FRANKLIN PIERCE COLLEGE: A MARKETING RESEARCH STUDY
TO DETERMINE STUDENT PREFERENCES IN RELATION
TO A NEW CELL PHONE SERVICE TOWER
BEING PLACED ON CAMPUS

Prepared for
The Information Technology Department at Franklin Pierce College

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Introduction

Background Information of the Organization Under Study

Franklin Pierce College is a four year coeducational, liberal arts college located in Rindge, New Hampshire. The college was founded in 1962 by Frank S. DiPietro, who would become the first president of the school. The main campus which is situated on more than 1,200 acres of woodland, fields, and waterfront, currently enrolls approximately 1,600 students with the mass majority of them living on campus. Franklin Pierce College also has several satellite campuses located in Keene, Manchester, Lebanon, Concord, Portsmouth, and Nashua, New Hampshire (Franklin Pierce College, 2005, 4).

Although Franklin Pierce is rather small for a college, it is becoming more widely known due to its high level of academic standards and high quality of education. Since it is a liberal arts college, Franklin Pierce not only provides it students with the necessary education for their academic major, but also focuses on other core classes within other studies to provide a well-rounded education for each and every student. “A distinctive element of the College is its core curriculum, Individual and Community, the spirit of which pervades the academic culture of the College. The hallmark goal of Franklin Pierce College is to prepare its students to function well as citizens and leaders of a democratic society.” (Franklin Pierce College, 2005, 4).

Nature of the Problem

The issue the College is currently facing is the lack of cellular service options on campus. There are major cell phone providers who do not offer service on our college campus, and this is something the researchers would like to take a step to improve.
Cellular phones have become a large part of people's lives in the past ten years, and there is no reason the Franklin Pierce College community should be behind the rest of the world in this convenient technology, just because of its remote location. The two more popular services of Sprint-Nextel and Cingular-AT&T receive very poor signal strength throughout the campus with many places of no service at all. This is a problem as students on campus have expressed concern because they have these named companies as their provider, and they do not have quality service.

Purpose of the Project

The purpose of this study is to determine Franklin Pierce College community’s needs and preferences toward cell phone services on campus. Different cell phone companies use different technology and offer different services. With this in mind, the researchers feel it is necessary to determine if there is a need for another cell phone service tower on campus, in addition to the current services available, via U.S. Cellular and Verizon Wireless. Our research team wishes to investigate what students use at home, and if they are changing services while they attend Franklin Pierce. Another question the researchers want answered relates to willingness to change service providers, if another major cell phone service provider were to become available on campus. The research team believes that the monopoly on campus by the U.S. Cellular company is effecting the FPC community, because the students cannot go out and get the best rates, or receive newer technology from other cell phone providers. This is so because other services don’t work since there is no corresponding service tower in the area. The overall purpose of this study is to better the Franklin Pierce College communities cell phone options.
Problem Statement

Research is necessary to determine if there is a demand from the Franklin Pierce College community for another cellular service tower on campus, other than the current U.S. Cellular provider.

Research Objectives

1. Identify what cellular service provider is the most popular on campus.
2. Identify if students, faculty, or staff would be willing to switch service providers if alternatives were available.
3. Identify which alternate provider the FPC community would prefer to have access to on campus.

Definition of Terms

Repeater. An electronic device that receives a weak or low-level signal and retransmits it at a higher level or higher power, so that the signal can cover longer distances without degradation (Wikipedia, 2005).
Literature Review

Introduction

Cell phones are an amazing technology that millions of people use everyday. There are so many variables included in buying not only a cell phone, but choosing a service provider. A consumer wants to know how good his/her coverage is going to be and also wants to choose a phone that has all the features that he/she needs. Although a consumer can't expect to get coverage everywhere, cell phones have come a long way since they were first introduced.

Cell Phones

Past. In it’s early stages cell phone were only something which existed in peoples dreams; never did they think it would become something almost everyone would carry with them. In 1947, the first ideas of how this service could become possible surfaced when an idea to create a mobile phone which used “Cells” to determine where the call was being made from, however this was tough to pursue as the technology was limited (Rutgers University, 2002).

