Defining Rural Oregon:
An Exploration

Mindy Crandall
Bruce Weber

November 2005

RSP 05-03
Defining Rural Oregon: An Exploration
A Rural Studies Program Paper, RSP 05-03
Mindy Crandall & Bruce Weber, Oregon State University
November 2005

I. Introduction
Oregon is a diverse state. Like many Western states, Oregon has large cities and vast open spaces; dense urban centers along with isolated ranches and farms. Conditions in the Willamette Valley, where the majority of the state’s population lives, are very different from those in more rural, isolated areas. During the 1990s, jobs and incomes grew faster in the urbanized areas of the state than in rural ones. Oregonians increasingly saw references to “two Oregons”: one prosperous and urban, with increasing incomes and access to jobs, education, and services; and one lagging and rural, with diminishing opportunities for work in the natural resource jobs that had been the economic mainstay for so many years. Although most people can visualize what the extreme rural and urban areas are – for example, downtown Portland as compared to Steens Mountain – the state is full of places that match neither of those definitions. What makes an area rural or urban? Many definitions of rural and urban criteria have been developed over the years, some for use across the whole country, some just for use in Oregon. Definitions use such criteria as overall population, population density, commuting patterns, and/or distance from other settlements in determining rural and urban areas.

In this report we explore alternative ways of defining “rural” by mapping and comparing four different classification systems: three created for nationwide use, and one created specifically for Oregon. We map the different classifications to allow assessment of how well each matches many peoples’ perceptions about rural and urban areas of the state. We also compare some basic demographic information across the first three classifications allowing us to explore how the demographic profile of rural Oregon changes as definitions of rural change. Several of the most

---

1 Mindy Crandall is Faculty Research Assistant and Bruce Weber is Professor, Agricultural and Resource Economics Department, Oregon State University. Support for this paper was provided by the OSU Rural Studies Program. Hannah Gosnell’s insightful comments greatly improved the clarity of the paper.

2 Another popular characterization of the diversity of the state is the “nine Oregons” identified by the Oregonian in their series that appeared in 2003. The series can be found on the Oregonian website http://www.oregonlive.com/special/ninestates/
frequently noted differences between the ‘two Oregons’ are the lower educational attainment, lower employment rate, lower average incomes, and higher poverty rates of rural parts of the state. To assess how different classifications affect each of these conclusions, we look at how urban and rural compare under each classification system in terms of the percent of the population with at least a four-year college degree; the percent living in poverty, as determined by the Census Bureau; the percent living with incomes below 185% of the poverty line and the median household income. To gauge how much of Oregon is rural under different systems, we compare the percent of the land and population that is ‘urban’ under each definition.

II. Rural and Urban: The Census Bureau Classification

The Census Bureau defined a place with 2,500 or more as “urban”; all other places were considered rural. Although the basic 2,500 person dividing line between urban and rural settlements has remained constant, the 2000 Census uses a complex algorithm involving population size (2,500 or more) and population density (500 persons per square mile or more) to classify a settlement as either rural or urban.

In order to understand the Census classification of rural and urban, it is necessary to understand the basics of “census geography.” The Census divides the nation into census blocks, the smallest geographic entity for which the Census reports population data. These are aggregated into block groups (which generally have between 300 and 3,000 people), which are in turn grouped into census tracts designed to be relatively homogeneous in terms of population and economic characteristics.

Without going into detail on the 10 steps in the Census algorithm, urban areas are defined starting with a block group that has a population density of 1,000 persons per square mile and adding on block groups and blocks that have a density of 500 persons per square mile. If the

---

3 The Census poverty determination compares a household’s income in the previous year with a threshold value that varies with household composition and is adjusted yearly for inflation. In 2004, the poverty line for a family of four composed of two children and two adults was $19,157.

4 The 185% line is often used as an income qualifier for non-cash government assistance programs such as Food Stamps. Those living below this line are sometimes identified as the “near poor”.

