

**LOUISIANA WORKFORCE TRAINING EFFORTS TO REBUILD HURRICANE
DISASTER AREAS:**

**FORECAST OF CRITICAL OCCUPATIONS REQUIRING TWO YEARS OR LESS
TRAINING IN SIX INDUSTRY SECTORS
FOR THE RECOVERY PERIOD 2006 TO 2009**

**PREPARED FOR
LOUISIANA WORKFORCE COMMISSION
AND THE
LOUISIANA RECOVERY AUTHORITY**

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INTRODUCTION

This report identifies critical occupations requiring two years or less training in regions most affected by Hurricanes Katrina and Rita, and will be used as part of the funding criteria for critical occupations training programs. These demand occupations were based upon economic forecasts for six industry sectors, covering the period 2006-2009, that were identified most critical to economic and physical recovery of affected regions. Within the six industry sectors, a demand for nearly 33,000 positions is forecast within this three year period. Within the Hurricane Katrina region, the demand is forecast for about 27,000 positions requiring two years or less of training. Within the Hurricane Rita region, the demand is forecast for 5,600 positions requiring two years or less of training. In addition to identifying the demand occupations, this report identifies the NAICS industries within each sector, the parishes within each geographical region and total historical and forecast employment and population by parish within each region.

PARISHES IDENTIFIED AS PART OF EACH HURRICANE RECOVERY AREA

Table 1 below identifies the parishes and the state labor market areas that are part of each recovery region. Each region has ten parishes which were directly or indirectly affected by Hurricanes Katrina and Rita. According to the “Community Development Block Grant Workforce Training Recovery Program” document prepared by the Workforce Commission and Louisiana Recovery Authority staff, *“Projects to be funded will be in the parishes in the southeast and southwest Louisiana most affected by Katrina and Rita, including but not limited to those with substantial infrastructure damage.”*

TABLE 1: PARISHES IDENTIFIED AS PART OF HURRICANES KATRINA AND RITA RECOVERY AREAS

REGION	Regional Labor Market	
	Area	PARISHES
KATRINA RECOVERY AREA	1	Jefferson Parish
	1	Orleans Parish
	1	Plaquemines Parish
	1	St. Bernard Parish
	1	St. Charles Parish
	1	St. Tammany Parish
	2	Tangipahoa Parish
	2	Washington Parish
	3	Terrebonne Parish
	3	Lafourche Parish
RITA RECOVERY AREA	4	Iberia Parish
	4	St. Mary Parish
	4	Vermilion Parish
	5	Allen Parish
	5	Beauregard Parish
	5	Calcasieu Parish
	5	Cameron Parish
	5	Jefferson Davis Parish
	6	Vernon Parish
	7	Sabine Parish

Source: Louisiana Workforce Commission; Louisiana Recovery Authority

Both regions accounted for 49% of the total Louisiana employment (Source: Bureau of Economic Analysis full-time and part-time employment estimates) in 2004.

In 2004, the Katrina recovery area accounted for 78% of the total employment in both recovery areas. In 2009, the forecast of total employment in the Katrina recovery area is expected to represent 75% of the total for both areas. In 2006, that fraction is estimated at 73% of both areas.

INDUSTRIES WITHIN EACH SECTOR

TABLE 2: INDUSTRIES WITHIN EACH SECTOR

NAICS	
OIL AND GAS INDUSTRY	
324	Petroleum Refining
211	Oil and Gas Extraction
213	Support Activities for Mining
486	Pipeline Transportation
CONSTRUCTION	
236	Construction of Buildings
237	Heavy and Civil Engineering Construction
238	Specialty Trade Contractors
ADVANCED MANUFACTURING	
311	Food Manufacturing
325	Chemical Manufacturing
326	Plastics and Rubber Products Manufacturing
332	Fabricated Metal Product Manufacturing
333	Machinery Manufacturing
334	Computer and Electronic Product Manufacturing
335	Electrical Equipment, Appliance, and Component Manufacturing
336	Transportation Equipment Manufacturing
TRANSPORTATION	
481	Air Transportation
483	Water Transportation
484	Truck Transportation
485	Transit and Ground Passenger Transportation
488	Support Activities for Transportation
HEALTHCARE	
621	Ambulatory Health Care Services
622	Hospitals
623	Nursing and Residential Care Facilities
CULTURAL ECONOMY	
pt. 323	Printing and Related Support Activities
pt. 453	Art dealers and retail art galleries
487	Scenic and Sightseeing Transportation
pt.451	Book and Music Stores
511	Publishing Industries (except Internet)
pt. 512	Motion Picture and Sound Recording
pt. 541	Architectural and Specialized Design Services
pt. 611	Educational Services
711	Performing Arts, Spectator Sports, and Related Industries
712	Museums, Historical Sites, and Similar Institutions
7221, 7223	Full-Service + Special Service Restaurants.
pt. 900	Local Government
067	Self-Employment

Source: Dr. Raymond J. Brady, Systems Solutions Consulting (August 2006)

Table 2 is self-explanatory. It identifies job forecast industries within each sector. These job forecast was, in turn, used as a control variable to project occupational demand within each industry which then aggregated by sector. The identified sectors were developed jointly by the Louisiana Recovery Authority and Systems Solutions Consulting. *It is important to recognize that these sectors do not cover all industries.* In the Katrina recovery region and in 2004, industries within these sectors accounted for 47% of the total wage and salary employment in that region. In the Rita recovery region, they accounted for 45% of the total wage and salary employment. Early on, a decision was made by Louisiana Recovery Authority staff to limit the occupational needs to a select group of industries that were deemed critical to recovery within each region.

HISTORICAL AND FORECAST POPULATION, SECTOR AND TOTAL EMPLOYMENT FOR HURRICANES KATRINA AND RITA RECOVERY AREAS

Table 3 looks at the distribution of employment for four periods, 1990, 2004, 2006 and 2009. In the Katrina recovery region, what becomes evident is that the Hurricane Katrina disaster probably accelerated existing trends of employment decentralization away from core urban center, Orleans Parish.

Table 3: Distribution of Employment within the Katrina Recovery Area

	1990	1994	2006	2009
Jefferson	28%	30%	31%	31%
Lafourche	4%	5%	6%	6%
Orleans	44%	35%	26%	27%
Plaquemines	3%	2%	2%	2%
Saint Bernard	2%	2%	1%	1%
Saint Charles	3%	3%	4%	4%
Saint Tammany	6%	9%	12%	12%
Tangipahoa	4%	5%	7%	7%
Terrebonne	6%	7%	9%	8%
Washington	2%	2%	2%	2%

Source: Dr. Raymond J. Brady,
Systems Solutions Consulting (August 2006)

Recovering to pre-Katrina employment levels in the entire Katrina recovery region will not likely occur until sometimes in the first five years of the next decade. It is highly probable that some parishes will not recover to pre-Katrina employment levels for a far longer period due to pre-Katrina decentralization trends. Although long-term decentralization trends are not likely to end, the central urban core parish, Orleans Parish, is forecast to add 37% (31,000 jobs) of total job growth (83,000) in the Katrina recovery region during the 2006-2009 period.

