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Chief Judge

DISTRICT COURT OF MARYLAND
August 1, 2017

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Chair, House Appropriations Committee
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Annapolis, MD 21401

Re: 2017_p12_JUD_Defendant Contact Information and Appearance Reminders

Dear Chairman and Madam Chair:

Pursuant to the 2017 Joint Chairmen's Report, page 12, the Judiciary herein submits its report on Defendant Contact Information and Appearance Reminders.

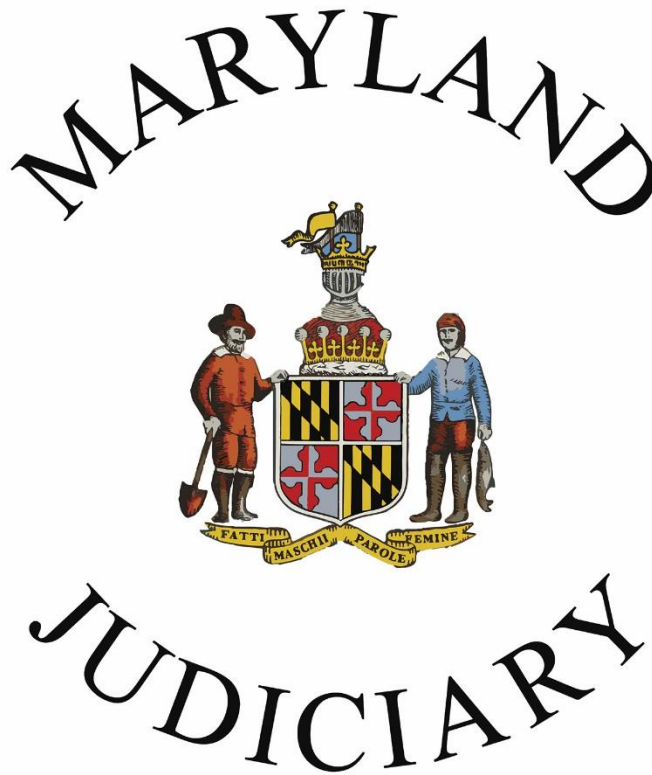
If you have any questions or concerns, please contact Kelley O'Connor, Assistant Administrator, Government Relations, at (410)260-1560 or kelley.oconnor@mdcourts.gov.

Sincerely,


John P. Morrissey

cc: Honorable Mary Ellen Barbera, Chief Judge, Court of Appeals
Honorable James E. DeGrange, Sr., Chairman, Public Safety, Transportation and Environment Subcommittee
Honorable Keith E. Haynes, Chairman, Public Safety and Administration Subcommittee
Pamela Q. Harris, State Court Administrator
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Preliminary Analysis of the Maryland Judiciary Implementing a Defendant Appearance Notification System



July 2017

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BACKGROUND INFORMATION

In July of 2017, the Maryland Judiciary formed a workgroup to evaluate the feasibility of implementing a telephone call and/or text message reminder system for court appearances of criminal defendants. This preliminary report focuses on three primary aspects: (1) outlining the current contact information collected from defendants; (2) discussing possible necessary steps to collect additional data; and (3) the overall feasibility of implementing a reminder system for court appearances to reduce failure to appear rates. Research for this report included querying the handful of court systems that are presently employing technology to send notice of hearings and trial dates via text/emails/phone calls to case participants.

The workgroup is currently exploring the ways these court systems are capturing the data, the architecture employed in interfacing with the court's case management system (CMS), vendors, costs and security concerns, and any documented outcome measures from these systems. The workgroup is also researching potential vendors who supply the technology necessary to implement this system. This and future research will be used to develop a level of effort and costs structure in contemplation of a Request for Proposal and a budget request to the legislature.

