

# **U.S. Department of Energy FY 2009**



**Support Cost Submissions  
From 28 Contractors**

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**Trends in Total Support Cost by Functional Categories**  
**TOTAL FOR ALL MAJOR SITE FACILITY CONTRACTORS (\$000)**  
**FY 2009**

	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>\$ Change 2005 To FY 2009</b>	<b>% Change 2005 To FY 2009</b>
<b>Total Costs</b>	18,534,108	18,507,548	18,374,955	19,120,332	20,156,044	1,621,936	8.8%
<b>Capital Construction</b>	1,345,978	1,371,932	1,316,385	1,251,716	1,388,727	42,749	3.2%
<b>Total Costs Less Construction</b>	17,188,130	17,135,616	17,058,570	17,868,616	18,767,317	1,579,187	9.2%
<b>Total Support Costs</b>	<b>7,460,750</b>	<b>7,516,654</b>	<b>7,662,749</b>	<b>7,915,756</b>	<b>8,481,138</b>	<b>1,020,388</b>	<b>13.7%</b>
<b>Mission Direct Operation</b>	9,727,380	9,618,962	9,395,821	9,952,860	10,286,179	558,799	5.7%
<b>Mission Direct Operation as % of Total Cost</b>	<b>52.5%</b>	<b>52.0%</b>	<b>51.1%</b>	<b>52.1%</b>	<b>51.0%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>7.3%</b>	<b>7.4%</b>	<b>7.2%</b>	<b>6.5%</b>	<b>6.9%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>40.3%</b>	<b>40.6%</b>	<b>41.7%</b>	<b>41.4%</b>	<b>42.1%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>40.3%</b>	<b>40.6%</b>	<b>41.7%</b>	<b>41.4%</b>	<b>42.1%</b>		
<b>TOTAL SUPPORT COST</b>	<b>7,460,750</b>	<b>7,516,654</b>	<b>7,662,749</b>	<b>7,915,756</b>	<b>8,481,138</b>	<b>1,020,388</b>	<b>13.7%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>12.5%</b>	<b>12.4%</b>	<b>12.0%</b>	<b>12.0%</b>	<b>12.8%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>2,312,736</b>	<b>2,290,260</b>	<b>2,200,104</b>	<b>2,299,814</b>	<b>2,576,878</b>	<b>264,142</b>	<b>11.4%</b>
EXECUTIVE DIRECTION	195,206	201,938	195,858	197,556	220,582	25,376	13.0%
HUMAN RESOURCES	219,806	212,346	208,945	211,360	274,085	54,279	24.7%
CFO	159,017	162,236	166,616	171,964	184,708	25,691	16.2%
PROCUREMENT	162,367	150,958	148,736	150,157	174,328	11,961	7.4%
LEGAL	62,843	60,603	60,780	60,119	64,930	2,087	3.3%
CENTRAL ADMIN SERVICES	210,109	186,120	189,030	194,046	187,058	-23,051	-11.0%
PROGRAM/PROJECT CONTROL	240,467	231,690	240,733	238,112	293,452	52,985	22.0%
INFORMATION OUTREACH	174,392	191,290	188,109	182,848	190,345	15,953	9.1%
INFORMATION SERVICES	782,516	782,235	739,329	767,212	835,855	53,339	6.8%
OTHER	106,013	110,844	61,968	126,440	151,535	45,522	42.9%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>22.6%</b>	<b>22.9%</b>	<b>23.4%</b>	<b>23.1%</b>	<b>23.5%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>4,180,053</b>	<b>4,234,485</b>	<b>4,306,829</b>	<b>4,420,054</b>	<b>4,728,181</b>	<b>548,128</b>	<b>13.1%</b>
ENVIRONMENTAL	196,241	203,070	214,929	226,213	261,269	65,028	33.1%
SAFETY AND HEALTH	800,287	811,342	838,784	817,645	896,090	95,803	12.0%
FACILITIES MANAGEMENT	582,670	532,156	541,445	535,261	544,302	-38,368	-6.6%
MAINTENANCE	889,990	868,661	907,712	938,311	1,034,345	144,355	16.2%
UTILITIES	427,423	471,375	454,514	494,489	486,594	59,171	13.8%
SAFEGUARDS AND SECURITY	772,165	805,366	812,024	859,350	865,441	93,276	12.1%
LOGISTICS SUPPORT	171,920	181,150	191,544	195,723	217,426	45,506	26.5%
QUALITY ASSURANCE	146,377	171,385	160,075	155,004	169,186	22,809	15.6%
LABORATORY/TECHNICAL SUPPORT	192,980	189,980	185,802	198,058	253,528	60,548	31.4%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>5.2%</b>	<b>5.4%</b>	<b>6.3%</b>	<b>6.3%</b>	<b>5.8%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>967,961</b>	<b>991,909</b>	<b>1,155,816</b>	<b>1,195,888</b>	<b>1,176,079</b>	<b>208,118</b>	<b>21.5%</b>
MANAGEMENT/INCENTIVE FEE	516,841	523,114	631,989	655,091	621,011	104,170	20.2%
TAXES	113,210	129,911	193,972	201,632	208,614	95,404	84.3%
LDRD / PDRD / SDRD	337,910	338,884	329,855	339,165	346,454	8,544	2.5%

**Trends in Total Support Cost by Functional Categories**  
**Total EM Sites (\$000)**  
**FY 2009**

	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>\$ Change 2005 To FY 2009</b>	<b>% Change 2005 To FY 2009</b>
<b>Total Costs</b>	3,814,077	3,590,837	3,278,229	3,378,986	4,002,049	187,972	4.9%
<b>Capital Construction</b>	156,635	120,008	103,648	97,565	130,311	-26,324	-16.8%
<b>Total Costs Less Construction</b>	3,657,442	3,470,829	3,174,581	3,281,421	3,871,738	214,296	5.9%
<b>Total Support Costs</b>	<b>1,742,569</b>	<b>1,639,823</b>	<b>1,645,644</b>	<b>1,565,744</b>	<b>1,926,853</b>	<b>184,284</b>	<b>10.6%</b>
<b>Mission Direct Operation</b>	1,914,873	1,831,006	1,528,937	1,715,677	1,944,885	30,012	1.6%
<b>Mission Direct Operation as % of Total Cost</b>	<b>50.2%</b>	<b>51.0%</b>	<b>46.6%</b>	<b>50.8%</b>	<b>48.6%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>4.1%</b>	<b>3.3%</b>	<b>3.2%</b>	<b>2.9%</b>	<b>3.3%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>45.7%</b>	<b>45.7%</b>	<b>50.2%</b>	<b>46.3%</b>	<b>48.1%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>45.7%</b>	<b>45.7%</b>	<b>50.2%</b>	<b>46.3%</b>	<b>48.1%</b>		
<b>TOTAL SUPPORT COST</b>	<b>1,742,569</b>	<b>1,639,823</b>	<b>1,645,644</b>	<b>1,565,744</b>	<b>1,926,853</b>	<b>184,284</b>	<b>10.6%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>11.3%</b>	<b>10.9%</b>	<b>11.1%</b>	<b>10.1%</b>	<b>13.7%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>429,813</b>	<b>392,166</b>	<b>363,949</b>	<b>340,263</b>	<b>550,113</b>	<b>120,300</b>	<b>28.0%</b>
EXECUTIVE DIRECTION	19,778	18,975	19,554	18,386	33,231	13,453	68.0%
HUMAN RESOURCES	41,752	42,379	40,963	41,086	95,310	53,558	128.3%
CFO	28,159	27,159	27,779	28,012	36,506	8,347	29.6%
PROCUREMENT	33,856	32,280	29,744	27,336	41,887	8,031	23.7%
LEGAL	11,793	10,662	10,127	8,900	11,415	-378	-3.2%
CENTRAL ADMIN SERVICES	40,222	30,307	31,355	31,095	34,158	-6,064	-15.1%
PROGRAM/PROJECT CONTROL	82,465	68,212	64,446	59,036	94,240	11,775	14.3%
INFORMATION OUTREACH	11,385	11,108	10,121	10,634	13,058	1,673	14.7%
INFORMATION SERVICES	107,494	100,191	100,290	97,857	119,150	11,656	10.8%
OTHER	52,909	50,893	29,570	17,921	71,158	18,249	34.5%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>28.3%</b>	<b>27.8%</b>	<b>30.3%</b>	<b>29.6%</b>	<b>28.9%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>1,080,442</b>	<b>997,792</b>	<b>992,165</b>	<b>999,234</b>	<b>1,158,120</b>	<b>77,678</b>	<b>7.2%</b>
ENVIRONMENTAL	56,937	50,791	51,006	51,770	67,874	10,937	19.2%
SAFETY AND HEALTH	285,747	268,180	260,247	255,587	292,658	6,911	2.4%
FACILITIES MANAGEMENT	88,363	71,687	72,496	70,834	85,498	-2,865	-3.2%
MAINTENANCE	233,056	200,181	203,265	203,880	239,240	6,184	2.7%
UTILITIES	80,378	84,064	77,458	83,132	103,105	22,727	28.3%
SAFEGUARDS AND SECURITY	168,468	168,567	182,431	189,265	178,709	10,241	6.1%
LOGISTICS SUPPORT	48,853	47,850	47,452	47,632	74,779	25,926	53.1%
QUALITY ASSURANCE	39,917	37,228	38,860	36,221	39,734	-183	-0.5%
LABORATORY/TECHNICAL SUPPORT	78,723	69,244	58,950	60,913	76,523	-2,200	-2.8%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>6.1%</b>	<b>7.0%</b>	<b>8.8%</b>	<b>6.7%</b>	<b>5.5%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>232,314</b>	<b>249,865</b>	<b>289,530</b>	<b>226,247</b>	<b>218,620</b>	<b>-13,694</b>	<b>-5.9%</b>
MANAGEMENT/INCENTIVE FEE	213,988	227,538	267,655	205,177	192,328	-21,660	-10.1%
TAXES	18,326	21,819	19,271	18,244	22,161	3,835	20.9%
LDRD / PDRD / SDRD	0	508	2,604	2,826	4,131	4,131	100.0%

**Trends in Total Support Cost by Functional Categories**  
**Total NNSA Sites (\$000)**  
**FY 2009**

	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>\$ Change 2005 To FY 2009</b>	<b>% Change 2005 To FY 2009</b>
<b>Total Costs</b>	9,260,065	9,197,661	9,171,518	9,399,191	9,385,865	125,800	1.4%
<b>Capital Construction</b>	768,873	800,335	736,673	655,924	520,080	-248,793	-32.4%
<b>Total Costs Less Construction</b>	8,491,192	8,397,326	8,434,845	8,743,267	8,865,785	374,593	4.4%
<b>Total Support Costs</b>	<b>3,726,686</b>	<b>3,766,125</b>	<b>3,806,881</b>	<b>4,042,302</b>	<b>4,118,524</b>	<b>391,838</b>	<b>10.5%</b>
<b>Mission Direct Operation</b>	4,764,506	4,631,201	4,627,964	4,700,965	4,747,261	-17,245	-0.4%
<b>Mission Direct Operation as % of Total Cost</b>	<b>51.5%</b>	<b>50.4%</b>	<b>50.5%</b>	<b>50.0%</b>	<b>50.6%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>8.3%</b>	<b>8.7%</b>	<b>8.0%</b>	<b>7.0%</b>	<b>5.5%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>40.2%</b>	<b>40.9%</b>	<b>41.5%</b>	<b>43.0%</b>	<b>43.9%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>40.2%</b>	<b>40.9%</b>	<b>41.5%</b>	<b>43.0%</b>	<b>43.9%</b>		
<b>TOTAL SUPPORT COST</b>	<b>3,726,686</b>	<b>3,766,125</b>	<b>3,806,881</b>	<b>4,042,302</b>	<b>4,118,524</b>	<b>391,838</b>	<b>10.5%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>12.7%</b>	<b>12.6%</b>	<b>11.8%</b>	<b>12.7%</b>	<b>12.8%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>1,176,079</b>	<b>1,155,854</b>	<b>1,080,288</b>	<b>1,197,463</b>	<b>1,201,773</b>	<b>25,694</b>	<b>2.2%</b>
EXECUTIVE DIRECTION	86,879	89,523	78,806	81,453	82,741	-4,138	-4.8%
HUMAN RESOURCES	122,098	113,877	104,613	102,058	101,417	-20,681	-16.9%
CFO	64,487	64,381	60,629	65,320	67,478	2,991	4.6%
PROCUREMENT	82,221	75,563	72,334	71,374	78,884	-3,337	-4.1%
LEGAL	27,520	27,164	30,381	30,248	29,466	1,946	7.1%
CENTRAL ADMIN SERVICES	97,422	88,098	88,699	97,080	91,309	-6,113	-6.3%
PROGRAM/PROJECT CONTROL	121,641	121,928	139,235	148,106	161,372	39,731	32.7%
INFORMATION OUTREACH	64,621	79,052	77,112	68,933	66,663	2,042	3.2%
INFORMATION SERVICES	473,963	460,237	406,239	436,834	460,257	-13,706	-2.9%
OTHER	35,227	36,031	22,240	96,057	62,186	26,959	76.5%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>22.0%</b>	<b>22.5%</b>	<b>22.7%</b>	<b>22.5%</b>	<b>23.4%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>2,041,504</b>	<b>2,072,697</b>	<b>2,083,641</b>	<b>2,113,709</b>	<b>2,200,418</b>	<b>158,914</b>	<b>7.8%</b>
ENVIRONMENTAL	94,419	95,131	93,180	105,426	115,520	21,101	22.3%
SAFETY AND HEALTH	331,134	337,362	357,256	337,978	362,645	31,511	9.5%
FACILITIES MANAGEMENT	346,177	285,069	279,797	252,652	247,667	-98,510	-28.5%
MAINTENANCE	383,727	388,197	409,746	426,107	448,814	65,087	17.0%
UTILITIES	192,363	213,801	203,346	219,535	201,845	9,482	4.9%
SAFEGUARDS AND SECURITY	485,298	509,324	492,665	524,777	537,491	52,193	10.8%
LOGISTICS SUPPORT	74,807	77,149	86,288	83,773	79,210	4,403	5.9%
QUALITY ASSURANCE	71,738	89,672	79,253	75,733	82,535	10,797	15.1%
LABORATORY/TECHNICAL SUPPORT	61,841	76,992	82,110	87,728	124,691	62,850	101.6%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>5.5%</b>	<b>5.8%</b>	<b>7.0%</b>	<b>7.8%</b>	<b>7.6%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>509,103</b>	<b>537,574</b>	<b>642,952</b>	<b>731,130</b>	<b>716,333</b>	<b>207,230</b>	<b>40.7%</b>
MANAGEMENT/INCENTIVE FEE	168,256	188,652	239,750	321,916	302,832	134,576	80.0%
TAXES	84,139	96,977	163,042	171,100	173,699	89,560	106.4%
LDRD / PDRD / SDRD	256,708	251,945	240,160	238,114	239,802	-16,906	-6.6%

**Trends in Total Support Cost by Functional Categories**  
**Total SC Sites (\$000)**  
**FY 2009**

	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>\$ Change 2005 To FY 2009</b>	<b>% Change 2005 To FY 2009</b>
<b>Total Costs</b>	3,923,499	3,983,621	4,152,814	4,581,207	4,855,444	931,945	23.8%
<b>Capital Construction</b>	391,537	376,523	384,625	389,030	528,382	136,845	35.0%
<b>Total Costs Less Construction</b>	3,531,962	3,607,098	3,768,189	4,192,177	4,327,062	795,100	22.5%
<b>Total Support Costs</b>	<b>1,245,273</b>	<b>1,311,219</b>	<b>1,383,121</b>	<b>1,481,417</b>	<b>1,572,892</b>	<b>327,619</b>	<b>26.3%</b>
<b>Mission Direct Operation</b>	2,286,689	2,295,879	2,385,068	2,710,760	2,754,170	467,481	20.4%
<b>Mission Direct Operation as % of Total Cost</b>	<b>58.3%</b>	<b>57.6%</b>	<b>57.4%</b>	<b>59.2%</b>	<b>56.7%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>10.0%</b>	<b>9.5%</b>	<b>9.3%</b>	<b>8.5%</b>	<b>10.9%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>31.7%</b>	<b>32.9%</b>	<b>33.3%</b>	<b>32.3%</b>	<b>32.4%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>31.7%</b>	<b>32.9%</b>	<b>33.3%</b>	<b>32.3%</b>	<b>32.4%</b>		
<b>TOTAL SUPPORT COST</b>	<b>1,245,273</b>	<b>1,311,219</b>	<b>1,383,121</b>	<b>1,481,417</b>	<b>1,572,892</b>	<b>327,619</b>	<b>26.3%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>11.2%</b>	<b>11.1%</b>	<b>11.1%</b>	<b>10.7%</b>	<b>10.8%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>441,095</b>	<b>441,068</b>	<b>461,729</b>	<b>488,822</b>	<b>524,001</b>	<b>82,906</b>	<b>18.8%</b>
EXECUTIVE DIRECTION	60,751	57,223	56,918	59,887	65,031	4,280	7.0%
HUMAN RESOURCES	33,059	33,552	36,012	41,517	42,927	9,868	29.8%
CFO	47,963	52,702	55,516	59,077	58,705	10,742	22.4%
PROCUREMENT	29,256	30,249	33,336	36,008	39,419	10,163	34.7%
LEGAL	11,106	10,155	10,891	12,370	13,477	2,371	21.3%
CENTRAL ADMIN SERVICES	39,306	37,086	38,983	41,613	43,646	4,340	11.0%
PROGRAM/PROJECT CONTROL	11,883	10,741	13,199	13,932	16,369	4,486	37.8%
INFORMATION OUTREACH	74,537	75,979	74,207	77,201	82,678	8,141	10.9%
INFORMATION SERVICES	120,543	128,043	136,294	142,405	156,146	35,603	29.5%
OTHER	12,691	5,338	6,373	4,812	5,603	-7,088	-55.9%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>17.5%</b>	<b>18.6%</b>	<b>19.1%</b>	<b>18.7%</b>	<b>18.6%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>685,683</b>	<b>742,504</b>	<b>792,491</b>	<b>855,978</b>	<b>904,769</b>	<b>219,086</b>	<b>32.0%</b>
ENVIRONMENTAL	33,146	37,273	41,342	46,227	54,710	21,564	65.1%
SAFETY AND HEALTH	106,956	118,772	129,143	140,835	151,754	44,798	41.9%
FACILITIES MANAGEMENT	101,529	122,225	123,970	137,748	145,640	44,111	43.4%
MAINTENANCE	173,482	187,177	201,374	212,737	229,948	56,466	32.5%
UTILITIES	126,323	139,037	142,394	160,514	155,753	29,430	23.3%
SAFEGUARDS AND SECURITY	61,116	62,540	69,861	68,287	67,742	6,626	10.8%
LOGISTICS SUPPORT	29,025	29,874	29,565	31,375	32,975	3,950	13.6%
QUALITY ASSURANCE	11,072	13,205	18,795	20,342	24,266	13,194	119.2%
LABORATORY/TECHNICAL SUPPORT	43,034	32,401	36,047	37,913	41,981	-1,053	-2.4%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>3.0%</b>	<b>3.2%</b>	<b>3.1%</b>	<b>3.0%</b>	<b>3.0%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>118,495</b>	<b>127,647</b>	<b>128,901</b>	<b>136,617</b>	<b>144,122</b>	<b>25,627</b>	<b>21.6%</b>
MANAGEMENT/INCENTIVE FEE	46,031	50,567	52,442	50,539	54,332	8,301	18.0%
TAXES	6,975	6,292	7,087	7,124	7,291	316	4.5%
LDRD / PDRD / SDRD	65,489	70,788	69,372	78,954	82,499	17,010	26.0%

**Trends in Total Support Cost by Functional Categories**  
**Ames National Lab/Iowa State University (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	29,600	32,284	28,736	30,564	31,958	2,358	8.0%
<b>Capital Construction</b>	2,517	4,858	1,467	1,500	1,500	-1,017	-40.4%
<b>Total Costs Less Construction</b>	27,083	27,426	27,269	29,064	30,458	3,375	12.5%
<b>Total Support Costs</b>	<b>10,564</b>	<b>11,094</b>	<b>11,347</b>	<b>11,830</b>	<b>12,423</b>	<b>1,859</b>	<b>17.6%</b>
<b>Mission Direct Operation</b>	16,519	16,332	15,922	17,234	18,035	1,516	9.2%
<b>Mission Direct Operation as % of Total Cost</b>	<b>55.8%</b>	<b>50.6%</b>	<b>55.4%</b>	<b>56.4%</b>	<b>56.4%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>8.5%</b>	<b>15.0%</b>	<b>5.1%</b>	<b>4.9%</b>	<b>4.7%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>35.7%</b>	<b>34.4%</b>	<b>39.5%</b>	<b>38.7%</b>	<b>38.9%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>35.7%</b>	<b>34.4%</b>	<b>39.5%</b>	<b>38.7%</b>	<b>38.9%</b>		
<b>TOTAL SUPPORT COST</b>	<b>10,564</b>	<b>11,094</b>	<b>11,347</b>	<b>11,830</b>	<b>12,423</b>	<b>1,859</b>	<b>17.6%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>11.6%</b>	<b>11.3%</b>	<b>13.1%</b>	<b>13.9%</b>	<b>15.0%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>3,428</b>	<b>3,635</b>	<b>3,757</b>	<b>4,251</b>	<b>4,793</b>	<b>1,365</b>	<b>39.8%</b>
EXECUTIVE DIRECTION	744	732	870	1,023	1,193	449	60.3%
HUMAN RESOURCES	258	263	301	318	352	94	36.4%
CFO	1,214	1,207	1,147	1,142	1,179	-35	-2.9%
PROCUREMENT	206	204	207	215	231	25	12.1%
LEGAL	0	0	8	12	13	13	100.0%
CENTRAL ADMIN SERVICES	125	117	154	129	154	29	23.2%
PROGRAM/PROJECT CONTROL	199	195	213	191	205	6	3.0%
INFORMATION OUTREACH	354	365	398	441	495	141	39.8%
INFORMATION SERVICES	987	1,141	1,138	1,138	1,177	190	19.3%
OTHER	-659	-589	-679	-358	-206	453	68.7%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>19.9%</b>	<b>19.3%</b>	<b>23.3%</b>	<b>22.1%</b>	<b>21.4%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>5,886</b>	<b>6,234</b>	<b>6,684</b>	<b>6,767</b>	<b>6,825</b>	<b>939</b>	<b>16.0%</b>
ENVIRONMENTAL	43	37	45	48	50	7	16.3%
SAFETY AND HEALTH	1,267	1,252	1,311	1,365	1,444	177	14.0%
FACILITIES MANAGEMENT	329	362	323	318	264	-65	-19.8%
MAINTENANCE	1,620	1,728	1,791	1,706	1,843	223	13.8%
UTILITIES	1,034	1,142	1,109	1,185	1,138	104	10.1%
SAFEGUARDS AND SECURITY	271	344	526	536	494	223	82.3%
LOGISTICS SUPPORT	380	385	412	458	470	90	23.7%
QUALITY ASSURANCE	73	68	75	70	70	-3	-4.1%
LABORATORY/TECHNICAL SUPPORT	869	916	1,092	1,081	1,052	183	21.1%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>4.2%</b>	<b>3.8%</b>	<b>3.2%</b>	<b>2.7%</b>	<b>2.5%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>1,250</b>	<b>1,225</b>	<b>906</b>	<b>812</b>	<b>805</b>	<b>-445</b>	<b>-35.6%</b>
MANAGEMENT/INCENTIVE FEE	1,250	1,225	906	812	805	-445	-35.6%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

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**SITE PROFILE**  
**Ames National Lab/Iowa State University**

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**SITE OVERVIEW AND CHARACTERISTIC**

**BACKGROUND**

Ames Laboratory is operated for the Department of Energy by Iowa State University. Ames is a single purpose laboratory engaged in basic research in a wide variety of scientific disciplines with a diverse customer base (EE, FE, NN, SC, and Work for Others). The Laboratory's mission is to conduct fundamental research in the physical, chemical, materials, and mathematical sciences and engineering which underlie energy generating, conversion, transmission and storage technologies, environmental improvement, and other technical areas essential to national needs. These efforts will be maintained so as to contribute to the achievement of the vision of the Department of Energy and, more specifically, to increase the general levels of knowledge and technical capabilities, to prepare engineering and physical sciences students for the future, and to develop new technologies and practical applications arising from our basic scientific programs. The Laboratory will approach all its operations with the safety and health of all workers as a constant objective and with genuine concern for the environment.

