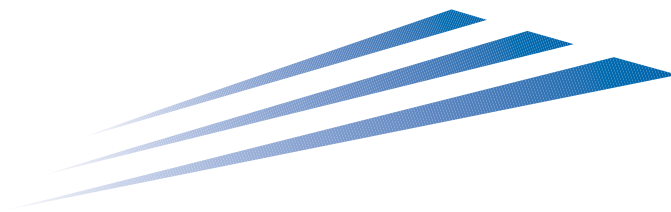


# KENTUCKY TRANSPORTATION CENTER

*College of Engineering*

**2003 MOTOR CARRIER SURVEY**



UNIVERSITY OF KENTUCKY



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Research Report  
KTC04-03/SPR263-02-1F

# **2003 Motor Carrier Survey**

by

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College of Engineering  
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in cooperation with  
Kentucky Transportation Cabinet

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<b>16. Abstract</b>  The goal of this study was to conduct a survey to evaluate usage and satisfaction with the KYTC's new program allowing motor carriers to credential vehicles and pay taxes via the Internet. Specifically, the study was to examine how many Kentucky motor carriers took advantage of this capability, why they did or did not, what improvements could be made to the system, and what incentives could be offered or obstacles removed to entice more motor carriers to use it.			
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## INTRODUCTION & METHODOLOGY

In the fall of 2003, the University of Kentucky Transportation Center, on behalf of the Kentucky Transportation Cabinet (KYTC), commissioned a survey to evaluate usage and satisfaction with the KYTC's new program allowing motor carriers to credential vehicles and pay taxes via the Internet. Specifically, the study was to examine how many Kentucky motor carriers took advantage of this capability, why they did or did not, what improvements could be made to the system, and what incentives could be offered or obstacles removed to entice more motor carriers to use it. This report summarizes results of that study.

In consultation with the University of Kentucky Survey Research Center (SRC) a brief self-administered survey instrument (see APPENDIX A) was developed to send to all motor carriers participating in one of Kentucky's credentialing programs.

The methodology for the survey was as follows:

- 5,515 initial surveys were mailed September 5, 2003
- 92 surveys were re-mailed with address corrections September 17
- 4,215 follow-up postcards were mailed October 3
- A second survey was mailed to 4,030 non-respondents for whom we had an accurate address on October 31, 2003
- 33 surveys were re-mailed with address corrections November 13

The survey was closed on December 17, 2003 with 2,519 total completions included in the data. Out of the 5,515 in the cleaned sample, a total of 126 were ineligible due to: an inaccurate address that we were not able to track successfully (114), no longer being in the trucking business (7), or those had been sent duplicate surveys (5)<sup>1</sup>. Thus, the response rate (**47.1%**) is based on a pool of 5,389 total eligible. It is likely that many of those not

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<sup>1</sup> The original sample database provided had 7,140 names, but many were duplicates. SRC staff removed as many as could be found, but some were listed under different company names and addresses and thus not all of the duplicates were removed. Indeed, it is possible that several more duplicates were sent out that the respondents did not tell us about.

