

Dear Jim Doe

This notice is to remind you that you have a hearing scheduled at the Sarpy County Courthouse at 9:00 AM on 12/30/2009.

Estimado(a)

Este aviso es para recordarle que tiene una audiencia programada en la Corte del Condado de Sarpy a las 9:00 AM en el día 12/30/2009.

COURT DATE REMINDER POSTCARDS

A benefit-cost analysis of using reminder cards to reduce *Failure to Appear* rates

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Effective court reminder programs can reduce FTAs, which are costly to both court systems and defendants.

by DAVID I. ROSENBAUM, NICOLE HUTSELL, ALAN J. TOMKINS, BRIAN H. BORNSTEIN, MITCHEL N. HERIAN, and ELIZABETH M. NEELEY

Introduction

The rate at which criminal defendants fail to appear (FTA) in court is hard to pinpoint,¹ but estimates for the percentages of misdemeanants who do not appear for their court hearing range as high as one in three, depending on the jurisdiction and offense type.² Failure to appear (FTA) increases workloads and expenditures for the courts and law enforcement and can also lead to increased penalties for defendants, including pre-trial incarceration and increased fines for what sometimes starts out as a minor offense. FTAs are costly to both court systems and defendants,

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1. Barry Mahoney, Pretrial Release: Key Policy Issues and Relevant Research, talk presented at Pretrial Research Meeting, National Institute of Justice, Charlotte, NC (May 22-23, 2007), available at <http://www.ojp.usdoj.gov/nij/topics/courts/pretrial/research-meeting/mahoney.pdf>; Pretrial Justice Institute, Survey of Pretrial Program Series: Calculating Rearrest Rates

and Failure to Appear (FTA) Rates (n.d.), available at www.pretrial.org/Docs/.../Survey%20Series%20Data%20on%20FTA.pdf.

2. See, e.g., Arapahoe County Justice Center, Court Date Notification (2010), available at <http://www.co.arapahoe.co.us/Departments/CS/JudicialServices/Court%20Date%20Notification%20Program.asp>; Warren Davis, *Should Georgia Change Its Misdemeanor Arrest Laws to Authorize Issuing More Field Citations?* 22 GA. ST. U. L. REV. 313 (2005); Matt O'Keefe, Court Appearance Notification System: 2007 Analysis Highlights, available from http://www2.co.multnomah.or.us/County_Management/Budget/Budget%20Office%20Evaluation/Reports/Public%20Safety%20Research/CANS%20Highlights.pdf; Wendy F. White, *Court Hearing Call Notification Project*, Coconino County Criminal Justice (May 2006), available at http://www.thecourtbrothers.com/fta_repo/Coconino_County_court_hearing_notification_project.pdf



Dear Mr. P. Guild
This notice is to remind you that you have a hearing scheduled at the Lancaster County Courthouse at 1:30 PM on 12/29/2009.

Failure to appear for this hearing may result in a number of negative consequences, including:

- You may be charged with the additional crime of failure to appear, which is a Class II misdemeanor.
- You may receive up to six months in jail and/or a \$1,000 fine for this additional charge.
- A warrant may be issued for your arrest.
- It may be harder to get bail in the future.
- Even if you are not formally charged with a failure to appear, failing to appear may be considered by the judge in determining your sentence on the original misdemeanor charge.

We strongly encourage you to not miss your hearing on the date and time listed above!

If you have questions about this postcard, please call: (402) 441-7291

Estimado(a)
Este aviso es para recordarle que tiene una audiencia programada en la Corte del Condado de Lancaster 1:30 PM en el día 12/29/2009.

El no presentarse para esta audiencia puede traer resultado un número de consecuencias negativas incluyen:

- Ud. puede ser acusado de un delito adicional por comparecer, que es un delito menor, Clase II.
- Ud. puede recibir hasta seis meses en la cárcel de \$1,000 por este cargo adicional.
- Una orden judicial puede ser expedida para su arresto.
- Puede ser más difícil calificar para una fianza e incluso ser acusado formalmente por faltar a comparecer, el faltar a comparecer puede ser considerado por el juez en la determinación de su pena por el delito original.

¡Le advertimos enérgicamente que no comparecer en la fecha y el tiempo descrito no deje de presentarse!

Case ID: O80913200



so FTA reduction is in the best interest of both entities. Failures to appear for court dates are most likely to occur at pretrial arraignments, though they can occur at later stages as well.³ The higher rates of FTA appear to be associated with misdemeanor offenses, likely because more serious offenses prompt either retained or appointed counsel; attorneys, thus, appear in court or make sure their clients appear. Felony defendants may also be held in custody prior to their arraignment.

A portion of defendants willfully fail to appear. However, as Mahoney and his colleagues indicate, the reasons for most defendants' FTA seem to be more complex.⁴ Many defendants lead disorganized lives, forget, lose the citation and do not know whom to contact to find out when to appear, fear the justice system and/or its consequences, do not understand the seriousness of missing court, have transportation difficulties, language barriers, are scheduled to work, have childcare responsibilities, or other reasons that lead to an FTA.

Some pretrial services offices across the country have implemented court reminder programs,⁵ similar to doctor's appointment reminders.⁶ Telephone reminder programs are especially popular, even spawning a nationwide calling business⁷ in the wake of calling initiatives demonstrating success in such diverse areas as Coconino County, AZ,⁸ Jefferson County, CO,⁹ King County, WA,¹⁰ and Multnomah County, OR.¹¹

Unfortunately, the costs of a call reminder system—either automated or using employees to make the calls—can be prohibitive.¹² Might it be as effective to use reminder *postcards* as it is to use the telephone?

The present study evaluated a pilot, postcard reminder project conducted in 14 counties across Nebraska from March 2009 to May 2010.¹³ The project studied whether FTA rates in Nebraska would be reduced for misdemeanants if they were sent a postcard reminder of their hearing date.

Three different postcard reminders were sent to misdemeanant defendants for their first court

appearances. The reason for the different postcard versions was to determine whether the content of the message would make a difference in appearance rates.¹⁴ The results of the project confirmed that court date notification via postcard significantly reduces failure to appear rates among misdemeanants.

