Economic or Amenity Driven Migration?
A Cluster-Based Analysis of County Migration in the American Southwest

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INTRODUCTION

The influence of migration patterns on economic growth or decline across geographic locations has served as a focus for research across the United States (U.S.) for several decades. The ability to successfully interpret changes in migration flows provides a useful tool for community leaders and for economic developers who are charged with attracting new jobs and promoting economic development in a region. This paper examines the relationship between net migration flows from 1995 to 2000 in the 4-Corners Region of the U.S. with a number of economic and amenity-based variables. We extend the analysis with the use of cluster analysis techniques to gain a better understanding of the effects of the five predictor variables on net migration.

The region of study was concentrated upon 93 counties in Arizona, Colorado, New Mexico, and Utah which contained a minimum of 10,000 permanent residents in 1995. Counties with populations of less than 10,000 residents were not included in the analysis for two reasons. Many of the variables used in this study rely on percent changes over periods of time. These changes may appear quite sizeable when the base numbers are very small, thereby producing large percentage changes when in fact, the absolute size and resulting impacts are minimal. Furthermore, the sampling process to obtain the migration flow data can result in numbers too small to be statistically significant for counties with smaller populations.

Predicting migratory flows is often accomplished by reliance on empirical relationships that have been identified over time. Occasionally this procedure is complicated by migration turnarounds that have been observed since the 1970's (Fuguitt and Beale 1978; and Fuguitt and Tordella 1980) in works that confirmed a reversal of long-time migration trends in many rural counties across the nation.

Economic opportunity was often credited with providing a pull-factor that counties could count on to attract new residents into an area (Muth 1971; Olvey 1972; Greenwood 1975, 1985; Partridge and Rickman 2006). However, many studies have also demonstrated the importance of the benefits derived from positive quality of life measures (Cushing 1987; Cebula 2005; Cebula and Payne 2005) and the role of location-specific amenities in particular locations in the decision to migrate (McGranahan 1999; Green 2001; Deller et al., 2001; Gunderson and Ng 2006.) Earlier, Graves (1973, 1979, 1980) concluded that generalized increased levels of income and wealth are related to location-specific amenities and leisure activities, which in turn could influence migration into a region. Johnson and Stewart (2005) used urban proximity to demonstrate the relationship between second-home ownership and eventual migration to areas influenced by recreation and amenities in southeastern Wisconsin. Porell (1982) addressed tradeoffs between economic and amenity factors to explain migration occurring in metropolitan regions between 1965 and 1970.

At the same time, Roback (1982) argued that positive quality-of-life factors in many locations will not only influence levels of wages and rents, but individuals are also willing to trade off higher wages and pay higher rents so that they might live in these communities. Blanchflower and Oswald (1994) extended Roback's work and found that individuals are frequently willing to accept higher levels of unemployment in order to live in high-amenity locations. Barkley et al. (1998) and Dorf and Emerson (1978) employed factor analysis techniques to generate underlying dimensions that explain manufacturing plant location in nonmetropolitan regions and examined the role for local school quality in assessing the growth of employment and population. Cebula and Alexander (2006) found the presence of hazardous waste sites and toxic chemical releases were negatively related to net state in-migration in the 2000-2004 period. Thus, an increasingly diverse amount of research supports the hypothesis that both economic factors and life-style amenities (both positive and negative) each play a role in the decision to migrate.

Measuring the effects of amenity-related variables on migration is complicated by how these attributes link to economic performance in each county. In selected cases, it is quite apparent that the presence of amenities contributes to a healthy economy and generates increased permanent migration into the region. While in others, recreation and entertainment amenities may attract large numbers of visitors and contribute to a healthy economy, yet the added employment opportunities brought about do not, in turn, induce additional migration into these areas. Thus, the influence of amenity-related variables on migration is contextual.

DATA

Ninety-three counties from Arizona, Colorado, New Mexico and Utah were included in this analysis constituting all counties with 10,000 or more permanent residents in these states. In the initial phase of the research, separate analyses for the rural versus urban-based counties were conducted; however, the interpretations of the separate models did not improve based upon the unique treatment of the two county types.

Data were collected from numerous sources commencing with 1990 and 2000 decennial U.S. Censuses of Population and Housing. Additional information for 1995 was obtained from the Bureau of Economic Analysis Regional Economic Accounts. Data were also selected from the National Outdoor Recreation Supply Information System (NORSIS) data set prepared and maintained by the USDA Forest Services' Wilderness Assessment Unit, Southern Research Station, Athens, Georgia. The NORSIS data set contains large numbers of variables ranging from population density, land use, access to water and recreation activities, climate and numerous additional items designed to identify amenities that may contribute to increased migration into a region.

