American Indians and Our Police, Courts, and Jails

by Roger Benjamin

Little or no hard data has been available in Minnesota on how citizens relate to the criminal justice system or on how the system relates to them. Do police officers pay more attention to certain population groups than others? Are all citizens treated equally once they have been arrested? Where discretion is allowed, who is favored by police? by pre-court screening units? by prosecutors? by juries? and by judges? Are the same people treated differently in different areas of the state?

In order to explore these questions a small group of researchers at the University of Minnesota undertook a study of Minnesota's criminal justice system, specifically a study addressed to the situation of the American Indian within that system. The research, a CURA project, was supported by the Governor's Commission on Crime Prevention and Control with federal LEAA funds. Roger Benjamin, a professor in the Department of Political Science, headed the two year project which is now completing its reports. Copies of the full reports are available from our central offices and may be ordered by phone (612) 373-7833 or on the Publication Order Form in this REPORTER. Highlights of the first report, American Indians and The Criminal Justice System in Minnesota are presented here. A second report will be forthcoming that will describe how different minorities in the Twin Cities perceive local police performance and the quality of life available to them in the metropolitan area.

Our study developed out of dissatisfaction with the level of knowledge available on how one's race affects how one is treated in Minnesota at the time of arrest, during prosecution, court procedures, sentencing, and while in jail. We were particularly interested in the treatment of American Indians as compared with blacks and whites.

A second area of study was examining the relative importance of a number of different factors in determining how a person is treated once inside the Minnesota correctional system. We looked especially at race as a factor as compared with socio-economic background, and with previous criminal history.

This study was made possible because of the recently completed computerization of records at the state's Bureau of Criminal Apprehension. The new computerized system, the Offender Based Transactional System (OBTS) allows researchers to do statistical comparisons for various groups or parts of the state with relative ease. The type of data we present here and the kind of comparisons made among racial groups can now be done on a routine basis in similar areas of public policy research in Minnesota.

The study was divided into two parts: first, an examination of treatment by police, prosecutors, and the courts; and second, a comparative study of treatment within the corrections system.

In the first part we followed the criminal justice system from apprehension through prosecution, conviction, and sentencing. By examining the treatment
of Indians, blacks, and whites, we hoped to answer several major questions:
1. For what crimes are members of each racial group arrested?
2. Are there differences among races in the way cases are handled in Minnesota?
3. Are there differences among races in the type of sentences given?
4. Are there differences among regions in the way members of each race are treated?

In order to answer these questions we created a sample of 14,203 cases based on actual arrests and subsequent procedures as recorded in the data files of the OITS. The sample included all Indians and all blacks arrested in Minnesota for the three years from 1973 through 1975. Because of the size of the white population, we chose a randomly selected 2.5 percent sample of whites arrested during the same period. We included only arrests where a charge of misdemeanor or felony was made. The sample consisted of 6,209 whites, 3,485 blacks, and 4,509 American Indians.

Criminal Arrests
Overall, controlling for population size, we found that 2,53 Indians and 1.35 blacks were arrested for every one white arrested. Table 1 shows the proportional distribution of the types of charges made at the time of arrest within each population group. Juveniles of all races were arrested largely on charges of property related-crimes. Almost 39 percent of adult whites arrested were charged with liquor related crimes; while about 40 percent of the adult minorities arrested were charged with disorderly conduct, traffic violations, vandalism, and the like.

Prosecutions
When we examined the next stage in the criminal justice process, we discovered important differences among races. While 22 percent of arrested whites were held in jail, 32 percent of arrested blacks and 43 percent of arrested Indians were held. In addition, approximately 55 percent of whites were released on bail or released with no charges, white 47 percent blacks and 36 percent of Indians were released in like manner. These differences are important because there is some reason to believe that not being confined gives the accused a better chance to prepare his or her case.

Table 2 points to other differences in treatment after arrest among races. The table shows procedures that followed arrests for the eight major crimes in which considerable numbers of minorities were sent to court. For example, 38 percent of whites charged with homicide were held while more than 90 percent of minorities charged with the same crime were held. For the eight selected crimes listed in the table, more than 60 percent of the minorities were held and only a little over 20 percent were released on bail, while only 47 percent of whites were held and 37 percent released on bail.