The objective of the current analysis is to conduct a benefit-cost analysis. We quantify the benefits of a reduction in first appearance misdemeanant FTAs on a unit and aggregate basis. The estimated benefits generated for each of the 14 counties participating in the study are then compared to the estimated costs of a postcard reminder program. The less easily quantified social costs of FTA are also explored in this study.¹⁵ Significantly, penalties for failure to appear disproportionately impact racial and ethnic minorities because minorities in general have higher failure to appear rates.¹⁶ Reducing FTA rates in racial and ethnic minority groups can play a small yet important

role in reducing the overrepresentation of minorities in the corrections system. The effects of FTA reduction on court hearings, court fees, and fine revenues are also discussed.

The Nebraska Postcard Reminder Project

Methods

The project was aimed at reducing failure to appear in court for a defendant's misdemeanor hearing. Data collection began in March 2009 and continued through the end of May 2010. Fourteen counties were included in the project. Defendants (19 and older) who were given a ticket by law enforcement officials instructing them to appear in court for an initial hearing on a non-traffic, non-waiverable, misdemeanor offense,¹⁷ were randomly assigned to one of four reminder conditions: a no-reminder (*control*) condition or one of three different postcards (see Figure 1). All postcards had the messages in both English and Spanish. The first postcard was a *Reminder-*

3. Christopher Murray et al, *The Misdemeanant Study: Misdemeanors and Misdemeanor Defendants in King County, Washington* (1998), available at <http://your.kingcounty.gov/exec/news/1999/030499fos.rtf>.

4. Barry Mahoney et al., *PRETRIAL SERVICE PROGRAMS: RESPONSIBILITIES AND POTENTIAL* 39-40 (Off. Just. Programs, Nat'l Inst. Just.) (March 2001), available at <http://www.ncjrs.gov/pdffiles1/nij/181939.pdf>.

5. See references in note 2, *infra*. See generally, The Court Brothers, *FTA Repository* (2012), available at http://www.thecourtbrothers.com/web_court/fta_fta_repository.pl; Marie Van Nostrand et al., *STATE OF THE SCIENCE OF PRETRIAL RELEASE RECOMMENDATIONS AND SUPERVISION 15-20* (June 2011), available at [http://pretrial.org/Featured%20Resources%20Documents/PJI%20State%20of%20the%20Science%20Pretrial%20Recommendations%20and%20Supervision%20\(2011\).pdf](http://pretrial.org/Featured%20Resources%20Documents/PJI%20State%20of%20the%20Science%20Pretrial%20Recommendations%20and%20Supervision%20(2011).pdf).

6. Eric B. Larson et al., *Do Postcard Reminders Improve Influenza Vaccination Compliance?: A Prospective Trial of Different Postcard Cues*, 20 *MEDICAL CARE* 639 (1982).

7. The Court Brothers, *Reminder Call Service*, available from http://www.thecourtbrothers.com/web_court.

8. White, *supra* note 2.

9. Timothy R. Schnacke et al, *Increasing Court Appearance Rates and Other Benefits of Live-Caller Telephone Court Reminders*, available at <http://pretrial.org/Success/Jefferson%20County%20CO%20Increasing%20Court%20Appearance%20Rates%202011.pdf>.

10. Crozier, *supra* note 1.

11. O'Keefe, *supra* note 2.

12. The major commercial calling service is offered by The Court Brothers, available at <http://www.thecourtbrothers.com/>. Their calling

service runs from \$1.00 to \$2.00 per defendant, depending on the services desired. See http://www.thecourtbrothers.com/web_court/pf_prices.pl (price), http://www.thecourtbrothers.com/web_court/pf_features.pl (features). Cheaper calling services are also available. See, e.g., Tavoca, available at http://www.tavoca.com/ac_calculatecosts.asp (depending on numbers of calls, call costs for Tavoca's physician-based services are in the 10 to 20 cents per call range).

13. Brian H. Bornstein et al., *Reducing Courts' Failure-to-Appear Rate by Written Reminders* (2010) (unpublished paper, under review). The study was funded by the National Institute of Justice, Award Number #2008-IJ-CX-0022.

14. Bornstein and his colleagues were especially interested in whether messages would reflect procedural justice elements (e.g., communicating on the postcard that the hearing will be an opportunity for the defendant to voice his/her "story" to a neutral factfinder who will be fair and listen to the defendant with respect and take the defendant's concerns seriously). Several prominent scholars and jurists argue that administering justice in accordance with procedural justice, starting with law enforcement contacts and including case dispositions, will increase decision acceptance and compliance with the law. E.g., Thomas R. Tyler, *WHY PEOPLE OBEY THE LAW* (2006). Kevin Burke & Steve Leben, *Procedural Fairness: A Key Ingredient in Public Satisfaction*, 44 *COURT REVIEW* 4 (2007-2008).

15. We have used this approach elsewhere. Nancy Shank & David Rosenbaum, *Examining the Potential Benefits of a 2-1-1 System: Quantitative and Other Factors*, 25 *INFORMATION & REFERRAL* 1 (2003).

16. O'Keefe, *supra* note 2; White, *supra* note 2.

Only message that included the date and time of the court arraignment. A second postcard included the same reminder as well as a message that made the recipient aware of possible negative sanctions should there be a failure to appear in court (*Reminder-Sanctions*). The final postcard included the same reminder and sanctions, as well as a message highlighting the positive aspects of procedural justice, such as voice, neutrality, respect, and public interest (*Reminder-Procedural Justice*). Postcards were mailed approximately five days in advance of the defendant's court date. Over 7,500 defendants (n = 7865) were included in the sample.¹⁸

Results

The control group had an average FTA rate of 12.6 percent (see Table 1). Defendants who received a postcard of any type failed to appear at a rate of 9.7%. Chi-square tests were performed to see if FTA rates were statistically different across treatment groups.¹⁹ The FTA rate for defendants that received any of the three postcards was statistically significantly lower than the FTA rate for

17. The age of majority in Nebraska is 19. The cases were identified via the case files that are routinely uploaded to the Nebraska Administrative Office of the Courts. The relevant portion of the Courts' database was examined each work day for eligible cases. The only traffic offenses included were driving under the influence of alcohol (DUIs). Other traffic violations such as suspended license, no proof of insurance and reckless driving were excluded because a hearing could be waived under certain circumstances (e.g., showing proof of insurance to a county clerk). If a defendant had a waivable or traffic offense but also had a non-waivable offense, the case was kept. Common waivable offenses and infractions include disturbing the peace, disorderly conduct, urinating in public, possession of marijuana (in virtually all the counties), and possession of drug paraphernalia. During the data collection period, 33 percent of all of the cases ticketed were non-traffic, non-waivable misdemeanors.

