

Using Data to Assess a Community's Risk for Youth Violence



The Massachusetts Executive Office of Public Safety
and Security
Office of Grants and Research
Research and Policy Analysis Division
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Presentation Overview



- Background on the Charles E. Shannon, Jr. Community Safety Initiative grant program- *Shannon CSI*
- Use of data for decision making
- Development of the Shannon CSI Risk Index

Shannon CSI Background



Background

- An \$11 million competitive grant program with the purpose of combating gang and youth violence through regional and multi-disciplinary prevention and intervention approaches
- Approaches include anti-gang task forces, focused prosecution efforts, reentry services, social intervention and opportunities provision programs and community mobilization activities
- Considered a one-time grant to eligible communities, but funded for a second and now third year
- EOPSS committed \$1.5M in Byrne JAG funding over two years to add a research component to this grant program

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Structure of Shannon CSI



- Used a national model from Office of Juvenile Justice and Delinquency Prevention (OJJDP)
 - EOPSS Resource Guide
- Incorporated a research component to promote learning
 - Statewide Youth Violence Research Partner
 - Local Action Research Partners
- Strict accountability

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OJJDP Comprehensive Gang Model



Applicants were asked to design their approaches using the framework of the OJJDP Comprehensive Gang Model. This model encourages a multi-disciplinary approach using five strategies:

Provision of Opportunities – Develop education, training and job opportunities

Social Intervention – Provide crisis intervention, treatment, and referrals to social workers for at risk youth and their families

Suppression – Use criminal justice interventions to target gang-involved youth

Organizational Change and Development – Establish agreement among stakeholders about the gang problem and talk across traditional silos

Community Mobilization - Involve community members, including former gang members, and the coordination of agencies, programs, and services

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Use of Data for Decision Making



- Grant applications reviewed by a team of reviewers, but EOPSS also wanted to use standardized data to help guide the decision making process
- SAC developed a spreadsheet formula to determine the relative need of each applicant - The Shannon CSI Risk Index
- Risk Index allowed EOPSS to rely on standardized data to assist in making funding decisions

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Risk Index – Selection of Variables



- “Gang data” is not defined or collected uniformly across communities and of questionable quality - proxy data needed to be determined
- Research showed that there is a relationship between gang activity and violent and property crime. These variables were thought to be good proxies for gang-related crime and weighted more heavily in the formula.
- Potential variables were subjected to the following criteria to determine utility and reliability for a risk formula:
 - From a reliable data source
 - Uses a single measure
 - Uses a single unit of analysis
 - Covers similar time periods
 - Based on standard definitions

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Criteria for Risk Index Variables



Risk Index Variables					
	Violent Crime Rate	Property Crime Rate	Percent of Youth	Youth Homicide Victims	Juvenile Detention Rate
Criteria					
Reliable Source	Massachusetts State Police, UCR	Massachusetts State Police, UCR	US Census Bureau	Massachusetts State Police, UCR	Massachusetts Department of Youth Services
Single Measure	Violent crime rate per 100,000 persons	Property crime rate per 100,000 persons	Percentage of youth in a community	Number of homicide victims	Juvenile detention rate per 100,000 persons
Single Unit of Analysis	City/Town	City/Town	City/Town	City/Town	City/Town
Similar Time Periods	Annual Counts 2007	Annual Counts 2007	Decennial Counts 2000	Annual Counts (2004-2007)	Annual Counts 2007
Based on a Standard Definition	FBI standard definition	FBI standard definition	US Census Bureau definition	FBI standard definition	DYS standard definition

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Risk Index Variables and Weights

- The following variables and corresponding weights were used for the formula

City/Town Variables in Risk Index

Variable	Data Source	Weight
Violent Crime Rate	Massachusetts State Police, Uniform Crime Reports (2007)	50%
Property Crime Rate	Massachusetts State Police, Uniform Crime Reports (2007)	20%
Youth Rate (15 to 19)	U.S. Census Bureau (2000)	10%
Youth Homicide Victims (12 to 24)	Massachusetts State Police, Supplementary Homicide Report (2004 to 2007)	10%
Juvenile Detention Rate	Massachusetts Department of Youth Services (2007)	10%



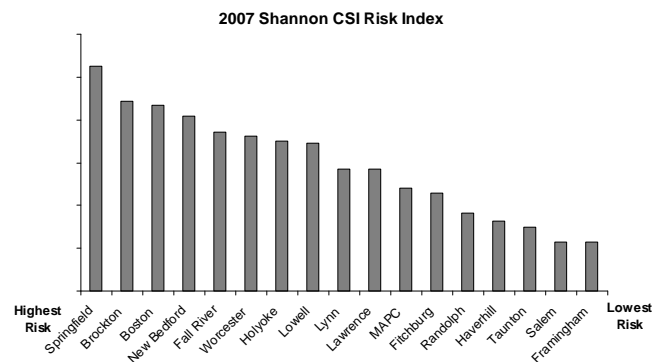
Shannon CSI Risk Index

- A spreadsheet model was developed to estimate gang problems for each Shannon CSI applicant relative to other applicants
- For applicants that applied with multiple municipalities, data from each city in the coalition was weighted using their individual populations, giving more weight to data from larger cities in the coalition
- Shannon CSI applicants were assigned a score based on these weighted variables
- Applicant's scores were used to determine who had the highest risk and who had the lowest risk in the applicant pool



Shannon CSI Risk Index - continued

- The figure below shows the Shannon applicants ranked from highest to the lowest risk using the selected variables
- The applicants on the left are the relatively high risk and applicants on the right are the relatively low risk



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Grant Process

- 17 applications representing 39 municipalities were received in July 2007 with a total request of \$17.4 million
- 16 were awarded funding - total awards = \$10.9 million
- The following criteria were used to evaluate the applications:
 - Use of data to illustrate the youth violence problem
 - Use of evidence-based practices
 - Link between the identified problem and the proposed solutions
 - Use of the five Comprehensive Gang Model elements
 - Sustainability
 - Commitment to provide the 25% match preference
 - The applicant's rank on the "Risk Index"

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Thank you!

Keith O'Brien
Executive Office of Public Safety and Security
Office of Grants and Research
Ten Park Plaza, Suite 3720
Boston, MA 02116
keith.obrien@state.ma.us