Land Use Based Crime Rates: Exploring Patterns of Land Use and Crime Rates in Coquitlam and Port Coquitlam

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While it is certainly valuable to understand the counts of specific crime types by location, in order to contextualize the relationships between these features, rates are needed. Table 1 (below) further explores this relationship by calculating the rate of each crime by land use. While rates are often employed using population as a denominator, such a measure is not practical when exploring crime at the parcel level. In this case, rates have been calculated according to crimes per 100 lots, producing an understandable and comparable value across all categories of land use and crime.

Some interesting relationships emerge when comparing rates across land use. When standardized per 100 units, the Commercial land use, and the Civic, Institutional and Recreational land uses dominate the table. In 2005, Coquitlam displays 215 property crime occurrences for every 100 lots designated as Commercial. Likewise, in Port Coquitlam, there are 151 property crime occurrences for every 100 Commercial lots.

### Table 1: Crime rates by land use: Coquitlam and Port Coquitlam, 2005

<table>
<thead>
<tr>
<th>City</th>
<th>Land Uses</th>
<th>Parcel Counts</th>
<th>Crime Rate per 100 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Violent</td>
</tr>
<tr>
<td>Coquitlam</td>
<td>Residential Land Use</td>
<td>35468</td>
<td>1.46</td>
</tr>
<tr>
<td></td>
<td>Farm Land Use</td>
<td>18</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Commercial Land Use</td>
<td>1017</td>
<td>24.39</td>
</tr>
<tr>
<td></td>
<td>Industrial Land Use</td>
<td>129</td>
<td>3.10</td>
</tr>
<tr>
<td></td>
<td>Transportation, Communication, Utility</td>
<td>78</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Civic, Institutional and Recreational</td>
<td>559</td>
<td>54.56</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>37269</strong></td>
<td><strong>2.88</strong></td>
</tr>
<tr>
<td>Port Coquitlam</td>
<td>Residential Land Use</td>
<td>16366</td>
<td>1.89</td>
</tr>
<tr>
<td></td>
<td>Farm Land Use</td>
<td>82</td>
<td>2.44</td>
</tr>
<tr>
<td></td>
<td>Commercial Land Use</td>
<td>817</td>
<td>15.42</td>
</tr>
<tr>
<td></td>
<td>Industrial Land Use</td>
<td>185</td>
<td>1.08</td>
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<tr>
<td></td>
<td>Transportation, Communication, Utility</td>
<td>41</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Civic, Institutional and Recreational</td>
<td>223</td>
<td>28.70</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>17714</strong></td>
<td><strong>2.85</strong></td>
</tr>
</tbody>
</table>

Source: Crime data: RCMP E-Division PIRS Dataset; BCAA Land Use Dataset