00	19	Y	18	180.00
11/1/2009	09-0000892	113	18:47:15	18:53:34	19:03:01	0:06:19	0:22:05	1.00	23	23	10.00	230.00	23	Y	18	180.00
11/3/2009	09-0000898	113	19:25:03	19:29:34	19:36:54	0:04:31	0:16:22	1.00	48	48	10.00	480.00	48	Y	18	180.00
11/17/2009	09-0000955	113	18:44:58	18:49:02	19:09:24	0:04:04	0:28:30	1.00	15	15	10.00	150.00	15	Y	18	180.00
10/16/2009	09-0000845	114	19:42:08	19:55:33	20:19:36	0:13:25	0:50:53	1.00	22	22	10.00	220.00	22	Y	18	180.00
12/1/2009	09-0000990	114	19:24:21	19:34:28	20:04:42	0:10:07	0:50:28	1.00	56	56	10.00	560.00	56	Y	18	180.00
7/27/2009	09-0000540	118	1:23:51	1:29:40	1:44:38	0:05:49	0:26:36	1.00	10	10	10.00	100.00	10	Y	18	180.00
9/10/2009	09-0000679	118	0:09:31	0:12:08	0:41:13	0:02:37	0:34:19	1.00	28	28	10.00	280.00	28	Y	18	180.00
11/19/2009	09-0000963	118	2:18:58	2:25:51	2:30:52	0:06:53	0:18:47	1.00	18	18	10.00	180.00	18	Y	18	180.00
7/11/2009	09-0000491	131	23:01:24	23:04:55	23:45:24	0:03:31	0:47:31	1.00	25	25	10.00	250.00	25	Y	18	180.00
8/20/2009	09-0000611	131	20:28:41	20:37:18	21:45:08	0:08:37	1:25:04	1.50	18	27	10.00	270.00	18	Y	18	270.00
8/23/2009	09-0000623	131	23:06:20	23:10:10	0:00:29	0:03:50	0:57:55	1.00	18	18	10.00	180.00	18	Y	18	180.00
9/3/2009	09-0000662	131	22:06:28	22:10:04	23:52:02	0:03:36	1:49:10	2.00	42	84	10.00	840.00	42	Y	18	360.00
10/10/2009	09-0000763	131	4:12:53	4:17:09	5:03:18	0:04:16	0:54:41	1.00	13	13	10.00	130.00	13	Y	18	180.00
11/28/2009	09-0000985	131	22:41:59	22:47:07	23:36:32	0:05:08	0:59:41	1.00	14	14	10.00	140.00	14	Y	18	180.00
12/9/2009	09-0001015	131	4:04:46	4:13:19	4:49:39	0:08:33	0:53:26	1.00	19	19	10.00	190.00	19	Y	18	180.00
7/8/2009	09-0000483	132	19:04:33	19:15:51	20:25:08	0:11:18	1:31:53	1.75	17	29.75	10.00	297.50	17	Y	18	315.00
11/13/2009	09-0000943	142	21:41:26	21:55:57	22:17:49	0:14:31	0:50:54	1.00	12	12	10.00	120.00	12	Y	18	180.00
9/1/2009	09-0000657	150	18:03:07	18:12:06	18:18:16	0:08:59	0:24:08	1.00	23	23	10.00	230.00	23	Y	18	180.00
9/19/2009	09-0000700	150	1:33:52	1:38:17	1:38:17	0:04:25	0:08:50	1.00	11	11	10.00	110.00	11	Y	18	180.00
11/4/2009	09-0000902	150	20:36:20	20:41:15	21:04:36	0:04:55	0:33:11	1.00	20	20	10.00	200.00	20	Y	18	180.00
11/4/2009	09-0000903	150	21:42:13	21:46:26	22:01:37	0:04:13	0:23:37	1.00	20	20	10.00	200.00	20	Y	18	180.00

7/25/2009	09-0000534	733	4:44:09	4:51:59	5:22:31	0:07:50	0:46:12	1.00	11	11	10.00	110.00	11	Y	18	180.00
8/25/2009	09-0000629	733	4:46:18	4:57:44	5:09:21	0:11:26	0:34:29	1.00	12	12	10.00	120.00	12	Y	18	180.00
