



***South Dakota
Demography Conference***

***South Dakota State University
June 11-13, 2014***

Jan Clites, MEd, BSN, RN (retired)

***South Dakota Department of Health
Hospital Preparedness Program (HPP):
Partnership Project***

***HEALTHCARE RESPONSE PLANNING FOR
AT-RISK,
VULNERABLE, OR
'SPECIAL' POPULATIONS***

Why Healthcare Organizations Prepare for Emergency Events

- Local planning efforts
- Accreditation
- State requirements
- Federal requirements
- Common Sense

The events of
SEPTEMBER 11, 2001
forever changed the scope and magnitude of
emergency preparedness efforts



ANTHRAX

Initial planning by Healthcare Organizations was having a response to a Bioterrorism event



Anthrax scare started at Florida Hospital Heartland Division

HEALTHCARE ORGANIZATIONS' PLANNING

is not just for acts of terrorism, but events such as:



Blizzards

Ice storms



Fires





Floods



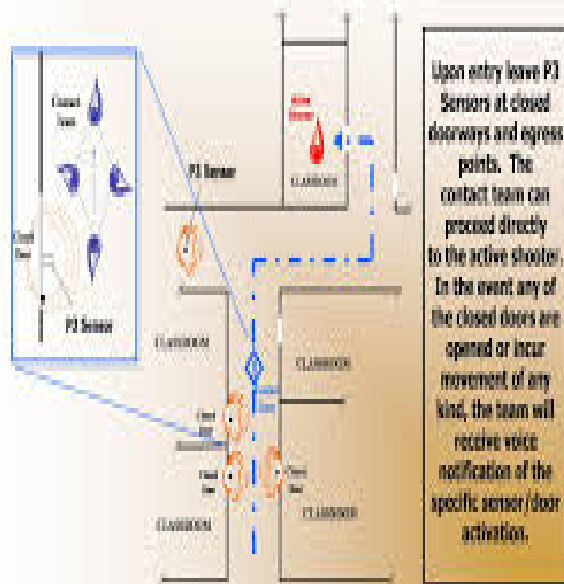
Tornadoes

Other potential
mass causality incidents



Active Shooter Event

ACTIVE SHOOTER RESPONSE



**Survive An Active
Shooter Event**

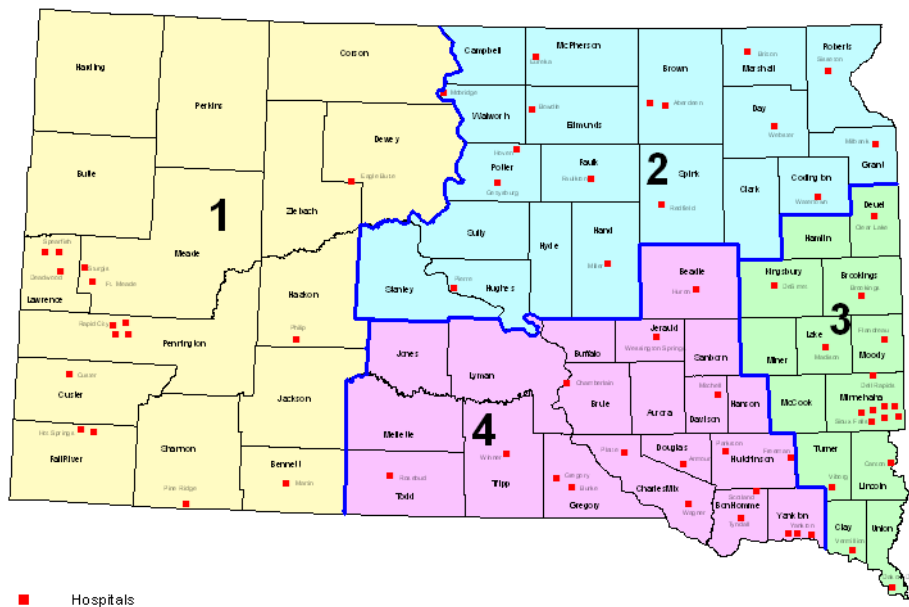
RUN. HIDE. FIGHT.

Learn more here!

