

## Claremont Colleges Scholarship @ Claremont

---

CGU Faculty Publications and Research

CGU Faculty Scholarship

---

1-1-2006

# Reporting On-Campus Crime Online: User Intention to Use

Gondy A. Leroy  
*Claremont Graduate University*

Alicia Iriberry '06  
*Claremont Graduate University*

Nathan Garrett  
*Woodbury University*

---

### Recommended Citation

A. Iriberry, G. Leroy, N. Garrett, "Reporting on-Campus Crime Online: User Intention to Use", Hawaii International Conference On Systems Sciences (HICSS), January 2006.

This Article is brought to you for free and open access by the CGU Faculty Scholarship at Scholarship @ Claremont. It has been accepted for inclusion in CGU Faculty Publications and Research by an authorized administrator of Scholarship @ Claremont. For more information, please contact [scholarship@cuc.claremont.edu](mailto:scholarship@cuc.claremont.edu).

# Reporting on-Campus Crime Online: User Intention to Use

Alicia Iriberry  
Gondy Leroy  
Nathan Garrett

*School of Information Systems and Technology  
Claremont Graduate University  
alicia.iriberri@cgu.edu*

## Abstract

*National surveys demonstrate that millions of crimes go unreported in the United States. Several reasons may contribute to this lack of reporting and we are investigating these potential reasons and how they may be addressed. We are developing an online system that provides an anonymous and secure mechanism for both victims and witnesses to report crimes to police. The system is being implemented and tested on a university campus. Potential users (i.e., students, staff) were surveyed to determine their intent to use the system. Respondents claimed to report crimes already, which is in contrast with the findings from the national surveys. Our respondents found the online system useful, accessible, and safe to report crime, but the type of crime and the urgency of response is a determinant in the decision to use the system versus reporting it to a live person.*

## 1. Introduction

With over 250 million searches a day submitted to Google, the most popular search engine, the Internet is the most pervasive means of information retrieval [13]. Today, a great percentage of these millions of searches originate from people interested in, for example, medical information and world news. However, in recent years, Internet users have shifted from being information consumers to being information providers. This is clear in the explosive growth of blogs or online journals discussing topics that range from poetry to politics. It is estimated that there are 9 million different bloggers and that 40,000 new ones are added every day [1]. Similarly, websites that welcome user input have experienced an increase in users signing in. The US Geological Survey website reported that within 90 minutes of a recent earthquake in Southern California 24,000 people submitted a report describing the effects of the earthquake

on their surroundings [11]. The Internet has become integrated into the everyday life of millions of Americans.

Unreported crime is an ongoing concern in our society. The Bureau of Justice reports that almost half of all violent crimes are never reported to the police [6]. Society needs to know the extent of crime so that we can make better decisions regarding places to live and preventive actions to take. Law enforcement agencies need to be able to allocate resources according to where crimes are committed and under what circumstances. There is a wide variety of reasons why crimes go unreported, and no single system can solve this problem. There is a need to investigate alternative ways for people to report crimes, and design mechanisms to ensure accessibility, confidentiality, anonymity, and safety.

Our goal is to investigate if Internet and mobile technology can increase reporting of committed crimes to law enforcement. This study is a first step and we investigate whether or not people would use the Internet to report crime. The use of mobile phones will be addressed later. We collaborate with Campus Safety at Claremont Graduate University, a private university east of Los Angeles.

We asked students and staff on campus if they would use an Internet-based system and under which circumstances. We found that all claim to report crime; however, this is not the case according to the national numbers. Overall, they would prefer an Internet-based system to a voicemail system, but when faced with a life-threatening situation they would prefer to report the crime to a live person. We also found that they perceived the Internet-based system as useful and are likely to use it to report crime; that they believe the system protects their anonymity, and that it is efficient to report a lot of information at once. Also, they perceive having listings of crime reports online more useful than having them on paper.

## 2. Background

National statistics on crime show a disparity on the number of committed crimes versus the number of reported crimes. According to the Bureau of Justice [2], only half of all violent crimes are reported to the police. For less serious crimes, such as household or property crimes, only one third are reported. For example, LAPD reports 1073 rapes in 2004 [7], based on national estimates, it can be estimated that there were twice as many rapes in the Los Angeles area. The information on unreported crime is very sparse. Searching Google for “Los Angeles” and “unreported crime” offers anecdotal evidence of this lack of information. Instead of millions of web pages only 129 were found (search performed on Thursday, January 06, 2005, [www.google.com](http://www.google.com)) and most mentioned unreported crime only briefly or provided decade old examples. At the national level, the National Crime Victimization Survey (NCVS), based on yearly interviews obtained from a representative sample of 45,000 households, provides a peek at unreported crimes. From this sample, those that have been victims of crime and did not necessarily report it, are interviewed. This data can be compared with Uniform Crime Reporting (UCR) data, which provides reported crime data based on police reports or with the National Incident-Based Reporting System (NIBRS), which adds more information about incidents and their victims. None of the surveys includes witnesses to crimes.

