

South Dakota Retirement System's Economic Impact on the State's Economy

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South Dakota Retirement System

- Total Membership – 67,958 Participants
- 18,076 Participants Receiving Benefits
- A More than \$7 Billion Held in Trust
- Payments in 2007
 - 254.3 million dollars
 - 229.5 million paid to SD residents
 - 24.8 million paid out-of-state

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The Economic Impact

- Estimation Methodology
- Economic Impact on State
- Economic Impact by County

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Impact Estimation Using IMPLAN

- **What is IMPLAN?** The multiplier estimation product used in the analysis is IMPLAN (IMpact Analysis for PLANning). IMPLAN was developed at the University of Minnesota over a period of years in conjunction with the U.S. Forest Service's Land Management Planning Unit in Fort Collins. Governmental agencies and leading universities across the nation use this product for estimating economic impacts.

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IMPLAN is an I-O Model

- IMPLAN is an improved input-output (I-O) estimation model. The versatility of this model enables specific analysis for each area of interest, including county, multi-county regions, a state or a group of states. Naturally, some estimation error will remain. The I-O technique describes an enterprise based on average ingredient and performance measures and therefore best predicts the impact of an average enterprise.

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Distribution of Benefits is Special

- Three multiplier effects are typically presented in an analysis: the *output*, *value-added*, and *employment* effects. Each of these in turn reflects three components: the *direct* effect, the *indirect* effect, and the *induced* effect.
- The impact of SDRS benefit payments are earned entitlements and not payments for goods or services.

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All Impact will be Induced Effects

- Induced expenditures result as the earned entitlements are spent throughout the economy creating new income for proprietors and their workers.
- The proprietors and workers spend that new income on goods and services which in turn creates demand for additional goods and services, thus creating a repeating cycle of expenditures.
- The aggregated sum of this repeating cycle of expenditures is referred to as a multiplier.

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In-State & Out-of-State

- The SDRS benefits are distributed throughout the State and to retirees residing Out-of-State
- Out-of-State disbursements are considered leakages having no significant economic impact within the state.
- Resident retiree's disbursements support local businesses creating jobs and increasing both proprietor's and worker's income. These dollars impact proprietors, workers and government services.

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Economic Activity Means Jobs

- Finally, this analysis shows the estimated number of full and part time jobs created by the economic activity as the SDRS retirement payments make their way through the economy.
- IMPLAN estimates the number of full and part-time jobs supported by the economic activity resulting from SDRS retirement payments.

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SDRS Payments & Economic Activity

(State)

- \$254.3 million - Total 2007 Payments
 - \$229.5 million - SD Assigned Payments
 - \$ 24.8 million - Out-of State (Leakage)
- \$229.5 million - SD Assigned Payments
 - \$210.4 million – Disposable Income
- \$287.4 million - Economic Activity (Multiplier)
- \$120.6 million – Value Added or Income
- 2,126 - Permanent Full and Part Time Jobs

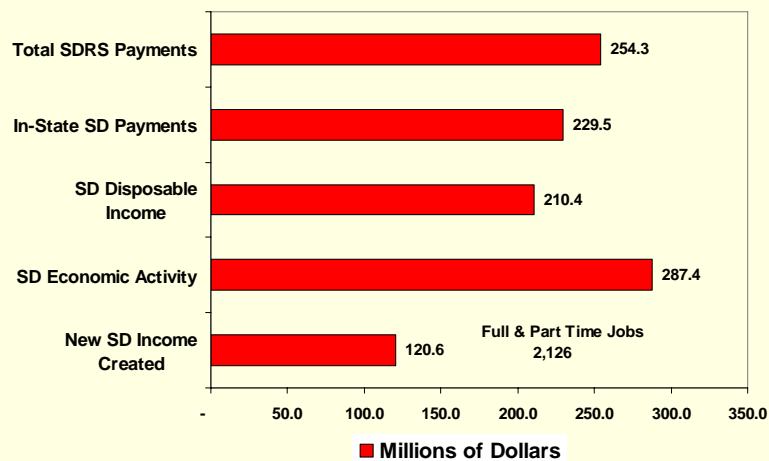
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Multiplier Discussion