The Ames site is located on approximately 10 acres of land owned by Iowa State University in Ames, Iowa that is leased to the Federal government on a long-term (99 year) basis. DOE owned buildings include three research buildings; one building housing management, administration, and technical support groups; and several small auxiliary buildings housing material receiving areas, warehouse functions, and shop facilities. Some research space is also leased from Iowa State University. Ames Laboratory does not have a large noncost-recovery user facility, a nuclear criticality facility, or any production facilities. The Laboratory operates as a customer of the local utility providers and does not operate central heating/chilling/power plant operations, water supply/treatment facilities, or sewage systems. Nor does Ames have its own fire department, cafeteria or library. Approximately 586 people (308 FTE's) worked at Ames Laboratory in FY2009.

**TRENDS**

Ames Laboratory's total costs increased from \$29,597K in FY2005 to \$31,708 in FY2009. This was an increase of 7.1%. The Laboratory's total functional support costs increased from \$10,563K in FY2005 to \$12,424K in FY2009, an increase of 17.6%.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

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**SITE PROFILE**  
**Ames National Lab/Iowa State University**

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**OTHER**

This category includes:

- The annual change in the Laboratory’s accrued vacation liability costs. These costs are the result of the difference in the vacation earned and used by each individual employee in the laboratory and can vary significantly (+ or -) each year. Also included are the costs of the Early Retirement Incentive Plan. Costs have decreased as the initial participants have come to the end of their years of participation and no new participants have applied for the program as the program has been terminated. The combined change of these two components was (\$114K).
- In accordance with the new Ames Laboratory contract DE-AC02-07CH11358, the duties of the Ames Laboratory Director no longer include directing the Iowa State University’s Institute of Physical Research and Technology (IPRT). In conjunction with this restructuring, Ames Laboratory is providing a reduced level of reimbursable administrative services to IPRT \$272K.

**COST SAVINGS INITIATIVES**  
(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
(None)			

**Trends in Total Support Cost by Functional Categories**  
**Argonne National Lab/University of Chicago (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	520,675	508,566	530,344	556,282	565,017	44,342	8.5%
<b>Capital Construction</b>	30,211	31,761	29,225	14,612	29,696	-515	-1.7%
<b>Total Costs Less Construction</b>	490,464	476,805	501,119	541,670	535,321	44,857	9.1%
<b>Total Support Costs</b>	<b>161,294</b>	<b>166,666</b>	<b>180,923</b>	<b>193,832</b>	<b>201,894</b>	<b>40,600</b>	<b>25.2%</b>
<b>Mission Direct Operation</b>	329,170	310,139	320,196	347,838	333,427	4,257	1.3%
<b>Mission Direct Operation as % of Total Cost</b>	<b>63.2%</b>	<b>61.0%</b>	<b>60.4%</b>	<b>62.5%</b>	<b>59.0%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>5.8%</b>	<b>6.2%</b>	<b>5.5%</b>	<b>2.6%</b>	<b>5.3%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>31.0%</b>	<b>32.8%</b>	<b>34.1%</b>	<b>34.8%</b>	<b>35.7%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>31.0%</b>	<b>32.8%</b>	<b>34.1%</b>	<b>34.8%</b>	<b>35.7%</b>		
<b>TOTAL SUPPORT COST</b>	<b>161,294</b>	<b>166,666</b>	<b>180,923</b>	<b>193,832</b>	<b>201,894</b>	<b>40,600</b>	<b>25.2%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>11.1%</b>	<b>11.1%</b>	<b>11.4%</b>	<b>11.6%</b>	<b>11.4%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>57,694</b>	<b>56,495</b>	<b>60,447</b>	<b>64,664</b>	<b>64,134</b>	<b>6,440</b>	<b>11.2%</b>
EXECUTIVE DIRECTION	9,775	9,968	9,637	11,429	11,738	1,963	20.1%
HUMAN RESOURCES	3,668	3,360	3,848	3,849	3,659	-9	-0.2%
CFO	4,149	4,660	4,884	4,707	5,238	1,089	26.2%
PROCUREMENT	4,138	4,124	4,429	4,239	4,311	173	4.2%
LEGAL	3,751	2,767	2,744	2,882	2,815	-936	-25.0%
CENTRAL ADMIN SERVICES	8,991	8,775	9,418	9,634	9,816	825	9.2%
PROGRAM/PROJECT CONTROL	1,947	892	1,812	1,587	1,874	-73	-3.7%
INFORMATION OUTREACH	3,652	5,007	5,569	5,822	6,857	3,205	87.8%
INFORMATION SERVICES	18,308	18,465	19,928	22,360	20,417	2,109	11.5%
OTHER	-685	-1,523	-1,822	-1,845	-2,591	-1,906	-278.2%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>15.5%</b>	<b>17.3%</b>	<b>18.2%</b>	<b>18.8%</b>	<b>19.9%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>80,473</b>	<b>87,984</b>	<b>96,489</b>	<b>104,451</b>	<b>112,247</b>	<b>31,774</b>	<b>39.5%</b>
ENVIRONMENTAL	6,184	5,843	9,150	10,260	11,958	5,774	93.4%
SAFETY AND HEALTH	12,437	18,293	18,529	19,857	20,337	7,900	63.5%
FACILITIES MANAGEMENT	8,987	9,252	6,659	7,559	10,654	1,667	18.5%
MAINTENANCE	18,193	17,299	20,349	21,658	21,851	3,658	20.1%
UTILITIES	22,672	25,925	25,968	30,007	32,517	9,845	43.4%
SAFEGUARDS AND SECURITY	7,641	7,321	6,485	6,160	6,200	-1,441	-18.9%
LOGISTICS SUPPORT	4,298	4,051	4,281	4,187	4,452	154	3.6%
QUALITY ASSURANCE	61	0	5,068	4,763	4,278	4,217	6,913.1%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>4.4%</b>	<b>4.4%</b>	<b>4.5%</b>	<b>4.4%</b>	<b>4.5%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>23,127</b>	<b>22,187</b>	<b>23,987</b>	<b>24,717</b>	<b>25,513</b>	<b>2,386</b>	<b>10.3%</b>
MANAGEMENT/INCENTIVE FEE	7,140	7,036	7,738	5,664	7,462	322	4.5%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	15,987	15,151	16,249	19,053	18,051	2,064	12.9%

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**SITE PROFILE**  
**Argonne National Lab/University of Chicago**

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**SITE OVERVIEW AND CHARACTERISTIC**

**BACKGROUND**

Argonne National Laboratory is one of the U.S. Department of Energy's largest research centers. It is also the nation's first national laboratory, chartered in 1946. Argonne is a direct descendant of the University of Chicago's Metallurgical Laboratory, part of the World War II Manhattan Project. It was at the Met Lab where, on Dec. 2, 1942, Enrico Fermi and his band of about 50 colleagues created the world's first controlled nuclear chain reaction in a squash court at the University of Chicago. After the war, Argonne was given the mission of developing nuclear reactors for peaceful purposes. Over the years, Argonne's research expanded to include many other areas of science, engineering and technology.

Argonne is managed by UChicago Argonne, LLC. The 1,500 acre site is surrounded by forest preserve and is approximately 25 miles southwest of Chicago's Loop. The site also houses the U.S. Department of Energy's Chicago Operations Office and the New Brunswick Laboratory. At the end of FY2009, the laboratory employed about 2,900 employees, including about 1,000 scientists and engineers, three-quarters of whom hold doctoral degrees. Argonne's annual operating budget of about \$580 million supports research projects ranging from studies of the atomic nucleus to global climate change. Since 1990, Argonne has worked with more than 600 companies and numerous federal agencies and other organizations.

Argonne is dedicated to protecting employees, guests and neighbors in all activities. Every employee, visitor, facility user and research collaborator is expected to put safety above all other concerns. No job is important enough to compromise safety.

Argonne's mission is to apply a unique mix of world-class science, engineering and user facilities to deliver innovative research and technologies. Argonne creates new knowledge that addresses the most important scientific and societal needs of our nation. Argonne makes significant contributions to DOE's mission in science, energy resources, environmental stewardship, and national security, with lead roles in the areas of science, operation of scientific facilities, and energy. In accomplishing our mission, we partner with DOE, other federal laboratories and agencies, the academic community, and the private sector.

Argonne's research centers around three principal areas:

- Energy
  - Energy Storage: Argonne develops transformational energy storage systems that enable and enhance electric-drive vehicles and a green-energy grid through electrical energy storage development, prototype and manufacturing process engineering,

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**SITE PROFILE**  
**Argonne National Lab/University of Chicago**

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stationary storage and grid management, and electric transportation systems.

- Alternative Energy and Efficiency: Argonne is developing the next generation of alternative energy sources to promote energy independence through improved chemical fuels, advanced biofuels, and solar energy systems, as well as through the optimization of fuel and engine dynamics.
- Nuclear Energy: Argonne develops advanced reactor and fuel cycle systems — including fast reactor and fuel cycle technologies, advanced modeling and simulation methods, and innovative nuclear energy systems — to enable the safe and sustainable generation of nuclear energy.
- Biological and Environmental Systems: Argonne produces integrated molecular-scale, hydrological, economic and social computational models to enable regionally focused ecological and climate assessments through metagenome analysis, protein discovery, regional climate prediction and integrated climate, energy and economic discovery.
- National Security: Argonne provides critical security technologies that prevent and mitigate events with potential for mass disruption or destruction through the nonproliferation and forensics of weapons of mass destruction, decision sciences, new sensors and materials, and cyber security.

Argonne scientists and engineers carry out both fundamental and applied scientific projects and maintain a number of large scientific user facilities that enhance research, especially projects that use hard X-rays and advanced computers. Our user facilities include:

- Advanced Photon Source (APS)
- Argonne Leadership Computing Facility (ALCF)
- Argonne Tandem-Linac Accelerator System (ATLAS)
- Atmospheric Radiation Measurement Climate Research Facility (ARM)
- Center for Nanoscale Materials (CNM)
- Electron Microscopy Center (EMC)
- Structural Biology Center (SBC)
- Transportation Research and Analysis Computing Center (TRACC)

## TRENDS

During FY05, Argonne experienced a significant restructuring due to the transition of the Argonne West site to the new Idaho National Laboratory effective January 31, 2005. The financial information provided reflects twelve months of Argonne East with four months of Argonne West in FY05. FY06 and beyond reflects only Argonne East financial information. The 4.7 percentage point increase for total Functional Cost in FY09 over FY05 is primarily due to the higher cost of utilities plus additional emphasis on Information/Outreach, Environmental, Safety & Health, and Quality Assurance activities.

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**SITE PROFILE**  
**Argonne National Lab/University of Chicago**

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**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**OTHER**

Other experienced a decrease of \$746K (40%) due to additional miscellaneous income.

**FACILITIES MANAGEMENT**

Facilities Management experienced an increase of \$3,095K (41%) due to increased building rental and miscellaneous expenses to allow occupancy of the new TCS building.

**MANAGEMENT/INCENTIVE FEE**

Management/Award/Incentive Fee experienced an increase of \$1,798K (32%) due to increased Board of Governor expenses.

**CAPITAL CONSTRUCTION**

Capital Construction experienced an increase of \$15,084K (103%) primarily due to IGPP and IGPE projects.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Contract Negotiations	4,500	Argonne takes an aggressive approach in contract negotiations for subcontracts and purchase orders. This has resulted in significant cost savings/cost avoidance each year.	Connie Markiewicz
Fringe Benefits	2,130	Changes were made in the fringe benefits area that have resulted in approximately \$651K in direct savings to the Laboratory by consolidating costs, negotiating better terms or by reducing the benefit. Argonne increased cost sharing with our healthcare participants saving another \$1,479K	Connie Markiewicz
Travel	491	By negotiated contracted rates with carriers and the lower fees associated with using the online booking tool versus traditional reservation calls with a live agent, Argonne realized savings in excess of \$491K in travel cost.	Connie Markiewicz

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**SITE PROFILE**  
**Argonne National Lab/University of Chicago**

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Energy	837	Coal was burned displacing Natural Gas which resulted in an estimated \$837K savings.	Connie Markiewicz
Infrastructure	1,065	Infrastructure Savings/Cost Avoidances realized \$1,065K due to restructuring facility support functions, closing the mail room, establishing in-house support, and replacing PBX equipment.	Connie Markiewicz

**Trends in Total Support Cost by Functional Categories**  
**Brookhaven National Lab/Brookhaven Science Assoc. (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	469,974	476,367	499,949	534,772	576,944	106,970	22.8%
<b>Capital Construction</b>	28,071	59,294	58,239	62,022	91,089	63,018	224.5%
<b>Total Costs Less Construction</b>	441,903	417,073	441,710	472,750	485,855	43,952	9.9%
<b>Total Support Costs</b>	<b>179,056</b>	<b>169,893</b>	<b>175,414</b>	<b>188,928</b>	<b>197,466</b>	<b>18,410</b>	<b>10.3%</b>
<b>Mission Direct Operation</b>	262,847	247,180	266,296	283,822	288,389	25,542	9.7%
<b>Mission Direct Operation as % of Total Cost</b>	<b>55.9%</b>	<b>51.9%</b>	<b>53.3%</b>	<b>53.1%</b>	<b>50.0%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>6.0%</b>	<b>12.4%</b>	<b>11.6%</b>	<b>11.6%</b>	<b>15.8%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>38.1%</b>	<b>35.7%</b>	<b>35.1%</b>	<b>35.3%</b>	<b>34.2%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>38.1%</b>	<b>35.7%</b>	<b>35.1%</b>	<b>35.3%</b>	<b>34.2%</b>		
<b>TOTAL SUPPORT COST</b>	<b>179,056</b>	<b>169,893</b>	<b>175,414</b>	<b>188,928</b>	<b>197,466</b>	<b>18,410</b>	<b>10.3%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>11.9%</b>	<b>10.3%</b>	<b>10.3%</b>	<b>10.1%</b>	<b>10.0%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>55,905</b>	<b>49,242</b>	<b>51,566</b>	<b>54,074</b>	<b>57,571</b>	<b>1,666</b>	<b>3.0%</b>
EXECUTIVE DIRECTION	11,599	8,624	8,826	9,453	10,175	-1,424	-12.3%
HUMAN RESOURCES	4,028	3,848	3,993	5,171	5,415	1,387	34.4%
CFO	2,484	2,711	2,538	2,693	2,999	515	20.7%
PROCUREMENT	2,106	2,396	2,347	2,744	3,034	928	44.1%
LEGAL	1,606	1,322	2,168	2,028	2,798	1,192	74.2%
CENTRAL ADMIN SERVICES	6,270	6,025	6,200	6,441	6,341	71	1.1%
PROGRAM/PROJECT CONTROL	2,995	2,853	2,284	2,412	2,815	-180	-6.0%
INFORMATION OUTREACH	7,536	5,411	5,628	5,755	6,118	-1,418	-18.8%
INFORMATION SERVICES	17,019	15,944	16,433	16,977	17,762	743	4.4%
OTHER	262	108	1,149	400	114	-148	-56.5%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>22.7%</b>	<b>22.2%</b>	<b>21.9%</b>	<b>22.3%</b>	<b>21.4%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>106,911</b>	<b>105,613</b>	<b>109,612</b>	<b>119,000</b>	<b>123,386</b>	<b>16,475</b>	<b>15.4%</b>
ENVIRONMENTAL	4,442	7,511	8,432	8,173	8,527	4,085	92.0%
SAFETY AND HEALTH	17,236	18,766	20,218	21,385	22,588	5,352	31.1%
FACILITIES MANAGEMENT	4,745	4,799	5,470	7,605	8,979	4,234	89.2%
MAINTENANCE	29,532	33,081	35,189	36,684	39,932	10,400	35.2%
UTILITIES	29,335	28,575	26,874	31,031	29,209	-126	-0.4%
SAFEGUARDS AND SECURITY	7,628	8,185	8,836	9,142	8,801	1,173	15.4%
LOGISTICS SUPPORT	3,487	3,365	3,341	3,469	3,656	169	4.8%
QUALITY ASSURANCE	1,044	1,331	1,252	1,511	1,694	650	62.3%
LABORATORY/TECHNICAL SUPPORT	9,462	0	0	0	0	-9,462	-100.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>3.5%</b>	<b>3.2%</b>	<b>2.8%</b>	<b>3.0%</b>	<b>2.9%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>16,240</b>	<b>15,038</b>	<b>14,236</b>	<b>15,854</b>	<b>16,509</b>	<b>269</b>	<b>1.7%</b>
MANAGEMENT/INCENTIVE FEE	6,992	6,575	6,401	6,956	7,474	482	6.9%
TAXES	2,000	1,000	1,110	1,041	1,110	-890	-44.5%
LDRD / PDRD / SDRD	7,248	7,463	6,725	7,857	7,925	677	9.3%

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**SITE PROFILE**  
**Brookhaven National Lab/Brookhaven Science Assoc.**

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**SITE OVERVIEW AND CHARACTERISTIC**

**SITE CHARACTERISTICS**

Brookhaven National Laboratory (BNL) is a multi-program National Laboratory founded in 1947 and currently operated by Brookhaven Science Associates for the U.S. Department of Energy. Seven Nobel Prizes have been awarded for discoveries based on research conducted at the Lab.

The Laboratory's broad mission is to produce excellent science and advanced technology in a safe, environmentally benign manner with the cooperation, support and appropriate involvement of our many communities.

Specifically, the mission of BNL, which supports the U.S. Department of Energy's strategic missions, is to:

- Conceive, design, construct and operate complex, “leading edge”, user-oriented facilities in a safe and environmentally friendly manner that is responsive not only to the DOE, but also to the needs of the international community of users.
- Carry out basic and applied research in long-term, high-risk programs at the frontier of science that supports DOE missions and the needs of the Laboratory's user community
- Develop advanced technologies that address national needs and initiate their transfer to other organizations and to the commercial sector.
- Disseminate technical knowledge to educate new generations of scientists and engineers, to maintain technical capabilities in the nation’s workforce, and to encourage scientific awareness in the general public.

**Large Research Facilities located at BNL:**

Alternating Gradient Synchrotron  
Relativistic Heavy Ion Collider  
National Synchrotron Light Source

**BioMedical Facilities located at BNL:**

Brookhaven Center for Translational Neuroimaging  
High-Field MRI Facility  
Brookhaven Linear Isotope Production Facility  
Scanning Transmission Electron Microscope  
Transmission Electron Microscope  
Positron Emission Tomography (PET) Facility

**Other Facilities and Centers located at BNL:**

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## SITE PROFILE

### Brookhaven National Lab/Brookhaven Science Assoc.

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Laser-Electron Accelerator Facility (LEAF)  
Tandem Van De Graaff Facility  
Accelerator Test Facility  
Center for Radiation Chemistry Research  
NASA Space Radiation Laboratory (NSRL)  
Center for Accelerator Physics  
Computational Science Center  
Center for Spectroscopy in Molecular Science  
Environmental Waste Technology Center  
RIKEN BNL Research Center  
National Nuclear Data Center  
Center for Functional Nanomaterials

#### **Facilities Under Construction at BNL:**

Electron Beam Ion Source  
National Synchrotron Light Source II

#### **Background**

Brookhaven National Laboratory (BNL) is a U.S. Department of Energy (DOE) research facility located on Long Island, New York (which is east of New York City), on a 5,300-acre campus. Approximately 30% of the total area is developed.

BNL is managed and operated for DOE by Brookhaven Science Associates in partnership between the Research Foundation of the State University of New York and the Battelle Memorial Institute.