Crimes go unreported for several reasons. People fear repercussions (e.g., gang related crimes), are ashamed to report the crime (e.g., crimes by relatives), believe it is a private issue (e.g., a neighbor who beats his wife), believe the crime too insignificant to warrant reporting (e.g., stolen bike), or believe that reporting the crime will make no difference (e.g., graffiti). The ability to reach an authority (i.e., police presence) is another important determinant in crime reporting according to Soares [12]. Current systems rely on the telephone or in person reporting. We are developing an Internet-based submission system that provides anonymity as an option, the use different data formats (video, pictures, text), and different access methods (via computer or later cell phone). The system will automatically inform the on-duty police officers and provide searchable overviews for the public at large. We believe people might find such a system a convenient alternative for reporting crime that addresses their concerns when having to report a crime.

Little if no research on crime reporting systems is available in the Information-Systems-literature on potential impacts of information technology on crime reporting. However, research on adoption of e-government initiatives may shed some light on the problem at hand. Similar to crime reporting systems, e-government initiatives have to be available for the

population in general and their adoption is also voluntary. Carter and Belanger investigated the adoption of e-government initiatives and proposed a model listing the factors involved in this adoption [3]. They combined elements of the Technology Adoption Model (TAM), the Diffusion of Innovation (DOI) model and constructs from the Web and Institutional Trust Models.

TAM is a well-known model used to study user acceptance of technology in general [4]. From TAM Carter and Belanger used three constructs: perceived usefulness and perceived ease of use as independent variables and intention to use as dependent variable. Perceived usefulness is defined as the “degree to which a person believes that using a particular system would enhance his or her job performance.” Perceived ease of use is defined as the “degree to which a person believes that using a particular system would be free of effort.” According to TAM, the acceptance of technology is determined by how useful and easy to use the system is perceived to be by potential users.

Carter and Belanger proposed that constructs from the DOI model might be useful to explain the adoption of e-government initiatives. These constructs are compatibility, relative advantage, and complexity. Compatibility is the “degree to which an innovation is seen to be compatible with existing values, beliefs, experiences, and needs of adopters.” Relative advantage is the “degree to which an innovation is seen as being superior to its predecessor.” Complexity is the “degree to which an innovation is seen by the potential adopter as being relatively difficult to use and understand” [14]. Carter and Belanger also include the construct of image, measured by the prestige that using the technology might bring to the potential adopter [9].

Finally, the e-government adoption model considers elements of trust. Carter and Belanger explain that two types of trust may influence the adoption of e-government initiatives. These are trust in the agency providing the service, and trust in the technology through which the transaction is executed.

## 3. On-Campus Crime Reporting System.

We are developing a website in collaboration with the Claremont Graduate University’s Department of Campus Safety where people (i.e., students, staff) can report crime and suspicious activities anonymously, (prototype, currently focused on unreported campus crime, <http://isl.cgu.edu/nathan/index.aspx>, all information shown for testing purposes only). The submitted information can be facts (text), images, or video.

Before initiating the development of the crime reporting prototype, a number of online sites were analyzed, all run by different agencies. These ranged from the FBI’s online tip submission system [17] and the

WeTip website [22] to the Claremont Colleges' Silent Witness website [16]. Several pages by local law enforcement offices were also studied, such as the Menlo Park PD site [18], the Lakeside Park-Crestview Hills Police site [19], and others. Several special-focus sites were also reviewed, ranging from USC's Sexual Assault Page [21] to Students Who Care [20].

The vast majority of the systems are very rudimentary. Ranging from a single empty textbox at the FBI's site, to the standardized list of questions at Claremont Colleges' Silent Witness webpage, they all required the submitter to recall all vital information without prompting. The systems are also all e-mail forms that do not facilitate integration of the submitted information in a database. Upon the receipt of the e-mailed information, the host organization has to enter all of the data manually, leading to an increase in time, effort, and errors.

The system we are developing is different from the

few existing ones, because people can submit or omit contact information, submit different types of information (e.g., pictures taken with a camera phone), and submit crime versus suspicious activity information. In addition, an overview of reported data is provided and the system uses a user-friendly interface. Figure 1 shows snapshots.

