

# Economic Reporter

Promoting Economic Development in Southeast Louisiana

Spring 2009

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**NATIONAL**

**U.S. Economy**

**Dr. A. M. M. Jamal**  
 Professor of Management  
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The U.S. real gross domestic product fell at an annual rate of 3.8 percent during the fourth quarter of 2008, but was still 1.7 percent higher than the fourth quarter of 2007. Total civilian employment for the fourth quarter fell 1.4 percent compared to the corresponding period of the previous year. A survey of forecasters by the

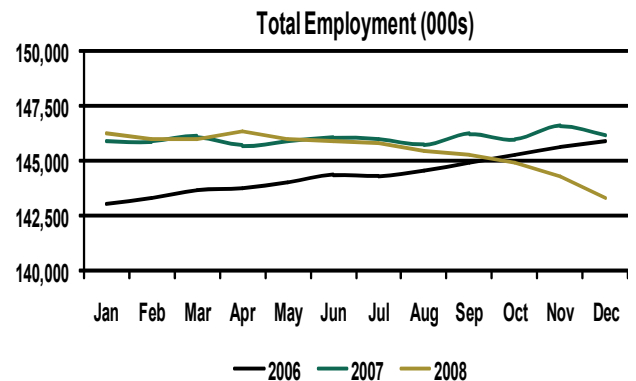
Philadelphia Federal Reserve Bank estimated that the U.S. economy is expected to contract 2.0 percent in 2009 and grow 2.2 percent in 2010. An alternative set of forecasts published by Wachovia indicates a drop of 3.3 percent in 2009 and a gain of 1.2 percent in 2010.

**EMPLOYMENT**

*UNITED STATES (Numbers in Thousands)*

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Labor Force	153,824	153,374	153,784	153,957	154,534	154,390	154,603	154,853	154,732	155,038	154,616	154,447
% Change vs Prior Year	0.6%	0.4%	0.6%	0.9%	1.2%	0.9%	0.9%	1.3%	0.8%	1.1%	0.5%	0.4%
Total Employment	146,248	145,993	145,969	146,331	146,046	145,891	145,819	145,477	145,255	144,958	144,285	143,338
% Change vs Prior Year	0.2%	0.1%	-0.1%	0.4%	0.1%	-0.1%	-0.2%	-0.2%	-0.7%	-0.7%	-1.6%	-2.0%
Total Nonfarm Emp.	138,002	137,919	137,831	137,764	137,717	137,617	137,550	137,423	137,020	136,700	135,755	135,178
% Change vs Prior Year	0.7%	0.6%	0.4%	0.3%	0.1%	0.0%	-0.1%	-0.2%	-0.6%	-0.9%	-1.7%	-2.1%
Unemployment Rate	4.9%	4.8%	5.1%	5.0%	5.5%	5.5%	5.7%	6.1%	6.1%	6.5%	6.7%	7.2%
Change vs Prior Year	0.3%	0.3%	0.7%	0.5%	1.0%	0.9%	1.0%	1.4%	1.4%	1.7%	2.0%	2.2%

	1Q7-08	2Q7-08	3Q7-08	4Q7-08
Labor Force	153,661	154,294	154,729	154,700
% Change vs Prior Year	0.5%	1.0%	1.0%	0.7%
Total Employment	146,070	146,089	145,517	144,194
% Change vs Prior Year	0.1%	0.1%	-0.3%	-1.4%
Total Nonfarm Emp.	137,917	137,699	137,331	135,878
% Change vs Prior Year	0.5%	0.1%	-0.3%	-1.6%
Unemployment Rate	4.9%	5.3%	6.0%	6.8%
Change vs Prior Year	0.4%	0.8%	1.3%	2.0%



Source: U.S. Bureau of Labor Statistics

## STATE

### Louisiana Economy

Dr. A. M. M. Jamal

Professor of Management

Total state employment for the fourth quarter of 2008 was virtually unchanged compared to the previous quarter and grew 0.4 percent for the year.

The unemployment rate for the fourth quarter was 5.6 percent, compared to a 3.8 percent rate for the same months last year. Although the state is experiencing a rise in the unemployment rate, it is still well below the national rate of 6.8 percent.

Sales tax collections for the fourth quarter of 2008 were up 4.4 percent over the prior quarter, but down 1.8 percent from the fourth quarter of 2007.

Sales tax collections for all of 2008 were approximately 1.7 percent higher than for 2007.

Fourth quarter personal income in Louisiana grew by 0.7 percent (2.7 percent annualized) compared to the third quarter, and was 2.6 percent higher than the fourth quarter of 2007.

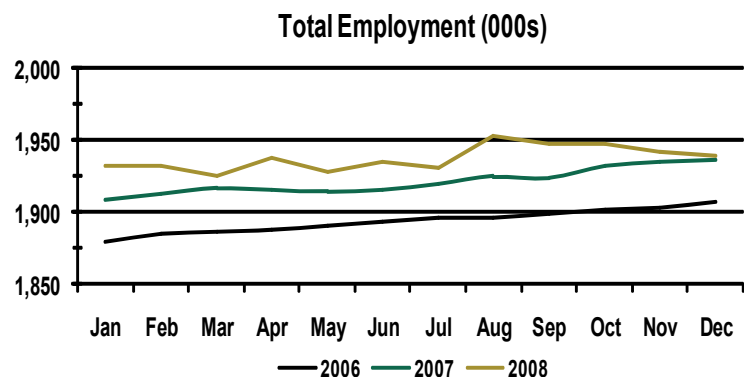
The number of Louisiana homes in the foreclosure process declined 15.1 percent from the third quarter and was almost identical to the fourth quarter of 2007. However, the level was approximately 45 percent higher than the fourth quarter of 2006. (For details see the article on the following page.)

### EMPLOYMENT

#### LOUISIANA (Numbers in Thousands)

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Labor Force	2,012	2,008	2,017	2,019	2,008	2,012	2,010	2,049	2,054	2,062	2,050	2,061
% Change vs Prior Year	1.4%	1.0%	1.1%	1.2%	0.6%	1.2%	0.9%	2.5%	2.6%	2.9%	2.0%	2.2%
Total Employment	1,933	1,933	1,926	1,937	1,929	1,935	1,931	1,953	1,947	1,948	1,942	1,939
% Change vs Prior Year	1.3%	1.1%	0.5%	1.2%	0.7%	1.0%	0.6%	1.4%	1.2%	0.8%	0.3%	0.1%
Total Nonfarm Emp.	1,939	1,940	1,940	1,942	1,944	1,948	1,947	1,957	1,941	1,946	1,945	1,949
% Change vs Prior Year	2.2%	1.8%	1.6%	1.8%	1.7%	1.7%	1.5%	1.2%	0.4%	0.5%	0.3%	0.4%
Unemployment Rate	4.0%	3.7%	4.5%	4.1%	4.0%	3.8%	4.0%	4.7%	5.2%	5.6%	5.3%	5.9%
Change vs Prior Year	0.2%	-0.1%	0.6%	0.1%	-0.1%	0.1%	0.3%	1.0%	1.3%	2.0%	1.6%	1.9%

	1QT-08	2QT-08	3QT-08	4QT-08
Labor Force	2,012	2,013	2,038	2,058
% Change vs Prior Year	1.2%	1.0%	2.0%	2.4%
Total Employment	1,930	1,934	1,944	1,943
% Change vs Prior Year	0.9%	1.0%	1.1%	0.4%
Total Nonfarm Emp.	1,940	1,945	1,948	1,947
% Change vs Prior Year	1.9%	1.7%	1.0%	0.4%
Unemployment Rate	4.1%	3.9%	4.6%	5.6%
Change vs Prior Year	0.2%	0.0%	0.8%	1.8%