BNL specializes in building and operating large research facilities that are used by our own staff and visiting scientists from academia, government and industry.

BNL categorizes salary into Scientific, Professional, Technical, Management and Union categories. For FYE 2009, the Laboratory reported 2,725 FTE's. BNL has hundreds of research programs going on in fields such as high-energy and nuclear physics, physics and chemistry of materials, homeland security, environmental and energy research, nonproliferation, structural biology and neurosciences and medical imaging. BNL contributes significantly to programs at other DOE laboratories, federal agencies, institutions, and industry. The work done for other agencies derives from our unique facilities and our core competencies. In FY09, the Laboratory received \$84.0M from Work for Others (WFO), which includes \$18.0M from other DOE laboratories/operations offices.

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**SITE PROFILE**  
**Brookhaven National Lab/Brookhaven Science Assoc.**

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More than 4,500 visiting scientists come from all over the world each year to do scientific research at our research facilities and work with our staff. To support these researchers, there are 422 on-site housing units. They are comprised of 66 family-style apartments, 46 efficiency apartments, 265 dormitory rooms, 30 seasonal houses, 2 all year round private houses and 13 guest-house rooms. A part-time off-site housing coordinator assists visitors in finding accommodations in the local area. Residents may be housed for periods from one day to several years. Many of the apartment units are over 60 years old. Morning and evening scheduled transportation is provided to a local railroad station. On-request, on-site transportation is provided during the workday. Subcontractors operate food service facilities and provide on-site food and snack services. A Quality of Life Office provides a link between visitors and support services. The RHIC and AGS Users' Center provides personal and administrative assistance to the experimenters from around the world who come to Brookhaven to use the Collider Accelerator user facilities. These facilities include the Relativistic Heavy Ion Collider (RHIC), Alternating Gradient Synchrotron (AGS), Tandem Van de Graaf, NASA Space Radiation Laboratory (NSRL), and the Accelerator Test Facility (ATF).

Safeguards & Security supports the basic scientific mission of DOE and the Laboratory by protecting DOE's Special Nuclear Materials, Classified Matter and property against theft, diversion or destruction, preventing the loss of information or sabotage of programs that could have significant financial impact and preventing radiological or toxicological sabotage that would endanger employees, the public or the environment. Safeguards & Security staff establishes guidelines, plans and strategies to protect sensitive or classified information. Employee/Visitor badges are required to gain access to the site.

Because of the nature of the Laboratory's missions, BNL generates a wide range of wastes. BNL generates some of the same waste streams common to many business and industries, such as aerosol cans, batteries, paint and oils; however, due to our scientific mission BNL also generates waste streams requiring more restrictions, such as compatible radioactive waste, chemicals and solvents. The Environmental Services and Waste Management Division provides a variety of waste management services to facilitate laboratory clean-outs by documenting, characterizing, and segregating wastes in preparation for removal. They also manage problem or non-routine wastes to reduce management and disposal costs.

There are approximately 345 buildings in use with a total area of 4.19 million square feet. The average age of BNL's operating buildings is 44 years with approximately 73% of BNL's building space over 30 years old, 44% over 50 years old (including World War II Army base structures). Detailed design for a new "Interdisciplinary Science Building I" will begin in the latter part of FY 10. This building will have approximately 90,000 square feet. In addition, there are 184 portable structures.

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**SITE PROFILE**  
**Brookhaven National Lab/Brookhaven Science Assoc.**

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Site-wide electrical, steam, sanitary sewer, storm sewer, and potable water utility systems serve the site. There are limited distribution chilled water and compressed air systems. The buildings served by these utilities are disbursed throughout the campus site thereby requiring maintenance of an extensive distribution network.

Maintenance and energy costs for the older, wood frame buildings are higher than those for structures that are considered permanent. Retrofitting older facilities to comply with current ES&H standards is extremely costly.

The large research facilities consume extraordinary amounts of electricity for their operation. Even faced with unprecedented increases in energy costs in FY09, the Laboratory's average unit price for electricity was only \$0.052/kWH for the year. This low rate was attributable to several factors, including energy conservation, load scheduling, depressed fuel prices (notable natural gas) and a favorable energy contract that includes a natural incentive to keep power usage down, especially in the summer.

For 28 years, the Laboratory has benefited from an agreement between the New York Power Authority (NYPA) and the local electrical utility. This agreement continues to provide power from upstate at a substantial savings to the Laboratory and is projected to save over \$26 million compared to the local utility for FY 10. At the present time, it is anticipated the average price for FY10 will be less than \$0.07 per kWH. While higher than FY 09, it is substantially less than the local utility price of over \$0.16 per kWH.

In addition, BNL's reported Functional Costs includes a Payment in lieu of Taxes (PILT) amount of \$1,076,944.

### TRENDS

BNL's Percent of Functional Support Costs to Total Site Cost has declined from 37.8% to 34.1%. BNL's support costs reflect Laboratory management actions to move the Laboratory in a direction that provides excellent science along with excellent standards for safety, health, environment, infrastructure and business operations. Since FY 2005, the laboratory has made significant efforts to control support costs through the adoption of best business practices and operations. This has been successful in spite of unfunded mandates on the laboratory for Cyber Security, ES&H, Emergency Management and Maintenance Improvement Initiatives.

### **DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

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**SITE PROFILE**  
**Brookhaven National Lab/Brookhaven Science Assoc.**

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**LEGAL**

Legal Fees vary from year to year depending on the number of cases being tried and/or actively litigated.

**OTHER**

The Other category includes Legal Settlement accrual reversals of 575k offset by an accrual for unpaid overtime related to Fair Standards Labor Act in the amount of 680k.

**CAPITAL CONSTRUCTION**

Increased funding for conventional construction of NSLS II.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Electricity	26,000	BNL/DOE negotiated a short term extension of its NYPA power contract through 12/31/2010 to support BNL's research programs, saving \$26 million per year in FY09 alone.	Donna Chiossone
Natural Gas	800	BNL saved approximately 800k by continuously monitoring the volatile energy markets and burning natural gas in the Central Steam Facility – instead of more expensive residual fuel oil. Firing natural gas has the added benefit of reducing the Laboratory's carbon dioxide emissions by approximately 5,000 tons per year.	Donna Chiossone
Contract Negotiation	332	Information Technology Division saved approx 332k by consolidating maintenance and support contracts and aggressive price negotiation.	Donna Chiossone
Medical Clinic	222	Occupational Medicine Clinic hired a physical therapist which resulted in medical cost savings of approx 222k.	Donna Chiossone
Stop Loss Insurance	169	Benefits Office renegotiated the stop loss insurance contract which resulted in savings of 169k.	Donna Chiossone

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**SITE PROFILE**

**Brookhaven National Lab/Brookhaven Science Assoc.**

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Fringe Benefits	2,000	Reduction of fringe rate by .75% resulted in savings of \$2M achieved by long term cost reductions in medical benefit cost and increases in employee contributions.	Donna Chisonne
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**Trends in Total Support Cost by Functional Categories**  
**Fermi National Accelerator Lab/University Research (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	318,468	328,986	335,402	338,354	372,538	54,070	17.0%
<b>Capital Construction</b>	45,132	36,456	25,881	27,812	35,302	-9,830	-21.8%
<b>Total Costs Less Construction</b>	273,336	292,530	309,521	310,542	337,236	63,900	23.4%
<b>Total Support Costs</b>	<b>100,970</b>	<b>102,347</b>	<b>114,226</b>	<b>117,182</b>	<b>132,064</b>	<b>31,094</b>	<b>30.8%</b>
<b>Mission Direct Operation</b>	172,366	190,183	195,295	193,360	205,172	32,806	19.0%
<b>Mission Direct Operation as % of Total Cost</b>	<b>54.1%</b>	<b>57.8%</b>	<b>58.2%</b>	<b>57.1%</b>	<b>55.1%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>14.2%</b>	<b>11.1%</b>	<b>7.7%</b>	<b>8.2%</b>	<b>9.5%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>31.7%</b>	<b>31.1%</b>	<b>34.1%</b>	<b>34.6%</b>	<b>35.4%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>31.7%</b>	<b>31.1%</b>	<b>34.1%</b>	<b>34.6%</b>	<b>35.4%</b>		
<b>TOTAL SUPPORT COST</b>	<b>100,970</b>	<b>102,347</b>	<b>114,226</b>	<b>117,182</b>	<b>132,064</b>	<b>31,094</b>	<b>30.8%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>10.4%</b>	<b>9.8%</b>	<b>10.3%</b>	<b>10.8%</b>	<b>12.0%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>32,971</b>	<b>32,181</b>	<b>34,663</b>	<b>36,628</b>	<b>44,673</b>	<b>11,702</b>	<b>35.5%</b>
EXECUTIVE DIRECTION	4,960	4,550	4,717	4,984	5,582	622	12.5%
HUMAN RESOURCES	3,567	3,568	3,416	3,682	4,221	654	18.3%
CFO	2,262	2,745	3,150	3,083	3,374	1,112	49.2%
PROCUREMENT	1,806	1,645	1,769	1,732	1,947	141	7.8%
LEGAL	715	653	716	633	588	-127	-17.8%
CENTRAL ADMIN SERVICES	1,800	1,819	1,936	1,926	2,059	259	14.4%
PROGRAM/PROJECT CONTROL	250	39	697	641	874	624	249.6%
INFORMATION OUTREACH	3,188	3,467	3,548	3,389	3,535	347	10.9%
INFORMATION SERVICES	14,402	13,657	14,676	16,489	22,390	7,988	55.5%
OTHER	21	38	38	69	103	82	390.5%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>20.3%</b>	<b>20.2%</b>	<b>22.7%</b>	<b>22.6%</b>	<b>22.5%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>64,616</b>	<b>66,530</b>	<b>76,147</b>	<b>76,413</b>	<b>83,733</b>	<b>19,117</b>	<b>29.6%</b>
ENVIRONMENTAL	1,040	1,147	1,148	909	1,222	182	17.5%
SAFETY AND HEALTH	10,732	10,494	10,474	10,359	10,895	163	1.5%
FACILITIES MANAGEMENT	1,897	1,469	1,716	1,438	2,390	493	26.0%
MAINTENANCE	22,391	22,514	24,656	23,491	28,117	5,726	25.6%
UTILITIES	19,429	22,001	25,558	28,497	28,653	9,224	47.5%
SAFEGUARDS AND SECURITY	3,305	3,399	3,817	2,754	2,714	-591	-17.9%
LOGISTICS SUPPORT	3,936	3,990	3,953	3,975	4,009	73	1.9%
QUALITY ASSURANCE	31	39	727	1,040	2,085	2,054	6,625.8%
LABORATORY/TECHNICAL SUPPORT	1,855	1,477	4,098	3,950	3,648	1,793	96.7%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>1.1%</b>	<b>1.1%</b>	<b>1.0%</b>	<b>1.2%</b>	<b>1.0%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>3,383</b>	<b>3,636</b>	<b>3,416</b>	<b>4,141</b>	<b>3,658</b>	<b>275</b>	<b>8.1%</b>
MANAGEMENT/INCENTIVE FEE	3,383	3,636	3,416	4,141	3,658	275	8.1%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

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**SITE PROFILE**  
**Fermi National Accelerator Lab/University Research**

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**SITE OVERVIEW AND CHARACTERISTIC**

**BACKGROUND**

Fermilab operates the world's highest-energy particle accelerator, the Tevatron. Some 2,300 scientists from 35 states and 30 countries use Fermilab's facilities to carry out research at the frontiers of particle physics.

Fermilab is a single purpose Laboratory whose mission statement is as follows:

“Fermi National Accelerator Laboratory advances the understanding of the fundamental nature of matter and energy by providing leadership and resources for qualified researchers to conduct basic research at the frontiers of high energy physics and related disciplines.”

Groundbreaking for the original linear accelerator was December 1968. The site is 6,800 acres, or a little more than 10 square miles. Approximately 1,900 people are employed at the Lab. Fermilab has an on-site housing operation to accommodate users and their families, and an on-site cafeteria for employees, users and visitors.

Beginning calendar year 2007, Fermilab is operated by Fermi Research Alliance (FRA), a limited liability company formed between Universities Research Association, Inc. (the former management contractor) and the University of Chicago. The level of non-DOE work at Fermilab is insignificant to the operation of the Laboratory.

**TRENDS**

1. Trend in Functional Support Costs from fiscal year 2005 to fiscal year 2009:

General Support costs are up 35% since 2005. The primary component is Information Services, with other significant increases in the Chief Financial Officer, Executive Direction and Human Resources components. Mission Support costs have increased 30% for the four year period primarily due to rising Utility costs, Maintenance and Quality Assurance. Beginning in 2007, the service center Machine Shop costs are now categorized in Laboratory/Technical Support resulting in the \$1.8 million increase in the category from Mission Direct and Capital/Construction.

2. Trend in Functional Support Costs as a percentage of Total Site Costs from fiscal year 2005 to

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**SITE PROFILE**  
**Fermi National Accelerator Lab/University Research**

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fiscal year 2009:

Overall support costs as a percentage of Total Site Costs have increased from 32% in fiscal year 2005 to 35% in 2009. The increase in Utilities is primarily due to deregulation in 2006 and a subsequent escalation of power costs. It should also be noted that the preponderance of Fermilab's Utilities costs are programmatic, and are driven by the number of weeks of Tevatron running. Additionally, the increases in Maintenance and Information Services costs combined with the reduction in Capital/ Construction cost has led to a gradual increase in the rate. While Capital/Construction has increased 27% from 2008, the completion of CMS construction and Run II Luminosity projects has reduced Capital/ Construction significantly since 2005. While having a negligible effect on the subject percentage, it should be noted that in accordance with DOE guidance and a recent peer review recommendation, beginning in FY07, costs were included for work performed for other DOE sites while cost of work for Fermilab performed by other DOE sites was excluded.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**PROGRAM/PROJECT CONTROL**

This category increased by 36% or \$233K in FY09. Major components of this increase are additional personnel costs in the Office of Project Management Oversight (\$137K), work towards the certification of the FRA Earned Value Management System (\$130K), and the startup of major new projects (\$151K). These increases were partially offset by the one-time workforce restructuring activity costs (\$168K) occurring in FY08.

**INFORMATION SERVICES**

Information Services increased by 36% or \$5.9M due to investments of \$3.3M primarily for the efforts towards obtaining ISO 2000 certification (\$1.7M), the Tune IT Up campaign (\$300K), networking and cable upgrades (\$700K), and a lab-wide engineering data manager (\$510K). In addition there was \$2.6M of central IT services reclassified from Mission Direct.

**OTHER**

The Other category increased by 48%, due to a \$34K increase in liability insurance. These are costs associated with general liability insurance. The costs fluctuate based on the level of claims in a given year.

**ENVIRONMENTAL**

The \$313K increase in this category is due to several factors. Most notably is \$98K for an additional FTE and \$157K for EPA clean-up, waste disposal, and erosion repair.

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## SITE PROFILE

### Fermi National Accelerator Lab/University Research

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#### FACILITIES MANAGEMENT

This category was up 66%, or \$953K, from 2008. Increases included \$484K for preliminary costs on outside Architectural and Engineering for Recovery Act projects, \$108K for consultant cost and server improvements for the Geographic Information System, and \$61K for the IL Accelerator Research Project. It also included \$779K reclassified from Maintenance. Decreases were realized in salaries, housing costs, and office remodeling from FY08 which partially offset these increases.

#### QUALITY ASSURANCE

This category realized a 100% increase or \$1M from 2008. The major component was the implementation of DOE Order 414.1C Quality Assurance which required significant effort from outside contractors (\$700K increase over FY08). Additionally, Quality Assurance Representatives (QARs) were identified for each division, section and center. This is a new activity and costs were collected in FY09, resulting in approximately \$149K in salary reclassifications from various other categories used in FY08.

#### CAPITAL CONSTRUCTION

This category was up 27%, or \$7.5M, mainly due to increased activity in the MINERvA, Dark Energy Camera and CD LATTICE QCD projects. GPP projects increased by \$1.3M, which includes \$873K of recovery act funds.

#### COST SAVINGS INITIATIVES

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Employee Benefits	600	Fermilab changed the cost share structure of the retiree medical plan resulting in a first year savings of approximately \$600K. The Benefits Department conducted aggressive negotiations with the insurance carriers to reduce renewal percentages. Employee cost share of medical plans was increased. Plan design changes that were made included raising co-pays for doctor visits and increasing deductibles.	Michael Rhoades

**Trends in Total Support Cost by Functional Categories**  
**Hanford/Fluor Daniel, CH2M Hill & W.Closure (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	1,222,861	1,099,098	1,080,388	1,322,192	1,562,433	339,572	27.8%
<b>Capital Construction</b>	41,523	32,731	29,022	53,916	76,317	34,794	83.8%
<b>Total Costs Less Construction</b>	1,181,338	1,066,367	1,051,366	1,268,276	1,486,116	304,778	25.8%
<b>Total Support Costs</b>	<b>558,880</b>	<b>585,855</b>	<b>537,287</b>	<b>570,034</b>	<b>756,868</b>	<b>197,988</b>	<b>35.4%</b>
<b>Mission Direct Operation</b>	622,458	480,512	514,079	698,242	729,248	106,790	17.2%
<b>Mission Direct Operation as % of Total Cost</b>	<b>50.9%</b>	<b>43.7%</b>	<b>47.6%</b>	<b>52.8%</b>	<b>46.7%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>3.4%</b>	<b>3.0%</b>	<b>2.7%</b>	<b>4.1%</b>	<b>4.9%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>45.7%</b>	<b>53.3%</b>	<b>49.7%</b>	<b>43.1%</b>	<b>48.4%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>45.7%</b>	<b>53.3%</b>	<b>49.7%</b>	<b>43.1%</b>	<b>48.4%</b>		
<b>TOTAL SUPPORT COST</b>	<b>558,880</b>	<b>585,855</b>	<b>537,287</b>	<b>570,034</b>	<b>756,868</b>	<b>197,988</b>	<b>35.4%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>11.0%</b>	<b>12.0%</b>	<b>12.1%</b>	<b>9.4%</b>	<b>15.8%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>134,413</b>	<b>131,950</b>	<b>130,755</b>	<b>124,219</b>	<b>246,220</b>	<b>111,807</b>	<b>83.2%</b>
EXECUTIVE DIRECTION	8,383	5,698	6,971	4,340	4,563	-3,820	-45.6%
HUMAN RESOURCES	15,136	15,450	14,362	15,058	60,849	45,713	302.0%
CFO	8,345	8,297	8,302	9,023	12,735	4,390	52.6%
PROCUREMENT	10,016	9,109	8,269	7,762	11,619	1,603	16.0%
LEGAL	5,518	3,407	3,224	3,071	4,453	-1,065	-19.3%
CENTRAL ADMIN SERVICES	11,039	11,706	12,863	13,345	14,114	3,075	27.9%
PROGRAM/PROJECT CONTROL	28,433	22,307	21,399	19,733	36,511	8,078	28.4%
INFORMATION OUTREACH	2,815	3,207	2,684	3,563	4,202	1,387	49.3%
INFORMATION SERVICES	40,341	39,734	39,697	39,576	50,603	10,262	25.4%
OTHER	4,387	13,035	12,984	8,748	46,571	42,184	961.6%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>28.7%</b>	<b>30.7%</b>	<b>32.0%</b>	<b>27.5%</b>	<b>26.4%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>351,287</b>	<b>337,647</b>	<b>346,009</b>	<b>363,255</b>	<b>411,752</b>	<b>60,465</b>	<b>17.2%</b>
ENVIRONMENTAL	27,845	24,473	21,801	25,719	33,550	5,705	20.5%
SAFETY AND HEALTH	84,092	74,175	76,249	79,285	77,640	-6,452	-7.7%
FACILITIES MANAGEMENT	40,088	35,005	38,578	37,774	44,590	4,502	11.2%
MAINTENANCE	77,272	74,970	84,057	88,813	93,815	16,543	21.4%
UTILITIES	10,642	9,801	9,872	11,088	11,710	1,068	10.0%
SAFEGUARDS AND SECURITY	41,576	49,977	55,070	57,720	53,158	11,582	27.9%
LOGISTICS SUPPORT	16,543	17,975	19,989	20,736	45,819	29,276	177.0%
QUALITY ASSURANCE	7,227	8,134	8,822	9,628	7,003	-224	-3.1%
LABORATORY/TECHNICAL SUPPORT	46,002	43,137	31,571	32,492	44,467	-1,535	-3.3%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>6.0%</b>	<b>10.6%</b>	<b>5.6%</b>	<b>6.2%</b>	<b>6.3%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>73,180</b>	<b>116,258</b>	<b>60,523</b>	<b>82,560</b>	<b>98,896</b>	<b>25,716</b>	<b>35.1%</b>
MANAGEMENT/INCENTIVE FEE	61,191	103,524	49,155	74,488	87,328	26,137	42.7%
TAXES	11,989	12,734	11,368	8,072	11,568	-421	-3.5%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

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**SITE PROFILE**  
**Hanford/Fluor Daniel, CH2M Hill & W.Closure**

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**SITE OVERVIEW AND CHARACTERISTIC**

**BACKGROUND**

In FY2009, the Hanford site went through significant site contract modifications. The work scope associated with the Fluor Hanford Contract was separated out into two different contracts. The CH2M Hill Plateau Remediation Company was awarded the remediation work; and the Mission Support Alliance contractor was awarded the site services and infrastructure work scope. Similarly, Washington River Protection Services began as the contractor for the Tank Operations Contract at the beginning of FY2009 taking over from CH2M Hill Hanford Inc. Both CH2M Hill and Fluor Hanford Inc. are now in contract close-out status.

Additionally, the Hanford contractors spent approximately \$170M in American Recovery and Reinvestment Act (ARRA) funds. This has increased the Functional Cost Report total dollars. Additionally, increases in various support areas, such as Human Resources, occurred to ramp up for efficient and effective use of the ARRA funds.