### TABLE 1: Distribution of Major Classes of Arrests by Race (percents)

<table>
<thead>
<tr>
<th>Crime</th>
<th>White</th>
<th></th>
<th>Black</th>
<th></th>
<th>Indian</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Juv</td>
<td></td>
<td>Adult</td>
<td></td>
<td>Juv</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(31,191)</td>
<td></td>
<td>(48,939)</td>
<td></td>
<td>(2,230)</td>
<td></td>
</tr>
<tr>
<td>Homicide (murder, negligent manslaughter)</td>
<td>0.0</td>
<td>.0</td>
<td>0.0</td>
<td>.0</td>
<td>0.0</td>
<td>.0</td>
</tr>
<tr>
<td>Crimes against persons</td>
<td>4.0</td>
<td>6.2</td>
<td>19.4</td>
<td>17.1</td>
<td>11.5</td>
<td>13.3</td>
</tr>
<tr>
<td>(assault, robbery, kidnapping)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theft (larceny, auto theft, stolen property)</td>
<td>32.2</td>
<td>14.8</td>
<td>46.9</td>
<td>16.3</td>
<td>45.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Damages to property (burglary, arson)</td>
<td>10.3</td>
<td>3.6</td>
<td>12.2</td>
<td>2.3</td>
<td>16.3</td>
<td>4.5</td>
</tr>
<tr>
<td>Forgery (fraud, forgery, counter forgery)</td>
<td>1.5</td>
<td>4.2</td>
<td>6.2</td>
<td>4.2</td>
<td>0.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Sex offenses (rape, prostitution, &amp; others)</td>
<td>1.0</td>
<td>1.8</td>
<td>2.6</td>
<td>8.5</td>
<td>0.0</td>
<td>1.7</td>
</tr>
<tr>
<td>Narcotics</td>
<td>7.7</td>
<td>7.7</td>
<td>9.3</td>
<td>3.4</td>
<td>3.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Liquor-related crimes (driving under the influence, liquor laws)</td>
<td>15.6</td>
<td>38.7</td>
<td>.4</td>
<td>11.3</td>
<td>4.7</td>
<td>24.7</td>
</tr>
<tr>
<td>All others (disorderly conduct, traffic, vandalism, &amp; other)</td>
<td>27.7</td>
<td>22.9</td>
<td>17.0</td>
<td>37.9</td>
<td>18.2</td>
<td>41.8</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>103.0</td>
<td>100</td>
<td>100.0</td>
<td>100</td>
<td>101.0</td>
<td>100</td>
</tr>
</tbody>
</table>

* N. (the absolute numbers) are larger than the total sample size because of multiple charges made at time of arrest. Variation in the original data from the OITS also causes column sums to vary from 100 percent total.
* Numbers here were too small to register even one-tenth of one percent.
TABLE 2: Placements During Prosecution for Eight Major Crimes by Race (percents)

<table>
<thead>
<tr>
<th>Crime</th>
<th>Being Held W</th>
<th>Being Held B</th>
<th>Being Held I</th>
<th>Released on Bail W</th>
<th>Released on Bail B</th>
<th>Released on Bail I</th>
<th>Released with No Charge W</th>
<th>Released with No Charge B</th>
<th>Released with No Charge I</th>
<th>Referred to Juvenile Unit W</th>
<th>Referred to Juvenile Unit B</th>
<th>Referred to Juvenile Unit I</th>
<th>Other* W</th>
<th>Other* B</th>
<th>Other* I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homicide</td>
<td>38</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assault</td>
<td>35</td>
<td>49</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robbery</td>
<td>88</td>
<td>57</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burglary</td>
<td>49</td>
<td>73</td>
<td>61</td>
<td>32</td>
<td>13</td>
<td>23</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>10</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto Theft</td>
<td>43</td>
<td>61</td>
<td>70</td>
<td>25</td>
<td>11</td>
<td>15</td>
<td>3</td>
<td>12</td>
<td>3</td>
<td>20</td>
<td>5</td>
<td>5</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forgery</td>
<td>61</td>
<td>61</td>
<td>69</td>
<td>32</td>
<td>16</td>
<td>23</td>
<td>0</td>
<td>6</td>
<td>4</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narcotics</td>
<td>41</td>
<td>58</td>
<td>60</td>
<td>44</td>
<td>28</td>
<td>28</td>
<td>8</td>
<td>8</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Larceny</td>
<td>18</td>
<td>24</td>
<td>38</td>
<td>66</td>
<td>65</td>
<td>54</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AVERAGE 47 | 61 | 67 | 37 | 23 | 22 | 6 | 6 | 4 | 6 | 3 | 2 | 5 | 8 | 5

*This category includes administrative discharge, return to military, deceased, deported, and voluntary departure from the United States.