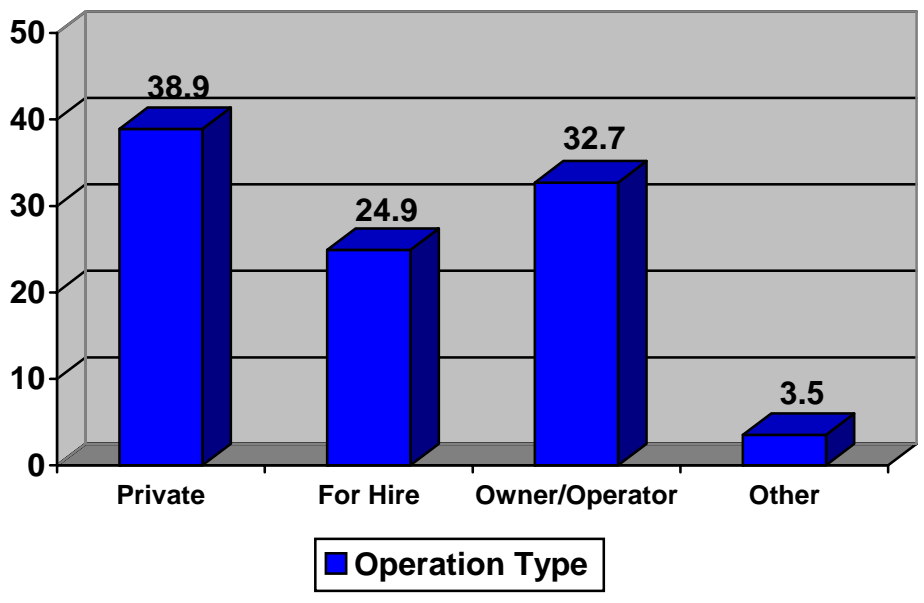
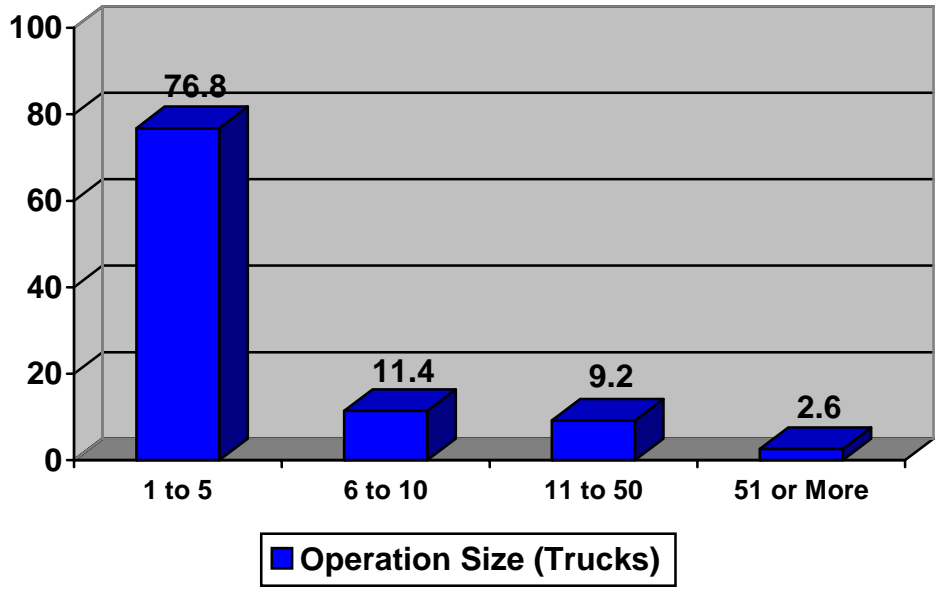
returned were also wrong addresses, and perhaps more duplicates, and thus the response rate listed is the most conservative estimate. Additionally 17 completed surveys have been returned since the closing date and are not included in the data.

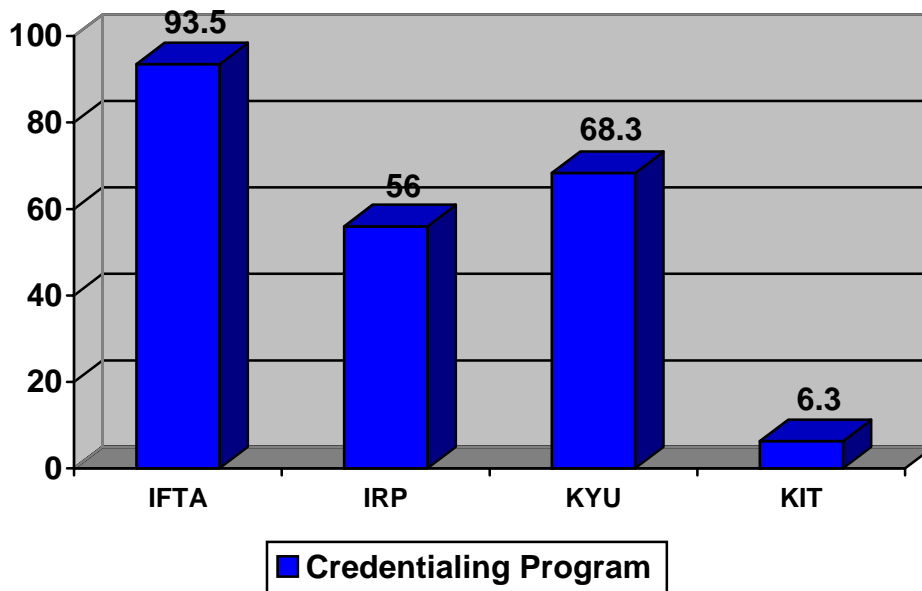
Note that in this report, all figures exclude “don’t know” or “not applicable” responses. Also, note that all results reported to be *statistically significant* were evaluated at the .05 level. Analyses to determine the statistical significance of related responses were conducted using the SPSS Contingency Table Analysis (Crosstabs) procedure.

