Labor Shortage: So What's the Question?

Using Labor Market Information Tools

Presented to the Wyoming Economic Development Association 2008 Winter Conference Cheyenne, Wyoming February 27, 2008 Wyoming Department of Employment, Research & Planning Tom Gallagher, Manager

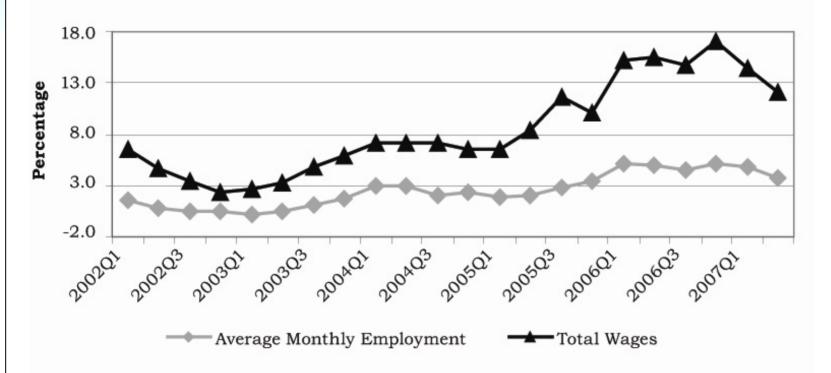
Introduction:

Market Response to Growing Labor Demand

- Recruitment
- Reallocation of Labor
- Demographic Drivers
- Retention Do We Really Mean It?

Employment Growth

Figure: Over-the-Year Percentage Change in Wyoming Covered Employment and Wages for First Quarter 2002 (2002Q1) to Second Quarter 2007 (2007Q2)

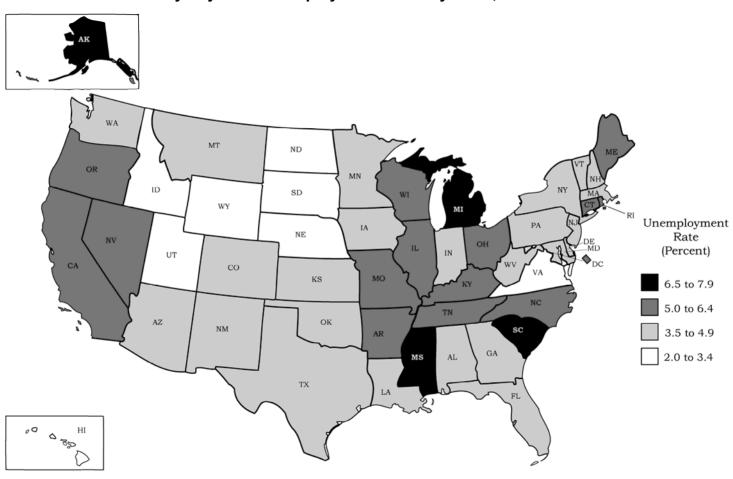


Source: Quarterly Census of Employment and Wages, developed through a cooperative program between Research & Planning and the U.S. Bureau of Labor Statistics.

Extract Date: October 2007.

Unemployment Rates

Seasonally Adjusted Unemployment Rates by State, December 2008



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics program. Extracted February 7, 2008.

Residency Status

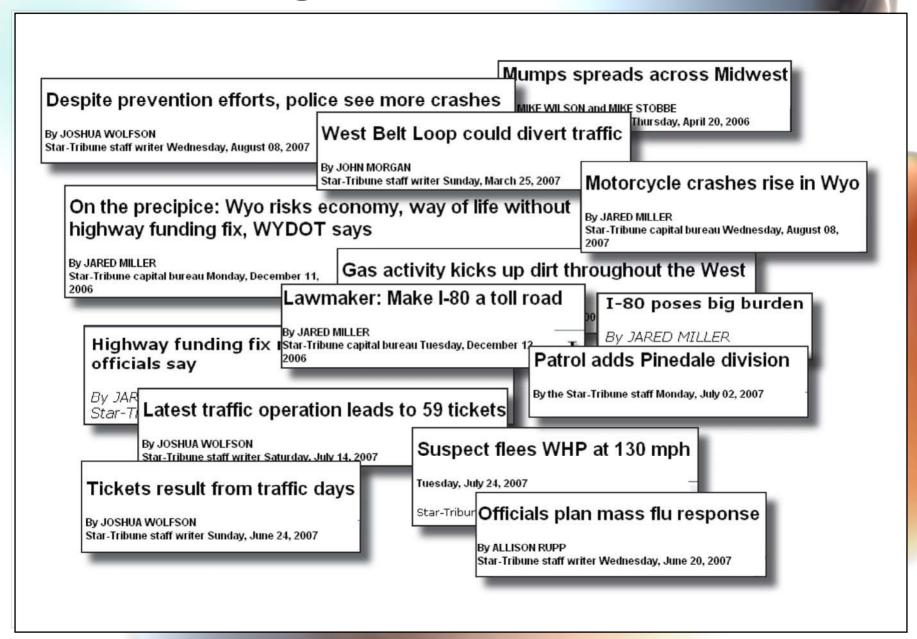
Table: Number of Persons Working at Any Time in Wyoming by Residency Status, 2004-2006