In 1968, the larger companies thought to pursue the technology more; since the technology was available it would be possible to go public with the idea. The cell phone went public about eleven years later when it was first tested in Chicago (Rutgers University, 2002). However, this was not the cell phone we know today, it was tested with about 2000 customers in that region. Not long after developers realized the technology was still not ready for mass production in the public, as overcrowding signals seemed to jam things up. The problem at hand was not having enough frequencies available to provide service to mass amounts of cell phones. However, this problem was
solved when new technology surfaced and the cell phone went public globally in 1988 (Rutgers University, 2002).

Present. Today many Americans have cell phones; this is an amazing thought considering 20 years ago it was still being tested in certain regions. The cell phone technology has continued to grow by leaps and bounds, no longer do people have a “car phone” which could only be used in a car and came in a duffle bag. The phones themselves have also come along way, not too long ago cell phone were the size of a tissue box, today they are the size of a credit card. Cell Phone are not longer oversized, nor are they just cell phone anymore. Today cell phones are used to download music, play games and take pictures. Now you can take a digital picture with your cell phone and email it to anyone around the world.

Future. The future is now, cell phones and cell phone services keep getting better everyday. Some of the new cell phone ideas for the future are such things as paying bills, purchasing movie tickets and accessing vending machines all by the touch of your cell phone (Junnarkar, 2002). That’s right someday you will be able to pay for things using your cellular phone like a credit card. Another advancement in cell phones in the future is something which has already started to become popular, palm pilots becoming cell phones. This enables the customers to have everything they need in an all in one organizer that also functions as a cell phone.

Another new and upcoming idea is the satellite phone, similar to the cell phone however they do not use cell phone towers, they use satellites. This is a much better technology because it eliminates the lost signal due to no tower reception. Also with satellite phones it will eliminate "roaming" charges for using other companies' cell
towers. The satellite phone will be the phone of the future and someday replace the cell phone we know today. The reason satellite phones have not yet replaced the cell phone is the technology is still new and very expensive, which will drop in time just like the cell phone did.

Cell Phone Coverage

How cell phone signals are transmitted. Cell phones operate on radio frequencies that can be monitored by commonly available radio frequency scanners (Radio Design Group Inc, 2001). All cellular telephones are basically radio transceivers. Your voice is transmitted through the air on radio waves. Radio waves are not directional; they disperse in all directions so that anyone with the right kind of radio receiver can listen in.

Although the law provides penalties for the interception of cellular telephone calls, it is easily accomplished and impossible to detect. Radio hobbyists have web sites where they exchange cell phone numbers of "interesting" targets. The signals travel by tower which is the next best thing to satellite phones, which will most likely be used in the future by the majority of the population (Radio Design Group Inc, 2001).

Spotty Cell Phone Coverage. None of the major carriers has a nationwide network. Each has areas it can't yet serve; or won't because it costs too much. There is so much territory that it would be impossible and extremely expensive to place towers everywhere (Rojas, 2005). There will be spotty coverage in certain areas with certain providers. In choosing a cell phone provider you should be sure that the company offers service in your area and the areas you will use the phone the most.

What companies have the best coverage? Considering all factors, Verizon is the best overall wireless service provider. In surveys of over 60,000 customers Verizon
attains the highest overall scores for customer satisfaction, network coverage and call quality (Federal Communications Commission, 2005). Verizon customers experienced fewer dropped calls and circuit overloads than with other carriers. While plan prices may not be the cheapest, rates are competitive. Verizon works on the CDMA network, which is not compatible with European or Asian networks, which use GSM networks. T-Mobile, which finishes a close second to Verizon in most reviews, works on a GSM network, so it's a better choice for international travelers (Federal Communications Commission, 2005). If you want to be able to use the same phone in both the U.S. and internationally on GSM networks, you'll need a dual- or tri-band GSM phone. Nearly all Verizon phones will currently not work overseas since they work on a non-compatible network, so your best bet is to go with T-Mobile and a GSM world phone. T-Mobile ties with Verizon or finishes a close second in most reviews. Of the competing GSM service providers, T-Mobile easily finishes ahead of Cingular/AT&T, with better scores and higher overall customer satisfaction (Federal Communications Commission, 2005).

How to Choose the Right Cell Phone

Features included with the phone. Everyday it seems like more and more features are being added to the cell phones that we use. When choosing a phone you want to consider what features you are looking for in a cell phone. Most phones have the same basic features like every other phone such as internet capability, text messaging capability, colored screens, and downloadable ringers, wallpaper, and games. Other than the basic features you may also have certain features that you want your cell phone to have that not every cell phone comes with. Depending on your preferences you might chose a phone that flips open, slides open, or just a simple styled phone that resembles
the shape of your house phone. Other features that are available are phones that take pictures and video, have walkie talkie capabilities, blue tooth enables, and the newest feature to cell phones which is being multimedia capable to be able to play mp3s or video clips (Entertainment on a Cell Phone, 2005).