5 According to Michael Ratcliffe, Chief of the Geographic Standards and Criteria Branch of the U.S. Census Bureau’s Geography Division, the Bureau formally adopted the 2,500 person definition of urban as the official definition in 1910, even though it had been used in earlier Census Bureau publications.
territory so defined has 2,500 or more people, it is then called an urban area. Urban areas are called “urbanized areas” if they have 50,000 or more people and “urban clusters” if they have fewer than 10,000 people. All other areas are rural.

The 156,232 blocks in Oregon in the 2000 Census have been aggregated into 2,490 block groups. We have classified block groups in which at least 95% of the population is urban as “urban” and those in which less than 95% of the population is urban as “rural.” The rural and urban areas of Oregon based on these categories are mapped below (Figure 1).

Figure 1 - Rural and Urban Oregon (Block Group Approximation)

---

6 An urban definition requiring 100% of the population in the block group to be “urban” yielded some discontinuous maps that seemed to us to violate the spirit of the new Census urban and rural classification procedure. After some sensitivity analysis using different cutoffs, we adopted this 95% criterion as most faithful to the spirit of the Census procedure.
This classification has many advantages. Although the method for determining urban areas has changed somewhat over the years, the basic 2,500 persons dividing line has remained constant over time and urban and rural proportions of the population have been reported for many years and can be compared over time. The simple, two category definition is easy to conceptualize. But there are also several drawbacks. Data from the Census are often not reported by rural and urban classification. In order to compare traits of residents in rural and urban areas (apart from population), data must be aggregated up from the block level. With only a two-category classification system, there is no continuum on which to place areas that combine characteristics of both rural and urban places. Much of the diversity of place is lost in a classification system that places residents of larger cities like Portland and Bend and smaller places like Ontario and Burns in the same category. By the same token, rural areas that are close enough to urban areas to allow for significant economic integration are classified together with remote, isolated ones.

Selected demographics of people in rural and urban areas, based on this system, are shown in Table 1. The proportion of the population with a college education is much higher in urban block groups – over 7 percentage points higher. However, the poverty rate and near poverty rates are slightly higher in urban block groups, and the average median income is higher in rural block groups. Both of these last two points fly in the face of common perceptions about urban and rural well-being.

Table 1. Population characteristics by rural – urban block group geography.

<table>
<thead>
<tr>
<th></th>
<th>Oregon</th>
<th>Urban Block Groups</th>
<th>Rural Block Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Bachelors</td>
<td>25.1</td>
<td>27.5</td>
<td>19.9</td>
</tr>
<tr>
<td>% Poor</td>
<td>11.6</td>
<td>12.5</td>
<td>9.7</td>
</tr>
<tr>
<td>% Near Poor</td>
<td>26.9</td>
<td>27.7</td>
<td>25.0</td>
</tr>
<tr>
<td>Population Density</td>
<td>35.6</td>
<td>2415.6</td>
<td>11.0</td>
</tr>
<tr>
<td>Avg Med HH Inc*</td>
<td>$41,975</td>
<td>$41,457</td>
<td>$42,966</td>
</tr>
<tr>
<td>Number of Block Groups</td>
<td>2490</td>
<td>1637</td>
<td>853</td>
</tr>
</tbody>
</table>

* Average of 2,490 block groups’ median household income

Source: Census 2000
III. Metropolitan, Micropolitan, and Non-Core Counties: The OMB Classification

The classification most commonly used by government agencies and researchers is a county-based classification system developed by the Office of Management and Budget (OMB). Initially, counties were classified as Metropolitan if they contained a city of at least 50,000 people, or were adjacent to a Metro county and linked to the Metro county through significant commuting flows. All other counties were considered Non-Metropolitan. These two categories have often been used to represent urban and rural areas across the country. The most recent update of this system, in 2003, maintained the Metropolitan definition but divided the Non-Metropolitan into Micropolitan counties – those where the largest town was between 10,000 and 49,999 – and Non-Core counties. Applying this classification to the state of Oregon produces the rural and urban areas seen in Figure 2 below.