SCOPE OF RESEARCH

This report focuses on the use of a text message reminder system for the primary purpose of notifying criminal defendants about scheduled appearance dates. For the purposes of this analysis, we have included traffic cases that require an appearance. In FY2016, there were 143,878 criminal cases filed in District Court. There were also 588,520 District Court motor vehicle filings, of which 111,057 required appearance by a defendant/respondent. There were 74,251 total criminal filings in the Circuit Courts in FY2016. Thus, 329,196 cases potentially have a defendant who might benefit from receiving appearance reminders and as many as 806,649 cases might ultimately benefit from combined appearance and payment reminders. In FY2016, there were 14,318 failures to appear in District Court criminal (non-traffic) cases and 50,978 failures to appear in District Court traffic must appear cases (including DUI's).

I. CURRENT DATA COLLECTION PRACTICES

Currently, the Maryland Judiciary does not routinely capture telephone numbers or email addresses of defendants. The District Court captures only the name and address of individuals in criminal actions. To varying degrees, a number of forms used in the District Court provide space to capture telephone numbers. The form used for civil citations has a space to capture an e-mail address. However, this information is not mandatory and there is no system presently in place that could utilize this data.

II. NECESSARY STEPS TO COLLECT ADDITIONAL DATA

After consulting with the handful of state and local courts around the country who have implemented a notification system, the existing systems fall into one of two general categories: (a) a passive/voluntary system, whereby defendants must sign up for reminders, or (b) active efforts by the court to collect contact information for all defendants and provide notifications unless and until a defendant "opts-out" of receiving the notifications.

Passive Voluntary Notification System

Missouri, one state that currently uses a passive reminder system, allows a defendant (or any member of the public) to sign up on the Missouri Courts website for email and text alerts. Any person with a valid email address and a phone number can receive alerts about any case unless the court has put a security control on a particular case. The benefit of a passive notification system is that a court does not need to expend resources to actively collect contact information. Another benefit is that by requiring a participant to visit the court's website before they can receive notifications, the court ensures proper opt-in advisements are available to participants. The participant must read the tracking/notification agreement, provide a working email, as well as receive and respond to a verification email or text. A single participant can also sign up to track several cases at once. The main limitation of this system is that it requires a defendant to take active steps in order to receive notifications. If a defendant is not inclined to appear in court, they may be similarly disinclined to visit a court's website to be reminded about their court date. Creating a notice that can be attached to a citation or summons may help improve awareness of the program and ultimately participation rates.

Active Court Efforts to Mandate Collection of Comprehensive Contact Information

The State of Arizona actively seeks to collect a phone number for as many defendants as possible. Then, all defendants are automatically notified about court activity, including appearance dates. The defendant must unsubscribe or opt-out to stop receiving notifications on a case. In order to implement this system, Arizona made substantial modifications to their court procedures. Tickets issued by state agencies were rewritten to include a space to capture telephone number. Further, the tickets now include language that states by signing the ticket, a defendant agrees not only to appear in court but also to opt-in to receive notifications from the court. Additionally, collecting contact information is now an important part of the daily duties of court clerks. For instance, in order to set up a payment plan with a court clerk, a debtor must provide email and phone number and agree to receive notifications.

Arizona's system is currently in the pilot phase and has only been in place since July of 2017. While it would appear that active collection of contact information might yield more court participants to notify, there is no definitive data that the additional efforts associated with this type of system yield improved appearance rates over a passive/voluntary notification system. The other critical part of an active/mandatory collection system is that a court would need to involve other agencies in order to be most effective, including state and local law enforcement. The active system may also be more prone to run afoul of legal issues, as the court in Arizona is tying the opt-in notification provision to the agreement to appear in court. In addition, there are federal laws that restrict the use of automatic or "autodial" notifications to wireless telephones. While Arizona does provide a mechanism to later opt-out of notifications, it is not clear what would happen if a person receiving a ticket refused to agree to receive notifications at the time of issuance. Defendants may also be concerned about what a police officer, state's attorney, or court would do with the email or phone number obtained, and opt to provide false information.