8/26/2009	09-0000631	733	4:26:29	4:26:29	4:28:33	0:00:00	0:02:04	1.00	0	0	10.00	0.00	0	Y	0	0.00
10/11/2009	09-0000774	733	20:29:14	20:33:40	20:41:13	0:04:26	0:16:25	1.00	21	21	10.00	210.00	21	Y	18	180.00
12/12/2009	09-0001025	733	21:50:02	21:54:48	22:03:19	0:04:46	0:18:03	1.00	13	13	10.00	130.00	13	Y	18	180.00
12/20/2009	09-0001051	733	2:12:27	2:18:26	3:02:16	0:05:59	0:55:48	1.00	7	7	10.00	70.00	7	Y	18	180.00
7/25/2009	09-0000535	735	5:49:15	5:49:50	5:52:22	0:00:35	0:03:42	1.00	1	1	10.00	10.00	1	Y	1	10.00
7/29/2009	09-0000545	735	19:29:36	19:37:05	19:48:48	0:07:29	0:26:41	1.00	30	30	10.00	300.00	30	Y	18	180.00
8/23/2009	09-0000619	735	0:51:23	0:55:45	1:05:42	0:04:22	0:18:41	1.00	10	10	10.00	100.00	10	Y	18	180.00
8/23/2009	09-0000620	735	3:32:13	3:38:57	3:54:31	0:06:44	0:29:02	1.00	1	1	10.00	10.00	1	Y	1	10.00
9/2/2009	09-0000660	735	21:13:45	21:19:44	21:37:05	0:05:59	0:29:19	1.00	20	20	10.00	200.00	20	Y	18	180.00
9/9/2009	09-0000678	735	23:39:29	23:45:37	0:17:09	0:06:08	0:37:50	1.00	17	17	10.00	170.00	17	Y	18	180.00
11/1/2009	09-0000893	735	19:01:47	19:05:52	19:10:58	0:04:05	0:13:16	1.00	16	16	10.00	160.00	16	Y	18	180.00
7/10/2009	09-0000488	736	22:32:28	22:34:14	23:01:06	0:01:46	0:30:24	1.00	14	14	10.00	140.00	14	Y	18	180.00
7/23/2009	09-0000526	736	18:11:37	18:16:17	18:23:13	0:04:40	0:16:16	1.00	17	17	10.00	170.00	17	Y	18	180.00
8/2/2009	09-0000554	736	21:00:21	21:16:31	21:26:14	0:16:10	0:42:03	1.00	1	1	10.00	10.00	1	Y	1	10.00
8/22/2009	09-0000613	736	2:18:13	2:27:12	2:58:36	0:08:59	0:49:22	1.00	14	14	10.00	140.00	14	Y	14	140.00
11/8/2009	09-0000931	736	18:39:14	18:45:00	18:54:27	0:05:46	0:20:59	1.00	1	1	10.00	10.00	1	Y	1	10.00
11/22/2009	09-0000976	736	5:35:25	5:51:01	5:57:00	0:15:36	0:37:11	1.00	1	1	10.00	10.00	1	Y	1	10.00
7/4/2009	09-0000475	740	19:47:09	19:47:09	19:51:14	0:00:00	0:04:05	1.00	16	16	10.00	160.00	16	Y	18	180.00
7/24/2009	09-0000532	740	19:32:24	19:37:54	19:49:40	0:05:30	0:22:46	1.00	16	16	10.00	160.00	16	Y	18	180.00
11/6/2009	09-0000913	740	21:58:18	21:58:18	21:58:18	0:00:00	0:00:00	0.00	24	0	10.00	0.00	24	Y	18	0.00
8/22/2009	09-0000618	743	23:36:26	23:40:41	23:45:43	0:04:15	0:13:32	1.00	9	9	10.00	90.00	9	Y	18	180.00
10/2/2009	09-0000736	743	18:44:34	18:48:39	19:09:12	0:04:05	0:28:43	1.00	14	14	10.00	140.00	14	Y	18	180.00
10/30/2009	09-0000876	743	22:40:04	22:43:58	22:46:31	0:03:54	0:10:21	1.00	13	13	10.00	130.00	13	Y	18	180.00
10/31/2009	09-0000884	743	22:48:45	22:54:24	23:11:34	0:05:39	0:28:28	1.00	16	16	10.00	160.00	16	Y	18	180.00