Tables 4A and 4B are total employment by parish. Historical data covers the period 1990 to 2004. The source of this data is the Bureau of Economic Analysis. This data was used because it includes a broader picture of employment. That is, it includes full-time and estimates of part-time and self-employed. The year 2005 data reflects monthly parish employment from the Bureau of Labor Statistics up to December 2005. *So these statistics take into consideration the impact of Hurricanes Katrina and Rita on specific parishes.* Forecasts of 2006 were based upon Bureau of Labor Statistics regional data through July 2006. Statistical models were developed to predict the parish estimate based upon MSA estimates. Parishes outside the MSA were predicted independently. The years 2007 and 2008 reflect peak years of recovery for the Katrina recovery region and 2006 and 2007 are forecast to be the peak recovery period for the Rita recovery region. Currently outside the recovery areas, the state's economy continues to grow at slow or moderate pace. Eighty-seven percent of the state's job additions between January and July 2006 were in the Katrina recovery area. In both recovery areas, a substantial slowdown in growth is forecast by 2009. It is anticipated that re-construction activity will dramatically decline. At this point, local economies will have to play a far more important role in sustaining growth. And for this reason, long-term decentralization trends, as well as slower long-term growth, were weighted into the forecasts by parish in the post-2008 period.

TABLE 4A: TOTAL EMPLOYMENT BY PARISH 1990-2009 IN THE KATRINA RECOVERY REGION

LRA DEFINED KATRINA DISASTER RECOVERY REGION	Area Name	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	Annual Average	HISTORICAL							ESTIMATE		FORECAST		
	Jefferson	193535	212042	229244	228923	226944	229019	230612	216000	195000	215000	220000	222000
Lafourche	24258	27332	32604	33606	34530	36320	35697	36110	36600	38900	39000	39700	
Orleans	300057	298384	292811	290690	282329	277988	274909	240400	159000	175000	185000	190000	
Plaquemines	18021	18153	18276	18558	16808	16885	16793	16370	14700	16500	16900	17300	
Saint Bernard	13950	15952	17611	17403	18146	18916	19274	15800	7800	9610	9850	9980	
Saint Charles	19791	21469	20683	20891	22036	22637	24030	23900	25000	25200	25500	25800	
Saint Tammany	37690	50058	62671	63866	66467	69401	72369	71536	74500	78700	81900	84400	
Tangipahoa	25206	32314	37100	37891	37916	39286	40153	41400	43400	44500	46000	47100	
Terrebonne	37804	41416	48591	50077	50683	50908	51088	52500	53800	54800	55300	56800	
Washington	11460	13229	12901	13036	12833	12400	12113	11900	12500	12300	12200	12100	
REGION	681772	730349	772492	774941	768692	773760	777038	725916	622300	670510	691650	705180	
STATE	1723309	1890347	2033118	2033800	2019981	2026560	2036932	1985000	1885000	1933000	1965000	1988000	

Source: 1990-2004, Bureau of Economic Analysis, Full and Part-time Employment Estimates; 2005, Bureau of Labor Statistics monthly wage and salary employment by parish adjusted to reflect BEA statistical series; Dr. Raymond J. Brady, *Systems Solutions Consulting* (August 2006).

Notes: 2006 estimate based upon statistical model that uses MSA data from the Bureau of Labor Statistics up to July 2006 to predict the remaining months of 2006. Each parish in the New Orleans- Metairie-Kenner MSA was then regressed against the regional data to derive parish data. The weighted model, using BLS parish monthly series, placed greater emphasis on the last four months of 2005 to adjust for the shock in the trend. The year 2006 represents the “data trough” because the entire series contains the full impact of the hurricanes. The forecast for the years 2007-2009 reflects assumptions of peak recovery in the Katrina Recovery area occurring in 2007-2008 and a substantial slowdown in 2009. The peaking and slowdown occurs earlier in the Rita recovery region.

TABLE 4B: TOTAL EMPLOYMENT BY PARISH 1990-2009 IN THE RITA RECOVERY REGION

Area Name		1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Annual Average		HISTORICAL						ESTIMATE		FORECAST			
LRA DEFINED RITA RECOVERY REGION	Allen	5048	7935	9473	9259	9431	9513	9279	8864	9130	9200	9210	9360
	Beauregard	7858	9143	9476	9457	9432	9564	9293	9500	9290	9440	9550	9670
	Calcasieu	71273	81120	90356	89234	89555	88429	88266	90490	91000	91800	92000	93400
	Cameron	4169	3794	4114	3937	3308	3260	3136	2964	2530	2700	2980	3030
	Jefferson Davis	8001	8182	7995	8219	8574	8907	8944	9040	8950	9000	9080	9160
	Sabine	5459	6318	6315	6317	6210	6215	6251	6300	6310	6410	6490	6490
	Vernon	27373	22599	22298	22680	22475	23030	24234	25089	25100	25600	25800	25700
	Iberia	26115	28547	31703	32294	32362	32565	32950	32860	32600	33000	33500	33900
	Saint Mary	27626	28418	28254	28452	27804	27895	26742	26130	25400	25200	24800	24600
	Vermilion	13050	15291	15323	15501	14903	14927	14809	15070	14400	14600	14700	14900
	REGION	195972	211347	225307	225350	224054	224305	223904	226307	224710	226950	228110	230210
	STATE	1723309	1890347	2033118	2033800	2019981	2026560	2036932	1985000	1885000	1933000	1965000	1988000

Source: 1990-2004, Bureau of Economic Analysis, Full and Part-time Employment Estimates; 2005, Bureau of Labor Statistics monthly wage and salary employment by parish adjusted to reflect BEA statistical series; Dr. Raymond J. Brady, *Systems Solutions Consulting* (August 2006).

Notes: 2006 estimate based upon statistical model that uses MSA data + parish specific estimates from the Bureau of Labor Statistics up to July 2006 to predict the remaining months of 2006. Because some parishes were not in MSA statistical area, independent forecasts were developed for the parishes. The year 2006 represents the “data trough” because the entire series contains the full impacts of the hurricanes. The forecast for the years 2007-2009 reflects assumptions of peak recovery in the Rita Recovery area occurring in 2006-2007 and a substantial slowdown by 2009 in recovery industries.

Tables 5A and 5B are total population projections for the Katrina and Rita recovery area. Population is benchmarked at July of each year which differs from the employment data which takes an average of employment over the year in question.

TABLE 5A: HISTORICAL AND PROJECTED POPULATION FOR THE KATRINA RECOVERY AREA

	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
July 1, of each year													
LRA DEFINED KATRINA DISASTER RECOVERY REGION	Jefferson	448306	461176	454773	452207	451729	452039	453089	452824	396000	417000	437000	440000
	Lafourche	85860	87611	89971	90123	90773	91440	91955	92179	92200	93100	93500	93900
	Orleans	496938	495018	483556	477632	472409	467592	461115	454863	230000	285000	295000	310000
	Plaquemines	25575	25942	26750	27006	27342	27958	28971	28995	22800	26300	27500	28500
	Saint Bernard	66631	68216	67027	66555	66362	65866	65636	65364	16100	25000	29000	34000
	Saint Charles	42437	45885	48199	48525	49104	49341	49955	50633	52100	52600	53200	53700
	St. Tammany	144500	171030	192272	196112	201847	207539	213694	220295	222000	232000	238000	243000
	Tangipahoa	85709	93775	100832	101591	102371	103493	105002	106502	109883	111000	113000	114000
	Terrebonne	97044	100362	104542	105008	105466	106079	106454	107491	106300	107202	108101	108910
	Washington	43185	43380	43907	43854	43874	43943	44096	44623	44500	45000	45100	45200
	REGION	1536185	1592395	1611829	1608613	1611277	1615290	1619967	1623769	1281883	1389202.1	1434401	1458210
	STATE	4221532	4378779	4468976	4465258	4475003	4490380	4506685	4523628	4366700	4444000	4479700	4508600