Source: Louisiana Department of Labor, Labor Market Statistics

## STATE

### Louisiana Foreclosure Activity

**Herb Holloway**

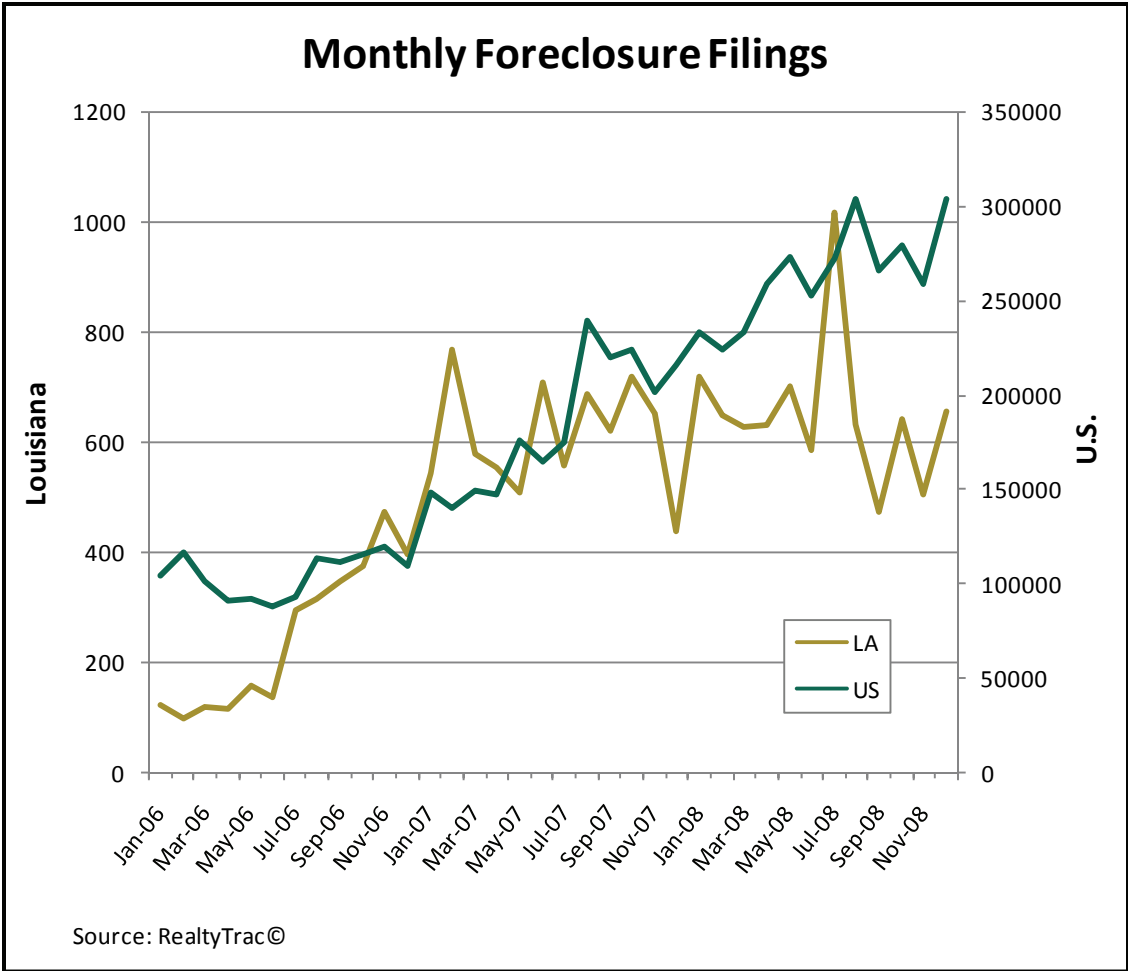
Research Economist

Southeastern Business Research Center

As shown in the figure below (using data from RealtyTrac®), foreclosure filings in Louisiana began climbing rapidly in the second half of 2006, from 136 in June 2006 to 472 in November 2006, an increase of almost 250 percent. Filings in 2007 peaked at 767 in February, and ranged between 500 and 700 before dropping to 437 in December 2007. The last twelve months saw a peak of 1,017 filings in July 2008, but trended around 600 per month for the rest of the year. U.S. foreclosure filings continued climbing through the fourth quarter of 2008, where they appear to be leveling off.

For all of 2008, 7,129 Louisiana properties, or 0.39 percent of all housing units in the state, were subject to a foreclosure filing. This rate ranked 41st in the nation.

However, the Mortgage Bankers Association recently announced that Louisiana had one of the sharpest fourth-quarter increases in the percentage of loans 90 days or more delinquent, indicating that foreclosure filings may be climbing in the coming months.



## REGIONAL

### Northshore Employment

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Total employment in the Northshore Region (the five parishes of Livingston, St. Helena, St. Tammany, Tangipahoa, and Washington) was unchanged during the fourth quarter of 2008 and was 1.0 percent higher than the same period in 2007.

Livingston, St. Helena and Washington parishes experienced modest gains in employment, while St. Tammany and Tangipahoa showed declines when compared with the previous quarter.

The total civilian work force rose 0.4 percent when compared to the previous quarter and 2.7 percent compared to the fourth quarter of 2007.

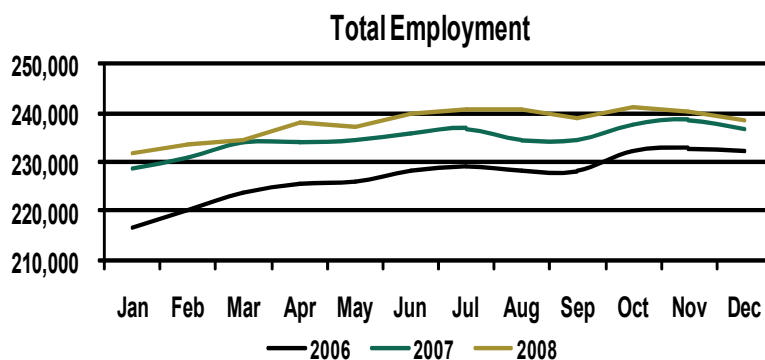
The unemployment rate for the fourth quarter of 2008 was 4.9 percent. In comparison, the unemployment rate was 4.5 percent in the previous quarter and 3.3 percent during the fourth quarter of 2007.

#### EMPLOYMENT (Not seasonally adjusted)

##### NORTHSHORE REGION

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Labor Force	242,404	241,449	243,706	245,863	245,639	251,335	250,703	252,182	250,860	253,624	251,665	251,238
% Change vs Prior Year	1.7%	1.3%	0.9%	2.0%	1.3%	2.1%	1.8%	3.6%	3.2%	3.5%	2.1%	2.6%
Total Employment	231,998	233,664	234,329	238,280	237,245	239,850	240,677	240,975	239,169	241,415	240,373	238,732
% Change vs Prior Year	1.4%	1.2%	0.1%	1.8%	1.2%	1.7%	1.6%	2.7%	1.9%	1.5%	0.7%	0.9%
Unemployment Rate	4.3%	3.2%	4.0%	3.2%	3.4%	4.6%	4.2%	4.6%	4.7%	4.8%	4.6%	5.2%
Change vs Prior Year	0.3%	0.1%	0.8%	0.2%	-0.1%	0.2%	0.2%	0.9%	1.1%	1.7%	1.4%	1.6%

	1QT-08	2QT-08	3QT-08	4QT-08
Labor Force	242,520	247,612	251,248	252,176
% Change vs Prior Year	1.3%	1.8%	2.9%	2.7%
Total Employment	233,330	238,458	240,274	240,173
% Change vs Prior Year	0.9%	1.6%	2.1%	1.0%
Unemployment Rate	3.8%	3.7%	4.5%	4.9%
Change vs Prior Year	0.4%	0.1%	0.8%	1.6%



Source: Labor Market Statistics, Local Area Unemployment Statistics Pr

## REGIONAL

### Estimated Retail Sales in the Northshore Region

Total value of taxable sales in the region rose 5.4 percent from the previous quarter, but fell 5.8 percent in comparison to the fourth quarter of 2007. Most parishes showed a gain in the fourth quarter due to the holiday season, but showed a decline when compared to the fourth quarter of 2007.

The year-to-year declines were most significant in

Washington and St. Tammany parishes, which were down 19.0 and 8.4 percent, respectively. However, the Washington Parish comparison is skewed by an approximately \$1 million audit finding in December 2007.

Fourth quarter sales in Tangipahoa Parish were up slightly compared to 2007, while sales in St. Helena Parish increased 13.4 percent.

#### ESTIMATED RETAIL SALES

##### NORTHSHORE REGION

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Total Est. Retail Sales (Mil.)	\$556.28	\$594.04	\$674.91	\$619.73	\$624.01	\$693.65	\$619.46	\$586.90	\$598.00	\$595.84	\$560.34	\$745.59
% Change vs Prior Month	-29.5%	6.8%	13.6%	-8.2%	0.7%	11.2%	-10.7%	-5.3%	1.9%	-0.4%	-6.0%	33.1%
% Change vs. Prior Year	-2.4%	6.2%	-4.7%	0.0%	-6.0%	-4.0%	-8.9%	-7.0%	-8.7%	-1.8%	-9.8%	-5.5%
Quarterly Average Sales			\$608.41			\$645.80			\$601.45			\$633.93
% Change vs. Prior Quarter			-9.5%			6.1%			-6.9%			5.4%
% Change vs Prior Year			-0.7%			-3.4%			-8.3%			-5.8%

Note: Washington Parish received a one-time payment of approximately \$2 million of use taxes in July 2007, the result of an audit finding covering the previous 3 years.

Sources: Livingston Parish School Board - Sales and Use Tax Division, St. Helena Parish Sheriff's Office, St. Tammany Parish Sheriff's Office - Sales and Use Tax Department, Tangipahoa Parish School Board - Sales and Use Tax Division, Washington Parish Sheriff's Office - Sales and Use Tax Department

### Residential Building Permits in the Northshore Region

Construction projects reflect another aspect of a region's economy. Building permits are usually a leading indicator of construction activity during the coming months. The value of residential building permits in the Northshore region for the fourth

quarter of 2008 fell 42.1 percent compared to the fourth quarter of 2007, projecting a major decline in construction activities during the coming months.

#### RESIDENTIAL BUILDING PERMITS

##### NORTHSHORE REGION

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Total Units	280	182	302	360	231	358	260	276	185	207	164	194
% Change vs Prior Year	-60.3%	-48.3%	-37.0%	-33.6%	-58.3%	-2.5%	-33.7%	-22.0%	-20.9%	-34.3%	-11.8%	-28.4%
Total Value (\$000s)	37,361	25,440	43,622	43,848	33,249	47,425	41,884	42,837	30,222	30,792	24,038	23,752
% Change vs Prior Year	-64.0%	-51.5%	-38.6%	-52.9%	-54.8%	-9.2%	-44.5%	-15.9%	-13.0%	-38.9%	-47.1%	-40.4%
Unincorp. Units	190	172	269	308	186	213	232	254	153	189	151	185
% Change vs Prior Year	-48.4%	-44.0%	-33.1%	-29.2%	-63.5%	-36.6%	-29.5%	-4.2%	-18.2%	-31.5%	-5.6%	-20.6%
Uninc. Value (\$000s)	28,264	24,271	39,075	36,840	25,938	30,459	35,974	38,444	27,171	28,218	21,603	22,085
% Change vs Prior Year	-63.9%	-46.1%	-31.0%	-48.6%	-60.3%	-30.3%	-44.9%	4.3%	-4.2%	-37.8%	-45.0%	-35.8%
Incorporated Units	90	10	33	52	45	145	28	22	32	18	13	9
% Change vs Prior Year	20.0%	-77.8%	-57.1%	-51.4%	0.0%	367.7%	-55.6%	-75.3%	-31.9%	-53.8%	-50.0%	-76.3%
Inc. Value (\$000s)	9,097	1,169	4,547	7,008	7,311	16,965	5,910	4,393	3,051	2,574	2,436	1,667
% Change vs Prior Year	-75.4%	-84.3%	-68.6%	-67.2%	-11.4%	99.4%	-41.5%	-68.8%	-52.0%	-48.2%	-60.1%	-69.2%

Sources: Livingston Parish -- La Dept. of Econ. Dev. (Research Services), Livingston Parish Permit Office, Town of Albany, City of Denham Springs, Town of Livingston, Town of Walker St. Helena Parish -- Louisiana Department of Economic Development (estimates with imputation)

St. Tammany Parish -- <http://censtats.census.gov>, Town of Abita Springs, City of Covington, Village of Folsom, Town of Madisonville, City of Mandeville, Town of Pearl River, City of Slidell

Tangipahoa Parish -- Tangipahoa Parish Permit Office, City of Hammond, Town of Independence, City of Ponchatoula

Washington Parish -- Washington Parish Permit Office, City of Bogalusa, Town of Franklinton

## REGIONAL

### Northshore Foreclosure Activity

#### Herb Holloway

Research Economist

Southeastern Business Research Center

The bursting of the housing bubble in late 2006 has been one of the important factors in the current national recession. The subsequent dramatic increase in the number of foreclosures further depressed housing prices, creating a vicious cycle of home value declines and foreclosures that is ongoing.

