CRIME SPECIFIC PLANNING AS THE FRAMEWORK 
FOR EVALUATION OF COMPUTER SYSTEMS

Ralph M. Gutekunst, Jr. 
Principal Associate 
Systems Science Development Corporation

During the course of this conference, we have 
had the opportunity to hear, discuss and under­
stand the problems related to computerized crimi­
nal histories, offender based transactional statistics 
and many related developments and functional 
subsystems. I would like to continue on the line of 
the points raised in earlier sessions and suggest that 
crime specific planning can provide a valuable 
framework for evaluation of information systems.

One of the dangerous fascinations in the use of 
technology is the ease with which one can lose 
sight of goals and begin to develop technology for 
its own sake. We must not begin to develop ideas 
into systems for the same reasons that people 
climb mountains — because they are challenging.

It is a demonstratable fact that much of the Safe 
Street's money has been used to improve system 
efficiency without our being able to show a corres­
ponding increase in system effectiveness. I would 
like to suggest that the notion of crime specific 
planning can keep our focus on the reduction of 
crime, as the single overriding reason for our sys­
tems efforts and as the ultimate criterion against 
which the effectiveness of our systems must be 
measured.

To explore this idea with you, I will first encap­
sulate the process of "crime specific" planning. 
The basic notion, and perhaps the greatest benefit 
of this approach, is its starting place with criminal 
acts. Crime specific planning is an attempt to 
develop strategies and tactics to overcome known 
crime problems and rapidly identify emerging ones. 
Thus, the determination of what crimes are occur­
ring, when and where they are occurring and 
against whom they are being perpetrated is neces­
sary to establish what the law enforcement re­
sponse will be.

Because of this initial requirement to determine 
the type of crime, "crime specific" planning often 
appears to be "specific crime" planning. In fact, 
the specific crime is of primary analytic impor­
tance only until the offender is identified. Upon 
identification, there is a gradual change in emphasis 
that requires the offender to become the focus of 
crime specific planning. In other words, for crimi­
nal justice agencies to identify with certainty who 
is committing the crime, they must start with the 
complaint or report of the crime itself. Once the 
perpetrator of a crime is identified, the system 
response will be focused on changing the behavior of 
that individual. The gradual shift in emphasis 
from the crime as the unit of analysis to the offen­
der as the unit of analysis comes about over the 
period of time from when the police identify a 
suspect to when that person is actually convicted 
in a court of law.

A "crime specific" approach recognizes this 
transition and attempts to develop strategies and 
tactics at all points in the system to overcome 
crime problems. The crux of crime specific plan­
ing is in considering the crime, the offender, the 
victim, the circumstances and determining what 
changes can be made in the offender, in the law, in 
the community, and in the criminal justice system 
response that will reduce the probability that 
similar additional offenses will occur.

Some rapid examples of the types of activity 
that might be undertaken by criminal justice agen­
cies following a "crime specific" approach are as 
follows:

Police would be responsible, as they are present­
ly, for collecting and analyzing crime occurrence 
information; determining ilocations, times of occur­
rence, types of structures or category of victim, 
kinds of articles taken, availability and use of pro­
tective devices by the victim and so on. Compila­
tion and analysis of such basic information about 
the crime can suggest both strategies and tactics 
which may be applied.

Police strategies based on such information 
typically take the following appearances:

First, increase the knowledge of crime occurrence.
Second, reduce the probability of crime occurrence.
Third, increase the risk of apprehension.

Tactics, based on each of the above, can be 
brainstormed easily. They might take the following 
forms.

1. Encourage reporting of suspicious events and observed or 
known crimes.
2. Reallocate patrol strength based on crime incidence.
3. Improve information capture and analysis capability of 
specific MO's used for crimes such as method of entry, trans­
portation and disposal of stolen items in burglary cases; types
of victims, locations and method of attack in rapes and
offenses, and so on.
4. Analyze arrests to determine specific contributing factors in
offenders such as drug use or dependence, member of juve­
nile gang or organized ring, ease of disposal of stolen goods
and so on.
5. Improve training of men in investigative techniques, such as
interrogation, evidence collection and preservation and so on.

For the prosecutor:
1. Insure greater flow of information on persons re-arrested
while on bail, or parole or probation for earlier offenses.
2. Maintain files permitting easy cross reference for investigative
purposes.
3. Make greater use of physical evidence in case preparation.
4. Provide priority calendaring or docketing in serious crime
cases.
5. Use more experienced personnel in serious crime cases.
6. Provide greater inservice training to staff.
7. Analyze acquit/1s and nolle prossed cases to aid police and
prosecutorial staff in determining where information was
weak, evidence was lacking, testimony unconvincing, etc.