TABLE 3: Sentencing for Eight Major Crimes by Race (percents)*

<table>
<thead>
<tr>
<th>Crime</th>
<th>Fines W</th>
<th>Fines B</th>
<th>Fines I</th>
<th>Confinement of 1 or more years W</th>
<th>Confinement of 1 or more years B</th>
<th>Confinement of 1 or more years I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homicide</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Assault</td>
<td>17</td>
<td>17</td>
<td>33</td>
<td>67</td>
<td>58</td>
<td>15</td>
</tr>
<tr>
<td>Robbery</td>
<td>0</td>
<td>19</td>
<td>5</td>
<td>20</td>
<td>19</td>
<td>25</td>
</tr>
<tr>
<td>Burglary</td>
<td>6</td>
<td>16</td>
<td>8</td>
<td>63</td>
<td>11</td>
<td>44</td>
</tr>
<tr>
<td>Auto Theft</td>
<td>7</td>
<td>0</td>
<td>26</td>
<td>40</td>
<td>22</td>
<td>38</td>
</tr>
<tr>
<td>Forgery</td>
<td>0</td>
<td>4</td>
<td>9</td>
<td>64</td>
<td>54</td>
<td>46</td>
</tr>
<tr>
<td>Narcotics</td>
<td>14</td>
<td>7</td>
<td>17</td>
<td>45</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>Larceny</td>
<td>11</td>
<td>7</td>
<td>19</td>
<td>42</td>
<td>42</td>
<td>44</td>
</tr>
</tbody>
</table>

AVERAGE 7 | 9 | 16 | 50 | 32 | 34 | 5 | 13 | 7 | 5 | 7 | 10 | 25 | 33 | 25

*Since there are other types of sentences, the total percentage may be less than 100.

The Courts

By the time the accused have been through the process of arrest, booking, initial appearance, and preliminary hearing, about 90 percent of all those arrested have been freed. An overwhelming majority of those who remain, we found, pleaded guilty (85 percent of the whites, 73 percent of the blacks, and 84 percent of the Indians).

Looking at the overall disposition of cases, we found that the only significant difference among races was in the number of cases dismissed. Close to twice as many minority cases were dismissed as white cases. Apparently, it is not unusual for an Indian or a black to spend time in jail without bail only to have the case dismissed. For whites this experience is much less common. Rates of conviction, on the other hand, were similar across race. The hiring of a private attorney as compared with using a public defender did not seem to affect the ultimate outcome of the case.

Sentencing

Clear differences were again apparent when we examined the types of sentences imposed on members of each race (Table 3). Again looking only at the eight major crimes we found that overall 50 percent of the whites were given probation of one or more years, a figure almost 20 percentage points above that for the minorities. More than 60 percent of the whites were given probation when it came to homicide, assault, burglary, and forgery. Of those given confinement of one year or more, blacks averaged 8 percent higher than other groups.
Regional Differences

In Minnesota, a majority of American Indians live outside the Twin Cities area. Since crimes are generally associated with cities, we decided a comparison between metropolitan and non-metropolitan groups would be useful. For this purpose we divide the state into three groups of counties:

Metro, the five metropolitan counties each with an Indian population greater than 200 in the 1970 census: Hennepin, Ramsey, Anoka, Dakota, and Washington counties.

Northern, the ten northern counties each with more than 200 Indians as estimated in the 1970 census: Becker, Beltrami, Carlton, Clearwater, Itasca, Koochiching, Mahnomen, Mille Lacs, Pine, and St. Louis counties.

Other, the remaining counties in Minnesota.

We looked at the number of people arrested per thousand population for each racial group in the three regions. We found Indians in the rural northern counties were arrested 2.7 times more often than Indians in the metro area and 6 times more often than whites in the northern counties.

Treatment through prosecution and the court system also differed. All offenders arrested outside the metro area were more likely to be held than those arrested in the metro area. The number of cases dismissed for arrested northern Indians was about 25 percent while for metropolitan Indians it was 15 percent (Table 4). This discrepancy becomes even larger when one adds to it the fact that about two-thirds of all Indians arrested in the state were arrested in the north. Thus a substantial number of northern Indians wait in jail only to have their case dismissed.

The Corrections System

In the second part of our study, we asked what does it mean to be an American Indian once inside the correctional system? Again, we explored the question through statistical analysis. Data was provided by the Minnesota Department of Corrections. We developed a sample based on a random selection from reports of individuals within the state correctional institutions in 1976: 438 whites (2.5 percent), 863 blacks (35 percent), and 798 Indians (35 percent).

