

LAS VEGAS STRIP CASINO EMPLOYMENT

PRODUCTIVITY, REVENUES, AND PAYROLL: A STATISTICAL STUDY, 1990-2011

CENTER FOR GAMING RESEARCH, MARCH 2012

Executive Summary

The past twenty-two years have seen tremendous growth on the Las Vegas Strip. Revenues have increased tremendously, as have labor costs. Yet, in general, increases in revenue have outpaced increases in payroll: casino resort employees produced proportionally more revenue now than they did in the past, both in absolute terms and as a ratio of payroll to revenues.

The following general trends covering the entire period 1990-2011 were most noteworthy:

- Casino employees are better paid now than at any time before, and they are producing more revenue for their employers.
- Though payroll has grown considerably, its share of the total revenue pie has actually fallen by over 9%
- **Gaming** departments saw lower revenue increases than other departments; despite an investment in labor-saving technology, the net increase in revenue per employee was lower than that in other departments
- The number of gaming positions per employee has increased
- **Rooms** departments have seen large boosts in productivity; revenues (+431%) are rising far faster than payroll (+341%)
- The average number of rooms per employee has increased significantly, from 3.32 in 1990 to 4.37 in 2011
- **Food** departments have seen payroll as a share of revenue fall (-21%), despite an increase in payroll per employee
- The number of food employees has increased by 62%, while food revenues have increased by 408%
- **Beverage** department revenues (+339%) have risen faster than payroll (184%)
- **“Other”** departments, chiefly retail and entertainment, saw the most dramatic increases in revenues (+587%) and payroll (+614%)
- Prior to the recession, “Other” payroll expenses were rising faster than revenues
- **General and administrative** employees saw the same increases in payroll as other departments, at levels above that of the casino as a whole (134% vs. 122%)

Definitions

Casino: Any non-restricted gaming licensee with annual revenues of \$1 million or more

Year: Fiscal year, July 1 of the previous year to June 30 of the year in question

Emp: Total number of employees reported for the department

Pos: Gaming positions; number of slots plus number of table games times six

Rooms: Total number of hotel rooms for the year in question

Revenue: Total reported annual revenue for the department

Payroll: Total amounts of payroll taxes, benefits, officers' pay, and other employees pay for the year

Rev/Emp: Revenue divided by employees; used as a measure of productivity

Pay/Emp: Payroll divided by employees; measures how much, on average, each employee costs

Pay/Rev: Payroll divided by revenue; shows the portion of resort revenues that payroll comprises

Data and analysis for All, Gaming, Room, Food, Beverage, Other, and General & Administrative departments is on the following pages.

Las Vegas Strip Casinos: All Departments

Year	Loc	Emp	Revenue	Payroll	Rev/Emp	Pay/Emp	Pay/Rev	Emp/Loc
1990	36	68,375	3,939,331,858	1,421,467,050	57,613.63	20,789.28	36.08%	1,899
1991	40	64,394	4,531,867,842	1,577,522,459	70,377.18	24,497.97	34.81%	1,610
1992	37	62,264	4,463,692,494	1,588,791,541	71,689.78	25,517.02	35.59%	1,683
1993	36	60,215	4,707,202,656	1,624,705,478	78,173.26	26,981.74	34.52%	1,673
1994	41	76,873	5,777,872,257	2,006,270,534	75,161.27	26,098.51	34.72%	1,875
1995	39	76,862	6,537,678,305	2,205,449,484	85,057.35	28,693.63	33.73%	1,971
1996	40	80,232	6,866,354,281	2,273,217,349	85,581.24	28,333.05	33.11%	2,006
1997	37	82,379	7,087,266,194	2,381,674,983	86,032.44	28,911.19	33.60%	2,226
1998	37	81,650	7,397,825,633	2,482,116,352	90,604.11	30,399.47	33.55%	2,207
1999	39	98,949	8,585,449,542	2,885,699,364	86,766.41	29,163.50	33.61%	2,537
2000	39	98,572	10,195,669,758	3,373,192,232	103,433.73	34,220.59	33.08%	2,527
2001	39	100,365	10,569,540,590	3,514,476,679	105,311.02	35,016.95	33.25%	2,573
2002	39	94,110	9,882,060,697	3,398,558,639	105,005.43	36,112.62	34.39%	2,413
2003	41	97,790	10,448,686,493	3,577,146,124	106,848.21	36,579.88	34.24%	2,385
2004	41	98,071	11,708,498,708	3,845,387,795	119,387.98	39,210.24	32.84%	2,392
2005	42	109,689	12,906,004,493	4,294,121,281	117,659.97	39,148.15	33.27%	2,612
2006	40	112,909	14,937,014,698	4,655,799,335	132,292.51	41,234.97	31.17%	2,823
2007	38	109,117	15,823,237,890	4,778,197,609	145,011.67	43,789.67	30.20%	2,872
2008	40	114,465	15,794,362,116	4,829,234,214	137,984.21	42,189.61	30.58%	2,862
2009	38	98,711	13,783,662,672	4,439,867,088	139,636.54	44,978.44	32.21%	2,598
2010	38	102,627	13,257,552,916	4,465,696,646	129,181.92	43,513.86	33.68%	2,701
2011	39	103,261	14,494,080,385	4,758,883,349	140,363.55	46,085.97	32.83%	2,648
Trend	8.33%	51.02%	267.93%	234.79%	143.63%	121.68%	-9.01%	39.40%