Figure 2 - Metropolitan, Micropolitan, and Non-Core Oregon
This system is popular for several reasons. Because the classification is county based, county data can be aggregated easily to compare conditions between ‘urban’ and ‘rural’ areas. County data are easily accessible from the Census Bureau, Bureau of Economic Analysis, the Internal Revenue Service, and state and local agencies. The small number of counties makes gathering and processing data easy. With only 3 classification categories, data comparison and analysis are greatly simplified, compared to many systems. County boundaries are relatively stable over time, so comparisons can be made between time periods.

One drawback to the OMB classification stems from the use of counties as the geographic base. In Oregon, the very large county size and diverse communities within them means there will be a lot of sparsely settled territory in “metropolitan” Oregon. This is easy to see in the map above. In contrast to the Census rural and urban classification, most of the state is considered Metro- or Micropolitan, because of the large size of the base geography. Lane County, for example, has a large urban center in Eugene – making it a Metropolitan county – but it also encompasses rural areas of both the coast and the Cascades. Micropolitan areas include many small towns and unincorporated areas that are not considered urban under the Census definition. The presence of Ontario, a city of nearly 11,000 people in Malheur County on the border of Oregon and Idaho, for example, means that the extremely isolated areas along the Nevada border south of Ontario are also classified as Micropolitan simply because they share the same county boundary.

Population demographics using this classification are summarized in Table 2. The first column has Oregon state data (except in the case of average median household income). The next two compare the values between Metropolitan and Non-Metropolitan counties – the equivalent of rural and urban used prior to the 2003 update. The final two columns separate out the Non-Metropolitan counties into Micropolitan and Non-Core.

The proportion of urban population within each category declines linearly from Metro to Non-Core, but there is a significant rural population (14.5%) in Metro areas and urban population (40.8%) in Non-Core areas (Table 2). In all the demographics listed we see the expected differences between Metro and Non-Metro counties: lower educational attainment, higher average poverty and near poverty rates, and lower average median household income. What is
surprising is the similarity in college attainment, poverty, near poverty, and median income for the Micro and Non-Core categories. The average rates among both types of Non-Metropolitan counties in the new 3-category classification system are almost identical, yet much lower than those in Metro counties. The average college attainment rate for the Non-Metropolitan counties is 12 percentage points lower; the average poverty rate is almost 3 percentage points higher. Those hovering near poverty are also more prevalent in the Micro- and Non-Core counties, where the average is 8 percentage points higher than Metro counties. Average median household income is between $9,000 and $11,000 lower. Micro and Non-Core counties differ in terms of population density but not in other important demographics.

### Table 2. Population characteristics by Metropolitan, Micropolitan and Non-Core geography.

<table>
<thead>
<tr>
<th></th>
<th>Oregon Metro Counties</th>
<th>Oregon Non-Metro Counties</th>
<th>Non-Metro Micro Counties</th>
<th>Non-Metro Non-Core Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Urban</td>
<td>78.7</td>
<td>85.5</td>
<td>56.5</td>
<td>59.8</td>
</tr>
<tr>
<td>% Bachelors</td>
<td>25.1</td>
<td>28.1</td>
<td>15.5</td>
<td>15.0</td>
</tr>
<tr>
<td>% Poor</td>
<td>11.6</td>
<td>11.0</td>
<td>13.8</td>
<td>13.8</td>
</tr>
<tr>
<td>% Near Poor</td>
<td>26.9</td>
<td>24.9</td>
<td>33.4</td>
<td>33.4</td>
</tr>
<tr>
<td>Population Density</td>
<td>35.6</td>
<td>150.8</td>
<td>10.2</td>
<td>15.8</td>
</tr>
<tr>
<td>Avg Med HH Income*</td>
<td>$36,382</td>
<td>$43,196</td>
<td>$33,384</td>
<td>$34,192</td>
</tr>
<tr>
<td>Number of Counties</td>
<td>36</td>
<td>11</td>
<td>25</td>
<td>14</td>
</tr>
</tbody>
</table>