The prototype is designed around two modes: submitting and reviewing. When submitting information, users can choose to report a suspicious activity or one of any number of preprogrammed crimes. The user interface is composed of five separate pages: *Overview*, *Details*, *Suspects*, *Witnesses*, and *Remarks*. The Overview page remains constant. Here, the user chooses the type of crime, the date of the incident, location, and a general description. The content of the next page differs depending on the type of crime chosen, and can ask for anything from information on a stolen bike to the cars involved in a traffic problem.

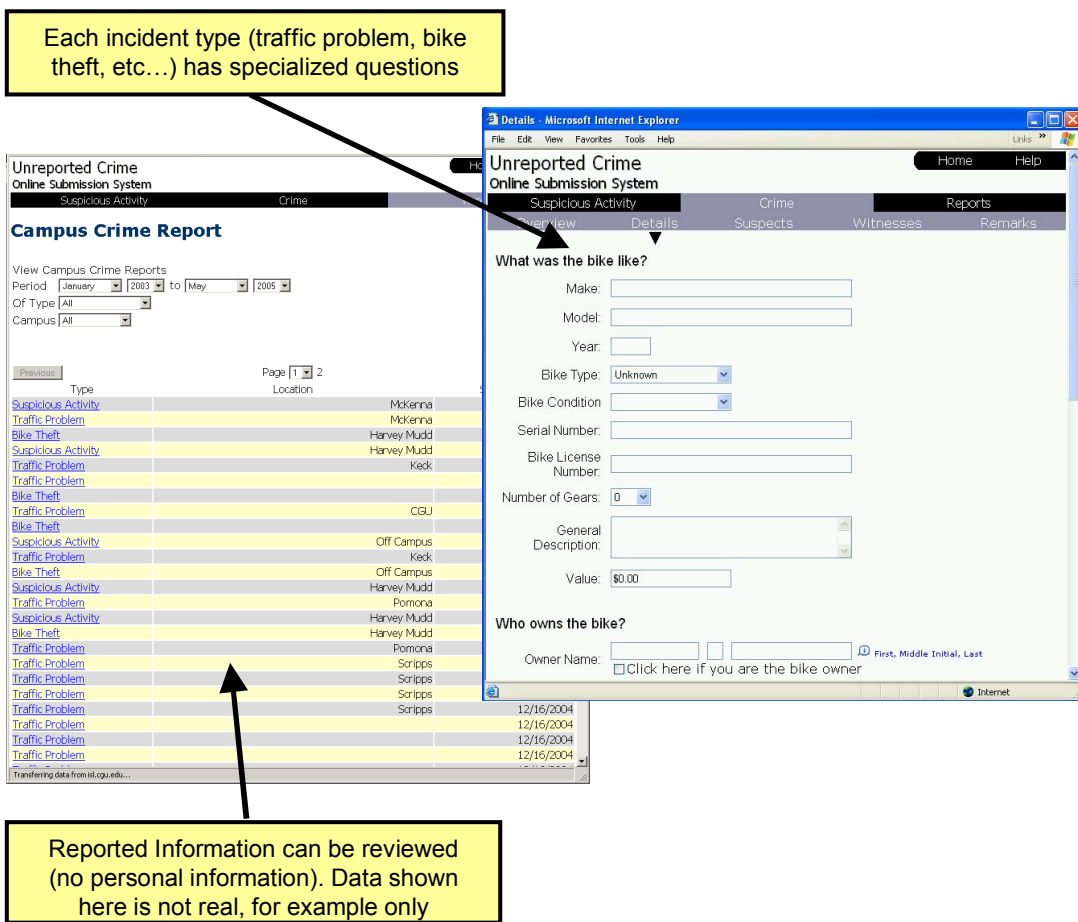


Figure 1. Internet-based crime reporting system

The Suspects and Witnesses pages allow users to input the name and contact information, and the Remarks page allows submitters to input contact information if they would like to be advised of follow-up activities

When reviewing incidents, the second mode, the general public and the Department of Campus Safety can review the suspicious activities and crimes put into the system. The system provides overview reports with both aggregated and detailed information. It differentiates between officers and the general public, and restricts the information displayed accordingly. The user interface also allows for simple sorting and filtering of information.

### 3. Research Questions

The limited usage of the existing Campus Safety website to report crimes online and the rate of unreported crime at the national level led to this study. We are developing a fully functional system for online crime reporting. Our goal is to investigate which factors contribute to crime reporting and we will expand our system as we go along to include more access opportunities and a larger community. The first question that we address in this exploratory study is whether or not users find such system convenient to use and safe i.e., ensures their anonymity or protects their identity. We also want to evaluate the impact of presenting users with online listings of reported crime detailing crime incidents and police progress in dealing with these incidents. This evaluation will aim to determine whether users will consider having these listings to be useful and whether having these listings will encourage people to report incidents when they occur. We intend to use the answers to fine-tune our questionnaire and online submission system.