12/16/2009	09-0001038	743	0:16:29	0:19:06	0:27:13	0:02:37	0:13:21	1.00	15	15	10.00	150.00	15	Y	18	180.00
8/5/2009	09-0000563	745	20:16:32	20:20:54	20:22:20	0:04:22	0:10:10	1.00	10	10	10.00	100.00	10	Y	18	180.00
10/31/2009	09-0000883	745	19:32:06	19:36:32	19:43:27	0:04:26	0:15:47	1.00	12	12	10.00	120.00	12	Y	18	180.00
9/14/2009	09-0000654	746	3:15:52	3:20:25	3:57:52	0:04:33	0:46:33	1.00	12	12	10.00	120.00	12	Y	18	180.00
12/17/2009	09-0001043	746	16:01:16	16:11:48	16:23:59	0:10:32	0:33:15	1.00	1	1	10.00	10.00	1	Y	1	10.00
10/15/2009	09-0000785	800	17:18:52	17:18:52	23:59:59	0:00:00	6:41:07	7.00	8	56	10.00	560.00	8	Y	18	1,260.00
10/16/2009	09-0000798	800	0:00:00	0:00:00	18:00:00	0:00:00	18:00:00	18.00	20	360	10.00	3,600.00	20	Y	18	3,240.00
8/26/2009	09-0000637	900	20:36:18	20:43:46	21:50:43	0:07:28	1:21:53	1.50	41	61.5	10.00	615.00	41	Y	18	270.00
10/25/2009	09-0000864	900	0:23:46	0:34:14	2:10:34	0:10:28	1:57:16	2.00	4	8	10.00	80.00	4	Y	18	360.00
11/3/2009	09-0000897	900	18:00:00	18:04:29	18:33:05	0:04:29	0:37:34	1.00	5	5	10.00	50.00	5	Y	18	180.00
11/5/2009	09-0000907	900	18:12:15	18:30:33	19:06:58	0:18:18	1:13:01	1.25	7	8.75	10.00	87.50	7	Y	18	225.00
11/21/2009	09-0000973	900	3:15:47	3:32:18	4:06:18	0:16:31	1:07:02	1.25	8	10	10.00	100.00	8	Y	18	225.00
7/18/2009	09-0000512	911	5:47:03	5:59:40	6:30:57	0:12:37	0:56:31	1.00	1	1	10.00	10.00	1	Y	1	10.00
7/23/2009	09-0000528	911	18:34:02	18:50:44	19:03:36	0:16:42	0:46:16	1.00	1	1	10.00	10.00	1	Y	1	10.00
9/5/2009	09-0000668	911	20:42:49	21:10:58	21:40:26	0:28:09	1:25:46	1.50	1	1.5	10.00	15.00	1	Y	1	15.00
7/15/2009	09-0000503	1001	22:19:13	22:27:16	22:34:08	0:08:03	0:22:58	1.00	19	19	10.00	190.00	19	Y	18	180.00
7/24/2009	09-0000531	900A	18:26:12	18:26:40	18:26:49	0:00:28	0:01:05	1.00	1	1	10.00	10.00	1	Y	1	10.00
9/15/2009	09-0000693	671	20:36:56	20:52:23	20:58:56	0:15:27	0:37:27	1.00	1	1	10.00	10.00	1	Y	1	10.00
											TOTAL	86,162.50				89,372.50

First Half 2009

DATE	I-NUMBER	INC TYPE	DISPATCH	ARRIVAL	CLEAR	RETURN	Total Time	Paid Hours	Personnel	Total Paid Hrs	Hourly Rate	Option A	Personnel	Shift?	18 on shift	Option B
2/16/2009	09-0000136	100	16:54:47	16:59:43	17:43:53	0:04:56	0:54:02	1.00	23	23	10.00	230.00	23	N	23	230.00
2/26/2009	09-0000155	111	6:02:57	6:09:12	11:44:07	0:06:15	5:47:25	6.00	42	252	10.00	2,520.00	42	N	42	2,520.00
3/1/2009	09-0000167	111	9:52:12	9:55:09	11:08:17	0:02:57	1:19:02	1.25	16	20	10.00	200.00	16	N	16	200.00
