INCIDENT-BASED DATA AS AN ANALYTICAL TOOL TO ADDRESS POLICY
Background

• South Carolina has a documented history of disproportionate minority contact in juvenile justice.

• We didn’t know much about DMC beyond measuring the degree to which racial disproportionality existed at various decision points in the process.

• The decision point at which disproportionality was greatest was arrest.
Data Sources

• Census data – Detailed population estimates for 2008 and 2009 were provided by the Office of Research and Statistics.

• SCIBRS – NIBRS compatible, 100% reporting. Juvenile arrests and offenses for the same years. Provided by the State Law Enforcement Division.
Defining Racial/Ethnicity Categories

For both census estimates and SCIBRS data, a combined racial/ethnic category was created. Ethnicity was used to categorize Hispanics, race was used to categorize Non-Hispanics.
SC Juvenile Population

- Slightly more than a million juveniles (age <= 16) in South Carolina.

- Racial/ethnic distribution - 57.8% White, 32.7% Black, 7.4% Hispanic, 1.6% Asian/Pacific Islander, 0.5% Native American.
Measuring Disproportionality

• Used Relative Rate Index (RRI) which is calculated by dividing the arrest or offense rate of a group of interest by the rate for the comparison group.

• Used White juveniles as the comparison group.

• RRI scores: an RRI score $< 1$ signifies a lower arrest rate than White juveniles, an RRI score $> 1$ signifies a higher arrest rate than White juveniles.
Operational Definition of Arrest

Arrest reports must be completed any time law enforcement takes a juvenile into custody, regardless of whether the juvenile was warned and released or actually charged/referred. The only exception is when a juvenile is taken into custody for their own protection.
## Arrest Disproportionality

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Rate</th>
<th>RRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian/Pacific Islander</td>
<td>23.8</td>
<td>0.2</td>
</tr>
<tr>
<td>Black</td>
<td>288.9</td>
<td>2.8</td>
</tr>
<tr>
<td>Hispanic</td>
<td>78.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Native American</td>
<td>33.5</td>
<td>0.3</td>
</tr>
<tr>
<td>White</td>
<td>105.1</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Note: all rates are expressed per 10,000 juveniles
## Disproportionality by Sex

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Rate</th>
<th>RRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minority</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>151.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Male</td>
<td>324.0</td>
<td>2.3</td>
</tr>
<tr>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>69.6</td>
<td>1.0</td>
</tr>
<tr>
<td>Male</td>
<td>138.6</td>
<td>1.0</td>
</tr>
</tbody>
</table>
Offense Categories

Created seven hierarchical offense categories:

- Serious Violent: 5.9%
- Weapons Offenses: 3.4%
- Lesser Violent: 19.2%
- Property Offenses: 25.9%
- Drug Offenses: 8.7%
- Status Offenses: 4.0%
- All Other Offenses: 32.8%
<table>
<thead>
<tr>
<th>Offense Category</th>
<th>Black RRI</th>
<th>Hispanic RRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious Violent</td>
<td>4.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Weapons Offenses</td>
<td>2.5</td>
<td>0.9</td>
</tr>
<tr>
<td>Lesser Violent</td>
<td>3.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Property Offenses</td>
<td>2.4</td>
<td>0.7</td>
</tr>
<tr>
<td>Drug Offenses</td>
<td>1.3</td>
<td>0.5</td>
</tr>
<tr>
<td>Status Offenses</td>
<td>1.4</td>
<td>0.9</td>
</tr>
<tr>
<td>All Other Offenses</td>
<td>3.1</td>
<td>0.8</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>On-site</td>
<td>Ticket</td>
</tr>
<tr>
<td>---------------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>Black</td>
<td>66.5%</td>
<td>14.1%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>63.2%</td>
<td>19.6%</td>
</tr>
<tr>
<td>White</td>
<td>58.0%</td>
<td>21.7%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>External</td>
<td>Internal</td>
</tr>
<tr>
<td>---------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Black</td>
<td>58.3%</td>
<td>41.7%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>61.6%</td>
<td>38.4%</td>
</tr>
<tr>
<td>White</td>
<td>59.7%</td>
<td>40.3%</td>
</tr>
</tbody>
</table>
## Juvenile Offenders by Premise Type

