

**The Clean Air Act Affects on the Employment and Wages of Drinking  
Places and Full-Service Restaurants:**

**prepared for the  
Division of Public Health,  
Delaware Health and Social Services**

**by**

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June 2006**

The Clean Indoor Air Act became effective on November 27, 2002. The act prohibits smoking in public places such as bars and restaurants.

The unemployment insurance (UI) files provide monthly employment and quarterly wages for all businesses that are subject to unemployment insurance. The data contain industry detail for each filer. Assuming a relatively stable relationship between sales, and wages and employment, data from the UI files can provide insight into the volume of business in particular industries.

This report uses the latest available data through the end of 2005. The new data confirm the previously identified positive growth in wages and employment among drinking places and full-services restaurants. The last report indicated emerging positive growth in wages and employment for six quarters. With the complete 2005 data now available, the growth in wages and employment at drinking establishments and full-service restaurants has now extended to ten quarters.

The nature of drinking establishments and restaurants is such that there is a high degree of worker turnover. This can lead to volatility in the reported wages and employment. Sales, and consequently wages and employment, at drinking establishments and full service restaurants follow seasonal patterns, which also contribute to data fluctuations.

This analysis provides evidence on the impact of the Clean Indoor Air Act on employment and wages in industries directly affected by the legislation. These industries include drinking establishments (NAICS 722410), and full service restaurants (NAICS 722110). The distinction between a drinking establishment and a full service restaurant is not always clear. Since many establishments that sell alcohol have food service, they appear under full service restaurants rather than drinking establishments. Aggregating the two industries is the best strategy to deal with this issue.

**Table 1**  
**Wages and Employment at Delaware Drinking Establishments and Full Service Restaurants, 2000-2004.**

							Growth Year-over-Year	
Year	Quarter	Wages	Average Employment	Wages/Average Emp	No. of Establishments	Wages	Ave. Emp	
2000	1	34,486,450	10,965	3,145	479			
2000	2	42,708,224	13,559	3,150	553			
2000	3	48,268,095	14,321	3,370	553			
2000	4	43,569,318	13,081	3,331	550			
2001	1	39,888,522	12,262	3,253	557	15.7%	11.8%	
2001	2	46,125,891	14,253	3,236	571	8.0%	5.1%	
2001	3	51,694,121	14,743	3,506	572	7.1%	2.9%	
2001	4	46,014,659	13,371	3,441	580	5.6%	2.2%	
2002	1	43,549,190	13,174	3,306	597	9.2%	7.4%	
2002	2	50,325,480	15,236	3,303	608	9.1%	6.9%	
2002	3	56,829,649	15,745	3,609	605	9.9%	6.8%	
<b>2002</b>	<b>4</b>	<b>48,437,889</b>	<b>14,024</b>	<b>3,454</b>	<b>599</b>	<b>5.3%</b>	<b>4.9%</b>	
2003	1	42,183,403	12,790	3,298	603	-3.1%	-2.9%	
2003	2	49,969,246	14,833	3,369	617	-0.7%	-2.6%	
2003	3	57,593,454	15,629	3,685	623	1.3%	-0.7%	
2003	4	50,550,409	14,226	3,553	635	4.4%	1.4%	
2004	1	48,081,195	13,814	3,481	656	14.0%	8.0%	
2004	2	54,354,744	15,732	3,455	669	8.8%	6.1%	
2004	3	63,058,159	16,683	3,780	680	9.5%	6.7%	
2004	4	55,009,606	14,922	3,686	688	8.8%	4.9%	
2005	1	48,500,036	14,036	3,455	691	0.9%	1.6%	
2005	2	56,414,582	15,700	3,593	698	3.8%	-0.2%	
2005	3	68,975,262	16,981	4,062	714	9.4%	1.8%	
2005	4	57,665,312	14,988	3,847	678	4.8%	0.4%	

Note: 2002 fourth quarter denotes the enactment of the Clean Indoor Air Act.

Table 1 illustrates the trend in employment and wages at Delaware drinking establishments and full service restaurants since 2000. Average quarterly employment increased from 10,965 at the beginning of 2000 to 14,036 in the first quarter of 2005. There are 199 more establishments in the fourth quarter of 2005 than at the beginning of 2000. Quarterly wages grew by \$23 million over this period.

Wage and employment growth fluctuated over the period. The fastest pace of growth occurred in the first quarter wages of 2001 (15% year-over-year). The slowest occurred in the first quarter wages of 2003 (-3%).