3/2/2009	09-0000168	111	11:43:56	11:47:05	11:58:28	0:03:09	0:17:41	1.00	17	17	10.00	170.00	17	N	17	170.00
3/6/2009	09-0000180	111	12:45:07	12:49:24	14:05:02	0:04:17	1:24:12	1.50	0	0	10.00	0.00	0	N	0	0.00
3/15/2009	09-0000197	111	13:27:18	13:40:19	14:14:12	0:13:01	0:59:55	1.00	0	0	10.00	0.00	0	N	0	0.00
3/29/2009	09-0000229	111	15:00:13	15:13:39	15:48:53	0:13:26	1:02:06	1.25	14	17.5	10.00	175.00	14	N	14	175.00
4/4/2009	09-0000239	111	16:38:56	18:43:10	19:28:24	2:04:14	4:53:42	5.00	28	140	10.00	1,400.00	28	N	28	1,400.00
4/18/2009	09-0000279	111	16:54:38	16:58:49	17:42:53	0:04:11	0:52:26	1.00	36	36	10.00	360.00	36	N	36	360.00
4/27/2009	09-0000313	111	16:56:07	17:11:08	17:38:55	0:15:01	0:57:49	1.00	0	0	10.00	0.00	0	N	0	0.00
5/10/2009	09-0000340	111	17:06:54	17:14:39	22:47:18	0:07:45	5:48:09	6.00	39	234	10.00	2,340.00	39	N	39	2,340.00
5/16/2009	09-0000357	111	17:08:48	17:12:30	17:45:25	0:03:42	0:40:19	1.00	45	45	10.00	450.00	45	N	45	450.00
1/17/2009	09-0000048	113	10:27:35	10:34:35	10:52:23	0:07:00	0:31:48	1.00	16	16	10.00	160.00	16	N	16	160.00
1/18/2009	09-0000055	113	10:55:24	11:00:33	11:15:10	0:05:09	0:24:55	1.00	27	27	10.00	270.00	27	N	27	270.00
1/21/2009	09-0000059	113	11:56:26	12:06:24	12:13:47	0:09:58	0:27:19	1.00	12	12	10.00	120.00	12	N	12	120.00
1/26/2009	09-0000073	113	14:37:25	14:43:31	14:50:27	0:06:06	0:19:08	1.00	37	37	10.00	370.00	37	N	37	370.00
1/29/2009	09-0000084	113	15:19:53	15:26:16	15:46:36	0:06:23	0:33:06	1.00	15	15	10.00	150.00	15	N	15	150.00
2/15/2009	09-0000134	113	15:52:50	15:59:25	16:00:44	0:06:35	0:14:29	1.00	19	19	10.00	190.00	19	N	19	190.00
2/27/2009	09-0000157	113	15:54:17	16:07:27	16:40:34	0:13:10	0:59:27	1.00	19	19	10.00	190.00	19	N	19	190.00
3/6/2009	09-0000178	113	16:18:46	16:27:53	16:34:56	0:09:07	0:25:17	1.00	1	1	10.00	10.00	1	N	1	10.00
3/12/2009	09-0000191	113	16:30:53	16:35:43	16:43:33	0:04:50	0:17:30	1.00	20	20	10.00	200.00	20	N	20	200.00
3/14/2009	09-0000193	113	17:49:03	17:56:50	18:35:50	0:07:47	0:54:34	1.00	20	20	10.00	200.00	20	N	20	200.00
1/19/2009	09-0000056	114	9:04:36	9:21:07	10:13:42	0:16:31	1:25:37	1.50	30	45	10.00	450.00	30	N	30	450.00
2/6/2009	09-0000103	114	9:59:58	10:09:03	11:10:00	0:09:05	1:19:07	1.50	43	64.5	10.00	645.00	43	N	43	645.00
3/28/2009	09-0000223	114	13:04:35	13:09:40	13:39:42	0:05:05	0:40:12	1.00	32	32	10.00	320.00	32	N	32	320.00
2/1/2009	09-0000098	118	12:54:17	12:59:11	13:15:54	0:04:54	0:26:31	1.00	21	21	10.00	210.00	21	N	21	210.00
