

Location-Based Criminal Risk Assessment

Josh Levin & Molly Miles Strategic Information Center



Introductions



Josh Levin

Criminal Intelligence Analyst
Strategic Information Center
Colorado Springs Police Department
(719) 667-2714

levinjo@ci.colospgs.co.us

Molly Miles

Crime Analysis Supervisor Strategic Information Center Colorado Springs Police Department (719) 444-7625

milesmo@ci.colospgs.co.us



City of Colorado Springs



- Population of 419,848 people
- ▶ 194 square miles
- ▶ 895 Police Employees
 - 620 Sworn Officers
 - 275 Civilian Employees
- Heavy Military Presence
 - Population of ~50,000 service men and women



Strategic Information Center (StIC)



- Analytical and Intelligence Center
- 8 Criminal Intelligence Analysts
 - 4 Patrol Focused Analysts
 - 4 Intelligence/Investigative Focused Analysts
- 3 Intel Unit Detectives
- 1 Analytical Supervisor
- 1 Lieutenant



Scanning & Problem Definition



- Entertainment District
 - Typical Issues
 - Increasing Challenges
 - Economic Pressures
 - More Bars = More Bar Patrons
 - Homelessness and Panhandling
- Initial Police Response
 - HOT Team
 - DART



Collaboration



- CSPD and the Military
 - Executive Forum
 - Investigative/Intelligence
 - Courtesy Patrol
- The Armed Forces Disciplinary Control Board (AFDCB)
 - Military Analysts



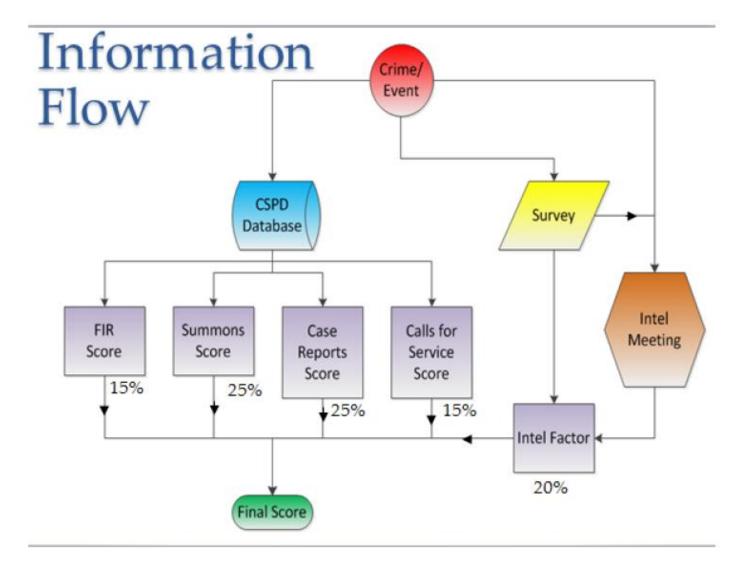
Opportunity



- Old Methodology outdated
 - Easy for bar owners to manipulate
 - Not comprehensive
 - Not comparable
- Development of new model
 - Analysis Driven
 - Location–Based Criminal Risk Assessment (CRA)









Analysis of Traditional Data



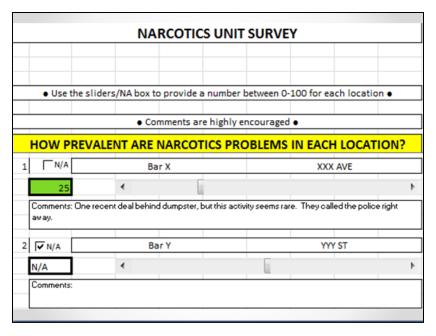
- The data is collected and categorized by the type of activity
 - Person
 - Property
 - Weapons
 - Liquor
 - Drugs
 - Disturbance/Disorder
 - Suspicious Activity
- Each of these categories are then weighted using the Fear of Crime scale



Collection Process



A survey is used to gather initial information



 A quarterly meeting with representatives from all of the involved units/groups takes place