## PROFILE OF RESPONDENTS

In addition to assessing respondents’ experiences with the online credentialing system, the survey instrument assessed basic information on the type and size of the respondent’s trucking operation as well as what types of credentialing programs were used. These characteristics are important for investigating potential differences in use and needs as a function of operation size and type, which can be used to prioritize and target program improvement efforts.

As seen in the charts below, survey respondents were mostly from small operations (1-5 trucks), but well distributed by type of operation with private carriers having the highest representation. Almost all respondents reported participating in the International Fuel Tax Agreement (IFTA) program, over 2/3 in the Kentucky Highway Use (KYU) program, over 1/2 in the International Registration Plan (IRP) program, and a small number in the Kentucky Intrastate Tax (KIT) program.

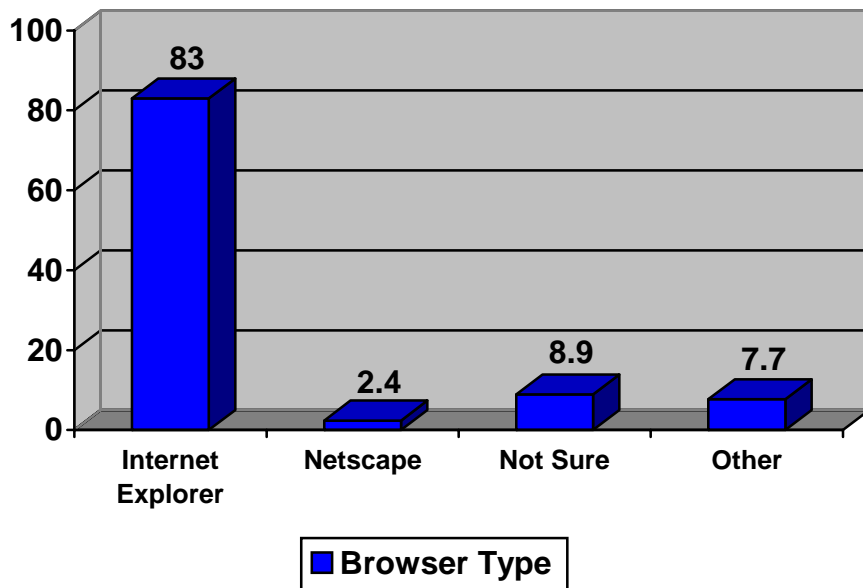
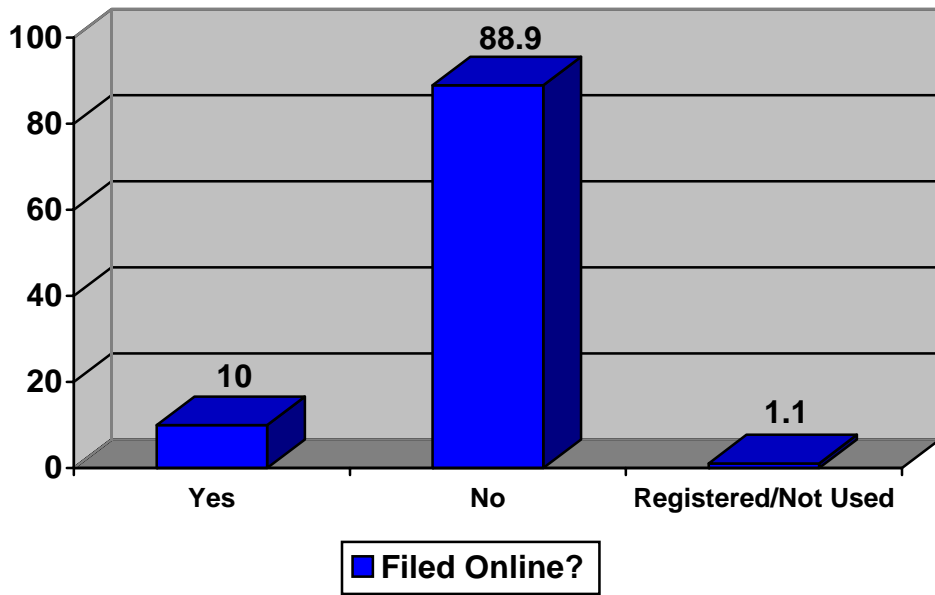