Some regions of the country have been impacted more severely than others, with Nevada, Florida, and Arizona the hardest hit states in 2008. Louisiana, which was not as heavily involved in issuing "Sub-Prime" and "Alt-A" mortgages as some states, was one of the least impacted states in 2008, ranking 41st in the nation in rate of foreclosures (see page 3).

However, a shift may now be occurring where mortgage delinquencies and foreclosures are increasingly due to the loss of jobs or income brought on by the ongoing recession and less the result of problems with the structure of the loan or credit-worthiness of the borrower.

The Mortgage Bankers Association (MBA) announced on March 5, 2009 that the delinquency rate for mortgage loans reached an all-time record in the fourth quarter of 2008, based on MBA data going back to 1972. The MBA also noted that Louisiana had one of the sharpest fourth-quarter increases in loans 90 days or more delinquent. It remains to be seen how many borrowers may have purposely pushed their loans to 90 days delinquent in order to qualify for loan modification programs, but delinquency rates and foreclosure filings in the coming months will bear watching closely.

The table and chart on the following page illustrate foreclosure filings in the Northshore region from February (the earliest available data) through December 2008. (Note: Data from St. Helena Parish is not available, and data for Washington Parish in the graph begins June 2008.) Data illustrated comes from RealtyTrac®, and include the following types of foreclosure filings:

- Pre-Foreclosure Filings — Include Notices of Default (NOD) and Lis Penden notifications. Both of these filings start the foreclosure process.
- Auctions — Includes the filing of Notices of Trustee's Sale (NTS) and Notices (Judgments) of Foreclosure Sale (NFS).
- REO — "Real Estate Owned" by the lender (including the government in the case of government-insured mortgages). This marks the final step in the foreclosure process.

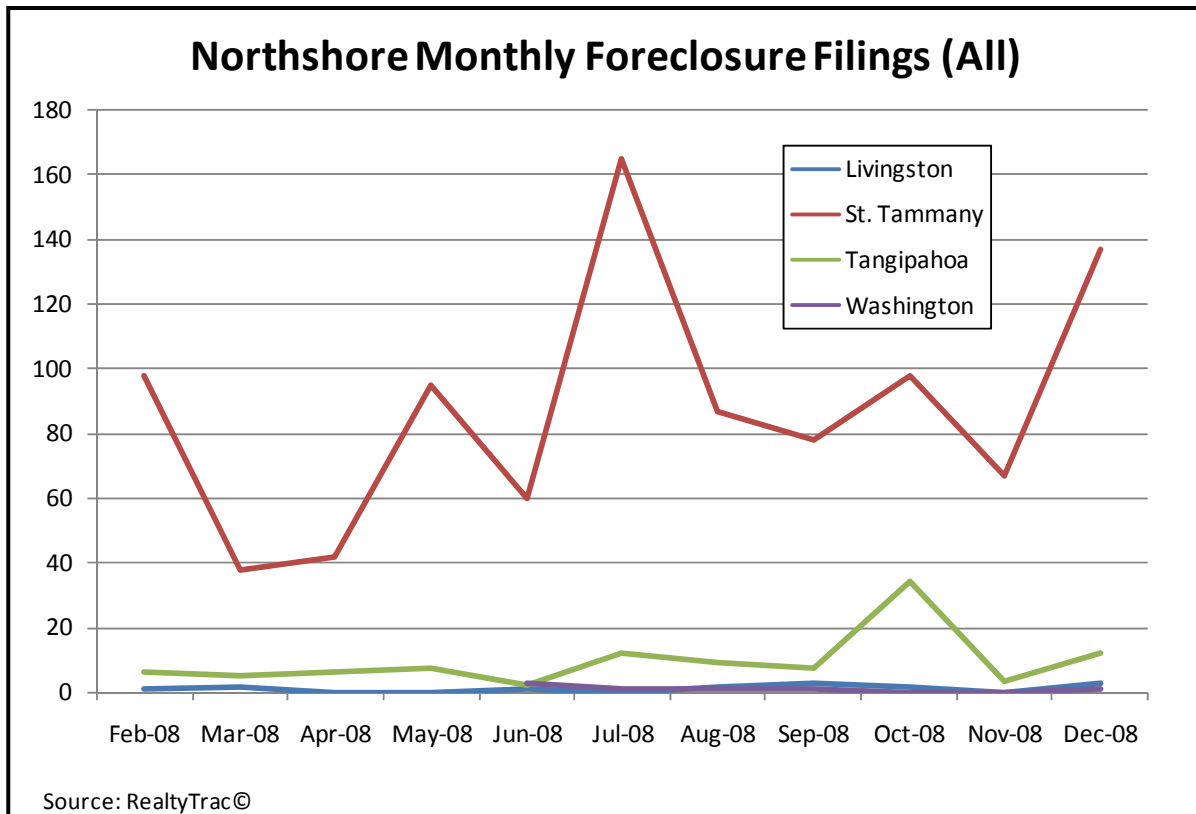
"All Filings" is the sum of these three measures.

As indicated in the table and chart, the majority of foreclosure filings in the Northshore region in 2008 were for homes in St. Tammany Parish. The 302 filings in St. Tammany Parish in the fourth quarter of 2008 represent 16.7 percent of all filings in Louisiana in that period. Tangipahoa Parish experienced a jump to 34 filings in October 2008, but the number returned to more typical levels in November and December. Livingston and Washington parishes had very few filings in 2008.

## REGIONAL

### Northshore Foreclosure Activity – continued

Northshore Foreclosure Activity		Pre-Foreclosures	Auctions	REOs	All Filings
Livingston	Oct-08	0	0	2	2
St. Tammany	Oct-08	1	74	23	98
Tangipahoa	Oct-08	0	9	25	34
Washington	Oct-08	0	0	0	0
Livingston	Nov-08	0	0	0	0
St. Tammany	Nov-08	2	51	14	67
Tangipahoa	Nov-08	1	1	1	3
Washington	Nov-08	0	0	0	0
Livingston	Dec-08	2	1	0	3
St. Tammany	Dec-08	2	105	30	137
Tangipahoa	Dec-08	1	0	11	12
Washington	Dec-08	0	1	0	1



## LOCAL

### Livingston Parish

Livingston Parish experienced a 0.6 percent gain in employment compared to the fourth quarter of 2007. However, because the labor force grew at a faster rate (1.9 percent), the unemployment rate rose to 4.7 percent.

Estimated retail sales fell 0.9 percent compared to the fourth quarter of 2007.

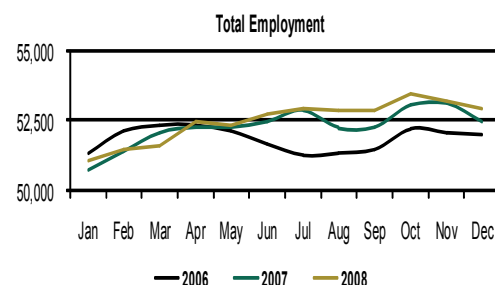
The number of residential building permits declined 38.5 percent compared to the third quarter of 2007. Values cannot be compared due to a change in valuation procedures.

#### EMPLOYMENT

##### LIVINGSTON PARISH

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Labor Force	53,422	53,283	53,784	54,259	54,216	55,282	55,230	55,324	55,438	56,066	55,657	55,662
% Change vs Prior Year	1.1%	0.4%	0.0%	0.7%	0.1%	0.7%	0.3%	1.8%	2.1%	2.3%	1.3%	2.2%
Total Employment	51,061	51,488	51,592	52,457	52,333	52,754	52,946	52,850	52,873	53,483	53,183	52,926
% Change vs Prior Year	0.6%	0.1%	-1.0%	0.4%	0.1%	0.5%	0.1%	1.1%	1.1%	0.8%	0.1%	0.9%
Unemployment Rate	4.4%	3.4%	4.1%	3.3%	3.5%	4.6%	4.1%	4.5%	4.6%	4.6%	4.4%	4.9%
Change vs Prior Year	0.4%	0.3%	1.0%	0.3%	0.0%	0.3%	0.1%	0.7%	1.0%	1.4%	1.1%	1.3%

	1QT-08	2QT-08	3QT-08	4QT-08
Labor Force	53,496	54,586	55,331	55,795
% Change vs Prior Year	0.5%	0.5%	1.4%	1.9%
Total Employment	51,380	52,515	52,890	53,197
% Change vs Prior Year	-0.1%	0.3%	0.8%	0.6%
Unemployment Rate	4.0%	3.8%	4.4%	4.7%
Change vs Prior Year	0.6%	0.2%	0.6%	1.3%



Source: Labor Market Statistics, Local Area Unemployment Statistics Program

#### ESTIMATED RETAIL SALES

##### LIVINGSTON PARISH

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Total Est. Retail Sales (Mil.)	\$93.88	\$96.16	\$111.58	\$102.93	\$111.22	\$114.70	\$108.79	\$110.18	\$107.05	\$107.23	\$96.45	\$138.47
% Change vs Prior Month	-25.8%	2.4%	16.0%	-7.8%	8.1%	3.1%	-5.2%	1.3%	-2.8%	0.2%	-10.1%	43.6%
% Change vs. Prior Year	5.3%	3.4%	-4.1%	-1.0%	-4.7%	-2.0%	1.5%	2.5%	0.9%	4.0%	-16.8%	9.5%
Quarterly Average Sales	\$100.54			\$109.61			\$108.67			\$114.05		
% Change vs. Prior Quarter	-12.7%			9.0%			-0.9%			4.9%		
% Change vs Prior Year	1.0%			-2.7%			1.6%			-0.9%		