18. The primary dependent measure for the Bornstein et al. study was whether defendants appeared for their scheduled court date. More methodological details are provided in the Bornstein et al. paper, *supra* note 13.

19. Multivariate analyses are reported in Bornstein et al., *supra* note x. In this article, we report simple chi-square analyses, which show whether observed differences in data are statistically significant. See generally, Robert M. Lawless, Jennifer K. Robbennolt, & Thomas S. Ulen, *EMPIRICAL METHODS IN LAW* (2009).

FIGURE 1. Postcard Reminder Conditions



the control group.²⁰ The reduction in the FTA rate from 12.6 percent to 9.7 percent represents a nearly 25 percent reduction in the rate of failure to appear. Differences in FTA rates between the control group and each of the treatment groups were examined as well. In all three cases, FTA rates were lower, though the control versus the Reminder-Only test was only marginally significant.²¹

The FTA rates for the three postcard treatments were also tested pair-wise to determine if they were statistically different. Only FTA rates from the samples receiving the Reminder-Only postcard versus the Reminder-Sanctions postcard were statistically different, at a 99 percent confidence interval.²² Receiving a postcard reminder that includes the negative consequences of FTA reduces the rate of failure to appear from 12.6 percent to 8.3 percent, which is more than a 30 percent reduction in the failure to appear rate. The FTA rate for those defendants receiving the Reminder-Only was also statistically higher than those receiving the Reminder-Sanctions and Reminder-Procedural Justice postcards combined at the 96.9 percent significance level.²³ The Reminder-Sanctions and the Reminder-Procedural Justice postcards were similar in that they both list the negative consequences of failing to appear.

Benefit-Cost Analysis Methods

The benefit-cost analysis examines the benefits and costs incurred from implementing a postcard notification program to induce reductions in pretrial FTAs. Benefits are derived from reductions in processing FTAs through judicial systems. While the analysis is done at the county level, benefits accrue to the county and the state as some avoided costs are paid by the state and others are paid by the counties. To quantify those benefits, time is estimated for each step an FTA imposes on the legal system. Then hourly wages are developed for the relevant law enforcement officials involved in each step of the FTA

TABLE 1. Sample Statistics

Treatment	N	Number that Appeared	Number that Failed to Appear	FTA Rate
Entire Sample	7,865	7,044	821	10.4%
Control: No postcard	2,095	1,831	264	12.6%
Reminder-Only	1,889	1,684	205	10.9%
Reminder-Sanctions	1,901	1,743	158	8.3%
Reminder-ProJust	1,980	1,786	194	9.8%
Rem-Sanct & Rem-ProJust	3,881	3,529	352	9.1%
All three postcards	5,770	5,213	557	9.7%

process. Finally, the probability of each step occurring is estimated and multiplied by the hours involved and the salary cost to derive an expected benefit from reducing an FTA.²⁴ The costs associated with implementing a postcard-based FTA reduction program are incurred in developing mailing lists, printing and mailing postcard reminders to defendants.

Benefits of FTA Reduction

In order to understand the legal process involved in processing an FTA, as well as quantify the impacts, phone interviews were conducted with county judges and personnel from clerk magistrate offices, county jails and law enforcement officials in each of the counties examined. Figure 2 depicts the typical alternatives involved in an FTA. Each FTA generates additional work for several entities. A reduction in FTA would positively affect the clerk magistrate's office, county judges, the county attorney's office, law enforcement offices, and county jails. The many ways that FTAs impact offices at the county level are described following Figure 2.

Time in Issuing a Warrant

The time and date of a mass arraignment is included on the citation that each defendant is issued for a misdemeanor offense(s). If a defendant fails to appear at that mass arraignment, a warrant is issued in nearly every case. In some counties, the judge issues a bench warrant. In other counties, the County Attorney files

for an arrest warrant. In counties where a bench warrant is issued, the judge reviews the case then writes on a file that the defendant failed to appear and that a bench warrant is being issued. The file is then given to the bailiff. This takes approximately 5 minutes per case. In counties where arrest warrants are the principle means of issuing warrants for first appearance misdemeanor FTA, it takes approximately 5-10 minutes per case for the county attorney's office to file an affidavit stating the defendant failed to appear for court and a motion for an arrest warrant. A judge reviews and signs the motion for the arrest warrant, which takes another 2-3 minutes per case.

