The State Data Center at SDSU

South Dakota State

Demography Conference 2014

Let's Start at the Beginning

- SDSU's Rural Life/Census Data Center started as an affiliate center, staffed with a half-time graduate research assistant funded through the Agricultural Experiment Station.

- Professor Don Arwood was one of those early research assistants.

Non-Student Staffing

- In January, 2006, Mike McCurry was assigned to the Sociology Department and the Rural Life/Census Data Center as an Extension Specialist.

- In July, 2007, he was converted from non-faculty exempt to faculty, and combined Extension and Academic duties.

Faculty Staffing

- In 2009, USD dropped their Business and Industry Data Center, leaving the task of closing it to Dr. Bill Anderson of their Government Research Center.

- During the Decennial Census (2010) South Dakota's duties were handled by Anderson and McCurry without formal agreements.

Faculty Staffing

- In July, 2011, the Governor named SDSU's Rural Life/Center as South Dakota's Lead Census Data Center, and designated McCurry as State Demographer.

- A paper transfer left McCurry in the same spot, with extremely similar duties, but as academic instead of Extension faculty.

Student Staffing – Past & Present

Dave Olsen   (now Extension Program Director)

Trevor Brooks   (Ass't Professor, Austin Peay)

Christi Corcoran

Jake Cummings   (SD Dept of Education)

Prekchya Singh

Eric Guthrie

Mary Killsahundred

Schuang Li

From the Outside, it was seamless

- The change from SDSU Extension Sociologist to State Demographer included many of the same outreach responsibilities
  - Sharing data from the newly released 2010 Census
  - Helping people learn to use the new American Community Survey effectively
  - Developing population projections for the state
  - Providing data to the Bureau for current estimates

Since Our First Demography Conference

- What we've done since we last met:
  - Mary Killsahundred – emphasis on researching the systemic bias that occurs in surveys in Indian Country and finding ways to counter it
  - Eric Guthrie's special efforts on melding data with maps has moved the data center a long way into displaying data as easily understood visualizations
  - Mike announced his retirement on 11/22 and Guangquing Chi will be coming on board as Director of the Data Center on June 22

Since Our First Demography Conference

- What we've done since we last met:
  - Dr. Mary Emery obtained "service center" classification for the State Data Center, allowing us more flexibility in contracting specific data research tasks.
  - Agricultural Experiment Station funding for a graduate research assistant was eliminated.

Part of what we accomplished can be shown in responses by an annoyed constituent

Dear Mr. McCurry:

I am a little concerned with the stats we were given regarding Campbell County. I realize our population has declined since year 2000 but most other counties have too. When you look at percentages, Campbell County will stick out because we are a small county.

Response to an annoyed constituent

"No, when you look at percentages, Campbell County sticks out because Campbell's 17.73 percent population loss between 2000 and 2010 was the largest percentage county population loss in the state. The reason we use percentages is specifically because counties cannot be compared on the basis of raw numbers, as they are all different, and percentages serve to norm the data."

An Annoyed Constituent

When you look at a 10-15 % population loss when we only had 1500 people to start out with, it only amounts to around 150 people less over a ten year period.

Response to an annoyed constituent

Campbell Population	Year	Percent Change
5,629	1930	
5,033	1940	-10.4
4,046	1950	-19.6
3,531	1960	-12.7
2,866	1970	-18.8
2,243	1980	-21.7
1,965	1990	-12.4
1,782	2000	-9.3
1,466	2010	-17.7

You stated a very partial truth . . . Campbell County's population has declined since 2000. As you can see, the decline began much earlier – it has declined since 1930.
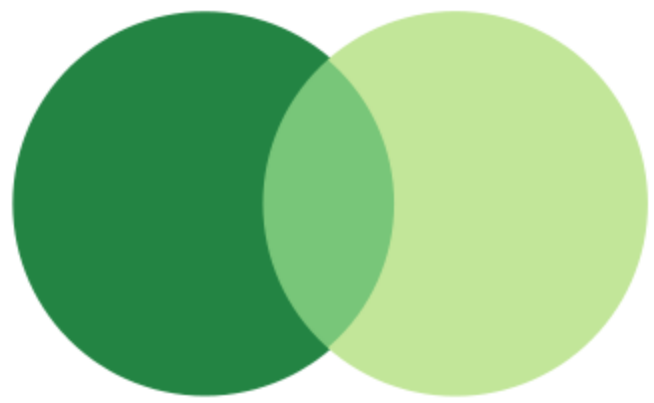
An Annoyed Constituent

We have an organized county development group and a full time Economic Development Coordinator. Within the past 5 past years we have attracted PIC (Pig Improvement Company) who employs over 50 people and have attracted a wind developer who plans on building a wind farm beginning this fall.