We adapted Carter and Belanger's e-government initiatives adoption model to our specific case of on-campus crime reporting. We added questions related to anonymity because of the sensitive nature of the information comprising a crime report. Anonymity seems to be an important factor for users of a system to report crime, due to their possible fear of repercussions. We also asked about the usefulness of having instantly updated crime reports for users to review online.

### 4. Methodology

A questionnaire measuring the e-government adoption constructs and perceived anonymity was developed by adapting items from [5], [8], [10], and [15]. Appendix A presents a summary of questions. The questionnaire was distributed to 134 students and staff at Claremont Graduate University where the systems will be

implemented. Participants were asked to provide answers to 40 questions in a paper-based survey handed out in class, in between classes, and at their offices. Eight participants declined the invitation to respond to the survey, and two answered it only partially. These two questionnaires were not included in the analyses, leaving a total of 124 usable responses.

Surveys were distributed to classes that were in session within a one-week period and that included students from different fields of study (e.g. Psychology, Business Administration, Information Systems and Technology; Politics, Religion). Staff members were selected from different departments as well. Selecting participants from different areas of knowledge and expertise would reduce possible bias towards the use of Internet technology, and would ensure a representative sample of the targeted population of users of the crime reporting system.

The survey questions were grouped in four sections. The majority of these questions required answers on a 5-points scale that ranged from *very [adjective]* to *not at all [adjective]* where *[adjective]* includes terms such as comfortable, confident, important or useful. The first section asks participants general information questions such as title, age, department, and about their confidence and trust in using the Internet to conduct transactions, about their trust in the Department of Campus Safety's commitment to resolve on-campus crime. Section 2 asks participants about their likelihood of reporting information about crime. Section 3 asks participants about their attitude toward using both voicemail and an online system to provide crime information. This section also presents snapshots of the Internet-based online crime-reporting prototype designed for this study, and asks participants about the usefulness of such a system. Finally, section 4 asks comparison questions regarding the usefulness and efficiency of voicemail versus online systems (i.e., relative advantage) to report crimes.

## 5. Data Analysis

### 5.1. Respondents demographic data

Descriptive statistics (frequency and means) were calculated for general demographic information. Title, age, gender, place of residence, trust in campus safety, and trust in the Internet were analyzed (Table 1).

Twenty-one percent of respondents are staff members and 78% are students. The majority of respondents do not live on campus (85%) and 60% are female.

As for their trust in the Internet, 56% of respondents feel comfortable conducting transactions on the Internet, and 21% feel very comfortable. Only 7% feel

uncomfortable, and 1% feel very uncomfortable conducting transactions on the Internet (Table 2). These findings show that the majority of respondents trust and have no difficulty using the Internet.

**Table 1. Demographic characteristics**

Characteristic	Freq	Percent
<b>Title</b>		
Staff	26	21
Student	97	78
Other (alumni)	1	1
Total	124	100
<b>Residency</b>		
On-Campus	17	14
Off-Campus	106	85
Missing	1	1
Total	124	100
<b>Gender</b>		
Female	75	60
Male	48	39
Missing	1	1
Total	124	100
<b>Age Range</b>		
50 – 59	10	8
40 – 49	14	11
30 – 39	31	25
20 – 29	61	49
Under 20	8	7
Total	124	100

**Table 2. Level of comfort conducting transactions on the Internet**

Level	Freq	Percent
Very Uncomfortable	1	1
Uncomfortable	9	7
Neutral	18	15
Comfortable	70	56
Very Comfortable	26	21
Total	124	100

Trust in Campus Safety is high. Fifty-three percent feel confident and 10% very confident that campus safety has their best interest in mind. Only 11% reported not being confident. In addition, 43% reported that they are confident and 12% very confident in campus safety commitment to resolve crimes, only 10% are not confident (Table 3).

**Table 3. Level of trust on Campus Safety 's commitment to resolve crimes**

Level	Freq	Percent
Not At All Confident	5	4
Not Confident	9	7
Neutral	32	26
Confident	66	53
Very Confident	12	10
Total	124	100

## 5.2. Crime reporting preferences data

We asked participants about their likelihood of reporting crime, and whether they had been victims or witnesses of crime and had reported it to campus police. Ninety-six percent would be likely to report crime; and all of those that have been victims or witnesses of crime have reported it to police.

We also ask participants to compare the voicemail with the online system in term of usefulness, comfort using each of them, perception of anonymity, and intention to use. This comparison is related to the relative advantage of one system versus its predecessor.