20. The Pearson Chi-square statistic is 14.288, ($p < .001$).

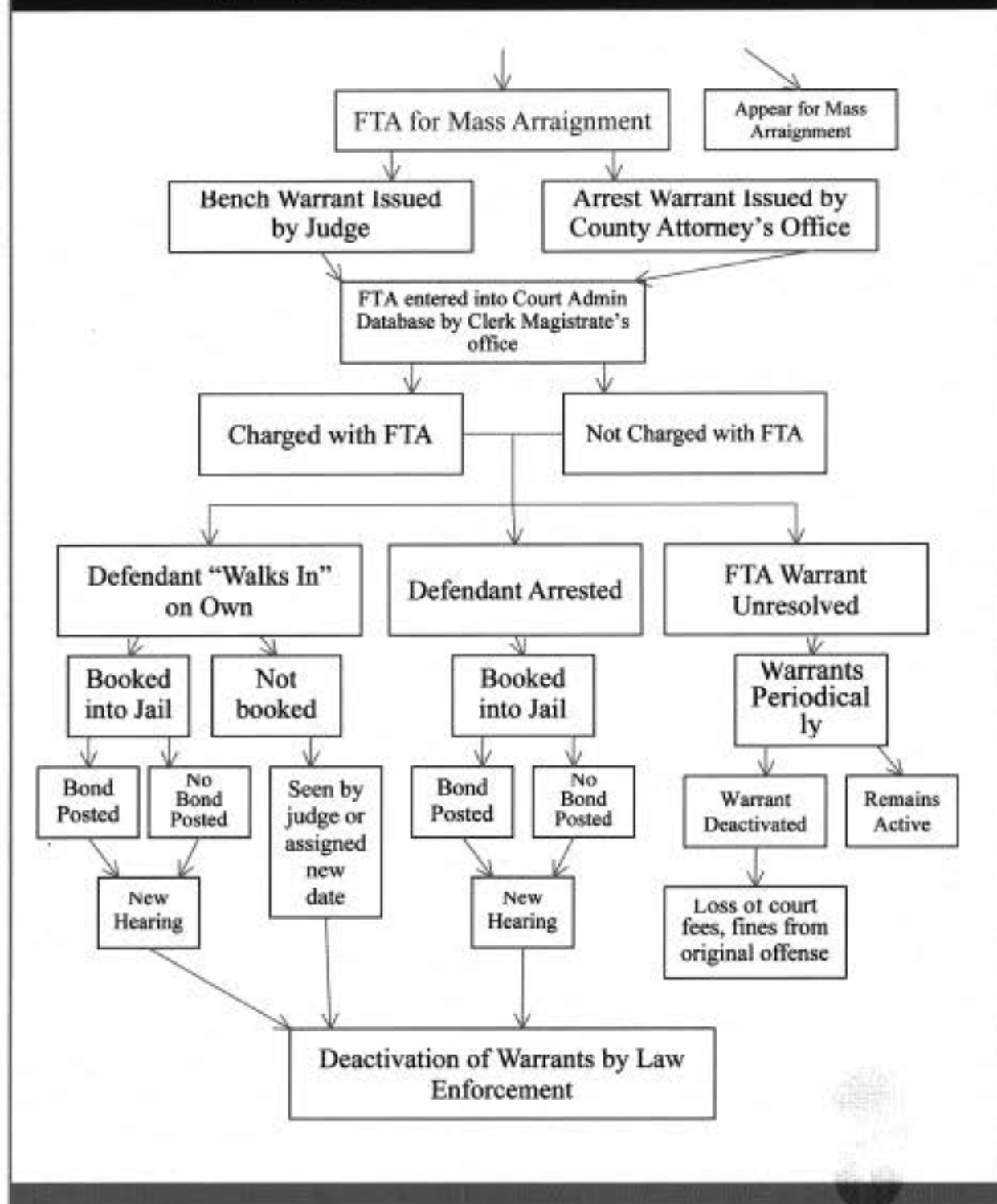
21. The Pearson Chi-square statistics were 2.926 ($p = .087$) for control versus the Reminder-Only postcard, 19.420 ($p < .001$) for control versus the Reminder-Sanctions postcard, and 8.020 ($p = .005$) for control versus the Reminder-Procedural Justice postcard.

22. Chi-square statistic of 7.063, ($p = .008$).

23. Chi-square equal to 4.629, ($p = .031$).

24. The benefits of an FTA notification process are the costs avoided by the courts through reductions in FTAs. Costs are avoided because fewer resources are needed to deal with FTAs. If FTAs are reduced, fewer resources would be needed. In this sense, the present study very reasonably measures the benefits of the postcard FTA reduction scheme. In some cases, a portion of those costs may eventually return to the system through court fees collected once an FTA re-enters the system, is ordered to pay court costs, and actually makes those payments. However, estimating such payments involves calculating expected present discounted value of probabilistic future flows of fee revenues and is well beyond the scope of the data. Consequently, the benefits estimated in the present paper may overstate the expected present discounted value of the eventual flow of benefits.

FIGURE 2. Consequences of First Appearance Misdemeanor Failure to Appear (FTA)



For both bench warrants and arrest warrants, it takes an estimated 5 minutes per case for the clerk magistrate's office to enter case information into the *Justice* database used by almost all counties for submission to the Court Administrator's Office. The computer program can interface with some sheriff offices. Counties can subscribe to the software through the state Supreme Court.

Even though a warrant is issued because a defendant failed to appear, he or she is not necessarily formally charged with an additional FTA charge. It is at the discretion of the county attorney's office whether or not the charge is added, and prac-

tices vary widely by county. Some rural counties rarely add the charge, while other counties formally add the charge in all misdemeanor FTA cases. It takes little time per entry for a county attorney's office to add an FTA charge electronically (1-2 minutes). The clerk magistrate's office must then update the case file to include the new charge, which takes approximately 2-3 minutes per case. In Douglas County, the city prosecutor's office adds FTA charges to misdemeanor court files instead of the county attorney's office.

For sheriff's offices and police department offices, processing the incoming warrants is generally a time consuming process. Clerks

must verify a defendant's identity and enter the warrant information into a statewide database. Clerks also research the defendant to find other possible addresses, his or her social security number or other state identification numbers, and attach the information. This research and entry process takes an estimated 15-30 minutes per case. County court cases make up the majority of warrants processed, so reduction in misdemeanor FTA warrants could have substantial time savings for these law enforcement offices.

Defendant Response to Warrants for FTA

Misdemeanor warrants are generally resolved in one of three ways. The defendant is arrested, the defendant turns him or herself in, or the warrant remains active until it is dropped. Generally speaking, the majority of FTA misdemeanor warrants are resolved because the defendant is arrested. Depending on the county, misdemeanor warrants are sometimes actively pursued as manpower will allow. One of the larger counties has its own warrants team consisting of one lieutenant and three deputies. Arrests can occur because of active pursuit or, more commonly, because officers incidentally come across a defendant because of another offense (e.g., getting pulled over for a speeding ticket). A small percentage of defendants come in on their own recognition. Other warrants are not resolved because the defendant is never apprehended.

