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# Justice Systems Integration: A Definition

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## Abstract

*This paper examines various types of justice systems integration implementations and provides a working definition of integration. It includes a brief history of integration and an overview of current practice.*

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## Introduction

While justice systems integration has recently been much discussed in Illinois, most policy makers have not experienced systems integration directly and are unfamiliar with the range and variety of integration initiatives in other states. Many who are new to the concept of integration naturally assume that it is merely an expensive consultant service or a product that can be purchased from a vendor. In actuality, since each situation requiring integration is different, there is no established product or service that can be purchased or easily adapted for new justice integration projects. This, at least in part, is due to significant differences between individual jurisdictions. Some have very little investment in automation and others have large, mature systems that have been in place for many years; however, most have a unique mix of new and old systems. These various situations will require very different approaches to integration. What most jurisdictions have in common is the need for increased electronic sharing of information between the various entities charged with administering criminal justice in a municipality, county, state, or region. Most jurisdictions are currently integrated to some degree since data sharing is an essential part of conducting the business of justice, but most could do better if their approach to integration was systematically organized and based on emerging best-practices for systems integration.

Most municipalities, counties and states seeking greater levels of justice systems integration are examining ways of linking existing systems in order to gain the benefits of integration without having to completely decommission their existing justice information systems and consolidate operations on a monolithic information system that serves all. In addition to saving money, linking systems to enable them to communicate at critical exchange points has the additional advantage of placing security administration mostly in the hands of the individual agencies. The agencies can then directly define and maintain their own data security. Individual agencies can also determine which data items are shared electronically, and with whom and when, rather than rely on a central data administrator who may be employed by another agency for security services.

Integrated systems that allow individual agencies to maintain system autonomy are now operational in Colorado and Los Angeles County. The Los Angeles system was the first to use software called “middleware” to link disparate agency systems into a “virtual” system that pipes information across justice entities in a way that eliminates redundant data entry. Such duplicative data entry is the cause of most data inaccuracy problem and is also very expensive. Recently, Los Angeles County, with a population of ten million people, has introduced a countywide criminal history system that has significantly reduced the

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## Various Definitions of Integration

region's previous problems with incomplete or missing criminal history information.

The Colorado Integrated Criminal Justice Information System (CICJIS) uses middleware to link autonomous justice information systems, in a way that is similar to what has been done in Los Angeles. Colorado's desired outcome was to link many disparate systems in a way that would eliminate redundant data entry by pumping data common to all systems from the originating agency (usually police) to agencies that previously had that same data reentered manually (such as courts). One of the benefits of the new system was a significant increase in Colorado's disposition posting rate. However, those administering the Colorado system still consider it a work in progress and are continually working to improve the quality of information and to raise the disposition posting rate.

Integration can be defined in a variety of ways. In the recent *Report of the National Task Force on Court Automation and Integration*, issued by the U.S. Department of Justice's Bureau of Justice Assistance, integration is defined "as the electronic sharing of information by two or more distinct justice entities within a system." The Task Force qualifies this definition with "the degree to which information systems are considered 'integrated' depends on who participates, what information is shared or exchanged, and how data are shared or exchanged within the system."

In the SEARCH Group's report, *Integration in the Context of Justice Information Systems: A Common Understanding*, the primary objective of integration is stated as "the elimination of duplicate data entry, access to information that is not otherwise available, and the timely sharing of critical data." In a later report by SEARCH, *Planning the Integration of Justice Information Systems: Developing Justice Information Exchange Points*, the authors state that "for the purpose of this project, we define integration as the ability to electronically access and exchange critical information at key decision points throughout the justice enterprise."

The SEARCH report emphasizes that integration does not force agencies to share or exchange all justice-related information, but only that information which is "relevant and appropriate at defined events and/or in defined circumstances." Decision-makers for the various agencies trying to achieve integration are those who must deal with the problem of deciding who gets what information and at what time. Of course, the object of integration should be to deliver timely, accurate information to justice decision makers in order to enhance the quality of their decision making.

While a definition of integration is important, it is also important to recognize what integration is not: integration is not a shared state

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## Functional Components of Integration

criminal history system, a shared court docketing system, or a shared mobile data system for law enforcement. While these systems share information, they do not integrate information from various sources and they do not eliminate redundant data entry efforts.