Collection Process



- Narcotics.xlsx
- Downtown Team Survey.xlsx



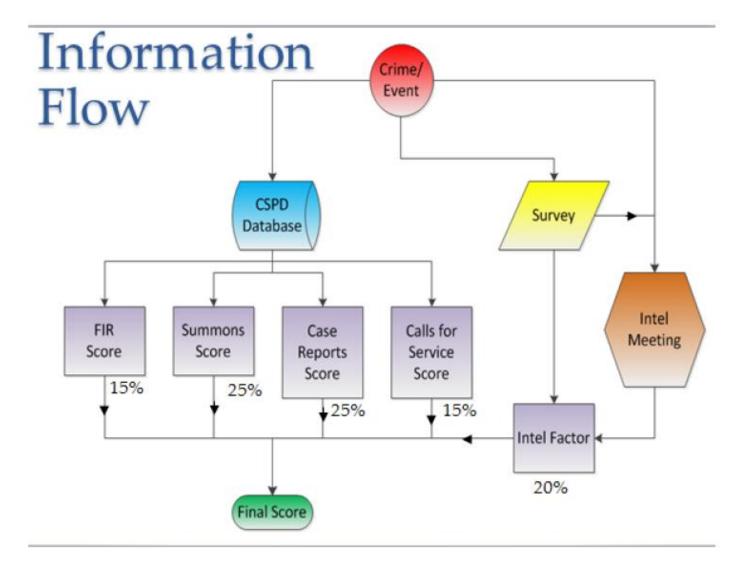
Evaluation of Intel (cont.)



- Weighting Process
 - Type of Activity
 - Severity of Activity
 - Source Reliability & Content Validity
 - Relationship with the Bar
 - Public Safety Cooperation
 - Non-Criminal Gang Presence









Final Output of Model





Location-Based Criminal Risk Assessment

Risk Assessment Scores



Location Name	Qtr 2 - 2011	Qtr 3 - 2011	Qtr 4 - 2011	Qtr 1 - 2012	Qtr 2 - 2012
Bar A	5.58	4.11	5.92	3.79	4.28
Bar B	5.55	2.74	4.10	6.15	4.16
Bar C	3.28	0.72	1.82	0.26	3.44
Bar D	1.72	1.41	0.90	1.30	3.22
Bar E	2.80	2.32	2.80	3.18	2.96
Bar F	0.51	0.51	0.82	0.08	2.31
Bar G	1.29	1.05	0.49	0.54	2.03
Bar H	4.13	2.56	6.65	2.91	1.92
Bar I	4.47	2.92	1.11	2.70	1.63
Bar J	1.73	0.94	1.08	2.82	1.52
Bar K	2.34	2.57	0.48	0.93	1.42
Bar L	5.22	2.91	2.66	2.90	1.32
Bar M	1.27	0.68	1.74	0.83	1.04
Bar N	1.39	0.98	1.26	1.71	0.97
Bar O	1.57	3.85	3.43	3.61	0.95
Bar P	0.21	0.48	0.56	0.81	0.95
Bar Q	3.58	0.19	0.19	0.19	0.69
Bar S	0.87	1.28	1.11	1.43	0.68



Working with Academia



- United States Air Force Academy
- Mutually beneficial
- Statistically valid





Impacts



- Improved Community Safety
 - More Informed Decision Making
 - AFDCB
 - CSPD
 - City Attorney/Liquor Board
 - Continuity of Operations
 - Qualitative Comparison
 - Increased Accountability
 - Bar Owners





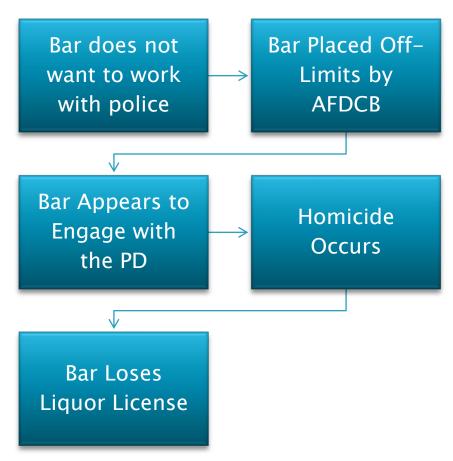
Example Reaction of Bar A







Example Reaction of Bar B





What's Next



- CSPD
 - Hookah Bars
 - Retail Establishments
 - Apartment Complexes
 - Schools
 - Geographic Areas
 - Risk Terrain Modeling
- Replication of Model in Other Cities



Questions?



Josh Levin

Criminal Intelligence Analyst
Strategic Information Center
Colorado Springs Police Department
(719) 667-2714

levinjo@ci.colospgs.co.us

Molly Miles

Crime Analysis Supervisor Strategic Information Center Colorado Springs Police Department (719) 444–7625

milesmo@ci.colospgs.co.us



Josh Levin

Criminal Intelligence Analyst Strategic Information Center Colorado Springs Police Department (719) 667-2714

<u>levinjo@ci.colospgs.co.us</u>

For more information, or to receive further documentation about this model, please feel free contact Josh Levin with CSPD.