Time in FTA Arrests. In most counties, at least 50 percent of misdemeanor FTA warrants are resolved through arrest of the defendant. Sometimes defendants are actively pursued, other times defendants are incidentally found through secondary offenses such as speeding tickets. Officers must first call dispatch to confirm the warrant, which takes approximately five minutes. The officer then typically requests a cover officer to assist in the arrest, which can take anywhere from 5 to 20 minutes. (In one of the larger

counties, the warrant's team routinely works in pairs.) If the defendant is picked up during a routine traffic stop, a tow truck is called or the defendant is allowed to make arrangements for the vehicle. Transportation to the jail adds another 5-25 minutes for both officers. Prior to the end of watch, officers complete arrest reports, which take 5-10 minutes to complete. This process takes law enforcement officers off the street a considerable amount of time for each arrest. When a warrant is resolved, the warrant also has to be deactivated by law enforcement clerks. This process takes approximately 10-15 minutes.

Once the defendant is taken to jail, officers at the jail start the booking process, which takes approximately 30 minutes of officer time for each defendant when the jail is not busy. This figure varies by jail facility. The booking process involves changing the defendant into uniform, logging personal items, APHIS fingerprinting, mug shot, and paperwork including medical history and visitors list. Posting bond takes approximately 20 minutes of officer time. Bond amounts vary based on the severity of the original offense(s). Some defendants with the most severe misdemeanors cannot post bond, and defendants with a history of FTA are less likely to be allowed to post bond.

When defendants are arrested on FTA bench warrants and they do not post bond, they are going to spend some time in jail, attributing to increased jail utilization. Unless a defendant is brought in early enough in the morning to schedule another hearing or the defendant can be scheduled to attend another mass arraignment that same afternoon, it is likely that the defendant will stay overnight until going to court the next day. The longest a defendant might be held is over the weekend. Defendants for misdemeanor FTA typically have a rapid turnover rate.²⁵

Time in FTA "Walk-Ins". If a defendant comes in on his or her own recognizance, he or she may avoid going through the booking process at the jail. Whether a walk-in can

TABLE 2. Annual and Hourly Salary Costs 2008

Position	Nebraska Mean Annual Salary	Nebraska Mean Hourly Cost
Judge	\$125,349	\$60.26
Law Clerk	\$32,630	\$15.69
Court Clerk	\$32,140	\$15.45
Patrol Officer	\$44,020	\$21.16

TABLE 3. Summary of Potential Time and Labor Benefits from One FTA Reduction

Event	Minutes	Labor Cost
Type of Warrant Issued:	-	-
Bench Warrant	32.5	\$15.49
Arrest Warrant	37.5	\$14.78
FTA Charge Added	4	\$1.32
Clearing Warrant from System	15	\$4.94
Arrest for Outstanding Warrant	42.5	\$32.74
Booking processing	30	\$13.54
Bond processing	20	\$8.94
Jail (Cost/Inmate for 24 hours)	-	\$50-83

reschedule for a different mass arraignment is often at the judge's discretion, and common practices vary from county to county. If a defendant comes in with a waivable offense, the fine can often be taken care of at the counter. These walk-ins save law enforcement valuable time. Law enforcement clerks must deactivate these warrants.

Time in Active/Unresolved FTA Warrants. Unresolved warrants can occur because a defendant is not apprehended. Alternatively, in many counties active warrants are periodically reviewed, and in some counties old unresolved warrants may be deactivated. The proportion of unresolved warrants varies from county to county. In certain areas, deportation is a common cause for unresolved warrants. Defendants particularly in border counties may flee the state, as counties rarely pursue extradition for minor misdemeanor charges. Judges can also set expiration dates for warrants. Warrants without expiration dates are typically reviewed at regular intervals. After these reviews,

an order to show cause may be issued to the county attorney's office to inquire if the county attorney wishes to actively pursue the case any longer. The county attorney's office has 30 days to decide if they want to file a response to keep the warrant active.

Quantitative Per Unit Benefit of 1-Unit First-Appearance FTA Reduction

To ascertain the benefit of FTA reduction, the cost of additional processing generated per FTA is quantified in terms of the cost of additional labor per event. Table 2 above shows the annual and hourly salary costs of labor used for the calculations. Hourly rates are annual salaries divided by 2,080 hours per year. The estimated values used to calculate the value of time spent processing

25. Only the jail costs of holding over a defendant are considered. If re-arrest after a fail to appear increases the likelihood that a defendant will serve jail time for the original offense, then this would require additional resources due to FTA and increase the benefits of reducing FTAs. However, we do not include that benefit in the analysis.

FTAs at the Clerk Magistrate's office is the Nebraska average Court Clerk wage. This figure is used because Clerk Magistrates typically have clerk assistants that carry out the data entry process into the *Justice* database. The Court Clerk average wage is also used to estimate the cost of labor for clerks in the law enforcement offices. The estimated value of labor for FTA processing by county attorney's offices is the Nebraska law clerk mean wage.

The resulting labor costs of the events generated by FTA that create additional work within the legal system are shown in Table 3 above. Detailed calculations of the labor costs in Table 3 are shown in Appendix A. These calculations use a benefit rate of 28 percent. The procedures for each of these events are similar in all counties, so the cost of labor estimates for each event are generally applicable for any of the counties in the

study. However, since the probabilities of these events occurring differ by county, each county has a different formula for calculating the expected benefit of one FTA reduction.

County-specific FTA cost estimates were developed for the largest, urban counties since they have the most misdemeanor non-traffic offenses each year and are the three most populous counties in Nebraska. As a proxy for jail utilization in all three counties, each arrested defendant who does not post bond spends an estimated .75 jail days waiting for arraignment. The figure for the value of estimated jail utilization for each arraignment FTA is thus the county FTA arrest percentage multiplied by the percentage that do not post bond multiplied by 0.75. The three largest counties are similar in that bench warrants are issued when defendants fail to appear for arraignment. In the cost estimates of all

three counties, the estimated rate of unresolved warrants used is five percent. These figures are conservative estimates based on interviews with county officials.

County A. In County A, law enforcement estimated that approximately 70 percent of FTA bench warrants are resolved through arrest. According to February 2010 county jail statistics, 46 percent of defendants who were arrested and booked into jail for an FTA bench warrant without any other warrants posted bond pre-arraignment. The remaining 54 percent spent some time in jail awaiting their arraignments. These figures are used to estimate bond processing and jail utilization costs in Table 4. The expected benefit of a one unit reduction in FTA for County A is 108 minutes and \$80.