**Affordability of the phone.** When considering what phone you would like to buy, you must also take into consideration how much you are willing to spend on a phone. Every cell phone service provider offers a variety of phones at a variety of different prices. Depending on what your looking for in a cell phone and how much you are willing to spend, there are many different cells phones that fit your needs. In the world of cell phones, just like with automobiles, the more extras you want on it the more it is going to cost. When looking at phones on the Sprint PCS website, there are phones ranging from $149.99 to $649.99 at regular price (Sprint.com, 2005). Also every service provider usually offers phones at discount prices if you sign up for a contract agreement to use their service over a period of time. With this being said most service providers give away phones for free if you just sign up for the service, which could come in handy for the person who is just looking to get a cheap phone just to talk on.

**Signal reception.** Cell phone signal reception depends on two major factors: strength of the service network and the actually cell phone you are using (German, 2005). The cell phones themselves have an effect on how good the service is because no two models are the same. Different models vary on how good the reception can be and the strength that the antenna and receiver put out. The antenna of the cell phone always has an effect on the service because some antennas are better than others, whether it be if they are longer or have better technology. The first factor is the strength of the carrier's
network. “Without a doubt, signal strength plays a huge role, so if you're having trouble getting a signal in a specific area, I'd blame the network first” (German, 2005). If there isn’t a tower of a specific service provider in the area, then you will more than likely have no service available to use your cell phone.

Conclusion

For us to better research a solution to our problem we need to know more about the cell phone, overall from its early stages to the multi billion dollar business it has become. Which is what we did, we searched through many articles to find out all we could on the cell phone world, and then we summed it up into what were the vital components.
Methodology and Procedures

Problem Identification

The problem that the market research group identified was that a large proportion of the Franklin Pierce College community had poor cellular phone service. The research group identified this problem through personal experiences with individual cellular service and also from input from other Franklin Pierce College students. After deciding that this would be a good subject to research, the researchers then went to the Information Technology Department to talk to Joanne Normandin to see if the study would serve a purpose to the college. When the group met with Joanne Normandin on September 21st she advised that the researchers would be better off talking to Marion Stone of the department. The research group met with Ms. Stone and presented the research proposal, and she agreed that this would be a great research topic. She informed the group that other cellular service providers had contacted the school before. When the cellular phone providers went to do the research about installing a tower the IT department never heard from the companies again. The researchers believe this is true because of the small population of the FPC community. With this being said, she thought it was a great idea and maybe the research would most likely help in setting up a new service tower on campus if we are able to narrow down what service provider the FPC community would most be interested in.

Development of Survey

The development of the Franklin Pierce College Cellular Service Survey went through several different stages. The first stage of development was done by having the research group brainstorm ideas and produce survey questions that would be of help to
our study. Once the researchers reviewed the survey several times, the next step of development was to present the work to fellow peers, who were also taking the marketing research class. After the survey was critiqued by the class, the survey was then turned into Professor Little multiple times to be reviewed and then corrected by the research group.

Definition of Population

The population that the researchers surveyed was the Franklin Pierce College Community. The Franklin Pierce Community consist of 1,680 students and 300 faculty and staff members.

Sample Size

After the population was identified by the research group the next step was to form a smaller sample size to gather data from. The researchers broke the population into two separate affiliates of the Franklin Pierce College: students and faculty/staff. The number students and faculty/staff surveyed was determined in proportion to the number of each subgroup on campus. The researchers surveyed 160 total people, broken down into 137 students and 23 faculty/staff members. Of the 137 students surveyed they were broken down into smaller subgroups depending on class standing. For the purpose of equality and convenience the numbers for class standing were distributed evenly with 35 freshmen, 34 sophomores, 34 juniors, and 34 seniors. Lastly, the sample size was surveyed by means of a non-probability convenience quota sampling method.

Data Collection Method

The research group’s data collection method was to first put together a survey of 8 questions to better obtain information needed to see if a new cell phone tower is needed
on campus. The research group hand collected surveys in classrooms and dormitories
from students, faculty, and staff on the Franklin Pierce College Campus. The data
collection process took place during the time span of November 18-28 2005.