The Hanford site, a 586 square mile tract near Richland, Washington, was established during World War II to produce plutonium for America's nuclear weapons arsenal. The site reached peak production in the 1960s when nine reactors were in operation at the Hanford Site. Department of Energy (DOE) halted weapons material production in the late 1980s and is now engaged in environmental cleanup efforts to deal with the legacy of radioactive and hazardous wastes that resulted from the plutonium production era.

The Hanford Site has two separate DOE offices. The DOE Office of River Protection (ORP) manages the program to remove the waste from the tanks, vitrify the waste for long-term storage or disposal, and close Hanford's tank farms. The Tank Operations Contract (TOC) includes Washington River Protection Solutions, LLC (WRPS) as the integrating contractor. WRPS employed 1,308 personnel at fiscal yearend 2009 and used more than 248 buildings and structures spread across the site. WRPS work scope as the Tank Operations Contractor includes storing, retrieving, treating and disposing of waste; closing tanks, tank farms, treatment and storage/disposal facilities.

The DOE Richland Operations Office (RL) oversees the bulk of cleanup, including plutonium stabilization, cleanup of contaminated soil and buildings, stabilization and storage of spent nuclear fuel, and waste treatment and disposal. CH2M Hill Plateau Remediation Company and the Mission Support Alliance complete cleanup activities for the Hanford site.

The contractors manage and maintain over 2,000 facilities, many of which are 30 to 50 years old.

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**SITE PROFILE**  
**Hanford/Fluor Daniel, CH2M Hill & W.Closure**

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The facilities include inactive nuclear reactors, administrative facilities, analytical laboratories, storage facilities, mobile offices, and trailers. The Hanford site struggles to maintain the older facilities with current standards and actively seeks ways to minimize its facility maintenance and repair costs.

Because of the large size of the Hanford site, DOE has been attempting to “reduce the government footprint” by accelerating cleanup efforts and transferring land to the Department of Interior. Benton, Franklin, and Grant counties border the site and receive over \$4 million in Payments in Lieu of Taxes (PILT). These PILT payments allow counties to recoup tax revenue lost due to the property being owned by the government rather than tax-paying landowners.

The site continues to progress on its three primary objectives:

- Restore the River Corridor
- Transition the Plateau
- Prepare for the Future

The River Corridor encompasses approximately 210 square miles adjacent to the Columbia River. It is divided into three areas: the 100 Area, comprising of nine shut-down plutonium reactors and support facilities; the 300 Area, comprising manufacturing and research facilities; and the 600 Area, encompassing mostly vacant land between the 100 and 300 Areas. Multiyear efforts are underway to remove sodium systems from Hanford production legacy.

The tradition of the Plateau refers to an area in the center of the Hanford site, which includes the 200 and 400 Areas and is the location of Hanford’s longer-term missions of waste treatment, storage and disposal operations.

### TRENDS

Hanford’s Total Cost has increased by approximately 28% over FY05 values. This increase is attributed to many items. RL assumed the legacy Mound, Fernald, and Rocky Flats pension and post retirement benefit costs. Hanford contractors had to contribute approximately \$40M to the site’s pension plan to be compliant with pension funding requirements. Hanford contractors costed an additional \$170M in American Recovery and Reinvestment Act (ARRA) funding. ARRA funding is responsible for an 84% increase in Capital Construction over FY05 levels.

Additional the General Support and Site Support categories increased. Areas related to hiring, staffing, and logistics, such as Human Resources and Project Controls, increased. These areas also increased due to the new Hanford business model, which restructured a single contractor (Fluor Hanford Inc.) into two contracts (CH2M Hill Plateau Remediation Contract and the Mission Support

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**SITE PROFILE**  
**Hanford/Fluor Daniel, CH2M Hill & W.Closure**

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Contract). The Other category increased by \$42M over FY2005 and \$37M over last year. This is primarily due to the pension contribution noted above and contract transition costs.

While it should be noted that functional support costs are not intended to be utilized to compare sites, there are some differences in the Hanford site that may distort Hanford data. The SCFAR guidance states that the contractor that originates the costs should report functional costs. With several major contractors at Hanford the costs could appear “out of line” with similar sites in certain categories, due to the fact that some functions have been centralized from a site perspective. In addition, the geographic location and size of the site requires the performance of many fundamental infrastructure support activities that may not be required at smaller sites.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**HUMAN RESOURCES**

Human resources have increased due to increased hiring for changes in several major prime contractors (relocation, incentives) and to ramp up for ARRA contracting.

**CFO**

Most of increase appears to be due to the changes in the site's contract structure.

**PROCUREMENT**

Several major contractors were transitioned in the last year requiring additional staffing. ARRA funding required additional procurements and the hiring of temporary staffing to fill those needs.

**LEGAL**

Increase is primarily due to a legal settlement cost in FY09 and changes in the site's contract structure.

**PROGRAM/PROJECT CONTROL**

Most of increase appears to be due to the changes in the site's contract structure.

**INFORMATION OUTREACH**

Most of increase appears to be due to the changes in the site's contract structure.

**INFORMATION SERVICES**

Most of increase appears to be due to the changes in the site's contract structure.

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**SITE PROFILE**  
**Hanford/Fluor Daniel, CH2M Hill & W.Closure**

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**OTHER**

The increase is primarily due to a pension payment to fund the pension liability in accordance with IRS/CAS/ERISA requirements. Another \$6M is attributable to contract transition costs for major prime contractors.

**MAINTENANCE**

Increases due to additional ARRA work scope.

**LOGISTICS SUPPORT**

Spare parts increases of approximately \$3.3M. Changes in the contract structures and Work Breakdown Structures appear to have reflected costs into this category instead of other categories where they had been shown in previous years.

**QUALITY ASSURANCE**

Changes in the contract structures and Work Breakdown Structures appear to have reflected costs into this category instead of other categories where they had been shown in previous years.

**LABORATORY/TECHNICAL SUPPORT**

Additional research pending.

**TAXES**

Contract changes had taxation implications.

**CAPITAL CONSTRUCTION**

Capital construction increases were the result of expedited work scope from the availability of ARRA funding.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT

**SITE PROFILE**  
**Hanford/Fluor Daniel, CH2M Hill & W.Closure**

<p>Hose in Hose Transfer Line Disposition</p>	<p>2,544</p>	<p>WRPS has significantly reduced the costs associated with the Hose in Hose Transfer Line Disposition (SST). The work includes design, work package development and field work to remove and dispose of the HIHTLs outside of the design life. Multiple hoses were grouped together to be worked in parallel. Several of the HIHTLs had relatively low contamination levels and did not require flushing or high radiation controls. Incorporation of lessons learned from previous HIHTL removals resulted in higher productivity for engineering and field work. HIHTL shipped directly to ERDF, avoiding off-site treatment costs.</p>	
<p>C-110 Retrieval modifications</p>	<p>1,651</p>	<p>WRPS made C-110 Retrieval modifications to the SST to complete the retrieval operations in accordance with the functional, operating, environmental, and safety requirements. The scope included a retrieval system that can deliver retrieved waste to the designated receiver DST and recycle liquids back from the DST system to the SST to minimize the waste volume produced by the retrieval system. Retrieval efficiencies were greater than historical tank retrievals. WRPS operated on two shift schedule increasing operating time resulting in fewer shutdowns and less equipment repair. Actual slurry volume loading by percent was much higher than previous experience.</p>	

**SITE PROFILE**  
**Hanford/Fluor Daniel, CH2M Hill & W.Closure**

High Technology Tax Credit	1,593	WRPS realized significant cost savings from efficiencies associated with Finance services required to support the Tank Farm Contractor's (TFC) ability to achieve the River Protection Project's (RPP) mission objectives. . B&O tax was eliminated as a result of the high technology tax credit and the use of teleconferencing technology reduced the amount of company travel.	
TOC Training Program	1,407	WRPS realized significant cost savings associated with the TOC Training Program. Tuition and labor efficiency gains due to streamlining transition to mandated Lockout-Tagout training program. Reviewed and adjusted training assignments for all employees to eliminate unnecessary training. Funding profile was adjusted to reflect actual staffing loading for FY09. Personnel with previous experience were hired, reducing the need for training and some hiring was deferred.	
Catch Tank & Pipeline Reporting	1,552	WRPS realized cost savings associated with Catch Tank & Pipeline Reporting by using direct labor rather than outside contracts for the initial planning scope. Efficiencies were realized with the Catch Tanks and Pipeline Report due to the use of an existing database and records.	

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**SITE PROFILE**  
**Hanford/Fluor Daniel, CH2M Hill & W.Closure**

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Streamlined Radcon Surveillance Routines	2,105	DST Radcon Surveys streamlined Radcon surveillance routines and processes. Tank Chemistry Control was able to accomplish an equipment shuffle activity with fewer resources than previously required. Design and fabrication of the corrosion probe was completed with a cost savings by installing both the AY-101 and AY-102 probes at the same time and labor efficiencies were achieved. Information Resource Management was able to purchase materials at a savings due to the economic conditions and subcontracted services were reduced by utilizing existing programs and avoiding additional programming changes.	
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**Trends in Total Support Cost by Functional Categories**  
**Idaho National Lab/Battelle, Bechtel & CH2MWG (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	954,705	0	0	0	0	-954,705	-100.0%
<b>Capital Construction</b>	14,457	0	0	0	0	-14,457	-100.0%
<b>Total Costs Less Construction</b>	940,248	0	0	0	0	-940,248	-100.0%
<b>Total Support Costs</b>	<b>480,274</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-480,274</b>	<b>-100.0%</b>
<b>Mission Direct Operation</b>	459,974	0	0	0	0	-459,974	-100.0%
<b>Mission Direct Operation as % of Total Cost</b>	<b>48.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>1.5%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>50.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>		
<b>Total</b>	<b>100.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>50.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>		
<b>TOTAL SUPPORT COST</b>	<b>480,274</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-480,274</b>	<b>-100.0%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>15.4%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>146,599</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-146,599</b>	<b>-100.0%</b>
EXECUTIVE DIRECTION	15,978	0	0	0	0	-15,978	-100.0%
HUMAN RESOURCES	13,897	0	0	0	0	-13,897	-100.0%
CFO	11,322	0	0	0	0	-11,322	-100.0%
PROCUREMENT	9,941	0	0	0	0	-9,941	-100.0%
LEGAL	4,082	0	0	0	0	-4,082	-100.0%
CENTRAL ADMIN SERVICES	20,110	0	0	0	0	-20,110	-100.0%
PROGRAM/PROJECT CONTROL	15,072	0	0	0	0	-15,072	-100.0%
INFORMATION OUTREACH	8,539	0	0	0	0	-8,539	-100.0%
INFORMATION SERVICES	46,953	0	0	0	0	-46,953	-100.0%
OTHER	705	0	0	0	0	-705	-100.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>27.5%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>262,936</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-262,936</b>	<b>-100.0%</b>
ENVIRONMENTAL	6,000	0	0	0	0	-6,000	-100.0%
SAFETY AND HEALTH	66,995	0	0	0	0	-66,995	-100.0%
FACILITIES MANAGEMENT	29,560	0	0	0	0	-29,560	-100.0%
MAINTENANCE	67,937	0	0	0	0	-67,937	-100.0%
UTILITIES	20,722	0	0	0	0	-20,722	-100.0%
SAFEGUARDS AND SECURITY	35,937	0	0	0	0	-35,937	-100.0%
LOGISTICS SUPPORT	13,723	0	0	0	0	-13,723	-100.0%
QUALITY ASSURANCE	12,926	0	0	0	0	-12,926	-100.0%
LABORATORY/TECHNICAL SUPPORT	9,136	0	0	0	0	-9,136	-100.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>7.4%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>70,739</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-70,739</b>	<b>-100.0%</b>
MANAGEMENT/INCENTIVE FEE	51,655	0	0	0	0	-51,655	-100.0%
TAXES	3,371	0	0	0	0	-3,371	-100.0%
LDRD / PDRD / SDRD	15,713	0	0	0	0	-15,713	-100.0%

**Trends in Total Support Cost by Functional Categories**  
**Idaho National Lab-Battelle Energy Alliance (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	0	612,038	650,049	693,503	770,322	770,322	100.0%
<b>Capital Construction</b>	0	19,609	12,053	14,747	24,169	24,169	100.0%
<b>Total Costs Less Construction</b>	0	592,429	637,996	678,756	746,153	746,153	100.0%
<b>Total Support Costs</b>	<b>0</b>	<b>344,130</b>	<b>374,005</b>	<b>391,001</b>	<b>416,909</b>	<b>416,909</b>	<b>100.0%</b>
<b>Mission Direct Operation</b>	0	248,299	263,991	287,755	329,244	329,244	100.0%
<b>Mission Direct Operation as % of Total Cost</b>	<b>0.0%</b>	<b>40.6%</b>	<b>40.6%</b>	<b>41.5%</b>	<b>42.7%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>0.0%</b>	<b>3.2%</b>	<b>1.9%</b>	<b>2.1%</b>	<b>3.1%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>0.0%</b>	<b>56.2%</b>	<b>57.5%</b>	<b>56.4%</b>	<b>54.1%</b>		
<b>Total</b>	<b>0.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>0.0%</b>	<b>56.2%</b>	<b>57.5%</b>	<b>56.4%</b>	<b>54.1%</b>		
<b>TOTAL SUPPORT COST</b>	<b>0</b>	<b>344,130</b>	<b>374,005</b>	<b>391,001</b>	<b>416,909</b>	<b>416,909</b>	<b>100.0%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>0.0%</b>	<b>18.4%</b>	<b>19.5%</b>	<b>16.9%</b>	<b>16.7%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>0</b>	<b>112,498</b>	<b>126,742</b>	<b>116,899</b>	<b>128,262</b>	<b>128,262</b>	<b>100.0%</b>
EXECUTIVE DIRECTION	0	22,393	23,607	24,096	23,503	23,503	100.0%
HUMAN RESOURCES	0	10,659	10,500	11,141	14,515	14,515	100.0%
CFO	0	6,598	8,950	8,182	9,385	9,385	100.0%
PROCUREMENT	0	3,884	3,549	6,347	5,488	5,488	100.0%
LEGAL	0	2,814	3,084	2,868	2,805	2,805	100.0%
CENTRAL ADMIN SERVICES	0	8,881	11,819	9,017	7,926	7,926	100.0%
PROGRAM/PROJECT CONTROL	0	4,645	7,889	6,299	10,698	10,698	100.0%
INFORMATION OUTREACH	0	10,446	10,462	9,053	9,479	9,479	100.0%
INFORMATION SERVICES	0	42,038	46,704	39,485	43,991	43,991	100.0%
OTHER	0	140	178	411	472	472	100.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>0.0%</b>	<b>32.3%</b>	<b>32.8%</b>	<b>34.6%</b>	<b>32.9%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>0</b>	<b>197,901</b>	<b>212,977</b>	<b>240,196</b>	<b>253,697</b>	<b>253,697</b>	<b>100.0%</b>
ENVIRONMENTAL	0	3,438	5,330	5,455	6,486	6,486	100.0%
SAFETY AND HEALTH	0	41,527	39,665	38,284	43,829	43,829	100.0%
FACILITIES MANAGEMENT	0	25,345	32,279	43,022	37,843	37,843	100.0%
MAINTENANCE	0	47,987	49,897	50,684	61,411	61,411	100.0%
UTILITIES	0	16,057	15,477	14,854	11,829	11,829	100.0%
SAFEGUARDS AND SECURITY	0	41,140	42,684	49,360	51,341	51,341	100.0%
LOGISTICS SUPPORT	0	12,848	15,018	20,291	20,127	20,127	100.0%
QUALITY ASSURANCE	0	8,080	9,694	10,308	12,152	12,152	100.0%
LABORATORY/TECHNICAL SUPPORT	0	1,479	2,933	7,938	8,679	8,679	100.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>0.0%</b>	<b>5.5%</b>	<b>5.3%</b>	<b>4.9%</b>	<b>4.5%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>0</b>	<b>33,731</b>	<b>34,286</b>	<b>33,906</b>	<b>34,950</b>	<b>34,950</b>	<b>100.0%</b>
MANAGEMENT/INCENTIVE FEE	0	17,600	17,372	17,139	18,139	18,139	100.0%
TAXES	0	488	1,223	603	219	219	100.0%
LDRD / PDRD / SDRD	0	15,643	15,691	16,164	16,592	16,592	100.0%

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**SITE PROFILE**  
**Idaho National Lab-Battelle Energy Alliance**

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**SITE OVERVIEW AND CHARACTERISTIC**

**BACKGROUND**

Battelle Energy Alliance, LLC (BEA) has management responsibilities of the Idaho National Laboratory (INL). The stated goal of the INL contract is to “Work towards the creation of a world-class, multi-disciplinary laboratory focused on nuclear energy and national security research and development.”

The INL functional cost profile is a result of the many factors and characteristics associated with our diverse operational missions. A comprehensive knowledge of site-specific characteristics (missions, diversity and complexity of work, duration of effort, regulatory drivers, geography, etc.) is required to fully understand and draw meaningful conclusions from this data. Some of the factors affecting the INL functional cost profile include:

- INL is a multi-program Federally Funded Research and Development Center laboratory with a diverse customer base. Major customers at INL in FY09 were:
  - Department of Energy - 61.8% (The Office of Nuclear Energy alone is 40%)
  - Department of Defense - 25.6%
  - Other — 12.6%
- The INL occupies 889 square miles with the associated logistics/infrastructure.
- 4079 people were employed at INL at the end of FY 2009. 2,129 employees worked at various ‘site’ (desert) locations approximately 40 to 60 miles from Idaho Falls. 1,950 employees worked in Idaho Falls facilities.
- INL provides various support services to other “on-site” government entities, e.g., the Naval Reactors Facility, other INL contractors, and DOE-ID.
- Examples of operational missions include:
  - Research and Development — The INL is involved in scientific research and development with a focus on nuclear energy and national security.
  - Nuclear Operations — The INL operates the Advanced Test Reactor (ATR) which provides material and fuel test results for the U.S. Navy and produces various isotopes.
  - Manufacturing — the INL produces tank armor for the U.S. Army.
  - INL is one of the largest employers in the state of Idaho.

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**SITE PROFILE**  
**Idaho National Lab-Battelle Energy Alliance**

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**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**HUMAN RESOURCES**

Cost increases associated with the establishment of the Training Service Center.

**PROGRAM/PROJECT CONTROL**

Reclassification of work previously recorded in other functional cost categories.

**MAINTENANCE**

New leases with GAS for light vehicles and busses, establishment of a Fuel Management Service Center, and maintenance for new facilities.

**UTILITIES**

Reduced fuel prices and reclassification of costs.

**TAXES**

Reduced tax payments.

**CAPITAL CONSTRUCTION**

More work.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
iBuy Project	255	The "iBuy" project, a 2009 portal initiative deployed in April 2009 to enhance the laboratory's acquisition interface by leveraging Asset Suite.	
Sunflower Assets	0	The new computer system, Sunflower Assets (SFA) has resulted in the retirement of 3 major outdated computer systems and reduction in costs for computer system support of over \$300K.	

**SITE PROFILE**  
**Idaho National Lab-Battelle Energy Alliance**

Property Distribution Streamlining Initiative	0	The INL has developed and is implementing a property distribution streamlining initiative (PDSI) to systematically improve processes to achieve an optimally efficient and effective system of property distribution. Cost savings to date for this initiative have exceeded \$500K.	
Occupational Medical	0	Occupational Medical closed the WCB Dispensary on the common Fridays beginning Feb. 6 2009 resulting in an estimated cost savings of \$10K	
Information Management	0	Information Management (IM) deployed its Power Management settings to all IM-Managed systems. This deployment involved enabling power management settings (i.e., monitor, hard disk and standby) on 100% of IM-Managed systems, as part of INL's goals for the annual Federal Electronics Challenge (FEC). Meeting this goal benefits the lab by creating a culture that conserves energy and reduces cyber risk.	
Desktop Management	0	Desktop Management has developed and released automated scripts to implement and audit INL Minimum Security Configuration on Linux systems. The result is a 1-2 hour time savings for each system that previously required manual configuration.	
Critical Path Contract	0	The Critical Path contract was renegotiated to lock in maintenance costs. The FY 2009 savings is \$12,131.77. This will also result in continued future savings.	