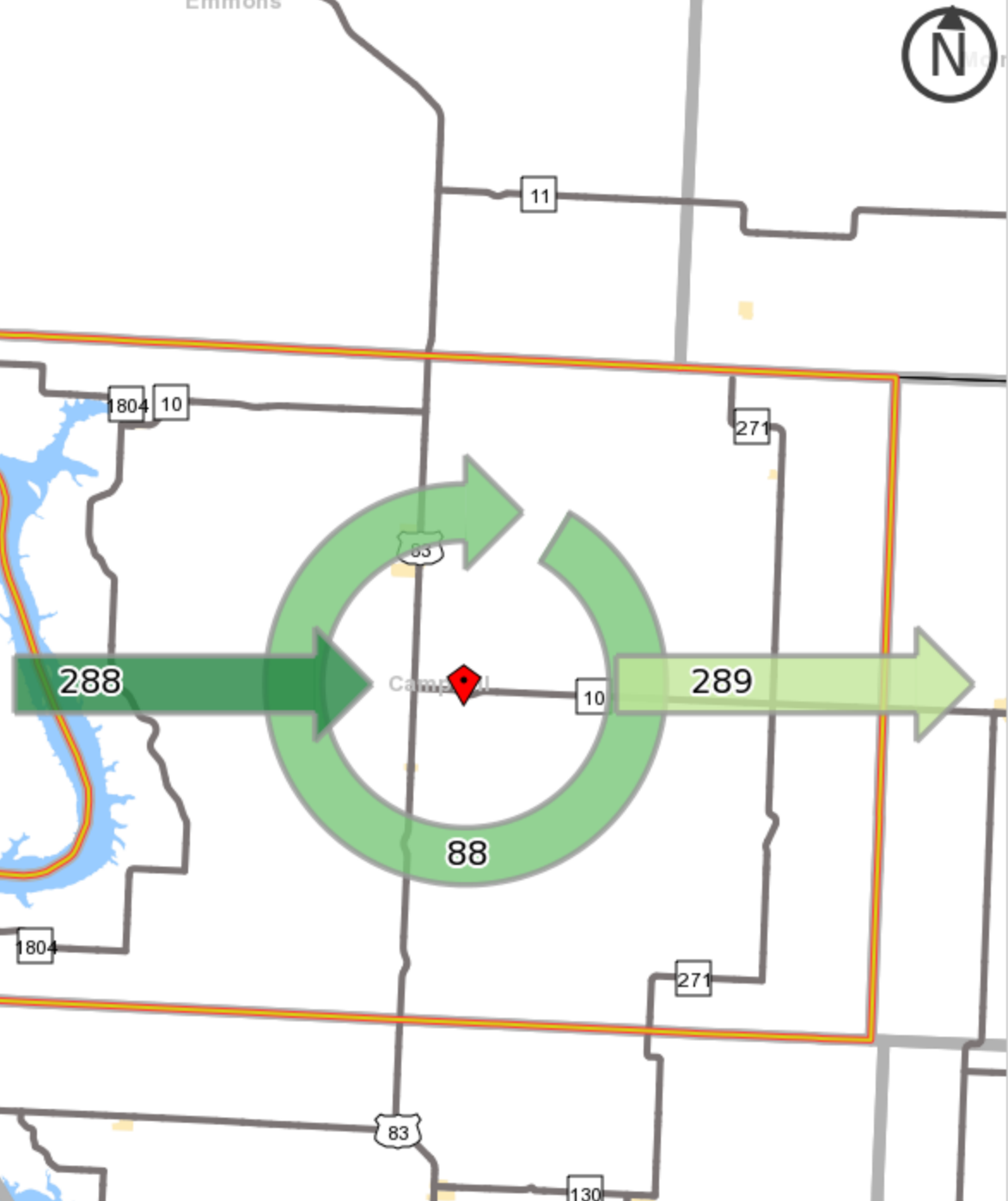# Response to an annoyed constituent

Years	Area	Industry	Estab	Covered Workers	Non-farm and salaried workers
1990	Campbell County	68	443	475	918
1995	Campbell County	60	461	490	951
2000	Campbell County	62	432	470	902
2005	Campbell County	61	418	465	883
2010	Campbell County	65	400	440	840
2011	Campbell County	72	464	430	894
2012	Campbell County	71	478	440	918

Inflow/Outflow Job Counts in 2011

- 288 - Employed in Selection Area, Live Outside
- 289 - Live in Selection Area, Employed Outside
- 88 - Employed and Live in Selection Area

Inflow/Outflow Job Counts (Primary Jobs)

	2011	
	Count	Share
Employed in the Selection Area	376	100.0%
Employed in the Selection Area but Living Outside	288	76.6%
Employed and Living in the Selection Area	88	23.4%
Living in the Selection Area	377	100.0%
Living in the Selection Area but Employed Outside	289	76.7%
Living and Employed in the Selection Area	88	23.3%