County B. A county judge and a law enforcement official independently estimated the percentage of FTA bench warrants resolved in arrest at 30 and 50 percent, respectively. An average of these two estimates, 40 percent, is used in County B's per-unit arraignment FTA cost estimate. This figure is the lowest estimate reported by the counties in the study. This may be because many defendants come in on their own recognizance after receiving mailed notices that a warrant has been issued for their arrest for failing to appear. County B's warrants never expire unless action is taken by the defendant. The expected benefit of a one unit reduction in FTA for County B is 85 minutes and \$50, as shown in Table 5.

County C. County C law enforcement estimated that at least 50 percent of FTA bench warrants are resolved through arrest. Estimates on bond posting rates for FTA bench warrants could not be obtained, so an average of bond posting rates in the other two urban counties, County A and County B (46 and 70 percent respectively) was used to arrive at an estimated rate of 58 percent of arrested defendants posting bond. This figure is used to estimate the jail utilization and bond processing costs (see Table 6). The expected benefit of a one unit reduction in FTA

TABLE 4. County A

Event	Cost	Labor (Minutes)	Estimated Probability	Expected Labor (Minutes)	Expected Cost Savings
Bench Warrant	\$12.10	32.50	100%	32.50	\$15.49
FTA Charge Added	\$1.04	4.00	100%	4.00	\$1.32
Arrest for Outstanding Warrant + Booking	\$36.15	72.50	70%	50.75	\$32.40
Bond Processing	\$7.05	20.00	32%	6.45	\$2.86
Clearing Warrant from System	\$3.86	15.00	95%	14.25	\$4.70
Jail Utilization: 24 Hours	\$83.34	—	28%	—	\$23.34
Total Per-Unit Estimated Cost				107.95	\$80.10

TABLE 5. County B

Event	Cost	Labor (Minutes)	Estimated Probability	Expected Labor (Minutes)	Expected Cost Savings
Bench Warrant	\$12.10	32.50	100%	32.50	\$15.49
FTA Charge Added (City Prosecutor's Office)	\$1.04	4.00	80%	3.20	\$1.05
Arrest for Outstanding Warrant + Booking	\$36.15	72.50	40%	29.00	\$18.51
Bond Processing	\$7.05	20.00	28%	5.60	\$2.50
Clearing Warrant from System	\$3.86	15.00	95%	14.25	\$4.70
Jail Utilization: 24 Hours	\$85.00	—	9%	—	\$7.65
Total Per-Unit Estimated Cost				84.55	\$49.91

for County C is nearly 58 minutes and almost \$59.

Costs of Postcard

Program Implementation

This section examines the costs of implementing the postcard reminder system. Note that in this section as well as the net benefit section, three treatment types are considered: those receiving the Reminder-Only postcard, those receiving either the Reminder-Sanctions or the Reminder-Procedural Justice postcards, and those receiving any postcard. Discussion of the statistical analysis surrounding Table 1 indicates that the FTA rate reduction from the Reminder-Sanctions and Reminder-Procedural Justice postcards was statistically different from the reduction induced by the Reminder-Only postcard. The statistical analysis also indicates that defendants receiving any postcard had a statistically significant lower FTA rate than defendants receiving no postcard reminder.

Estimated Cost per Postcard

We estimate that during the sample period, 335 labor hours were spent on the court date reminder postcard process. This included time culling cases, developing mailing lists and labels, printing and mailing cards. There were 5,770 postcards sent to valid addresses.²⁶ Dividing the time spent by the number of postcards indicates that the time per postcard is 0.058 hours. Labor costs of \$19.77 per hour are based on the average Nebraska court clerk wage.²⁷ The

TABLE 6. County C

Event	Cost	Labor (Minutes)	Estimated Probability	Expected Labor (Minutes)	Expected Cost Savings
Bench Warrant	\$12.10	32.50	100%	32.50	\$15.49
FTA Charge Added	\$1.04	4.00	80%	3.20	\$3.20
Arrest for Outstanding Warrant + Booking	\$36.15	4.00	50%	2.00	\$23.14
Bond Processing	\$7.05	20.00	29%	5.80	\$2.59
Clearing Warrant from System	\$3.86	15.00	95%	14.25	\$4.70
Jail utilization: 24 hours	\$60.00	—	16%	—	\$9.60
Total Per-Unit Estimated Cost				57.75	\$58.72

TABLE 7. Average Cost per Postcard

	Type of Postcard		
	Rem-Only	Rem-Sanct & Remind-ProJust	Weighted Average
Labor	\$1.15	\$1.15	\$1.15
Materials	\$0.04	\$0.04	\$0.04
Postage	\$0.27	\$0.49	\$0.42
Total	\$1.46	\$1.68	\$1.61

resulting labor cost per postcard is \$1.15.

The estimated cost of materials, including ink and perforated card-stock was approximately \$205. Dividing that cost by 5,770 postcards nets an average material cost of four cents per postcard. Postage cost for the Reminder-Only postcard was \$0.27, and the postage cost for the other two was \$0.49. These figures were used to arrive at the cost estimate values of \$1.46 for the Reminder-Only postcard and \$1.68 for the other

Reminder-Sanctions and Reminder-Procedural Justice postcards, presented in Table 7 above.

Potential Postcard Cost Reduction with Case Look-Up Automation

Looking up cases by case number on the database to determine if cases are non-waiverable, non-traffic offenses involved approximately two-thirds to three-fourths of the postcard preparation time. If the system were automated to eliminate this time-intensive step, the labor cost per postcard

TABLE 8. Cost per 1-Unit FTA Reduction

Treatment	FTA Rate ¹	Control Rate Minus Postcard Rate	Reduction with 85% Valid Addresses	Postcards Needed per 1-Unit FTA Reduction	Cost per Postcard ²	Cost of 1-Unit FTA Reduction
Control: No Postcard	12.60%	—	—	—	—	—
Reminder-Only Postcard	10.85%	1.75%	1.49%	67.3	\$1.46	\$97.99
Rem-Sanct & Rem-ProJust combined into one group	9.07%	3.53%	3.00%	33.3	\$1.68	\$55.81
All three postcards combined into one group	9.65%	2.95%	2.51%	39.9	\$1.61	\$64.08

1. Source: Table 1, supra.
2. Source: Table 7, supra.

would be reduced significantly. We assume labor costs would be reduced by 67 percent, dropping the labor cost per postcard from \$1.15 to \$0.38. This reduces the total cost per postcard to 69 cents for the Reminder-Only postcard and 91 cents for the other two postcards. The weighted average cost is 84 cents per postcard.