	2004	2006	2004-	2006
Residency Status	Number	Number	Numeric Change	Percent Change
Residents	275,740	275,015	-725	-0.3
Nonresidents	48,767	76,586	27,819	57.0
Total	324,507	351,601	27,094	8.3

Excerpt from Jones, S.D. (2007). Demographic Effects of Wyoming's Energy-Related Expansion. *Wyoming Labor Force Trends 44*(4). http://doe.state.wy.us/lmi/0407/a1.htm

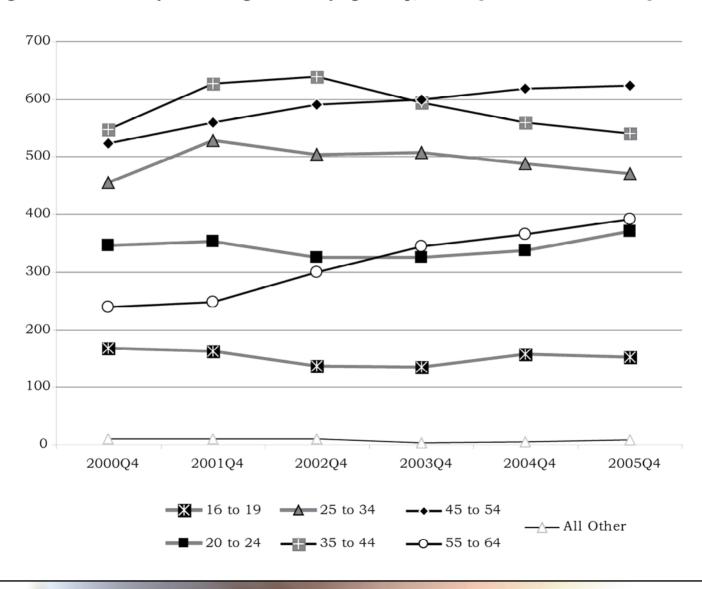
Note: Nonresidents represent segment of the population without known demographics.

Commuting Headlines



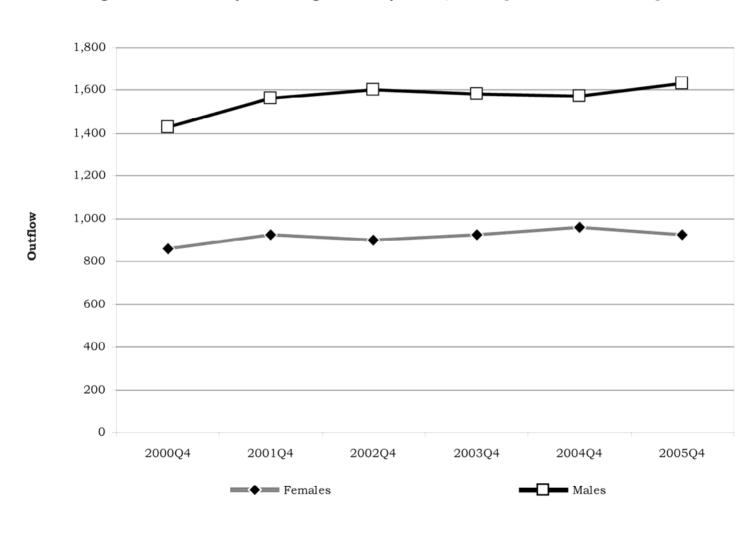
Converse County Outflow by Age

Figure: Converse County Commuting Outflows by Age Group, Fourth Quarter 2000 to Fourth Quarter 2005