For the courts:
1. Require indepth presentence investigations in all felony and
serious misdemeanor cases.
2. Develop rapid retrieval capability for pretrial release concern­
ing status of the accused, e.g. charged in another case, war­
ant outstanding, previous record, under supervision, escaped,
AWOL, etc.
3. Str? t at levels that provide time for research into case law.
4. Require prosecution and defense to attend pretrial confer­
ence and adhere to court docket.
5. Develop more efficient methods of jury selection and use.
6. Demand greater sentencing alternatives.

For the rehabilitation agencies:
1. Institute case management and special supervision for violent
offenders.
2. Increase capability of providing greater court services, e.g.
screening, presentence investigation.
3. Provide intensive treatment capability for juvenile and youth
offenders.
4. Provide more sentencing alternatives.

Any reasonably qualified person could continue
listing potential programs. However, what the most
qualified among us would have trouble doing is
indicating which programs will bring about the
greatest benefit. This is where we must turn to our
information systems for support. If we accept the
notion that our primary goal is crime reduction,
then our information system can be evaluated on
criteria that are related to the achievement of
crime reduction.

Going to the goal of crime reduction, the next
step is to specify the criteria by which the informa­
tion delivery system will be evaluated. Generally,
they may be listed as:

- Accuracy
- Completeness
- Timeliness
- Economy

Accuracy and completeness interact with each
other to a considerable degree but real differences
exist between them. To give an example, complaint
reports may exist in a department for every actual
complaint made, but many of them could be
systematically upgraded or downgraded in serious­
ness so that their accuracy is seriously compro­
mised, although they are complete. Alternatively,
complaint reports in another department might be
lacking in cases of minor violations, but where
reports exist they are accurate. To clarify any
problem in distinguishing between the two, com­
pleteness is the measure of existing records as a
percentage of total records while accuracy is the
measure of the correctness of the information that
does exist. (I use the term record, but I might as
easily talk about data element.)

Timeliness measures whether this information
was available in time for a decision to be made
based on it.

Economy does not necessarily measure direct
dollar cost and should not be interpreted that way.
A major reason is that our goal has been specified
as crime reduction, not installing a computer. Or,
to put it a little differently, if we have established a
goal of crime reduction which requires the support
of an information system, the question must be
what is the most economical information system
required to support the goal.

The criterion of economy must take into
account such questions as the potential for routini­
zation of data collection versus one-time or
a periodic collection; the question of using sample
data versus attempting to capture a universe and
perhaps most importantly, the manner in which
the information is delivered.

To elaborate on that point for a moment, a
well-planned program of crime reduction requires a
multitude of decisions to be made. In some cases,
we know or can judge ahead of time what the
effects of a particular decision will be. Decisions at
this level might be termed operational; they have
known parameters and a low probability of risk. At
the next level, greater judgment or prudence must
be exercised because the parameters or effects of
the decision have not been fully identified or elab­
orated. We generally term these management deci­
sions. In the most extreme cases, the effects are
admittedly unknown and we generally decline any
decision and call it "research."

Part of the economy of a system depends on
proper identification of decision/risk potential and
of insuring the delivery of information in an appro­
priate manner. For example, if we can specify the
parameters or effects of decisions ahead of time to a point where risk is negligible, then the computer can make the "decision." Where we cannot make this definition to an acceptable level of risk, the information system must deliver what information exists to the lowest ranking person who can make the decision at what we regard as an acceptable level of risk.

For Security and Privacy, I commend to you the SEARCH publication.

The methodologies for examining information systems in the light of the criteria suggested are constantly being refined. What we should be careful to avoid is failure to distinguish between the evaluation of a computer system, for which very detailed specifications and standards exist, and the evaluation of a statewide criminal justice information system, which only recently has become a necessity.

The methodologies of the latter must be developed in far greater detail, but some current work deserves wider publicity.

Accuracy of the very first data to enter the system — the complaint and the police response to it — requires a systematic type of audit. The St. Louis Police have been undertaking such an audit, utilizing personnel from their internal inspection unit in conjunction with knowledgeable auditors from outside of government since the late 1950's.

Their program deserves to be copied throughout the country.

Completeness of crime data can be measured in part through victimization studies similar to the one being undertaken by the Census Bureau for LEAA.

The much discussed OBTS will contribute tremendously to our knowledge of data completeness even if, as has been predicted, it doesn't provide us with its full potential of data for several years to come.

Measuring economy of information systems, as well as security and privacy will remain a largely judgmental effort since decision levels in the former case will be organizationally specific and the shifting tides of opinion will be a heavily weighted factor in the privacy area. As an aid in the setting of appropriate levels of performance, the work of the National Advisory Commission on Criminal Justice Standards and Goals should prove invaluable.

While each of these segments will aid in the development of better evaluation of information systems, the key point that cannot be neglected is that the information system is a tool, whether computerized or not, as such should be judged or evaluated against its usefulness and productivity in the reduction of crime.
END