Across all departments, Las Vegas Strip casinos have seen a boom in employment over the past two decades. Despite adding only 3 casinos, the Strip has added more than 30,000 employees over the period.

Since the start of the recession, however, the Strip has been a net job loser, slipping from 114,465 casino employees in fiscal 2008 to 98,711 in the course of one year, then rebounding to 103,261 employees in 2011

Overall, payroll has increased, but not quite as much as overall revenues. Strip casino employees, then, have become more productive over the past twenty years—each of them is, on average, producing more revenue. And though payroll has grown considerably, its share of the total revenue pie has actually fallen. This drop was even more apparent in 2007/2008, before the recession slashed revenues.

Las Vegas Strip Casinos: Casino Department

Year	Pos	Emp	Pos/Emp	Revenue	Rev/Emp	Rev/Pos	Payroll	Pay/Emp	Pay/Rev
1990	42,644	21,868	1.95	2,278,666,097	104,200.94	53,434.62	485,265,552	22,190.67	21.30%
1991	53,588	20,283	2.64	2,616,868,246	129,017.81	48,833.10	518,366,831	25,556.71	19.81%
1992	51,728	19,598	2.64	2,530,932,046	129,142.36	48,927.70	517,562,670	26,408.95	20.45%
1993	50,846	18,940	2.68	2,680,865,771	141,545.18	52,725.20	525,380,236	27,739.19	19.60%
1994	61,054	23,779	2.57	3,188,994,040	134,109.68	52,232.35	618,800,771	26,022.99	19.40%
1995	62,072	23,100	2.69	3,516,053,825	152,210.12	56,644.76	679,153,477	29,400.58	19.32%
1996	65,747	23,366	2.81	3,629,745,193	155,343.03	55,207.77	681,368,183	29,160.67	18.77%
1997	66,619	23,056	2.89	3,650,458,259	158,330.08	54,796.05	708,654,989	30,736.25	19.41%
1998	66,815	22,583	2.96	3,717,773,057	164,627.07	55,642.79	732,098,602	32,418.13	19.69%
1999	74,906	25,593	2.93	4,128,143,954	161,299.73	55,110.99	794,904,509	31,059.45	19.26%
2000	75,215	25,471	2.95	4,683,729,471	183,884.79	62,271.22	899,331,210	35,308.04	19.20%
2001	76,442	26,602	2.87	4,615,644,944	173,507.44	60,381.01	940,114,149	35,339.98	20.37%
2002	74,704	24,204	3.09	4,247,749,172	175,497.82	56,861.07	903,019,166	37,308.67	21.26%
2003	73,557	23,076	3.19	4,490,623,007	194,601.45	61,049.57	919,048,927	39,827.05	20.47%
2004	72,386	23,636	3.06	4,909,991,047	207,733.59	67,830.67	948,332,582	40,122.38	19.31%
2005	71,324	25,932	2.75	5,283,122,106	203,729.84	74,072.15	978,589,647	37,736.76	18.52%
2006	70,282	27,248	2.58	6,040,935,450	221,701.98	85,952.81	1,064,363,852	39,062.09	17.62%
2007	67,324	26,082	2.58	6,490,880,088	248,864.35	96,412.57	1,109,865,863	42,552.94	17.10%
2008	66,386	27,648	2.40	6,266,058,200	226,636.94	94,388.25	1,125,232,584	40,698.52	17.96%
2009	66,048	23,641	2.79	5,330,233,592	225,465.66	80,702.42	1,023,593,186	43,297.37	19.20%
2010	65,964	24,061	2.74	5,167,060,856	214,748.38	78,331.53	1,004,232,860	41,736.95	19.44%
2011	65,689	24,050	2.73	5,496,667,593	228,551.67	83,677.14	1,045,514,886	43,472.55	19.02%
Trend	54.04%	9.98%	40.06%	141.22%	119.34%	56.60%	115.45%	95.90%	-10.68%