- The Economic Activity Multipliers
- Value Added which includes:
 - Employee Compensation
 - Proprietor Income
 - Other Property Income
 - Indirect Business Tax (Sales Tax)
- Full and Part-Time Jobs

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SDRS Payments & Economic Activity (State)



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Snowbird Assumptions

- Payments to South Dakota recipients are spent in South Dakota in the same proportion as spending occurs in the economy. There is no adjustment for resident snowbirds.
- Payments to Out-of-State recipients are all lost to the South Dakota economy. This may not be true.
- Many Snowbirds continue to maintain households here during winter or have annual extended visits. All is not lost with their absence.
- Errors in the two assumptions are offsetting but it is likely the offset isn't perfect. A survey of participants would be required to refine assumptions.

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SDRS Payments & Economic Activity

(SMSA)

SMSA	SDRS Payments	Economic Activity		Total Activity
	Annual March 2007	Initially	Subsequently	
Sioux Falls	37,470,319	31,245,145	10,229,567	41,474,712
Rapid City	36,391,339	31,781,872	9,128,961	40,910,834

SMSA	New Income	Full & Part Time Jobs
Sioux Falls	17,993,485	300.0
Rapid City	17,095,565	295.6

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Estimates of Impacts by County

SDRS Payments are identified by county in the first set of slides along with:

- Disposable Personal Income Estimates, and
- Estimates of Total Economic Activity

That set of slides is followed by estimates of:

- The Economic Activity Multiplier
- Value added or Income from that activity, and
- The number of Full and Part-Time Jobs created

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SDRS Payments / Economic Activity₁

County	SDRS Payments	Economic Activity		Total
	Annual March 2007	Initially *	Subsequently	Activity
Aurora	968,186	879,820	29,581	909,401
Beadle	5,611,653	5,041,255	914,181	5,955,436
Bennett	355,047	322,770	18,475	341,245
Bon Home	2,524,550	2,287,240	193,299	2,480,539
Brookings	15,575,680	13,252,375	1,836,673	15,089,049
Brown	13,422,338	11,670,348	2,800,160	14,470,508
Brule	1,456,464	1,304,065	178,657	1,482,722
Buffalo	33,783	32,038	445	32,484
Butte	2,195,008	2,003,012	209,509	2,212,521
Campbell	418,141	377,366	20,220	397,586
Charles Mix	2,089,102	1,907,441	185,174	2,092,616
Clark	901,216	821,526	42,815	864,341
Clay	7,733,218	6,797,659	832,761	7,630,419
Codington	8,077,944	6,917,504	1,265,543	8,183,047
Corson	480,729	448,014	9,477	457,491
Custer	2,768,182	2,447,694	193,671	2,641,366

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*The initial impact is SDRS Payments less taxes or disposable personal income.

SDRS Payments / Economic Activity₂

County	SDRS Payments	Economic Activity		Total
	Annual March 2007	Initially	Subsequently	Activity
Davison	6,151,534	5,362,186	1,097,709	6,459,896
Day	1,961,020	1,743,596	160,941	1,904,537
Deuel	726,416	651,512	37,018	688,530
Dewey	723,944	677,086	23,729	700,816
Douglas	609,174	560,798	39,398	600,196
Edmunds	972,651	887,733	51,236	938,969
Fall River	2,002,507	1,815,765	158,095	1,973,860
Faulk	1,097,516	988,267	48,576	1,036,843
Grant	1,739,633	1,518,288	189,145	1,707,433
Gregory	1,217,234	1,101,959	110,892	1,212,852
Haakon	492,366	425,677	47,173	472,850
Hamlin	1,419,761	1,239,547	70,359	1,309,906
Hand	1,049,177	911,473	93,570	1,005,043
Hanson	466,651	421,755	15,752	437,507
Harding	280,915	242,996	9,296	252,291
Hughes	19,261,419	16,172,682	2,530,507	18,703,190

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SDRS Payments / Economic Activity₃