A hybrid of these two systems is currently employed by New Jersey. When a defendant is arrested, as part of their release they are presented with the option to receive notifications about their case by email, text, and/or phone call. If the defendant wishes to opt-in, the court signs them up for notifications, capturing defendant data into the CMS. This system, which has been operating since January of 2017, targets the participants New Jersey is most interested in notifying, while ultimately leaving it up to the defendant whether they wish to participate.

III. OVERALL FEASIBILITY OF IMPLEMENTATION

At the time of this preliminary report, only four states were identified as having a statewide text notification system. Only three states (Missouri, New Jersey and Arizona) were available to provide details on their systems. Of these, the oldest notification system is approximately one year old. No state had any data on the impact these notification systems have had on appearance or collection rates. Thus, this report cannot speak sufficiently to what effect implementing such a system would have in Maryland. That a handful of states and some local courts are using this technology proves that bringing text message notifications to Maryland is technologically possible. However, the feasibility of implementation would hinge greatly on more detailed discussions with potential vendors and a cost-benefit analysis. In this preliminary discussion of general feasibility, issues of costs, technical capabilities, data security issues and other legal considerations are addressed.

Technical Considerations

Generally speaking, for a text messaging system to operate properly, the CMS that stores case activity data would need to be able to effectively communicate with at least one other system that is sending the text messages. Based on the CMS system architecture, and tolerance for risk related to data security and system integrity, the process of a text messaging service communicating with a CMS can become more complicated, and may require the need for one or more additional intermediary databases or data processing tools. Another key consideration when discussing technical considerations is whether Maryland will seek to pursue a passive/voluntary system (which would require a portal allowing a defendant to sign-up) or an active mandatory data collection scheme (which would allow for data to be input directly into the CMS).

To set up a high-volume text messaging program, the Judiciary would need to work with a vendor that will allow for “short-code” messaging. A short code is a 5- or 6-digit number that can send and receive short message service (SMS) and multimedia message service (MMS) to and from mobile phones. Short codes can send 100 messages or more per second. Because short codes can send high volumes of messages, wireless carriers individually approve every short code for its intended use. This approval process typically takes 8 to 12 weeks. A short code would be the only viable option for a high volume text notification system. Phone carrier regulations make a traditional (or long-code) messaging program infeasible, by limiting the number of SMS that may be sent (1 per second) and requiring the ratio of inbound to outbound SMS traffic be better than 1:3. Comparatively, short-code messaging has no limit on SMS traffic patterns and no limit on the total number of messages that can be sent in a day.

Next, the court must consider what capabilities the text notification system should include. For instance, Arizona uses a text messaging system that will attempt to deliver a voice message or leave a voicemail where a text message fails. The court receives notifications on text message failures and the success or failure of the subsequent voice notification attempt. Notification features are particularly critical if a court were to ever use text messaging as a means to replace other notification methods (ex: traditional mail).

Costs

The main drivers of costs for this project are as follows: (1) the specifics of the CMS, (2) data security controls, (3) the vendor selected, (4) the volume of text messages, and (5) the additional features chosen.

Existing Case Management System - The Maryland Electronic Courts (MDEC) project is actively being rolled out and will ultimately create a single Judiciary-wide integrated CMS that will be used by all the courts in the state court system. While several courts in Maryland are already using the MDEC system, the remaining District and Circuit Courts are using several different legacy systems. As each system would need to be configured to accept text messages, it would not be cost-effective to implement text messaging from any legacy systems, as they will all be phased-out in the next few years. Thus, this analysis only considers implementing text messaging through the MDEC system. Neither Arizona nor Missouri use a CMS that mirrors Maryland's MDEC system. Because the mechanics behind each system are unique, it is difficult to estimate the costs of setting up text messaging notifications at this time. One potential benefit of the MDEC system is it is based heavily on the Odyssey product from Tyler Technologies, a product suite used by several courts around the nation. If other courts using Odyssey successfully implement a text messaging system, it may streamline the technical considerations for Maryland's implementation.