Source: Livingston Parish School Board - Sales and Use Tax Division

#### RESIDENTIAL BUILDING PERMITS

##### LIVINGSTON PARISH

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Total Units	48	53	65	106	87	79	59	53	55	54	40	21
% Change vs Prior Year	-62.8%	-62.4%	-60.4%	-39.4%	-59.2%	-24.8%	-29.8%	-15.9%	-6.8%	-30.8%	-7.0%	-68.2%
Total Value (\$000s)	4,547	4,322	5,533	9,299	7,881	6,509	10,860	8,819	9,658	9,518	7,550	3,730
% Change vs Prior Year	-80.0%	-65.7%	-61.0%	-35.0%	-42.0%	-31.1%	42.8%	57.3%	58.9%	54.1%	78.6%	-36.0%
Unincorp. Units	45	52	65	96	78	68	58	51	53	50	36	19
% Change vs Prior Year	-64.6%	-62.3%	-59.9%	-42.9%	-63.0%	-31.3%	-29.3%	-16.4%	0.0%	-35.1%	-10.0%	-71.2%
Uninc. Value (\$000s)	3,822	4,136	5,533	8,041	6,220	5,423	10,234	8,455	9,351	8,822	6,352	3,352
% Change vs Prior Year	-82.9%	-65.9%	-59.8%	-39.6%	-53.0%	-35.0%	42.5%	62.2%	100.1%	45.3%	88.5%	-42.5%
Incorporated Units	3	1	-	10	9	11	1	2	2	4	4	2
% Change vs Prior Year	50.0%	-66.7%	-100.0%	42.9%	350.0%	83.3%	-50.0%	0.0%	-66.7%	300.0%	33.3%	n/a
Inc. Value (\$000s)	725	186	-	1,258	1,661	1,086	627	364	307	696	1,199	378
% Change vs Prior Year	96.1%	-57.6%	-100.0%	25.6%	368.0%	-0.9%	47.5%	-7.8%	-78.2%	560.8%	39.6%	n/a

Sources: La Dept. of Econ. Dev. (Research Services), Livingston Parish Permit Office, Town of Albany, City of Denham Springs, Town of Livingston, Town of Walker

**Note:** Valuation estimation procedure discontinued by Livingston Parish Permit Office after June 2008. Unincorporated values from July 2008 forward are by U.S. Census via La Dept of Economic Development, and tend to be much higher per unit. Comparisons to values in prior periods are not valid.

## St. Helena Parish

Employment in St. Helena in the fourth quarter of 2008 rose 0.6 percent compared to the same months of the previous year. The labor force grew by 4.2 percent, leading to an unemployment rate of 9.5 percent. This was an increase of 3.2 percent from the fourth quarter of 2007, but a slight decline from the 9.6 percent of the third quarter of 2008.

Sales tax collections rose 13.4 percent compared to the fourth quarter of 2007, in contrast to the region as a whole, which was down.

Actual residential building permit data are not available for St. Helena Parish. Fourth quarter estimates of the value of St. Helena Parish building permits provided by the Louisiana Department of Economic Development declined 32 percent compared to the prior year.

### EMPLOYMENT

#### ST. HELENA PARISH

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Labor Force	4,166	4,084	4,150	4,174	4,155	4,323	4,340	4,359	4,402	4,399	4,363	4,401
% Change vs Prior Year	1.3%	-0.5%	-6.9%	-5.5%	-5.8%	-7.6%	-8.5%	-5.8%	-5.1%	-4.9%	-5.4%	-6.8%
Total Employment	3,813	3,845	3,853	3,917	3,908	3,939	3,954	3,946	3,948	3,994	3,971	3,952
% Change vs Prior Year	0.6%	0.1%	-1.0%	0.4%	0.1%	0.5%	0.1%	1.1%	1.1%	0.9%	0.1%	0.9%
Unemployment Rate	8.5%	5.9%	7.2%	6.2%	5.9%	8.9%	8.9%	9.5%	10.3%	9.2%	9.0%	10.2%
Change vs Prior Year	0.6%	-0.6%	1.3%	0.4%	0.1%	0.9%	0.2%	2.6%	4.2%	3.5%	3.5%	2.6%

	1Q-08	2Q-08	3Q-08	4Q-08
Labor Force	4,133	4,217	4,367	4,388
% Change vs Prior Year	0.4%	0.8%	3.4%	4.2%
Total Employment	3,837	3,921	3,949	3,972
% Change vs Prior Year	-0.1%	0.3%	0.8%	0.6%
Unemployment Rate	7.2%	7.0%	9.6%	9.5%
Change vs Prior Year	0.4%	0.4%	2.3%	3.2%



Source: Labor Market Statistics, Local Area Unemployment Statistics Program

### ESTIMATED RETAIL SALES

#### ST. HELENA PARISH

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Total Est. Retail Sales (Mil.)	\$4.98	\$4.75	\$6.47	\$5.03	\$5.50	\$6.78	\$6.75	\$5.46	\$6.05	\$6.51	\$6.20	\$9.15
% Change vs Prior Month	-34.1%	-4.6%	36.3%	-22.3%	9.4%	23.2%	-0.4%	-19.1%	10.8%	7.5%	-4.7%	47.5%
% Change vs. Prior Year	58.5%	-26.7%	-10.5%	-17.5%	-10.4%	12.6%	-5.2%	-17.7%	-16.5%	20.8%	-2.2%	21.2%
Quarterly Average Sales			\$5.40			\$5.77			\$6.09			\$7.29
% Change vs. Prior Quarter			-16.0%			6.8%			5.5%			19.7%
% Change vs Prior Year			-3.9%			-5.2%			-13.1%			13.4%

Source: Sales tax collections from St. Helena Parish Sheriff's Office expanded using tax rate of .05 (5%)

### RESIDENTIAL BUILDING PERMITS

#### ST. HELENA PARISH

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Total Units	2	2	3	2	2	2	2	1	1	2	1	1
% Change vs Prior Year	100.0%	100.0%	0.0%	-50.0%	-50.0%	-50.0%	-50.0%	-66.7%	-50.0%	0.0%	-50.0%	-50.0%
Total Value (\$000s)	250	250	375	254	254	254	254	127	127	254	127	127
% Change vs Prior Year	53.8%	53.8%	0.0%	-49.1%	-49.2%	-49.1%	-49.1%	-66.1%	-49.1%	1.8%	-49.1%	-49.1%

Source: Louisiana Department of Economic Development (estimates with imputation)

## St. Tammany Parish

Total employment in St. Tammany Parish in the fourth quarter of 2008 rose 1.2 percent compared to a year ago. The workforce grew by 2.6 percent, leading to an increase in the unemployment rate to 4.0 percent.

Estimated retail sales rose 6.7 percent from the previous quarter but fell 8.4 percent compared to the fourth quarter of 2007, marking a slowdown in business activities due to the national recession.

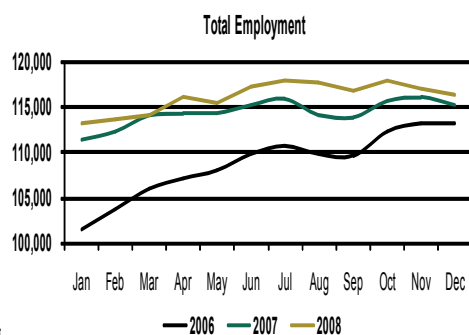
The value of residential building permits dropped 71.4 percent compared to the fourth quarter of 2007, also mirroring statewide and national housing trends.

### EMPLOYMENT

#### ST. TAMMANY PARISH

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Labor Force	117,165	116,752	117,944	119,285	118,860	121,809	121,846	122,230	120,928	122,654	121,546	121,282
% Change vs Prior Year	1.7%	1.2%	0.7%	1.9%	0.9%	1.9%	1.8%	3.9%	3.2%	3.4%	1.9%	2.4%
Total Employment	113,063	113,665	114,040	116,165	115,434	117,220	117,870	117,620	116,661	117,825	116,915	116,273
% Change vs Prior Year	1.5%	1.2%	0.0%	1.7%	0.9%	1.7%	1.7%	3.0%	2.6%	1.9%	0.7%	1.0%
Unemployment Rate	3.5%	2.6%	3.3%	2.6%	2.9%	3.8%	3.3%	3.8%	3.5%	3.9%	3.8%	4.1%
Change vs Prior Year	0.2%	0.0%	0.6%	0.1%	0.0%	0.2%	0.2%	0.8%	0.5%	1.4%	1.1%	1.3%

	1Q7-08	2Q7-08	3Q7-08	4Q7-08
Labor Force	117,287	119,985	121,668	121,827
% Change vs Prior Year	1.2%	1.5%	3.0%	2.6%
Total Employment	113,589	116,273	117,384	117,004
% Change vs Prior Year	0.9%	1.4%	2.4%	1.2%
Unemployment Rate	3.2%	3.1%	3.5%	4.0%
Change vs Prior Year	0.3%	0.1%	0.5%	1.3%



Source: Labor Market Statistics, Local Area Unemployment Statistics Pr

### ESTIMATED RETAIL SALES

#### ST. TAMMANY PARISH

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Total Est. Retail Sales (Mil.)	\$308.79	\$320.42	\$366.99	\$340.18	\$335.04	\$373.52	\$332.05	\$311.96	\$318.85	\$314.63	\$310.41	\$401.88
% Change vs Prior Month	-31.5%	3.8%	14.5%	-7.3%	-1.5%	11.5%	-11.1%	-6.1%	2.2%	-1.3%	-1.3%	29.5%
% Change vs. Prior Year	-5.2%	3.8%	-7.1%	-1.7%	-5.8%	-11.0%	-4.0%	-10.0%	-13.9%	-5.9%	-7.6%	-10.9%
Quarterly Average Sales			\$332.07			\$349.58			\$320.96			\$342.31
% Change vs. Prior Quarter			-11.1%			5.3%			-8.2%			6.7%
% Change vs Prior Year			-3.2%			-6.5%			-9.4%			-8.4%