*Average of 36 Counties’ median household incomes

Source: Census 2000

### IV. Rural-Urban Commuting Area (RUCA) Codes: The ERS Classification

The next rural-urban classification system we consider is the Rural-Urban Commuting Area Codes, developed following the 1990 Census by researchers at the USDA Economic Research Service (ERS) in conjunction with demographers at the University of Washington. In many ways they represent a compromise between the rural and urban Census designation and the county-based OMB classification. The geographic basis for the RUCA Codes is census tracts. Each tract is designed to contain a population of 3,000 to 8,000 people, who are relatively homogeneous with respect to socio-economic demographics. Since the tracts are based on a population target, they range in geographic size from a small urban neighborhood to a much larger area where the population is sparsely settled.
The RUCA Codes are defined based primarily on population size and commuting behavior. The classification captures the level of community integration between core and periphery census tracts. When the primary commute is within an area, the tract is considered a core tract. The cores themselves are classified as Metropolitan (an Urbanized Area with population greater than 50,000), Micropolitan (a large Urban Cluster with population 10,000 – 49,999), or a Small Town (a small Urban Cluster with population 2,500 – 9,999). In addition each core has tracts with high commuting into the core (the primary commuting flow there is at least 30%) and low commuting into the core (where the primary flow is 5 - 30%). A final category of completely Rural tracts brings the total number of RUCA Codes to 10. On the map of the RUCA Codes for Oregon (Figure 3), the three shades of blue on the map are Metropolitan RUCAs, the greens are Micropolitan RUCAs, and the yellow to tan tracts are the Small Town and Rural RUCAs.

Figure 3 - Rural Urban Commuting Area Codes

---

7 Actually, the RUCA Codes are defined at two levels. The codes described here are considered the primary codes. Each tract also can have an additional designation – the secondary code – that further describes the destination of the primary flow or flows of the secondary commute. Using the full codes brings the number of categories up to 29, which can be combined in different ways according to the researcher’s interest.
The RUCA Codes have several advantages over the other two systems. They greatly improve upon the geographic specificity relative to the OMB system, by virtue of their finer scale. In areas such as Lane County, the rural coast is now separate from its metro core, and the rural southeastern part of the state is separate from its micropolitan town. Since the definition incorporates commuting behavior, we know that the areas of metro influence represent places where most people have access to metropolitan jobs, education, and services. And the RUCAs are better than the Census urban-rural dichotomy in characterizing urban influence outside densely settled urban centers.

However, the RUCA Codes are also challenging. There is less data available at the tract level. Only the Census Bureau collects and distributes data at that geographic level. There are far more tracts than counties in the state of Oregon – 755 – which makes gathering data by hand difficult. The main limitation, however, is that census tracts actually change boundaries following each decennial census as the population increases and changes composition. While this does not limit analysis of current data, it complicates time series studies. Although the RUCA Codes can be combined at many levels (such as presented here), they are not as intuitive or easy to explain as the OMB system.

Table 3 compares population characteristics for the RUCA tract-based definitions. The second and third columns compare the values between Metro RUCAs to all other RUCAs. The fourth and fifth columns split the latter category into Micropolitan RUCAs (large urban cluster core and influence areas) and Small Town and Rural RUCAs (small urban cluster core and influence areas along with completely rural areas). Using this system again brings the expected differences. Educational attainment through college is 13 percentage points higher in metropolitan areas, while poverty and near poverty is much lower (2 and 7 percentage points lower, respectively). The income gap of roughly $10,000 between the two categories is the same difference seen between Metro and Non-Metro counties in the OMB system.

---

8 There is at least one commercial firm that has created a tract level database with consistent geographic boundaries for 1990 and 2000.
Once again, there is little difference in the demographics of Micropolitan RUCAs and those in Small Town and Rural RUCAs. The values for the rates of college attainment, poverty, and near poverty are very similar. Again, the data summarized here confirms popular notions that the critical advantage is gained in tracts located either in or with access to metropolitan centers.

Table 3. Population characteristics by RUCA tract geography.