HPP: HOSPITAL PREPAREDNESS PROGRAM

SDDOH

South Dakota Hospitals

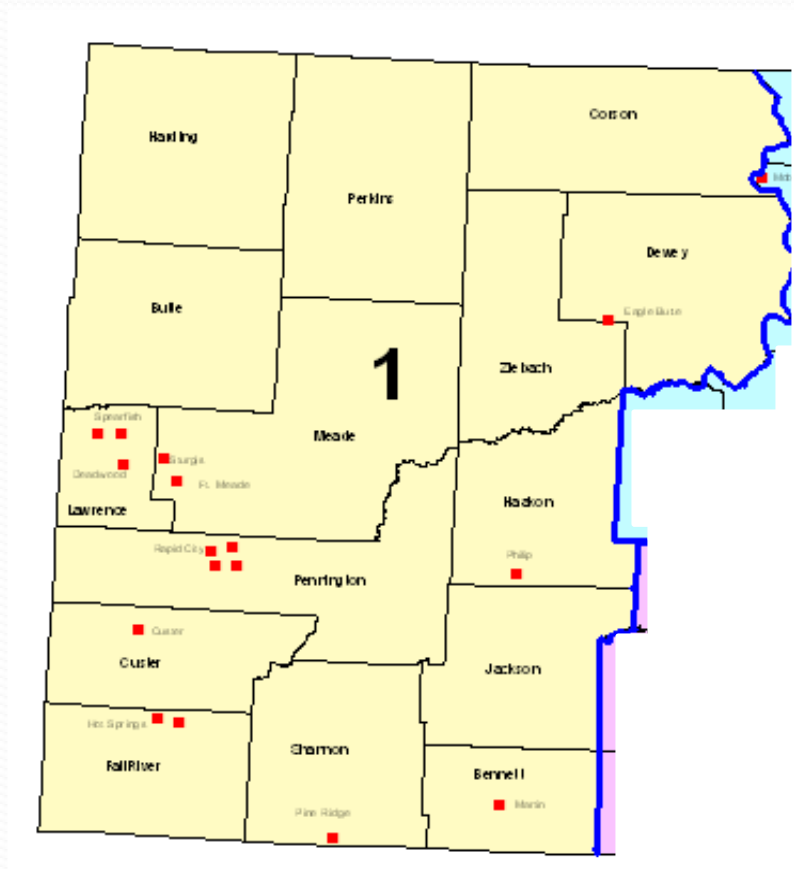


9/20 10

- Assists hospitals and collaborating entities to prepare for and respond to medical and public health emergencies
- Improves surge capacity
- Promotes partnerships between healthcare facilities
- Ensures integrated response from local facility to state level
- Four (4) Regions

REGION 1 COUNTIES: 26% SD Population

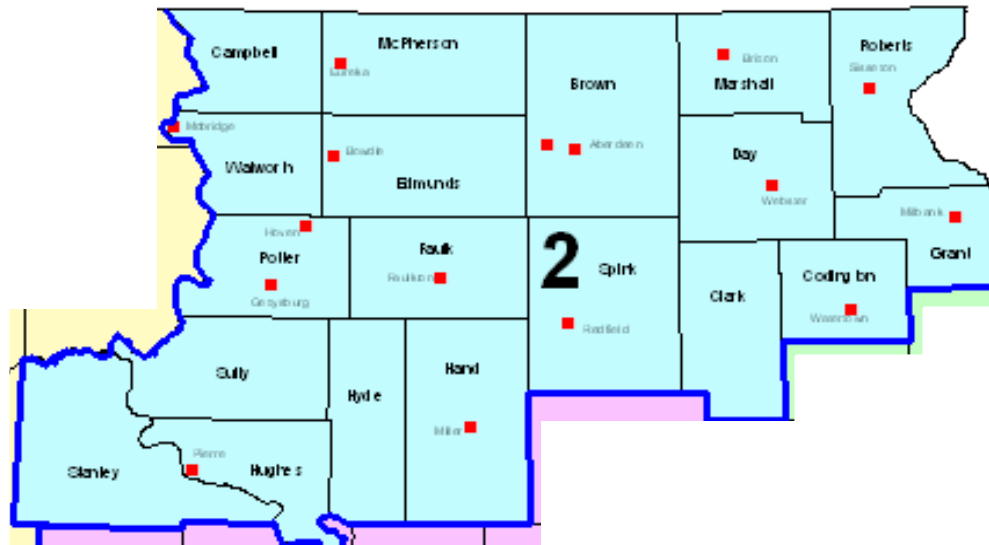
Bennett
Butte
Corson
Custer
Dewey
Fall River
Haakon
Harding



Jackson
Lawrence
Meade
Pennington
Perkins
Shannon
Ziebach

REGION 2 COUNTIES: 18% SD Population

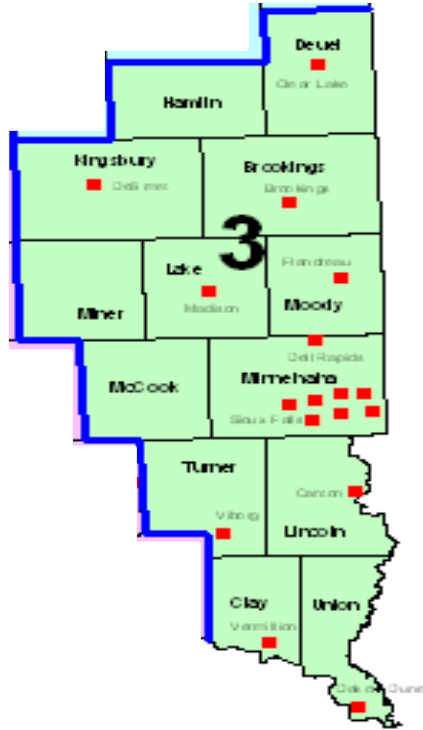
Brown
Campbell
Clark
Codington
Day
Edmunds
Faulk
Grant
Hand