5/28/2009	09-0000389	121	12:12:41	12:36:24	13:46:44	0:23:43	1:57:46	2.00	9	18	10.00	180.00	9	N	9	180.00
1/28/2009	09-0000077	131	8:08:23	8:12:22	8:40:46	0:03:59	0:36:22	1.00	17	17	10.00	170.00	17	N	17	170.00
1/30/2009	09-0000091	131	8:15:50	8:38:58	9:21:35	0:23:08	1:28:53	1.50	17	25.5	10.00	255.00	17	N	17	255.00
5/5/2009	09-0000327	131	12:43:22	12:48:30	13:16:08	0:05:08	0:37:54	1.00	0	0	10.00	0.00	0	N	0	0.00
2/10/2009	09-0000113	132	9:26:43	9:32:44	11:01:00	0:06:01	1:40:18	1.75	34	59.5	10.00	595.00	34	N	34	595.00
4/2/2009	09-0000235	132	15:04:58	15:11:05	16:26:03	0:06:07	1:27:12	1.50	0	0	10.00	0.00	0	N	0	0.00
3/15/2009	09-0000196	140	13:09:27	13:09:27	13:16:59	0:00:00	0:07:32	1.00	40	40	10.00	400.00	40	N	40	400.00
4/18/2009	09-0000282	140	17:02:30	17:23:04	22:08:15	0:20:34	5:26:19	5.50	0	0	10.00	0.00	0	N	0	0.00
3/25/2009	09-0000212	142	12:46:55	12:46:55	13:56:08	0:00:00	1:09:13	1.25	36	45	10.00	450.00	36	N	36	450.00
2/14/2009	09-0000128	150	8:36:15	8:44:01	8:48:00	0:07:46	0:19:31	1.00	0	0	10.00	0.00	0	N	0	0.00
3/23/2009	09-0000208	150	13:56:14	14:09:00	14:21:28	0:12:46	0:38:00	1.00	0	0	10.00	0.00	0	N	0	0.00
4/18/2009	09-0000280	150	15:51:54	15:54:07	16:16:02	0:02:13	0:26:21	1.00	0	0	10.00	0.00	0	N	0	0.00
6/21/2009	09-0000450	151	16:59:01	17:08:42	17:22:44	0:09:41	0:33:24	1.00	11	11	10.00	110.00	11	N	11	110.00
5/15/2009	09-0000355	154	13:59:12	14:01:41	14:26:10	0:02:29	0:29:27	1.00	10	10	10.00	100.00	10	N	10	100.00
5/29/2009	09-0000391	154	15:27:29	15:39:47	15:54:33	0:12:18	0:39:22	1.00	21	21	10.00	210.00	21	N	21	210.00
3/19/2009	09-0000201	200	7:17:22	7:25:31	7:45:19	0:08:09	0:36:06	1.00	13	13	10.00	130.00	13	N	13	130.00
5/27/2009	09-0000385	221	10:57:28	11:03:00	11:04:19	0:05:32	0:12:23	1.00	16	16	10.00	160.00	16	N	16	160.00
6/3/2009	09-0000411	221	13:11:03	13:18:56	13:37:25	0:07:53	0:34:15	1.00	13	13	10.00	130.00	13	N	13	130.00
1/17/2009	09-0000046	322	7:21:54	7:33:36	7:59:18	0:11:42	0:49:06	1.00	28	28	10.00	280.00	28	N	28	280.00
1/29/2009	09-0000083	322	7:38:39	7:49:03	8:34:05	0:10:24	1:05:50	1.25	19	23.75	10.00	237.50	19	N	19	237.50
2/12/2009	09-0000122	322	10:11:59	10:18:50	10:39:19	0:06:51	0:34:11	1.00	18	18	10.00	180.00	18	N	18	180.00
2/15/2009	09-0000132	322	13:35:33	13:53:53	14:12:52	0:18:20	0:55:39	1.00	23	23	10.00	230.00	23	N	23	230.00
4/18/2009	09-0000285	322	13:48:22	13:56:59	14:06:15	0:08:37	0:26:30	1.00	22	22	10.00	220.00	22	N	22	220.00
4/23/2009	09-0000292	322	14:17:52	14:22:59	14:23:13	0:05:07	0:10:28	1.00	14	14	10.00	140.00	14	N	14	140.00