Source: Sales tax collections from St. Tammany Parish Sales and Use Tax Department expanded using an average tax rate of .04825 (4.825%)

### RESIDENTIAL BUILDING PERMITS

#### ST. TAMMANY PARISH

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Total Units	143	63	149	113	72	186	96	125	80	42	31	80
% Change vs Prior Year	-71.3%	-50.0%	-24.0%	-41.5%	-55.3%	32.9%	-47.3%	6.8%	14.3%	-65.9%	-64.8%	-23.8%
Total Value (\$000s)	22,560	12,659	25,523	18,251	16,103	29,292	17,418	22,166	14,697	7,873	6,603	8,940
% Change vs Prior Year	-67.6%	-55.4%	-37.5%	-67.2%	-57.6%	7.0%	-64.0%	-10.0%	-7.5%	-70.6%	-80.4%	-58.2%
Unincorp. Units	96	57	130	82	53	79	79	118	56	35	29	73
% Change vs Prior Year	-45.8%	-40.0%	-11.6%	-30.5%	-59.5%	-36.8%	-44.8%	37.2%	7.7%	-63.5%	-60.3%	-16.1%
Uninc. Value (\$000s)	17,703	11,886	22,729	13,646	12,483	15,125	13,057	19,532	12,299	6,862	6,230	7,651
% Change vs Prior Year	-61.9%	-50.0%	-28.5%	-68.0%	-62.1%	-31.1%	-68.7%	9.6%	-3.0%	-71.4%	-78.8%	-57.3%
Incorporated Units	47	6	19	31	19	107	17	7	24	7	2	7
% Change vs Prior Year	-21.7%	-80.6%	-61.2%	-58.7%	-36.7%	613.3%	-56.4%	-77.4%	33.3%	-74.1%	-86.7%	-61.1%
Inc. Value (\$000s)	4,857	773	2,794	4,605	3,620	14,167	4,361	2,634	2,399	1,011	373	1,289
% Change vs Prior Year	-86.1%	-83.4%	-69.1%	-64.6%	-28.5%	161.3%	-35.4%	-61.3%	-25.3%	-63.8%	-91.2%	-62.7%

Sources: <http://censtats.census.gov/>, Town of Abita Springs, City of Covington, Village of Folsom, Town of Madisonville, City of Mandeville, Town of Pearl River, City of Slidell

## Tangipahoa Parish

Employment in Tangipahoa Parish continued to grow during the fourth quarter of 2008, and was 1.2 percent higher than in the same period of 2007. The labor force grew more (+ 3.7 percent), however, leading to an increase in the unemployment rate for the quarter to 6.1 percent.

Retail sales grew 0.3 percent compared to the fourth quarter of 2007, showing a better performance than most other parishes of the region.

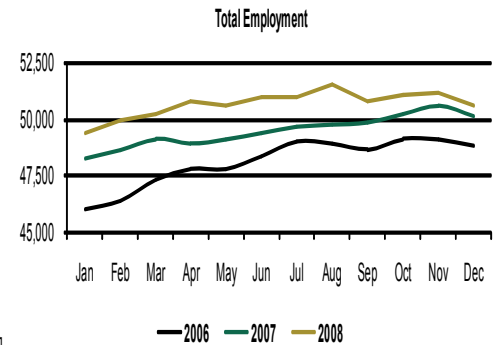
The value of building permits increased 17.0 percent from the prior quarter, but was off 4.7 percent from the fourth quarter of 2007.

### EMPLOYMENT

#### TANGIPAHOA PARISH

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Labor Force	52,006	51,875	52,660	52,675	52,669	53,851	53,700	54,510	54,132	54,324	54,282	54,185
% Change vs Prior Year	2.9%	2.8%	3.2%	3.8%	3.0%	3.5%	3.1%	4.8%	4.1%	4.3%	3.4%	3.4%
Total Employment	49,365	49,938	50,249	50,725	50,600	50,946	50,954	51,503	50,737	51,054	51,144	50,623
% Change vs Prior Year	2.4%	2.7%	2.3%	3.7%	3.1%	3.2%	2.6%	3.5%	1.8%	1.6%	1.1%	0.9%
Unemployment Rate	5.1%	3.7%	4.6%	3.7%	3.9%	5.4%	5.1%	5.5%	6.3%	6.0%	5.8%	6.6%
Change vs Prior Year	0.5%	0.0%	0.9%	0.1%	-0.1%	0.3%	0.4%	1.2%	2.2%	2.5%	2.1%	2.3%

	1Q7-08	2Q7-08	3Q7-08	4Q7-08
Labor Force	52,180	53,065	54,114	54,264
% Change vs Prior Year	3.0%	3.5%	4.0%	3.7%
Total Employment	49,851	50,757	51,065	50,940
% Change vs Prior Year	2.5%	3.3%	2.7%	1.2%
Unemployment Rate	4.5%	4.3%	5.6%	6.1%
Change vs Prior Year	0.5%	0.1%	1.3%	2.3%



Source: Labor Market Statistics, Local Area Unemployment Statistics Prog

### ESTIMATED RETAIL SALES

#### TANGIPAHOA PARISH

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Total Est. Retail Sales (Mil.)	\$122.95	\$134.31	\$150.55	\$136.79	\$137.22	\$158.01	\$136.56	\$131.38	\$133.10	\$131.16	\$122.04	\$162.58
% Change vs Prior Month	-18.7%	9.2%	12.1%	-9.1%	0.3%	15.2%	-13.6%	-3.8%	1.3%	-1.5%	-7.0%	33.2%
% Change vs. Prior Year	-0.3%	12.1%	1.9%	2.7%	-6.9%	8.7%	4.2%	-4.1%	-2.0%	-2.3%	-5.5%	7.5%
Quarterly Average Sales	\$135.94			\$144.01			\$133.68			\$138.59		
% Change vs. Prior Quarter	-1.7%			5.9%			-7.2%			3.7%		
% Change vs Prior Year	4.3%			1.4%			-0.7%			0.3%		

Source: Sales tax collections from the Tangipahoa Parish School Board - Sales and Use Tax Division expanded using a tax rate of .02 (2%)

### RESIDENTIAL BUILDING PERMITS

#### TANGIPAHOA PARISH

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Total Units	78	53	73	128	54	81	87	91	41	100	89	84
% Change vs Prior Year	20.0%	-26.4%	-30.5%	-2.3%	-58.8%	1.3%	4.8%	-32.1%	-42.3%	-5.7%	97.8%	16.7%
Total Value (\$000s)	8,890	6,640	10,588	14,722	7,108	10,088	11,018	10,915	4,434	11,487	9,528	9,837
% Change vs Prior Year	-12.8%	-31.0%	-13.5%	-22.4%	-58.3%	-10.7%	-10.3%	-35.3%	-54.0%	-28.6%	51.3%	-1.5%
Unincorp. Units	39	50	63	120	39	55	81	79	36	94	85	84
% Change vs Prior Year	-29.1%	-21.9%	-25.9%	12.1%	-68.8%	-22.5%	26.6%	1.3%	-29.4%	-1.1%	123.7%	52.7%
Uninc. Value (\$000s)	5,554	6,430	9,371	13,832	5,248	8,465	10,444	9,550	4,164	10,695	8,894	9,837
% Change vs Prior Year	-35.7%	-21.5%	-9.8%	18.5%	-65.2%	-10.3%	6.6%	-4.4%	-48.2%	-23.7%	65.7%	18.8%
Incorporated Units	39	3	10	8	15	26	6	12	5	6	4	0
% Change vs Prior Year	290.0%	-62.5%	-50.0%	-66.7%	150.0%	188.9%	-68.4%	-78.6%	-75.0%	-45.5%	-42.9%	-100.0%
Inc. Value (\$000s)	3,335	210	1,217	890	1,860	1,623	574	1,365	270	792	634	0
% Change vs Prior Year	113.3%	-85.3%	-33.9%	-87.8%	-7.0%	-12.7%	-77.0%	-80.2%	-83.1%	-61.7%	-31.7%	-100.0%

Sources: Tangipahoa Parish Permit Office, City of Hammond, Town of Independence, and City of Ponchatoula

## Washington Parish

The Washington Parish labor force grew 3.0 percent to 16,182 in the fourth quarter of 2008. Employment only increased 0.8 percent, however, causing the unemployment rate to climb to 6.9 percent.

Estimated retail sales were off 1.2 percent from the prior quarter and 19.0 percent from the fourth quarter of 2007. The year over year comparison is skewed, however, by a large audit settlement collected in December 2007.

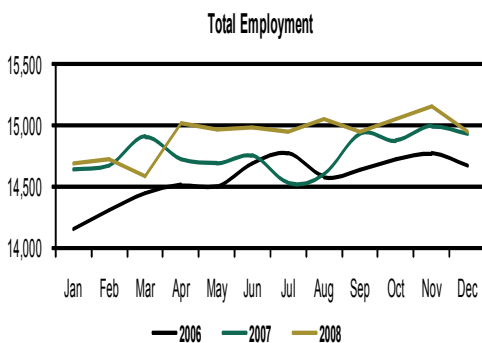
The value of residential building permits fell 32.4 percent from the prior quarter, and 32.1 percent in comparison with the fourth quarter of 2007.