<table>
<thead>
<tr>
<th></th>
<th>Oregon</th>
<th>Metro RUCAs</th>
<th>All Other RUCAs</th>
<th>Micro RUCAs</th>
<th>Small Town and Rural RUCAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Urban</td>
<td>78.7</td>
<td>87.0</td>
<td>58.4</td>
<td>70.3</td>
<td>35.5</td>
</tr>
<tr>
<td>% Bachelors</td>
<td>25.1</td>
<td>28.8</td>
<td>16.1</td>
<td>16.3</td>
<td>15.8</td>
</tr>
<tr>
<td>% Poor</td>
<td>11.6</td>
<td>10.9</td>
<td>13.3</td>
<td>13.0</td>
<td>14.0</td>
</tr>
<tr>
<td>% Near Poor</td>
<td>26.9</td>
<td>24.7</td>
<td>32.2</td>
<td>30.9</td>
<td>34.5</td>
</tr>
<tr>
<td>Population Density</td>
<td>35.6</td>
<td>184.1</td>
<td>12.0</td>
<td>37.7</td>
<td>5.2</td>
</tr>
<tr>
<td>Avg Med HH Inc*</td>
<td>$42,028</td>
<td>$45,205</td>
<td>$35,213</td>
<td>$36,549</td>
<td>$33,175</td>
</tr>
<tr>
<td>Number of Tracts</td>
<td>995</td>
<td>515</td>
<td>240</td>
<td>145</td>
<td>95</td>
</tr>
</tbody>
</table>

*Average of 995 tracts median household income.

Source: Census 2000

V. Comparisons of the Three Classifications

In this section of the report, we compare the proportion of the population and land area that is considered rural or urban under each system: urban-rural block groups, metro-nonmetro counties, and tract-based RUCAs.

Both county and tract based systems produce similar estimates of the percent of land and population that is considered metropolitan (Table 4). In both cases, roughly 15% of the land area and three-fourths of the population lives in metropolitan areas. However, the Census urban/rural system defines only 1% of the land as urban, even though the urban population share estimate is not far from the others.
Table 4. Comparison of Metro/urban and Nonmetro/rural land and population between systems.

<table>
<thead>
<tr>
<th></th>
<th>Metropolitan/Urban Areas</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Metro Counties</td>
<td>Metro RUCAs</td>
<td>Urban Block Groups</td>
</tr>
<tr>
<td>% of State Land</td>
<td>18.1</td>
<td>13.7</td>
<td>1.0</td>
</tr>
<tr>
<td>% of State Population</td>
<td>76.5</td>
<td>70.9</td>
<td>69.5</td>
</tr>
<tr>
<td></td>
<td>Nonmetropolitan/Rural Areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nonmetro Counties</td>
<td>Micro/Small Town/Rural RUCAs</td>
<td>Rural Block Groups</td>
</tr>
<tr>
<td>% of State Land</td>
<td>81.9</td>
<td>86.3</td>
<td>99.0</td>
</tr>
<tr>
<td>% of State Population</td>
<td>23.5</td>
<td>29.1</td>
<td>30.5</td>
</tr>
</tbody>
</table>

Although the OMB and RUCA systems show similar proportions of “nonmetro” land (82 % and 86% respectively) and population (24 %and 29 % respectively), the two classifications produce very different estimates of “rural” land and population in the state if “rural” is defined by the most “rural” definition in each classification system (Non-Core county and Small Town/Rural RUCA). Using the county-based OMB system, the Non-Core counties have 38 percent of the land and 4 percent of the population. (Table 5). The tract-based RUCA classification, however, has about twice the percent of land (68 percent) and population (10 percent) classified as Small Town/Rural. Under the Census Rural definition, 99 percent of the land and almost one-third of the population is rural.

Table 5. Comparison of land and population under different rural classification systems.