5/4/2009	09-0000325	322	16:49:42	16:56:18	17:07:23	0:06:36	0:24:17	1.00	28	28	10.00	280.00	28	N	28	280.00
5/4/2009	09-0000326	322	17:00:41	17:08:05	18:37:53	0:07:24	1:44:36	1.75	0	0	10.00	0.00	0	N	0	0.00
2/19/2009	09-0000144	323	16:53:01	16:54:05	17:08:17	0:01:04	0:16:20	1.00	15	15	10.00	150.00	15	N	15	150.00
1/28/2009	09-0000080	324	16:01:04	16:15:13	16:23:02	0:14:09	0:36:07	1.00	37	37	10.00	370.00	37	N	37	370.00
1/14/2009	09-0000041	352	6:13:30	6:22:30	8:07:33	0:09:00	2:03:03	2.25	0	0	10.00	0.00	0	N	0	0.00
4/14/2009	09-0000262	352	8:03:18	8:10:06	8:26:22	0:06:48	0:29:52	1.00	22	22	10.00	220.00	22	N	22	220.00
1/11/2009	09-0000028	353	14:19:12	14:22:49	14:37:00	0:03:37	0:21:25	1.00	15	15	10.00	150.00	15	N	15	150.00
6/17/2009	09-0000438	353	17:28:14	17:33:06	17:42:07	0:04:52	0:18:45	1.00	12	12	10.00	120.00	12	N	12	120.00
4/4/2009	09-0000241	400	13:43:43	13:45:43	13:53:57	0:02:00	0:12:14	1.00	0	0	10.00	0.00	0	N	0	0.00

6/26/2009	09-0000466	154	23:22:35	23:34:09	23:51:28	0:11:34	0:40:27	1.00	9	9	10.00	90.00	9	Y	18	180.00
3/8/2009	09-0000184	160	3:53:38	4:01:16	4:36:25	0:07:38	0:50:25	1.00	14	14	10.00	140.00	14	Y	18	180.00
5/17/2009	09-0000358	161	3:41:46	3:50:32	4:59:17	0:08:46	1:26:17	1.50	21	31.5	10.00	315.00	21	Y	18	270.00
2/14/2009	09-0000131	251	23:13:23	23:22:15	23:41:43	0:08:52	0:37:12	1.00	10	10	10.00	100.00	10	Y	18	180.00
1/9/2009	09-0000017	322	2:36:39	2:48:53	2:51:13	0:12:14	0:26:48	1.00	16	16	10.00	160.00	16	Y	18	180.00
5/10/2009	09-0000341	322	19:49:35	19:54:23	20:28:36	0:04:48	0:43:49	1.00	26	26	10.00	260.00	26	Y	18	180.00
6/4/2009	09-0000414	322	22:47:47	22:56:07	23:07:06	0:08:20	0:27:39	1.00	0	0	10.00	0.00	0	Y	18	180.00
6/25/2009	09-0000458	322	23:06:54	23:12:39	23:44:16	0:05:45	0:43:07	1.00	12	12	10.00	120.00	12	Y	18	180.00
6/25/2009	09-0000460	324	18:57:42	19:05:42	19:17:39	0:08:00	0:27:57	1.00	19	19	10.00	190.00	19	Y	18	180.00
1/15/2009	09-0000044	341	23:26:09	23:26:09	0:04:23	0:00:00	0:38:14	1.00	21	21	10.00	210.00	21	Y	18	180.00
2/27/2009	09-0000158	350	23:06:20	23:12:59	23:20:01	0:06:39	0:20:20	1.00	25	25	10.00	250.00	25	Y	18	180.00
5/13/2009	09-0000350	400	22:08:34	22:14:34	22:45:26	0:06:00	0:42:52	1.00	23	23	10.00	230.00	23	Y	18	180.00
5/7/2009	09-0000333	411	20:34:52	20:37:22	21:05:27	0:02:30	0:33:05	1.00	18	18	10.00	180.00	18	Y	18	180.00
5/20/2009	09-0000367	411	22:35:00	22:38:04	22:45:30	0:03:04	0:13:34	1.00	12	12	10.00	120.00	12	Y	18	180.00