EMPIRICAL RESULTS

The criterion variable used for this study was the domestic five-year net migration rate from 1995 to 2000 in each of the 93 counties. The migration rate is available from the Census 2000 long form question on residence. The Census Bureau calculates the net migration rate as the ratio of the difference between in migration and out migration for each county to the intercensal 1995 census estimate of population for each county, and then multiplied by 1000. During the five years from 1995 to 2000, 55 of the counties in the study area experienced net positive migration flows, while 38 counties experienced net migration outflows.

Five predictor variables were selected from a larger set of variables that focuses on economic as well as lifestyle and amenity characteristics in the counties. Many of the variables initially investigated were found to be ineffective in predicting net migration.[1] Consequently, the five variables ultimately included in the equation were:

- per capita wages and salaries as a percent of overall per capita personal income;
- the percentage change in total county employment;
- the percent of county employment attributed to manufacturing;
- the percent of local municipality tax revenues derived from property taxes; and
- the average January temperature in each county.

Data from 1995 were used to measure wages and salaries per capita as a percent of overall personal income per capita (abbreviated as WSP). This variable measures the portion of overall personal income originating from wage and salary sources. Wages and salaries represent only one of several components of overall personal income which also includes proprietors' income, dividends, retirement income and transfer payments such as social security income, veteran's benefits and various welfare payments to the unemployed or disabled. While the hypothesis here is complex, two scenarios are plausible. One hypothesis emerges when wages and salaries represent a high percentage of total income. This could be an indication of economic prosperity and consequently a stimulus for migration into the county; thus, the need for fewer transfer payments which would generate a higher ratio of wages and salaries to overall income. The second scenario might apply to high-retirement counties where individuals who possess significant wealth and receive dividends and retirement income but little if any earnings, move into a community for the various lifestyle amenities. In this scenario, the wages and salaries portion of overall personal income will be lower compared to the results in the initial scenario. An inverse relationship between wages and salaries and overall personal income will occur at the same time higher net in migration occurs in a county. Therefore, we are unable to predict how these two influences will interact prior to analyzing the data, thus the sign on this coefficient could be either positive or negative.

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[1] Among the variables that were non-significant were the metro/nonmetro status of counties, percentage of residents over age 65, education levels of county residents, annual snowfall amounts, percentage of the labor force employed in various industries outside of manufacturing as well as numerous other agricultural, forest and mountain characteristics pertaining to each county.

The percentage change in total employment from 1989 to 1999 (abbreviated as EMP CHANGE) reflects the measurement of the change in the percentage of the county population that was employed in each of the two years. The hypothesis is that if this rate increased, for example from 45 percent to 55 percent, this would serve as an attraction for people to migrate to the county. On the other hand, if the rate declined, out migration would be the more likely outcome since employment opportunities may be declining in the county. Therefore, we project a positive sign on this coefficient.

The percent of employment originating in the manufacturing sector is also expected to influence the net migration rate since high levels of manufacturing employment in many counties may serve as an indicator of economic health. Thus, additional manufacturing jobs would provide an attraction for individuals to migrate into the county as well as establish a source of resistance for persons to move out. Therefore, a positive sign is expected for this variable.

The percent of local municipality (cities, towns, county governments, etc.) revenue generated from property taxes (abbreviated as PROPERTY) was obtained from the NORSIS data set compiled for 1986-87, which is near the time of the initial migration flow used in our analysis. Our hypothesis is that when property tax collections as a percent of total revenue increase, a portion of this increase in revenues may result from greater numbers of new residents who are driving the increased development. Thus, we expect a positive relationship between net migration and PROPERTY.

Finally, the mean average January temperature in each county was used a proxy for climate conditions that could impact the decision to migrate into or out of a region. The terrain in the 4-Corners region varies considerably and January temperatures range from moderate in the desert climates in portions of the region, to frigid in the more mountainous areas. We expect a positive sign on this coefficient to indicate people are more likely to migrate on a permanent basis to warmer climates. This is consistent with previous findings in the literature (Cebula and Alexander 2006; Conway and Houtenville 1998).