Focusing on employees of the casino proper, it becomes clear that much of the gain in employee productivity has come from the casino.

The total number of gaming positions (slot machines + number of tables games multiplied by six) increased by 54.04%; the total number of employees, however, only increased by 9.98%. The general trend has been for the number of positions per employee to increase; this isn't a surprise given the ascendancy of labor-saving and labor-removing innovations in casinos. Since 2003, however, the trend has reversed, likely because casinos are generally shrinking their slot floors and because of the rising importance of table games on the Strip.

Increases in revenue (+141%) have outpaced increases in payroll (+115%), but the growth in both is not as much for the casino in general: gambling, in these years, became a less critical driver of revenue for casino resorts.

Las Vegas Strip Casinos: Rooms Department

Year	Rooms	Emp	Revenue	Payroll	Rm/Emp	Rev/Rm	Rev/Emp	Pay/Emp	Pay/Rev
1990	36,503	10,996	662,311,307	211,612,755	3.32	18,144.02	60,232.02	19,244.52	31.95%
1991	43,088	11,129	761,203,722	242,233,182	3.87	17,666.16	68,398.21	21,765.94	31.82%
1992	45,082	10,761	775,713,227	251,849,830	4.19	17,206.80	72,085.61	23,403.94	32.47%
1993	42,694	10,447	821,671,207	258,816,377	4.09	19,245.37	78,651.40	24,774.23	31.50%
1994	49,128	13,435	1,048,102,543	321,303,708	3.66	21,334.28	78,012.84	23,915.42	30.66%
1995	54,076	13,664	1,283,252,531	352,905,673	3.96	23,730.74	93,914.85	25,827.41	27.50%
1996	54,515	14,044	1,391,133,176	368,895,063	3.88	25,518.50	99,055.34	26,267.09	26.52%
1997	58,614	14,781	1,535,714,914	399,455,666	3.97	26,200.38	103,897.90	27,024.94	26.01%
1998	61,726	15,558	1,618,896,618	427,385,515	3.97	26,227.25	104,055.57	27,470.47	26.40%
1999	65,099	17,907	1,900,913,038	486,595,133	3.64	29,200.51	106,154.75	27,173.46	25.60%
2000	72,343	19,288	2,380,443,846	571,854,248	3.75	32,904.86	123,415.79	29,648.19	24.02%
2001	73,871	18,901	2,648,983,961	612,109,234	3.91	35,859.73	140,150.47	32,385.02	23.11%
2002	74,361	17,638	2,390,866,446	595,400,900	4.22	32,152.28	135,552.02	33,756.71	24.90%
2003	75,184	18,451	2,544,812,712	633,607,614	4.07	33,847.87	137,922.75	34,340.01	24.90%
2004	78,105	19,093	2,970,641,703	711,631,157	4.09	38,033.90	155,588.00	37,271.84	23.96%
2005	79,241	20,788	3,367,195,538	764,255,380	3.81	42,492.91	161,977.85	36,764.26	22.70%
2006	81,860	20,739	3,849,204,700	858,071,518	3.95	47,022.07	185,602.23	41,374.78	22.29%
2007	80,724	19,692	4,082,315,743	803,247,474	4.10	50,571.00	207,308.34	40,790.55	19.68%
2008	79,515	20,959	4,070,006,370	874,753,924	3.79	51,185.19	194,188.96	41,736.43	21.49%
2009	82,722	19,130	3,370,478,662	842,339,172	4.32	40,744.52	176,188.12	44,032.37	24.99%
2010	85,816	19,822	3,106,483,873	854,261,180	4.33	36,199.42	156,718.99	43,096.62	27.50%
2011	89,627	20,525	3,517,773,750	933,561,344	4.37	39,249.04	171,389.71	45,484.11	26.54%
Trend	145.53%	86.66%	431.14%	341.16%	31.54%	116.32%	184.55%	136.35%	-16.94%