Source: 1990 to 2005, U.S. Census Bureau; 2006-2009, Dr. Raymond J. Brady, *Systems Solutions Consulting* (August 2006)

TABLE 5B: HISTORICAL AND PROJECTED POPULATION FOR THE RITA RECOVERY AREA

	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
July 1, of each year													
LRA DEFINED RITA DISASTER RECOVERY REGION	Beauregard	30083	31765	33067	33099	33181	33534	34012	34562	33800	34400	34800	35300
	Calcasieu	168134	177308	183546	183041	183149	184063	184635	185419	181900	184000	185000	186000
	Cameron	9260	9299	9954	9839	9740	9670	9626	9558	8000	8300	8160	8060
	Jefferson Davis	30722	31671	31409	31199	31122	31097	31179	31272	30800	30800	30900	31000
	Sabine	22646	23231	23500	23415	23396	23506	23577	23786	23700	23900	24000	24000
	Vernon	61961	55807	52498	52273	51212	50531	49522	48745	49100	48800	48300	47900
	Iberia	68297	70927	73271	73461	73690	74005	74166	74388	74200	74500	74900	75300
	Saint Mary	58086	55741	53305	52769	52511	52324	52008	51416	50700	50500	50100	49600
	Vermilion	50055	51438	53803	54010	54237	54377	54624	55195	53500	53800	54100	54400
	REGION	520470	531433	539777	538428	537375	538382	538612	539611	531300	534900	536360	537860
	STATE	4221532	4378779	4468976	4465258	4475003	4490380	4506685	4523628	4366700	4444000	4479700	4508600

Source: 1990 to 2005, U.S. Census Bureau; 2006-2009, Dr. Raymond J. Brady, *Systems Solutions Consulting* (August 2006)

TABLE 6A: HISTORICAL AND FORECAST ANNUAL AVERAGE EMPLOYMENT IN THE KATRINA RECOVERY REGION

HISTORICAL								ESTIMATE AND FORECAST			
1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
OIL AND GAS SECTOR											
20,334	16,514	14,877	15,212	13,766	13,682	13,172	12,955	13,795	15,008	15,654	15,809
CONSTRUCTION											
30,651	32,016	37,043	36,097	34,194	36,026	35,323	30,723	25,500	32,078	34,676	35,500
ADVANCED MANUFACTURING											
35,200	33,740	35,071	33,501	31,277	30,720	30,558	30,701	22,705	23,134	23,641	24,179
TRANSPORTATION											
25,735	21,861	20,693	20,579	19,910	19,864	19,598	18,798	13,873	14,613	15,032	15,619
HEALTHCARE											
58,401	71,146	68,459	69,889	71,792	72,943	73,330	62,426	45,372	47,789	50,508	52,604
CULTURAL ECONOMY											
154,089	172,518	186,378	190,085	189,333	194,573	199,216	176,774	135,538	144,215	151,832	158,987
TOTAL EMPLOYMENT IN ALL SECTORS											
324,410	347,795	362,521	365,363	360,272	367,808	371,197	332,377	256,783	276,836	291,343	302,697

Source: Bureau of Economic Analysis; Bureau of Labor Statistics; Dr. Raymond J. Brady, Systems Solutions Consulting (August 2006)

TABLE 6A: HISTORICAL AND FORECAST ANNUAL AVERAGE EMPLOYMENT IN THE RITA RECOVERY REGION

HISTORICAL								ESTIMATE AND FORECAST			
1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
OIL AND GAS SECTOR											
12,806	11,910	10,494	11,594	10,690	10,247	9,948	10,233	10,739	10,718	10,880	11,016
CONSTRUCTION											
12,319	13,836	17,045	16,764	15,701	15,311	15,058	15,300	17,960	18,507	17,697	16,750
ADVANCED MANUFACTURING											
13,387	13,313	13,550	13,249	12,422	11,697	11,319	11,465	11,424	11,373	11,323	11,173
TRANSPORTATION											
5,545	5,313	5,781	5,933	5,740	6,018	5,588	5,597	5,644	5,676	5,709	5,743
HEALTHCARE											
16,787	21,457	22,115	22,364	22,952	23,705	24,392	24,809	25,032	25,539	26,041	26,766
CULTURAL ECONOMY											
40,160	43,986	49,236	52,228	52,208	53,258	54,272	55,045	55,301	56,509	57,350	58,303
TOTAL EMPLOYMENT IN ALL SECTORS											
101,005	109,815	118,221	122,133	119,712	120,236	120,577	122,448	126,100	128,322	129,000	129,751

Source: Bureau of Economic Analysis; Bureau of Labor Statistics; Dr. Raymond J. Brady, Systems Solutions Consulting (August 2006)

PROJECTION OF CRITICAL OCCUPATIONAL NEEDS IN FORECAST INDUSTRY SECTORS

DEFINITION- *Total occupational demand* by occupational title is the sum of demand coming from *new growth* (increased demand for labor) and *replacement demand* (the need to fill positions due to retirement, job resignations, shifts in positions or lack of skilled labor to fill current positions). Normally, the majority of occupation demand is derived from replacement demand.

METHODOLOGY

Each industry has an occupational structure which defines both the number and type of occupations that are part of it. These occupations are identified by the Bureau of Labor Statistics and the Louisiana Department of Labor through surveys of industries. These surveys result in an occupational profile of each industry. The distribution of occupations within an industry is affected by two factors. First, changes in technology or market conditions affect the relative number of positions that would be in demand over some fixed time period. For example, the introduction of the desktop computer had substantial impact on the demand for secretaries within an industry, either increasing or decreasing that industries share. Second, the replacement rate is the *average* percentage or fraction of that industry which is likely to retire, change jobs or leave the employment pool over some fixed time. These statistics reflect national averages and again are gathered through surveys of industries over time.

For the purpose of this project, a statewide occupational matrix was used to project occupational demand within each Sector. Only those occupations that met four requirements were identified:

- **The first requirement is that the occupation must require two years or less of training.**
- **The second requirement is that the total demand (new demand and replacement demand) must be at least 20 positions or more over the three year period 2006-2009.**
- **The third requirement is that the position must require some form of “formal training” or be linked to a repair or recovery industry (construction laborers) which would be essential to more skilled workers in that sector to be defined as a critical occupation. Therefore, occupations such as waiters and waitresses, retail sales clerks were removed from the list.**
- **The fourth requirement limited the number of occupations, specifically in the “cultural economy” sector that were defined as critical to the recovery of that industry. This list is somewhat arbitrary since the “cultural economy” spans several unrelated industries. So for example, again, waiters and waitresses would be significant part of the restaurant industry which is part of the cultural economy. However, these occupations were removed. The net impact of this cleansing is that the list is reduced substantially.**

Three steps were followed to project total occupational demand for each sector. These steps are:

- ➔ **First, calculate occupations created by new demand.** The change in employment in the NAICS industry within the sector is multiplied by the fraction of that occupation within the matrix. For example, if the change in the employment was 100 and the fraction of , for example, system engineers was 0.10, then total new demand would be 10 (100 X 0.10). If the demand declines, the new demand = 0, since you cannot have negative new demand.

- **Second, calculate occupations created by replacement demand.** In this case, a three year average was calculated to determine the fraction of replacement demand between 2006 and 2009. Next, the fraction is multiplied by the base year (2006) employment to determine the total replacement demand over the three year period.
- **Third, sum both new demand and replacement demand which equals total occupational demand.** This value will be used as an indicator of demand in the allocation of funds.