Prior to developing the regression equation, two variable plots between the criterion variable (the domestic five-year net migration rate for each county between 1995-2000) and each of the predictor variables were analyzed. Each of the relationships was approximately linear with simple positive correlations ranging from 0.37 to 0.76. All but the JAN TEMP variable were found to have statistically significant relationships with net migration at the .01 level or less.

REGRESSION ANALYSIS

A stepwise regression model utilizing SPSS 15.0 for Windows$^{©}$ was used to narrow a field of potential predictor variables. This approach introduces predictor variables into the model as long as there is a positive contribution to the coefficient of multiple determination.

The equation relating migration to the five predictor variables possesses an F value of 45.189 with a significance level of less than 0.001. Each of the regression coefficients was significantly different from zero at the 0.05 level or less. The coefficient of multiple determination for the five variable model was 0.722 with an adjusted R Square of 0.706. The results of the multiple linear regression model are presented in Table 1. The standardized coefficients indicate how one decides which of the independent variables is most important for determining the response variable. The explanatory variables are arranged in Table 1 from the most important (EMP CHANGE) to least important (JAN TEMP.)

Table 1. Multiple Linear Regression
R Sq = 0.722   Adj. R Sq = 0.706   n = 93
Breusch-Pagan = 0.0678

Predictor	Coefficients	Standardized Coefficients	t Stat	P-value	VIF
CONSTANT	-0.13428		-2.73	0.0073	
EMP CHANGE	0.16579	0.634	9.36	<.0001	1.433
WSP	-0.14307	-0.215	-3.17	0.0021	1.432
MFGR	0.00323	0.191	3.22	0.0018	1.100
PROPERTY	0.00136	0.188	3.16	0.0021	1.106
JAN TEMP	0 .00137	0.128	2.12	0.0369	1.140

DISCUSSION

Several important factors emerge from the results presented in this analysis. First, employment change over the period from 1989 to 1999 was responsible for the majority of the predictive power of the equation. Another significant point is the negative sign on the wage and salary variable. The negative sign indicates the importance of households with high levels of wealth and income but not necessarily high levels of wage and salary income, on the rate of net migration. This confirms the idea that high income households may dominate the flow of migrants into some of these counties and thus account for the negative sign. The migration flows observed in many high-amenity, recreation-oriented counties in the region follow this pattern. Several counties are identified where quality-of-life factors positively influence the migration rate and where the WSP variable was below the average found across the region. As examples, these include Mohave and Yavapai counties in Arizona, Douglas and La Plata counties in Colorado, Santa Fe and Valencia counties in New Mexico and Summit and Wasatch counties in Utah. Representative communities within these counties such as Lake Havasu City, Park City and Santa Fe, have experienced rapid growth as a result of recreation or resort-oriented activities that have flourished in recent years.

The EMP CHANGE and MFGR variables are generally considered to be primarily economically-oriented in terms of their impact as opposed to the other three variables which can be considered part of an amenity-related profile that might contribute to positive net migration. Positive coefficients on EMP CHANGE and MFGR are expected in locations where increasing rates of economic activity, and in particular, the presence of manufacturing activity, serve to attract new migrants into the county. This would very likely appear in the larger populated counties; however, smaller size counties which exhibit healthy growth will also reflect this pattern. A review of the counties in the Four-Corner states enables us to confirm this relationship in many of the highly populated areas including Maricopa County in Arizona which includes Phoenix; Utah County which includes Provo-Orem; Douglas, and Larimer counties in Colorado which contain portions of Denver and Ft. Collins; and Sandoval County in New Mexico, the home of Albuquerque.

Logically, the PROPERTY variable should move in concert with the employment variables, and should exhibit a positive sign when net in migration increases. This occurs as a result of the additional influx of new households seeking employment in the county. Alternatively, in instances where positive migration flows can be attributed to high-end homebuyers moving into the county for recreation or retirement purposes, the property values will also increase to reflect the increased demand on land pressures in these locations.

Finally there is a minor but significant impact of January average temperature on migration. Although this was not a significant relationship when the simple correlation between January average temperature and migration rates was investigated, it does add power to the equation through the interaction effect.

TESTING THE ASSUMPTIONS OF THE MODEL

SAS 9.1 for Windows© was used to confirm the SPSS analysis to determine the variance inflation factors (VIF) and to complete the Breusch-Pagan test (Breusch and Pagan 1979). The VIFs in all the models revealed values less than 10 which indicate the absence of significant multicollinearity among the predictor variables. When a set of explanatory variables is uncorrelated, the individual VIFs will be equal to one. The VIFs have values between 1 and 2 in this study.