Since 1990, revenues produced by the rooms departments of Strip casinos have far outstripped revenue gains from the casino, food, and beverage departments. Since the 1990s, rooms have become an important revenue center. Yet their employment costs have not risen proportionally to their revenues. Over the period of study, the number of rooms more than doubled and room revenues more than quintupled. Payroll, however, less than quadrupled.

As a share of revenues, payroll has fallen dramatically—more than double the rate for the casino at large (down 17% for rooms vs. 7% overall). Partially, this can be explained by the increase in room rates since the 1990s. But it is not just a case of guests paying more for their rooms; the average number of rooms per employee has increased significantly, from 3.32 in 1990 to 4.37 in 2011. This suggests that the average rooms department employee is far more productive, with more rooms to be cleaned and maintained by, proportionally, less staff.

Las Vegas Strip Casinos: Food Department

Year	Emp	Revenue	Payroll	Rev/Emp	Pay/Emp	Pay/Rev
1990	16,363	441,234,069	276,393,615	26,965.35	16,891.38	62.64%
1991	14,714	505,510,009	313,840,809	34,355.72	21,329.40	62.08%
1992	14,439	513,980,809	314,483,887	35,596.70	21,780.17	61.19%
1993	13,571	531,056,812	323,152,107	39,131.74	23,811.96	60.85%
1994	17,471	659,455,174	409,158,376	37,745.70	23,419.29	62.04%
1995	17,112	729,748,118	446,441,013	42,645.40	26,089.35	61.18%
1996	18,041	753,484,715	454,915,417	41,765.13	25,215.64	60.37%
1997	17,507	774,730,169	480,346,960	44,252.59	27,437.42	62.00%
1998	18,741	848,526,497	489,022,611	45,276.48	26,093.73	57.63%
1999	24,105	1,027,946,303	623,966,294	42,644.53	25,885.35	60.70%
2000	22,526	1,258,434,080	735,819,486	55,865.85	32,665.34	58.47%
2001	24,396	1,353,845,193	766,713,954	55,494.56	31,427.86	56.63%
2002	23,295	1,335,593,403	740,742,112	57,333.91	31,798.33	55.46%
2003	22,599	1,429,119,078	800,689,878	63,238.16	35,430.32	56.03%
2004	24,776	1,629,820,796	883,348,435	65,782.24	35,653.39	54.20%
2005	28,688	1,817,712,594	985,311,233	63,361.43	34,345.76	54.21%
2006	30,372	2,145,503,923	1,139,710,092	70,640.85	37,525.03	53.12%
2007	27,805	2,179,198,017	1,161,309,877	78,374.32	41,766.22	53.29%
2008	30,653	2,320,938,469	1,153,841,937	75,716.52	37,642.06	49.71%
2009	25,426	2,066,326,184	1,028,067,179	81,268.24	40,433.70	49.75%
2010	27,179	2,013,338,100	1,030,616,760	74,076.97	37,919.60	51.19%
2011	26,535	2,241,771,611	1,114,200,447	84,483.57	41,989.84	49.70%
Trend	62.16%	408.07%	303.12%	213.30%	148.59%	-20.66%

Dining on the Las Vegas Strip has increased in both sophistication and pricing since 1990. There are certainly more outlets available, which explains the 62% increase in food employees. Food revenues, though, have seen a greater increase (408%). Many casinos have abandoned the former “loss leader” mentality in the food department, and restaurants are significant revenue center.

