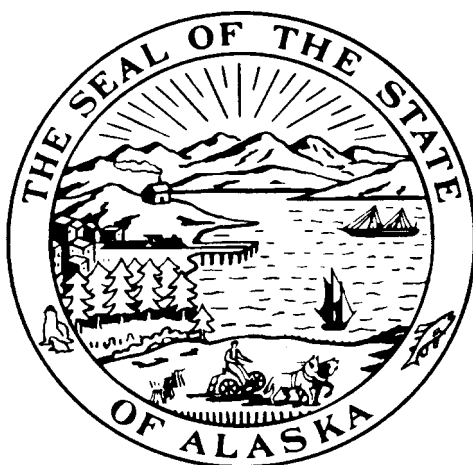


STATE OF ALASKA

DEPARTMENT OF PUBLIC SAFETY
DIVISION OF ADMINISTRATIVE SERVICES
INFORMATION SYSTEMS

INTEGRATION OF CRIMINAL JUSTICE
INFORMATION SYSTEMS PROJECT

***CHARGE TRACKING ALTERNATIVES
AND RECOMMENDATIONS***



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I. INTRODUCTION

The charge tracking portion of the Criminal Justice Information Systems Integration project is focused on improving charge tracking in the state of Alaska. Charge tracking is the ability to track--or otherwise record--information about individual charges and related actions, from arrest to final disposition, as they progress through the state's criminal justice system.

An effective charge tracking system provides the basis for criminal history and provides invaluable information to participating agencies at all points in the criminal justice process. Access to criminal history information that is complete, accurate, and timely allows criminal justice agencies to improve their effectiveness, thereby improving the overall criminal justice system.

The following example, based on actual records received by the state central repository, illustrates why Alaska needs a charge tracking system:

A police department entered the following information into APSIN: John Doe was arrested (ATN 123456789) for four counts of burglary and three counts of theft on 10/3/95.

A correctional agency sent a fingerprint card to the central repository, showing that John Doe was fingerprinted for ATN 123456789, for Burglary II and Theft III (no indication as to how many counts) and that the date of arrest was 8/19/96.

A court sent a judgment to the central repository, showing that John Doe was convicted of the following charges for ATN 123456789:

Count I: Burglary II
Count V: Burglary II
Count VII: Burglary II

The judgment does not state whether any remaining charges were dismissed or otherwise disposed. The repository has not received a report from any prosecutor that the remaining charges reported by the arresting agency were declined for prosecution. The central repository staff must update John Doe's criminal history record to show which of his arrest charges have been disposed. The central repository cannot tell which of the original seven charges have been disposed. Have three out of the four burglary charges been disposed, or were some thefts amended to burglaries and vice versa?

The central repository staff must research these questions by contacting the arresting agency and/or prosecutor, as well as the court system. They must also contact the fingerprinting agency to ensure that the fingerprints were for all seven charges associated with the ATN, because only fingerprint-supported charges may be forwarded to the FBI to become part of John Doe's national criminal history record.

In this example, the use of the ATN helps the central repository research these questions. John Doe has a number of other arrest records for burglary and theft, as well as other offenses. However, the central repository will be able to focus its questions on the charges for this ATN only, instead of all of John Doe's arrests. (In this example, the fact that the "date of arrest" in APSIN differs from the "date of arrest" on the fingerprint card makes the ATN particularly useful; without the ATN, the repository would assume there were two different arrest episodes, both involving theft and burglary charges.)

Even with the ATN, however, the central repository must contact each reporting agency to determine which of the original seven charges has been disposed, which are still pending, which were disposed but not reported to the repository, etc. They will have to research whether any of the original seven charges have been amended to a different charge, i.e., a burglary was changed to a theft, etc. In sum, criminal justice agencies are required to expend considerable time and other valuable resources to research and derive the answers to all of these questions.

The baseline assessment of Alaska's criminal history records, conducted by the SEARCH Group in 1993, identified the need to improve charge tracking in the state of Alaska. The above example clearly illustrates that it is problematic and time consuming to assign the correct final disposition to the original charge in the criminal history record without a charge tracking system. While the state has implemented some of the recommendations provided by SEARCH, such as establishing an arrest tracking number (ATN) and employing a check digit in the ATN, a great deal remains to be done to improve the state's charge tracking process.