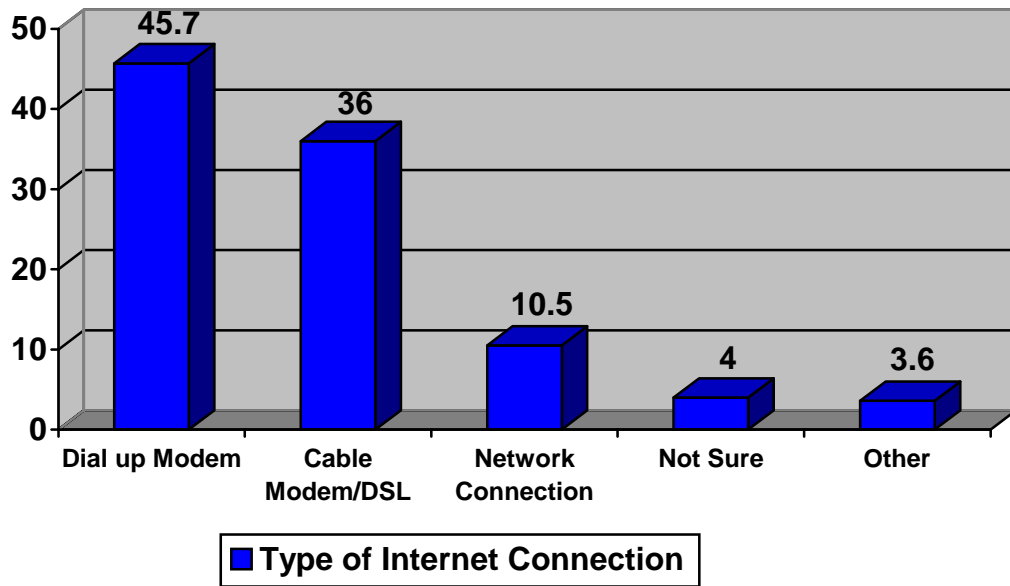


## MAJOR FINDINGS

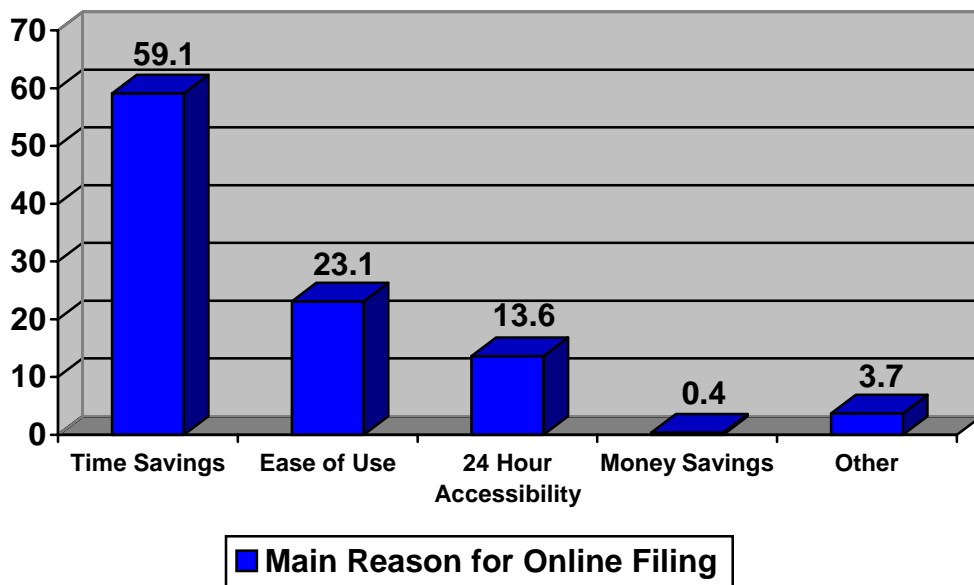
The main goals of the study were to find what induced motor carriers to file online, how the system could be improved, and what could be done to entice nonusers to take advantage of online filing. As seen in the chart below, only 10% of the respondents have registered and filed for a credential using the online system. An additional 1.1% had registered but not used the system to file. Of those that have filed using the Internet, the vast majority used Internet Explorer, indicating that any interface improvements should focus on how the system works using that browser. Only a handful of users reported using Netscape or AOL to connect to the Internet. The majority of users connected via a dial-up modem, although over 1/3 connected using a faster cable modem or hi-speed DSL connection.