2/27/2009	09-0000159	412	18:32:07	18:35:37	19:17:18	0:03:30	0:48:41	1.00	15	15	10.00	150.00	15	Y	18	180.00
3/30/2009	09-0000232	412	22:35:17	22:38:39	23:20:29	0:03:22	0:48:34	1.00	14	14	10.00	140.00	14	Y	18	180.00
5/2/2009	09-0000322	412	23:15:59	23:15:59	23:37:38	0:00:00	0:21:39	1.00	24	24	10.00	240.00	24	Y	18	180.00
4/10/2009	09-0000252	413	3:19:16	3:27:56	3:53:59	0:08:40	0:43:23	1.00	8	8	10.00	80.00	8	Y	18	180.00
6/19/2009	09-0000446	413	20:47:16	21:06:30	21:12:32	0:19:14	0:44:30	1.00	3	3	10.00	30.00	3	Y	18	180.00
4/9/2009	09-0000249	424	21:37:00	21:47:00	22:03:47	0:10:00	0:36:47	1.00	15	15	10.00	150.00	15	Y	18	180.00
3/4/2009	09-0000174	440	1:37:42	1:43:33	1:45:47	0:05:51	0:13:56	1.00	15	15	10.00	150.00	15	Y	18	180.00
3/20/2009	09-0000203	440	5:05:02	5:14:43	5:35:19	0:09:41	0:39:58	1.00	11	11	10.00	110.00	11	Y	18	180.00
4/4/2009	09-0000242	440	5:18:21	5:27:46	6:05:56	0:09:25	0:57:00	1.00	15	15	10.00	150.00	15	Y	18	180.00
4/24/2009	09-0000296	440	18:23:56	18:23:56	18:41:31	0:00:00	0:17:35	1.00	24	24	10.00	240.00	24	Y	18	180.00
5/27/2009	09-0000387	440	19:24:59	19:29:33	19:38:14	0:04:34	0:17:49	1.00	17	17	10.00	170.00	17	Y	18	180.00
6/12/2009	09-0000427	440	19:35:12	19:42:35	20:32:54	0:07:23	1:05:05	1.25	38	47.5	10.00	475.00	38	Y	18	225.00
6/5/2009	09-0000417	441	19:37:42	19:44:19	19:51:29	0:06:37	0:20:24	1.00	11	11	10.00	110.00	11	Y	18	180.00
2/14/2009	09-0000127	442	0:22:45	0:28:36	1:10:03	0:05:51	0:53:09	1.00	15	15	10.00	150.00	15	Y	18	180.00
4/4/2009	09-0000240	442	2:34:18	2:36:31	3:00:01	0:02:13	0:27:56	1.00	0	0	10.00	0.00	0	Y	18	180.00
6/21/2009	09-0000449	444	21:59:22	22:06:12	0:30:14	0:06:50	2:37:02	2.75	5	13.75	10.00	137.50	5	Y	18	495.00
5/10/2009	09-0000343	445	23:30:29	23:36:47	23:53:02	0:06:18	0:28:51	1.00	11	11	10.00	110.00	11	Y	18	180.00
1/1/2009	09-0000004	500	0:14:48	0:21:37	0:45:48	0:06:49	0:37:49	1.00	12	12	10.00	120.00	12	Y	18	180.00
1/10/2009	09-0000021	500	3:33:25	3:45:03	3:56:46	0:11:38	0:34:59	1.00	12	12	10.00	120.00	12	Y	18	180.00
4/17/2009	09-0000275	500	19:24:07	19:38:13	20:10:21	0:14:06	1:00:20	1.00	5	5	10.00	50.00	5	Y	18	180.00
5/30/2009	09-0000395	500	23:38:08	23:55:39	0:01:58	0:17:31	0:30:41	1.00	1	1	10.00	10.00	1	Y	1	10.00
1/25/2009	09-0000071	520	3:33:29	3:41:09	4:48:21	0:07:40	1:22:32	1.50	17	25.5	10.00	255.00	17	Y	18	270.00
4/14/2009	09-0000267	521	18:39:29	18:46:45	19:18:36	0:07:16	0:46:23	1.00	20	20	10.00	200.00	20	Y	18	180.00