Hughes
Hyde
Marshall
McPherson
Potter
Roberts
Spink
Stanley
Sully
Walworth

REGION 3 COUNTIES: 40% SD Population

Brookings
Clay
Deuel
Hamlin
Kingsbury
Lake
Lincoln



McCook
Miner
Minnehaha
Moody
Turner
Union

REGION 4 COUNTIES: 16% SD Population

Aurora

Beadle

Bon Homme

Brule

Buffalo

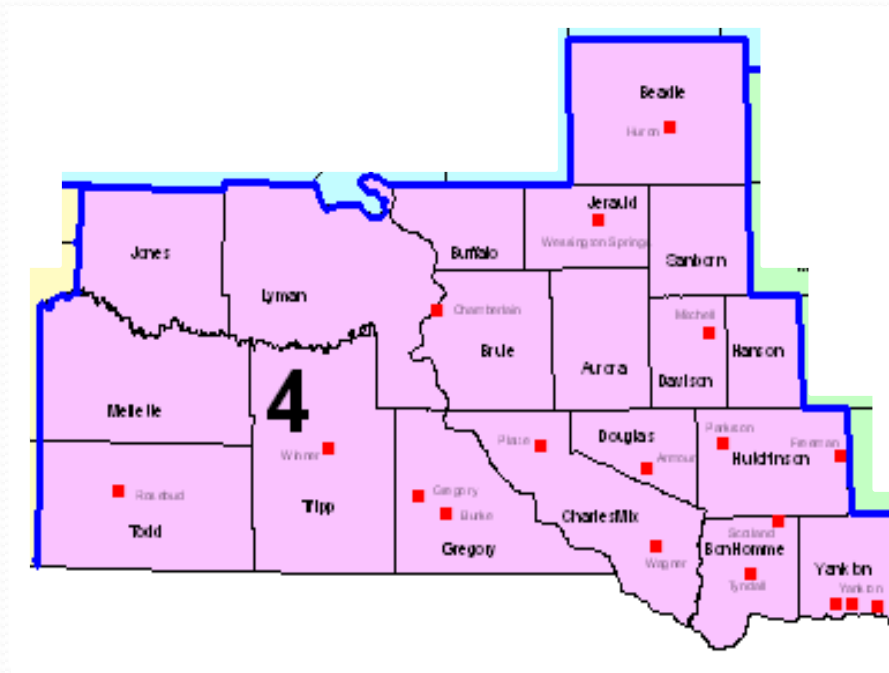
Charles Mix

Davison

Douglas

Gregory

Hanson



Hutchinson

Jerauld

Jones

Lyman

Mellette

Sanborn

Todd

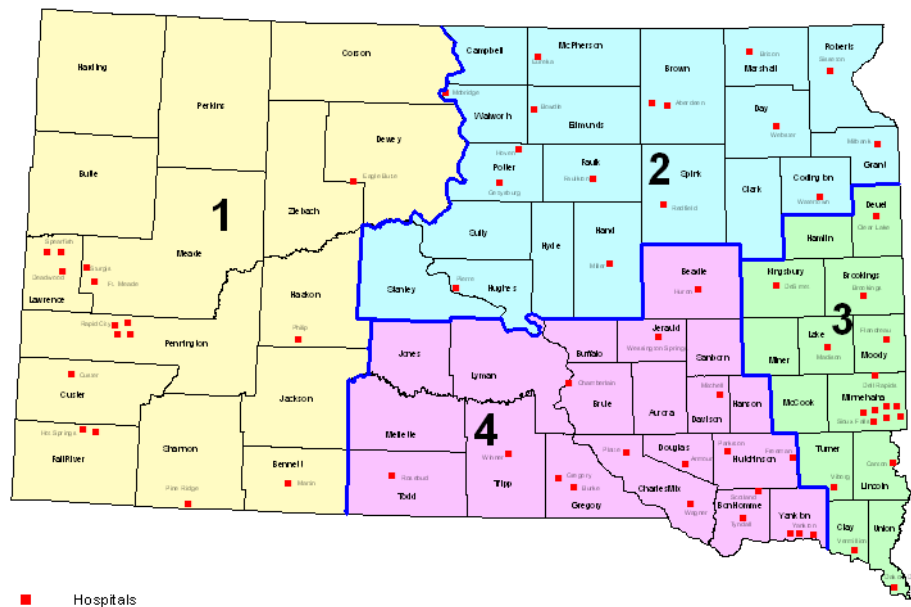
Tripp

Yankton

HPP: HOSPITAL PREPAREDNESS PROGRAM

SDDOH

South Dakota Hospitals



9/20 10

- Assists hospitals and collaborating entities to prepare for and respond to medical and public health emergencies
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WHO ARE THE AT-RISK POPULATIONS?

<u>Population:</u>	<u>% U.S. Population (Census 2000)</u>
Children, age 15 & under	22.84
Elderly, age 65 & older	12.43
Non- institutionalized with a Disability, age 16-64	11.78
Speak English 'not well' or 'not at all'	2.95
TOTAL:	49.99
With addition of entire institutionalized population (e. g. nursing homes, residential facilities, hospitals)	51.44

AT-RISK POPULATIONS

FOUR (4) CATEGORIES*

1. **AGE:** Elderly, Children
2. **DISABILITY/MEDICALLY FRAGILE:** Vision, Hearing, Substance Abuse, Physical/Mental Illness, Pregnant Women, Pharmacologically Dependent
3. **ECONOMIC DISADVANTAGE:** Unemployed, Homeless, Below Poverty Level
4. **LIMITED LANGUAGE/CULTURAL/GEOGRAPHIC ISOLATION:** Non-English Speaking, Hutterite, Native Americans