A look at race, age, and sex breakdowns in the sample (Table 5) suggests a number of points. First, incarceration is primarily a male phenomenon, over 80 percent of the sample are male. The proportion of females among the Indians was 24 percent while that among whites was 17 percent and for blacks, 12 per-

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**TABLE 4: Results of Prosecution and Court Action by Race and Region (percents)**

<table>
<thead>
<tr>
<th></th>
<th>Metro</th>
<th>Northern</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W</td>
<td>B</td>
<td>I</td>
</tr>
<tr>
<td>N=</td>
<td>(117)</td>
<td>(278)</td>
<td>(48)</td>
</tr>
<tr>
<td>Being held</td>
<td>2.6</td>
<td>2.1</td>
<td>4.2</td>
</tr>
<tr>
<td>Released on bail</td>
<td>9.4</td>
<td>4.0</td>
<td>4.2</td>
</tr>
<tr>
<td>Pending</td>
<td>14.5</td>
<td>11.9</td>
<td>25.0</td>
</tr>
<tr>
<td>Acquitted</td>
<td>2.6</td>
<td>2.1</td>
<td>0</td>
</tr>
<tr>
<td>Dismissed</td>
<td>23.0</td>
<td>30.9</td>
<td>14.6</td>
</tr>
<tr>
<td>Convicted</td>
<td>39.3</td>
<td>45.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Other</td>
<td>8.6</td>
<td>4.0</td>
<td>2.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

**TABLE 5: Sex and Age Distribution Within the Corrections System by Race (percents)**

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>17-25</th>
<th>26-35</th>
<th>35+</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>83.1</td>
<td>16.9</td>
<td>56.8</td>
<td>30.4</td>
<td>8.4</td>
</tr>
<tr>
<td>Black</td>
<td>88.3</td>
<td>11.7</td>
<td>40.3</td>
<td>33.0</td>
<td>17.0</td>
</tr>
<tr>
<td>Indian</td>
<td>76.3</td>
<td>23.7</td>
<td>62.3</td>
<td>25.2</td>
<td>9.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>52.1</td>
<td>29.5</td>
<td>12.4</td>
<td>6.0</td>
<td></td>
</tr>
</tbody>
</table>
cent. The table also reafirms that crime is strongly associated with adolescence and youth. The number of persons age 10-17 in the total population of Minnesota in 1970 was 17 percent. More than half of the prison sample were 17 or younger and the proportion of adolescents in the Indian sample (62%) was significantly higher than that of blacks (40%). The proportion of blacks who were 26 years old or more was substantially higher than the same proportion in the white and Indian groups.

By preparing a series of regression analyses for this sample group we were able to explore the effects of race, education, employment patterns, mental and physical health, level of employable skills, family stability, and previous criminal record on treatment within the correctional system. The results of this analysis indicate that, within Minnesota prisons, race drops out as a significant factor in determining length of incarceration. The variables associated with poverty — family instability, unemployment, low education, alcohol and drug abuse, and mental and physical problems — emerged as significant. We did not find discriminatory treatment of those in the prison population by race. Once in prison, each group appeared to be treated in a similar manner. Of course, if one asks which racial groups tend to be more related to these poverty factors, the circle is closed. For clearly in Minnesota, as elsewhere, minority citizens are more likely to be poor.

Major Findings

In sum, we found that arrest rates are higher for American Indians and blacks than for whites and arrested whites are more likely to secure bail than Indians. However, acquittal or dismissal rates are higher for Indians than for whites. The result is that a substantial number of Indians spend time in jail without bail only to have their cases dismissed. Whites are also more likely to receive probation than Indians. The northern system of justice seems to discriminate against Indians more than the system in the metro area. But once a person is in prison, race drops out as a significant factor in how one is treated.

The study itself comprises a detailed statistical breakdown of many specific items that may be of interest to practitioners in and observers of the Minnesota criminal justice system.

Pratt joins Abrahamson in chairing AUCEQ

The All-University Council on Environmental Quality (AUCEQ) has additional leadership this year with the appointment of Douglas C. Pratt as co-chair of the council along with Dean Abrahamson. Pratt, a professor of botany, has been concerned with environmental problems and bioenergy potential for over a decade. Trained with a special emphasis in plant physiology and photochemistry, his recent work in developing cattails as a potential new source of energy has intrigued colleagues at the University.