Quantitative Per Unit Cost of 1-Unit First-Appearance FTA Reduction

The costs associated with using a postcard reminder system to reduce FTA rates are described in Table 8. The first column shows the FTA rate for the control group and three alternative treatment groups. The second column shows the reduction in the FTA rate associated with each treatment. In our sample, the invalid address rate was approximately 15 percent. To account for the effect of invalid addresses, the differences between the control and treatment FTA rates are multiplied by the percentage of valid addresses. The resulting FTA rate reductions are shown in the third column of Table 8.

The fourth column shows the number of postcards needed to induce a 1-unit FTA reduction. This is multiplied by the cost per postcard in the fifth column to get the cost of a 1-unit FTA reduction, shown in the last column of Table 8. These costs range from \$55.81 for the combined Reminder-Sanctions and Reminder-Procedural Justice postcards to \$97.99 for the Reminder-Only postcard. The difference is driven by 1) the different effectiveness of each treatment in reducing FTA rates, and 2) the different costs in mailing the three types of postcards.

Table 9 shows the same figures if an automated lookup system (as described in section II.B.2 above) is implemented. Such a system would use a database search to find non-waiverable, non-traffic offenses. The cost per 1-unit FTA reduction is then much lower, ranging from \$30.28 for the combined postcards to \$46.39 for the Reminder-Only postcard.

Benefit-Cost Analysis

In this section we compare the benefit of an FTA reduction to the associated

cost. The net benefit is the monetary benefit of a 1-unit reduction in FTA minus the cost of a 1-unit reduction under the different treatment options. Net benefit is calculated on a per unit and aggregate basis.

Per Unit Net Benefit

The net benefit of an FTA reduction for each county is shown in Table 10 above. At the current cost per postcard (without automation in the lookup process), the postcard notification methods are cost effective 1) in County A for the Reminder-Sanctions and Reminder-Procedural Justice postcards, 2) in County A for the weighted value for all three postcards, and 3) in County C for the Reminder-Sanctions and Reminder-Procedural Justice postcards. With automation, all postcard types generate a net benefit in all counties. With automation, the net benefit from using the Reminder-Sanctions and Reminder-Procedural Justice postcards increases to \$50 per FTA reduction in County A to nearly \$20 in County B, and almost \$30 in County C.

TABLE 9. Cost per 1-Unit FTA Reduction with Automated Lookup

Treatment	FTA Rate ¹	Control Rate Minus Postcard Rate	Reduction with 85% Valid Addresses	Postcards Needed per 1-Unit FTA Reduction	Cost per Postcard ²	Cost of 1-Unit FTA Reduction
Control: No Postcard	12.60%	—	—	—	—	—
Reminder-Only	10.85%	1.75%	1.49%	67.3	\$0.69	\$46.39
Rem-Sanct & Rem-ProJust combined into one group	9.07%	3.53%	3.00%	33.3	\$0.91	\$30.28
All three postcards combined into one group	9.65%	2.95%	2.51%	39.9	\$0.84	\$33.49

1. Source: Table 1, *supra*.
2. Source: See discussion following Table 7, *supra*.

TABLE 10. Net Benefit of a 1-Unit FTA Reduction

County	Benefit from Preventing One FTA	Cost to Prevent One FTA Without Automation			Cost to Prevent One FTA With Automation		
		Rem-Only	Rem-Sanct & Rem-ProJust	All 3 Weighted	Rem-Only	Rem-Sanct & Rem-ProJust	All 3 Postcards Weighted
		\$97.99	\$55.81	\$64.08	\$46.39	\$30.28	\$33.49
A	\$80.10	(\$17.89)	\$24.29	\$16.02	\$33.71	\$49.82	\$46.61
B	\$49.91	(\$48.08)	(\$5.90)	(\$14.17)	\$3.51	\$19.63	\$16.42
C	\$58.72	(\$39.27)	\$2.91	(\$5.36)	\$12.33	\$28.44	\$25.23

TABLE 11. Aggregate Impact of Postcard Reminder System

County	2009 Misdemeanor Non-Traffic Offenses	Estimated Non-Waiverable Offenses (33%)	Estimated FTA Reduction with Rem-Sanct & Rem-ProJust (3.5%)	Aggregate Net Benefit without Automation	Aggregate Net Benefit with Automation
C	33,884	11,182	336	\$977	\$9,556
A	22,991	7,587	228	\$5,537	\$11,358
B	8,810	2,907	87	(\$516)	\$1,715
3 County total	65,685	21,676	651	\$5,999	\$22,628

Aggregate Net Benefit

The aggregate impact of implementing a postcard reminder system in counties A, B and C is in Table 11. The first column shows the number of misdemeanor offenses in each county in 2009. Across these three counties, over the sample period, approximately 33 percent of non-traffic misdemeanor offenses were non-waiverable.²⁸ This figure is used in the second column to estimate the number of citations eligible to receive postcard reminders. Using the approximately 15 percent invalid address rate noted previously, it means the Reminder-Sanctions and Reminder- Procedural Justice postcards prevented three percent of all non-traffic misdemeanor defendants from failing to appear (see the third column of Tables 8 and 9). The fourth column of Table 11 shows the estimated number of FTAs averted in each county via mailings of the Reminder-Sanctions and Reminder-Procedural Justice postcards. This is multiplied by the cost savings per FTA reduction to generate the estimated aggregate net benefit value of FTA reductions. Results with a non-automated lookup system are shown in the penultimate column. County A would generate 228 fewer FTAs at an aggregate net benefit of \$5,537 dollars and County C would generate 336 fewer FTAs at an aggregate net benefit of \$977 dollars. While County B would generate 87 fewer FTAs, it would be at a net cost of \$516 dollars. The total benefit across the three counties would be \$6,000. The last column in Table 11 shows the aggregate benefit with an automated lookup system. Here the net benefit

across all three counties would total more than \$22,000 annually.