Assumptions

The researchers have made some basic assumptions for this research project.
First, the group assumed that each survey had been answered honestly by each
participant. The research group also made the assumption, that as an educated population,
the participants were able to understand the vocabulary and concepts included within the
survey.

Limitations

In conducting the study, there were some limitations that the research group
faced. The first limitation was that the sample size was relatively small in conjunction
with the student, faculty, and staff population. Another limitation was that it was difficult
in determining how much weight to put on each group of participants. The researchers
wanted to make sure that the focus was on the population that this project would affect
the most (students, faculty, and staff that will be returning the most in years to come),
without ignoring the upper classmen's opinions in the situation. Time was also a
limitation given that our Marketing Research class is only one semester long.
Results

Question 1

With 141 respondents answering “yes”, 88.1% of the sample own cellular phones. With 19 respondents answering “no” this shows that 11.9% of the sample are non-cellular phone owners (Appendix B).

Question 2

Of the 19 respondents or 11.9% who did not own a cellular phone 18 of them or 94.7% were interested in purchasing one in the near future. 1 respondent or 5.3% of the sample who did not own a cellular phone were not interested in purchasing one (Appendix C)

Question 3

The most used cellular phone provider was Verizon with 40.4%. The second most used provider was Sprint/Nextel with 24.8%. The third most used provider was Cingular with 18.4%. The fourth most used provider was T-Mobile with 7.8%. The fifth must used provider was U.S. Cellular with 7.1%, and 1.4% accounted for other cellular phone providers that were used by the sample (Appendix D).

Question 4

With a mean of 2.85, a range of 4, and a standard deviation of 1.449, 22.7% of the sample rated their service on campus “poor.” 28.4% of the sample rated their service on campus “below average.” 6.4% of our sample rated their service on campus “average.” 26.2% of our sample rated their service on campus “above average,” and 16.3% of our sample rated their service on campus “excellent” (Appendix E).
**Question 5**

44.3% of the sample who had “poor” service on campus would be interested in switching providers to improve their coverage. 55.7% of the sample who had “poor” coverage would not be willing to switch providers (Appendix F).

**Question 6**

41.3% of the sample would like to see Sprint/Nextel service on campus, which was the highest of any service provider. In a close second Verizon accounted for 37.5% of the sample of which they would like to see on campus. 9.4% would like to Cingular on campus. 6.9 would like to see T-Mobile on campus, and 1.3 accounted for other service providers that the sample would like to see on campus (Appendix G).

**Question 7**

85.6% of the sample were students, and 14.4% of the sample were faculty or staff (Appendix H).

**Question 8**

Out of the student sample 25.5% were freshman, 24.8% were sophomore, 24.8% were juniors, and 24.8% were seniors (Appendix I).

**Cross Tabulation 1**

The cross tabulation showed that freshmen owned Sprint/Nextel phones more than any other phone with 12. Also, freshman were the class standing that owned the least amount of Verizon phones. This could mean that although Verizon was popular with the upperclassmen that Sprint/Nextel could be taking over the younger market entering Franklin Pierce College (Appendix J).

**Cross Tabulation 2**
Once again the cross tabulation shows that freshmen prefer Sprint/Nextel over all other services that they would like to see available on campus. Also a lot more upperclassmen that might not own Sprint/Nextel, would like to see the service available on campus (Appendix K).

Cross Tabulation 3

The cross tabulation shows that the members of the Franklin Pierce College community that use Verizon and U.S. Cellular services have a lot better service than people who use Sprint/Nextel and Cingular services. Also the cross tabulation shows that for the Franklin Pierce College community is generally split up into either you have below average or above average service (Appendix L).
Discussion, Conclusions, and Recommendations

Discussion

The results show that the most popular service provider was Verizon, which has the second most coverage in the area just behind the main service provider on campus, U.S. Cellular. This supported our findings in the literature review stating that Verizon has the best overall customer satisfaction and network coverage (Federal Communications Commission, 2005). Verizon also has the fewest dropped calls and circuit overloads out of the all major providers. The lowest satisfaction rate came from the Sprint/Nextel company who has not aligned themselves with other companies to expand and strengthen their service coverage.