Pratt received all his post secondary formal education at the University of Minnesota and began his teaching here as an instructor in the Department of Botany. He now serves as head of that department. Four years were spent at Carleton in the mid-1960s. At the University he has served two terms in the University Senate and held numerous other committee positions. He has been both vice-president and president of the American Association of University Professors, Twin Cities Chapter. Pratt is currently a member of the Resource Council for the Science and Technology Project of the Minnesota Legislature. Also active in community affairs, he has been involved in PTA and other education committees, his local and campus church, the DFL, Eastside Neighborhood Services, and the Human Relations Council of Northeast Minneapolis.

Other Changes for the Environmental Council

Offices of the All-University Council on Environmental Quality have moved from the West Bank to Room 319 Walter Library. The phone number remains the same: 373-7796.

Mary Trigg, assistant administrator for the Council, has taken a leave of absence until the summer of 1980. She is serving as research consultant with the DFL caucus research staff, specializing in energy, environment, natural resources, and health care.

New faces in the Council offices are: Penelope Burke, the secretary; Timothy Kelly, project director for the environmental assessment project; Suzanne Lanzolla, graduate student in public health and assistant in the environmental assessment project; and Thomas Peek, graduate student in public affairs and administrative fellow for general council activities.
New Method of Monitoring Growth Explored in Wright County

by William J. Craig, CURA Staff

William J. Craig is the assistant director of CURA. Before coming to CURA, eight years ago, he was director of the University's Social Science Research Facilities Center. Land use and information systems are his principal research interests. Craig is nearing completion of a doctorate in the geography department at the University.

Urban sprawl, loss of prime agricultural lands, incompatible neighboring uses, degradation of the environment, unsafe building sites, leapfrog development, and dissonance over paying for public services: these are the kinds of land use issues that are making headlines across the country. Many of these problems could have been averted with proper planning based on an evaluation of current land use patterns and trends.

There is a great need for continued monitoring of growth and its impact on land use. Yet land use inventories occur at most once a decade. Ironically the normal operating files of government usually have all the data needed to monitor land use change and development. Assessor's records and all sorts of permit files do this monitoring on a regular basis. If a new home is built, the owner has to make an application for one or more of the following: building permit, zoning permit, driveway permit, or sanitation permit. If a swamp is to be drained, a permit must be issued by the State Department of Natural Resources. The list is endless. The problem is that these various records detail individual events but are seldom organized or summarized to give an overview of the total impact. If data recorded on a day-to-day basis could be collected regularly, if the lands involved could be located precisely, and if the information could be organized for use within existing computer systems, warnings of changes in existing land use could be made early enough to be of benefit.

Several large jurisdictions outside Minnesota have already begun to use building permit information for monitoring. The UDIS system in Fairfax County, Virginia uses permits as one means to anticipate new growth and aid in planning for public services. The city of Seattle has used permit files to determine dollar value of new construction in high amenity areas. And in Snohomish County, Washington new development has also been mapped. These summaries and maps have allowed local governments to better control their destiny.

Could this type of monitoring system be used in non-metropolitan areas? What work would have to be done to transform files of building permits into useful maps and tables indicating development and land use change? How reliable would the results be? Could this work be done for a reasonable cost?

It was to answer these questions that CURA undertook a pilot study in Wright County on the fringe of the Twin Cities metropolitan area (Figure 1). Wright, though rural and formerly with a stable population, is now one of the fastest growing counties in the state. Environmental problems have resulted. At least one major dispute has arisen over the question of who should pay for public facilities for these new developments. Against this background the county has had to freeze construction in one location and has drawn up a new land use

Figure 1: Location of Wright County
A more regular monitoring system might have caught these problems sooner and surely would have aided in the drafting of the new land use plan.

**CURA's Pilot Study**

Eight years of Wright County building permits were collected, 1969-1976. Permits are separately issued by each of fifteen cities, by Frankfort Township, and for the remaining townships by the county (Figure 2). Copies were made of each permit application for major new construction in every jurisdiction. In all, 4,448 useable permits were found and copied.

Mention should be made of the different state of records in the various jurisdictions. The county keeps a copy of the single sheet application and files this alphabetically by name for each year. While some of the cities use this same procedure, many variations were found. Some permits are filed chronologically. Often the record is simply a list of permits granted, to whom, and for what purpose. The permit process seemed more informal in the cities. In some, records from the earlier years could not be located. This mix is probably representative of the condition of records across the state.

The information collected was coded onto computer sheets. Once the data was in the computer it would be possible to summarize it in any number of ways for a fairly low cost. Table 1, for example, presents a summary of the value of new year-round single-family home construction in the townships of Wright County. It is interesting to note that Otsego Township, which is the area most accessible to the Twin Cities by interstate highway, had the largest number of new units with nearly the largest total dollar investment, but with one of the lowest average values per unit.