<table>
<thead>
<tr>
<th></th>
<th>OMB Classification</th>
<th>ERS Classification</th>
<th>Census</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Micro Counties</td>
<td>Non-Core Counties</td>
<td>Small Town &amp; Rural RUCAs</td>
</tr>
<tr>
<td>% of State Land</td>
<td>43.8</td>
<td>38.1</td>
<td>18.1</td>
</tr>
<tr>
<td>% of State Population</td>
<td>19.4</td>
<td>4.1</td>
<td>19.1</td>
</tr>
</tbody>
</table>

The Census classification emphasizes rural areas (99 percent of the state land and 31 percent of the people are rural), while the county-based OMB system classifies only 39 percent of the land and 4 percent of the population in its most “rural” category. The Census designation overstates rural areas by counting as rural many small areas that have strong ties to urban centers, while the
OMB designation understates rural areas by counting sparsely-settled areas of metropolitan counties as “urban”. Among these three options, the tract-based RUCA system paints the portrait of rural land that is closest to our intuitions, classifying areas with significant ties to urban areas as urban, and sparsely-settled areas without significant commuting linkages to large urban places as rural.

VI. A Unique Oregon Rural Classification System: The Office of Rural Policy Classification

In 2004, Governor Kulongoski created an Office of Rural Policy and Rural Policy Advisory Committee in order to better coordinate the formulation of rural policy in Oregon. The executive order describes the underlying rationale for establishing this office:

Rural Oregon communities are in need: unemployment in those communities is often many percentage points higher than the state average; …[they] have significant threshold issues to overcome to compete with urban communities for economic and community development resources; the lack of an industrial base…makes funding for education, health care, economic development and other social services more difficult to attain; and…[they] often lack administrative mechanisms and infrastructure to share information and collectively construct solutions to its problems (Office of the Governor, 2004).

Listed above are most of the serious problems that people associate with the rural part of the ‘two Oregons’. Recognizing that the rural part of Oregon was more diverse than that suggested by some of the classifications already discussed, the Governor’s office developed the following geographic classification system. Urban Oregon is defined - by implication - as urban communities of 50,000 or more and the surrounding area within 10 miles of these cities. There are six urban areas in Oregon: Portland and vicinity, Eugene, Salem, Medford, Bend and Corvallis.

Rural areas are classified as follows:

- Urban Rural – a geographic area that is at least 10 miles by road from an urban community (at least 50,000); characterized by many individuals commuting…an economy with fewer natural resources…easy and immediate access to health care services and numerous paved streets and roads.

- Rural – a geographic area that is at least 30 miles by road from an urban community; characterized by some commercial businesses, two or fewer densely populated areas in a county, an economy changing from a natural resource base…and reasonable but not immediate access to health care.
• Isolated Rural – a rural area that is at least 100 miles by road from a community of 3,000 or more individuals; characterized by low population density (fewer than 5 persons per square mile), an economy of natural resources…large areas of land owned by the state or federal government and predominately unpaved streets.

• Frontier Rural – a rural area that is at least 75 miles by road from a community of less than 2,000 individuals; characterized by an absence of densely populated areas, small communities, individuals working in their communities, an economy dominated by natural resource and agricultural activities, and few paved streets and roads. [quoted from the Office of the Governor, 2004, with italics added and order listed in the initial report reversed]

These categories characterize what it is about the diverse rural landscape that may make communities more likely to have high poverty, low educational attainment, high unemployment, and low infrastructure. This is done in a way that helps people visualize the type of communities described in each instance.

The first exclusive and exhaustive classification possible is that of urban, urban rural, and all rural areas, mapped below in Figure 4. This classification, similar to the Census urban-rural definition, emphasizes rural areas of Oregon. Unlike the Census definition, however, it attempts to capture non-urban areas adjacent to urban ones that can easily access the amenities of large urban areas. In order to capture differences in access to services in rural Oregon, the Office of Rural Policy proposes two additional classifications of rural. Since these categories overlap, we present them separately in order to clarify how they differ.