The average food department employee, then, produces nearly triple the revenue he did in 1990. Payroll has increased, but not as much as revenues. This is in keeping with the trend for the Las Vegas Strip gaming industry in general.

As elsewhere, payroll as a share of revenue has fallen for the period under study (-20%), despite an increase in payroll per employee.

The recession, though, has been a divergence point for Strip restaurants. While other departments have seen their revenues fall faster than their payrolls, food departments have shrunk payroll (-4%) while, as of 2011, increasing their revenues (+3%)

Las Vegas Strip Casinos: Beverage Department

Year	Emp	Revenue	Payroll	Rev/Emp	Pay/Emp	Pay/Rev
1990	5,054	237,866,174	89,444,477	47,064.93	17,697.76	37.60%
1991	4,596	255,193,771	97,313,108	55,525.19	21,173.44	38.13%
1992	4,474	246,575,971	97,369,524	55,113.09	21,763.42	39.49%
1993	4,288	252,566,355	100,080,795	58,900.74	23,339.74	39.63%
1994	5,209	291,356,958	117,842,596	55,933.38	22,622.88	40.45%
1995	4,952	317,194,130	123,555,531	64,053.74	24,950.63	38.95%
1996	5,261	324,187,692	124,715,955	61,620.93	23,705.75	38.47%
1997	5,415	331,632,990	128,587,872	61,243.40	23,746.61	38.77%
1998	5,207	355,371,362	134,780,377	68,248.77	25,884.46	37.93%
1999	5,998	412,998,801	155,815,984	68,856.09	25,977.99	37.73%
2000	6,080	500,220,574	163,422,837	82,273.12	26,878.76	32.67%
2001	6,195	531,510,614	165,298,419	85,796.71	26,682.55	31.10%
2002	5,824	528,493,997	163,930,486	90,744.16	28,147.40	31.02%
2003	5,548	567,929,522	177,476,637	102,366.53	31,989.30	31.25%
2004	5,622	638,534,862	187,917,195	113,577.88	33,425.33	29.43%
2005	6,354	701,189,570	205,011,501	110,354.04	32,264.95	29.24%
2006	6,776	822,696,923	228,231,379	121,413.36	33,682.32	27.74%
2007	7,579	890,311,717	238,420,716	117,470.87	31,458.07	26.78%
2008	8,425	826,479,765	222,203,795	98,098.49	26,374.34	26.89%
2009	7,361	847,114,503	219,051,830	115,081.44	29,758.43	25.86%
2010	7,801	909,553,146	226,764,570	116,594.43	29,068.65	24.93%
2011	8,031	1,044,229,654	253,587,022	130,024.86	31,576.02	24.28%
Trend	58.90%	339.00%	183.51%	176.27%	78.42%	-35.42%

Las Vegas Strip casinos changed a great deal about the way that they serve beverages. Traditionally, the department was a loss leader, with comped service to gamblers supplemented by lounges. Since the early 2000s, however, the rise of nightclubs—and particularly bottle service—has made beverage sales far more lucrative for casinos.

The total amount of beverage employees has risen, but at almost half the rate that revenues have. For that reason, the share of revenues devoted to payroll has shrunk by more than one-third.

Since the recession began, employment levels have increased by 6%. Yet revenues grew 17% from 2007 to 2011, while payroll grew by 6%. As a result, beverage departments have seen a trend opposite to most other departments; while most of them have devoted more revenues, proportionally, to paying salaries and benefits since the recession began, beverage departments have continued to cut that number.