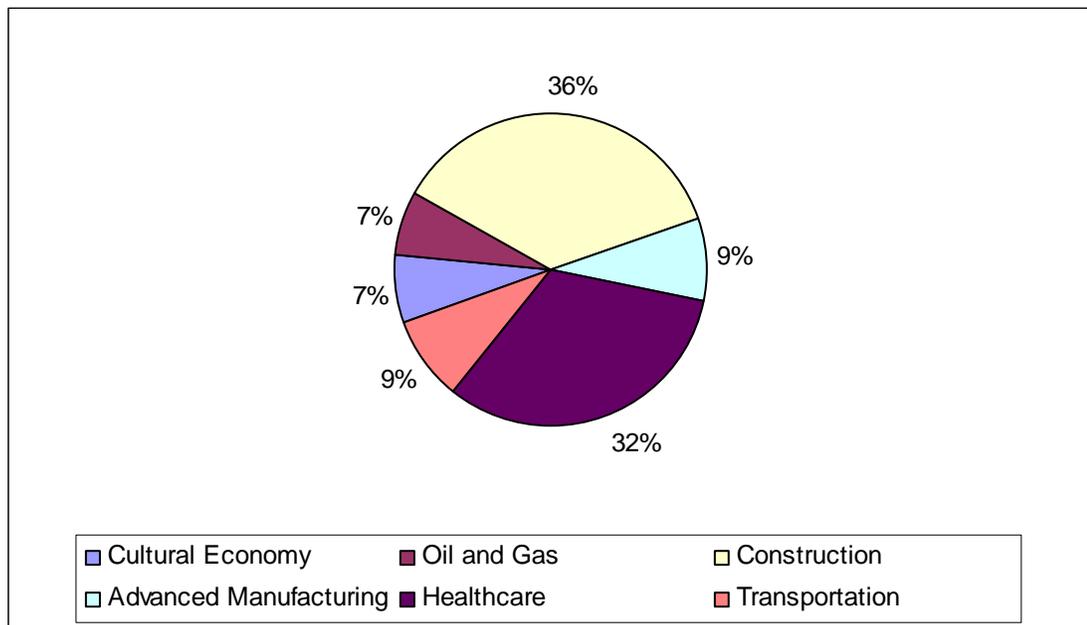
REALITY CHECK:

The method identified can only be viewed as an approximation of future occupational demand in the affected areas. The precise number of critical occupations is highly affected by the (a) availability of trainable labor, and (b) the initial skill conditions of those seeking training. **These occupational projections will be used, however, as a benchmark to determine whether trainers are seriously overestimating or underestimating realizable demand. Therefore, they should be used as guidelines but not as absolute limits.**

TOTAL OCCUPATIONAL DEMAND IN THE KATRINA RECOVERY REGION

This section focuses on total occupational demand in the Katrina recovery region.

TABLE 7: DISTRIBUTION OF TOTAL DEMAND BY ECONOMIC SECTOR IN THE HURRICANE KATRINA RECOVERY REGION



Source: Dr. Raymond J. Brady, Systems Solutions Consulting (August 2006)

**TABLE 8: TOTAL OCCUPATIONAL DEMAND BY SECTOR
IN HURRICANE KATRINA RECOVERY AREA**

ECONOMIC SECTOR	OCCUPATIONAL CODE	QUALIFIED OCCUPATIONS REQUIRING TWO YEARS OR LESS TRAINING	2006 EMPLOYMENT	Total Demand over Three Years	
OIL AND GAS INDUSTRY	47-5071	Roustabouts, Oil and Gas	782	188	
	47-5013	Service Unit Operators, Oil, Gas, and Mining	691	169	
	47-5012	Rotary Drill Operators, Oil and Gas	652	159	
	51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	582	120	
	49-9041	Industrial Machinery Mechanics	531	114	
	53-7062	Laborers and Freight, Stock, and Material Movers, Hand	415	101	
	49-9042	Maintenance and Repair Workers, General	463	98	
	47-5011	Derrick Operators, Oil and Gas	376	93	
	47-5081	Helpers--Extraction Workers	337	81	
	43-9061	Office Clerks, General	376	70	
	51-4121	Welders, Cutters, Solderers, and Brazers	248	61	
	43-5032	Dispatchers, Except Police, Fire, and Ambulance	315	59	
	41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	216	52	
	51-9198	Helpers--Production Workers	193	49	
	47-2111	Electricians	210	45	
	19-4031	Chemical Technicians	160	44	
	53-3032	Truck Drivers, Heavy and Tractor-Trailer	206	42	
	43-6014	Secretaries, Except Legal, Medical, and Executive	197	31	
	19-4041	Geological and Petroleum Technicians	133	30	
	53-7032	Excavating and Loading Machine and Dragline Operators	124	30	
	43-3031	Bookkeeping, Accounting, and Auditing Clerks	159	28	
	47-2152	Plumbers, Pipefitters, and Steamfitters	114	26	
	53-7073	Wellhead Pumpers	159	25	
	49-9043	Maintenance Workers, Machinery	107	25	
	47-5021	Earth Drillers, Except Oil and Gas	108	24	
	53-7021	Crane and Tower Operators	103	22	
	51-4041	Machinists	95	22	
	43-5061	Production, Planning, and Expediting Clerks	92	21	
	TOTAL DEMAND OCCUPATIONS			8146	1808

ECONOMIC SECTOR	OCCUPATIONAL CODE	QUALIFIED OCCUPATIONS REQUIRING TWO YEARS OR LESS TRAINING	2006	Total Demand over Three Years
CONSTRUCTION	47-2031	Carpenters	2746	1155
	47-2061	Construction Laborers	3125	1028
	47-2141	Painters, Construction and Maintenance	1629	790
	47-2152	Plumbers, Pipefitters, and Steamfitters	1372	685
	47-2111	Electricians	1252	677
	51-4121	Welders, Cutters, Solderers, and Brazers	771	383
	47-2073	Operating Engineers and Other Construction Equipment Operators	679	266
	53-7062	Laborers and Freight, Stock, and Material Movers, Hand	592	264
	47-3015	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	407	255
	47-3012	Helpers--Carpenters	421	241
	47-3013	Helpers--Electricians	368	231
	53-3032	Truck Drivers, Heavy and Tractor-Trailer	470	225
	43-6014	Secretaries, Except Legal, Medical, and Executive	530	225
	47-3016	Helpers--Roofers	33	221
	47-2181	Roofers	184	216
	49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	295	190
	43-3031	Bookkeeping, Accounting, and Auditing Clerks	411	190
	47-2221	Structural Iron and Steel Workers	392	175
	47-2081	Drywall and Ceiling Tile Installers	286	167
	43-9061	Office Clerks, General	352	163
	47-2021	Brickmasons and Blockmasons	232	133
	47-2051	Cement Masons and Concrete Finishers	306	125
	47-2041	Carpet Installers	50	111
	37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	219	109
	49-3042	Mobile Heavy Equipment Mechanics, Except Engines	291	106
	47-2132	Insulation Workers, Mechanical	198	105
	49-9098	Helpers--Installation, Maintenance, and Repair Workers	171	89
	43-6011	Executive Secretaries and Administrative Assistants	166	76
	49-9042	Maintenance and Repair Workers, General	196	76
	49-9044	Millwrights	163	73
	47-2211	Sheet Metal Workers	113	72
	47-4031	Fence Erectors	119	67
	49-9041	Industrial Machinery Mechanics	275	66
	53-7032	Excavating and Loading Machine and Dragline Operators	144	65
	47-3014	Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	95	63
	41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	97	61
	47-2131	Insulation Workers, Floor, Ceiling, and Wall	102	61
	49-9096	Riggers	115	61
	43-4171	Receptionists and Information Clerks	104	59
	47-3011	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	82	56
47-2121	Glaziers	90	55	
43-3051	Payroll and Timekeeping Clerks	118	52	
47-2151	Pipelayers	142	52	