Respondents find the Internet-based crime reporting system more useful, would feel more comfortable using it, believe it would provide a higher level of anonymity, and are more likely to use it over a voicemail system. Paired t-test showed these differences to be significant (Table 4). A higher number represents higher levels of the criteria with five being the highest and one the lowest.

**Table 4. Comparison of voicemail vs. online**

Criteria	Voice Mail Mean	Online Mean	Diff.	Sig.
Comfort	3.27	3.91	.637	.000
Anonymity	2.95	3.36	.411	.001
Usefulness	3.26	3.83	.573	.000
Intent	3.23	3.61	.387	.001

**Table 5. Perceived usefulness of the Internet-based crime reporting system**

Level	Freq	Percent
Not At All Useful	0	0
Not Useful	16	13
Neutral	18	15
Useful	61	49
Very Useful	29	23
Total	124	100

Respondents find the Internet-based crime reporting system to be useful and they have the intention to use it. Forty-nine percent find the system useful and 23% very useful. Similarly, 40% responded they would likely use the system and 22% said they would very likely use it to report crime (Table 5 and 6).

**Table 6. Intention to use the Internet-based crime reporting system**

Level	Freq	Percent
Not At All Likely	2	2
Not Likely	24	19
Neutral	21	17
Likely	50	40
Very Likely	27	22
Total	124	100

Respondents report finding the voicemail crime reporting system to be moderately useful but many do not have the intention to use it. Thirty-six percent find the

system useful and, 10% find it very useful. Thirty-one percent responded they would likely use the system and 14% said they would very likely use it to report crime. However, 26% do not find it useful and 35% would not be likely to use it (Table 7 and 8).

**Table 7. Perceived usefulness of the voicemail crime reporting system**

Level	Freq	Percent
Not At All Useful	4	3
Not Useful	29	23
Neutral	34	28
Useful	45	36
Very Useful	12	10
Total	124	100

**Table 8. Intention to use the voicemail crime reporting system**

Level	Freq	Percent
Not At All Likely	2	2
Not Likely	41	33
Neutral	25	20
Likely	39	31
Very Likely	17	14
Total	124	100

Table 9 provides an overview of perceived usefulness of monthly paper-based crime reports, monthly online crime reports, and instantly updated online crime reports. Respondents find monthly updated paper reports moderately useful, but find monthly updated online reports and instantly updated online reports the most useful. The difference between paper reports (mean 3.41) and online reports (mean 3.94) was significant.

**Table 9. Comparison of the perceived usefulness of paper, online, and instantly updated crime reports**

Usefulness		Diff	Sig
Paper	Monthly Online	.54	.000
3.41	3.95		
Monthly Online	Instantly Online	.032	.714
3.95	3.98		

### 5.3. Crime reporting systems efficiency and anonymity.

Table 10 presents findings comparing, in terms of efficiency, the Internet-based system with the voicemail system to report crime, to report a lot of information, and to report information very quickly. Respondents perceive the Internet-based system as more efficient than the voicemail system to report crimes, and to report a lot of information. They find it slightly more efficient to report information quickly. Thirty-nine percent of respondents find the Internet-based system to be more efficient to report crimes, 62% more efficient to report a lot of

information, and 40% to report information quickly. It is important to note that a high percent of respondents are neutral about the efficiency of either of the systems.

**Table 10. Internet-based system efficiency versus voicemail**

Efficiency	Freq	Percent
Less Efficient	16	13
Neutral	58	47
More Efficient	49	39
Missing	1	1
Total	124	100
<b>A lot of Information</b>	<b>Freq</b>	<b>Percent</b>
Less Efficient	10	8
Neutral	37	30
More Efficient	77	62
Total	124	100
<b>Quickly</b>	<b>Freq</b>	<b>Percent</b>
Less Efficient	31	25
Neutral	44	35
More Efficient	49	40
Total	124	100

Forty-seven percent are neutral about the efficiency of either system to report crime, 30% are neutral about the efficiency of either system to report a lot of information, and 35% about the efficiency of either of them to report information quickly. Written comments received from 12% of respondents indicated that it would be more efficient to report a crime to a live person. However, these questions did not differentiate between serious and minor crimes. This lack of specificity may have influenced the direction of the responses.