In the Literature review we discussed how to choose the right cell phone, and this could be the most critical part for a Franklin Pierce Student, Faculty, or staff member. The Franklin Pierce College community is forced to pick one or two cell phone providers, U.S. Cellular or Verizon, not because of price, rates or features, but because those are the only two companies who can provide reliable service on campus. This is a major reason why there is a need for another cell phone tower, so the community could choose from all the providers based on the best plans, features and other services, and not be forced to go with the only providers that work on campus.

Conclusions

After surveying the Franklin Pierce Community, we have come to the conclusion that there is need for another cell phone tower on campus. Sprint/Nextel and Verizon are the two companies which the majority of students, faculty and staff currently subscribe to most are unhappy with the service provided on campus due to the lack of reception they
receive. With the recent addition of a new cell phone tower, we have seen a dramatic increase in the satisfaction rate of U.S. cellular. However, the satisfaction rate of Verizon has also dramatically increased due to the fact that Verizon has installed a repeater on the U.S. Cellular tower. Sprint/Nextel however does not have a repeater which means the firm still does not provide good enough reception to the campus, which is the reason why we need a new tower that will provide service to Sprint/Nextel customers. After collecting all the surveys we noticed that 44.3% of the sample surveyed would be willing to change providers if another provider could offer strong service on campus. Another question we asked on the survey was which service provider each participant currently uses, twenty-four percent stated they currently used Sprint/Nextel, and 42% of the sample surveyed said they would like to see Sprint/Nextel service on campus. These percentages suggest there is enough support behind building a new tower to carry the Sprint/Nextel services.

Recommendations

The Franklin Pierce Information Technology Department should look strongly into contacting the Sprint/Nextel service provider and explaining to them the demand for their service on our campus. Twenty-four percent, of the FPC community, already has the Sprint/Nextel service, and it is the most in demand cellular service over any other non-existent provider on campus, with 42% of the FPC community interested in the Sprint/Nextel service.
References


Marion Stone, personal communication, September 21, 2005


Appendix A

Franklin Pierce College Cellular Service Survey

We are a marketing research team from Franklin Pierce College conducting research for the Information Technology Department at Franklin Pierce College, located in Rindge, New Hampshire. The purpose of this survey is to find out if there is a demand from the Franklin Pierce College community for another cellular service tower on campus, other than the current U.S. Cellular provider. Your individual responses will be kept confidential and repeated as data only.

1. Do you own a cellular phone? YES (1) NO (2)

2. If “NO”, are you interested in purchasing a phone in the near future? YES (1) NO (2)

3. What cellular service provider do you currently use?
   - Sprint/Nextel (1)
   - Cingular (2)
   - Verizon (3)
   - U.S. Cellular (4)
   - T-Mobile (5)
   - Other _________________________ (6)

4. How would you rate your current service on campus? (circle one)
   1 2 3 4 5
   Poor Excellent

5. If your current service on campus is poor, would you be interested in switching service providers? YES (1) NO (2)

6. If you answered “YES”, what service provider would you like available on campus?
   - Sprint/Nextel (1)
   - Cingular (2)
   - Verizon (3)
   - T-Mobile (4)
   - Other _________________________ (5)

7. How are you affiliated with Franklin Pierce College?
   - Student (1)
   - Faculty/Staff (2)

8. If you are a student, identify your class standing.
   - Freshman (1)
   - Sophomore (2)
   - Junior (3)
   - Senior (4)
Appendix B

Do you own a cellular phone?

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Yes&quot;</td>
<td>141</td>
<td>88.1</td>
<td>88.1</td>
<td>88.1</td>
</tr>
<tr>
<td>&quot;No&quot;</td>
<td>19</td>
<td>11.9</td>
<td>11.9</td>
<td>100.0</td>
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<tr>
<td>Total</td>
<td>160</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Appendix C

If "NO," are you interested in purchasing a phone in the near future?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>&quot;Yes&quot;</td>
<td>18</td>
<td>94.7</td>
<td>94.7</td>
</tr>
<tr>
<td></td>
<td>&quot;No&quot;</td>
<td>1</td>
<td>5.3</td>
<td>5.3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>19</td>
<td>100</td>
<td>100.0</td>
</tr>
</tbody>
</table>

If "NO", are you interested in purchasing a phone in the near future?

- **YES**
  - Frequency: 18
  - Percent: 94.7
  - Valid Percent: 94.7
  - Cumulative Percent: 94.7

- **NO**
  - Frequency: 1
  - Percent: 5.3
  - Valid Percent: 5.3
  - Cumulative Percent: 100.0

![Pie chart showing 18 'YES' responses and 1 'NO' response]
Appendix D

What cellular service provider do you currently use?