According to the SEARCH Report there are several functional components of integration, including the ability to:

- *Query* local, regional, statewide and national databases to determine the current status of a particular person as regards pending cases, warrants and criminal background.
- Automatically *push* information to another agency. An example of this might be the pushing of arrest information from the police agency to a prosecutor for review and refinement of charges, or the pushing of indictment/information data to the courts.
- Automatically *pull* information from other systems. This is the inverse of pushing information in that information is pulled from other agencies for incorporation into an operation or analytical database. An example of this might be a state criminal history repository automatically pulling arrest and disposition information from arresting agencies and the courts in order to populate statewide criminal history databases.
- *Publish* information regarding people, cases, events and agency actions. Such information could be published as interactive crime maps, sex offender registries available to the community, or as data sets available to the research community.
- *Subscribe* to a notification service. An example might be a probation officer who subscribes in order to receive immediate information on and new arrests that happen to anyone who is a part of the probation officer's case load.

## The Beginnings of Integration

The first recorded instance of integration of justice information systems occurred in Harris County, Texas, in the late 1970s, when it was decided by local policy makers that individual justice agencies would no longer design, develop and maintain their own systems. They would instead become users of an enterprise-wide system designed to serve the entire Harris County justice community. The Harris County system is still in operation 23 years later, but the system has undergone massive changes over time as result of changing needs and system evolution. The Harris County approach was to combine all justice agencies on one large system, which at the time was the only workable solution. Nowadays, since most municipalities and states already have substantial investment in existing justice-related systems they are unlikely to want to scrap their systems and adopt the Harris County approach. Instead, they will probably want to find ways to leverage their

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current investment by enabling existing systems to communicate and share.

## **Integration in Practice**

Many municipalities and states exploring integration of their justice information systems are examining ways of linking existing systems in order to gain the benefits of integration without having to completely decommission existing systems and devise a singular large system. This approach of linking systems in order to enable them to communicate at critical exchange points has the additional advantage of placing responsibility for security in the hands of the individual agencies, and can also allow individual agencies to directly define and maintain their own security. They can also determine which data items are shared electronically with whom and when.

## **State and Local Roles**

Many justice practitioners assume that responsibility for integration should be at the state level, but in order to maintain and preserve the independence and autonomy of local agencies and officials, the state cannot, and should not, establish an arrest-to-disposition integration scheme for local agencies. Moreover, such a once-size-fits-all approach would fail to capitalize on existing local investment in justice information systems. What is needed is a partnership between a state and its localities. Responsibilities should be shared in a way that will establish a statewide network for information sharing, but still allow local entities to integrate their own systems in order to preserve their autonomy and make the most of existing systems investment.

Integration efforts at the state level also differ substantially from integration efforts at the local level in that states must provide centralized criminal history information repositories and supporting infrastructures, as well as create and maintain efficient and effective means of gathering and disseminating such information. States should also create standards for the exchange and storage of information so that municipalities and counties are not forced to develop their own local standards, which may not be consistent with the standards of other municipalities.

At the local level, integration must focus on the operational objectives of police, prosecution, probation, courts and other allied agencies. It is at this level that some of the most difficult integration work must be accomplished, but local efforts can be made much easier if the state develops standards for communications, data definitions and even off-the-shelf software. These standards can then guide the procurements and development efforts of local agencies.

## **Conclusion**

No matter where integration starts, the process must be tailored to the needs of the entire justice enterprise. Integration efforts should also borrow from the wide range of successful integration initiatives that have already been implemented across the country. No government should

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begin the process just for the sake of integration but should carefully quantify the desired outcomes and then make sure that the results of the process actually meet those outcomes.

It is generally recognized that the three desired outcomes of information systems expenditures are to enable people to work faster, better and cheaper. Integration of justice information systems will provide all three outcomes: information will be more timely (faster), more accurate (better), and through coordination of resources, costs will be reduced (cheaper). However, for these benefits to be realized, integration efforts must be carefully tailored to meet the needs of all agencies in the justice enterprise. There is no canned definition of integration that will work in every instance, and no integration product that will work for everyone and every situation. A common solution must involve careful planning and participation by all stakeholders—both at the policy-maker and at the end-user level. Without the involvement and input of those most likely to be affected by the changes that new procedures and systems will bring, the integration process is much less likely to produce successful outcomes.