ECONOMIC SECTOR	OCCUPATIONAL CODE	QUALIFIED OCCUPATIONS REQUIRING TWO YEARS OR LESS TRAINING	2006	Total Demand over Three Years	
CONSTRUCTION	51-9198	Helpers--Production Workers	123	51	
	51-2041	Structural Metal Fabricators and Fitters	75	47	
	53-7021	Crane and Tower Operators	88	39	
	49-9051	Electrical Power-Line Installers and Repairers	129	37	
	49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	60	36	
	47-2171	Reinforcing Iron and Rebar Workers	83	36	
	47-2043	Floor Sanders and Finishers	63	35	
	49-2098	Security and Fire Alarm Systems Installers	56	34	
	49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	45	28	
	49-9052	Telecommunications Line Installers and Repairers	57	27	
	47-2161	Plasterers and Stucco Masons	47	26	
	47-5071	Roustabouts, Oil and Gas	38	25	
	47-4021	Elevator Installers and Repairers	34	22	
	TOTAL DEMAND OCCUPATIONS			22810	9985

ECONOMIC SECTOR	OCCUPATIONAL CODE	QUALIFIED OCCUPATIONS REQUIRING TWO YEARS OR LESS TRAINING	2006	Total Demand over Three Years
ADVANCE MANUFACTURING	51-4121	Welders, Cutters, Solderers, and Brazers	2353	475
	51-9198	Helpers--Production Workers	1066	191
	51-4041	Machinists	979	142
	53-7062	Laborers and Freight, Stock, and Material Movers, Hand	774	141
	47-2152	Plumbers, Pipefitters, and Steamfitters	605	108
	51-2041	Structural Metal Fabricators and Fitters	531	98
	51-9011	Chemical Equipment Operators and Tenders	585	100
	49-9042	Maintenance and Repair Workers, General	683	86
	47-2111	Electricians	434	75
	41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	506	75
	51-3022	Meat, Poultry, and Fish Cutters and Trimmers	369	67
	51-2092	Team Assemblers	422	65
	51-4192	Lay-Out Workers, Metal and Plastic	383	53
	51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	240	50
	51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	200	49
	19-4031	Chemical Technicians	378	53
	49-9041	Industrial Machinery Mechanics	411	48
	51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	339	46
	35-2021	Food Preparation Workers	168	41
	51-9111	Packaging and Filling Machine Operators and Tenders	411	40
	51-3023	Slaughterers and Meat Packers	212	38
	47-2211	Sheet Metal Workers	174	34
	43-9061	Office Clerks, General	242	32
	53-7051	Industrial Truck and Tractor Operators	251	31
	43-5071	Shipping, Receiving, and Traffic Clerks	321	31
	49-3011	Aircraft Mechanics and Service Technicians	92	27
	43-3031	Bookkeeping, Accounting, and Auditing Clerks	266	28
	47-2141	Painters, Construction and Maintenance	148	25
	43-5081	Stock Clerks and Order Fillers	127	27
	51-2091	Fiberglass Laminators and Fabricators	112	23
	43-5061	Production, Planning, and Expediting Clerks	129	21
	51-3092	Food Batchmakers	135	22
TOTAL DEMAND OCCUPATIONS			14045	2344

ECONOMIC SECTOR	OCCUPATIONAL CODE	QUALIFIED OCCUPATIONS REQUIRING TWO YEARS OR LESS TRAINING	2006	Total Demand over Three Years
TRANSPORTATION	53-3032	Truck Drivers, Heavy and Tractor-Trailer	2625	576
	53-5021	Captains, Mates, and Pilots of Water Vessels	1904	364
	53-5011	Sailors and Marine Oilers	1436	311
	53-5031	Ship Engineers	560	179
	53-3021	Bus Drivers, Transit and Intercity	437	146
	53-7062	Laborers and Freight, Stock, and Material Movers, Hand	1038	141
	53-3033	Truck Drivers, Light or Delivery Services	460	83
	53-7072	Pump Operators, Except Wellhead Pumpers	298	82
	49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	273	80
	49-3011	Aircraft Mechanics and Service Technicians	442	67
	43-5032	Dispatchers, Except Police, Fire, and Ambulance	275	60
	53-3041	Taxi Drivers and Chauffeurs	210	58
	53-2012	Commercial Pilots	181	32
	53-7032	Excavating and Loading Machine and Dragline Operators	132	32
	49-9042	Maintenance and Repair Workers, General	204	28
	53-7051	Industrial Truck and Tractor Operators	160	28
	43-6014	Secretaries, Except Legal, Medical, and Executive	249	27
	43-9061	Office Clerks, General	163	26
	51-4121	Welders, Cutters, Solderers, and Brazers	143	22
	53-7121	Tank Car, Truck, and Ship Loaders	236	22
	53-3031	Driver/Sales Workers	91	21
	35-2012	Cooks, Institution and Cafeteria	51	21
	53-7061	Cleaners of Vehicles and Equipment	117	21
TOTAL DEMAND OCCUPATIONS			11686	2427

ECONOMIC SECTOR	OCCUPATIONAL CODE	QUALIFIED OCCUPATIONS REQUIRING TWO YEARS OR LESS TRAINING	2006	Total Demand over Three Years
HEALTHCARE	29-1111	Registered Nurses	7915	2305
	31-1012	Nursing Aides, Orderlies, and Attendants	5293	1107
	29-2061	Licensed Practical and Licensed Vocational Nurses	3672	732
	43-4171	Receptionists and Information Clerks	1358	316
	31-1011	Home Health Aides	1032	300
	31-9092	Medical Assistants	1114	286
	43-9061	Office Clerks, General	1399	279
	37-2012	Maids and Housekeeping Cleaners	933	219
	39-9021	Personal and Home Care Aides	726	205
	31-9091	Dental Assistants	696	175
	29-1126	Respiratory Therapists	505	145
	43-6014	Secretaries, Except Legal, Medical, and Executive	899	138
	29-2034	Radiologic Technologists and Technicians	607	136
	47-2152	Plumbers, Pipefitters, and Steamfitters	366	124
	29-2012	Medical and Clinical Laboratory Technicians	470	118
	35-2021	Food Preparation Workers	397	117
	35-2012	Cooks, Institution and Cafeteria	442	112
	43-6011	Executive Secretaries and Administrative Assistants	546	108
	29-2071	Medical Records and Health Information Technicians	500	104
	43-6013	Medical Secretaries	581	102
	37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	455	101
	29-2041	Emergency Medical Technicians and Paramedics	554	100
	43-3011	Bill and Account Collectors	469	98
	43-3031	Bookkeeping, Accounting, and Auditing Clerks	497	93
	29-2055	Surgical Technologists	367	80
	43-4111	Interviewers, Except Eligibility and Loan	305	78
	43-3021	Billing and Posting Clerks and Machine Operators	493	76
	49-9042	Maintenance and Repair Workers, General	332	73
	51-6011	Laundry and Dry-Cleaning Workers	279	71
	29-2021	Dental Hygienists	356	66
	21-1093	Social and Human Service Assistants	262	64
	31-9094	Medical Transcriptionists	289	61
	33-9032	Security Guards	313	53
	43-4051	Customer Service Representatives	220	48
	31-2022	Physical Therapist Aides	206	46
	39-9011	Child Care Workers	149	46
	29-2032	Diagnostic Medical Sonographers	190	46
	31-2021	Physical Therapist Assistants	167	41
	43-2011	Switchboard Operators, Including Answering Service	258	40
	29-2053	Psychiatric Technicians	235	40
	29-2031	Cardiovascular Technologists and Technicians	159	37
43-5081	Stock Clerks and Order Fillers	150	37	
31-1013	Psychiatric Aides	236	35	
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	92	33	
29-2052	Pharmacy Technicians	152	31	