The state has engaged Wolfe & Associates, Inc. to develop a Charge Tracking Conceptual Model, identify changes to agency procedures and forms that will be required to implement the model, and conduct training to assist agencies with the implementation of charge tracking. As a prerequisite to these activities, the consultant has conducted an alternatives analysis to establish a general approach to charge tracking prior to developing the conceptual model. This document contains the results of the alternatives analysis activities.

Wolfe & Associates met with representatives from Alaska's criminal justice agencies during a one-day conference in Anchorage on June 7, 1996, to discuss how cases move and

charges are tracked through the criminal justice system. A number of problems were identified, which must be addressed before the accuracy and completeness of criminal history records can be improved:

- The Arrest Tracking Number is assigned by law enforcement and prosecution agencies on a paper form, the Criminal Case Intake and Disposition (CCID), but it is not always provided to booking agencies responsible for placing the number on the fingerprint card.
- The Arrest Tracking Number is not used for “collateral” offenses, meaning those which are generated by a bench warrant, such as failure to appear/failure to comply, or probation/parole violations, so these events are particularly difficult to assign to the correct record in APSIN.
- Charge numbers on the CCID are assigned by arresting/charging agencies, and may be changed and re-used as charges are added, dropped, or amended, so the disposition charge number may be different than the original/arrest charge number.
- APSIN records charges according to NCIC codes, which are difficult to match to the actual offense citation used by other agencies. (This problem is being addressed through implementation of a uniform offense citation table, also recommended by SEARCH.)
- APSIN does not record charge numbers.
- CCID forms, fingerprint cards (except for live-scans), and court judgments are produced and processed manually instead of through an integrated, automated

system. (This problem is being addressed through various projects to upgrade/replace and integrate the agency systems.)

- There is no prosecution segment in APSIN--the actual filing or amendment of charges is not reported to the central repository--only arrest charges, fingerprint cards, declines to prosecute, and court dispositions are submitted to the repository.

In providing assistance to the state of Alaska, the consultant has identified both technical and non-technical changes that are necessary for an effective charge tracking system. Two alternative technical approaches have been identified, including a description of the advantages and disadvantages of each. This report recommends which technical alternative to pursue.

II. NON-TECHNICAL ALTERNATIVES FOR IMPROVING CHARGE TRACKING

An effective charge tracking solution will not be based solely on technology, but rather on a blend of technology with policies, procedures, forms, and sound operating practices. The charge tracking concept must be sound in theory and practice before the benefits of automation can be realized.

Charge tracking requires that each charge in the criminal justice system be distinguishable from every other charge, and that charges be grouped (at least initially) by arrest or incident. The most common method of uniquely identifying information is to apply some form of sequential-numbering scheme, where each item receives the next number in the sequence and is therefore unique. Assigning the next sequential number to each and every charge that enters the Alaska Criminal Justice System would prove to be impractical. However, since all charges need to be associated with an arrest or charging incident, and the state of Alaska has already implemented the Arrest Tracking Number (ATN) to uniquely identify arrests/charging incidents, it makes sense to combine the ATN and a sequential number (001, 002, 003, etc.) to form a unique charge identifier. The sequential-numbering process would be restarted with 001 for each ATN, and each charge would be assigned the next sequence number. This combination of ATN and sequence number would result in each charge having a unique identifier--exactly what is needed to record information concerning a charge as it moves through the criminal justice system.

This approach will require changes in procedures--specifically, procedures for completing and processing the CCID form, which is the source document used by law enforcement and prosecution agencies when generating charges. Once a charge number is assigned on the CCID form, all criminal justice agencies will have to reference that charge by that number as it moves through the system to final disposition. The charge numbers should be available on paper forms as they move between agencies, and an agency may always inquire into APSIN to determine which charge numbers have already been posted.

While it is possible to use other numbering schemes, none would offer any advantages over using the ATN/sequence-number combination and few, if any, would be as meaningful. When this concept was introduced during the June 7 interagency meeting on this subject, there appeared to be general consensus that this approach makes the most sense. However, municipal

prosecution agencies did not participate in that conference. Since this approach will rely heavily on the cooperation of prosecution agencies to modify their current use of the CCID/ATN form, municipal, as well as state prosecution agencies must be included in the planning and implementation of the charge tracking project.