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**SITE PROFILE**  
**Idaho National Lab-Battelle Energy Alliance**

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<p>Standardizing the latest Dell Optiplex PC system</p>	<p>0</p>	<p>The Desktop Management team completed the process for standardizing on the latest Dell Optiplex PC system. This system is Electronic Product Environmental Assessment Tool (EPEAT) Gold compliant, ensures that INL is keeping up with hardware currency/capability, and was negotiated at a lower price than the previous standard PC system. Performance increases include doubling the memory and faster dual core processor. By saving \$109 per PC, the lab as a whole saved approximately \$109K per year (based on ~1,000 PC purchases per year).</p>	
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**Trends in Total Support Cost by Functional Categories**  
**Idaho National Lab-Bechtel BWXT (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	0	143,776	123,500	129,861	135,285	135,285	100.0%
<b>Capital Construction</b>	0	0	0	0	0	0	0.0%
<b>Total Costs Less Construction</b>	0	143,776	123,500	129,861	135,285	135,285	100.0%
<b>Total Support Costs</b>	<b>0</b>	<b>60,397</b>	<b>51,634</b>	<b>58,597</b>	<b>60,085</b>	<b>60,085</b>	<b>100.0%</b>
<b>Mission Direct Operation</b>	0	83,379	71,866	71,264	75,200	75,200	100.0%
<b>Mission Direct Operation as % of Total Cost</b>	<b>0.0%</b>	<b>58.0%</b>	<b>58.2%</b>	<b>54.9%</b>	<b>55.6%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>0.0%</b>	<b>42.0%</b>	<b>41.8%</b>	<b>45.1%</b>	<b>44.4%</b>		
<b>Total</b>	<b>0.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>0.0%</b>	<b>42.0%</b>	<b>41.8%</b>	<b>45.1%</b>	<b>44.4%</b>		
<b>TOTAL SUPPORT COST</b>	<b>0</b>	<b>60,397</b>	<b>51,634</b>	<b>58,597</b>	<b>60,085</b>	<b>60,085</b>	<b>100.0%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>0.0%</b>	<b>7.0%</b>	<b>11.7%</b>	<b>11.3%</b>	<b>11.0%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>0</b>	<b>10,031</b>	<b>14,461</b>	<b>14,668</b>	<b>14,938</b>	<b>14,938</b>	<b>100.0%</b>
EXECUTIVE DIRECTION	0	978	2,590	2,487	2,653	2,653	100.0%
HUMAN RESOURCES	0	837	1,466	1,550	1,111	1,111	100.0%
CFO	0	982	901	834	924	924	100.0%
PROCUREMENT	0	1,078	1,602	1,653	1,572	1,572	100.0%
LEGAL	0	200	249	236	259	259	100.0%
CENTRAL ADMIN SERVICES	0	884	943	984	1,095	1,095	100.0%
PROGRAM/PROJECT CONTROL	0	740	691	782	939	939	100.0%
INFORMATION OUTREACH	0	143	277	264	274	274	100.0%
INFORMATION SERVICES	0	4,189	5,742	5,878	6,101	6,101	100.0%
OTHER	0	0	0	0	10	10	100.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>0.0%</b>	<b>26.5%</b>	<b>27.8%</b>	<b>25.0%</b>	<b>24.2%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>0</b>	<b>38,064</b>	<b>34,328</b>	<b>32,503</b>	<b>32,732</b>	<b>32,732</b>	<b>100.0%</b>
ENVIRONMENTAL	0	1,526	1,137	1,173	1,101	1,101	100.0%
SAFETY AND HEALTH	0	14,390	18,008	16,323	15,798	15,798	100.0%
FACILITIES MANAGEMENT	0	4,758	2,164	2,740	2,148	2,148	100.0%
MAINTENANCE	0	7,239	6,546	6,318	7,481	7,481	100.0%
UTILITIES	0	416	527	1,498	1,662	1,662	100.0%
SAFEGUARDS AND SECURITY	0	475	502	541	764	764	100.0%
LOGISTICS SUPPORT	0	554	1,464	1,525	1,175	1,175	100.0%
QUALITY ASSURANCE	0	2,550	1,975	1,949	2,216	2,216	100.0%
LABORATORY/TECHNICAL SUPPORT	0	6,156	2,005	436	387	387	100.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>0.0%</b>	<b>8.6%</b>	<b>2.3%</b>	<b>8.8%</b>	<b>9.2%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>0</b>	<b>12,302</b>	<b>2,845</b>	<b>11,426</b>	<b>12,415</b>	<b>12,415</b>	<b>100.0%</b>
MANAGEMENT/INCENTIVE FEE	0	10,855	2,405	10,370	11,371	11,371	100.0%
TAXES	0	1,447	440	1,056	1,044	1,044	100.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

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**SITE PROFILE**  
**Idaho National Lab-Bechtel BWXT**

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**SITE OVERVIEW AND CHARACTERISTIC**

**Background**

The Advanced Mixed Waste Treatment Project is the U.S. Department of Energy's most advanced waste treatment facility and is a cornerstone of DOE's commitment to prepare and ship transuranic (TRU) waste and mixed low-level waste out of Idaho. AMWTP is managed by Bechtel BWXT Idaho. AMWTP has also been identified by DOE to receive, characterize, certify, and treat TRU waste from other DOE sites.

Operations at AMWTP require the retrieval, characterization, treatment and packaging of transuranic waste currently stored at DOE's Idaho site. The project's schedule is aligned with court-mandated milestones in a 1995 Settlement Agreement between the state of Idaho, the U.S. Navy and DOE to remove the waste from Idaho.

AMWTP has a workforce of approximately 823 Bechtel BWXT Idaho employees, supplemented by approximately 51 subcontract employees. Operations take place 24 hours a day, seven days a week, 365 days a year.

AMWTP is located on the Idaho National Laboratory site, approximately 50 miles west of Idaho Falls, Idaho. AMWTP shares the southern fenceline with the Radioactive Waste Management Complex. There are five key functions that define the overall operating mission of AMWTP. These activities take place in 10 main facilities. These operations include:

**Retrieval**

Waste is retrieved from Waste Management Facility-636 where it was originally stored in drums and boxes on asphalt pads under a soil berm that was later enclosed in a metal building. Drums and boxes are systematically removed and taken to characterization.

**Characterization**

Retrieved waste is examined and characterized in Waste Management Facility-634 to determine its contents using testing equipment such as radiography (X-Rays), gamma spectrometry, drum coring, or headspace gas sampling. Based on the waste in the drums or boxes it may be sent to loading facilities for packaging and shipping, or to the Treatment Facility for further processing. Waste awaiting characterization is stored in five Type II storage modules, WMF-629-633.

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**SITE PROFILE**  
**Idaho National Lab-Bechtel BWXT**

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**Treatment Facility**

The Treatment Facility, Waste Management Facility-676, houses a supercompactor and a shredder that reduce the volume of waste. The shredder can reduce boxes to sawdust and metal scrapings, while the supercompactor can compact a 55-gallon drum to roughly one-fifth its original size. Waste from the Treatment Facility, both “pucks” (compacted drums) and waste from the shredder are packaged into lightweight drums that are then placed in overpack containers.

**Payload Assembly**

Waste from the Treatment Facility is taken to Waste Management Facility-635 where it is assembled into shipping payloads. The payloads are placed in overpack containers and loaded into transport vessels called TRUPACTs.

**Shipping**

TRUPACTs are loaded and inspected in Waste Management Facility-618. The TRUPACTs are put through various visual and mechanical inspections by the Idaho State Police before they are shipped by truck. Transuranic waste is taken to the Waste Isolation Pilot Plant in New Mexico. Mixed low level waste is taken to a licensed disposal site outside of Idaho.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**HUMAN RESOURCES**

Less relocation activities and Mercer (actuary) costs.

**PROGRAM/PROJECT CONTROL**

Increased labor associated with this functional cost category.

**OTHER**

Insurance costs.

**FACILITIES MANAGEMENT**

Lease/service costs have been reduced.

**SAFEGUARDS AND SECURITY**

Increase in cyber security costs.

**LOGISTICS SUPPORT**

Reduced travel costs.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

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**SITE PROFILE**  
**Idaho National Lab-Bechtel BWXT**

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<b>INITIATIVE TITLE</b>	<b>AMOUNT SAVED PER YEAR</b>  (\$ in 000's)	<b>DESCRIPTION OF EFFORT</b>	<b>POINT OF CONTACT</b>
Six Sigma Activities	10,950	Continued implementation of Six Sigma activities.	Carl Sellers

**Trends in Total Support Cost by Functional Categories**  
**Idaho National Lab-CH2MWG (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	0	414,375	451,700	415,303	450,070	450,070	100.0%
<b>Capital Construction</b>	0	34,975	68,406	75,510	119,416	119,416	100.0%
<b>Total Costs Less Construction</b>	0	379,400	383,294	339,793	330,654	330,654	100.0%
<b>Total Support Costs</b>	<b>0</b>	<b>160,598</b>	<b>153,728</b>	<b>136,285</b>	<b>130,108</b>	<b>130,108</b>	<b>100.0%</b>
<b>Mission Direct Operation</b>	0	218,802	229,566	203,508	200,546	200,546	100.0%
<b>Mission Direct Operation as % of Total Cost</b>	<b>0.0%</b>	<b>52.8%</b>	<b>50.8%</b>	<b>49.0%</b>	<b>44.6%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>0.0%</b>	<b>8.4%</b>	<b>15.1%</b>	<b>18.2%</b>	<b>26.5%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>0.0%</b>	<b>38.8%</b>	<b>34.0%</b>	<b>32.8%</b>	<b>28.9%</b>		
<b>Total</b>	<b>0.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>0.0%</b>	<b>38.8%</b>	<b>34.0%</b>	<b>32.8%</b>	<b>28.9%</b>		
<b>TOTAL SUPPORT COST</b>	<b>0</b>	<b>160,598</b>	<b>153,728</b>	<b>136,285</b>	<b>130,108</b>	<b>130,108</b>	<b>100.0%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>0.0%</b>	<b>15.0%</b>	<b>9.9%</b>	<b>10.3%</b>	<b>7.8%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>0</b>	<b>62,064</b>	<b>44,713</b>	<b>42,748</b>	<b>35,042</b>	<b>35,042</b>	<b>100.0%</b>
EXECUTIVE DIRECTION	0	1,724	1,888	1,273	1,281	1,281	100.0%
HUMAN RESOURCES	0	2,863	3,464	3,426	3,186	3,186	100.0%
CFO	0	3,610	5,362	3,343	3,196	3,196	100.0%
PROCUREMENT	0	979	1,334	1,046	892	892	100.0%
LEGAL	0	1,553	1,272	1,439	1,148	1,148	100.0%
CENTRAL ADMIN SERVICES	0	9,585	7,581	7,508	4,075	4,075	100.0%
PROGRAM/PROJECT CONTROL	0	16,915	7,433	3,767	5,020	5,020	100.0%
INFORMATION OUTREACH	0	562	652	545	561	561	100.0%
INFORMATION SERVICES	0	10,122	13,164	15,249	13,284	13,284	100.0%
OTHER	0	14,151	2,563	5,152	2,399	2,399	100.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>0.0%</b>	<b>19.0%</b>	<b>19.4%</b>	<b>18.0%</b>	<b>15.6%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>0</b>	<b>78,883</b>	<b>87,741</b>	<b>74,688</b>	<b>70,305</b>	<b>70,305</b>	<b>100.0%</b>
ENVIRONMENTAL	0	8,687	17,896	11,729	12,164	12,164	100.0%
SAFETY AND HEALTH	0	19,502	25,460	20,319	21,325	21,325	100.0%
FACILITIES MANAGEMENT	0	7,168	9,790	8,880	4,492	4,492	100.0%
MAINTENANCE	0	12,838	10,439	11,102	9,885	9,885	100.0%
UTILITIES	0	8,441	8,370	7,707	7,916	7,916	100.0%
SAFEGUARDS AND SECURITY	0	535	285	373	2,650	2,650	100.0%
LOGISTICS SUPPORT	0	6,748	7,467	7,062	5,433	5,433	100.0%
QUALITY ASSURANCE	0	11,528	4,462	4,727	5,698	5,698	100.0%
LABORATORY/TECHNICAL SUPPORT	0	3,436	3,572	2,789	742	742	100.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>0.0%</b>	<b>4.7%</b>	<b>4.7%</b>	<b>4.5%</b>	<b>5.5%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>0</b>	<b>19,651</b>	<b>21,274</b>	<b>18,849</b>	<b>24,761</b>	<b>24,761</b>	<b>100.0%</b>
MANAGEMENT/INCENTIVE FEE	0	17,101	18,773	15,936	20,942	20,942	100.0%
TAXES	0	2,550	2,501	2,913	3,819	3,819	100.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

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**SITE PROFILE**  
**Idaho National Lab-CH2MWG**

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**SITE OVERVIEW AND CHARACTERISTIC**

**BACKGROUND**

CH2M-WG Idaho, LLC (CWI) assumed management of the Idaho Cleanup Project (ICP) and related Idaho National Laboratory (INL) projects on May 1, 2005. The ICP consists of defined environmental nuclear cleanup activities to be completed by September 30, 2012. The American Recovery and Reinvestment Act of 2009 (ARRA) added over \$400M of funding and scope to the CWI contract. ARRA work scope is scheduled for completion by the end of FY 11.

CWI has a FAR based contract with Cost-Plus-Incentive-Fee provisions for the ICP and Cost-Plus-Fixed-Fee provisions for other work performed.

The scope of the ICP and other CWI-performed projects is impacted by the environmental legacy at the INL, the diversity and complexity of the work, defined ARRA work scope, schedule constraints, and regulatory drivers. The CWI Support Costs are therefore significantly impacted by:

- The logistics and infrastructure requirements caused by the location of CWI projects throughout the 889 square mile INL
- Site locations averaging 50 miles from the city of Idaho Falls
- The diverse workforce of Salaried and Union employees
- CWI providing some support services to the entire INL
- Waste cleanup activities for various waste forms (Transuranic Waste, Low-Level Waste, High-Level Waste, Mixed Low-Level Waste, Spent Nuclear Fuel, etc)
- The State of Idaho Settlement Agreement

**TRENDS**

CWI began reporting Support Costs with FY06 data. Prior to FY 06 Support Costs were included in the consolidated INL submittal. Total Functional Support Costs decreased in FY 09 and are now less than 30% of total costs.

General Support — \$7.8 million, 18% Decrease.

- Central Administrative Services costs decreased due to reduced Printing Service Center, copier, and mail service activity as the ICP project matures and the INL site requirements change.
- Program/Project Planning & Control costs increased due to increased construction activity and in support of ARRA.
- Other costs decreased due to fewer layoffs and severance costs.

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**SITE PROFILE**  
**Idaho National Lab-CH2MWG**

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Field Specific — \$6.0 million, 32% Increase

- The ICP provisional award fee increased due to improved project performance.
- Sales and use tax increased due to increased fuel purchases.

Mission Support - \$4.4 million, 6% Decrease

- Facilities Management and Maintenance costs decreased significantly as the ICP footprint decreases due to Decontamination and Decommissioning activities.
- The INTEC Analytical Laboratory was reengineered to support an overall complex wide reduction in sample analysis.

Mission Direct - \$3.0 million, 1% Decrease

- Direct work in risk reduction, demolition of retired facilities, waste management, and regulatory compliance was reduced as planned.

Capital Construction - \$43.9 million, 58% Increase

- The Integrated Waste Treatment Unit project for the eventual processing of sodium bearing waste matured into the full construction phase in FY 09.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**LEGAL**

Lower legal support and lower legal settlements.

**CENTRAL ADMIN SERVICES**

Downsizing of printing, copying, records, and mail activities.

**PROGRAM/PROJECT CONTROL**

Additional work associated with increased construction activities.

**OTHER**

Decreased severance costs.

**FACILITIES MANAGEMENT**

Reduction in space footprint due to D&D activities.

**SAFEGUARDS AND SECURITY**

Reclassification of cyber security costs from another functional cost category.

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**SITE PROFILE**  
**Idaho National Lab-CH2MWG**

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**LOGISTICS SUPPORT**

Decrease in logistics activities due to reduced property footprint.

**QUALITY ASSURANCE**

Increased work due to increased construction activities.

**LABORATORY/TECHNICAL SUPPORT**

Efficiencies were found in operating the Analytical Laboratory.

**MANAGEMENT/INCENTIVE FEE**

Fee increased due to improved contract performance

**TAXES**

Due to increased fuel purchases.

**CAPITAL CONSTRUCTION**

More work.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
RCRA Permit	2,500	Consolidation of the RCRA permit.	Scott Lebow
Maintenance	3,500	Re-engineered maintenance requirements.	Scott Lebow
Work Prioritization	6,300	Changed procedures to allow for winter work which accelerates work activities and allows for reduced long-term infrastructure costs.	Scott Lebow
Information Technology Subcontract	1,300	Optimized use of subcontract support.	Scott Lebow
Physical Security Requirements	400	Re-designing physical security requirements, reducing security guards.	
Water System	500	Re-designing water system needs, reducing maintenance.	
Utility systems	600	Re-engineering maintenance of utility systems.	

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**SITE PROFILE**  
**Idaho National Lab-CH2MWG**

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Communication Systems	300	Optimizing communications system, including fax technology, reducing Information Technology costs.	
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**Trends in Total Support Cost by Functional Categories**  
**Kansas City Plant/Honeywell, FM&T (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	538,395	509,716	501,007	543,813	557,525	19,130	3.6%
<b>Capital Construction</b>	39,207	20,060	10,760	13,207	3,972	-35,235	-89.9%
<b>Total Costs Less Construction</b>	499,188	489,656	490,247	530,606	553,553	54,365	10.9%
<b>Total Support Costs</b>	<b>214,209</b>	<b>208,265</b>	<b>195,657</b>	<b>203,237</b>	<b>220,693</b>	<b>6,484</b>	<b>3.0%</b>
<b>Mission Direct Operation</b>	284,979	281,391	294,590	327,369	332,860	47,881	16.8%
<b>Mission Direct Operation as % of Total Cost</b>	<b>52.9%</b>	<b>55.2%</b>	<b>58.8%</b>	<b>60.2%</b>	<b>59.7%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>7.3%</b>	<b>3.9%</b>	<b>2.1%</b>	<b>2.4%</b>	<b>0.7%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>39.8%</b>	<b>40.9%</b>	<b>39.1%</b>	<b>37.4%</b>	<b>39.6%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>39.8%</b>	<b>40.9%</b>	<b>39.1%</b>	<b>37.4%</b>	<b>39.6%</b>		
<b>TOTAL SUPPORT COST</b>	<b>214,209</b>	<b>208,265</b>	<b>195,657</b>	<b>203,237</b>	<b>220,693</b>	<b>6,484</b>	<b>3.0%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>13.6%</b>	<b>13.5%</b>	<b>13.3%</b>	<b>12.2%</b>	<b>13.5%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>73,135</b>	<b>68,919</b>	<b>66,629</b>	<b>66,560</b>	<b>75,417</b>	<b>2,282</b>	<b>3.1%</b>
EXECUTIVE DIRECTION	6,178	5,065	4,927	5,294	5,920	-258	-4.2%
HUMAN RESOURCES	3,734	3,495	2,967	3,143	3,579	-155	-4.2%
CFO	6,045	6,414	5,415	5,040	6,062	17	0.3%
PROCUREMENT	6,483	7,558	6,877	7,088	8,046	1,563	24.1%
LEGAL	1,135	925	1,343	1,122	604	-531	-46.8%
CENTRAL ADMIN SERVICES	274	288	0	411	507	233	85.0%
PROGRAM/PROJECT CONTROL	8,786	8,688	10,092	11,481	13,815	5,029	57.2%
INFORMATION OUTREACH	4,399	4,742	3,692	2,835	3,009	-1,390	-31.6%
INFORMATION SERVICES	35,690	31,703	29,795	29,885	32,573	-3,117	-8.7%
OTHER	411	41	1,521	261	1,302	891	216.8%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>21.0%</b>	<b>21.5%</b>	<b>19.1%</b>	<b>17.6%</b>	<b>19.2%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>113,319</b>	<b>109,405</b>	<b>95,664</b>	<b>95,581</b>	<b>106,895</b>	<b>-6,424</b>	<b>-5.7%</b>
ENVIRONMENTAL	4,855	4,889	4,524	4,898	5,703	848	17.5%
SAFETY AND HEALTH	5,427	5,131	4,620	3,515	3,240	-2,187	-40.3%
FACILITIES MANAGEMENT	11,715	12,587	10,635	12,172	15,241	3,526	30.1%
MAINTENANCE	43,158	37,573	31,226	29,273	31,018	-12,140	-28.1%
UTILITIES	14,347	14,761	13,217	14,693	14,204	-143	-1.0%
SAFEGUARDS AND SECURITY	11,331	11,516	9,871	9,094	11,250	-81	-0.7%
LOGISTICS SUPPORT	7,951	7,741	8,353	8,185	9,740	1,789	22.5%
QUALITY ASSURANCE	9,463	9,577	9,586	9,587	10,825	1,362	14.4%
LABORATORY/TECHNICAL SUPPORT	5,072	5,630	3,632	4,164	5,674	602	11.9%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>5.2%</b>	<b>5.9%</b>	<b>6.7%</b>	<b>7.6%</b>	<b>6.9%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>27,755</b>	<b>29,941</b>	<b>33,364</b>	<b>41,096</b>	<b>38,381</b>	<b>10,626</b>	<b>38.3%</b>
MANAGEMENT/INCENTIVE FEE	23,866	26,690	29,044	37,419	34,767	10,901	45.7%
TAXES	2,206	2,307	2,487	2,350	2,294	88	4.0%
LDRD / PDRD / SDRD	1,683	944	1,833	1,327	1,320	-363	-21.6%

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**SITE PROFILE**  
**Kansas City Plant/Honeywell, FM&T**

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**SITE OVERVIEW AND CHARACTERISTIC**

The Kansas City Plant (KCP) is operated by Honeywell, Federal Manufacturing & Technologies (FM&T). Our broad array of products and capabilities are closely linked with current and future efforts to ensure the safety and reliability of the stockpile. The plant produces over 85% of the components that constitute a nuclear weapon—more than 1,000 active ship entities for over 40 product families. Approximately 100,000 ship entity pieces are shipped annually. Engineers are responsible for the full spectrum of products and technologies that perform weapon functions from access authorization to delivery of energy to the nuclear explosives package. These products include items such as radars, programmers, reservoirs, joint test assemblies, trajectory sensing signal generators, firesets, and mechanical cases. Other major initiatives the plant supports are: fabrication of telemetry systems to evaluate weapon systems, fabrication of Safeguards Transporters and program activities for the Office of Secure Transportation, and warehousing and shipment of hardware for the Air Force’s ongoing maintenance programs.

The KCP includes property, assets and people located in Missouri, New Mexico and Arkansas. Current employment is approximately 2,600 people. The Kansas City facility resides on 141 acres including grounds and parking lots and currently utilizes approximately 2.9 million square feet of building space (primarily within one manufacturing building). The plant provides utility services to the South Kansas City Federal Complex which includes the plant and General Services Administration (GSA) space leased to other federal agencies. The plant bills GSA for their utilities. In October 1994, the FM&T division assumed responsibility for Kirtland Operations previously operated by EG&G. Kirtland Operations is situated on four separate sites in Albuquerque, New Mexico: 20.2 fenced acres owned by the U.S. Air Force and occupied under permit to the DOE, the Craddock Facility, the Air Park Facility, and the Coyote Canyon Facility. The Kirtland Operation also provides facility support and training for Fort Chaffee, Arkansas, which supports the Office of Secure Transportation, and engineering and technical support for Los Alamos, New Mexico. There are approximately 30,000 items of equipment at the combined facilities.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

CFO

CFO costs are inclusive of 813K attributed to pension cost normalization.

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**SITE PROFILE**  
**Kansas City Plant/Honeywell, FM&T**

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**LEGAL**

Decreases in Executive Legal (\$.6M) are driven by headcount reductions.