---

9 Mapping these categories by actually tracing out the areas certain distances from actual roads would have required a more sophisticated software and geospatial data than we had. Consistent with the exploratory nature of this report, we mapped a distance half of that described for each category as a first step. This we believe is a conservative estimate of the land in the urban and urban rural categories in Figure 4; the actual land covered by these two categories may be more. We also believe that this procedure may understate the rural category in Figures 5 and 6.
In Figure 5, urban and urban rural lands remain as in Figure 4, but isolated rural Oregon is distinguished from the rural areas that are not isolated from cities and small towns. Adding an isolated rural definition helps capture some of the key characteristics that may place a rural area at very high risk due to its distance from any substantial settlement (any town of at least 3,000 people). It does encompass some of the most isolated territory of Oregon, in particular the entire southeast corner and the very center of the eastern half of the state. Most of this area is in counties with fewer than 5 persons per square mile (see Appendix Figure A1).
Frontier lands (identified in yellow in Figure 6) are those rural areas that are at least 37 miles from a town of any size (towns less than 2,000 people). Using this classification, only the southeastern corner and the central southern area immediately south of Bend (probably not by design) are considered Frontier.
Both Frontier Rural and Isolated Rural Oregon are found mostly in the south central and southeast parts of the state. For a discussion of how these categories intersect see Appendix Figure A2.

While the classification system of the Office of Rural Policy has some intuitively appealing features, it is difficult to implement from the standpoint of conducting research. To compare social, economic, and demographic characteristics of the different categories of rural and urban areas – even basic characteristics such as population – the geographic layers shown above must be intersected with some base data layer. The finest layer of geography for demographic social and economic data is census block group. A map comparing the boundaries of the isolated rural areas with state block group boundaries is shown in the Appendix (Figure A3).
VII. Conclusions – What is Rural Oregon?

We have reviewed here four classification systems for defining rural Oregon: the Census Bureau’s rural and urban classification, the OMB’s Metropolitan, Micropolitan and Non-Core county-based system, the ERS Rural – Urban Commuting Area Codes (RUCA), and the classification for Oregon rural areas proposed by the Office of Rural Policy. Of the classifications, the tract-based RUCA codes appear to us to provide the best balance of 1) conceptual separation of densely settled urban space from more remote and sparsely settled places and 2) richness and accessibility of social, economic, and demographic data. It is clear that the choice of definition matters for research and policy. The choice affects how much land and population is rural. It affects the demographics and economic profile of rural and urban places. It affects how we view the barriers and opportunities in rural Oregon, and the appropriateness of policy options.
Appendix

One possible way to compare data using an approximation of the Office of Rural Policy’s (ORP) Isolated Rural definition is to simply use the counties with a population density of less than 5 persons per square mile as isolated rural areas. These counties are displayed with grey crosshatching in Figure A1 below. This characteristic, suggested in the original description of the ORP areas, corresponds relatively well with the isolated rural areas.

Figure A1 – Overlap of Isolated Rural Oregon and Low Population Density Counties

What happens when all four of the Office of Rural Policy’s categories are combined? Figure A2 below shows the intersection of the definitions of Frontier and Isolated Rural areas. In this map, the urban and urban rural areas are shown combined. The area that is
both brown and crosshatched is the area that is not Frontier or Isolated Rural. The brown area without crosshatching is the portion of Isolated Rural that is not Frontier – areas that are at least 50 miles from a community of 3,000 people, but that are not at least 33 miles from a community of less than 2,000. The yellow, crosshatched area is the converse of this – Frontier Rural areas that are not Isolated. The solid yellow area represents the rural lands that are both Frontier and Isolated.

Figure A2 – Overlap of Isolated and Frontier Rural Oregon

Figure A2 shows the similarity between the geographic areas that match both of these classifications.

As discussed in the paper, the lack of data available at a level of geography that can be used to compare the different rural areas created with the ORP definitions makes data analysis of the conditions in rural vs. urban areas difficult. As discussed above, one
simple solution would be to use the counties with less than 5 people per square mile as a proxy for Isolated Rural areas. However, this still leaves no definition other than county level ones to use as urban area comparisons. Block groups are the smallest geographical area for which poverty data, for example, can be obtained and are the data unit that would have the best match. The overlap between block groups and Isolated Rural areas is shown in Figure A3 below. It is clear that a significant share of the Census block groups cross ORP classification boundaries; they do not fall neatly into one rural category.

Figure A3 – Alignment of Office of Rural Policy Categories with Census Block Groups