III. TECHNICAL ALTERNATIVES FOR IMPROVING CHARGE TRACKING

Assignment of a unique charge number on paper forms, even if fully agreed upon and applied carefully through revised procedures and proper training, will not be sufficient to implement effective charge tracking. Some form of automation must be employed. Ultimately, each agency system (manual and automated) will be required to incorporate the new charge numbering scheme.

Wolfe & Associates has identified two technical alternatives that may be pursued in order to improve charge tracking capabilities in the state of Alaska. One alternative represents an ideal, theoretical, automated solution. The other alternative identifies an automated approach that is more reasonable and practical, while providing the potential for significant improvement in Alaska charge tracking capabilities.

A. FULLY INTEGRATED, REAL-TIME, AUTOMATED SYSTEM

This approach may be considered an ideal theoretical approach to statewide charge tracking. It relies on *real-time* processing of criminal justice information where the APSIN central repository becomes an integral part of each agency's information system.

1. Description

In its simplest form, the solution would consist of one centralized system that would fulfill the operational and charge tracking needs of all criminal justice agencies. In a more complex form, the solution would consist of multiple agency systems that satisfy individual agency needs while being fully integrated with APSIN on a *real-time* basis. As such, APSIN would become an integral part of each agency's information system and would perform critical functions, such as assigning new ATN's and unique charge numbers ("electronic CCID") as arrest and charge data is entered into agency systems to ensure the accuracy, completeness, and timeliness of information and to ensure adherence

to policies, procedures, and sound operating practices. Outdated agency systems would be replaced with new systems that are fully integrated with APSIN on a *real-time* basis.

2. *Advantages*

This level of integration virtually eliminates duplicate data entry and thus drastically reduces opportunities for error. Each agency would build on information that has already been entered into the system, eliminating the need to re-enter information.

A fully integrated, *real-time*, automated system is able to maintain control over key activities that directly affect the quality of information. Automatic assignment of ATN's and sequential charge numbers would ensure that charges are uniquely identified and numbers never reused. Furthermore, the system could help to ensure that complete information is captured, by prohibiting the closing of a case until missing information is provided by the appropriate agencies.

The high degree of control that is possible with this alternative would serve to reduce dependency on manual procedures, as the system would be able to guide criminal justice agencies through the various processes.

A centralized or tightly integrated group of *real-time* systems allows information to be captured closer to the source, with virtually no time delay for information that is destined for the central repository. Since information would be captured directly by the repository as a result of agencies performing their daily activities, a minimum amount of effort (if any) would be required to allow agencies to share information. Agencies could be confident that they have access to the most current information available.

3. *Disadvantages*

While there are a number of very attractive advantages associated with this alternative, there are also a number of equally unattractive disadvantages that must be considered. The most obvious associated with this alternative involves the magnitude of complexity, cost, time, and other valuable resources that would be required to implement the solution. Outdated agency systems would have to be replaced with new systems that not only satisfy agency operational needs, but also provide *real-time* access to the central repository as an integral part of processing. In all probability, replacement systems of this nature would require custom development, as changes to off-the-shelf software would be too extensive to be practical. The custom development of each agency system would result in a number of large, complex, costly projects, each with high risk factors and substantial risk to the overall system. It would be safe to assume that several years would be required to complete the endeavor. Furthermore, changes to the central repository or agency portions of the system(s) would cause ripples affecting the entire system(s), resulting in a solution that is difficult and costly to maintain.

Another significant disadvantage associated with this alternative is the system availability requirements that would be placed on APSIN, the mainframe, telecommunications software, and the communications network. Should any of these items be out of service or otherwise unavailable, the entire criminal justice community would be adversely affected. Agency systems would cease to function until such time as access to APSIN was restored. The impact of such an outage would range from minor inconvenience for smaller, remote agencies to major, adverse events for larger, high-volume agencies. This is especially true for law enforcement and correctional agencies which operate 24 hours per day, seven days per week, where access to information plays a key role in officer safety and the safety of the public in general.

B. LOOSELY INTEGRATED, MULTI-SYSTEM APPROACH

This alternative provides some of the advantages of the fully integrated approach while eliminating the major disadvantages.

1. Description

As agencies replace their current information systems, charge tracking capability will be included in the specifications for the new systems and their interfaces with APSIN. Agencies will maintain their own information systems that are interfaced with APSIN, either on-line (but not *real-time*) or in a batch environment, depending upon the nature of the information reported to the repository. The difference between this and the previous alternative is that agency systems would not be interfaced with APSIN in a *real-time* mode, and would continue to operate independent of the availability of APSIN.