The Breusch-Pagan test is used to test for heteroscedasticity. This test is particularly important when cross-section data are modeled. The Breusch-Pagan test assumes that the error variance varies functionally with a set of regressors. Using this test, the null hypothesis is homoscedasticity; thus, we wish to fail to reject the null hypothesis with large p-values. If the observed level of significance is greater than 0.10, then there is no significant heteroscedasticity in the model without any reasonable doubt. When the p-value is between 0.01 and 0.05 it is important to know the value of alpha in order to make a decision about the null hypothesis. The Breusch-Pagan test shows an observed value of significance of 0.067 indicating that the null hypothesis of homoscedasticity is not rejected at the 5 percent level of significance. Furthermore, the residuals were normally distributed with a mean of zero.

CLUSTER ANALYSIS

In order to develop a better understanding of the effects of the five predictor variables on net migration, cluster analysis was applied to the 93 counties and the five predictor variables used in this study. Cluster analysis relies on a high-level descriptive technique to form natural groupings of cases (e.g., counties) that are similar across a profile of variables. For this study, the cluster technique partitions counties into groups that exhibit similar traits, for example, high employment growth vs. low employment growth counties, or warm-weather counties vs. those with cooler temperatures.

There are several approaches and computer algorithms available to perform cluster analysis but in general they work by starting with the first case and then searching all of the other cases until the one most similar to the first case (across the profile of the five predictor variables) is located. This most similar case is then grouped with the first case. This process continues until in theory all of the cases are in one group. The K-Means approach to cluster analysis was used in this study because of its simplicity and its effectiveness in grouping the 93 counties using the five variables.

The selection of the number of groups to interpret and analyze is typically left to the researcher's judgment and frequently requires some trial and error. Here, five, four and three groups or clusters were profiled and evaluated for meaningful interpretation and understanding. After performing one way analysis of variance tests on each of the five variables with the three, four or five groups, we determined four groups were most illustrative of the effects of both economic and amenity variables on domestic migration. The results of the one-way analysis of variance are presented in Table 2. Pair-by-pair mean comparisons were also completed and are shown in Table 3. Note that domestic migration was not used in the cluster formation process but was evaluated only after the groups or clusters were established. Nevertheless, significant differences in the domestic migration rate were found among the four groups that were ultimately determined to provide the most insight into the domestic migration process.

**Table 2. Means of Four Cluster Groups on the Five Explanatory
Variables and on Migration, F-Values and Significance Levels**

	Group 1 (n=24)	Group 2 (n=11)	Group 3 (n=42)	Group 4 (n=16)	F Value	Significance Level
EMP CHANGE	284	.414	.533	.486	2.58	.059
WSP	.509	.448	.484	.418	1.49	.222
MFGR*	7.008	8.500	11.126	7.312	3.65	.022
PROPERTY	48.863	75.527	67.014	83.100	111.63	.000
JAN TEMP*	32.596	47.282	27.543	25.169	38.27	.000
MIGRATION	-.036	.066	.059	.046	6.87	.000

*Homogeneity of variance assumption not met for MFGR and for JAN TEMP. Consequently, the Welch robust test of equality of means was used for these two variables.

**Table 3. Pair by Pair Mean Comparisons on
Five Explanatory Variables and Migration Rates**

EMP CHANGE*	Only Group 1 is significantly different from Group 3 at the .05 alpha level.
WSP	No pair by pair significant differences at the .05 alpha level.
MFGR	Only Group 1 is significantly different from Group 3, and Group 3 is significantly different from Group 4 at the .05 alpha level.
PROPERTY	All pair by pair comparisons are significantly different at the .05 alpha level.
JAN TEMP	All pair by pair comparisons are significantly different at the .05 alpha level except for Group 3 versus Group 4.
MIGRATION	Group 1 is significantly different from Group 2, 3 and 4 at the .05 alpha level. Other pair by pair comparisons are not significantly different.

*Tukey HSD test used for EMP CHANGE, WSP, PROPERTY AND MIGRATION.
The Games-Howell Test was used for MFGR and JAN TEMP.

REVIEW OF THE CLUSTERS

Four distinct clusters emerged in the analysis of the 93 counties. Appendix A provides a listing of the counties contained in each cluster. The emerging relationships among the clusters resulted from differences in economic characteristics as well as climatic and demographic conditions. Table 4 introduces the names of the four clusters as well as the number of counties contained in each.