County	SDRS Payments	Economic Activity		Total
	Annual March 2007	Initially	Subsequently	Activity
Hutchinson	2,245,473	2,007,565	169,079	2,176,644
Hyde	409,402	347,606	23,631	371,237
Jackson	546,094	502,689	17,724	520,414
Jerauld	531,564	477,365	23,627	500,992
Jones	373,971	326,595	14,808	341,403
Kingsbury	1,343,802	1,214,885	85,833	1,300,718
Lake	4,969,443	4,353,010	544,296	4,897,306
Lawrence	8,631,695	7,628,378	1,443,251	9,071,628
Lincoln	2,877,710	2,492,530	380,064	2,872,594
Lyman	738,937	633,868	35,398	669,266
Marshall	1,651,049	1,465,015	87,316	1,552,331
McCook	1,181,670	1,073,723	73,009	1,146,732
McPherson	683,060	627,807	32,310	660,117
Meade	5,328,252	4,833,105	760,185	5,593,290
Mellette	348,262	323,287	7,524	330,811
Miner	615,808	562,862	29,378	592,240

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SDRS Payments / Economic Activity₄

County	SDRS Payments	Economic Activity		Total
	Annual March 2007	Initially	Subsequently	Activity
Minnehaha	31,337,727	25,664,463	7,734,576	33,399,039
Moody	1,315,799	1,174,280	58,310	1,232,590
Pennington	31,063,087	26,726,080	6,666,446	33,392,526
Perkins	747,116	672,557	62,475	735,032
Potter	881,721	785,139	62,589	847,728
Roberts	2,194,045	1,991,128	157,992	2,149,120
Sanborn	680,581	610,992	20,812	631,804
Shannon	105,637	98,951	1,504	100,455
Spink	3,648,338	3,261,306	201,973	3,463,279
Stanley	1,908,673	1,563,732	81,766	1,645,498
Sully	288,750	262,169	18,853	281,022
Todd	554,132	519,712	12,421	532,133
Tripp	1,595,493	1,456,178	216,987	1,673,164
Turner	2,073,212	1,887,540	141,571	2,029,111
Union	2,784,199	2,190,237	203,388	2,393,624
Walworth	2,143,845	1,933,825	249,144	2,182,969
Yankton	7,798,544	6,754,877	1,188,825	7,943,701
Ziebach	131,854	124,051	2,845	126,896

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Impacts by County (continued)

- The Economic Activity Multipliers
- Value Added which includes:
 - Employee Compensation
 - Proprietor Income
 - Other Property Income
 - Indirect Business Tax (Including Sales Taxes)
- Full and Part-Time Jobs

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Multipliers/ New Income / Jobs₁

County	Economic Activity Multipliers		Value Added (Dollars)	Permanent F&P Jobs
	Payments	Disposable		
Aurora	0.94	1.03	191,448	3.3
Beadle	1.06	1.18	420,832	40.3
Bennett	0.96	1.06	235,411	1.4
Bon Home	0.98	1.08	273,881	11.4
Brookings	0.97	1.14	357,035	90.1
Brown	1.08	1.24	487,335	112.0
Brule	1.02	1.14	364,928	10.6
Buffalo	0.96	1.01	128,309	0.1
Butte	1.01	1.10	312,921	13.0
Campbell	0.95	1.05	199,676	1.8
Charles Mix	1.00	1.10	287,094	12.2
Clark	0.96	1.05	222,479	3.0
Clay	0.99	1.12	319,586	51.7
Codington	1.01	1.18	431,616	58.1
Corson	0.95	1.02	143,083	0.9
Custer	0.95	1.08	262,262	12.2

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Multipliers/ New Income / Jobs₂