Data Security Controls – The Judiciary's Judicial Information Systems (JIS) Division works around the clock to protect the integrity of the system from a variety of security threats. Adding telephone (and potentially email) data may attract additional security breach attempts. Further, allowing one or two-way communication between MDEC and one or more other systems may require additional costs to ensure data security integrity is not impaired. The specifics of these costs will depend greatly on the design of the text messaging system and the vendor or vendors chosen.

Vendors and Messaging Costs – Because text messaging notification is a fairly well-developed field in the private business sector, there are a variety of companies who offer text messaging notification services. The list of potential vendors numbers well into the dozens. The cost of sending a text message out is estimated to be between \$0.0085 and \$0.01, depending on the volume of texts sent (in the case of Arizona, the lower rate triggers if the state spends at least \$25,000 annual in both text and voice costs). The initial set-up costs vary among vendors, and are contingent upon the review of several factors. Any further analysis will include consideration and a comparison of set-up costs from the various vendors.

Volume of Messages – The volume of messages depends on three key factors: (1) the number of cases eligible for text messaging alerts; (2) which participants will receive alerts (i.e. only defendants, or also arresting officer, other witnesses, etc.); and (3) what events will trigger the sending of a text message.

(A) Number of Cases

In FY2016, there were 329,196 criminal and traffic must appear cases where a defendant may have been required to appear, and thus may have benefitted from appearance reminders.

(B) Participants Who Will Receive Notification and Frequency of Texts

If only sending messages to defendants, and assuming each filing has one defendant, Table 1 below estimates the number of texts that might be sent based on the total number of must-appear criminal and traffic cases from FY16. If the Judiciary pursued a mandatory phone number collection program, 100% compliance would likely not be achieved during the infancy of the program.

As such, **Table 1** presents the number of text messages sent and associated cost assuming varying rates of contact information availability. These estimated amounts include only the cost of sending the messages themselves and do not include any short-code set up fee, database integration fee, costs associated with collecting data, or costs to ensure data security and legal compliance. The cost of sending the text messages is expected to be only a very small part of the total costs to implement and maintain this program.

Table 1 – Estimated Annual Cost of Only Sending Text Messages for Criminal and Traffic Must Appear Cases*

Based on case volume, percentage of contact information known, and number of texts per case.

| Percentage of Contact Information Available | Number of Cases | Number of Text Messages (at two messages per case) | Cost | Number of Text Messages (at five messages per case) | Cost | Number of Text Messages (at ten messages per case) | Cost |
|---|-----------------|--|------------|---|-------------|--|-------------|
| 25% | 82,299 | 164,598 | \$1,645.98 | 411,495 | \$4,114.95 | 822,990 | \$8,229.90 |
| 50% | 164,598 | 329,196 | \$3,291.96 | 822,990 | \$8,229.90 | 1,645,980 | \$16,459.80 |
| 75% | 246,897 | 493,794 | \$4,937.94 | 1,234,485 | \$12,344.85 | 2,468,970 | \$24,689.70 |
| 100% | 329,196 | 658,392 | \$6,583.92 | 1,645,980 | \$16,459.80 | 3,291,960 | \$32,919.60 |

* Table 1 identifies only the estimated cost charged by the vendor for the physical act of sending the text messages. This figures do not include any short-code set up fee, database integration fee, costs associated with collecting data, or costs to ensure data security and legal compliance. These additional costs, in total, are expected to greatly outweigh the isolated cost of sending the text messages.

(C) Message Triggering Events

Table 1 also shows the number of messages and estimated cost at varying amounts of texts per case. The number of texts per case will depend on how the Judiciary designs the notification system, and at what point (if at all) a defendant opts-out of receiving notifications. One factor that may increase the number of texts per case is the limitation of the SMS system itself. The maximum length of a text message that one can send is 918 characters. However, if one sends a message longer than 160 characters, then the message will be broken down into chunks of 153 characters before being sent to the recipient's handset. Depending on the content of the message, one notification may require several individual text messages.