Other Benefits and Costs to Counties

Reduction of FTAs has other less easily quantifiable influences on counties, notably in terms of equality, court fees and hearings, and potential for increased community outreach.

Benefit: Reduction of Disproportionate Impact of FTA on Minorities

Reducing FTA rates in racial and ethnic minority groups can play a small yet important role in reducing the overrepresentation of minorities in the corrections system.²⁹ Penalties for FTA disproportionately impact racial and ethnic minorities because minorities in general have higher FTA rates. In our sample African Americans and Hispanics had FTA rates of 19.6 and 14.0 percent, respectively, while whites had an FTA rate of 11.0 percent. The Reminder-Sanctions and Reminder- Procedural Justice postcards resulted in a 5.2 percentage point reduction in FTA for African Americans, a 4.0 percentage point reduction in the FTA rate for Hispanics, and a 3.3 percentage point reduction in the FTA rate for whites. Table 12 shows the net benefit from reducing FTAs among black and Hispanic populations.³⁰ The net benefits are just over \$1,700 using non-automated mailing and over \$7,000 using automated mailing.

Influence of FTA on Number of Hearings, Court Fees and Fine Revenue

A study of misdemeanants in King County, Washington suggests that

defendants that fail to appear have more hearings. In fact, King County defendants who fail to appear for a pretrial hearing have, on average, twice as many hearings as those who appear.³¹ This suggests that counties would benefit from a reduction in the total number of hearings.

FTA charges may help to prevent some misdemeanor cases from going to trial. For cases in which an FTA charge has been added, county attorneys often use the FTA charge as a bargaining tool. County attorneys can offer to drop the FTA charge in return for defendants pleading guilty to the other charges.

A reduction in the FTA rate could result in a decrease in county revenue from FTA charge fines. Revenue from FTA fines is a negligible source of income for counties where formal FTA charges are added. The penalties for FTA charges vary by county, and often the penalties are left to judges' discretion. According to Nebraska statute §29-426, the penalty for misdemeanor FTA can be a fine of up to five hundred dollars

26. About 15% of the postcards were returned due to invalid addresses.

27. Bureau of Labor and Statistics. May 2008 NE average; Court, Municipal, and License Clerks (SOC 434031). This figure includes 28 percent in benefits.

28. There were 18,581 offenses, of which 6,149 were non-waiverable.

29. Public Safety Coordinating Council of Multnomah County, Oregon Racial Over-Representation in the Criminal Justice System (Task Force Report) (2001-2002) at 7, available at <http://web.multco.us/sites/default/files/lpscc/documents/orreport20012002.pdf>.

30. We did not have year 2009 misdemeanor non-traffic offenses by race. Consequently, the proportions of blacks and Hispanics in the sample were applied to the total offense numbers in text Table 11.

31. Murray et al., *supra* note 3.

TABLE 12. Aggregate Impact of Postcard Reminder System among Black and Hispanic Populations

County	Number of Black	Number of Hispanic	Aggregate Net Benefit	Aggregate Net Benefit with Automation
C	7,183	2,711	\$393	\$3,845
A	2,805	1,724	\$1,464	\$3,002
B	934	599	(\$120)	\$399
3 County total	10,922	5,034	\$1,737	\$7,246

and/or up to three months imprisonment in county jail.

Courts lose court fees and fine revenue from the original offenses from defendants that “disappear.” Counties could benefit from FTA reduction if reduction in the FTA rate resulted in fewer unresolved FTA warrants. However, defendants that disappear may be more likely to be the defendants that willfully fail to appear for arraignment in an effort to avoid their punishments. If this is the case, then sending reminders would likely not reduce the number of defendants with FTA warrants that flee.

Potential for Increased Community Outreach

Reducing the number of active warrants by reducing the FTA rate frees up law enforcement time and resources. Depending on the county, misdemeanor FTA warrants reportedly make up 25 to over 80 percent of all active misdemeanor warrants. With the reduction of misdemeanor warrants, public safety agencies could potentially devote more resources to other initiatives. Lower FTA rates might also increase citizens’ trust and confidence in the criminal justice system, leading to a

host of other intangible benefits (e.g., greater feeling of safety, more participation in public governance, etc.).

Conclusions

The defendant response to the Reminder-Sanctions and Reminder-Procedural Justice postcards suggests that defendants are more likely to appear when they are aware of the potential sanctions they will face if they fail to appear for arraignment. The Reminder-Sanctions and Reminder-Procedural Justice postcards were shown to be the most effective postcards and reduced the FTA rate significantly more than the Reminder-Only postcards.

The benefit-cost analysis reveals that at the current cost of sending postcards, implementation of a postcard notification program using either the Reminder-Sanctions or the Reminder-Procedural Justice postcards would only be cost effective in counties with relatively high rates of arrest of defendants with FTA warrants. However, if the cost of sending postcards is reduced through automation of case look-up, the postcards become cost-effective in urban counties. Since the postcards were cost effective at the lower postcard cost in the county with the lowest probability of arrest of defendants with FTA warrants, sending postcards is likely cost effective in all other counties.

Perhaps a different method that might also be effective in preventing failures to appear would be to include the consequences of failing to appear on the citation and informing defendants who they can contact if they have any ques-

tions. Law enforcement could be trained to emphasize the importance of showing up to court and to encourage defendants to communicate with the court system. More research of this method is needed.

Live phone calls and automated phone calls are other methods for contacting defendants to remind them of their court dates.³² There are not studies comparing the efficacies of phone call and mailed reminder methods. Further research in this area would be valuable to court systems looking to implement a reminder program, as would other benefit-cost studies. ★

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32. Estimates of phone call benefits range from over \$500,000 per year in Multnomah County, Oregon (based on an estimate of costs for \$1,300 for every FTA warrant issued), http://www.thecourtbrothers.com/fta_repo/court_appearance_notification_system/, to a non-monetized savings of “1,100 hours of judge, court clerk, police officer, and booking staff time” in Jefferson County, Colorado, http://www.co.jefferson.co.us/jeffco/cjp_uploads/Jeffco_CDN_Six_Month_Report.pdf.