### EMPLOYMENT

#### WASHINGTON PARISH

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Labor Force	15,645	15,455	15,465	15,727	15,739	16,070	15,973	16,172	15,960	16,181	16,209	16,157
% Change vs Prior Year	0.8%	0.1%	-1.3%	1.8%	1.5%	1.7%	3.2%	4.8%	1.4%	3.7%	2.9%	2.6%
Total Employment	14,696	14,728	14,595	15,016	14,970	14,991	14,953	15,056	14,950	15,059	15,160	14,958
% Change vs Prior Year	0.4%	0.3%	-2.1%	1.9%	1.9%	1.6%	2.9%	3.1%	0.1%	1.2%	1.1%	0.1%
Unemployment Rate	6.1%	4.7%	5.6%	4.5%	4.9%	6.7%	6.4%	6.9%	6.3%	6.9%	6.5%	7.4%
Change vs Prior Year	0.5%	-0.2%	0.8%	-0.2%	-0.3%	0.1%	0.3%	1.5%	1.1%	2.2%	1.7%	2.2%

	1Q-08	2Q-08	3Q-08	4Q-08
Labor Force	15,522	15,845	16,035	16,182
% Change vs Prior Year	-0.1%	1.7%	3.1%	3.0%
Total Employment	14,673	14,992	14,986	15,059
% Change vs Prior Year	-0.5%	1.8%	2.0%	0.8%
Unemployment Rate	5.5%	5.4%	6.5%	6.9%
Change vs Prior Year	0.3%	-0.1%	1.0%	2.1%



Source: Labor Market Statistics, Local Area Unemployment Statistics Pi

### ESTIMATED RETAIL SALES

#### WASHINGTON PARISH

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Total Est. Retail Sales (Mil.)	\$25.68	\$38.40	\$39.30	\$34.81	\$35.03	\$40.64	\$35.31	\$27.92	\$32.95	\$36.31	\$25.24	\$33.51
% Change vs Prior Month	-51.5%	49.5%	2.4%	-11.4%	0.6%	16.0%	-13.1%	-20.9%	18.0%	10.2%	-30.5%	32.8%
% Change vs. Prior Year	-10.3%	21.7%	-5.3%	14.9%	-8.2%	19.1%	-60.4%	-16.5%	-8.1%	21.2%	-26.5%	-36.7%
Quarterly Average Sales	\$34.46			\$36.82			\$32.06			\$31.69		
% Change vs. Prior Quarter	-11.9%			6.9%			-12.9%			-1.2%		
% Change vs Prior Year	1.7%			7.7%			-39.3%			-19.0%		

Source: Washington Parish Sheriff's Office - Sales and Use Tax Department

### RESIDENTIAL BUILDING PERMITS

#### WASHINGTON PARISH

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08
Total Units	9	11	12	11	16	10	16	6	8	9	3	8
% Change vs Prior Year	-18.2%	-8.3%	-14.3%	-71.8%	-64.4%	-73.7%	-59.0%	-83.8%	-75.0%	50.0%	-62.5%	-69.2%
Total Value (\$000s)	1,115	1,569	1,603	1,322	1,902	1,281	2,333	810	1,305	1,660	230	1,117
% Change vs Prior Year	26.9%	-7.6%	-58.4%	-63.7%	-56.8%	-64.4%	-64.5%	-76.7%	-54.5%	55.7%	-75.9%	-53.7%
Unincorp. Units	8	11	8	8	14	9	12	5	7	8	0	8
% Change vs Prior Year	0.0%	22.2%	0.0%	-78.9%	-63.2%	-75.7%	-66.7%	-86.5%	-75.9%	33.3%	-100.0%	-65.2%
Uninc. Value (\$000s)	935	1,569	1,067	1,067	1,732	1,192	1,985	780	1,230	1,585	0	1,117
% Change vs Prior Year	37.8%	105.6%	57.3%	-70.1%	-51.4%	-65.7%	-67.7%	-77.5%	-54.8%	48.7%	-100.0%	-48.2%
Incorporated Units	1	0	4	3	2	1	4	1	1	1	3	0
% Change vs Prior Year	-66.7%	-100.0%	-33.3%	200.0%	-71.4%	0.0%	33.3%	0.0%	-66.7%	0.0%	200.0%	-100.0%
Inc. Value (\$000s)	180	0	536	255	170	89	348	30	75	75	230	0
% Change vs Prior Year	-10.3%	-100.0%	-83.1%	218.8%	-79.7%	-31.0%	-20.1%	0.0%	-49.0%	0.0%	283.3%	-100.0%

Sources: Washington Parish Permit Office, City of Bogalusa, Town of Franklinton

## SOUTHEASTERN

**Incorporating Virtual Worlds into the Real World**

**David Wyld, Robert Maurin Professor of Management  
Southeastern Louisiana University**

**The Video Game Culture**

Video games have become a huge part of not just the entertainment marketplace, but of life today. Anyone who has kids can testify to the power of video games to engross their child's attention for hours (and hours) upon end. And it's not just the preteen set.

The latest *eMarketer* survey of the US video game marketplace shows that almost three-quarters of all Americans play video games of one type or another, with well over half of these not just playing games on their personal computers, game consoles, or mobile devices, but online as well.<sup>1</sup> Online gaming is exploding in popularity. While it's true that the percentage of the US population playing online video games decreases among older age groups, more than half of all baby boomers and almost four in 10 members of the "mature generation" (those presently over the age of 61) play games online.<sup>2</sup> This has amounted to rapid growth in the massively multiplayer online role-playing game (MMORPG) sector, with recent estimates putting the total number of adult subscribers at more than 17 million today.<sup>3</sup>

But the largest growth of online gaming is among the young. And the younger the child, the more likely it is that he or she will be an online gamer. According to the Mediamark Research and Intelligence (MRI) "2007 American Kids Survey," nearly four in five American kids between the ages of six and 11 play online games. In fact, online gaming has become the most popular of all online activities for today's youth, far exceeding any other. As Anne Marie Kelly, MRI's VP of marketing and strategic planning, observes, "Online gaming is clearly firmly entrenched as a pastime in the lives of most American kids."<sup>4</sup>

As we can see in Figure 1<sup>5</sup>, a great deal of online gaming activity is not spent just on video games, but specifically in online virtual worlds. In fact, kid-oriented virtual worlds dominate the American virtual world marketplace (see Figure 2<sup>6</sup>). Big media/entertainment companies, such as Walt Disney and Viacom's Nickelodeon division, are embracing this trend. They are acquiring virtual world sites aimed at kids (e.g., Club Penguin) and creating virtual worlds for their theme parks, movies, and characters.<sup>7</sup> In Club Penguin, aimed at the 8 to 14 year-old set, kids can earn — and buy — virtual coins to clothe and house their penguin avatars in a polar virtual world.<sup>8</sup> Likewise, toy companies such as Mattel and Lego are creating virtual worlds for children that correspond to their popular products.

Today's youth are thus coming to see virtual worlds as one of their primary ways to interact over the Internet. According to *eMarketer* senior analyst Debra Williamson, the percentage of all US Internet users between the ages of 3 and 17 who access virtual worlds at least once a month has risen by more than 50 percent in year-over-year figures (from 5.3 million in 2006 to 8.2 million in 2007). If this trend continues, by 2011 well over half of all young Internet users — approximately 20 million — will visit virtual worlds.<sup>9</sup>

And this is not just an American phenomenon. There are an estimated 73 million online game players around the world today.<sup>10</sup> As they interact with virtual worlds, it changes their perspective about what their Internet experience should be. As Williamson notes, "They are growing up not only with social networking, but also with the ability to interact with people, shop, learn, and play in a graphic environment."<sup>11</sup> "Flat" Web sites may pale in comparison to what they see as a truly new and improved version of the Internet.

### Incorporating Virtual Worlds into the Real World — *continued*

#### Training and Learning for “Digital Natives”

Why are online games and virtual worlds such appealing concepts to both today’s organizations and learners? The answer can be found in a generational quake that is occurring in real time and being hotly discussed in the education literature. Marc Prensky, the founder and CEO of Games2train, describes today’s younger generation as being “native speakers of technology, fluent in the digital language of computers, video games, and the Internet.” Those of us who are old enough not to be native to the digital culture are thus said to be “digital

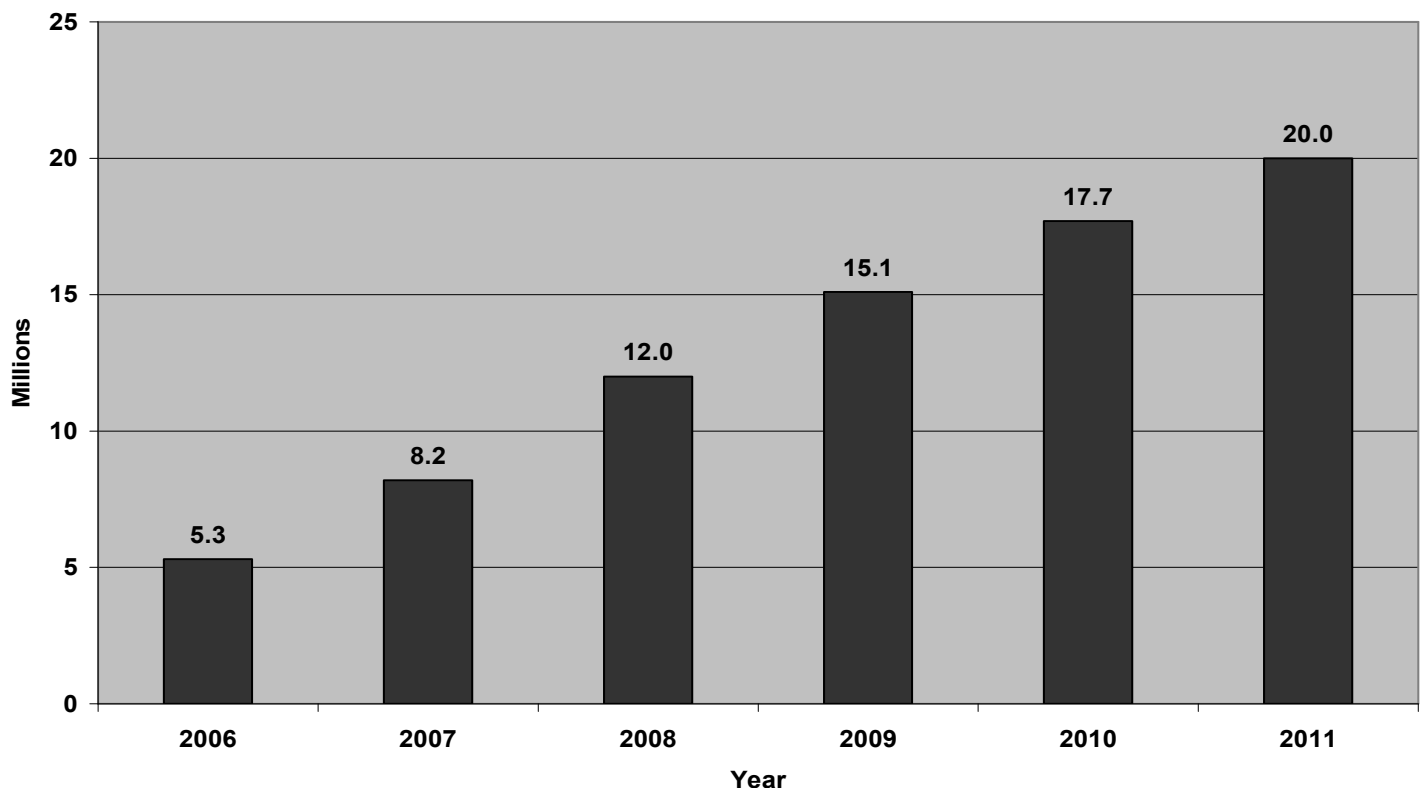
immigrants.” As such, while we may adopt many aspects of the technology, akin to those who learn a second language, “we retain an ‘accent’ because we still have one foot in the past.”<sup>12</sup>