*Source: CDC (Center for Disease Control)

'AT-RISK' TOO BROAD/NON-SPECIFIC

INDIVIDUALS MAY HAVE ONE OR MORE NEEDS IN THESE FIVE
(5) AREAS AND REFERRED TO AS CMIST

1. **Communication**: decreased hearing, speech, vision, limited English
2. **Medical Care**: unstable, terminal, or contagious conditions; tube feedings; on oxygen; managing intravenous therapy; on power-dependent equipment; medication supply
3. **Independence**: requirement of durable medical equipment (wheelchairs, walkers); medical supplies; service animals; caregivers may determine level of independence
4. **Supervision**: loss of caregivers, family, friends or inability to cope in a new environment
5. **Transportation**: lack of vehicle; unable to drive; require special vehicles

EXAMPLES OF 2010 COUNTY PYRAMIDS

(AGING AND DEPENDENCY)

Median age: **50**

Population density ratio: **5/sq mile**

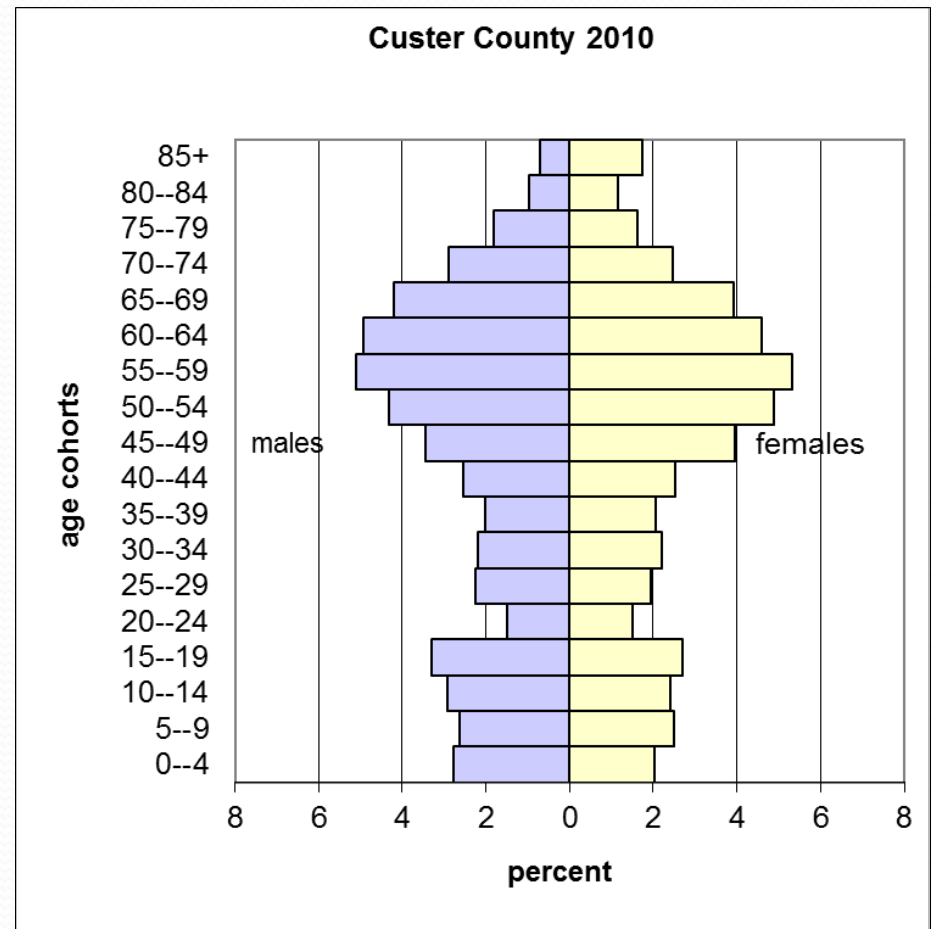
Youth dependency ratio: **24**

(# of persons 0-14 years per 100 persons 15-64 years)

Aged dependency ratio: **34**

(# of persons 65+ years per 100 persons 15-64)