Table 4. Cluster Names

Cluster #1	Rural, Low Growth Areas	N = 24
Cluster #2	Warm Weather, Retirement Areas	N = 11
Cluster #3	Growth Centers	N = 42
Cluster #4	Rural , Non-wage Income Dependent Areas	N = 16

Cluster 1 contains 24 counties, primarily drawn from New Mexico including most of the counties north of Albuquerque, and includes Santa Fe and Taos as well as much of southern and eastern New Mexico. These counties contain no large cities, are primarily rural in nature, and most of the counties experienced net out migration flows over the 1995-2000 time period.
Cluster 1 is distinguished by the following characteristics:

- Eighteen of the 24 counties experienced net out migration flows
- Primarily comprised of rural counties in New Mexico
- Lowest reliance on property taxes among the 4 clusters
- Lowest rate of manufacturing activity among the 4 clusters
- Smallest percentage increase in overall county employment among the 4 clusters
- Highest ratio of wages and salaries as a percent of total income among the 4 clusters

Cluster 2 contains only 11 counties, primarily from southern Arizona. The Phoenix and Tucson areas are included as well as Washington County which includes St. George, Utah, and also Sierra County in southern New Mexico. The dominating characteristic of this cluster is the high mean January temperature experienced in these counties as compared to counties in the other three clusters. The cluster average January temperature of 55.4F is almost 20 degrees warmer than most of the other cluster means. These are

warm-weather counties that have attracted large numbers of retirement-age populations who depend upon non-wage income for their earnings. Net-migration flows in almost all of these counties were positive over the 1995-2000 period which also brought about rapid overall population increases in these counties, not just the increase in retirement migration.

Non-wage income (Social Security receipts, dividends, interest receipts, government support payments) was higher in this cluster than what it was in two of the other three clusters. This would be anticipated in counties experiencing inflows of retirement-aged migrants who derive much of their income from sources not related to current employment.

Cluster 2 is distinguished by the following characteristics:

- Nine of 11 counties experienced net in migration flows
- Primarily comprised of southern, warm-weather counties in Arizona
- Highest average January temperatures among the 4 clusters
- Relatively low ratio of wages and salaries as a percent of total income among the 4 clusters. Instead non-wage income is dominant which is characteristic of high-retirement areas.

Cluster 3 is the largest of the groups and contains 42 counties. This cluster is the most widespread geographically, comprising counties from throughout Colorado and Utah as well as from northern Arizona. The cluster also contains most of the largest metropolitan areas in the region including Denver, Salt Lake City and Albuquerque. This cluster is dominated by high-growth regions, often called growth centers or growth poles which serve to attract individuals seeking employment. Net-migration flows in these counties were mostly positive over the 1995-2000 period.

Cluster 3 is distinguished by the following characteristics:

- Thirty-one of the 42 counties experienced net in migration flows, and in the counties experiencing net out migration, the outflows were close to zero
- Very high levels of manufacturing activity when compared to the other clusters
- High rates of increase in overall employment levels over the period of study
- Primarily cold-weather counties exist in this cluster

Cluster 4 is similar to Cluster 1 in that its counties are drawn mostly from rural regions. However, while the first cluster is dominated by New Mexico counties, this cluster is primarily populated by counties located in eastern Utah and northern Arizona as well as a small number from Colorado, and only one from New Mexico. There are 16 counties in this cluster. Most of the counties are drawn from cold-weather regions and many lost population due to net out migration. Manufacturing activity is lower in these counties than what was experienced in the other clusters. The small amount of manufacturing activity may also explain the higher property tax rates in these counties suggesting that the households are picking up the tax payments that would typically be made by the manufacturing base in other regions.

Cluster 4 is distinguished by the following characteristics:

- Nine of the 16 counties experienced net in migration
- Primarily rural, cold-weather counties
- Manufacturing as a percent of total employment is considerably lower than what occurred in Clusters 2 and 3
- Wage levels as a percent of total income are the lowest among the 4 clusters. Several of these counties rely on government support such as welfare-related payments
- Very high property tax rates which suggest the households have to make up for the lack of manufacturing base that would normally assume some of the tax burden

Clusters 1 and 4 are closely related; however, #1 is almost exclusively New Mexico counties and #4 is largely Utah based. They also differ in the following ways:

Wages and salaries as percent of income -- Cluster 1 is highest, Cluster 4 is lowest
Mean employment change over the period -- Cluster 1 is lowest, Cluster 4 is much higher
Property taxes as a percent of local budgets -- Cluster 1 is lowest, Cluster 4 is highest

To summarize, we have identified four clusters. One is primarily a warm-weather growing region. A second one is characteristic of an economically healthy high-growth region. The remaining two clusters are more rural, cold-weather regions; however, one of these two experienced more out migration and had high levels of wages as a percent of income, while the other experienced a more balanced level of in and out migration along with low levels of wage income and higher amounts of government-support income payments. Thus each of the clusters is characterized by a different set of attributes.