More precise geographic location (geocode) was needed to indicate where this development was actually occurring and how it was affecting land use. After all, if most of the development was within existing subdivisions, no land use change would have occurred. The land referred to on each permit was therefore located to a quarter-quarter section (forty acres) of the Public Land Survey. This work was tedious since only 8 percent of the collected permits contained such a legal description. Lands designated in other permits were located using platbooks, subdivision plat maps, public land survey maps, and street maps. Twenty percent of the new development could not be located even with these aids. Local (township) assessors and village clerks assisted in locating most of these remaining lands.

**Figure 2: Cities and Townships of Wright County**

![Map of Wright County with township and city names labeled]

ALL CAPS indicates a township
Upper and Lower Case indicates a city

**TABLE 1: Value of New Single-Family Homes by Township; 1969-1976**

<table>
<thead>
<tr>
<th>Townships</th>
<th>Number Units</th>
<th>Mean Value</th>
<th>Total Value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albion</td>
<td>73</td>
<td>$33.8</td>
<td>$ 2,468</td>
</tr>
<tr>
<td>Buffalo</td>
<td>171</td>
<td>35.8</td>
<td>6,120</td>
</tr>
<tr>
<td>Chatham</td>
<td>98</td>
<td>36.3</td>
<td>3,561</td>
</tr>
<tr>
<td>Clearwater</td>
<td>73</td>
<td>33.3</td>
<td>2,430</td>
</tr>
<tr>
<td>Cokato</td>
<td>31</td>
<td>34.4</td>
<td>1,068</td>
</tr>
<tr>
<td>Corinna</td>
<td>191</td>
<td>35.1</td>
<td>6,704</td>
</tr>
<tr>
<td>Franklin</td>
<td>202</td>
<td>40.4</td>
<td>8,171</td>
</tr>
<tr>
<td>French Lake</td>
<td>74</td>
<td>33.1</td>
<td>2,454</td>
</tr>
<tr>
<td>Maple Lake</td>
<td>141</td>
<td>35.1</td>
<td>4,951</td>
</tr>
<tr>
<td>Marysville</td>
<td>95</td>
<td>38.8</td>
<td>3,682</td>
</tr>
<tr>
<td>Middleville</td>
<td>43</td>
<td>32.6</td>
<td>1,400</td>
</tr>
<tr>
<td>Monticello</td>
<td>281</td>
<td>36.4</td>
<td>10,238</td>
</tr>
<tr>
<td>Otsego</td>
<td>324</td>
<td>32.9</td>
<td>10,661</td>
</tr>
<tr>
<td>Rockford</td>
<td>304</td>
<td>36.7</td>
<td>11,152</td>
</tr>
<tr>
<td>Silver Creek</td>
<td>115</td>
<td>39.0</td>
<td>4,481</td>
</tr>
<tr>
<td>Southside</td>
<td>106</td>
<td>33.7</td>
<td>3,575</td>
</tr>
<tr>
<td>Stockholm</td>
<td>25</td>
<td>41.1</td>
<td>1,029</td>
</tr>
<tr>
<td>Victor</td>
<td>52</td>
<td>34.2</td>
<td>1,781</td>
</tr>
<tr>
<td>Woodland</td>
<td>43</td>
<td>35.7</td>
<td>1,536</td>
</tr>
</tbody>
</table>

*Assumes units missing permit data necessary to estimate value had values equal to the means of other units in the township.
When all the geocoding was complete and the data placed in the computer, it was possible to produce precise computer-generated maps showing changes in Wright County over the eight year study period. Figure 3, for example, maps the location of all permits for residential construction. Much of the development is scattered. Where concentrations occur, the site is usually quite accessible by highway or is lakeshore property. A comparison of Figure 3 with computer-generated soil maps shows that residential construction during this period clearly avoided the more productive soils.

Accuracy of Monitoring Growth by Permits
The Wright County study showed that building permits could be used to indicate development and land use change. It remained to be proven that these indications were accurate. Field trips were made to various parts of the county to look for mismatches between information from permits and what was on the ground. A few homes were found without permits and a few permits existed for homes never built. In total, these errors amounted to 7 percent. Mobile homes that had been removed added another 4 percent error. Errors by the study staff in collecting permits or in locating lands referred to in permits added a final 8 percent to these errors. Most of this error (19 percent total) would be eliminated in the future were
the jurisdiction issuing permits to enforce new and stricter standards for permit application and data capture. The geocode, for example, could have been added when the application was submitted and then checked by an inspector.