**Table 11. Intention to use per type of crime**

Serious	Freq	Percent
Definitely Voicemail	20	16
Maybe Voicemail	13	11
Neutral	42	34
Maybe Online	23	18
Definitely Online	25	20
Missing	1	1
Total	124	100
<b>Minor</b>	<b>Freq</b>	<b>Percent</b>
Definitely Voicemail	9	7
Maybe Voicemail	8	6
Neutral	37	30
Maybe Online	37	30
Definitely Online	32	26
Missing	1	1
Total	124	100

Table 11 presents findings comparing the Internet-based system and the voicemail system to report serious crime (i.e., fight, burglary, sexual assault, etc.) and minor crimes (i.e., noise complaint, bike theft, etc.). Furthermore, it seems that younger people perceive either system to protect anonymity to a higher degree than older people. Forty-seven percent of respondents age 20-29 reported the Internet-based crime reporting system more anonymous versus 1% age 30-39. Similarly, 36% of

respondents age 20-29 report the voicemail more anonymous versus 2.5% age 30-39.

## 6. Discussion

The following list outlines the findings of this study:

1. All respondents are likely to report crime, and those that have been victims or witnesses have reported it.
2. Respondents find the online crime reporting system useful.
3. Respondents are likely to use the online crime reporting system
4. Respondents find the online reporting system more efficient to report crime, to report a lot of information, and to report information quickly than to the voicemail system. However, a high percent of respondents are neutral about the overall efficiency of either system.
5. Respondents feel more comfortable using the online system than the voicemail system
6. Respondents believe that the online system provides a higher degree of anonymity than the voicemail system.
7. Respondents find the online crime reporting system more useful than the voicemail system
8. Respondents are more likely to use the online crime reporting system than the voicemail system to report crime.
9. Respondents find it equally useful to have monthly updated online crime reports and instantly updated online crime reports. They only found it moderately useful to have monthly updated paper reports.
10. Respondents are more likely to use the online reporting system to report minor crimes than to report serious crimes, but they still are likely to use the online system more than the voicemail system for either type of crime. Again a considerable number of respondents is neutral about reporting either type of crime using the online system.
11. Respondents consider it important to remain anonymous when reporting crimes and find the online crime reporting system to provide higher levels of anonymity than the voicemail system.
12. Respondents believe that type of crime and its urgency determine the use of any of the two systems as opposed to reporting to a live person. Serious crimes involving life-threatening situations would more likely be reported to a live person.

Carter and Belanger found perceived usefulness, relative advantage (i.e., how superior the innovation is to its predecessor), and compatibility (i.e., how compatible the innovation is with existing needs, values, and experiences), to be significant in determining the adoption

of e-government initiatives. In this study we found evidence to suggest that the same factors are significant for the adoption of the proposed online crime reporting system. Item 1 relates to perceived usefulness. Items 3, 6, 7 and 8 relate to relative advantage. Items 4 and 9 relate to compatibility.

As expected, anonymity is an important factor to consider when reporting crime. We found that potential users perceive higher levels of anonymity on the online reporting system than on a voicemail system (items 5 and 10).

We found that the type of crime and its urgency are important when choosing a reporting method. Although the online system is perceived as more useful to report minor crimes than serious crimes, a considerable percentage of potential users are neutral about using the system for either serious or minor crimes (Item 9). A possible explanation is found in the comments provided by 12% of the respondents. They stated that when confronted with serious crimes they would prefer reporting the crime to a live person. Work by Soares [12] may help explain this finding. In a study of the determinants in crime reporting at a national level, he proposed level of education as a possible determinant in reporting crime. Higher levels of education may increase the knowledge of individual's rights and the capacity to demand services from government agencies. In our study, the majority of participants is comprised of students at a master's or doctoral level. This high level of education might be related then to the participants' willingness to report crimes as opposed to not reporting them and the lack of fear or concerns to report them directly in person.

The online crime reporting system is being developed for the Claremont Graduate University's Campus Safety Department. The findings discussed are directly relevant to the students, staff, system developers, and administrators of this institution. Indirectly, however, the findings of this study are relevant to other populations (i.e., other campuses, other schools, cities), as the extent of unreported crime is considerable nationwide and our findings confirmed Carter and Belanger e-government initiatives adoption model. Findings suggest that an online crime reporting system might be a viable and useful alternative to crime reporting; anonymity is important when reporting a crime; confidence in using the Internet and confidence in the institution handling the reports are necessary conditions; additionally, our findings suggest that mechanisms to address different levels of education of the person reporting a crime, the seriousness of the crime, the urgency of police intervention and their prompt response should be in place. In our study, with highly educated people who trust the Campus Safety Department, our findings suggest that people tend to report crime incidents after they occur.



## 7. Limitations and Future Research

One limitation of this study was our inability to demonstrate the prototype to respondents. Although the questionnaire presented printed snapshots of the online crime reporting system, participants were not able to experience the system to fully appreciate its advantages. Having the opportunity to try the system and learn about all its functionality may have had a higher impact on participants' intention to use the system. Proponents of user-center development stress the importance of user involvement in the development of systems in general. Moreover, tests of the systems need to be conducted to address usability issues. We will evaluate our system with realistic scenarios in the future and compare its usefulness for users who report crime and for Campus Safety personnel who receive the information.