<table>
<thead>
<tr>
<th>Premise</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>2.8%</td>
</tr>
<tr>
<td>Highway/Streets</td>
<td>11.3%</td>
</tr>
<tr>
<td>Other</td>
<td>6.2%</td>
</tr>
<tr>
<td>Parking Lots</td>
<td>3.4%</td>
</tr>
<tr>
<td>Residences</td>
<td>38.8%</td>
</tr>
<tr>
<td>Retail</td>
<td>12.4%</td>
</tr>
<tr>
<td>School</td>
<td>25.1%</td>
</tr>
</tbody>
</table>
### Disproportionality by Premise Type

<table>
<thead>
<tr>
<th>Premise</th>
<th>Black RRI</th>
<th>Hispanic RRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>2.2</td>
<td>0.6</td>
</tr>
<tr>
<td>Highway/Streets</td>
<td>7.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Other</td>
<td>4.8</td>
<td>0.5</td>
</tr>
<tr>
<td>Parking Lots</td>
<td>5.0</td>
<td>0.4</td>
</tr>
<tr>
<td>Residences</td>
<td>4.7</td>
<td>0.8</td>
</tr>
<tr>
<td>Retail</td>
<td>5.2</td>
<td>0.7</td>
</tr>
<tr>
<td>School</td>
<td>6.7</td>
<td>0.8</td>
</tr>
</tbody>
</table>
Disproportionality by County

- Two of forty-six counties had an annual RRI of 1 or less for Black juveniles.
- Forty-two counties had an annual RRI of 2 or greater for Black juveniles.
- Annual RRIs among counties for Black juveniles ranged from 0.6 to 12.7.
Key Findings

• SCIBRS provides no support for officer discretion as a factor in disproportionate arrest rates.

• Geographic variation is limited, disproportionality is not concentrated in any county or region.

• Disproportionality is a problem among Black juveniles but not among Hispanic juveniles.
Key Findings Continued

• Gender is not a moderating factor for racial/ethnic disproportionality.

• Disproportionality was highest among arrests for violent offenses (both categories) and lowest among arrests for drug and status offenses.

• More than half of juvenile arrests were for all other (33%) or property (26%) offenses.
Key Findings Continued

• Nearly two-thirds of juvenile crime occurred at private residences (39%) or schools (25%).

• Disproportionality was greatest for offenses at residences and at schools.
Implications

• Important to verify law enforcement is adhering to juvenile arrest reporting requirements.

• More detailed analysis needs to be done looking at disproportionality within offense categories.

• Additional analysis needs to be done concerning disproportionality and juvenile crime at schools.
Welcome to Vermont:

March 25, 2014: -10 Degrees
PREVIEW

• Introduction & Background

• Research Methods

• Analysis of domestic violence using key NIBRS variables

• Policy analysis of domestic violence arrest patterns
  ◦ Arrest type
  ◦ Clearance rates: victim refusals
  ◦ Regression analysis: predictors of physical arrest
INTRODUCTION & BACKGROUND

• Funded by JRSA -- IBR Resource Center Grant

• Collaborative initiative with Vermont Domestic Violence Community:
  ◦ Data for prevention programs
  ◦ Analysis of arrest policies

• Vermont is a 100% NIBRS state pursuant to statute

• Certified since 1994 – 85 agencies reporting
INTRODUCTION & BACKGROUND

• Access to NIBRS data:
  ◦ Vermont Crime On-Line (Beyond 20/20)
  ◦ Data is analyzed using VCON
  ◦ Data can be downloaded in a .csv file

<table>
<thead>
<tr>
<th>Offense Type</th>
<th>Assault offenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim to Offender Relation</td>
<td>Intimate</td>
</tr>
<tr>
<td>Incident Date</td>
<td>2012</td>
</tr>
<tr>
<td>Measures</td>
<td>Number of Victimization</td>
</tr>
<tr>
<td>Victim Age</td>
<td>Number of Victimization</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Total</td>
<td>941</td>
</tr>
<tr>
<td>Under 18</td>
<td>23</td>
</tr>
<tr>
<td>18 - 20</td>
<td>91</td>
</tr>
<tr>
<td>21 - 29</td>
<td>354</td>
</tr>
<tr>
<td>30 - 39</td>
<td>232</td>
</tr>
<tr>
<td>40 - 49</td>
<td>154</td>
</tr>
<tr>
<td>50 - 59</td>
<td>78</td>
</tr>
<tr>
<td>Over 60</td>
<td>9</td>
</tr>
</tbody>
</table>
RESEARCH METHODS