ECONOMIC SECTOR	OCCUPATIONAL CODE	QUALIFIED OCCUPATIONS REQUIRING TWO YEARS OR LESS TRAINING	2006	Total Demand over Three Years
HEALTHCARE	35-3041	Food Servers, Nonrestaurant	111	30
	39-9032	Recreation Workers	114	28
	39-9041	Residential Advisors	122	28
	43-4071	File Clerks	252	26
	43-3051	Payroll and Timekeeping Clerks	102	25
	29-2051	Dietetic Technicians	107	22
	29-2054	Respiratory Therapy Technicians	124	20
		TOTAL DEMAND OCCUPATIONS	39577	8803

ECONOMIC SECTOR	OCCUPATIONAL CODE	QUALIFIED OCCUPATIONS REQUIRING TWO YEARS OR LESS TRAINING	2006	Total Demand over Three Years
CULTURAL ECONOMY	35-2014	Cooks, Restaurant	2226	617
	35-3011	Bartenders	1351	361
	35-1011	Chefs and Head Cooks	528	142
	25-4031	Library Technicians	353	95
	27-4021	Photographers	456	92
	17-3011	Architectural and Civil Drafters	247	56
	51-3011	Bakers	164	40
	51-6052	Tailors, Dressmakers, and Custom Sewers	176	31
	43-9061	Office Clerks, General	154	27
	27-4011	Audio and Video Equipment Technicians	44	26
	51-5023	Printing Machine Operators	213	25
	39-6032	Transportation Attendants, Except Flight Attendants and Baggage Porters	41	22
	17-3012	Electrical and Electronics Drafters	82	20
		TOTAL DEMAND OCCUPATIONS	6036	1555

Source: Dr. Raymond J. Brady, Systems Solutions Consulting (August 2006)

The next table views occupation demand, not by sector, but by total demand over all sectors. This gives a more realistic perspective of the total demand of an occupation independent of industry structure.

**TABLE 9: TOTAL OCCUPATION DEMAND RANKED
BY NUMBER OF OPENINGS IN KATRINA RECOVERY REGION**

ECONOMIC SECTOR	OCCUPATIONAL CODE	QUALIFIED OCCUPATIONS REQUIRING TWO YEARS OR LESS TRAINING	TOP DEMAND OCCUPATIONS OVER 2006-2009
5	29-1111	Registered Nurses	2300
2	47-2031	Carpenters	1160
5	31-1012	Nursing Aides, Orderlies, and Attendants	1110
2	47-2061	Construction Laborers	1030
1,2,3,5	47-2152	Plumbers, Pipefitters, and Steamfitters	940
1,2,3,4	51-4121	Welders, Cutters, Solderers, and Brazers	920
1,2,4	53-3032	Truck Drivers, Heavy and Tractor-Trailer	840
2,3	47-2141	Painters, Construction and Maintenance	810
1,2,3	47-2111	Electricians	790
5	29-2061	Licensed Practical and Licensed Vocational Nurses	730
1,2,3,4	53-7062	Laborers and Freight, Stock, and Material Movers, Hand	640
6	35-2014	Cooks, Restaurant	620
1,2,3,4,5,6	43-9061	Office Clerks, General	600
1,2,4,5,6	43-6014	Secretaries, Except Legal, Medical, and Executive	420
2,5	43-4171	Receptionists and Information Clerks	380
4	53-5021	Captains, Mates, and Pilots of Water Vessels	360
6	35-3011	Bartenders	360
1,2,3,4,5	49-9042	Maintenance and Repair Workers, General	360
1,2,3,5,6	43-3031	Bookkeeping, Accounting, and Auditing Clerks	340
4	53-5011	Sailors and Marine Oilers	310
5	31-1011	Home Health Aides	300
5	31-9092	Medical Assistants	290
1,2,3	51-9198	Helpers--Production Workers	280
2	47-2073	Operating Engineers and Other Construction Equipment Operators	270
2	47-3015	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	250
2	47-3012	Helpers--Carpenters	240
2	47-3013	Helpers--Electricians	230
1,2,3	49-9041	Industrial Machinery Mechanics	230
2	47-3016	Helpers--Roofers	220
5	37-2012	Maids and Housekeeping Cleaners	220
2	47-2181	Roofers	220
1,2	47-5071	Roustabouts, Oil and Gas	210
2,5	37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	210
5	39-9021	Personal and Home Care Aides	200
1,2,3,6	41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	200
5,6	43-6011	Executive Secretaries and Administrative Assistants	190
2	49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	190
4	53-5031	Ship Engineers	180
5	31-9091	Dental Assistants	180
2	47-2221	Structural Iron and Steel Workers	170
1	47-5013	Service Unit Operators, Oil, Gas, and Mining	170

2	47-2081	Drywall and Ceiling Tile Installers	170
1,3	51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	160
1	47-5012	Rotary Drill Operators, Oil and Gas	160
1,3	51-4041	Machinists	160
4	53-3021	Bus Drivers, Transit and Intercity	150
5	29-1126	Respiratory Therapists	150
6	35-1011	Chefs and Head Cooks	140
2,3	51-2041	Structural Metal Fabricators and Fitters	140
5	29-2034	Radiologic Technologists and Technicians	140
6	35-1011	Chefs and Head Cooks	130
2	47-2021	Brickmasons and Blockmasons	130
4,5	35-2012	Cooks, Institution and Cafeteria	130
1,2,4	53-7032	Excavating and Loading Machine and Dragline Operators	130
2	47-2051	Cement Masons and Concrete Finishers	130
2,4,6	53-3033	Truck Drivers, Light or Delivery Services	120
1,4	43-5032	Dispatchers, Except Police, Fire, and Ambulance	120
5	29-2012	Medical and Clinical Laboratory Technicians	120
2	47-2041	Carpet Installers	110
2	49-3042	Mobile Heavy Equipment Mechanics, Except Engines	110
2	47-2132	Insulation Workers, Mechanical	110
2,3	47-2211	Sheet Metal Workers	100
5	29-2071	Medical Records and Health Information Technicians	100
5	43-6013	Medical Secretaries	100
5	29-2041	Emergency Medical Technicians and Paramedics	100
5	43-3011	Bill and Account Collectors	100
3,4	49-3011	Aircraft Mechanics and Service Technicians	90
1,3	19-4031	Chemical Technicians	90
1	47-5011	Derrick Operators, Oil and Gas	90
6	27-4021	Photographers	90
3	51-9011	Chemical Equipment Operators and Tenders	90
2	49-9098	Helpers--Installation, Maintenance, and Repair Workers	90
4	53-7072	Pump Operators, Except Wellhead Pumpers	80
1	47-5081	Helpers--Extraction Workers	80
6	25-4031	Library Technicians	80
4	49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	80
5	29-2055	Surgical Technologists	80
5	43-4111	Interviewers, Except Eligibility and Loan	80
2,5	43-3051	Payroll and Timekeeping Clerks	80
5	43-3021	Billing and Posting Clerks and Machine Operators	80
2	43-6011	Executive Secretaries and Administrative Assistants	80
5,6	43-5081	Stock Clerks and Order Fillers	70
2	49-9044	Millwrights	70
5	51-6011	Laundry and Dry-Cleaning Workers	70
2	47-4031	Fence Erectors	70
5	29-2021	Dental Hygienists	70
3	51-3022	Meat, Poultry, and Fish Cutters and Trimmers	60
5	21-1093	Social and Human Service Assistants	60
2	47-3014	Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	60
1,2	53-7021	Crane and Tower Operators	60
3	51-2092	Team Assemblers	60
2	47-2131	Insulation Workers, Floor, Ceiling, and Wall	60
5	31-9094	Medical Transcriptionists	60