Carriers who had filed using the Internet were asked for the MAIN reason they preferred filing online. By far the most cited reason was the time saving involved (59%), although a significant number (23%) cited that the main reason was that it was easier than filing in person. Some cited 24-hour accessibility (13%), but only one user cited money

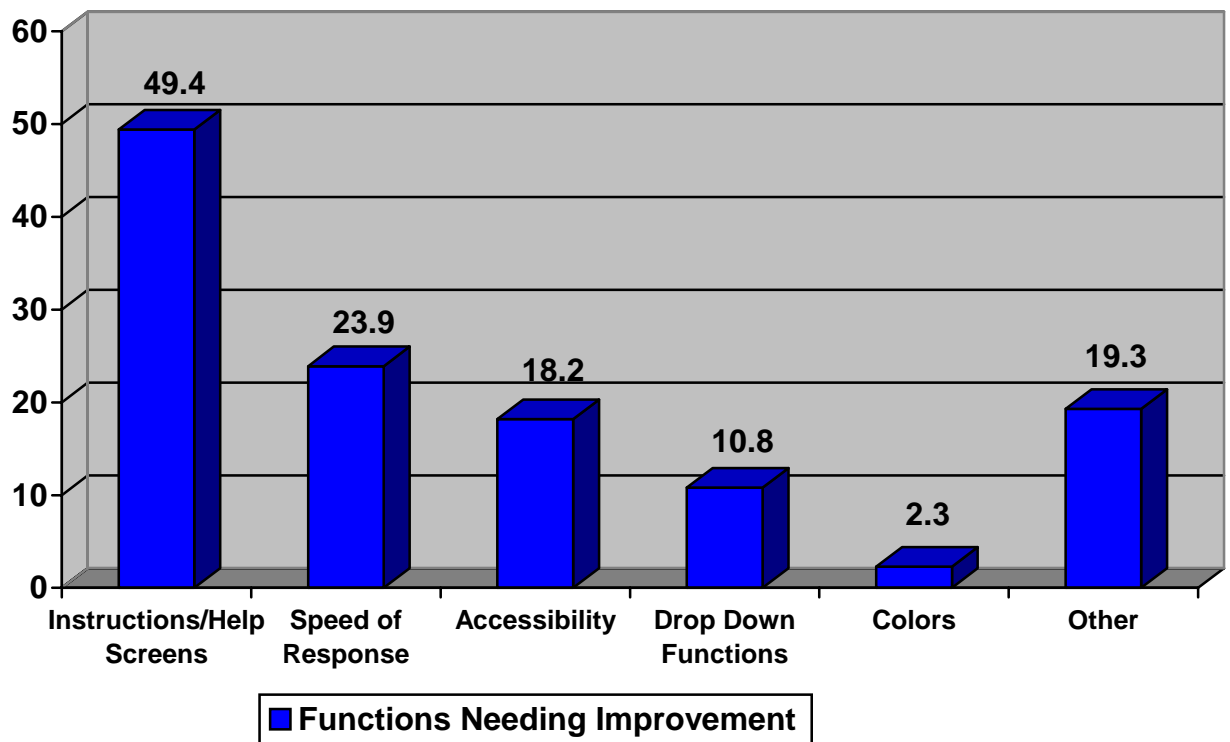


savings. This may indicate that significant financial savings are not perceived to exist, or that they would need to be substantial to induce non-users to file online in the future.