- Analysis focuses on NIBRS victim, arrestee, and crime circumstance data
- Assault offenses
- Intimate or family victim/offender relationship
- 10,048 incidents
- 2007 - 2011
JURISDICTION: COUNTY

Chart 5: Number of Incidents by County

- Addison: 233
- Bennington: 882
- Caledonia: 841
- Chittenden: 669
- Essex: 878
- Franklin: 680
- Grand Isle: 398
- Lamoille: 290
- Orange: 91
- Orleans: 987
- Rutland: 240
- Total: 2711
VICTIM & OFFENDER CHARACTERISTICS

**VICTIMS**
- Mean Age = 31
- Median Age = 29
- 71% female
- 93% white
- 2.4% African American
- 12% under 18

**OFFENDERS**
- Mean Age = 32
- Median = 30
- 72% male
- 92% white
- 5% African Americans
VICTIM OFFENDER RELATIONSHIP

Chart 1: Victim Offender Relationship

- Intimate: 7768
- Child: 1132
- Immediate Family: 2133
- Extended Family: 644
TIME OF DAY AND DAY OF WEEK

Chart 4: Number of Incidents by Day of Week and Time
INJURY

Chart 3: Type of Injury by Victim/Offender Relationship

Type of Injury

- None
  - Intimate
  - Child
  - Family
  - Extended Family

- Minor
  - Intimate
  - Child
  - Family
  - Extended Family

- Serious
  - Intimate
  - Child
  - Family
  - Extended Family

Percentage:

0%  20%  40%  60%  80%  100%
WEAPON & TYPE OF INJURY

Chart 2: Type of Weapon and Type of Injury Caused

- Firearm
- Deadly Weapon
- Body
- Drugs
- Other
- None

Legend:
- None
- Minor
- Serious
POLICY ANALYSIS: ARREST TYPE
ARREST TYPE BY AGENCY

Chart 9: Type of Agency by Type of Arrest

- Local Police:
  - Arrest on a Warrant: 54%
  - Arrest Without Warrant: 10%
  - Citation to Appear: 37%

- Sherriff's Agency:
  - Arrest on a Warrant: 41%
  - Arrest Without Warrant: 3%
  - Citation to Appear: 41%

- State Police:
  - Arrest on a Warrant: 49%
  - Arrest Without Warrant: 7%
  - Citation to Appear: 40%
ARREST TYPE BY COUNTY

Chart 10: Type of Arrest by County

- Addison
- Bennington
- Caledonia
- Chittenden
- Essex
- Franklin
- Grand Isle
- Lamoille
- Orange
- Orleans
- Rutland
- Washington
- Windham
- Windsor

Legend:
- Blue: Arrest on Warrant
- Red: Arrest Without Warrant
- Green: Citation
POLICY ANALYSIS:
VICTIM REFUSALS
CLEARANCE: VICTIM REFUSED TO COOPERATE

Chart 8: Percent of "Victim Refused to Cooperate" Incidents by Agency Type

- State Police: 10.9%
- Sheriff's Agency: 0.3%
- Local Police: 2.7%

Percent of all incidents by Agency
CLEARANCE: VICTIM REFUSED TO COOPERATE
POLICY ANALYSIS:
REGRESSION ANALYSIS –
PREDICTORS OF PHYSICAL ARREST
PREDICTORS OF PHYSICAL ARREST

- Population density (Rural)
- Seriousness of offense
- Use of alcohol by defendant
- Age of the defendant (older defendants)
- Relationship (Intimate)
- Sex of victim (Female)
- Sex of offender (Male)
- Time of day (nighttime)
- Model predicted arrest 84% of the time
The reports featured in today’s webinar can be found on the Incident-Based Reporting Resource Center

http://www.jrsa.org/ibrrc/background-status/state_reports.shtml