South Dakota State University Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange

Extension Extra

SDSU Extension

4-1-2010

Possible Effects of Auto Dealer Closures in Rural South Dakota

Jacob Cummings South Dakota State University

Bob Preston South Dakota State University

Mike McCurry South Dakota State University

Diane Kayongo-Male South Dakota State University

Follow this and additional works at: http://openprairie.sdstate.edu/extension extra

Recommended Citation

Cummings, Jacob; Preston, Bob; McCurry, Mike; and Kayongo-Male, Diane, "Possible Effects of Auto Dealer Closures in Rural South Dakota" (2010). *Extension Extra*. Paper 376. http://openprairie.sdstate.edu/extension_extra/376

This Other is brought to you for free and open access by the SDSU Extension at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Extension Extra by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.



Possible Effects of Auto Dealer Closures in Rural South Dakota

Jacob Cummings, Bob Preston, Mike McCurry, and Diane Kayongo-Male Rural Sociology

Determining the impact of a business closure in a community or county can be a complicated process that requires both economic and demographic data. However, one may begin such an assessment by simply examining the number of people who are employed within an occupational category in a designated location.

This study was prompted largely by recent decisions by Chrysler and General Motors to reduce the number of retail auto dealerships in selected locations. While the financial effects of eliminating rural dealerships are likely well understood by corporate accountants, our intent is to examine what else may happen to rural South Dakota counties that lose a new car dealership. A previous study has shown that, in South Dakota's most-rural counties, each new car dealer serves a population that is about 20 percent smaller than the average population served by similar South Dakota dealers (Khatiwada et al. 2008). Another study has shown that, while employment in private industry has been growing in urban areas and along Interstate 29, such employment has been declining in several rural counties (Chatterjee et al. 2009).

The following methods were used to examine how closures of automobile dealerships might affect the economies of several rural towns. First, we chose to limit our study to South Dakota counties that have been identified as "rural" by the United States Department of Agriculture (USDA). The USDA's Economic Research Service facilitated this process by assigning Rural-Urban Continuum Codes (RUCCs) to each county. These codes range from "1" to "9," with 9 being the most rural. Codes vary by a county's population and location.

As table 1 demonstrates, 53 percent (35 of 66 counties) of South Dakota counties are assigned continuum code 9. Table 1 does not contain descriptions of codes 1, 2, or 4 because they are assigned to "metro counties in metro areas of 1 million population or more," "metro counties in metro areas of 250,000 to 1 million population," and non-metro counties with "urban population of

COUNTY TYPE	CONTINUUM CODE (and description)	COUNTY or COUNTIES	TOTAL COUNTIES		
metro	3 (county in metro area with population less than 250,000)	Lincoln, McCook, Meade, Minnehaha, Pennington, Turner, and Union	7		
non-metro	5 (non-metro county with urban population of 20,000 or more, not adjacent to a metro area)	Brown	1		
non-metro	6 (non-metro county with urban population of 2,500 to 19,999, adjacent to a metro area)	Butte, Clay, Lake, and Lawrence	4		
non-metro	7 (non-metro county with urban population of 2,500 to 19,999, not adjacent to a metro area)	Beadle, Brookings, Codington, Davison, Fall River, Grant, Hughes, Shannon, Spink, Tripp, Walworth, and Yankton	12		
non-metro	8 (non-metro county completely rural or less than 2,500 urban population, adjacent to a metro area)	Custer, Haakon, Hanson, Hutchinson, Jackson, Miner, and Moody	7		
non-metro	9 (non-metro county completely rural or less than 2,500 urban population, not adjacent to a metro area)	Aurora, Bennett, Bon Homme, Brule, Buffalo, Campbell, Charles Mix, Clark, Corson, Day, Deuel, Dewey, Doug- las, Edmunds, Faulk, Gregory, Hamlin, Hand, Harding, Hyde, Jerauld, Jones, Kingsbury, Lyman, McPherson, Marshall, Mellette, Perkins, Potter, Roberts, Sanborn, Stanley, Sully, Todd, and Ziebach			
Source: http://www.ers.usda.gov/briefing/ruralitv/ruralurbcon/					

Table 1. Rural-Urban Continuum Codes (RUCCs) for South Dakota counties (2003)

20,000 or more, adjacent to a metro area," respectively. None of these three types of counties are found in South Dakota.

Next, we compiled a list of auto dealers in each of the counties designated as a "9" or "completely rural RUCC," using a directory supplied by the South Dakota Auto Dealer's Association (2009). Table 2 illustrates that many of the 35 counties found in the bottom ("nonmetro") row of table 1 lacked dealerships (the counties in table 2 are not named, due to anonymity issues).