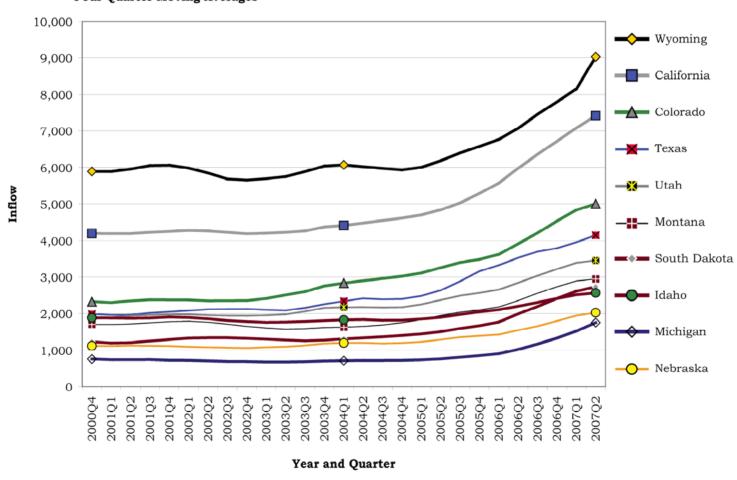
Converse County Outflow by Gender





Interstate Commuting

Figure: Top State of Origin Inflows to Wyoming for Workers Without Wyoming Driver's Licenses, Four Quarter Moving Averages



Who Stays?

Table: Comparison of Average Number of Workers Starting Employment in Wyoming During a Quarter and Who Were Still Employed One Quarter and Four Quarters Later, by State of Origin (Selected States), 1994 to 2006

	Total n Started Work		Wyoming er Later	1	Vyoming ers Later	
	in Wyoming	n	%	n	%	p-value
Wyoming	9,014	6,332	70.2%	3,959	43.9%	*0.000
Nebraska	1,465	1,037	70.8%	498	34.0%	*0.000
South Dakota	1,684	1,249	74.2%	680	40.4%	*0.000
Montana	2,234	1,522	68.1%	734	32.9%	*0.009
Iowa	750	531	70.8%	240	32.0%	0.167
Total of All States	61,337	41,942	68.4%	18,953	30.9%	

^{*}Significant at the .01 level.

Source: Unpublished data. Run February 12, 2008, by S.D. Jones, Research & Planning.

Reasons for living here

Table: Where Respondent Went to High School * Reason For Living in Community, All Nurses

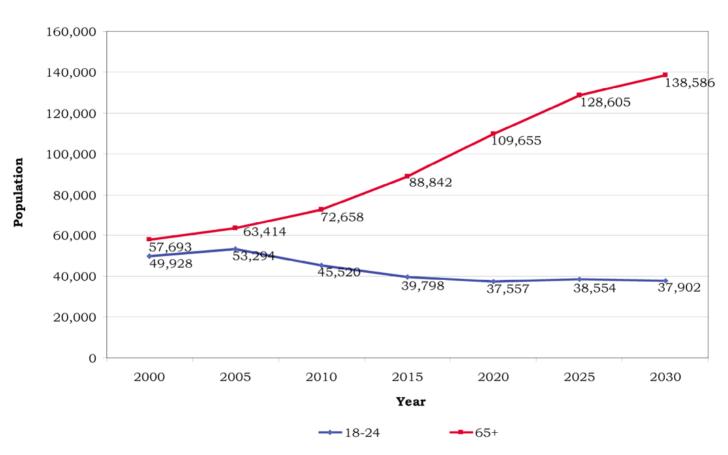
Where Respondent Attended High Sch	100	O)()	,	1	•	•	•	•	((((C	C	c	c	c	c	c	٥	((((((((C	c)	þ)	j			c	c	c	c	C	((((((((•	•	•	•	•	,	,	,	,	,	,	,	,	11	•	•	•	•	•	•	•	•	,	,	,	þ	þ	,	,	,	,	þ	ì	ì)	Į	þ	þ	þ	þ	þ)		Ċ	C	((•	,	ι	1	1	Ċ	l	J		۶		(1	j	:	Š	-			ì	d	ı		ć	2	ş	į	i	i		I	Ì	1		l	l	J	1				ı	l
------------------------------------	-----	---	----	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--	--	--	--	--	---	---	---	---	--	--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--	---	---	---	---	---	---	---	---	---	---	---	---	--	---	--	---	---	---	---	---	---	--	--	---	---	---	--	---	---	---	---	---	---	--	---	---	---	--	---	---	---	---	--	--	--	---	---