Even with these errors the information collected was quite useful and certainly better than standard sources. Conventional monitoring schemes, based on air photos and subsequent air photo interpretations, have proved inadequate because of the expense involved, the infrequency with which they occur, the amount of effort needed for interpretation, the lack of categorical detail or spatial accuracy, and the frequent inaccuracy of results (as much as 25 percent or more error). Attempts were made to check land use change against change indicated by air photo interpretation. With air photography, changes in subjective interpretations and shifts in location reference led to larger errors than those found with the permits. Information on land values, obtained from permits, could never have been provided by air photo interpretation.

Costs of This Method

A great number of useful maps and tables were produced from the Wright County pilot study. It is estimated that similar work for Wright County could be done in the future for as little as $200 annually. Much more effort than this goes into generating more standard reports to the county boards, city councils, and the Census Bureau. These required reports could be generated from a computerized permit system. The more interesting and useful tables and maps, like those presented here, would be nearly free by-products of such a system.

Prospects for the Future

Could this approach be easily transferred to other counties in the state? The answer is not clear. The State Building Code with its intended standard building permit application would have provided a solid data base across the state. However, the 1979 legislature restricted the mandated coverage of the code to the seven counties of the metropolitan area and a few cities that had already adopted it. Many remaining counties have building permit systems as efficient as Wright's and could make use of such a system. However it is also known that such useful information is lacking in many counties. In these, no permits may be required for construction except near lakeshores. In other counties only a sanitary permit is required and available to indicate new construction. Finally, even in counties with an operating permit system, the administration of the system may be so lax as to yield unusable information. Perhaps, if useful maps and tables were provided from permits, counties would become more interested in implementing and maintaining a carefully managed building permit system.

Building permits do offer a useful means for a county to monitor itself. Computerization of building permits offers an inexpensive way to prepare useful and required reports. Careful attention to detail in administering the program and the addition of a geocode to each application would allow for the generation of accurate tables and maps. The usefulness of such a system to counties—and to the state for preparing summaries—is dependent on the willingness of the county to require good initial data collection.

A full technical report on the study in Wright County is available from CURA upon request. To obtain the report (Building Permits Monitor Development and Land Use Change in Wright County) phone (612) 373-7833 or return the publication order form in this CURA REPORTER.

Student Papers in the Public Administration Library

Research papers prepared by masters degree candidates in the Hubert H. Humphrey Institute of Public Affairs are housed in the Public Administration Library after they have been approved by the institute's faculty. Because many of these papers are of interest to our readers, we periodically list recently acquired papers, (Plan B papers, as they are called). The Public Administration Library is located in room 356, Blegen Hall, West Bank Campus of the University of Minnesota (373-2892). The faculty advisor for each study is indicated at the end of the entry.

Lindblom, John. Barry P. A benefit-cost analysis of the proposal for a stadium-garage complex in downtown Minneapolis, by Barry Johnson, Hille Dais, and Jay Kiedrowski. 1972. 60p + Appendices. Arnold. (For other copies check under other authors.)
Reid, Joseph M. Central themes from the writings of Michael Polanyi. 1979. 40p. Noble.


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Reid, Joseph M. Central themes from the writings of Michael Polanyi. 1979. 40p. Noble.
New CURA Publications

Taxes and the Minnesota Community

Taxes in Minnesota are high, but benefits to the community from those taxes are also high. How does the collection of taxes statewide and the redistribution of tax monies for different state needs work? And how does taxation in Minnesota compare with the other forty-nine states? In a series of forty-five maps and figures, John Borchert presents some of the intricacies of our tax system in Minnesota. The accompanying text guides the reader through a complex subject with amazing ease. Much of the data presented here is part of a current project to update and revise the Atlas of Minnesota Resources and Settlement, a cooperative CURA-Minnesota State Planning Agency project.