Reset Highlighting

An Annoyed Constituent

"At this time, we only have a hand full of houses for sale in the entire county. "
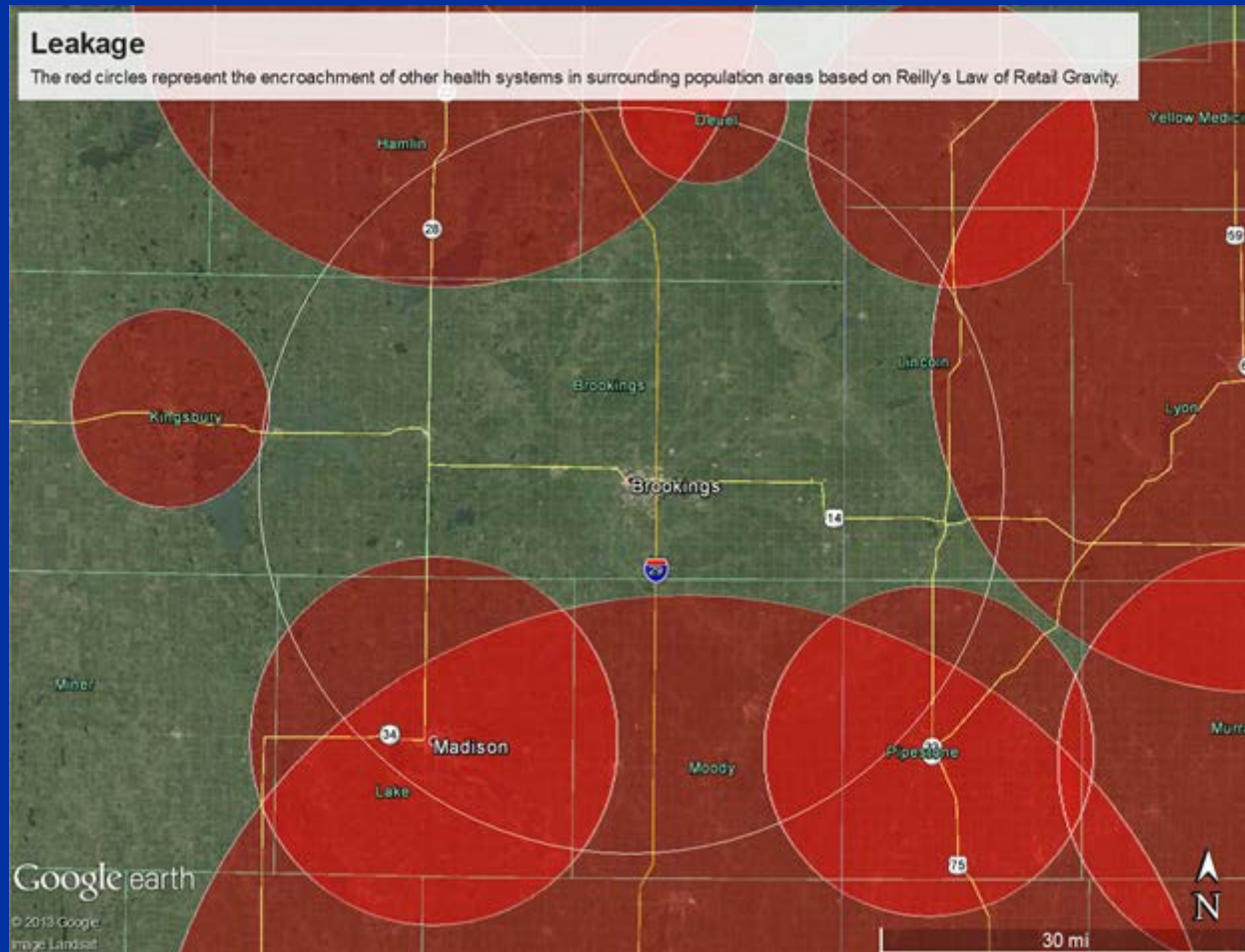
We would appreciate it if you could take Campbell County out of your presentation.

"Campbell and McPherson counties lead the aging trend that is occurring in rural South Dakota. How those counties cope with the aging provides data that will help others deal with a new demographic situation. Culturally, we have eons of experience in dealing with high levels of youth dependency – but dealing with the coming high levels of aged dependency we see in Campbell and McPherson counties is a new challenge."

A More Pleased Constituent

The Data Center recently assisted the Brookings Health system look at its service area and how that is affected by systems in other areas.

Leakage According to a Gravitational Model

Leakage

The red circles represent the encroachment of other health systems in surrounding population areas based on Reilly's Law of Retail Gravity.

Projecting Populations

- The basic operation of a demography unit.
  - Completed the 2010-2035 projections for SD and its counties last year.
  - Grew the interest in this type of work in the state

School Projections

The Center is currently working on school projections for several West River districts including and around the Rapid City Area

Correcting Survey Bias

- Mary Kills-A-Hundred's research dealt with the problems of conducting surveys in American Indian Majority Counties.

- After considerable number crunching, she discovered that the sampling bias can be beaten by combining Post Office data with ZIP code level Census Data instead of sampling at a county level.

Thank you!