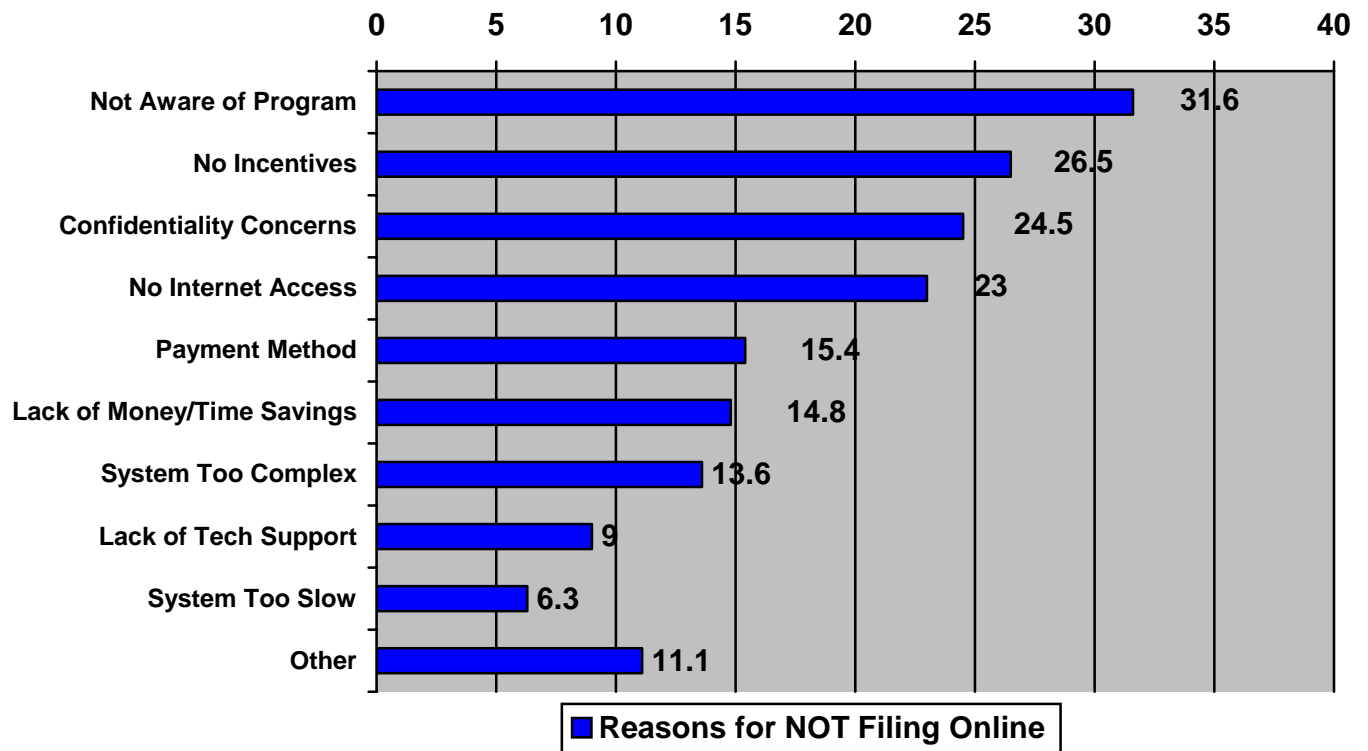
Two individuals said these were all the main reason for using the system, and two individuals indicated that they do NOT prefer to file online and would not do so again.

[Note: See codes for answers to open-ended questions in APPENDIX B; verbatim open-ended responses are provided on enclosed diskette.]