Excerpts from Taxes and the Minnesota Community

"...Although the state's income tax rates in 1975 were at the top, rates were near or moderately above the average in other types of taxation. The high income tax reflected in part a deliberate shift from almost sole dependence on the property tax to other and more equitable taxes to raise the increased revenue needs of state and local governments in our modern society." p. 3

"...While taxes have grown most at the state level, spending has grown most at the local level. Increased state spending has gone mainly to grants-in-aid to local governments and school districts-two-thirds to elementary and secondary education. The increased use of state aids, again, reflects deliberate policies:

a) an attempt to equalize educational opportunity by shifting educational support from local to statewide resources,
b) an attempt to keep school management responsibility in the local districts, and
3) an historic commitment to education as a long-term investment for the community..." p. 4

"...In 1975 Minnesota was one of eleven states whose citizens received less money from federal expenditures than they paid in federal taxes. Relatively low defense spending and low federal government employment were the main reasons for the deficit. While 18th in population, Minnesota ranked 28th in per-capita volume of defense contracts, 47th in per-capita outlay for defense salaries, and 27th in federal government civilian employment..." p. 4

Two of the forty-three maps in Taxes and the Minnesota Community

![Map](image)

Quartiles

- 65
- 90
- 115 (median)
- 126
- 244

Total outlays $300.87 billion;
to Minnesota: $3.62 billion.

Figure 2. Federal outlays as a percent of federal taxes, 1975.
... Combined state aids and state payroll equal or exceed 10 percent of personal income in nearly half of the counties in the state, mostly in the north (figure 43). The figure exceeds 5 percent in every county except one. Most state aid payments, along with federal aids, support jobs for professionals, tradesmen, or technicians who, in turn, provide public goods and services. Thus state aids and the state payroll are important factors in urban employment and the pattern of urban development in Minnesota...." p. 26.

"... State aids are confined to selected needs; so they make up only a small, but significant, part of the income gap between low income and high income counties...." p. 28.

"... Given the progressive income tax rates and geographic concentration of above average income in a few counties, state aids benefit most of the counties and a majority of the population...." p. 28


An architect and a special education teacher present their experiences with teaching architecture to a group of sixth grade students. Their program was developed under the aegis of Project Rediscovery, a CURA program that provides selected Minnesota communities with University students to study community architectural and planning problems and suggest solutions. In Red Wing a course parallel to that of the University students was created for sixth graders. The goals and methods of that course are presented here in hope of stimulating similar projects in other communities and schools. This four-color brochure was a joint project of CURA and the Minnesota Society American Institute of Architects. Funding was also provided by the National Endowment for the Arts and the Minnesota State Arts Board.

A Student Guide to Graduate Study in Housing: Courses, Faculty, and Resources at the University of Minnesota Twin Cities Campus 1979-80. Elaheh Aliabadi-Iststrom and Sonia Sands. CURA 79-4. 36pp. Free.

A number of departments at the University offer courses in housing but a complete listing of such courses has not been available until now. This guide, prepared by two graduate housing students, is intended to help both students and faculty become aware of the wide range of opportunities for graduate study in housing at the University of Minnesota, Twin Cities. Courses on housing and courses relevant to housing are identified. University faculty and resource persons whose special interests relate to housing are also listed along with a variety of resource centers and libraries available for housing research within the Twin Cities area. The guide is a joint publication of CURA and the Design Department, College of Home Economics, where the only University degree in housing is offered.

Courses in the Field of Aging: Class Schedule 1979-80. All University Center on Aging. 19pp. Free.

Courses concerned with aging at the University of Minnesota are offered in over thirty different disciplines. This guide to what classes are available when and where is designed to aid the student who is interested in aging find the appropriate classes. It can be used in conjunction with the Center's Courses and Programs of Study in the Field of Aging: A Student Guide, which offers more detailed course descriptions.


Building Permits Monitor Development and Land Use Change in Wright County. William J. Craig. CURA 79-5. 129 pp. Free. See p. 6 of this REPORTER for a summary.

Figure 43. State aids and state payrolls as a percent of personal income, 1976.
CURA Publication Order Form

Please send me the following publications:


☐ Courses in the Field of Aging: Class Schedule 1979-80. All University Center on Aging. 19 pp. Free.

☐ A Student Guide to Graduate Study in Housing: Courses, Faculty, and Resources at the University of Minnesota Twin Cities Campus 1978-80. Elaheh Alia-badi-Idstrom and Sonia Sands. CURA 79-4. 36 pp. Free.


☐ Recent Population Change in the United States. David J. Borchert and James D. Fitzsimmons. CURA 78-5. 30 pp. $3.00.


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The CURA REPORTER is published by CURA to provide information about:

• what CURA projects are doing
• related programs and projects in the University
• related programs in other Minnesota colleges and universities, and
• actions outside the educational establishment which affect our plans and programs.

Comments and contributions are welcome. Thomas M. Scott, director; Thomas L. Anding, associate director; William J. Craig, assistant director; Judith H. Weir, editor.