2	49-9096	Riggers	60
4	53-3041	Taxi Drivers and Chauffeurs	60
3,4	53-7051	Industrial Truck and Tractor Operators Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	60
2	47-3011	Architectural and Civil Drafters	60
6	17-3011	Glaziers	60
2	47-2121	Security Guards	50
5	33-9032	Pipelayers	50
2	47-2151	Customer Service Representatives	50
5,6	43-4051	Lay-Out Workers, Metal and Plastic Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	50
3	51-4192	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	50
3	51-4122	Physical Therapist Aides	50
5	31-2022	Child Care Workers	50
5	39-9011	Diagnostic Medical Sonographers	50
5	29-2032	Production, Planning, and Expediting Clerks	40
1,3	43-5061	Physical Therapist Assistants	40
5	31-2021	Switchboard Operators, Including Answering Service	40
5	43-2011	Psychiatric Technicians	40
5	29-2053	Packaging and Filling Machine Operators and Tenders	40
3	51-9111	Cardiovascular Technologists and Technicians	40
5	29-2031	Electrical Power-Line Installers and Repairers	40
2	49-9051	Recreation Workers	40
5,6	39-9032	Telecommunications Equipment Installers and Repairers, Except Line Installers	40
2	49-2022	Reinforcing Iron and Rebar Workers	40
2	47-2171	Slaughterers and Meat Packers	40
3	51-3023	Food Batchmakers	40
3,6	51-3092	Bakers	40
6	51-3011	Floor Sanders and Finishers	40
2	47-2043	Psychiatric Aides	30
5	31-1013	Shipping, Receiving, and Traffic Clerks	30
3,6	43-5071	Security and Fire Alarm Systems Installers	30
2	49-2098	Combined Food Preparation and Serving Workers, Including Fast Food	30
5	35-3021	Commercial Pilots	30
4	53-2012	Printing Machine Operators	30
6	51-5023	Pharmacy Technicians	30
5	29-2052	Food Servers, Nonrestaurant	30
5	35-3041	Geological and Petroleum Technicians	30
1	19-4041	Residential Advisors	30
5	39-9041	Electrical and Electronics Repairers, Commercial and Industrial Equipment	30
2	49-2094	Telecommunications Line Installers and Repairers	30
2	49-9052	Plasterers and Stucco Masons	30
2	47-2161	File Clerks	30
5	43-4071	Audio and Video Equipment Technicians	30
6	27-4011	Stock Clerks and Order Fillers	30
3	43-5081	Printing Machine Operators	30
6	51-5023	Wellhead Pumpers	20
1	53-7073	Maintenance Workers, Machinery	20
1	49-9043	Earth Drillers, Except Oil and Gas	20
1	47-5021		20

**TABLE 11: TOTAL OCCUPATIONAL DEMAND BY SECTOR
IN HURRICANE RITA RECOVERY AREA**

ECONOMIC SECTOR	OCCUPATIONAL CODE	QUALIFIED OCCUPATIONS REQUIRING TWO YEARS OR LESS TRAINING	2006 EMPLOYMENT	Total Demand over Three Years
OIL AND GAS INDUSTRY	47-5071	Roustabouts, Oil and Gas	560	139
	47-5013	Service Unit Operators, Oil, Gas, and Mining	486	93
	47-5012	Rotary Drill Operators, Oil and Gas	363	50
	53-7062	Laborers and Freight, Stock, and Material Movers, Hand	320	45
	51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	396	39
	49-9041	Industrial Machinery Mechanics	327	69
	47-5081	Helpers--Extraction Workers	260	35
	47-5011	Derrick Operators, Oil and Gas	235	42
	51-4121	Welders, Cutters, Solderers, and Brazers	170	25
	51-9198	Helpers--Production Workers	149	21
			TOTAL DEMAND OCCUPATIONS	3267

ECONOMIC SECTOR	OCCUPATIONAL CODE	QUALIFIED OCCUPATIONS REQUIRING TWO YEARS OR LESS TRAINING	2006	Total Demand over Three Years
CONSTRUCTION	47-2031	Carpenters	1934	199
	51-4121	Welders, Cutters, Solderers, and Brazers	543	110
	47-2152	Plumbers, Pipefitters, and Steamfitters	967	101
	47-2061	Construction Laborers	2201	99
	47-2111	Electricians	882	59
	47-2141	Painters, Construction and Maintenance	1147	57
	53-7062	Laborers and Freight, Stock, and Material Movers, Hand	417	56
	47-3015	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	287	56
	47-3013	Helpers--Electricians	259	50
	47-3012	Helpers--Carpenters	297	44
	43-6014	Secretaries, Except Legal, Medical, and Executive	374	43
	47-2073	Operating Engineers and Other Construction Equipment Operators	478	43
	47-2211	Sheet Metal Workers	80	29
	49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	208	27
	47-2221	Structural Iron and Steel Workers	276	26
	49-3042	Mobile Heavy Equipment Mechanics, Except Engines	205	25
	43-3031	Bookkeeping, Accounting, and Auditing Clerks	290	24
	43-9061	Office Clerks, General	248	20
			TOTAL DEMAND OCCUPATIONS	11091

ECONOMIC SECTOR	OCCUPATIONAL CODE	QUALIFIED OCCUPATIONS REQUIRING TWO YEARS OR LESS TRAINING	2006	Total Demand over Three Years
ADVANCED MANUFACTURING	51-4121	Welders, Cutters, Solderers, and Brazers	1128	130
	51-9198	Helpers--Production Workers	511	54
	53-7062	Laborers and Freight, Stock, and Material Movers, Hand	371	50
	51-4041	Machinists	469	38
	19-4031	Chemical Technicians	181	33
	51-9011	Chemical Equipment Operators and Tenders	281	30
	47-2152	Plumbers, Pipefitters, and Steamfitters	290	27
	51-2041	Structural Metal Fabricators and Fitters	255	25
	41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	243	23
	51-2092	Team Assemblers	202	23
	47-2111	Electricians	208	22
	49-9042	Maintenance and Repair Workers, General	327	21
	TOTAL DEMAND OCCUPATIONS			4467

ECONOMIC SECTOR	OCCUPATIONAL CODE	QUALIFIED OCCUPATIONS REQUIRING TWO YEARS OR LESS TRAINING	2006	Total Demand over Three Years
TRANSPORTATION	53-3032	Truck Drivers, Heavy and Tractor-Trailer	1068	119
	53-5021	Captains, Mates, and Pilots of Water Vessels	775	78
	53-5011	Sailors and Marine Oilers	584	70
	53-7062	Laborers and Freight, Stock, and Material Movers, Hand	422	63
	53-5031	Ship Engineers	228	50
	53-3021	Bus Drivers, Transit and Intercity	178	39
	49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	111	21
	53-7072	Pump Operators, Except Wellhead Pumps	121	20
TOTAL DEMAND OCCUPATIONS			3487	460