6/16/2009	09-0000434	531	19:30:04	19:40:00	19:50:57	0:09:56	0:30:49	1.00	18	18	10.00	180.00	18	Y	10	100.00
4/26/2009	09-0000305	551	18:30:58	19:05:34	19:28:56	0:34:36	1:32:34	1.50	6	9	10.00	90.00	6	Y	18	270.00
4/26/2009	09-0000307	551	18:40:08	18:53:20	20:47:24	0:13:12	2:20:28	2.50	5	12.5	10.00	125.00	5	Y	18	450.00
4/28/2009	09-0000315	551	18:47:23	18:55:17	19:49:43	0:07:54	1:10:14	1.25	6	7.5	10.00	75.00	6	Y	18	225.00
5/22/2009	09-0000375	551	21:30:15	21:36:43	21:54:26	0:06:28	0:30:39	1.00	7	7	10.00	70.00	7	Y	18	180.00
6/5/2009	09-0000416	551	22:23:55	22:41:07	23:11:16	0:17:12	1:04:33	1.25	14	17.5	10.00	175.00	14	Y	18	225.00
1/2/2009	09-0000006	571	0:59:18	1:11:52	5:07:23	0:12:34	4:20:39	4.50	27	121.5	10.00	1,215.00	27	Y	18	810.00
1/10/2009	09-0000023	571	1:21:53	1:40:02	5:08:31	0:18:09	4:04:47	4.25	32	136	10.00	1,360.00	32	Y	18	765.00
1/14/2009	09-0000039	571	2:56:58	2:59:54	2:59:54	0:02:56	0:05:52	1.00	0	0	10.00	0.00	0	Y	18	180.00
1/21/2009	09-0000063	571	5:23:23	6:04:15	9:19:28	0:40:52	4:36:57	4.75	17	80.75	10.00	807.50	17	Y	18	855.00
4/28/2009	09-0000316	571	20:48:05	21:36:12	23:35:34	0:48:07	3:35:36	3.75	19	71.25	10.00	712.50	19	Y	1	37.50
5/20/2009	09-0000368	571	21:39:59	21:57:44	21:57:44	0:17:45	0:35:30	1.00	13	13	10.00	130.00	13	Y	18	180.00
6/26/2009	09-0000463	571	23:46:01	0:08:14	0:38:56	0:22:47	1:15:32	1.25	16	20	10.00	200.00	16	Y	18	225.00
6/26/2009	09-0000464	571	23:51:16	23:51:16	23:51:16	0:00:00	0:00:00	0.00	13	0	10.00	0.00	13	Y	18	0.00
1/2/2009	09-0000005	600	0:32:44	0:43:44	1:44:44	0:11:00	1:23:00	1.50	9	13.5	10.00	135.00	9	Y	18	270.00
1/31/2009	09-0000092	600	0:42:47	0:51:07	0:56:21	0:08:20	0:21:54	1.00	13	13	10.00	130.00	13	Y	18	180.00
1/31/2009	09-0000093	600	0:56:30	1:00:27	1:06:19	0:03:57	0:13:46	1.00	11	11	10.00	110.00	11	Y	18	180.00
2/10/2009	09-0000114	600	2:09:47	2:16:36	2:30:06	0:06:49	0:27:08	1.00	13	13	10.00	130.00	13	Y	18	180.00
2/24/2009	09-0000151	600	3:42:00	3:47:00	4:13:28	0:05:00	0:36:28	1.00	1	1	10.00	10.00	1	Y	1	10.00
2/27/2009	09-0000156	600	5:31:15	5:39:39	5:44:32	0:08:24	0:21:41	1.00	6	6	10.00	60.00	6	Y	18	180.00
3/2/2009	09-0000169	600	6:00:42	6:08:03	6:10:45	0:07:21	0:17:24	1.00	12	12	10.00	120.00	12	Y	18	180.00
6/17/2009	09-0000437	600	18:02:01	18:11:03	18:13:58	0:09:02	0:20:59	1.00	15	15	10.00	150.00	15	Y	18	180.00
6/24/2009	09-0000456	600	22:33:56	22:57:19	23:20:01	0:23:23	1:09:28	1.25	1	1.25	10.00	12.50	1	Y	1	12.50
2/18/2009	09-0000142	622	1:17:33	1:42:47	1:48:40	0:25:14	0:56:21	1.00	1	1	10.00	10.00	1	Y	1	10.00