<table>
<thead>
<tr>
<th>Provider</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sprint/Nextel</td>
<td>35</td>
<td>21.9</td>
<td>24.8</td>
<td>24.8</td>
</tr>
<tr>
<td>Cingular</td>
<td>26</td>
<td>16.3</td>
<td>18.4</td>
<td>43.3</td>
</tr>
<tr>
<td>Verizon</td>
<td>57</td>
<td>35.6</td>
<td>40.4</td>
<td>83.7</td>
</tr>
<tr>
<td>U.S. Cellular</td>
<td>10</td>
<td>6.3</td>
<td>7.1</td>
<td>90.8</td>
</tr>
<tr>
<td>T-Mobile</td>
<td>11</td>
<td>6.9</td>
<td>7.8</td>
<td>98.6</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1.3</td>
<td>1.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>141</td>
<td>88.1</td>
<td>100.0</td>
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</tr>
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<td>Missing System</td>
<td>19</td>
<td>11.9</td>
<td></td>
<td></td>
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<td>Total</td>
<td>160</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What cellular service provider do you currently use?

![Bar chart showing the distribution of cellular service providers]
Appendix E

How would you rate your current service on campus?

Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>How would you rate your current service on campus?</td>
<td>141</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>2.85</td>
<td>1.449</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>141</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>32</td>
<td>20.0</td>
<td>22.7</td>
</tr>
<tr>
<td>Below Average</td>
<td>40</td>
<td>25.0</td>
<td>28.4</td>
</tr>
<tr>
<td>Average</td>
<td>9</td>
<td>5.6</td>
<td>6.4</td>
</tr>
<tr>
<td>Above Average</td>
<td>37</td>
<td>23.1</td>
<td>26.2</td>
</tr>
<tr>
<td>Excellent</td>
<td>23</td>
<td>14.4</td>
<td>16.3</td>
</tr>
<tr>
<td>Total</td>
<td>141</td>
<td>88.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>19</td>
<td>11.9</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>160</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

How would you rate your current service on campus?

![Bar Chart](chart.png)
Appendix F

If your current service on campus is poor, would you be interested in switching service providers?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Yes</td>
<td>58</td>
<td>36.3</td>
<td>44.3</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>73</td>
<td>45.6</td>
<td>55.7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>131</td>
<td>81.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>System</td>
<td>29</td>
<td>18.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>160</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

If your current service on campus is poor, would you be interested in switching service providers?

- YES: 44%
- NO: 56%
What service provider would you like available on campus?

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>154</td>
<td>96.3</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Sprint/Nextel</td>
<td>66</td>
<td>41.3</td>
<td>42.9</td>
<td>42.9</td>
</tr>
<tr>
<td>Cingular</td>
<td>15</td>
<td>9.4</td>
<td>9.7</td>
<td>52.6</td>
</tr>
<tr>
<td>Verizon</td>
<td>60</td>
<td>37.5</td>
<td>39.0</td>
<td>91.6</td>
</tr>
<tr>
<td>T-Mobile</td>
<td>11</td>
<td>6.9</td>
<td>7.1</td>
<td>98.7</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1.3</td>
<td>1.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>154</td>
<td>96.3</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Missing System: 6 (3.8%)
Total: 160 (100.0%)

---

What service provider would you like available on campus?

![Bar chart showing the frequency of service provider preferences: Sprint/Nextel 66, Cingular 15, Verizon 60, T-Mobile 11, Other 2, Total 154.](chart.jpg)
Appendix H

### How are you affiliated with Franklin Pierce College?

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>137</td>
<td>85.6</td>
<td>85.6</td>
<td>85.6</td>
</tr>
<tr>
<td>Faculty/Staff</td>
<td>23</td>
<td>14.4</td>
<td>14.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>160</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

![Bar Chart](chart.png)