Anne Derryberry, an advisor and consultant to organizations about “serious games” and virtual worlds, declares:

21st century learning experiences need to reflect the lives of 21st century workers. While there is still skepticism that something called a game could be anything more than a leisure activity, serious organizations are getting serious results with serious games.<sup>13</sup>

**FIGURE 1**

**Millions of Internet Users, Ages 3-17, Who Visit Virtual Worlds, 2006-2011**



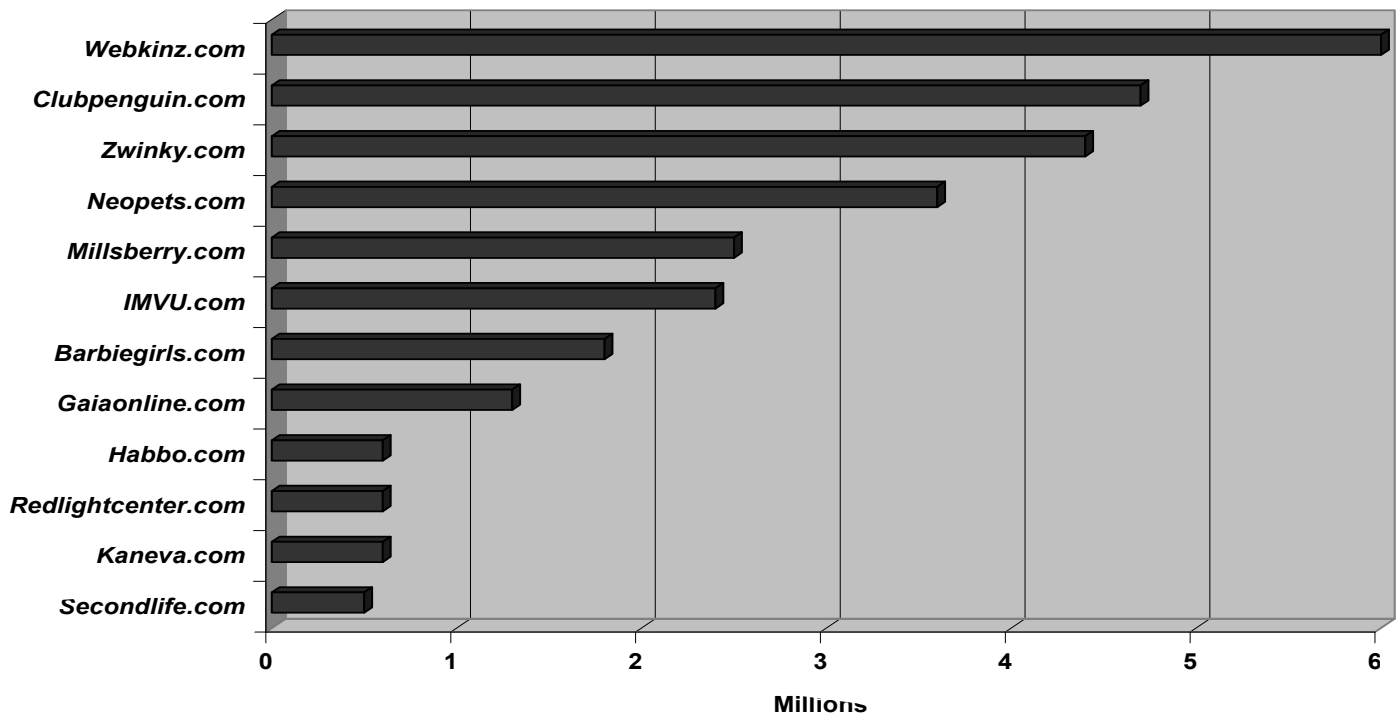
Source Data: Williamson (2007)

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### Incorporating Virtual Worlds into the Real World — *continued*

FIGURE 2

Total Unique U.S. Visitors to Virtual World Sites, September 2007



Source Data: Adapted from Steel, 2007

Indeed, virtual worlds such as Second Life and World of Warcraft are proving to be effective training and learning environments. This is because they provide what Lucia Graves of *U.S. News & World Report* describes as a space that “provides a social laboratory where role-playing, simulations, exploration, and experimentation can be tried out in a relatively risk-free environment.”<sup>14</sup> In a game, an individual will try and fail — often many, many times — to learn the moves necessary to “slay the dragon” and earn points and/or advance levels. Unlike in traditional training and learning environments, games offer what *InformationWeek’s* Mitch Wagner calls “permission to fail” — as small failures are built into the process to enable the player to learn

and advance.<sup>15</sup> He argues that using virtual games for organizational training is no longer “techno-utopian silliness”:

Making work more fun doesn’t necessarily mean doing it in a multiplayer online game like World of Warcraft. But it does mean that businesses need to take some of the techniques games like Warcraft use to make repetitive work fun.<sup>16</sup>

#### Virtual-World Training in Real-World Enterprises

We can see pioneering examples of such efforts today that will translate into models for wider use in the coming years. IBM is one of the leading companies seeking new and innovative ways to use virtual

### Incorporating Virtual Worlds into the Real World — *continued*

worlds in practical ways.<sup>17</sup> The company guides its new hires through a virtual environment in which they attend an orientation session, sign up for employee benefit programs, and learn how to do various tasks, including completing expense reports. IBM has multiple islands in Second Life, and it routinely holds in-world events and meetings (from small group work sessions to large, auditorium-style gatherings) with employees from across the organization and around the world.

The US Transportation Security Administration (TSA) has announced that it is looking to use video games — or what the agency terms “games with a purpose” — to train its 40,000 airport security screeners so as to increase the accuracy of screening and improve customer service.<sup>18</sup> Given the far-flung nature of the TSA’s workforce, virtual environments would be a natural for training and simulations for the agency.

At the University of Maryland’s Center for Advanced Transportation Technology (CATT), researchers are developing a virtual-world training exercise — encompassing many traffic scenarios, from minor accidents to major incidents — for use by emergency responders in the I-95 Corridor Coalition. These simulations include hundreds of participants playing out their real-world response functions in the virtual environment. CATT Research Director Michael Pack observes, “It wasn’t until we started to do elaborate demos that the first responders started to realize the true potential.”<sup>19</sup> Training in the virtual environment can be more cost-effective, as well as realistic in ways that staged disasters cannot. For example, in the simulated environment, if a first responder fails to put on his reflective jacket when approaching the scene of an accident, his avatar may be hit by a car — a harsh but valuable lesson that could not occur in a real-life training exercise.

### Developing Digital Leaders

Virtual worlds may be valuable not only in training for specific scenarios and learning narrow roles, but also as a way of testing and developing leadership skills that can translate into real-world managerial jobs.<sup>20</sup> A May 2008 cover story in the *Harvard Business Review*<sup>21</sup> focuses on just this subject. The authors highlight how experience leading “guilds” in World of Warcraft and virtual teams in other multiplayer online role-playing games is now translating into leadership skills that can be transferred to today’s organizations. In fact, a study of more than 100 IBM business team leaders who also led groups in MMORPGs found this to be the case. These leaders cautioned, however, that the advance of gaming culture will require changes in the very way we think about organizations. First of all, leadership in games is “a task, not an identity,” and thus a person does not assume that a leadership role has permanence. In fact, one’s role can alternate between leadership and followership. In addition, organizational cultures must learn to accept initial failures in order to achieve ultimate group success.<sup>22</sup> These caveats aside, the speed of game play may be ideally suited for teaching players how to lead people in today’s increasingly fast-paced, technologically intense environment.

Roger Smith, CTO for the US Army Simulation, Training, and Instrumentation Program Executive Office, recently commented that “each generation is comfortable with a different set of technologies. Just wait for those that use games to move into positions of power.”<sup>23</sup> With this generational succession, there will be a growing acceptance of computer simulations. Former *Government Executive* Editor Anne Laurent states that the use of gaming and virtual worlds by the next generation of leaders will come about because they will simply “expect and demand it”:

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**Incorporating Virtual Worlds into the Real World — *continued***

These people will not, cannot, manage information on paper, or in spreadsheets or online dashboards. They will not endure the kludgy, slow, inefficient process of learning new software and keeping that knowledge up to date merely to be able to manipulate data.... They will demand to see and touch and manipulate what is known about problems and to “play” possible solutions so they can view the likely outcomes before choosing how to proceed.<sup>24</sup>

Thus, as the gamers come to the fore, it will be imperative for enterprises (and colleges and universities as well) to challenge the way things are done to adapt to the needs of the digital native generation.