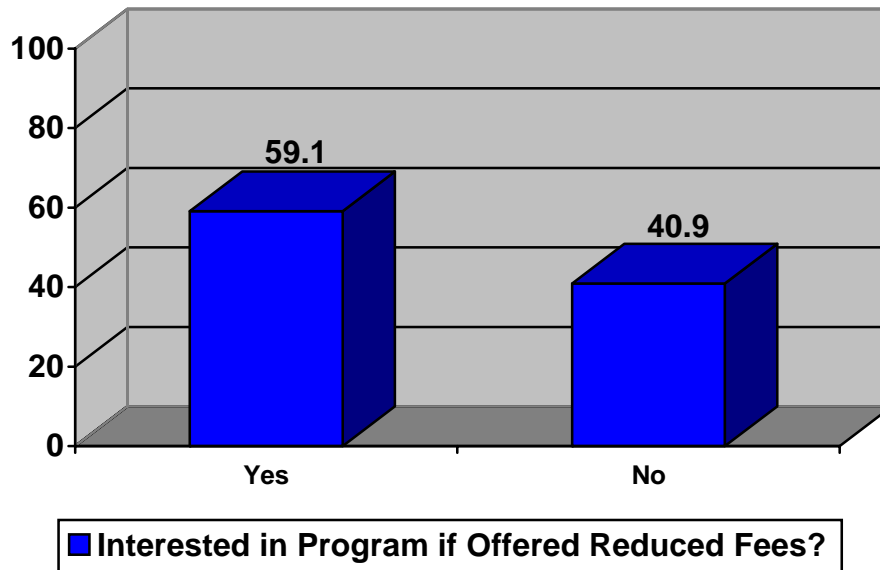
Users were also asked which, if any, of a list of online functions needed improvement. Respondents could select more than one function. The chart below shows the responses in order of the frequency of mention. Most frequently cited as needing improvement were the instructions or help screens (49%). Very few were concerned about cosmetic issues like color. Among the “other” suggestions was the request that confirmation that you have registered successfully be included.



Of key importance is to determine why so few are using the online credentialing system. Those who reported that they have not used the system were asked why. The chart below indicates the main reasons Kentucky motor carriers have not used the system (multiple response allowed). What stands out from these data is the substantial number of carriers who are not aware of the system (32%). This is clearly something KYTC can remedy. Some of the reasons that people do not use the system cannot easily be addressed (no access, concerns about confidentiality), however others (no incentives, lack of money savings, lack of technical support) probably could be improved. Concerns about the speed of the system, both from users and nonusers, may be a function of modem speed and thus should improve as high speed connections become more prevalent and inexpensive.



While users did not cite money savings as a significant reason for filing via the Internet, when nonusers were asked if they would be interested in trying online credentialing if given discounted fees, a majority (59%) reported they would.



## ADDITIONAL ANALYSES

In order to further examine the reasons people choose to file online and whether discounting fees would encourage more to do so, additional analyses of the data were performed to see if the size or type of operation was an important determinant. While some statistically significant patterns emerge, they are mainly modest in strength. Specifically, *larger* operations were more likely to have filed online and *larger* operations who had not yet done so were much more likely to be willing to try it if they received discounted fees. *For-hire carriers* were about twice as likely to have used the system than owner-operators, with private carriers somewhere in between. Owner-operators were also significantly less interested in trying the system, even if discounts are

offered. The only other statistically significant difference between operation types is that owner-operators are more likely to cite 24-hour accessibility and less likely to cite time savings as the main reason for filing online.

Given this evidence that owner-operators and smaller operations (which comprise a significant number of Kentucky motor carriers) are less interested in trying the system, perhaps the KYTC should work to develop incentives targeted at these groups. On the other hand, the opposite can be argued, and perhaps the KYTC should instead work to improve functionality important to those inclined to use the system.

## SUMMARY

While only a small percentage of Kentucky motor carriers report using the Internet to obtain credentials, those who do use it appear generally satisfied but would like more instructions and help screens (and a confirmation screen) to assure them they have used the system correctly. Almost 1/3 of those who have not used the system were not aware of it, and another 40% do not perceive that there are enough financial, time savings, or other incentives to make it worth their while. This indicates that if the program were more widely publicized and some clear incentives provided, the KYTC could quickly convince a much greater number of carriers to try the system.

At the end of the questionnaire survey respondents were given the opportunity to make additional comments about this issue. While the responses varied greatly, a few received several mentions that are consistent with the data provided in this report. Types of comments that were made by at least 10 respondents include:

- positive comments about online registration (20)
- don't own computer-not proficient with computer-no access (17)

- simplify system (15)
- would like to know more about online registration (13)
- have had difficulty completing online registration (11)
- provide alternative payment method (10)

As to improving the functionality of the system for users, it appears that the designers should focus on how the system functions for one using Internet Explorer, as this is the dominant connection browser. Indeed, improvements should not focus so much on how the system “looks” as they should on how precise and plentiful the instructions are. Users need to be confident that they have accurately filed for their credentials.