ECONOMIC SECTOR	OCCUPATIONAL CODE	QUALIFIED OCCUPATIONS REQUIRING TWO YEARS OR LESS TRAINING	2006	Total Demand over Three Years
HEALTHCARE	29-1111	Registered Nurses	4367	708
	31-1012	Nursing Aides, Orderlies, and Attendants	2920	349
	29-2061	Licensed Practical and Licensed Vocational Nurses	2026	231
	31-1011	Home Health Aides	569	111
	43-4171	Receptionists and Information Clerks	749	111
	31-9092	Medical Assistants	615	103
	43-9061	Office Clerks, General	772	89
	37-2012	Maids and Housekeeping Cleaners	515	76
	39-9021	Personal and Home Care Aides	401	76
	29-2011	Medical and Clinical Laboratory Technologists	385	64
	31-9091	Dental Assistants	384	64
	29-1126	Respiratory Therapists	237	50
	47-2152	Plumbers, Pipefitters, and Steamfitters	202	49
	35-2021	Food Preparation Workers	219	47
	29-2034	Radiologic Technologists and Technicians	335	46
	29-2012	Medical and Clinical Laboratory Technicians	259	42
	35-2012	Cooks, Institution and Cafeteria	244	42
	43-6014	Secretaries, Except Legal, Medical, and Executive	496	35
	37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	251	34
	43-6011	Executive Secretaries and Administrative Assistants	301	34
	29-2071	Medical Records and Health Information Technicians	276	33
	43-3011	Bill and Account Collectors	259	32
	43-6013	Medical Secretaries	321	29
	43-4111	Interviewers, Except Eligibility and Loan	168	28
	29-2041	Emergency Medical Technicians and Paramedics	306	28
	43-3031	Bookkeeping, Accounting, and Auditing Clerks	274	28
	51-6011	Laundry and Dry-Cleaning Workers	154	26
	29-2055	Surgical Technologists	203	26
	49-9042	Maintenance and Repair Workers, General	183	24
	21-1093	Social and Human Service Assistants	145	22
43-3021	Billing and Posting Clerks and Machine Operators	272	22	
31-9094	Medical Transcriptionists	159	20	
TOTAL DEMAND OCCUPATIONS			18966	2679

ECONOMIC SECTOR	OCCUPATIONAL CODE	QUALIFIED OCCUPATIONS REQUIRING TWO YEARS OR LESS TRAINING	2006	Total Demand over Three Years
CULTURAL ECONOMY	35-2014	Cooks, Restaurant	908	147
	35-3011	Bartenders	551	84
	35-1011	Chefs and Head Cooks	216	33
	17-3011	Architectural and Civil Drafters	101	29
	27-4021	Photographers	186	26
	25-4031	Library Technicians	144	20
TOTAL DEMAND OCCUPATIONS			2106	339

Source: Dr. Raymond J. Brady, Systems Solutions Consulting (August 2006)

**TABLE 12: TOTAL OCCUPATION DEMAND RANKED
BY NUMBER OF OPENINGS IN RITA RECOVERY REGION**

ECONOMIC SECTOR	OCCUPATIONAL CODE	QUALIFIED OCCUPATIONS REQUIRING TWO YEARS OR LESS TRAINING	Total Demand over Three Years
5	29-1111	Registered Nurses	708
5	31-1012	Nursing Aides, Orderlies, and Attendants	349
1,2,3	51-4121	Welders, Cutters, Solderers, and Brazers	264
5	29-2061	Licensed Practical and Licensed Vocational Nurses	231
1,2,3,4	53-7062	Laborers and Freight, Stock, and Material Movers, Hand	214
2	47-2031	Carpenters	199
2,3,5	47-2152	Plumbers, Pipefitters, and Steamfitters	177
6	35-2014	Cooks, Restaurant	147
1	47-5071	Roustabouts, Oil and Gas	139
4	53-3032	Truck Drivers, Heavy and Tractor-Trailer	119
5	31-1011	Home Health Aides	111
5	43-4171	Receptionists and Information Clerks	111
2,5	43-9061	Office Clerks, General	109
5	31-9092	Medical Assistants	103
2	47-2061	Construction Laborers	99
1	47-5013	Service Unit Operators, Oil, Gas, and Mining	93
6	35-3011	Bartenders	84
2,3	47-2111	Electricians	81
2,5	43-6014	Secretaries, Except Legal, Medical, and Executive	78
4	53-5021	Captains, Mates, and Pilots of Water Vessels	78
5	37-2012	Maids and Housekeeping Cleaners	76
5	39-9021	Personal and Home Care Aides	76
4	53-5011	Sailors and Marine Oilers	70
1	49-9041	Industrial Machinery Mechanics	69
5	29-2011	Medical and Clinical Laboratory Technologists	64
5	31-9091	Dental Assistants	64
2	47-2141	Painters, Construction and Maintenance	57
2	47-3015	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	56
3	51-9198	Helpers--Production Workers	54
5,2	43-3031	Bookkeeping, Accounting, and Auditing Clerks	52
4	53-5031	Ship Engineers	50
5	29-1126	Respiratory Therapists	50
2	47-3013	Helpers--Electricians	50
1	47-5012	Rotary Drill Operators, Oil and Gas	50
5	35-2021	Food Preparation Workers	47
5	29-2034	Radiologic Technologists and Technicians	46
3,5	49-9042	Maintenance and Repair Workers, General	45
2	47-3012	Helpers--Carpenters	44
2	43-6014	Secretaries, Except Legal, Medical, and Executive	43
2	47-2073	Operating Engineers and Other Construction Equipment Operators	43
5	29-2012	Medical and Clinical Laboratory Technicians	42
1	47-5011	Derrick Operators, Oil and Gas	42
5	35-2012	Cooks, Institution and Cafeteria	42
1	51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	39

4	53-3021	Bus Drivers, Transit and Intercity	39
3	51-4041	Machinists	38
5	43-6014	Secretaries, Except Legal, Medical, and Executive	35
1	47-5081	Helpers--Extraction Workers	35
5	37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	34
5	43-6011	Executive Secretaries and Administrative Assistants	34
3	19-4031	Chemical Technicians	33
6	35-1011	Chefs and Head Cooks	33
5	29-2071	Medical Records and Health Information Technicians	33
5	43-3011	Bill and Account Collectors	32
3	51-9011	Chemical Equipment Operators and Tenders	30
5	43-6013	Medical Secretaries	29
2	47-2211	Sheet Metal Workers	29
6	17-3011	Architectural and Civil Drafters	29
5	43-4111	Interviewers, Except Eligibility and Loan	28
5	29-2041	Emergency Medical Technicians and Paramedics	28
2	49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	27
2	47-2221	Structural Iron and Steel Workers	26
6	27-4021	Photographers	26
5	51-6011	Laundry and Dry-Cleaning Workers	26
5	29-2055	Surgical Technologists	26
2	49-3042	Mobile Heavy Equipment Mechanics, Except Engines	25
3	51-2041	Structural Metal Fabricators and Fitters	25
3	41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	23
3	51-2092	Team Assemblers	23
5	21-1093	Social and Human Service Assistants	22
5	43-3021	Billing and Posting Clerks and Machine Operators	22
1	51-9198	Helpers--Production Workers	21
4	49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	21
6	25-4031	Library Technicians	20
4	53-7072	Pump Operators, Except Wellhead Pumpers	20
5	31-9094	Medical Transcriptionists	20

TOTAL DEMAND OCCUPATIONS

5655

Source: Dr. Raymond J. Brady, Systems Solutions Consulting (August 2006)

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