County	Economic Activity Multipliers		Value Added (Dollars)	Permanent F&P Jobs
	Payments	Disposable		
Davison	1.05	1.20	434,261	44.5
Day	0.97	1.09	282,543	9.9
Deuel	0.95	1.06	239,886	2.5
Dewey	0.97	1.04	187,243	2.3
Douglas	0.99	1.07	246,292	2.3
Edmunds	0.97	1.06	247,461	3.1
Fall River	0.99	1.09	261,326	11.6
Faulk	0.94	1.05	231,285	3.9
Grant	0.98	1.12	340,946	10.3
Gregory	1.00	1.10	296,251	7.1
Haakon	0.96	1.11	327,602	2.8
Hamlin	0.92	1.06	219,498	4.1
Hand	0.96	1.10	317,747	5.4
Hanson	0.94	1.04	183,725	0.9
Harding	0.90	1.04	201,044	1.1
Hughes	0.97	1.16	407,318	134.2

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Multipliers/ New Income / Jobs₃

County	Economic Activity Multipliers		Value Added (Dollars)	Permanent F&P Jobs
	Payments	Disposable		
Hutchinson	0.97	1.08	280,090	10.2
Hyde	0.91	1.07	260,560	1.4
Jackson	0.95	1.04	167,239	2.1
Jerauld	0.94	1.05	232,696	2.0
Jones	0.91	1.05	212,506	1.3
Kingsbury	0.97	1.07	259,140	5.5
Lake	0.99	1.13	347,859	30.5
Lawrence	1.05	1.19	414,184	58.0
Lincoln	1.00	1.15	382,522	14.7
Lyman	0.91	1.06	231,599	3.2
Marshall	0.94	1.06	241,258	6.6
McCook	0.97	1.07	240,824	5.3
McPherson	0.97	1.05	207,105	2.6
Meade	1.05	1.16	366,010	34.8
Mellette	0.95	1.02	160,227	0.9
Miner	0.96	1.05	223,057	2.3
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Multipliers/ New Income / Jobs₄

County	Economic Activity Multipliers		New Income (Millions)	Permanent F&P Jobs
	Payments	Disposable		
Minnehaha	1.07	1.30	565,303	241.2
Moody	0.94	1.05	233,413	4.0
Pennington	1.07	1.25	515,697	227.2
Perkins	0.98	1.09	261,390	3.7
Potter	0.96	1.08	253,592	4.1
Roberts	0.98	1.08	242,664	10.2
Sanborn	0.93	1.03	196,876	1.8
Shannon	0.95	1.02	124,271	0.2
Spink	0.95	1.06	236,917	11.7
Stanley	0.86	1.05	237,809	7.2
Sully	0.97	1.07	266,336	1.2
Todd	0.96	1.02	149,391	1.1
Tripp	1.05	1.15	366,438	11.8
Turner	0.98	1.08	263,570	8.1
Union	0.86	1.09	312,906	10.5
Walworth	1.02	1.13	331,819	14.7
Yankton	1.02	1.18	416,389	52.7
Ziebach	0.96	1.02	152,506	0.4

Shopping Center Effects

- State-wide summary:
 - 2,126 - Permanent Full and Part Time Jobs
- County totals:
 - 1,461 - Permanent Full and Part Time Jobs
- There is a difference of 664.5 Jobs

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Sioux Falls SMSA vs. Four Counties

- Sioux Falls SMSA
 - 300.0 - Permanent Full and Part-Time Jobs
- Four County Total
 - 269.3 - Permanent Full and Part-Time Jobs
- A difference of 30.6 Full & Part-Time Jobs

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Rapid City SMSA vs. Two Counties

- Rapid City SMSA
 - 295.6 - Permanent Full and Part-Time Jobs
- Two County Total
 - 262.0 - Permanent Full and Part-Time Jobs
- A difference of 33.6 Full & Part-Time Jobs

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Import of Jobs Logic Extended

- Larger and Smaller communities in South Dakota cross county lines to shop in Trade Center Communities.
- IMPLAN catches these purchases in the State geography but are lost in the county specific geography. The larger state numbers are more inclusive by capturing this activity.

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Perspective: Apples and Apples

- The latest Bureau of Economic Analysis industry income data is for 2004
- SDRS payment amounts are in 2007 dollars. Estimated 2004 dollar amounts are included for data consistency and purposes of comparison.
- The relative importance of SDRS payments in the South Dakota economy is evident.