**How are you affiliated with Franklin Pierce College?**

- **Student**: 137
- **Faculty/Staff**: 23
Appendix I

If you are a student, identify your class standing

<table>
<thead>
<tr>
<th>Class Standing</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>35</td>
<td>21.9</td>
<td>25.5</td>
<td>25.5</td>
</tr>
<tr>
<td>Freshman</td>
<td>34</td>
<td>21.3</td>
<td>24.8</td>
<td>50.4</td>
</tr>
<tr>
<td>Sophomore</td>
<td>34</td>
<td>21.3</td>
<td>24.8</td>
<td>75.2</td>
</tr>
<tr>
<td>Junior</td>
<td>34</td>
<td>21.3</td>
<td>24.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Senior</td>
<td>34</td>
<td>21.3</td>
<td>24.8</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>85.6</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing Total</td>
<td>23</td>
<td>14.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>160</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Student Class Standing

- Freshman: 35
- Sophomore: 34
- Junior: 34
- Senior: 34

Diagram of student class standing with proportions.
Appendix J

What cellular service provider do you currently use? * How are you affiliated with Franklin Pierce College? Crosstabulation

<table>
<thead>
<tr>
<th>What cellular service provider do you currently use?</th>
<th>How are you affiliated with Franklin Pierce College?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Student</td>
<td>Faculty/Staff</td>
</tr>
<tr>
<td>Sprint/Nextel</td>
<td>29</td>
<td>6</td>
</tr>
<tr>
<td>Cingular</td>
<td>24</td>
<td>2</td>
</tr>
<tr>
<td>Verizon</td>
<td>48</td>
<td>9</td>
</tr>
<tr>
<td>U.S. Cellular</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>T-Mobile</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>122</td>
<td>19</td>
</tr>
</tbody>
</table>

What cellular service provider do you currently use? * If you are a student, identify your class standing. Crosstabulation

<table>
<thead>
<tr>
<th>What cellular service provider do you currently use?</th>
<th>If you are a student, identify your class standing.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freshman</td>
<td>Sophomore</td>
</tr>
<tr>
<td>Sprint/Nextel</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Cingular</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Verizon</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>U.S. Cellular</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>T-Mobile</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>27</td>
</tr>
</tbody>
</table>
Appendix J (cont.)

What cellular service provider do you currently use?

If you are a student
- Freshman
- Sophomore
- Junior
- Senior

Count

0 2 4 6 8 10 12 14 16

Sprint/Nextel  Verizon  T-Mobile  Other

Cingular  U.S. Cellular  Other

What cellular service provider do you currently use?
Appendix K

What service provider would you like available on campus? * How are you affiliated with Franklin Pierce College? Crosstabulation

<table>
<thead>
<tr>
<th>What service provider would you like available on campus?</th>
<th>How are you affiliated with Franklin Pierce College?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Student</td>
</tr>
<tr>
<td>Sprint/Nextel</td>
<td>55</td>
</tr>
<tr>
<td>Cingular</td>
<td>13</td>
</tr>
<tr>
<td>Verizon</td>
<td>53</td>
</tr>
<tr>
<td>T-Mobile</td>
<td>9</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
</tr>
</tbody>
</table>

What service provider would you like available on campus? * If you are a student, identify your class standing. Crosstabulation

<table>
<thead>
<tr>
<th>What service provider would you like available on campus?</th>
<th>If you are a student, identify your class standing.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freshman</td>
</tr>
<tr>
<td>Sprint/Nextel</td>
<td>25</td>
</tr>
<tr>
<td>Cingular</td>
<td>2</td>
</tr>
<tr>
<td>Verizon</td>
<td>6</td>
</tr>
<tr>
<td>T-Mobile</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
</tr>
</tbody>
</table>
Appendix K (cont.)

What service provider would you like available on campus?

If you are a student
- Freshman
- Sophomore
- Junior
- Senior

Count

What service provider would you like available on campus?
What cellular service provider do you currently use? * How would you rate your current service on campus?

### Crosstabulation

<table>
<thead>
<tr>
<th>What cellular service provider do you currently use?</th>
<th>Poor</th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
<th>Excellent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sprint/Nextel</td>
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<td>20</td>
<td>2</td>
<td>1</td>
<td></td>
<td>35</td>
</tr>
<tr>
<td>Cingular</td>
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<td>2</td>
<td>1</td>
<td></td>
<td>26</td>
</tr>
<tr>
<td>Verizon</td>
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<tr>
<td>U.S. Cellular</td>
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<td>1</td>
<td>3</td>
<td>4</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>T-Mobile</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>1</td>
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<td>11</td>
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<td>Other</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>40</td>
<td>9</td>
<td>37</td>
<td>23</td>
<td>141</td>
</tr>
</tbody>
</table>