		P		
	Wyoming	Out of State	Unknown	Total
n	378	198	8	584
Col.%	38.8	14.4	14.0	24.3
n	197	355	12	564
Col.%	20.2	25.8	21.1	23.4
n	139	273	13	425
Col.%	14.3	19.9	22.8	17.7
n	30	177	4	211
Col.%	3.1	12.9	7.0	8.8
n	39	74	4	117
Col.%	4.0	5.4	7.0	4.9
n	22	29	1	52
Col.%	2.3	2.1	1.8	2.2
n	2	2	0	4
Col.%	0.2	0.1	0.0	0.2
n	168	266	15	449
Col.%	17.2	19.4	26.3	18.7
n	975	1,374	57	2,406
Col.%	100.0	100.0	100.0	100.0
	Col.% n	Wyoming n 378 Col.% 38.8 n 197 Col.% 20.2 n 139 Col.% 14.3 n 30 Col.% 3.1 n 39 Col.% 4.0 n 22 Col.% 2.3 n 2 Col.% 0.2 n 168 Col.% 17.2 n 975	Wyoming Out of State n 378 198 Col.% 38.8 14.4 n 197 355 Col.% 20.2 25.8 n 139 273 Col.% 14.3 19.9 n 30 177 Col.% 3.1 12.9 n 39 74 Col.% 4.0 5.4 n 22 29 Col.% 2.3 2.1 n 2 2 Col.% 0.2 0.1 n 168 266 Col.% 17.2 19.4 n 975 1,374	n 378 198 8 Col.% 38.8 14.4 14.0 n 197 355 12 Col.% 20.2 25.8 21.1 n 139 273 13 Col.% 14.3 19.9 22.8 n 30 177 4 Col.% 3.1 12.9 7.0 n 39 74 4 Col.% 4.0 5.4 7.0 n 22 29 1 Col.% 2.3 2.1 1.8 n 2 2 0 Col.% 0.2 0.1 0.0 n 168 266 15 Col.% 17.2 19.4 26.3 n 975 1,374 57

Source: 2007 Healthcare Presonnel Survey. Table run February 13, 2008, by L. Knapp, Wyoming Department of Employment, R&P.

Demographic Sledgehammer

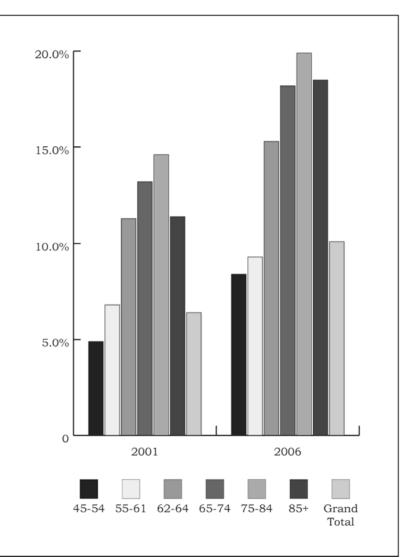
Figure: Projected Population Growth for Wyoming, 2000-2030



Adjusted Exiters

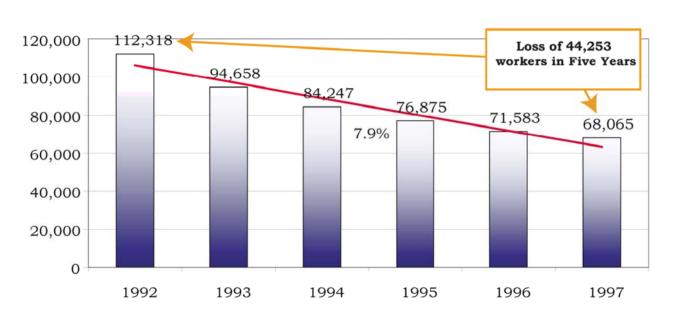
Table: Withdrawl of Employed Workers in Wyoming Age 45 and Older From the Market (Adjusted)