Lastly, we used the U.S. Census Bureau's Censtats database to capture the number of individuals employed at car dealerships in each location. In order to do so, we used the dealers' zip codes, found in the dealer directory, to determine employment information at the zip-code level.

|--|

PART 1. Dealers Possibly Targeled for Closure						
	Employment					
County	Minimum # of employees	Maximum # of employees	Middle estimate # of employees			
A	10	19	14.5			
А	10	19	14.5			
В	5	9	7.0			
В	10	19	14.5			
С	5	9	7.0			
D	10	19	14.5			
E	10	19	14.5			
E	20	49	34.5			
F	5	9	7.0			
G	10	19	14.5			
Totals	95.0	190.0	142.5			
PA	RT 2: Dealers Not I	Designated for Clos	ure			
		Employment				
County	Minimum # of employees	Maximum # of employees	Middle estimate # of employees			
Н	20	49	34.5			
I	10	19	14.5			
J	1	4	2.5			
К	50	99	74.5			
L	1	4	2.5			
L	10	19	14.5			
М	10	19	14.5			
Ν	10	19	14.5			
Ν	20	49	34.5			
0	10	19	14.5			
Р	10	19	14.5			
Р	10	19	14.5			
Totals	162.0	338.0	250.0			
Parts 1–2 Totals	257.0	528.0	392.5			
Source: South Dakota Auto Dealers Association. "2009 Membership Directory." Pgs. 10-25.						

Source: Censtats: http://censtats.census.gov/cbpnaic/cbpnaic.shtml

Table 2 shows that the Census Bureau simply reports the number of each type of business, with the number of employees working there as a range. This made it more difficult to determine the effects of the dealer closures, so three additional employment values are reported. First, we looked at the minimum number of employees that might be affected; then we found the maximum number who could be affected; lastly, we reported the "middle estimate" for the number of workers possibly affected by summing the minimum and maximum and dividing by 2.

A more detailed examination of table 2, part 1 reveals that a minimum of 95 employees could lose their jobs among the rural dealers possibly designated for closure. Similarly, if we use the maximum values, a total of 190 people could become unemployed. If our middle estimate is used, the number of employees at risk of becoming unemployed falls to 142.5, or more realistically, 143. It should be noted that we excluded used and wholesale dealers from our calculations because we thought it was less likely that these dealers would be closed.

If we expand our examination to include all auto dealers located in counties with an RUCC of 9, including those not designated for closure, we find that Census data reveal that a minimum of 257, a maximum of 528, and a middle estimate of 392.5 (or 393) people are employed at new auto retailers.

We decided to keep the auto dealer data anonymous because the process of appealing the closure designation may not be complete, and the source of our closure list wished to remain anonymous. Nevertheless, one still notices in table 2, part 1 that three communities (A, B, and E) have pairs of dealers listed. There are two reasons for this. First, we could not always isolate the closure to a particular dealer using the census data chosen. Second, we wanted to determine the complete effect of closing dealerships.

Our preliminary analysis of the data suggests that the proposed auto dealer closures will likely have a considerable effect on rural communities. Additional examinations suggest that rural auto dealers represent a sizable portion of the rural employment sector in several counties. Often, decisions to close businesses consider the corporate bottom line and ignore many of the local ramifications, such as possible employment losses, suggested by this study.

If you would like more information about demographic trends and data, such as the possible ramifications of business closures, contact Jacob Cummings or Mike McCurry at the Rural Life and Census Data Center. The Center's e-mail address is sdsudata@sdstate.edu, and the phone number is (605) 688-4899. You can also learn more by looking at the Center's website at http://sdrurallife.sdstate.edu/.

REFERENCES

- Chatterjee, Priyanka, W. Trevor Brooks, and Michael McCurry. 2009. "Private Industry Change in South Dakota." http://sdrurallife.sdstate.edu/publications/ private%20industry.pdf.
- Khatiwada, Saileza, Michael McCurry, and Trevor Brooks. 2008. "Threshold Levels for Selected Rural South Dakota Retail and Service Businesses." http://sdrurallife.sdstate.edu/publications/rural%20 threshold.pdf.
- South Dakota Auto Dealers Association. "2009 Membership Directory."
- United States Department of Agriculture. Economic Research Service. 2003. "Measuring Rurality: Rural-Urban Continuum Codes." Retrieved January 19, 2010, from http://www.ers.usda.gov/briefing/rurality/ruralurbcon/.
- U.S. Census Bureau. Nd. "North American Industry Classification System." Retrieved January 19, 2010, from http://censtats.census.gov/cbpnaic/cbpnaic.shtml.



South Dakota State University, South Dakota counties, and U.S. Department of Agriculture cooperating. South Dakota State University is an Affirmative Action/Equal Opportunity Employer and offers all benefits, services, education, and employment opportunities without regard for race, color, creed, religion, national origin, ancestry, citizenship, age, gender, sexual orientation, disability, or Vietnam Era veteran status.

EXEX9006 Access at http://agbiopubs.sdstate.edu/articles/ExEx9006.pdf.