Another limitation is the demographic characteristics and size of the sample. Varying degrees of age, place of residence, and educational level might increase our understanding of crime reporting in general and of the individual characteristics that make people more likely to use the online system. However, the system is being developed for a University campus community. As such, our sample is representative of the intended users. Later, we will expand our prototype and studies for the surrounding communities.

In addition to addressing these limitations, future research will investigate the specific types of crime people will be more willing to report using the online crime reporting system. This will provide valuable information to design alternative mechanisms to encourage crime reporting. We will also evaluate if people will report crimes as they here claim they will.

## 8. Conclusions

Millions of Americans turn to the Internet to retrieve and provide information. We expect that people will also use the Internet to report crime and suspicious activities. Having this information would be helpful for law enforcement in determining where to provide more resources (i.e., people or funds) and for the community at large in taking preventive measures. We are developing an Internet-based crime reporting system and conducted a survey to determine how useful potential users perceive such a systems and how likely they are to use it. We found that the decision to report a crime will depend on factors such as perceived anonymity, efficiency of the system, seriousness of crime, and urgency of response. The use of the system will also depend on its ability to provide mechanisms to ensure that these issues are factored in the day-to-day operation of the Internet-based

crime reporting system, and its ability to reassure users of the fact that these issues were considered at system's design.

## 9. Acknowledgments

We would like to thank all of our survey respondents and especially Lena Robinson and the staff of the Department of Campus Safety at the Claremont Colleges.

## 10. References

- [1] Baler, S. and Green, H., "Blogs Will Change your Business", *Business Week*, 3931, May 2, 2005, 56
- [2] Bureau of Justice Statistics Special Report, "Reporting Crime to the Police", 1992-2000, <http://www.ojp.usdoj.gov/bjs/abstract/rcp00.htm>
- [3] Carter, L. and Belanger, F. "Citizen Adoption of Electronic Government Initiatives", *Proceedings of the 37<sup>th</sup> Hawaii International Conference on System Sciences*, 2004.
- [4] Davis, F., "Perceived Usefulness and User Acceptance of Information Technology", *MIS Quarterly*, 13(3), 1989, 319-340.
- [5] Gefen, D. and Straub, D. "The Relative Importance of Perceived Ease of Use in IS Adoption: A study of E-Commerce Adoption", *Journal of the Association for Information Systems*, 1(8), 2000, pp. 1-28.
- [6] Hart, T. and Rennison, C., "Reporting Crime to the Police, 1992-2000", *Bureau of Justice Statistics Special Report*, March 2003.
- [7] Los Angeles Police Department, Crime Statistics: Keeping you Informed. [http://www.lapdonline.org/general\\_information/crime\\_statistics/2004\\_crime\\_summary.htm](http://www.lapdonline.org/general_information/crime_statistics/2004_crime_summary.htm)
- [8] McKnight, H. Choudhury, V., and Kacmar, C. "Developing and Validating Trust Measures for E-Commerce: An Integrative Typology", *Information Systems Research*, 13(3), 2002.
- [9] Moore, G. and Benbasat, I., "Development of an Instrument to Measure the Perception of Adopting an Information Technology Innovation", *Information Systems Research*, 2(3), 1991, 173-191.
- [10] Pavlou, P. "Integrating Trust in Electronic Commerce with the Technology Acceptance Model: Model Development and Validation", *Seventh Americas Conference on Information Systems*, 2001.
- [11] Powers, A. and Hyman, S. "Quake Shakes Wide Area", *Los Angeles Times*, June 13, 2005, B1.

[12] Soares, R. R. "Crime Reporting as a Measure of Institutional Development", *Economic Development and Cultural Change*, 52(4), 2004, 851-871.

[13] Sullivan, D. "Searches per Day" Search Engine Watch, February, 25, 2003  
<http://searchenginewatch.com/reports/article.php/2156461>

[14] Tornatzky, L. and Klein, K., "Innovation Characteristics and Innovation Adoption-Implementation: A Meta-analysis of Findings," *IEEE Transactions on Engineering Management*, 29(1), 1982, 28-45.

[15] Van Slyke, C., Belanger, F. and Comunale, C. "Factors Influencing the Adoption of Business to Consumer Electronic Commerce: The Effects of Trust and Perceived Innovation Characteristics", *The Data Base for Advances in Information Systems*, 35(2), 2004.