APPENDIX A  
QUESTIONNAIRE



# Survey of Licensed Professional Kentucky Motor Carriers

For each question below, please circle the letter corresponding to the most correct answer.

1. Which term best describes your operation:
  - a) Private carrier
  - b) For hire carrier
  - c) Owner operator
  - d) Other
  
2. Which category best describes the size of your operation:
  - a) 1-5 trucks
  - b) 6-10 trucks
  - c) 11-50 trucks
  - d) 51 or more
  
3. In which of the following credentialing programs do you participate? (*Please circle all that apply*)
  - a) IFTA
  - b) IRP
  - c) KYU
  - d) KIT
  
4. Have you ever filed for any of these credentials online, that is, through an Internet connection?
  - a) Yes
  - b) No → **Skip to 9.**
  - c) I have registered to file online, but have never done so. → **Skip to 9.**
  
5. What type of internet connection do you use when you file online?
  - a) Dial up modem
  - b) Cable modem or DSL
  - c) Network connection
  - d) Not sure
  - e) Other (*Please specify:*) \_\_\_\_\_
  
6. What browser do you use when you access the Internet?
  - a) Internet Explorer
  - b) Netscape
  - c) Not sure
  - d) Other (*Please specify:*) \_\_\_\_\_

**Please continue on back →**

7. Which of the following do you consider to be a the MAIN reason you prefer to file for credentials online? (*Please select only one*)
- a) Time savings
  - b) Money savings
  - c) Ease of use/easier than filing in person
  - d) 24 hour accessibility
  - e) Other (*Please specify:*) \_\_\_\_\_
8. Which, if any, of the following online functions need improvement? (*Please circle all that apply*)
- a) Colors
  - b) Drop down functions
  - c) Instructions or help screens
  - d) Speed of systems' response
  - e) Ability to connect or access the system
  - f) Other (*Please specify:*) \_\_\_\_\_

\*\*\*\*\**If you answered questions 5-8, please skip to 11.*\*\*\*\*\*

9. Would you be interested in trying online credentialing if you received discounted fees?
- a) Yes
  - b) No
10. Which of following best describes your reasons for not using online credentialing? (*Please circle all that apply*)
- a) System too complex
  - b) System too slow
  - c) Lack of time or money savings
  - d) Don't like the payment method
  - e) No incentives to file this way
  - f) Lack of technical support
  - g) No internet access
  - h) Concern for confidentiality
  - i) Was not aware of online credentialing program
  - j) Other (*Please specify:*) \_\_\_\_\_
11. Is there anything else you would like to share with us regarding online credentialing?

***Thank you for your time!***

APPENDIX B  
CODEBOOK

**Other type of Internet connection**

1 none  
95 miscellaneous  
96 uncodeable  
98 don't know  
99 refused

**Other browser**

1 AOL  
95 miscellaneous  
96 uncodeable  
98 don't know  
99 refused

**Other reason for filing credentials online:**

1 have stopped-will stop filing online  
2 all of the above  
95 miscellaneous  
96 uncodeable  
98 don't know  
99 refused

**Other online functions that need improvement:**

1 need confirmation that registration successfully completed  
2 satisfied with service  
95 miscellaneous  
96 uncodeable  
98 don't know  
99 refused

**Other reason for not using online credentialing:**

1 do not own-use computer  
2 not proficient with computer  
3 do not know enough about online credentialing  
4 intend to use online credentialing in future  
5 do not trust online system-need confirmation on paper  
6 no time to register  
7 prefer in-person registration-general  
8 organization too small  
9 not interested-general  
10 credentialing handled by another party  
95 miscellaneous  
96 uncodeable  
98 don't know  
99 refused

**11. Is there anything else you would like to share with us regarding online credentialing?**

- 1 would like to know more about online registration
- 2 don't trust that personal information is secure online
- 3 don't own computer-not proficient with computer-no access
- 4 positive comments about online registration
- 5 have had difficulty completing online registration
- 6 cannot confirm that information was received online
- 7 simplify system
- 8 provide alternative payment method
- 9 improve technical support
- 77 blank
- 95 miscellaneous
- 96 uncodeable
- 98 don't know
- 99 refused