**CENTRAL ADMIN SERVICES**

Central Administrative Services costs are inclusive of \$90K attributed to pension cost normalization.

**PROGRAM/PROJECT CONTROL**

There is an offsetting increase in Program / Project Planning of \$2.8M due to an increased emphasis on project management, resulting in a headcount increase for this function over the five year period.

**OTHER**

Other costs are inclusive of 45K attributed to pension cost normalization.

**FACILITIES MANAGEMENT**

The increase in Facilities Management reflects an increase in contracted services to the plant in accordance with the increase in facilities planning services in preparation for support of construction and of relocation to the new facility.

**SAFEGUARDS AND SECURITY**

The increase is attributable to increased plant support for Cyber Security.

**LABORATORY/TECHNICAL SUPPORT**

The increase in Laboratory/Technical Support costs is primarily due to increased costs associated with Lab and Analytical Testing for our reimbursable projects. Headcount for that function has increased along with associated labor costs.

**CAPITAL CONSTRUCTION**

The \$9M decrease from FY2008 reflects the plant's lowered priorities on new capital procurements while remaining in the existing facility.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
(None)			

**Trends in Total Support Cost by Functional Categories**  
**L. Berkeley National Lab/University of California (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	523,738	517,155	512,388	585,063	645,170	121,432	23.2%
<b>Capital Construction</b>	82,227	55,552	42,873	59,889	79,603	-2,624	-3.2%
<b>Total Costs Less Construction</b>	441,511	461,603	469,515	525,174	565,567	124,056	28.1%
<b>Total Support Costs</b>	<b>146,151</b>	<b>151,846</b>	<b>154,920</b>	<b>165,142</b>	<b>181,499</b>	<b>35,348</b>	<b>24.2%</b>
<b>Mission Direct Operation</b>	295,360	309,757	314,595	360,032	384,068	88,708	30.0%
<b>Mission Direct Operation as % of Total Cost</b>	<b>56.4%</b>	<b>59.9%</b>	<b>61.4%</b>	<b>61.5%</b>	<b>59.5%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>15.7%</b>	<b>10.7%</b>	<b>8.4%</b>	<b>10.2%</b>	<b>12.3%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>27.9%</b>	<b>29.4%</b>	<b>30.2%</b>	<b>28.2%</b>	<b>28.1%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>27.9%</b>	<b>29.4%</b>	<b>30.2%</b>	<b>28.2%</b>	<b>28.1%</b>		
<b>TOTAL SUPPORT COST</b>	<b>146,151</b>	<b>151,846</b>	<b>154,920</b>	<b>165,142</b>	<b>181,499</b>	<b>35,348</b>	<b>24.2%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>11.6%</b>	<b>12.1%</b>	<b>12.1%</b>	<b>11.0%</b>	<b>10.6%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>60,715</b>	<b>62,427</b>	<b>62,216</b>	<b>64,390</b>	<b>68,516</b>	<b>7,801</b>	<b>12.8%</b>
EXECUTIVE DIRECTION	8,658	7,586	6,659	7,418	8,182	-476	-5.5%
HUMAN RESOURCES	5,178	4,477	5,248	5,218	5,464	286	5.5%
CFO	7,625	8,537	8,429	9,179	9,934	2,309	30.3%
PROCUREMENT	6,004	5,699	6,753	6,726	7,109	1,105	18.4%
LEGAL	2,407	2,437	2,228	3,076	3,112	705	29.3%
CENTRAL ADMIN SERVICES	4,341	4,325	3,182	3,365	3,910	-431	-9.9%
PROGRAM/PROJECT CONTROL	0	0	0	0	0	0	0.0%
INFORMATION OUTREACH	3,288	3,246	3,502	3,556	3,730	442	13.4%
INFORMATION SERVICES	21,605	23,800	24,125	25,090	26,637	5,032	23.3%
OTHER	1,609	2,320	2,090	762	438	-1,171	-72.8%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>13.5%</b>	<b>14.1%</b>	<b>14.9%</b>	<b>14.2%</b>	<b>14.6%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>70,585</b>	<b>72,837</b>	<b>76,139</b>	<b>83,123</b>	<b>94,463</b>	<b>23,878</b>	<b>33.8%</b>
ENVIRONMENTAL	4,724	4,422	4,291	5,804	6,705	1,981	41.9%
SAFETY AND HEALTH	7,970	8,617	10,409	13,289	15,727	7,757	97.3%
FACILITIES MANAGEMENT	18,225	18,416	17,396	17,429	21,107	2,882	15.8%
MAINTENANCE	17,351	17,849	18,940	20,665	24,086	6,735	38.8%
UTILITIES	6,422	6,134	8,277	8,511	9,435	3,013	46.9%
SAFEGUARDS AND SECURITY	3,486	3,973	3,487	3,823	3,685	199	5.7%
LOGISTICS SUPPORT	4,282	4,397	4,357	5,128	5,852	1,570	36.7%
QUALITY ASSURANCE	368	888	1,198	1,373	1,165	797	216.6%
LABORATORY/TECHNICAL SUPPORT	7,757	8,141	7,784	7,101	6,701	-1,056	-13.6%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>2.8%</b>	<b>3.2%</b>	<b>3.2%</b>	<b>3.0%</b>	<b>2.9%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>14,851</b>	<b>16,582</b>	<b>16,565</b>	<b>17,629</b>	<b>18,520</b>	<b>3,669</b>	<b>24.7%</b>
MANAGEMENT/INCENTIVE FEE	3,695	4,482	6,276	5,915	6,254	2,559	69.3%
TAXES	313	342	271	305	341	28	8.9%
LDRD / PDRD / SDRD	10,843	11,758	10,018	11,409	11,925	1,082	10.0%

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**SITE PROFILE**  
**L. Berkeley National Lab/University of California**

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**SITE OVERVIEW AND CHARACTERISTIC**

**BACKGROUND**

Lawrence Berkeley National Laboratory (LBNL) is a multi-program lab engaged in basic research in a wide variety of scientific disciplines. Major scientific achievements include 11 winners of the Nobel Prize and other world-class, competitive prizes. The Lab's core competencies are in: Sustainable Energy Science and Technology; Nanoscience, Materials Synthesis, and Characterization; Multidisciplinary Biology and Environmental Science; Soft X-Ray and Ultra Fast Science, Photon and Particle Beams including those for National User Facilities; Computational Science and Engineering; Advanced Detector Systems for Astrophysics, High Energy Physics, and Nuclear Science. The Berkeley Lab provides several unique national experimental user facilities for qualified investigators: the Advanced Light Source (ALS); the Molecular Foundry; the Joint Genome Institute; the National Energy Research Scientific Computing Center (NERSC); Energy Sciences Network (ESnet); and the National Center for Electron Microscopy.

LBNL is managed by the University of California and is located in Berkeley, California. LBNL occupies 152 buildings and trailers on 200 acres. It also shares buildings on the UC Berkeley campus. Additional facilities are located in the following places due to space limitations on site: southwest Berkeley, Oakland for the NERSC facility, Emeryville for the Joint BioEnergy Institute, and Walnut Creek for the Joint Genome Institute. In FY 2009, the workforce was approximately 3,900 people, consisting of 58% Career employees, 12% Graduate Student Research Assistants & Student Assistants, 10% Postdoctoral Fellows & Researchers, 6% Faculty, and 13% other.

LBNL's major DOE customer is Office of Science (SC), which accounted for 70% of Mission Direct costs, followed by work for other (Federal and Non-Federal sponsors). Other DOE programs include Energy Efficiency and Renewable Energy (EE), Fossil Energy (FE), Administrator for National Nuclear Security Administration (NA), Office of Electric Transmission & Distribution (TD), Civilian and Radioactive Waste (RW), Environmental, Safety and Health (EH), Nuclear Energy (NE), and Environmental Management (EM).

**TRENDS**

LBNL's Functional Support Costs (FSC) as a percentage of total Site Costs have fluctuated between 28.2% and 30.0% with an average of 29.0% between FY05 and FY09. From FY08 to FY09, total site costs increased by 10.2% while total Functional Support Costs also increased by 10.2%. Explanations for functional support cost categories with major changes (increase/decrease >  $\pm$  20%) are detailed below.

**Major Changes from FY05 to FY09:**

Information Services: Both centralization of ES&H and Facilities IT activities as well as the centralization and standardization of workstations made these activities identifiable and thereby

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**SITE PROFILE**  
**L. Berkeley National Lab/University of California**

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quantifiable in this category.

**Environmental, Safety and Health:** New government regulations for a Worker’s Health and Safety program and for strengthening safety initiatives in compliance with Contract 31 increased the overall Safety and Health cost. A formal DOE Health, Safety, and Security review in FY09 required substantially increased costs in ES&H.

**Maintenance:** LBNL has made a substantial increase in Institutional infrastructure investments. DOE also mandated increased investments through the Deferred Maintenance Reduction (DMR) and Management Investment Index (MII) programs.

**Quality Assurance:** In FY05, as a new contractual requirement between UC and DOE, the Office of Institutional Assurance was created to provide oversight of LBNL’s projects, management systems, and operating processes to ensure that project management practices are consistent with DOE Order 413.3.

**Management Fee:** FY06 was the first full fiscal year for LBNL under Contract 31 with the University of California, which caused an increase in the Management Fee cost. Part of the performance fee was waived in FY06, but is included in FY07 through FY09 which creates another significant increase.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**OTHER**

Decrease due to a reduction in legal liability and a reduction to balance sheet adjustments.

**FACILITIES MANAGEMENT**

\$3.7M cost increase associated with leasing an off-site facility for the Joint BioEnergy Institute.

**CAPITAL CONSTRUCTION**

Increase of \$19.7M related to work on the Advanced Light Source (ALS) User Support Building and Building 74 Seismic Safety phases I and II.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT

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**SITE PROFILE**

**L. Berkeley National Lab/University of California**

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Commodity Buying Process	8,900	In the DOE contract proposal process in FY05, LBNL committed to saving \$30.0M over 5 years by implementing Supply Chain Management. In FY09, the savings for this initiative were \$8.9M from a combination of labor and commodity savings through reengineering the commodity buying process. The cumulative savings since FY05 is \$23.9M.	Lon Freeman
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**Trends in Total Support Cost by Functional Categories**  
**L. Livermore National Lab/University of California (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	1,625,780	1,600,696	1,623,639	1,586,882	1,494,638	-131,142	-8.1%
<b>Capital Construction</b>	116,104	190,081	157,063	60,950	40,887	-75,217	-64.8%
<b>Total Costs Less Construction</b>	1,509,676	1,410,615	1,466,576	1,525,932	1,453,751	-55,925	-3.7%
<b>Total Support Costs</b>	<b>590,685</b>	<b>561,907</b>	<b>585,247</b>	<b>633,505</b>	<b>584,722</b>	<b>-5,963</b>	<b>-1.0%</b>
<b>Mission Direct Operation</b>	918,991	848,708	881,329	892,427	869,029	-49,962	-5.4%
<b>Mission Direct Operation as % of Total Cost</b>	<b>56.5%</b>	<b>53.0%</b>	<b>54.3%</b>	<b>56.2%</b>	<b>58.1%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>7.1%</b>	<b>11.9%</b>	<b>9.7%</b>	<b>3.8%</b>	<b>2.7%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>36.3%</b>	<b>35.1%</b>	<b>36.0%</b>	<b>39.9%</b>	<b>39.1%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>36.3%</b>	<b>35.1%</b>	<b>36.0%</b>	<b>39.9%</b>	<b>39.1%</b>		
<b>TOTAL SUPPORT COST</b>	<b>590,685</b>	<b>561,907</b>	<b>585,247</b>	<b>633,505</b>	<b>584,722</b>	<b>-5,963</b>	<b>-1.0%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>12.0%</b>	<b>12.0%</b>	<b>12.2%</b>	<b>13.3%</b>	<b>13.5%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>194,613</b>	<b>191,783</b>	<b>197,634</b>	<b>210,852</b>	<b>202,242</b>	<b>7,629</b>	<b>3.9%</b>
EXECUTIVE DIRECTION	17,658	18,535	18,517	21,897	19,481	1,823	10.3%
HUMAN RESOURCES	19,382	18,246	19,394	18,865	17,448	-1,934	-10.0%
CFO	7,714	7,964	8,660	11,528	11,816	4,102	53.2%
PROCUREMENT	16,628	15,063	14,800	16,635	18,217	1,589	9.6%
LEGAL	3,166	3,154	3,433	3,670	3,844	678	21.4%
CENTRAL ADMIN SERVICES	22,646	20,453	19,323	22,444	18,566	-4,080	-18.0%
PROGRAM/PROJECT CONTROL	3,320	3,182	5,716	7,509	8,875	5,555	167.3%
INFORMATION OUTREACH	18,178	19,146	20,542	20,113	23,637	5,459	30.0%
INFORMATION SERVICES	80,708	81,714	85,254	82,240	75,606	-5,102	-6.3%
OTHER	5,213	4,326	1,995	5,951	4,752	-461	-8.8%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>20.3%</b>	<b>19.1%</b>	<b>19.9%</b>	<b>19.6%</b>	<b>20.4%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>329,657</b>	<b>305,100</b>	<b>323,833</b>	<b>311,631</b>	<b>304,237</b>	<b>-25,420</b>	<b>-7.7%</b>
ENVIRONMENTAL	23,572	18,250	21,167	15,517	12,103	-11,469	-48.7%
SAFETY AND HEALTH	50,255	55,055	60,370	51,299	59,806	9,551	19.0%
FACILITIES MANAGEMENT	61,882	52,755	61,392	47,978	46,752	-15,130	-24.4%
MAINTENANCE	73,564	51,718	47,613	37,686	36,188	-37,376	-50.8%
UTILITIES	21,403	32,741	34,660	37,344	28,231	6,828	31.9%
SAFEGUARDS AND SECURITY	62,551	59,081	61,399	74,067	80,264	17,713	28.3%
LOGISTICS SUPPORT	9,815	10,244	12,186	9,940	5,933	-3,882	-39.6%
QUALITY ASSURANCE	5,912	6,262	6,954	4,105	3,883	-2,029	-34.3%
LABORATORY/TECHNICAL SUPPORT	20,703	18,994	18,092	33,695	31,077	10,374	50.1%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>4.1%</b>	<b>4.1%</b>	<b>3.9%</b>	<b>7.0%</b>	<b>5.2%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>66,415</b>	<b>65,024</b>	<b>63,780</b>	<b>111,022</b>	<b>78,243</b>	<b>11,828</b>	<b>17.8%</b>
MANAGEMENT/INCENTIVE FEE	13,701	13,888	13,991	54,031	37,738	24,037	175.4%
TAXES	414	263	275	10,348	-6,556	-6,970	-1,683.6%
LDRD / PDRD / SDRD	52,300	50,873	49,514	46,643	47,061	-5,239	-10.0%

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## SITE PROFILE

### L. Livermore National Lab/University of California

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#### SITE OVERVIEW AND CHARACTERISTIC

##### **Background**

Established in 1952, Lawrence Livermore National Laboratory (LLNL) is a government-owned, contractor-operated research and development facility managed and operated by Lawrence Livermore National Security, LLC, for the National Nuclear Security Administration (NNSA) within the United States Department of Energy (DOE). LLNL is responsible for ensuring that the nation's nuclear weapons remain safe, secure, and reliable. Laboratory researchers are tackling the grand challenge of understanding the scientific details of nuclear weapons performance through nonnuclear tests and experimentally validated simulations.

LLNL is also applying its science and engineering capabilities to devise new technologies and approaches for addressing nuclear proliferation and terrorism, energy security and climate change, and other threats to national security and global stability. The Laboratory has a diverse customer base with major efforts for DOE and NNSA program offices, as well as considerable work for other federal and non-federal agencies.

The Laboratory continues to make pioneering advances in high-performance computing. Several of the world's fastest supercomputers are at Livermore, including BlueGene/L (capable of performing 480 teraflops and used for several Gordon Bell Prize-winning calculations) and the 500-teraflops Dawn. Dawn is the initial delivery system of Sequoia, a supercomputer (to arrive in 2011) with an unprecedented 20,000 teraflops performance capability. LLNL is also leading the Hyperion project, a partnership with 10 computing industry leaders to speed the development and reduce the cost of high-performance computing clusters.

The Laboratory met key milestones in 2009 in support of Stockpile Stewardship and NNSA Complex Integration. Most notably, DOE certified completion of the National Ignition Facility (NIF) construction project in March 2009 after NIF had become the first laser to break the megajoule barrier earlier that month. The facility was formally dedicated in May 2009 and NIF experiments are now supporting stockpile stewardship and making significant progress toward achieving fusion ignition and energy gain. In addition, LLNL continues to reduce its inventory of special nuclear material in support of NNSA Complex Transformation consolidation goals. More than two-thirds of the material has been shipped offsite since October 2006.

LLNL's contributions to nonproliferation and homeland security include the development of systems to detect proliferation activities as well as radiation and biological agent detectors for homeland security. For the seventh year in a row, LLNL received at least one "R&D 100 Award" for an important advance in detection technology. Laboratory researchers earned a record high eight such awards in 2009 (and 129 since 1978), which is indicative of LLNL's many other technical accomplishments.

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## SITE PROFILE

### L. Livermore National Lab/University of California

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Other recent LLNL breakthroughs in science and technology include: authorship of the opening chapter in the most comprehensive report to date on the probable national impacts of climate change, first imaging of multiplanet solar system, development of nanowires that can function like nerve cells, and use of laser to produce copious amounts of antimatter, and discovery that new human heart cell continue to develop into adulthood.

As of September 30, 2009, LLNL had 6,429 employees, including all workforce categories except contractors. LLNL's highly educated workforce includes approximately 1,454 doctorates, 953 masters, and 1,449 bachelor degrees. The primary LLNL site is located on one square mile, 40 miles southeast of San Francisco.

#### DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS

##### OTHER

General accounting adjustments. Increased insurance premiums/payments. FY08 included \$5.4M in one-time Involuntary Separation Program (ISP) costs. Environmental Protection Agency fine was coordinated through the Livermore Site Office.

##### ENVIRONMENTAL

Decrease is due primarily to annualized impacts of FY08 staffing reductions and budgetary constraints in Environmental Safety Health & Quality coupled with budget reductions in the area of Waste Sampling Analysis.

##### UTILITIES

Increase is due to the movement into the Maintenance category of costs associated with the maintenance, management, administration, and operation of the high voltage electrical distribution system. This resulted from a change in FY09 to a project accounting based accounting structure. The categorization of these costs will be reviewed going forward.

##### LOGISTICS SUPPORT

The decrease is a result of the annualized impacts of FY08 staffing reductions in the areas of Materials Distribution and Property Management.

##### MANAGEMENT/INCENTIVE FEE

In FY08 DOE required LLNL to accrue the maximum allowable fee of \$53,742K. In FY08 the maximum allowable Management Fee was not earned. In FY09 the unearned portion of the FY08 fee totaling \$16,084K was returned, thereby reducing FY09 costs. This is the primary driver behind the reduction in cost within the Mgmt/Award Fee category.

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**SITE PROFILE**

**L. Livermore National Lab/University of California**

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**TAXES**

In FY08 \$10M was accrued for the Possessory Interest Tax (PIT) liability. In FY09 this accrual subsequently reversed, with \$3.1M being re-accrued. This resulted in a net credit of (\$6.9M) in FY09, a decrease in cost of \$16.9M from FY08.