Another factor is the need to have an opt-out option available to the court participant. Some courts send the opt-out notification with only the first text of the case. One court sends a separate opt out message each and every time a message is sent.

Assuming the text notification system is only used to notify a defendant of appearances, the number of texts needed may further vary by how the complexity of the case and the posturing of the parties affects the total number of appearance dates (including status hearings and postponements). As **Table 1** indicates, the annual cost of sending text messages alone could range from \$1,645 (if capturing 25% of phone numbers and sending two texts per case) to \$32,919 (if capturing 100% of phone numbers and sending 10 texts per case).

Other Considerations outside the Scope of this Report:

Through the research conducted to complete this report, ancillary information was collected that may be of use when further exploring a court text messaging program. First, most courts who have implemented this program began with a roll out phase. One state started with three limited-jurisdiction courts, with a plan to expand state-wide after one month of no unresolved issues with the program. Given that a number of Maryland courts are currently on MDEC, theoretically Maryland would not need to wait for all courts to switch to the unified CMS before implementing a pilot program.

Another factor noted in the research was the variability of how courts are using text messaging notifications, in terms of case types, participants, and notification triggers. Some courts use notifications for all cases, regardless of case type, including civil cases. Some courts allow anyone – even a member of the public unassociated with a matter – to track a case, while others have notifications only available to parties to the case. Both Missouri and Arizona use the text message notification not only for appearance reminders, but also to remind participants of payments due to the court. As the general mechanism for setting up notifications would be the same in either instance, and arguably the court would have better access to participants wishing to set up a payment plan with the court, notification about outstanding costs could be considered when designing a program. Other uses for text messaging alerts by courts included juror notifications and notifications to judges about activities related to their cases.

An additional factor to consider is when messages should be sent. Through trial and error, one court realized that sending messages as each case was updated resulted in duplicate (and incomplete) messages being sent each time a clerk edited any aspect of the case. To combat this, they have set all text messages to be sent at or about 9:00 p.m. Another court sends messages a certain number of hours after the last activity on a case, but never after 10:00 p.m.

Text message and voicemail notification systems can also be configured to present messages to participants in different languages, improving access to justice for defendants and other participants whose primary language is one other than English.

A final major consideration to the design of this program would be whether other technology or court practices could work in conjunction with text notifications. Some courts have increased flexibility of court dates in conjunction with the notification system to make court appearance more convenient for participants. Missouri requires email addresses in order to use the text messaging system, while Arizona selected a vendor that does not support email notifications, but instead offers voicemail notifications. All of these specifications will have to be decided when placing this project out for bid.

CONCLUSIONS

A handful of states have recently implemented systems to notify court participants about court activity and events. While one of the purported benefits of a notification system is increasing appearance rates, comprehensive data on the impact of text messaging on appearance rates was not available for this analysis. While the initial focus of a text notification system might be limited to criminal defendants, in FY2016, for District Court criminal (non-traffic) cases, defendants failed to appear 14,318 times. For District Court traffic must appear cases (including DUI's), defendants failed to appear 50,978 times. As such, if Maryland were to implement a system, it should likely include mandatory appearance traffic matters. Notifications about outstanding costs and fees owed to the court may also improve the results of the program without greatly increasing the operating costs.

The costs and specifics of implementing this program depend on a variety of factors. Namely, whether Maryland wishes to implement a passive/voluntary notification where participants must take active

steps to sign up for notifications, or a mandatory implementation where courts work with state and local law enforcement to mandate the collection of contact information and consent to receive text message notifications. Other costs and implementation factors depend on specific features desired, and how a vendor or vendors systems will be able to interface effectively with Maryland's MDEC CMS.

Ultimately, while the efforts of other states implementing text messaging is clear evidence that use of this technology is possible in Maryland, a more thorough analysis is needed to determine whether the costs and resources needed to implement this program, as well as the legal and security risks associated with operating and maintaining it, are justified by the intended benefits, including an increased appearance rate. The workgroup will reconvene in September 2017.