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SDRS vs. SD Retail Trade Income

(,000 of 2004 dollars)

Transportation and warehousing	516,720
Information	339,937
Truck transportation	298,802
Motor vehicle and parts dealers	278,899
SDRS (2007 dollars)	229,494
SDRS (est. 2004 dollars)	209,986
General merchandise stores	186,683
Food and beverage stores	172,725
Telecommunications	162,100
Building material and garden supply stores	149,036
Gasoline stations	134,785
Miscellaneous store retailers	106,085
Broadcasting, except Internet	83,794
Nonstore retailers	69,052
Publishing industries, except Internet	68,451
Rail transportation	60,820
Health and personal care stores	60,678

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SDRS vs. Nondurable Goods Manufact.

(,000 of 2004 dollars)

Food manufacturing	302,369
SDRS (2007 dollars)	229,494
SDRS (est. 2004 dollars)	209,986
Printing and related support activities	59,738
Plastics and rubber products manufacturing	51,912
Chemical manufacturing	47,279
Paper manufacturing	46,611
Beverage and tobacco product manufacturing	20,046
Textile product mills	13,076
Apparel manufacturing	5,287
Leather and allied product manufacturing	1,100

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SDRS vs. Durable Goods Manufact.

(,000 of 2004 dollars)

Machinery manufacturing	251,934
Miscellaneous manufacturing	235,839
SDRS (2007 dollars)	229,494
SDRS (est. 2004 dollars)	209,986
Computer and electronic product manufacturing	182,607
Fabricated metal product manufacturing	145,010
Wood product manufacturing	104,232
Furniture and related product manufacturing	84,008
Nonmetallic mineral product manufacturing	76,230
Primary metal manufacturing	32,914
Electrical equipment and appliance manufacturing	20,347

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SDRS vs. SD Construction Income

(,000 of 2004 dollars)

Specialty trade contractors	555,345
Construction of buildings	311,384
SDRS (2007 dollars)	229,494
SDRS (est. 2004 dollars)	209,986
Heavy and civil engineering construction	182,340

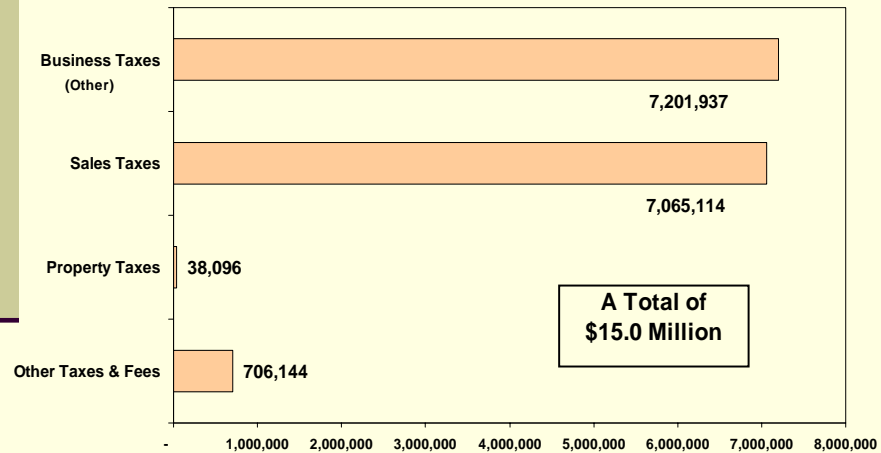
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SDRS Prominent in SD Economy

- \$254.3 million - Total 2007 Payments
 - \$229.5 million - SD Assigned Payments
 - \$ 24.8 million - Out-of State (Leakage)
- \$229.5 million - SD Assigned Payments
 - \$210.4 million – Disposable Income
- \$287.4 million - Economic Activity (Multiplier)
- \$120.6 million – Value Added or Income
- 2,126 - Permanent Full and Part Time Jobs

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State and Local Tax Estimates



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State and Local Taxes Received

- \$15.0 Million in State and Local Taxes & Fees
- Based on \$287.4 Million of Economic Activity
 - That (\$15.0) is an average yield of 5.2%
- Of \$120.6 Million of Value Added
 - Government's share (\$15.0) is 12.4%

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Thank You!

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