**CAPITAL CONSTRUCTION**

The reason for the decrease in Mission Specific Capital is due to reduced construction costs, as a result of the completion of the NIF construction project.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
(None)			

**Trends in Total Support Cost by Functional Categories**  
**Los Alamos National Lab/Los Alamos National Sec. (\$000)**  
**FY 2009**

	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>\$ Change 2005 To FY 2009</b>	<b>% Change 2005 To FY 2009</b>
<b>Total Costs</b>	2,104,479	2,147,997	2,052,786	2,081,792	2,183,686	79,207	3.8%
<b>Capital Construction</b>	192,522	176,616	206,823	228,498	222,238	29,716	15.4%
<b>Total Costs Less Construction</b>	1,911,957	1,971,381	1,845,963	1,853,294	1,961,448	49,491	2.6%
<b>Total Support Costs</b>	<b>922,656</b>	<b>948,056</b>	<b>953,641</b>	<b>996,275</b>	<b>1,090,284</b>	<b>167,628</b>	<b>18.2%</b>
<b>Mission Direct Operation</b>	989,301	1,023,325	892,322	857,019	871,164	-118,137	-11.9%
<b>Mission Direct Operation as % of Total Cost</b>	<b>47.0%</b>	<b>47.6%</b>	<b>43.5%</b>	<b>41.2%</b>	<b>39.9%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>9.1%</b>	<b>8.2%</b>	<b>10.1%</b>	<b>11.0%</b>	<b>10.2%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>43.8%</b>	<b>44.1%</b>	<b>46.5%</b>	<b>47.9%</b>	<b>49.9%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>43.8%</b>	<b>44.1%</b>	<b>46.5%</b>	<b>47.9%</b>	<b>49.9%</b>		
<b>TOTAL SUPPORT COST</b>	<b>922,656</b>	<b>948,056</b>	<b>953,641</b>	<b>996,275</b>	<b>1,090,284</b>	<b>167,628</b>	<b>18.2%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>15.0%</b>	<b>14.4%</b>	<b>11.7%</b>	<b>13.4%</b>	<b>13.7%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>315,966</b>	<b>308,872</b>	<b>241,096</b>	<b>279,053</b>	<b>300,003</b>	<b>-15,963</b>	<b>-5.1%</b>
EXECUTIVE DIRECTION	19,489	21,417	10,884	8,083	10,142	-9,347	-48.0%
HUMAN RESOURCES	22,250	22,827	19,193	22,543	22,576	326	1.5%
CFO	14,614	14,740	10,813	16,063	15,712	1,098	7.5%
PROCUREMENT	22,353	18,497	16,938	16,099	21,643	-710	-3.2%
LEGAL	10,857	9,434	8,565	9,653	9,846	-1,011	-9.3%
CENTRAL ADMIN SERVICES	25,967	23,271	27,444	30,925	31,383	5,416	20.9%
PROGRAM/PROJECT CONTROL	17,544	14,096	28,124	26,440	28,657	11,113	63.3%
INFORMATION OUTREACH	18,781	33,516	27,743	27,117	26,820	8,039	42.8%
INFORMATION SERVICES	148,165	146,939	91,392	95,284	127,950	-20,215	-13.6%
OTHER	15,946	4,135	0	26,846	5,274	-10,672	-66.9%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>23.7%</b>	<b>23.5%</b>	<b>23.7%</b>	<b>23.2%</b>	<b>24.3%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>497,897</b>	<b>504,667</b>	<b>486,609</b>	<b>482,827</b>	<b>531,074</b>	<b>33,177</b>	<b>6.7%</b>
ENVIRONMENTAL	27,373	23,132	23,503	19,880	25,998	-1,375	-5.0%
SAFETY AND HEALTH	93,009	80,995	94,495	90,891	97,776	4,767	5.1%
FACILITIES MANAGEMENT	96,693	84,811	76,931	63,662	72,282	-24,411	-25.2%
MAINTENANCE	56,184	74,762	89,882	96,396	97,482	41,298	73.5%
UTILITIES	63,632	65,018	58,568	65,739	44,280	-19,352	-30.4%
SAFEGUARDS AND SECURITY	118,199	118,466	95,093	99,429	98,289	-19,910	-16.8%
LOGISTICS SUPPORT	11,747	11,958	15,112	15,522	13,751	2,004	17.1%
QUALITY ASSURANCE	24,974	38,243	31,115	30,966	34,871	9,897	39.6%
LABORATORY/TECHNICAL SUPPORT	6,086	7,282	1,910	342	46,345	40,259	661.5%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>5.2%</b>	<b>6.3%</b>	<b>11.0%</b>	<b>11.3%</b>	<b>11.9%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>108,793</b>	<b>134,517</b>	<b>225,936</b>	<b>234,395</b>	<b>259,207</b>	<b>150,414</b>	<b>138.3%</b>
MANAGEMENT/INCENTIVE FEE	19,448	32,616	72,035	74,333	86,876	67,428	346.7%
TAXES	0	15,477	76,508	86,482	97,182	97,182	100.0%
LDRD / PDRD / SDRD	89,345	86,424	77,393	73,580	75,149	-14,196	-15.9%

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**SITE PROFILE**  
**Los Alamos National Lab/Los Alamos National Sec.**

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**SITE OVERVIEW AND CHARACTERISTIC**

On July 15, 1945, a Los Alamos physicist threw the switch that detonated the world's first atomic bomb. The resultant explosion ushered in the Atomic Age and established Los Alamos National Laboratory (LANL) as a world-class research institution. Today, the Laboratory is operated by the Los Alamos National Security, LLC (LANS) for the National Nuclear Security Administration of the U.S. Department of Energy.

The Laboratory is one of the world's largest multidisciplinary institutions. The name "Los Alamos National Laboratory" is synonymous with nuclear weapons research and development. However, the Laboratory partners with industry and education to conduct research in a broad array of non-defense programs, including research in energy, biomedical science, computational science, environmental science, and materials science. The Laboratory is home to the "Roadrunner" supercomputer, the world's fastest computer. This computer allows scientists to visualize and predict real phenomena, from the inner workings of nuclear weapons to the course of wildfires, global weather patterns and epidemics. Laboratory personnel work on advanced technologies to meet the needs of the 21<sup>st</sup> century, such as hydrogen fuel cell development, supercomputing, and applied environmental research. Since its creation, the primary responsibility of the Laboratory has been to maintain the effectiveness of the nation's nuclear deterrent, including stewardship of the existing nuclear weapons stockpile, managing nuclear materials, and stemming the proliferation of weapons of mass destruction.

*Location & physical size of the site:* The Laboratory is located in northern New Mexico, approximately 40 miles northwest of Santa Fe, on approximately 38 square miles of mesas and canyons. Twenty of these square miles are considered security areas with limited access. The site consists of 49 separate technical areas, a large central administrative area and many outlying research sites scattered across the mesas and canyons. Nuclear facilities are located at 9 of the 49 technical areas. The Laboratory maintains approximately 1,250 buildings comprising approximately 9.4 million square feet. Connecting the diverse points of this infrastructure are 268 miles of roads, 26 miles of 115-kV and 113 miles of 13.2 kV electrical lines, 58 miles of gas lines, and 90 miles of water lines.

*Number of employees:* The Laboratory is the largest employer in northern New Mexico. At the end of fiscal year 2009 (9/30/09), the laboratory employee roster included 9,663 LANS employees:

Managers	1,269
Scientists / engineers	2,068
Technicians / technical support	1,126
Professional support	3,403
Clerical support	412
Postdoctoral appointees	338
Student appointees	1,047

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**SITE PROFILE**

**Los Alamos National Lab/Los Alamos National Sec.**

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*Number of contractors on site:* The Laboratory employs 916 contractor personnel: a security force of 478 and 438 technical and non-technical contractor employees employed throughout the Laboratory.

*Requirements for housing and cafeterias:* The Laboratory supports one main cafeteria, two satellite cafeterias and a vending truck service for the Laboratory. *Transportation (buses) requirements:* The Laboratory maintains a shuttle service for traveling from work-site to work-site and to carry employees to and from outlying parking areas. *Amount of work subcontracted:* Of the Laboratory's total expenditures of \$2,172M, the Laboratory spent \$951M on subcontracted activities. This subcontracted work falls into the following categories:

Materials	\$101M
Services	\$604M
Plant and Equipment	\$68M
Site Support Services	\$137M
Travel/Miscellaneous	\$41M

*Customer diversity:* The following three types of customers sponsor Laboratory activities (based on 2009 funding):

National Nuclear Security Administration (NNSA)	70%
Department of Energy (DOE) (non-NNSA)	18%
Non-DOE Work for Others (WFO)	12%

*Levels of non-DOE work:* The non-DOE Work for Others portion of the Laboratory's sponsorship is composed of the following categories:

*Federal funding*

Department of Defense	22%
Other Defense-Related	32%
Department of Health and Human Services	6%
Department of Homeland Security	20%
National Aeronautics and Space Administration	4%
Department of State	1%

*Non-federal funding* Universities and Institutions . . . . . 13%

*Other* . . . . . 3%

*Gross Receipt Tax:* As a for-profit company, LANS LLC is required to collect and remit gross receipts taxes directly to the State of New Mexico. Total LANS LLC gross receipts tax costs for FY08 were \$97,200K.

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**SITE PROFILE**  
**Los Alamos National Lab/Los Alamos National Sec.**

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**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**EXECUTIVE DIRECTION**

Increased spending for materials and services to support the LANS,LLC. Company office and minor staff cost increases in the Director's and Principle Associate Directors' offices.

**PROCUREMENT**

Increased spending to support the CMR Replacement project procurements, to absorb former KSL procurement staff, and to bolster contract audit and contract closeout functions.

**INFORMATION SERVICES**

The majority of the increase was due to the consolidation of information services related service center activities into this category. Other factors are increase of staff costs associated with the formation of the Chief Information Office and the increase in materials and services related to projects to bolster the lab's information infrastructure.

**OTHER**

The FY 2008 costs associated with severance payments and related fringe costs made to the 431 employees in the voluntary workforce reduction program.

**ENVIRONMENTAL**

In order to better comply with DOE guidance, LANL changed its methodology of including service center costs to the recipient category and beginning in FY09, will report service center costs in the appropriate general or mission support category.

**UTILITIES**

Costs of utilities commodities and power generation sharply decreased in FY09.

**LABORATORY/TECHNICAL SUPPORT**

Change in reporting treatment program recharge (service centers) is the primary driver for the cost increase. All laboratory charges for materials handling, processing and machining and other technical services (formerly captured in recipient programs) are now captured in this category.

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**SITE PROFILE**

**Los Alamos National Lab/Los Alamos National Sec.**

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**CAPITAL CONSTRUCTION**

The overall level of spending on capital equipment and construction projects were very stable between FY08 and FY09. However, two one-time events drove the reported decrease: (1) recategorization of service center costs for reporting purposes, and (2) prior year cost corrections to the CMR replacement project.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

<b>INITIATIVE TITLE</b>	<b>AMOUNT SAVED PER YEAR</b>  (\$ in 000's)	<b>DESCRIPTION OF EFFORT</b>	<b>POINT OF CONTACT</b>
(None)			

**Trends in Total Support Cost by Functional Categories**  
**National Renewable Energy Lab/Midwest Research (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	209,985	195,604	201,390	248,266	339,091	129,106	61.5%
<b>Capital Construction</b>	14,314	18,117	9,955	18,940	66,369	52,055	363.7%
<b>Total Costs Less Construction</b>	195,671	177,487	191,435	229,326	272,722	77,051	39.4%
<b>Total Support Costs</b>	<b>59,824</b>	<b>62,778</b>	<b>70,399</b>	<b>81,840</b>	<b>103,631</b>	<b>43,807</b>	<b>73.2%</b>
<b>Mission Direct Operation</b>	135,847	114,709	121,036	147,486	169,091	33,244	24.5%
<b>Mission Direct Operation as % of Total Cost</b>	<b>64.7%</b>	<b>58.6%</b>	<b>60.1%</b>	<b>59.4%</b>	<b>49.9%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>6.8%</b>	<b>9.3%</b>	<b>4.9%</b>	<b>7.6%</b>	<b>19.6%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>28.5%</b>	<b>32.1%</b>	<b>35.0%</b>	<b>33.0%</b>	<b>30.6%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>28.5%</b>	<b>32.1%</b>	<b>35.0%</b>	<b>33.0%</b>	<b>30.6%</b>		
<b>TOTAL SUPPORT COST</b>	<b>59,824</b>	<b>62,778</b>	<b>70,399</b>	<b>81,840</b>	<b>103,631</b>	<b>43,807</b>	<b>73.2%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>18.5%</b>	<b>20.7%</b>	<b>20.9%</b>	<b>19.9%</b>	<b>18.2%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>38,797</b>	<b>40,453</b>	<b>42,041</b>	<b>49,293</b>	<b>61,802</b>	<b>23,005</b>	<b>59.3%</b>
EXECUTIVE DIRECTION	4,495	5,565	5,382	4,889	7,327	2,832	63.0%
HUMAN RESOURCES	1,969	1,976	3,245	4,434	6,046	4,077	207.1%
CFO	2,380	2,396	3,254	3,592	3,826	1,446	60.8%
PROCUREMENT	2,892	2,591	2,662	3,533	4,088	1,196	41.4%
LEGAL	1,513	1,568	1,917	2,178	2,074	561	37.1%
CENTRAL ADMIN SERVICES	2,551	2,390	2,111	2,605	2,942	391	15.3%
PROGRAM/PROJECT CONTROL	1,380	1,499	931	901	991	-389	-28.2%
INFORMATION OUTREACH	11,290	10,772	12,075	13,902	16,272	4,982	44.1%
INFORMATION SERVICES	8,226	9,609	10,336	13,124	18,236	10,010	121.7%
OTHER	2,101	2,087	128	135	0	-2,101	-100.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>7.4%</b>	<b>8.6%</b>	<b>10.4%</b>	<b>9.5%</b>	<b>9.3%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>15,567</b>	<b>16,890</b>	<b>20,912</b>	<b>23,584</b>	<b>31,385</b>	<b>15,818</b>	<b>101.6%</b>
ENVIRONMENTAL	41	417	50	38	245	204	497.6%
SAFETY AND HEALTH	1,230	1,915	2,315	2,845	4,088	2,858	232.4%
FACILITIES MANAGEMENT	6,980	6,764	9,840	10,249	15,137	8,157	116.9%
MAINTENANCE	3,047	2,794	2,726	3,298	3,714	667	21.9%
UTILITIES	1,524	1,934	1,920	2,487	2,082	558	36.6%
SAFEGUARDS AND SECURITY	1,246	1,420	2,444	2,646	2,972	1,726	138.5%
LOGISTICS SUPPORT	538	886	852	1,092	1,252	714	132.7%
QUALITY ASSURANCE	715	504	580	588	1,370	655	91.6%
LABORATORY/TECHNICAL SUPPORT	246	256	185	341	525	279	113.4%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>2.6%</b>	<b>2.8%</b>	<b>3.7%</b>	<b>3.6%</b>	<b>3.1%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>5,460</b>	<b>5,435</b>	<b>7,446</b>	<b>8,963</b>	<b>10,444</b>	<b>4,984</b>	<b>91.3%</b>
MANAGEMENT/INCENTIVE FEE	5,460	5,435	5,418	5,856	7,014	1,554	28.5%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	0	0	2,028	3,107	3,430	3,430	100.0%

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**SITE PROFILE**  
**National Renewable Energy Lab/Midwest Research**

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**SITE OVERVIEW AND CHARACTERISTIC**

The National Renewable Energy Laboratory is a single program laboratory dedicated to supporting renewable energy and energy efficiency technologies. On October 1, 2008, under a new contract with the U.S. Department of Energy, the Alliance for Sustainable Energy, LLC became the managing and operating contractor for NREL. The majority of NREL's facilities are located on two DOE-owned sites. The South Table Mountain site, in the metropolitan area of Denver, is the primary research site, with 136 acres of buildable land and 404,242 gross square feet (gsf) of facilities used for basic science and for biomass, solar energy, hydrogen, buildings, and vehicle R&D. The National Wind Technology Center site is 20 miles north, with 307 acres and 56,084 gsf of facilities used for research and testing of wind energy, distributed electrical generation, and grid interconnection and control. NREL has leased buildings near the South Table Mountain site, with 382,658 gsf of facilities for both administrative and research activities and a leased facility in Denver for testing heavy-duty vehicles and alternative fuels.

To help achieve the mission of the laboratory by expanding technical capabilities and enhancing NREL's overall work environment, NREL has multiple major construction projects underway concurrently. Among these projects are the highly energy efficient, LEED Platinum Research Support Facility (RSF) I and the Integrated Biorefinery Research Facility (IBRF). To accommodate the new buildings and prepare for further campus expansion, NREL will continue infrastructure upgrades to the South Table Mountain site.

NREL has achieved "carbon neutrality" since 2006. This goal was achieved through cost-effective energy retrofits, substantially increasing on-site renewable energy use, requiring all new construction to achieve at least a LEED gold rating, and continued purchase of renewable energy certificates that totally offset the laboratory's carbon footprint.

NREL had 1,435 employees and a total staff of 1,845 on site at all its locations at fiscal year end. NREL's unprecedented growth of more than 35% this year demanded creative solutions to the laboratory's staffing needs. During the year, the laboratory welcomed more than 300 new employees to the NREL team. Among these new employees were several critical hires that will expand NREL's capabilities in renewable electricity and fuels.

NREL provides expertise across the continuum of research, development, and demonstration and supports implementation strategies to accelerate market adoption. These efforts are underpinned by highly effective program management, yielding significant outcomes that advance the nation's energy goals. In FY 2009 NREL received 92% of its total funding from EERE, the laboratory's steward and primary sponsor. Work with DOE's Office of Science (4% of funding) promotes fundamental research in areas that will lead to breakthrough technologies and scientific advances in energy efficiency and renewable energy. Additional funding came from the DOE Office of Electricity

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## SITE PROFILE

### National Renewable Energy Lab/Midwest Research

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Delivery and Energy Reliability and other offices. Technology Partnership Agreements with non-DOE sponsors represent 4% of the laboratory's total budget. In partnership with EERE, NREL supports 12 programs by conducting research and development to advance renewable energy and energy efficiency technologies, providing technical assistance to support the application of technologies, and conducting strategic analyses to inform portfolio planning, research directions, and policy formulation. The Laboratory also received a significant increase in funding for construction, which indicates the nation's commitment to further developing NREL as a national resource.

NREL's world-class R&D staff and facilities are recognized and valued by industry, as demonstrated through hundreds of collaborative research projects and licensed technologies with public and private partners. This is accomplished through vehicles such as Memorandums of Understanding, Technology Partnership Agreements, and licenses that promote the transfer of the knowledge and technologies produced at NREL. Through these partnerships, DOE's return on investment is realized as the knowledge created is put to use in relevant markets and sectors locally, nationally, and internationally. Through cost-sharing partnerships, NREL also leverages the dollars invested at the Laboratory in support of the DOE mission.

The knowledge, innovation, and creativity of our research and technical staff has enabled NREL to become recognized as the nation's premier laboratory for R&D in renewable energy and energy efficiency. Throughout the years, many of our staff have received awards and honors for their contributions and their dedication to their sciences and technologies. In FY09, NREL has been recognized for the following accomplishments:

- **R&D 100 Award** for the Ultra-Accelerated Weathering System (UAWS) - a multifaceted ultraviolet solar concentrator used to speed up the exposure of coatings, paints, and other materials to determine their durability and resistance to weathering. Industry applications include coatings used for solar panels while other uses for the UAWS include paints or finishes used on homes, cars or even bridges. The UAWS provides test results 12 times faster than other accelerated weathering systems and can replicate years of sun damage in just a few weeks. NREL shares this award with Atlas Material Testing Technology and the Institute of Laser Optical Technology.
- **R&D 100 Award** for the SkyTrough™ Parabolic Trough Solar Concentrating Collector - which uses a reflector material developed by NREL and its collaborative research partner, SkyFuel, to create a ground-breaking and low-cost system for utility-sized power generation. The SkyTrough™ uses ReflecTech® Mirror Film, a glass-free, slide-in mirror that is lightweight and weather proof. This innovation coupled with improvements to items like the hydraulic-based rotational system and the sun-tracking controller enables SkyTrough™ to reduce the installed cost by 35 percent and substantially improves the financial return to investors. This reduction to the price barriers brings the installation costs into competition with gas-fired power plants. NREL shares this award with SkyFuel, Inc.

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**SITE PROFILE**  
**National Renewable Energy Lab/Midwest Research**

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- **R&D 100 Award** for the PowerPlane UX Microbattery - a safe, rechargeable, deep-cycle, thin-film lithium microbattery. Its ideal applications are remote wireless sensors, smart homes, smart cars and medical sensing devices. Unlike traditional batteries, the PowerPlane UX Microbattery has a long life cycle even if it is frequently and fully discharged. It uses a solid glass electrolyte–lithium phosphorus oxynitride (LiPON)–to give the battery its longer cycle life. NREL developed the buried-anode architecture used in the microbattery. This innovation involves lithium being intercalated, or chemically trapped within, the cathode layer. The battery also is tolerant of high temperatures. NREL shares this award with Planar Energy Devices.
- **Governor’s Award for Research Impact in Renewable Energy**- awarded to NREL for its contributions to thin films photovoltaics. NREL was recognized by CO-LABS, a nonprofit organization that educates about and advocates for Colorado’s 24 federal research labs.
- **2009 Award for Excellence in Technology Transfer** by the Federal Laboratory Consortium for Technology Transfer for the Inverted Metamorphic Multijunction (IMM) Solar Cell.

NREL’s mission and strategy are focused on advancing the U.S. Department of Energy’s and our nation’s energy goals. The laboratory’s scientists and researchers support critical market objectives to accelerate research from scientific innovations to market-viable alternative energy solutions. As national commitment to transform the energy system increases, so do expectations of NREL’s contribution and impact. In order to meet these expectations and have a material impact on the nation’s energy challenges, the laboratory’s strategic roadmap is focused on:

- **Implementing Renewables at the Gigawatts Scale** — Reducing the cost of renewable electricity, increasing performance and reliability, improving dispatchability of renewables and ensure reliable operation of utility-scale and distributed energy systems.
- **Displacement of Petroleum-Based Fuels** — Reducing cellulosic ethanol cost and other advancing other cost-effective biofuels, ensuring life cycle sustainability of biofuels, improving fuels infrastructure, addressing demand and utilization.
- **Reducing Energy Demand of Buildings, Vehicles, and Industry** — Providing the technical foundation for model building codes, reducing the cost of, and increasing performance and reliability of new energy efficient technologies, and providing the tools to enable integration of technologies in cost-effective net zero energy buildings.

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**SITE PROFILE**  
**National Renewable Energy Lab/Midwest Research**

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**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**EXECUTIVE DIRECTION**

Costs increased by \$2,438K due to the new Alliance organizational structure which increased the overall management of the laboratory to position Alliance for growth and due to overall laboratory growth.

**HUMAN RESOURCES**

Costs increased by \$1,612K due to an increase in staffing support in HR and an increase in relocation costs both due to overall laboratory growth.

**INFORMATION SERVICES**

Costs increased by \$5,112K. These increases were due to laboratory growth which required additional infrastructure in new leased facilities and additional staff and contractors to support the accelerated growth at the laboratory.

**OTHER**

Costs decreased by \$135K due to reclassification of Fellows to Executive Direction as requested by the FY08 SCFA peer review team.

**ENVIRONMENTAL**

Costs increased by \$207K due to the growth of the sustainability program at the laboratory.

**SAFETY AND HEALTH**

Safety and Health costs increased by \$1,243K. New safety and health professionals were added during FY09 to support the increased requirements due to laboratory growth and construction projects.

**FACILITIES MANAGEMENT**

Costs increased by \$4,888K due to the addition of Site Operations personnel, the addition of leased space, the reconfiguration of existing leased space and the purchase and installation of furniture for new leased space and due to overall laboratory growth.

**QUALITY ASSURANCE**

Costs increased by \$782K due accelerated growth of the laboratory. It has become necessary to reengineer existing processes and develop supporting Quality Management Systems. This need has resulted in growth for this Office.

**LABORATORY/TECHNICAL SUPPORT**

Costs increased by \$184K for Machine Shop services due an increase in work.