**Conclusion**

Today, digital natives — who have become accustomed to living, communicating, and socializing online — are bringing their second lives to their work lives. Consequently, digital natives are going to change the way business is done through their innovative uses of Web 2.0 technologies like wikis, blogs, social networking... and virtual worlds. All too often, however, organizations and their IT departments (mostly made up of digital immigrants) simply “ban what they don’t understand.” In doing so, they are not just stifling innovation, but also risking the morale of their younger workers, who see access to the Web and more as almost a right at work. Alan Paller, director of research for the SANS Institute, opines that “resistance is futile” and that such Web 2.0 tools, rather than being time wasters, can actually help improve both connectivity and productivity in younger workers, who are part of an “intensely interactive, ‘high-fidelity, high-bandwidth’ culture.”<sup>25</sup> On the other hand, the post-40 set of digital immigrants may need training in order to feel comfortable and be productive in the new, ever more virtual world.

In time, virtual worlds will bring about great change in the way we operate. Our business meetings will change. Our business travel needs will change. Our customer interactions will change. Our recruiting efforts and the way we interview will change. All of this presents great challenges — and opportunities — for the IT industry and IT specialists. There will be new demands for bandwidth, new expectations for easy access, and new types of training and education made possible, and necessary, by the advent of virtual-world environments. All of this will put IT at the core of an organization’s ability to react to and thrive in virtual worlds.

Finally, as virtual-world technology is introduced into use in the workplace, there will be a need to develop policies and guidelines for corporate and individual presences in virtual worlds. Certainly, this is an area that will need attention going forward, as executives will want to have standards in place for what can and cannot be done in Second Life and/or other virtual worlds when employees are present in their “official” avatars. As there are few, if any, norms or codes of conduct for employees acting in virtual worlds<sup>26</sup>, there will certainly be some interesting issues to address, such as:

How should their avatars look?

Where can they go?

What can they say?

What can — and cannot — be done “on the clock”?

We thus stand at an exciting crossroads. Virtual worlds will play an increasingly large role in our lives as they develop over the next decade. In time, we may consider the advent of “serious games” and virtual-world environments in organizations to be almost as profound an inflection point as the

### Incorporating Virtual Worlds into the Real World – *continued*

development of the Web itself. The challenge for IT professionals will be to stay on top of these developments to enable themselves and their organizations to thrive in a world that is becoming more and more virtual.

(**NOTE:** This article is excerpted from "World of Workcraft: Educating and Training 'Digital Natives'" by David Wyld, *Cutter IT Journal*, September 2008, pps. 26-31.)

#### ENDNOTES

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<sup>18</sup> Chan, Wade-Hahn. "Learning Could Be Fun and Games at TSA." *Federal Computer Week*, 31 July 2007.

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<sup>20</sup> Gaylord. See 11.

<sup>21</sup> Reeves, Byron, T. W. Malone, and T. O'Driscoll. "Leadership's Online Labs." *Harvard Business Review*, Vol. 86, No. 5, May 2008, pp. 58-66.

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<sup>23</sup> Smith, Roger. "The Long History of Gaming for Military Training." US Army Simulation, Training, and Instrumentation Program Executive Office, March 2008. ([www.peostri.army.mil/CTO/FILES/RSmith\\_Military\\_Game\\_Training.pdf](http://www.peostri.army.mil/CTO/FILES/RSmith_Military_Game_Training.pdf)).

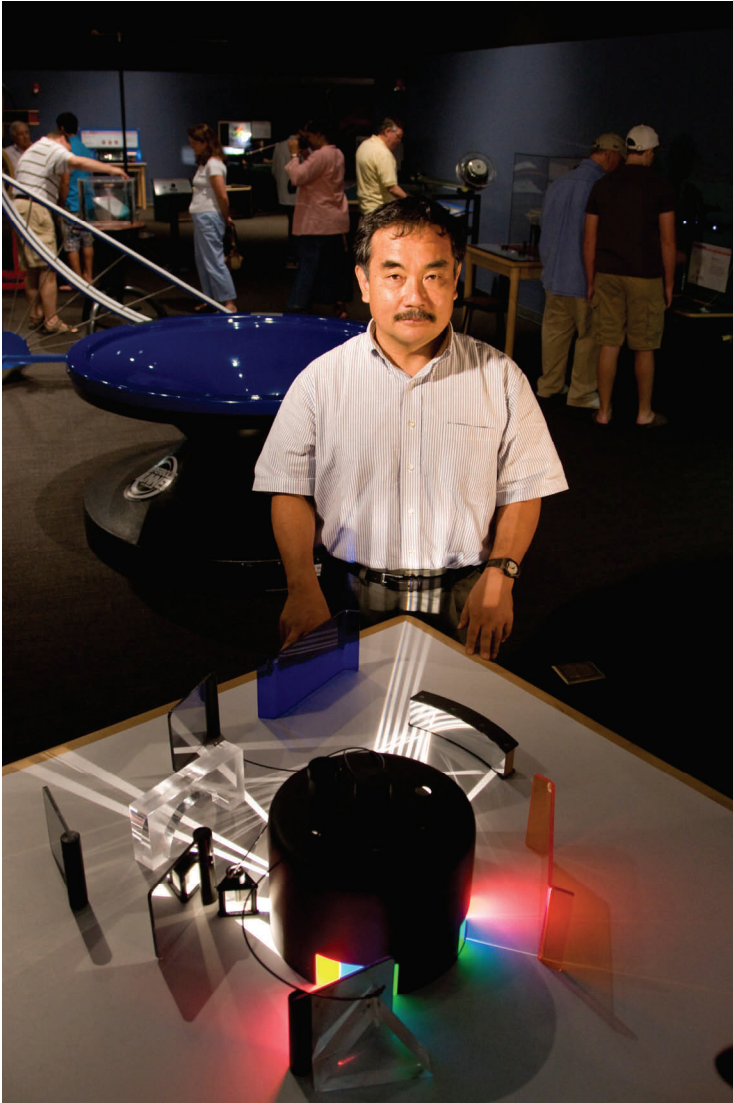
<sup>24</sup> Holmes, Allan. "Tech Insider: New Blog on Virtual Government." *NextGov*, 7 February 2008.

<sup>25</sup> Noyes, Andrew. "Management Matters: Shadow IT." *Government Executive*, 10 October 2007.

<sup>26</sup> Perhaps the best example to date is IBM's Virtual World Guidelines, which are available at [http://domino.research.ibm.com/comm/research\\_projects.nsf/pages/virtualworlds](http://domino.research.ibm.com/comm/research_projects.nsf/pages/virtualworlds).

**David C. Wyld** currently serves as the Robert Maurin Professor of Management at Southeastern Louisiana University. He is the Director of the College of Business's Strategic e-Commerce/e-Government Initiative, the Founding Editor of the *Journal of Strategic e-Commerce*, and a frequent contributor to both academic journals and trade publications. Dr. Wyld has established himself as one of the leading academic experts on emerging applications of technology in both the public and private sector. He has been an active consultant, a qualified expert witness, and an invited speaker on the management of technology to both trade and academic audiences, as well as an invited panelist on technology issues on *The Discovery Channel* and in other media outlets. In recognition of his research accomplishments, Dr. Wyld has been awarded Southeastern's "President's Award for Excellence in Research" and named a *Rising Star in Government Information Technology* by *Federal Computer Week*.

## SOUTHEASTERN – Staff Highlight – *Sanichiro Yoshida*



*Photograph courtesy of Southeastern's Office of Public Information.*

### **Southeastern's Yoshida gains recognition for research**

Southeastern Louisiana University's Sanichiro Yoshida is an electrical engineer by training who operates in a world of physicists. Holder of the Alumni Association Endowed Professorship in Chemistry and Physics, Yoshida is the recipient of multiple honors in recognition of his research.

Last year he received the President's Award for Excellence in Research, one of a trio of prestigious faculty honors at Southeastern, and was named an "Innovator of the Year" by *New Orleans CityBusiness*. His development of a "deformation prediction instrument" – which uses laser light waves to measure displacement in materials and predict their weak points – earned a patent for Southeastern, the first to be awarded to the university through one of its faculty. A second patent on a related area of study is now under consideration.

Yoshida came to Southeastern in 2001 through his association with the Laser Interferometer Gravitational Wave Observatory (LIGO) in Livingston Parish. Previously, he taught or performed research all over the world, holding academic positions in his native Tokyo, the Republic of Indonesia, the former Soviet Union, Siberia, and at several locations in the United States.

A graduate of Keio University in Tokyo, Yoshida's research involves using laser interferometry – intersecting light waves that can measure less than a millionth of a meter – to detect weaknesses and stress points in materials ranging from massive steel girders to the nanostructures of super-mini electronic circuits.

"This approach allows us to predict where and when fractures may occur in materials by determining the weak spot and the remaining life of the material," Yoshida explained. "It also seems to work very well on the nanoscale, even though the structural dynamics are very different from more massive materials."

Yoshida enjoys a worldwide scientific and teaching reputation, as evidenced by requests to write articles for scholarly journals, publication of 69 articles in peer-reviewed journals and his more than 80 presentations at international or national meetings.

*(continued on back of page)*

### Southeastern's Yoshida gains recognition for research — continued

He is likewise sought after as a teacher and mentor having worked with numerous undergraduate and graduate students, including them in his research and sharing authorship with them on scientific articles. He has assisted many students in obtaining valuable research opportunities at centers throughout the world.

"Dr. Yoshida employs considerable effort to involve undergraduate students in his research," said President John L. Crain. "He makes his research meaningful for students by including them in the actual experimentation involved in his work."

With a reputation and research track record that could allow him to work just about anywhere in the world, Yoshida likes his situation at Southeastern.

"I like to teach and interact with students; I think I can help them here," he said. "Plus, my research work is very fundamental. Big universities can be like factories: you have to do the research that brings in the big grants. Here I can pursue what interests me. I have a lot of freedom here."

*(Article courtesy of Southeastern's Office of Public Information.)*



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