CONCLUSIONS

This study has investigated county net migration flows for the 4-Corners Region of the U.S. from 1995 to 2000. Fifty-five of the 93 counties in these states whose populations exceeded 10,000 in 1995, experienced positive net migration over this period. We identify both employment-related and amenity-related factors that exerted positive influences on the migration flows.

The net in migration rate is positively impacted by a low wage and salary ratio to overall personal income in these counties. Although this may appear counterintuitive initially, this result was confirmed through experiences in several counties where either retirees or high-income residents migrated to these locations. These residents are frequently not employed thus they do not contribute to the earnings stream; however, they bring nonwage earnings in the form of dividends and other unearned income, thus lowering the wages and salary to overall income ratio.

Their presence also contributes to an increase in the percentage of local government revenue generated from property taxes which moves in tandem with increased demand for real property under these conditions, and in this way contributes to higher valuations and increased revenues for local governments. Therefore, an influx of wealth and income into recreation-based, high-amenity counties within this region is partially driving the net migration. However, traditional economic variables also continue to influence the flow of migrants into the region. Increases in total county employment exerted the largest force on the migration rate. The relative importance of the manufacturing sector in each county was also highly significant. Therefore, county officials should not disregard the importance of expanding existing industries as well as attracting new industries in their efforts to stimulate local job creation since the time-honored tradition of "people following jobs" remains a significant force in the continued inflow of new residents into these counties.

The next step was to group the counties based on similarities in the profile of the explanatory variables used in this study. The natural grouping of counties using various cluster techniques can improve the qualitative explanation of how the variables impact net migration. Four groups were selected using the K-Means clustering technique to distinguish different attributes among the counties. The cluster analysis confirmed that economic, climatic and demographic factors each contributed to the explanation of the migration flows that occurred in this region from 1995 to 2000.

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Appendix A – Counties Contained in Each of the Clusters

Cluster 1

Chaves, NM
Cibola, NM
Colfax, NM
Curry, NM
Denver, CO
Dona Ana, NM
Eddy, NM
Grant, NM
Lea, NM
Los Alamos,   NM
Luna, NM
McKinley, NM
Mesa, CO
Otero, CO
Otero, NM
Pitkin, CO
Quay, NM
Rio Arriba, NM
Roosevelt, NM
Sandoval, NM
Santa Fe, NM
Socorro, NM
Summit, CO
Taos, NM

Cluster 2

Cochise, AZ
Gila, AZ
Graham, AZ
La Paz, AZ
Maricopa, AZ
Pima, AZ
Pinal, AZ
Santa Cruz, AZ
Sierra, NM
Washington, UT
Yuma, AZ

Cluster 3

Adams, CO
Alamosa, CO
Arapahoe, CO
Bernalillo, NM
Boulder, CO
Box Elder, UT
Cache, UT
Chaffee, CO
Coconino, AZ
Davis, UT
Delta, CO
Douglas, CO
Eagle, CO
El Paso, CO
Fremont, CO
Garfield, UT
Gunnison, CO
Iron, UT
Jefferson, CO
La Plata, CO
Larimer, CO
Lincoln, NM
Logan, CO
Montezuma, CO
Montrose, CO
Navajo, AZ
Prowers, CO
Pueblo, CO
Rio Grande, CO
Routt, CO
Salt Lake, UT
San Juan, CO
San Miguel, CO
Sanpete, UT
Sevier, UT
Teller, CO
Tooele, UT

Cluster 3 (cont'd)

Utah, UT
Valencia, NM
Weber, UT
Weld, CO
Yavapai, AZ

Cluster 4

Apache, AZ
Carbon, UT
Duchesne, UT
Elbert, CO
Emery, UT
Las Animas, CO
Millard, UT
Moffat, CO
Mohave, AZ
Morgan, UT
Park, CO
San Juan, UT
Summit, UT
Torrance, NM
Uintah, UT
Wasatch, UT