Wage and employment growth at Delaware drinking establishments and full service restaurants had slowed in 2001, prior to the Clean Indoor Air Act, but continued to post positive gains. In early 2001, wages and employment were growing at a double-digit pace. Each quarter of 2001 delivered slower growth, with the fourth quarter 2001, which

followed the terrorist attacks of September 11, 2001, posting wage and employment growth of 5% and 2% respectively.

The first full quarter following the Clean Indoor Air Act's passage was the first quarter of 2003. In this quarter, wages and employment fell by 3.1% and 2.9% respectively. Simultaneously, that winter experienced the third highest snowfall in Delaware history (46 inches). Winter 2003's weather conditions undoubtedly affected sales at bars and restaurants. Consequently, the first and second quarters of 2003 reflect a confluence of negative factors, and may overstate the impact of the Clean Indoor Air Act. The fourth quarter of 2003 and all four quarters of 2004 indicate positive year-over-year growth in wages and salaries. Two-thousand and five's wage and employment growth is also positive, albeit slightly less strong than 2004.

The figure below confirms the general upward trend in wages and employment at Delaware drinking establishments and full service restaurants. Seasonal volatility in the data accounts for much of the fluctuations. Nevertheless, the trend in wages and employment at these establishments is positive post-Clean Air Act.

### Delaware Drinking Establishments and Full Service Restaurant Wage and Employment Trends, 2000-2005

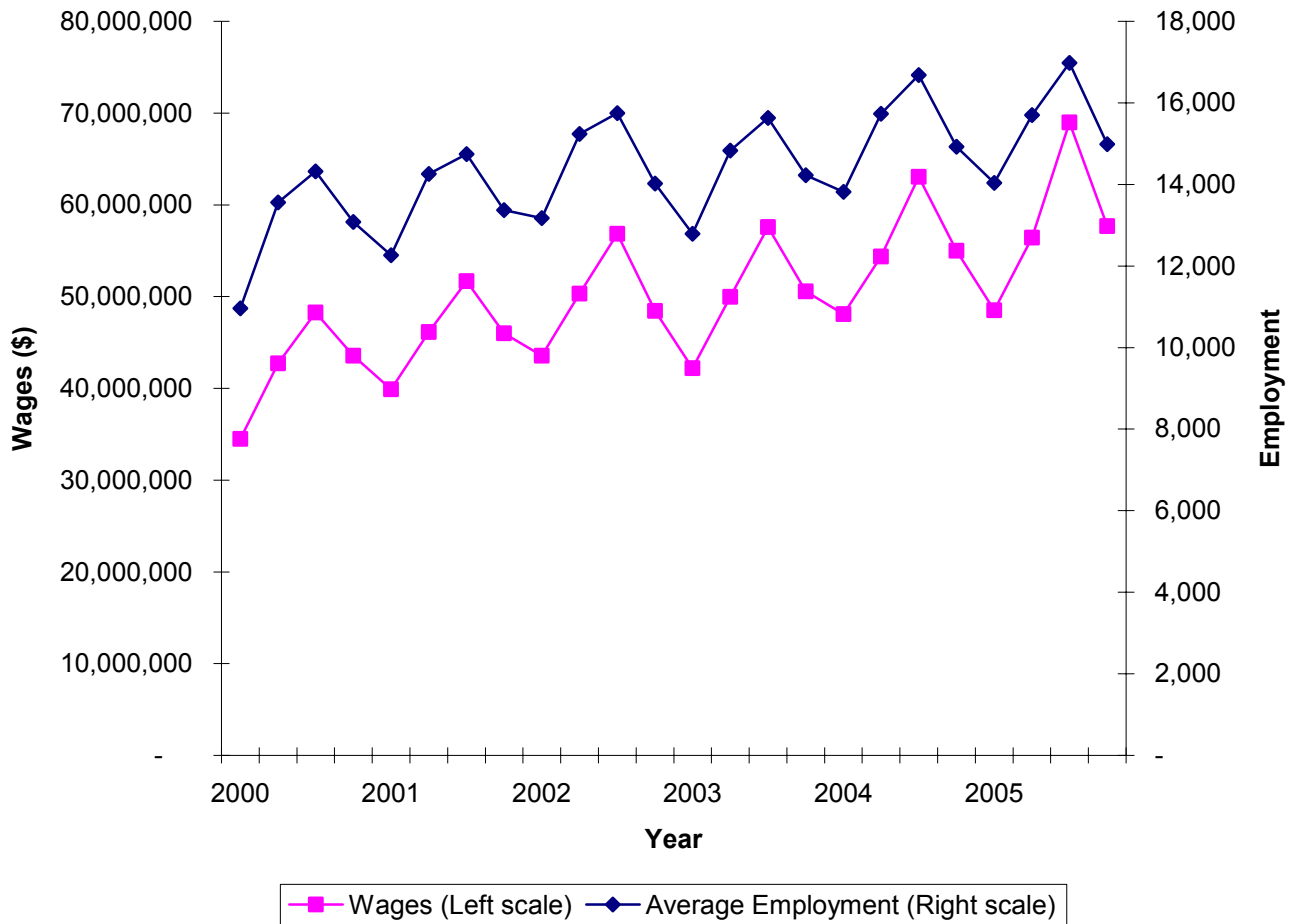


Table 2 reports total wages and employment in the State for the period 2000-2005. These data confirm the weakness of the economy leading up to and immediately following the Clean Indoor Air Act. The data illustrate that average year-over-year wage growth was flat during 2002 fourth quarter and 2003 first quarter for all industries. Further, average quarterly employment was falling year-over-year in the six quarters prior to the end of 2002. Positive year-over-year growth returned at the end of 2003 and throughout 2005, which corresponds with a rebounding economy, and positive growth at drinking establishments and full service restaurants.

**Table 2**  
**Total Wages and Employment in Delaware, 2000-2004.**

All Industries					Growth Year-over-Year	
Year	Quarter	Wages	Average Employment	Wages/Average Emp	Wages	Ave. Emp
2000	1	3,788,880,335	399,316	9,488		
2000	2	3,526,490,843	411,238	8,575		
2000	3	3,608,275,831	413,312	8,730		
2000	4	4,078,761,973	411,884	9,903		
2001	1	3,974,813,869	401,575	9,898	4.9%	0.6%
2001	2	3,724,319,915	410,415	9,075	5.6%	-0.2%