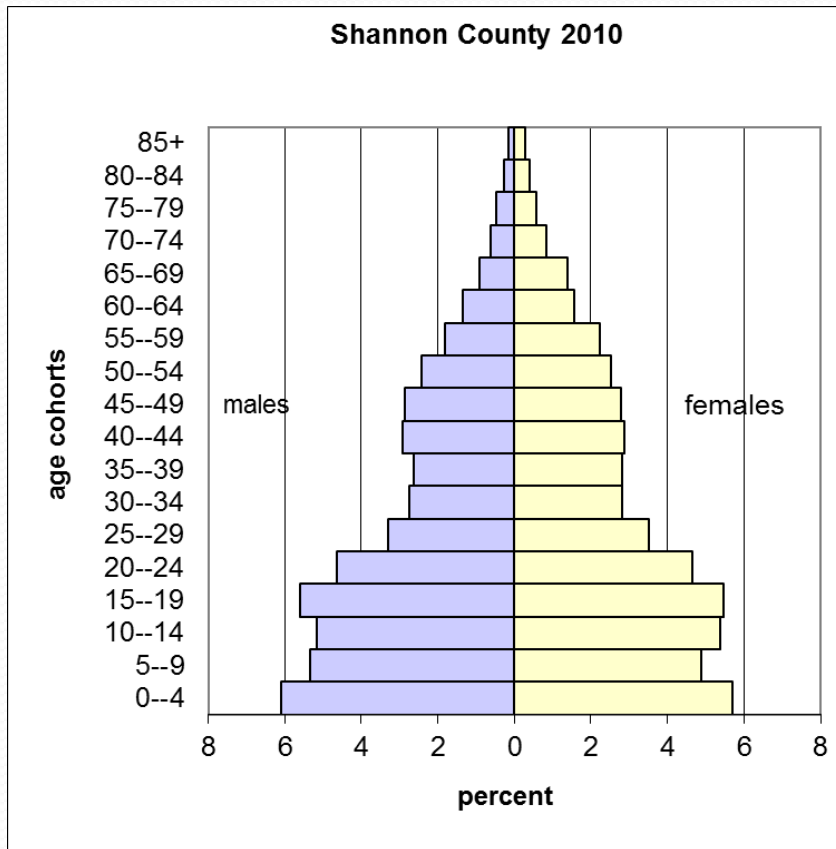
Aging Index: **141**



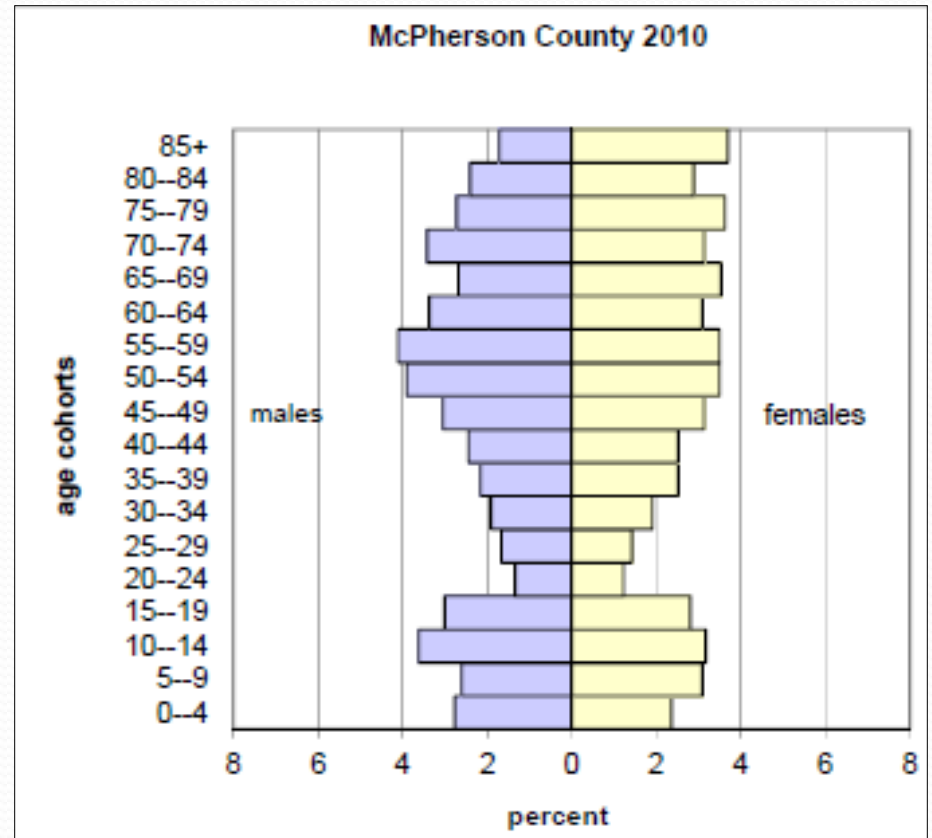
DEPENDENCY RATIOS



COUNTY PYRAMID EXAMPLES – CONT'D

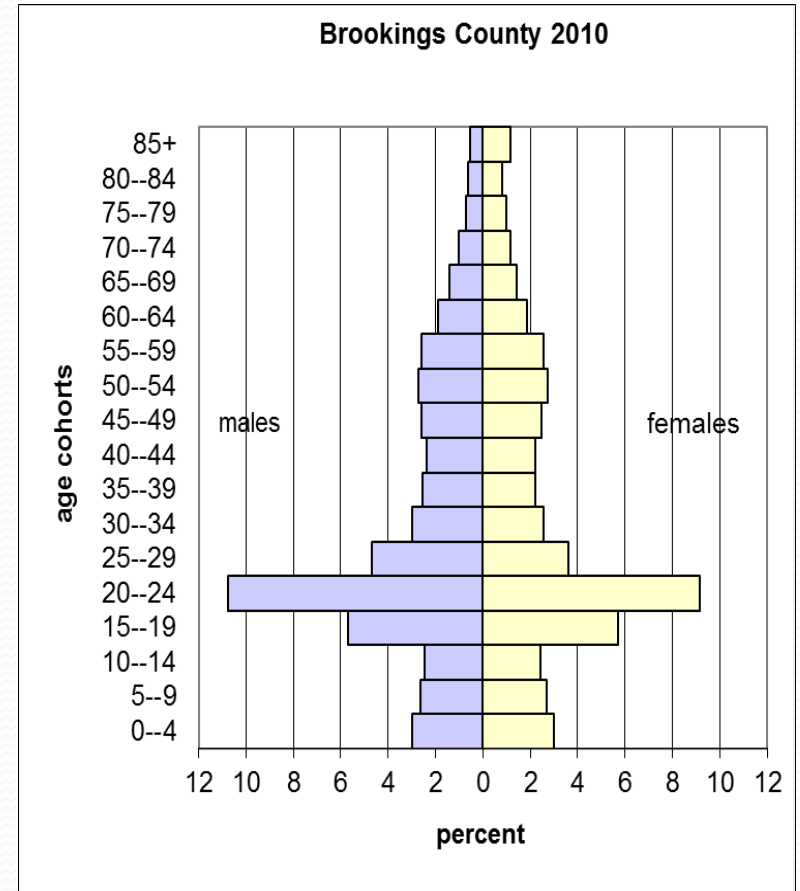
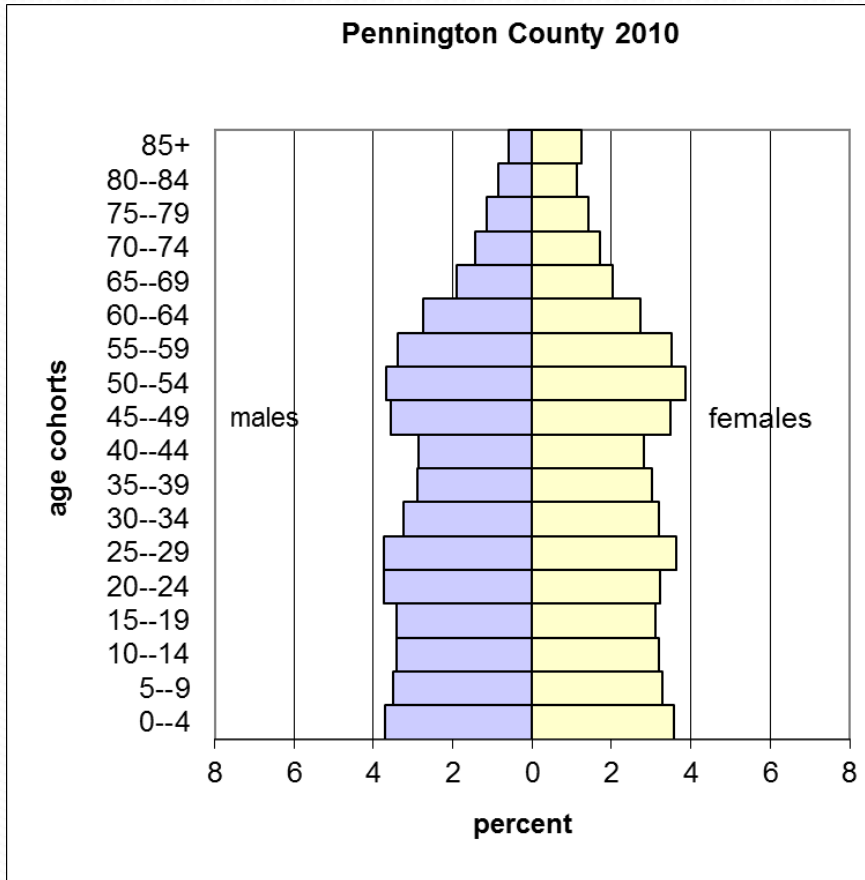


Youth Dependency Ratio = 53
 Aged Dependency Ratio = 10
 Aging index = 18



Youth Dependency Ratio = 33
 Aged Dependency Ratio = 56
 Aging index = 169

COUNTY PYRAMID EXAMPLES



Youth Dependency Ratio = 31
Aged Dependency Ratio = 20
Aging Index = 65

Youth Dependency Ratio = 22
Aged Dependency Ratio = 13
Aging Index = 61

Table 2
AT-RISK POPULATIONS: Region 3
Category: DISABILITY

County	*County Population 2008	***Alcohol & Drug Abuse 6/01/08-5/31/09 #clients served	**End Stage Renal Disease (ESRD)	+Sensory Disabilities	+Physical Disabilities	+Mental Disabilities	+Self-Care Disabilities	+Go-Outside Home Disabilities	+Employment Disabilities
Brookings	29,668	157	32	836	1,462	857	419	934	1,381
Clay	13,605	89	14	292	678	308	140	441	587
Deuel	4,276	14	4	113	355	161	128	312	280
Hamlin	5,660	28	9	113	452	260	182	384	266
Kingsbury	5,394	25	6	129	469	144	99	278	219
Lake	11,693	83	8	232	642	301	183	440	541
Lincoln	39,713	181	19	549	1,023	472	224	726	1,078
McCook	5,671	24	9	110	351	183	85	322	287
Miner	2,435	6	5	66	247	97	54	168	194
Minnehaha	179,180	3,257	205	4,360	8,442	4,978	2,235	6,120	9,193
Moody	6,414	63	8	197	436	235	78	243	311
Turner	8,366	42	10	193	624	229	147	487	465
Union	14,131	56	6	287	698	247	161	493	583
Total:	Region 3 Population 326,206	4,025	335	7,477	15,879	8,472	4,135	11,348	15,385