[16] CUC Silent Witness Program. Campus Safety, Claremont Graduate University. March 13, 2005  
<[http://www.cuc.claremont.edu/cs/silent\\_witness\\_program.htm](http://www.cuc.claremont.edu/cs/silent_witness_program.htm)>

[17] FBI Tips and Public Leads. Federal Bureau of Investigations. March 13, 2005. <<https://tips.fbi.gov/>>

[18] Online Reporting Services. Menlo Park Police Department. March 13, 2005  
<[http://www.geocities.com/menloparkpdtest/online\\_intro.html](http://www.geocities.com/menloparkpdtest/online_intro.html)>

[19] Online Reporting Services. Lakeside Park-Crestview Hills Police Department. March 13, 2005  
<[http://www.lpchpd.com/online\\_reporting/online\\_reporting.asp](http://www.lpchpd.com/online_reporting/online_reporting.asp)>

[20] Students Who Care. Cyber Enforcement Resources. 13 Mar., 2005  
<http://www.cyberenforcement.com/schoolwatch/swcreport.asp>

[21] University of Southern California Sexual Assault Incident Report. University of Southern California. 13 Mar 2005.  
<<http://sait.usc.edu/sait/>>

[22] [www.wetip.com](http://www.wetip.com)

6. How comfortable do you feel when you conduct transactions on the Internet?
7. How confident do you feel that the safeguards provided by the Internet will be enough to conduct personal business?
8. How confident do you feel that technological advances on the Internet make it safe for you to conduct transactions there?
9. How confident do you feel in the robustness and safety of the Internet to conduct transactions?
10. How confident do you feel that Campus Safety keeps your best interest in mind?
11. How confident are you in Campus Safety's commitment to resolve reported crimes?
12. How confident are you with Campus Safety protecting your personal information when you provide it to them?

### Reporting crimes because you were a victim or a witness

The following questions relate to your attitude towards providing information about crimes.

1. Have you ever been a crime victim?
  - a. *If you have been a crime victim, did you report it?*
2. Have you ever been a crime witness?
  - a. *If you have been a crime witness, did you report it?*
3. How important is it to be able to remain anonymous when reporting a crime?
4. How likely are you to report a crime if you were offered a reward?
5. How likely are you to report a crime if you were NOT offered a reward?
6. How useful would it be to get monthly on-campus crime report in a paper report?
7. How useful would it be to get monthly on-campus crime report online?
8. How useful would it be to have on-campus crime (instantly updated) reports online?
9. Would online reports (instantly updated) make you more likely to report a crime online?

## Appendix A.

### Survey Questionnaire Abridged

#### Demographic Information

1. Are you a Student Staff Professor Custodial  
Other: \_\_\_\_\_
2. What department are you with?
3. Do you live on campus?
4. What gender are you?
5. What age group are you in?

#### Voicemail System

Victims or witnesses of crimes can leave a message by phone on the voice mail of Campus Safety. The messages can be anonymous or you can include your name and contact information.

The following questions relate to your attitude towards voice messages to provide information about crimes.

1. Do you have access to a phone?
2. How comfortable would you feel when leaving a voice mail message related to a crime?

3. How anonymous would you feel when leaving a voice mail message related to a crime?
4. How useful do you think a voice mail system to report crime would be?
5. How likely is it that you report a crime using voice mail?
6. How important is the ability to use the system from a public phone?
7. Have you ever left a message on the campus safety voicemail related to a crime?

### **Internet System**

*A comprehensive website is being created for victims and witnesses of crimes to provide information to Campus Safety. The Website allows people to provide specific information and upload files (e.g., pictures). There is also an option to leave your name and other contact information. The picture below provides an example of how the website will look (Same as Figure 1).*

1. Do you have access to the Internet?
2. How comfortable would you feel submitting information online related to a crime?
3. How anonymous would you feel submitting information online related to a crime?
4. How useful do you think an online system to report crime would be?
5. How likely is that you report a crime using a website?
6. How important is the ability to use the system from a place with public access to the Internet?
7. Have you ever submitted information online related to a crime?

### **Comparison Questions**

1. Which system would you prefer reporting a crime through?
  - a. *For a serious crime (a fight, burglary, sexual assault, etc...)*
  - b. *For a minor crime (noise complaint, bike theft, etc...)*
2. How comfortable do you feel about other people reading what you submit online?
3. How efficient would a website be to report crime as opposed to voicemail?
4. How efficient would a website be to report a lot of detailed information as opposed to voicemail?
5. How efficient would a website be to report a lot of information very quickly as opposed to voicemail?

Do you have additional comments or suggestions for us? Do you see specific advantage or disadvantage?