Las Vegas Strip Casinos: Other Departments

Year	Emp	Revenue	Payroll	Rev/Emp	Pay/Emp	Pay/Rev
1990	3,493	319,254,211	63,779,788	91,398.29	18,259.32	19.98%
1991	3,200	393,102,094	76,315,086	122,844.40	23,848.46	19.41%
1992	3,229	396,490,441	79,524,077	122,790.47	24,628.08	20.06%
1993	3,242	421,042,511	80,226,017	129,871.22	24,745.84	19.05%
1994	5,019	589,963,542	124,025,322	117,546.03	24,711.16	21.02%
1995	6,272	691,429,701	162,162,291	110,240.70	25,854.96	23.45%
1996	4,798	767,803,505	174,326,167	160,025.74	36,333.09	22.70%
1997	6,659	794,729,862	179,295,612	119,346.73	26,925.31	22.56%
1998	6,475	857,258,099	186,956,651	132,395.07	28,873.61	21.81%
1999	8,850	1,115,447,446	230,867,067	126,039.26	26,086.67	20.70%
2000	10,076	1,372,841,787	288,316,545	136,248.69	28,614.19	21.00%
2001	8,545	1,419,555,878	287,187,872	166,127.08	33,608.88	20.23%
2002	8,898	1,379,357,679	279,148,759	155,018.84	31,372.08	20.24%
2003	8,527	1,416,202,174	299,073,686	166,084.46	35,073.73	21.12%
2004	8,014	1,559,510,300	313,973,688	194,598.24	39,178.15	20.13%
2005	9,726	1,736,784,685	382,372,109	178,571.32	39,314.43	22.02%
2006	10,946	2,078,673,702	434,365,293	189,902.59	39,682.56	20.90%
2007	12,555	2,180,532,325	476,135,853	173,678.40	37,924.00	21.84%
2008	11,033	2,310,879,312	466,820,113	209,451.58	42,311.26	20.20%
2009	9,807	2,169,509,731	426,392,409	221,220.53	43,478.37	19.65%
2010	9,995	2,061,116,941	431,228,242	206,214.80	43,144.40	20.92%
2011	9,433	2,193,637,777	455,962,870	232,549.32	48,336.99	20.79%
Trend	170.05%	587.11%	614.90%	154.44%	164.73%	4.04%

“Other” departments include primarily retail and entertainment, two areas that Las Vegas Strip casinos have greatly expanded over the past two decades. As a result, both their revenues and their payrolls have expanded dramatically. Unlike other departments, however, the increase in payroll has largely kept pace with—and for many years exceeded—the growth in revenues. Until the advent of the recession, payroll actually accounted for a larger share of revenues over the study—the only department for which this is true.

For that reason, it appears that when it comes to payroll “Other” parts of the casinos have not seen the same increases in productivity (defined as higher revenues) as gaming, rooms, food, and beverage. From 1990 to 2007, payroll as a share of revenues actually grew by 9.3%, which suggests that despite their growth in revenues (nearly seven-fold from 1990 to 2011), “Other” departments are not as profitable as other casino divisions, as pre-recession gains in revenue (+579.56%) were outstripped by gains in payroll (+646.53%).

Since the recession began, payroll has fallen 4%, while revenues have grown by less than 1%.

Las Vegas Strip Casinos: General & Administrative Departments

Year	Emp	Payroll	Pay/Emp
1990	10,601	294,970,863	27,824.81
1991	10,475	329,453,443	31,451.40
1992	9,763	328,001,553	33,596.39
1993	9,727	337,049,946	34,650.97
1994	11,960	415,139,761	34,710.68
1995	11,762	441,231,499	37,513.31
1996	14,722	468,996,564	31,856.85
1997	14,961	485,333,884	32,439.94
1998	13,086	511,872,596	39,116.05
1999	16,496	593,550,377	35,981.47
2000	15,131	714,447,906	47,217.49
2001	15,726	743,053,051	47,249.97
2002	14,251	716,317,216	50,264.35
2003	19,589	747,249,382	38,146.38
2004	16,930	800,184,738	47,264.31
2005	18,201	978,581,411	53,765.26
2006	16,828	931,057,201	55,327.86
2007	15,404	989,217,826	64,218.24
2008	15,747	986,381,861	62,639.35
2009	13,346	900,423,312	67,467.65
2010	13,769	918,593,034	66,714.58
2011	14,687	956,056,780	65,095.44
Trend	38.54%	224.12%	133.95%

General and Administrative departments have seen their ranks increase, though that rise has been tempered by the recession. Both the number of employees and the total payroll have increased, with the share of payroll per employee growing by considerably more than the average for the casino at large (134% vs. 109%)

With no direct revenues to measure, it is difficult to quantify the productivity of general and administrative employees, but it is worth noting that the increase in total payroll (224%) does not match the increase in total casino resort revenues (268%).

Preferred citation:

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