*U.S. Census Bureau data estimated population for 2008. <http://quickfacts.census.gov/qfd/states>

**Renal Network of the Upper Midwest www.esrdnet11.org

***S. D. Department of Human Services, Division of Alcohol and Drug Abuse

+SNAPS data derived from the 2000 U.S. Census and several 2003 CDC databases www.bt.cdc.gov/snaps/data

County	County Population In 2008*	Percentage of Persons in SD below poverty level in 2007*	Individuals Eligible for Medical Services January 2010**		Supplemental Nutrition Assistance January 2010** # Persons	Temporary Assistance for Needy Families January 2010** # Recipients	Percentage Of Unemployed 2008 State of South Dakota at 3.0%*****	Homeless January 2009***	Homeless September 2009***
			Adults	Children				#	#
Brookings	29,668	14.4%	648	1,283	1,560	71	2.3	18	13
Clay	13,605	19.6%	547	904	1,331	66	2.7	1	5
Deuel	4,276	8.8%	115	257	207	a	3.8	Did Not Report	
Hamlin	5,660	9.5%	184	562	389	a	3.3	0	0
Kingsbury	5,394	9.3%	149	243	229	11	3.2	Did Not Report	
Lake	11,693	11.2%	384	642	872	29	3.1	Did Not Report	
Lincoln	39,713	3.7%	370	1,201	920	15	2.4	Did Not Report	
McCook	5,671	9.2%	187	390	391	a****	3.4	Did Not Report	
Miner	2,435	11.6%	90	149	165	a	3.5	Did Not Report	
Minnehaha	179,180	9.6%	6,425	15,355	19,685	822	2.8	447	795
Moody	6,414	8.9%	164	493	512	27	4.3	Did Not Report	
Turner	8,366	8.5%	295	501	680	10	3.1	Did Not Report	
Union	14,131	6.4%	261	692	783	37	3.4	Did Not Report	
Totals:	326,206		9,819	22,672	27,724	1,088		466	813

* U.S. Census Estimate Population <http://quickfacts.census.gov/qfd/states>

** Statistical Analysis Report January 2010 S.D. Department of Social Services/Office of Management Information, www.dss.sd.gov

** *SD Statewide 2009 Homeless Count Results/SD Housing Authority

**** Data for 5 or less families not published to avoid disclosure of information for particular individuals.

***** Bureau of Labor Statistics, U.S.D.A., Economic Research Service

*Information obtained from U.S. Census Bureau 2000; summarized by Mike McCurry Ph.D. SDSU Extension Sociologist.

**Colony formed after the 2000 census with estimate of population based on usual split of colonies. Age distribution information not available.

County	Colony	Colony Population	Age 0-19	Age 20-85+	County Population	Hutterite Population	% Hutterite Population
Brookings	Newdale	68	37	31	28,200	181	0.6%
	Norfield	75**	**	**			
	Rolland	38	18	20			
Hamlin	Claremont	68	40	28	5,540	123	2.3%
	Poinsett	55	23	32			
Kingsbury	Spring Lake	105	51	54	5,815	105	1.8%
Lake	Graceville	131	62	69	11,276	201	1.8%
	Rustic Acres	70**	**	**			
McCook	Orland	73	51	22	5,832	73	1.3%
Moody	Pleasant Valley	75	33	42	6,595	75	1.1%
Total	10 colonies	758	315**	298**	63,258	758	1.2%

County	County Population 2008*	Language other than English spoken at home**		Native American Population*		Hispanic Population*		Asian Population*		Lacking basic prose literacy skills*** #
		%	#	%	#	%	#	%	#	
Brookings	29,668	5.2	1,542	1.0	297	1.2	356	1.8	534	1,270
Clay	13,605	5.1	694	2.6	354	1.3	177	2.5	340	556
Deuel	4,276	3.9	167	0.4	17	1.2	51	0.2	9	275
Hamlin	5,660	5.7	323	0.8	45	1.3	74	0.2	11	372
Kingsbury	5,394	2.7	146	0.6	32	0.8	43	0.4	22	350
Lake	11,693	4.8	561	0.9	105	1.2	140	0.7	82	590
Lincoln	39,713	3.3	1,311	0.7	278	1.5	596	0.7	280	1,098
McCook	5,671	4.1	233	0.4	23	1.1	62	0.2	11	350
Miner	2,435	4.7	114	0.4	10	0.9	22	0.1	2	192
Minnehaha	179,180	6.7	12,005	2.3	4,121	4.0	7,167	1.0	1,792	6,935
Moody	6,414	5.8	372	12.6	808	1.3	83	1.1	71	350
Turner	8,366	3.7	310	0.7	59	0.8	67	0.3	25	471
Union Totals:	14,131 Region 3 Population 326,206	4.1	579 18,357 Individuals	0.5	71 6,220 Individuals	1.8	254 9,092 Individuals	2.5	353 3,532 Individuals	601 13,410 Individuals

* U. S. Census Bureau data estimated population for 2008

**U.S. Census Bureau 2000 data

***National Center for Education Statistics/number of persons based on estimated (county) population size of persons 16 years and older in households in 2003.