Agency systems would build APSIN interface transactions as part of their data entry processes, and the transactions would be stored on the agency system. The agency system would then--independent of the data entry and other critical processes--transmit the transactions to APSIN. If, for some reason, APSIN is unavailable, the interface portion of the agency system would simply wait and attempt the transmission at a later time, independent of data entry and other critical processes. APSIN will notify the agency system of the results of processing each transaction.

It would also be possible for agency systems to *optionally* request information from APSIN as part of the data entry process. For example, if the prosecutor's office was about to enter a new case into its system, the prosecutor system could send a request for information to APSIN based on ATN or some other key identifier. APSIN could then return whatever information presently resides in the repository, such as name, address, date of birth, SSN, arrest date, charges, and other information that was submitted by the arresting or other criminal justice agencies. Once the prosecutor system receives the information from APSIN, it could selectively populate data entry fields on the screen,

eliminating the need to reenter the data and eliminating potential typographical errors for that data. The data entry clerk would be able to overwrite information, as appropriate. If the agency system does not receive information from APSIN in a predetermined amount of time, then the agency system would assume that APSIN is not available and would request that the data entry clerk enter all of the information.

This approach provides flexibility and timely electronic transfer of information to the repository without dependency on the availability of APSIN and the network. However, since it is not *real-time*, the system cannot exercise complete control over critical activities, such as assigning unique charge numbers. Charge numbers would still have to be created by the charging agency instead of being generated by APSIN through a centralized “electronic CCID.” Once a charge number is created and linked to an ATN for a particular charge, however, APSIN would be able to exercise limited control over the consistent use of that number.

2. *Advantages*

This alternative takes advantage of the APSIN interface and agency system replacement projects which are currently under development. It provides flexibility with regard to integration and therefore allows agency systems to function, in the event that APSIN is unavailable. It also provides for the timely electronic transfer of information to the APSIN central repository and has the potential to reduce redundant data entry and associated typographical errors dramatically.

This alternative allows criminal justice agencies to acquire and maintain their own systems with a minimum amount of interface requirements. Agencies would be able to acquire and implement their systems independently, resulting in projects that are less costly, more focused, manageable, and achievable. Furthermore, changes to an agency system would be less likely to impact other agency systems and APSIN, resulting in an overall solution that is easier to maintain

This alternative can be implemented now, instead of delaying charge tracking improvements for years.

3. *Disadvantages*

The disadvantages associated with this alternative are best identified by comparison to the ideal, theoretical solution, as described in the previous alternative. The fact that integration with APSIN would not be *real-time* is a disadvantage. The loosely integrated approach cannot exercise the same degree of control that can be obtained from a *real-time* solution, and there will be opportunity to introduce errors in agency systems. Most of these errors will be detected by the APSIN interface, however, and agencies will be notified electronically, resulting in a two-step error-detection/correction process. With a *real-time* solution, errors are detected and corrected at the time of data entry. Furthermore, since this alternative will have less control over activities and information, criminal justice agencies will be more dependent on manual policies and procedures.

This will require more effort to design, implement, provide training, and closely monitor/audit the non-technical aspects of charge tracking, i.e., changes in agency forms and procedures. It will require a higher degree of cooperation among agencies to make sure the non-technical procedures are followed closely. This alternative will result in a higher error rate than a fully automated, centrally controlled system.

This alternative will be somewhat difficult to implement over the short term, until agencies acquire replacement systems that include APSIN interface functionality, owing to the fact that present systems do not support the new charge numbering scheme.

IV. RECOMMENDATIONS

This chapter contains both non-technical and technical recommendations concerning which alternatives to pursue to improve charge tracking in the state of Alaska.

A. NON-TECHNICAL RECOMMENDATIONS

It is recommended that the criminal justice community adopt a charge numbering scheme that is based on ATN and a three-digit sequential number that serves as a suffix. Under this scheme, three charges for an arrest/case with an ATN of xxxxxxxxx would appear as follows:

- xxxxxxxxx001
- xxxxxxxxx002
- xxxxxxxxx003

The first charge for an ATN would always be assigned a suffix of 001. Each additional charge would be assigned a suffix of the next sequential number, 002, 003, etc. Every charge must receive some form of disposition, and dispositions will contain the ATN and three-digit suffix, to facilitate matching the disposition to the correct charge in the repository. Charges may be amended and new charges may be added, but a charge number (suffix) cannot be reused for an ATN. If there is a decline to prosecute for one or more charges, a disposition(s) must be provided that indicates such, to help ensure that every charge receives some form of disposition.