			Total	
		n	Total age	%
	45-54	2,909	59,780	4.9%
	55-61	1,434	21,237	6.8%
	62-64	566	4,993	11.3%
2001	65-74	887	6,715	13.2%
	75-84	173	1,184	14.6%
	85+	31	272	11.4%
	Grand Total	6,000	94,181	6.4%
	45-54	3,999	63,447	6.3%
	55-61	2,090	27,977	7.5%
	62-64	947	6,633	14.3%
2005	65-74	1,221	8,320	14.7%
	75-84	308	1,673	18.4%
	85+	79	353	22.4%
	Grand Total	8,620	108,403	8.0%
	45-54	5,418	64,122	8.4%
	55-61	2,820	30,173	9.3%
	62-64	1,077	7,046	15.3%
2006	65-74	1,623	8,901	18.2%
	75-84	342	1,719	19.9%
	85+	66	358	18.5%
	Grand Total	11,391	112,319	10.1%
	45-54	2,509	4,342	3.6%
	55-61	1,386	8,936	2.6%
	62-64	511	2,053	4.0%
2001 - 2006 Change	65-74	736	2,186	5.0%
Shange	75-84	169	535	5.3%
	85+	35	86	7.1%
	Grand Total	5,391	18,138	3.8%



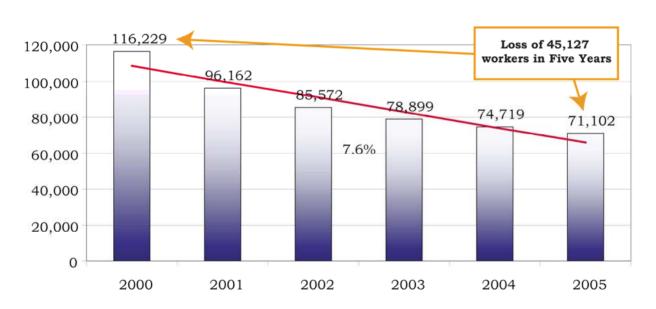
Exodus of Youth

Figure: Number of 1992 Resident Cohort Age 16-34 Still Working in Wyoming



Exodus of Youth

Figure: Number of 2000 Resident Cohort Age 16-34 Still Working in Wyoming



Is the Question Retention?

Young Residents

- Hathaway Scholarship Program
- Occupational Opportunities Matched to Skills
- Affordable Health Insurance

Other Residents

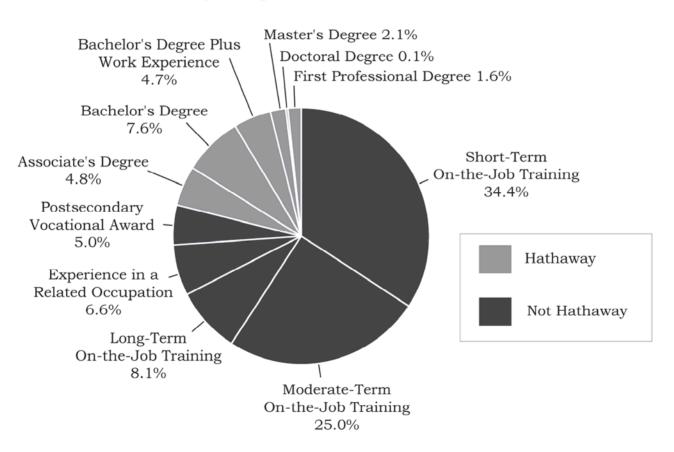
- Social isolation
- Physical Isolation
- Cost of Airfares
- Affordable Health Insurance

Nonresidents

- Isolation From Relatives
- Lack of Familiar
 Amenities
 (e.g., Large Malls,
 Pro Sporting Events)
- Urban vs. Rural Attitudes
- Climate
- Affordable Health Insurance
- Who Assumes Risk for Housing Infrastructure?

Educational Requirements

Figure: Distribution of Employment Growth by Typical Education/Experience Level for All Industries in Wyoming, 2012



For More Information

Contact:

Research & Planning PO Box 2760 Casper, WY 82602 (307) 473-3807

http://doe.state.wy.us/LMI/doeerd_r&p_web@state.wy.us