Inflow/Outflow Analysis

enter your own subtitle

Display Settings

Labor Market Segment Filter [All Workers](#)

Year

Map Controls

- Color Key
- Flow Overlay
- Selection Outline
- [Identify](#) [Zoom to Selection](#)
- [Clear Overlays](#) [Animate Overlays](#)

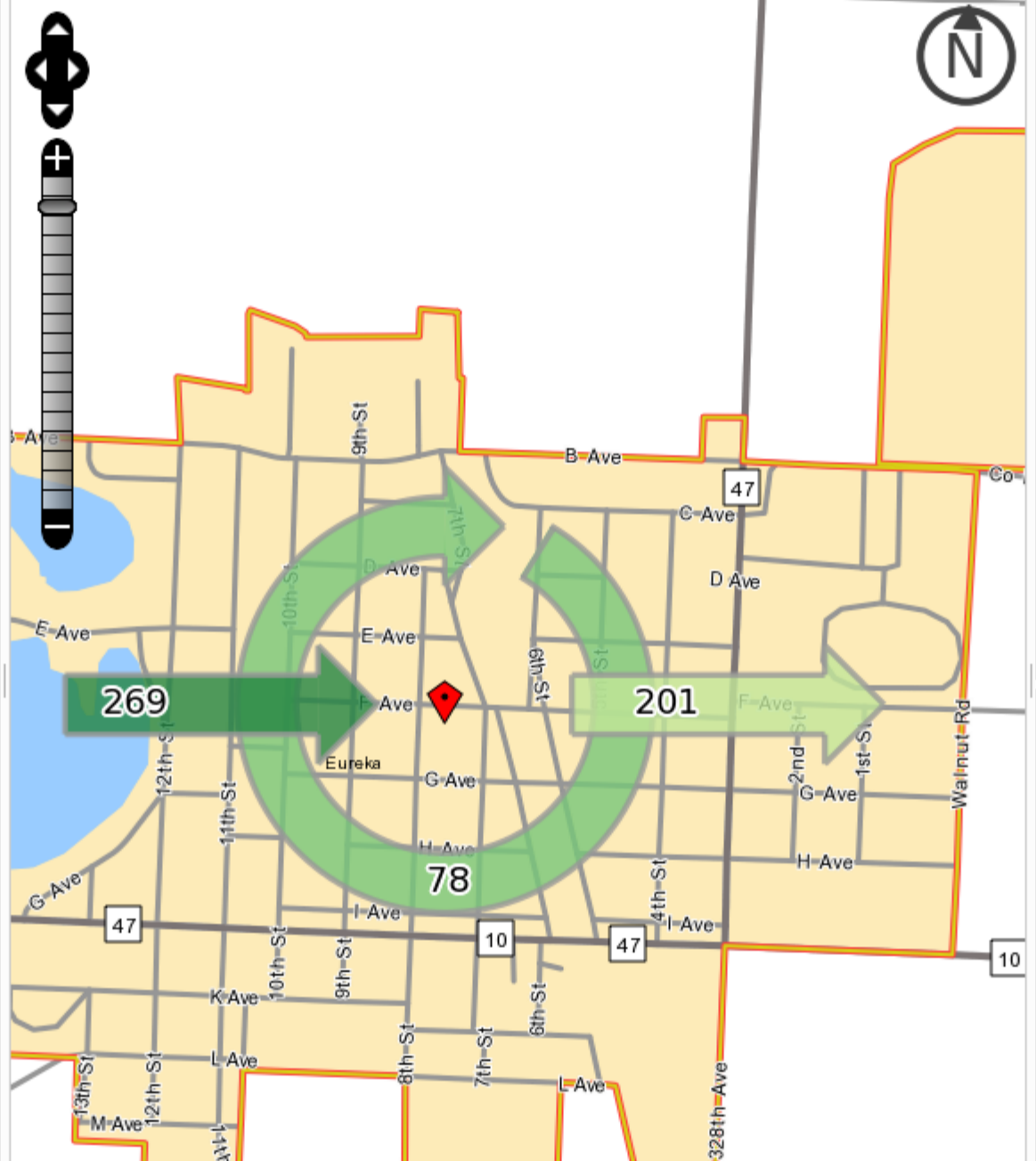
Report/Map Outputs

- [Detailed Report](#)
- [Export Geography](#)
- [Print Chart/Map](#)

Legends

Note: Overlay arrows do not indicate directionality of worker flow between home and employment locations.

- Employed and Live in Selection Area
- Employed in Selection Area, Live Outside
- Live in Selection Area, Employed Outside
- Analysis Selection



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REGIONAL RESPONSE PLAN OBJECTIVES

- Maintain individuals in a familiar environment to lessen the traumatic impact of an emergency situations;
- Provide support to community-based agencies and organizations who provide direct service to At-Risk Populations; thus,
- Minimize additional burden on hospitals and allow for care of those most critically injured/ill

COMPONENTS OF PLANNING

- **IDENTIFY** vulnerable populations
- **WHO** represents them
(agencies/organizations)
- **HOW** to reach vulnerable populations
- **HOW** to transport or provide care

QUESTIONS?