2001	3	3,781,257,684	410,147	9,219	4.8%	-0.8%
2001	4	4,151,556,493	404,821	10,255	1.8%	-1.7%
2002	1	4,146,144,395	392,408	10,566	4.3%	-2.3%
2002	2	3,809,376,575	403,188	9,448	2.3%	-1.8%
2002	3	3,841,455,454	407,737	9,421	1.6%	-0.6%
<b>2002</b>	<b>4</b>	<b>4,133,891,854</b>	<b>404,637</b>	<b>10,216</b>	<b>-0.4%</b>	<b>0.0%</b>
2003	1	4,171,199,335	389,838	10,700	0.6%	-0.7%
2003	2	3,926,100,176	403,302	9,735	3.1%	0.0%
2003	3	3,980,314,792	406,412	9,794	3.6%	-0.3%
2003	4	4,368,703,676	407,238	10,728	5.7%	0.6%
2004	1	4,384,855,138	400,134	10,958	5.1%	2.6%
2004	2	4,136,258,237	411,300	10,057	5.4%	2.0%
2004	3	4,156,355,985	415,748	9,997	4.4%	2.3%
2004	4	4,797,400,466	417,959	11,478	9.8%	2.6%
2005	1	4,633,128,662	405,252	11,433	5.7%	1.3%
2005	2	4,335,846,163	418,436	10,362	4.8%	1.7%
2005	3	4,513,750,980	422,416	10,686	8.6%	1.6%
2005	4	5,143,053,701	422,311	12,178	7.2%	1.0%

Note: 2002 fourth quarter denotes the enactment of the Clean Indoor Air Act.

### Observations

The enactment of the Clean Indoor Air Act occurred with a confluence of other factors including a recession, weak consumer confidence, and a harsh winter. The wage and employment data presented here can provide some insight into the trends of these industries before and after the Clean Indoor Air Act. As more data become available, the longer-term trends in these industries will become more apparent.

Wages and employment continue to grow in the drinking establishments and restaurant industries. The first full quarter of data following the enactment of the Clean Indoor Air Act coincided with a number of negative factors (a blizzard, a slow economy), which undoubtedly contributed to weak industry sales, and consequently wages and employment. However, recent wage and employment data point to positive year-over-year growth, which is evidence that industry sales are growing post-Clean Air Act.

Appendix.

The following industries are included in the analysis.

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2002 NAICS	Corresponding Index Entries
722110	Bagel shops, full service
722110	Diners, full service
722110	Doughnut shops, full service
722110	Family restaurants, full service
722110	Fine dining restaurants, full service
722110	Full service restaurants
722110	Pizza parlors, full service
722110	Pizzerias, full service
722110	Restaurants, full service
722110	Steak houses, full service
722410	Alcoholic beverage drinking places
722410	Bars (i.e., drinking places), alcoholic beverage
722410	Cocktail lounges
722410	Drinking places (i.e., bars, lounges, taverns), alcoholic
722410	Lounges, cocktail
722410	Nightclubs, alcoholic beverage
722410	Taverns (i.e., drinking places)

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