A charge numbering scheme of this nature requires criminal justice agencies to pay close attention to the sequence number of each charge, in order to ensure that information is associated with the correct charge. Likewise, agencies must be aware of the last sequence number used whenever a new charge is to be added, in order to assign the next sequence number to the new charge. The sequence numbers will be established

by the first criminal justice agency to record charge information, whether recorded on a paper form or in an automated system. Agencies will be required to rely on paper forms received from other agencies, or may inquire into APSIN to determine which sequence numbers have already been used.

Some method of linking “collateral offenses” which are not assigned their own ATN must also be addressed. Policies and procedures will be required for tracking arrests pursuant to bench warrants for failures to appear/comply and for probation/parole violation charges. A related project, to implement a uniform offense citation table, will provide part of this solution, by flagging these “collateral offenses” so that they can be processed differently than new charges in APSIN.

This charge identification scheme will allow the state of Alaska to identify charges uniquely throughout the criminal justice system and will facilitate maintaining a central repository that contains complete and accurate criminal history information.

B. TECHNICAL RECOMMENDATIONS

This section contains recommendations concerning the technical approach that should be taken in support of charge tracking in the state of Alaska.

1. Explore Potential for Maintaining New Charge Numbers in Existing Agency Systems

It is recommended that agencies explore the potential of maintaining the new charge numbering scheme (ATN + sequence number) in their existing systems. It may be possible to use existing data fields that are presently not being used and/or it may be possible to make simple modifications to existing agency systems to maintain the new charge numbers until such time as replacement systems are required. It may also be

possible for an agency to develop a simple PC-based application to track ATN and sequential charge numbers.

While not mandatory, maintaining the new charge numbers in existing or some other automated system would make it easier for agencies to implement the new charge tracking model prior to replacing present systems with new systems that contain support for the APSIN interface. Without some form of automated support, agencies will be forced to rely on paper forms to track charges until the replacement systems are acquired and implemented.

2. Pursue the Loosely Integrated, Multi-System Approach

It is recommended that the state of Alaska continue to pursue the technical alternative of a loosely integrated, multi-system approach in support of charge tracking. The fully integrated *real-time* interface alternative, while providing superior advantages, would prove to be impractical, owing to the size, complexity, cost, time, and system availability requirements.

The loosely integrated, multi-system approach provides many of the advantages associated with the ideal solution, plus the additional interface flexibility required to yield a solution that is significantly more practical and attainable.

Agencies would be able to acquire their own operational systems that are customized by vendors to include APSIN interface functionality, providing a manageable solution for individual agencies and the central repository. The loose integration of this alternative will provide for the timely transfer of information to APSIN and yet will allow agency systems to continue to operate in the event that APSIN or the interface portion of the communications network is unavailable.

C. DEVELOP THE APSIN INTERFACE IN TWO PHASES

The APSIN interface that is presently under development is to provide for the electronic transfer of charge tracking/criminal history information from criminal justice agency systems to the APSIN central repository. It is recommended that the state proceed with this project as Phase I of the interface. During the course of this project phase, APSIN interface transactions will be designed, documented, and provided to criminal justice agencies. Agencies can then provide the transaction specifications to potential vendors, in preparation for acquiring new systems.

It is also recommended that the state plan a second phase for the APSIN interface. This phase would address responding to agency system requests for electronic APSIN information based on ATN, court case number, and other key identifiers. Agency systems could then *optionally* request data from APSIN as part of the data entry process, and use the data that is returned by APSIN to populate data entry fields on the agency system's screens. This part of the interface would dramatically reduce redundant entry, while improving the overall quality of information in agency systems and the central repository.

In support of this concept, it is recommended that the state pursue the design of these Phase-II transactions during Phase I of the project. If they are designed during Phase I, the transactions can be made available to criminal justice agencies, along with the Phase-I transactions, enabling agencies to provide specifications for both types of transactions to potential vendors during their system-acquisition process. If this can be accomplished, all that will remain is to modify APSIN to complete Phase II of the interface.