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**SITE PROFILE****National Renewable Energy Lab/Midwest Research**

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**CAPITAL CONSTRUCTION**

Costs increased by \$47,429K due to construction costs on the Research Support Facility and the Integrated Biorefinery Facility. There were several General Plant Projects including the South Table Mountain site access, the Turbine Infrastructure project and the Outdoor Test Facility Field Array Repairs that drove the increase in this category.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

<b>INITIATIVE TITLE</b>	<b>AMOUNT SAVED PER YEAR</b>  (\$ in 000's)	<b>DESCRIPTION OF EFFORT</b>	<b>POINT OF CONTACT</b>
Energy Savings Performance Contract	67	Helped initiate four utility energy services contracts leveraging a \$15M investment and providing \$23M in life cycle cost savings.	Barbara Stokes

**Trends in Total Support Cost by Functional Categories**  
**Naval Nuclear Propulsion Program/Bechtel (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	784,200	725,700	725,000	740,200	788,243	4,043	0.5%
<b>Capital Construction</b>	48,800	49,900	53,400	54,200	42,507	-6,293	-12.9%
<b>Total Costs Less Construction</b>	735,400	675,800	671,600	686,000	745,736	10,336	1.4%
<b>Total Support Costs</b>	<b>188,800</b>	<b>196,600</b>	<b>189,600</b>	<b>204,700</b>	<b>218,100</b>	<b>29,300</b>	<b>15.5%</b>
<b>Mission Direct Operation</b>	546,600	479,200	482,000	481,300	527,636	-18,964	-3.5%
<b>Mission Direct Operation as % of Total Cost</b>	<b>69.7%</b>	<b>66.0%</b>	<b>66.5%</b>	<b>65.0%</b>	<b>66.9%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>6.2%</b>	<b>6.9%</b>	<b>7.4%</b>	<b>7.3%</b>	<b>5.4%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>24.1%</b>	<b>27.1%</b>	<b>26.2%</b>	<b>27.7%</b>	<b>27.7%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>24.1%</b>	<b>27.1%</b>	<b>26.2%</b>	<b>27.7%</b>	<b>27.7%</b>		
<b>TOTAL SUPPORT COST</b>	<b>188,800</b>	<b>196,600</b>	<b>189,600</b>	<b>204,700</b>	<b>218,100</b>	<b>29,300</b>	<b>15.5%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>8.4%</b>	<b>10.0%</b>	<b>7.6%</b>	<b>8.4%</b>	<b>8.4%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>65,800</b>	<b>72,500</b>	<b>55,100</b>	<b>62,300</b>	<b>66,300</b>	<b>500</b>	<b>0.8%</b>
EXECUTIVE DIRECTION	7,100	6,800	6,600	7,200	7,300	200	2.8%
HUMAN RESOURCES	12,000	11,100	10,300	10,900	11,100	-900	-7.5%
CFO	5,400	5,400	5,200	5,300	5,300	-100	-1.9%
PROCUREMENT	4,800	4,300	4,200	4,300	4,200	-600	-12.5%
LEGAL	500	400	500	1,200	500	0	0.0%
CENTRAL ADMIN SERVICES	2,700	2,200	2,600	3,500	3,100	400	14.8%
PROGRAM/PROJECT CONTROL	1,400	2,600	2,200	2,900	2,600	1,200	85.7%
INFORMATION OUTREACH	0	0	0	0	0	0	0.0%
INFORMATION SERVICES	27,200	24,900	25,700	27,000	24,100	-3,100	-11.4%
OTHER	4,700	14,800	-2,200	0	8,100	3,400	72.3%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>14.1%</b>	<b>15.5%</b>	<b>16.9%</b>	<b>17.7%</b>	<b>17.7%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>110,800</b>	<b>112,600</b>	<b>122,800</b>	<b>130,700</b>	<b>139,600</b>	<b>28,800</b>	<b>26.0%</b>
ENVIRONMENTAL	14,200	14,200	13,200	13,300	12,500	-1,700	-12.0%
SAFETY AND HEALTH	30,800	30,700	27,500	28,500	30,800	0	0.0%
FACILITIES MANAGEMENT	7,300	6,800	9,300	10,100	11,400	4,100	56.2%
MAINTENANCE	22,900	20,800	35,300	38,500	43,500	20,600	90.0%
UTILITIES	5,800	7,200	7,400	9,700	9,400	3,600	62.1%
SAFEGUARDS AND SECURITY	17,200	16,800	17,400	17,300	18,100	900	5.2%
LOGISTICS SUPPORT	4,900	5,700	6,000	6,300	6,500	1,600	32.7%
QUALITY ASSURANCE	7,700	10,400	6,700	7,000	7,400	-300	-3.9%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>1.6%</b>	<b>1.6%</b>	<b>1.6%</b>	<b>1.6%</b>	<b>1.5%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>12,200</b>	<b>11,500</b>	<b>11,700</b>	<b>11,700</b>	<b>12,200</b>	<b>0</b>	<b>0.0%</b>
MANAGEMENT/INCENTIVE FEE	10,100	9,700	10,000	10,000	10,600	500	5.0%
TAXES	2,100	1,800	1,700	1,700	1,600	-500	-23.8%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

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**SITE PROFILE**  
**Naval Nuclear Propulsion Program/Bechtel**

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**SITE OVERVIEW AND CHARACTERISTIC**

**GENERAL DESCRIPTION OF BECHTEL MARINE PROPULSION CORPORATION**

The Bechtel Marine Propulsion Corporation (BMPC), a subsidiary of Bechtel National, Inc. (BNI), is operated for the Naval Nuclear Propulsion Program (NNPP), a joint United States Navy-Department of Energy (DOE) organization. BMPC is comprised of Knolls Atomic Power Laboratory (KAPL) and Bettis Laboratory. Both labs are research and development laboratories and they both support the NNPP through development of advanced reactor plant designs, while providing design agency support of the operating fleet and training to nuclear propulsion plant operating personnel.

Bettis Laboratory is located in the Borough of West Mifflin, Pennsylvania, approximately 7.5 miles southeast of Pittsburgh, Pennsylvania. The Laboratory is situated on approximately 208 acres of land. All land and buildings on the site are the property of the Federal government. As part of the Bettis Laboratory, BMPC also operates the Bettis-Idaho Facility located in Idaho Falls, Idaho. The Bettis-Idaho Facility examines Naval spent nuclear fuel and irradiated test specimens. The information derived from these examinations is used to develop new technology and to improve the cost-effectiveness of existing designs.

Similarly, KAPL has two major sites, one in Niskayuna, NY and one in West Milton, NY. The Knolls Site in Niskayuna and the Kesselring Site in West Milton are situated on approximately 170 and 3,900 acres of land, respectively. Kesselring Site Operations focuses on achieving KAPL's mission of training sailors.

Bettis and KAPL field personnel also operate out of shipyards and vendor plants in Maine/New Hampshire, Connecticut, Virginia, Hawaii, Georgia, California, Washington State, and Tennessee. Bettis currently employs approximately 3,500 people at all of its sites. KAPL currently employs approximately 2,600 people at all of its sites.

**Brief Explanation of Bettis History**

The present site of the Bettis Laboratory was originally developed as Pittsburgh's first airfield. The Pittsburgh-McKeesport Airdrome opened there in August of 1925. A year later, the Airdrome was renamed Bettis Airfield in honor of Lieutenant Cyrus Bettis, a famous aviator who died in a plane crash in central Pennsylvania. In 1940, most commercial traffic moved to the nearby Allegheny County Airport because the Bettis Airfield could not handle the increasingly larger, modern aircraft. Private aviators used the field until 1948.

The newly-formed Westinghouse Atomic Power Division bought the Airfield tract early in 1949 and purchased adjacent properties in 1952. The land was acquired according to a contract between Westinghouse and the Atomic Energy Commission (AEC) whereby Westinghouse was assigned certain responsibilities for engineering, design, procurement, and construction work on the prototype of the first

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## SITE PROFILE

### Naval Nuclear Propulsion Program/Bechtel

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naval nuclear propulsion plant. Later, in 1957, the AEC (now DOE) exercised its contractual option to purchase the site and has held title since then. Bechtel National, Inc. (BNI) replaced Westinghouse Electric Company as the operating contractor on February 1, 1999. In February 2009, Bechtel Marine Propulsion Corporation (BMPC), a wholly owned subsidiary of BNI, began operating the Bettis Laboratory and the Knolls Atomic Power Laboratory.

The site evolved into a large-scale development, engineering, and design facility. The initial efforts of Bettis led to the development of the power plant for USS NAUTILUS, the world's first nuclear-powered submarine.

Since USS NAUTILUS, Bettis has worked on many aspects of the development of the nuclear navy. Advanced technology for submarine and surface ship nuclear propulsion plants has constituted a major portion of the work program. Bettis' work on the prototype nuclear propulsion plant for a surface ship, and successful operation of the prototype at the Naval Reactors Facility in Idaho Falls, Idaho, led to the development of the first nuclear-powered surface ship, the cruiser USS LONG BEACH, and the first nuclear-powered aircraft carrier, USS ENTERPRISE. Bettis currently provides design and engineering support for many of the Navy's operating propulsion plants including the propulsion plants in the NIMITZ class aircraft carriers and in the SEAWOLF class of attack submarines and is developing new technologies and designs for the Navy's future ships including the VIRGINIA class of submarines and the GERALD R FORD class aircraft carriers.

Bettis has also played a role in the development of land-based nuclear reactor plants. Under DOE's office of Naval Reactors (NR), Bettis worked on the design and development of the first United States full-scale nuclear power plant for civilian use, the Shippingport Atomic Power Station. Shippingport was also the site of the first Light Water Breeder Reactor (LWBR) which was placed into operation in 1977 and operated until October 1982. This advanced reactor system was developed to improve significantly the utilization of fuel in light water reactors. The technology developed for the Shippingport program has been made available to industry for commercial application.

The broad spectrum of Bettis' activities has included work on core and component technology and design, thermal and hydraulic systems, materials, nuclear physics design, and training of naval personnel.

#### **Brief Explanation of KAPL History**

KAPL was originally operated by the General Electric (GE) Company. GE received its initial contract to establish KAPL from the Manhattan Engineering District in May of 1946. KAPL's mission was shifted completely to Naval nuclear propulsion by the mid-1950s. KAPL's initial efforts for the Navy were spent developing a nuclear reactor small enough to operate inside a submarine. The ex-SEA Wolf (SSN 575), which was launched in 1955, represented the first KAPL-designed reactor plant. Subsequently, KAPL designed reactors for TRITON (SSN 586), NARWHAL (SSN 671) and the research submarine NR-1. KAPL has also designed reactors for BAINBRIDGE (CGN 25) and TRUXTON (CGN 35) cruisers, the LOS ANGELES Class and VIRGINIA Class attack submarines and OHIO Class ballistic missile submarines. In 1993, responsibility for the operation of KAPL was transferred to KAPL, Inc., a subsidiary of Martin Marietta. In 1996, KAPL, Inc. became a Lockheed

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**SITE PROFILE**  
**Naval Nuclear Propulsion Program/Bechtel**

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Martin company. In February 2009, Bechtel Marine Propulsion Corporation (BMPC), a wholly owned subsidiary of BNI, began operating the Bettis Laboratory and the Knolls Atomic Power Laboratory.

KAPL currently maintains, supports and enhances the mission capability of LOS ANGELES and VIRGINIA Class attack submarines and OHIO Class ballistic missile submarines. KAPL also supports Electric Boat and Northrop Grumman Newport News in the test and construction of additional VIRGINIA Class submarines and provides design and engineering support for the future CVN 21 Class aircraft carriers.

KAPL's efforts focus on designing the world's most technologically advanced nuclear reactor plants for the U.S. Naval Nuclear Propulsion Program. Fundamental research is conducted to develop improved materials and components for naval nuclear propulsion technology.

KAPL uses its theoretical knowledge, sophisticated testing capabilities and computational power to design new reactor and propulsion systems and components that will be used on existing and future Navy surface ships and submarines. Some additional areas KAPL focuses on are Brayton cycle evaluations and electric drive propulsion.

In addition, KAPL operates two prototype plants located at the Kesselring Site in West Milton, NY. The MARF and S8G prototypes commenced operation in 1976 and 1979, respectively, and are used to test reactors, reactor plant systems, and steam and electric plant components. The MARF and S8G prototypes are also used for training of U.S. Navy personnel as Naval nuclear propulsion plant operators. Two other prototypes were located at the site; the S3G prototype, which has been completely removed, and the D1G prototype, which is currently undergoing inactivation. S3G and D1G, which started operation in 1958 and 1962, respectively, were operated for training and testing until their missions were completed in the 1990s. At that time, the plants were shut down and inactivation was started as part of Naval Reactors' continuing commitment to ensure proper dismantlement and environmental remediation of formerly used facilities.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**OTHER**

Reflects extraordinary pension payments.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

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**SITE PROFILE**  
**Naval Nuclear Propulsion Program/Bechtel**

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<b>INITIATIVE TITLE</b>	<b>AMOUNT SAVED PER YEAR</b>  (\$ in 000's)	<b>DESCRIPTION OF EFFORT</b>	<b>POINT OF CONTACT</b>
(None)			

**Trends in Total Support Cost by Functional Categories**  
**Nevada/National Securities Tech & Bechtel (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	617,831	632,638	653,275	619,110	661,888	44,057	7.1%
<b>Capital Construction</b>	23,944	25,069	31,145	29,089	14,308	-9,636	-40.2%
<b>Total Costs Less Construction</b>	593,887	607,569	622,130	590,021	647,580	53,693	9.0%
<b>Total Support Costs</b>	<b>238,792</b>	<b>269,893</b>	<b>295,264</b>	<b>282,285</b>	<b>290,673</b>	<b>51,881</b>	<b>21.7%</b>
<b>Mission Direct Operation</b>	355,095	337,676	326,866	307,736	356,907	1,812	0.5%
<b>Mission Direct Operation as % of Total Cost</b>	<b>57.5%</b>	<b>53.4%</b>	<b>50.0%</b>	<b>49.7%</b>	<b>53.9%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>3.9%</b>	<b>4.0%</b>	<b>4.8%</b>	<b>4.7%</b>	<b>2.2%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>38.7%</b>	<b>42.7%</b>	<b>45.2%</b>	<b>45.6%</b>	<b>43.9%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>38.7%</b>	<b>42.7%</b>	<b>45.2%</b>	<b>45.6%</b>	<b>43.9%</b>		
<b>TOTAL SUPPORT COST</b>	<b>238,792</b>	<b>269,893</b>	<b>295,264</b>	<b>282,285</b>	<b>290,673</b>	<b>51,881</b>	<b>21.7%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>10.5%</b>	<b>9.4%</b>	<b>8.8%</b>	<b>9.3%</b>	<b>8.9%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>64,719</b>	<b>59,613</b>	<b>57,520</b>	<b>57,867</b>	<b>59,151</b>	<b>-5,568</b>	<b>-8.6%</b>
EXECUTIVE DIRECTION	4,594	2,726	2,823	2,381	2,483	-2,111	-46.0%
HUMAN RESOURCES	4,357	4,462	4,647	4,732	5,543	1,186	27.2%
CFO	4,851	4,769	4,946	4,985	5,319	468	9.6%
PROCUREMENT	4,297	3,534	3,137	3,191	3,543	-754	-17.5%
LEGAL	982	751	948	884	890	-92	-9.4%
CENTRAL ADMIN SERVICES	9,517	7,134	5,856	5,946	4,710	-4,807	-50.5%
PROGRAM/PROJECT CONTROL	5,998	8,075	7,094	7,878	8,031	2,033	33.9%
INFORMATION OUTREACH	2,593	2,477	2,574	616	652	-1,941	-74.9%
INFORMATION SERVICES	24,062	23,303	23,561	24,616	24,549	487	2.0%
OTHER	3,468	2,382	1,934	2,638	3,431	-37	-1.1%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>22.8%</b>	<b>28.1%</b>	<b>30.8%</b>	<b>30.4%</b>	<b>29.3%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>140,689</b>	<b>177,792</b>	<b>201,471</b>	<b>187,918</b>	<b>194,040</b>	<b>53,351</b>	<b>37.9%</b>
ENVIRONMENTAL	1,380	3,234	3,603	5,136	5,234	3,854	279.3%
SAFETY AND HEALTH	22,158	22,902	23,347	22,784	27,996	5,838	26.3%
FACILITIES MANAGEMENT	11,470	11,572	11,685	11,350	11,741	271	2.4%
MAINTENANCE	24,422	33,061	33,118	29,745	30,081	5,659	23.2%
UTILITIES	13,316	14,291	14,760	13,401	15,517	2,201	16.5%
SAFEGUARDS AND SECURITY	41,818	52,850	61,544	61,459	63,712	21,894	52.4%
LOGISTICS SUPPORT	12,721	13,254	12,885	12,759	15,572	2,851	22.4%
QUALITY ASSURANCE	5,436	5,758	5,994	3,986	4,255	-1,181	-21.7%
LABORATORY/TECHNICAL SUPPORT	7,968	20,870	34,535	27,298	19,932	11,964	150.2%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>5.4%</b>	<b>5.1%</b>	<b>5.6%</b>	<b>5.9%</b>	<b>5.7%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>33,384</b>	<b>32,488</b>	<b>36,273</b>	<b>36,500</b>	<b>37,482</b>	<b>4,098</b>	<b>12.3%</b>
MANAGEMENT/INCENTIVE FEE	21,321	20,913	25,000	26,534	28,299	6,978	32.7%
TAXES	7,182	7,199	7,232	6,241	5,585	-1,597	-22.2%
LDRD / PDRD / SDRD	4,881	4,376	4,041	3,725	3,598	-1,283	-26.3%

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**SITE PROFILE**  
**Nevada/National Securities Tech & Bechtel**

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**SITE OVERVIEW AND CHARACTERISTIC**

National Security Technologies (NSTec) started on July 1, 2006 pursuant to a joint venture including Northrop Grumman, AECOM, CH2MHILL, and Nuclear Fuel Services. In FY 2009 the Nevada Test Site contract employed approximately 2,500 employees.

NSTec is the Management and Operating contractor that manages operations at the Nevada Test Site (NTS) and its related facilities and laboratories. The primary mission is to maintain the NTS for testing. Located 65 miles north of Las Vegas, the NTS is a massive outdoor laboratory and national experimental center. It is one of the largest restricted access areas in the United States covering approximately 1,375 square miles. There are 400 miles of paved roads and 300 miles of unpaved roads, two airstrips, 10 heliports, several active water wells, and an electric power transmission system. Also located within the boundaries of the Nevada Test Site is the base camp of Mercury with many of the amenities found in a small town. Housing, medical services, fire protection, law enforcement, security, and a cafeteria are all on site. There are 535 support buildings including offices, laboratories, warehouses, training facilities, a hospital, post office, fire station, sheriff's substation; and a large motor pool complete with repair facilities. The climate is that of a high desert basin with an estimated rainfall of less than seven inches and 310 days of sunshine each year. The arid desert climate allows year-round operation.

Most of the mission direct work performed at the NTS is contracted directly with the Nevada Site Office. Therefore, support costs for NSTec may appear higher than other integrated contractors. Besides the Department of Energy/National Nuclear Security Administration Nevada Site Office, NSTec partners with the Lawrence Livermore National Laboratory, Los Alamos National Laboratory, and Sandia National Laboratories on many projects. National Security Technologies also works on projects for other federal agencies such as the Defense Threat Reduction Agency, NASA, the Nuclear Regulatory Commission, and the U.S. Air Force, Army, and Navy.

NSTec is organized under a General Manager (GM) and Deputy General Manager (DGM) with 5 staff offices and 4 line divisions. This organization shortens lines of communications and focuses the attention of the workforce on the 4 core missions: Environmental Management; Experimentation & Stockpile Stewardship; Homeland Security & Defense Applications; and Operations & Infrastructure.

Environmental Management is responsible for Environmental Restoration, Program Integration, Waste Management Programs and Environmental Science and Technology Development.

Experimentation & Stockpile Stewardship provides experimental capabilities necessary to maintain confidence in the safety and performance of weapons in the U.S. nuclear weapons stockpile.

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**SITE PROFILE**  
**Nevada/National Securities Tech & Bechtel**

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Stockpile Stewardship is also responsible for maintaining the ability to resume underground nuclear testing.

Homeland Security & Defense Applications includes several programs that involve high-hazard test and evaluation, applied engineering, and technology. Also, included in this mission is Nonproliferation Test and Evaluation Complex (NPTEC) — fully permitted to release highly hazardous chemicals in a controlled environment for experimental purposes.

Operations & Infrastructure is responsible for handling the daily site operations, site and infrastructure planning, facilities, emergency services support, and site engineering.

Business Operations, Planning & Integration, ESH&Q, Executive Services and Mission Support Services provides support to the four core programs. In addition, these organizations maintain commercial management and administration, financial, management and systems, human programs and communications, and project management and control systems.

More than half of NSTec's employees work in the Las Vegas area or at the nearby Nevada Test Site. The company has satellite offices in Livermore, California (Livermore Operations) Los Alamos, New Mexico (Los Alamos Operations) as well as the Special Technologies Laboratory in Santa Barbara, California. NSTec also operates the Remote Sensing Laboratory in Nevada and its sister group located near Washington, D.C.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**CENTRAL ADMIN SERVICES**

Change is due to compliance with peer review finding from 2006 report for improved alignment of administrative costs to the Mission Direct programs that they support.

**OTHER**

Increase is related to a one-time adjustment for auto liability insurance and timing difference for prior period adjustments.

**SAFETY AND HEALTH**

Increase is due to compliance with 2008 peer review finding #1 and is also due to an increase in Fire Protection costs and Nuclear Safety costs.

**SAFEGUARDS AND SECURITY**

Increase due to compliance with 2008 peer review finding #4 - better alignment of Cyber Security costs.

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**SITE PROFILE**  
**Nevada/National Securities Tech & Bechtel**

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**LOGISTICS SUPPORT**

Increase due to compliance with 2008 peer review finding #3.

**LABORATORY/TECHNICAL SUPPORT**

Decline in laboratory costs from 2008 to 2009 reflect the final impact of the facilities transfer of the DAF from LLNL to NSO in mid 2008. Cost in 2008 reflected LLNL's cost until transition so the overall 2008 costs are higher. (impact is \$3.62m)

**CAPITAL CONSTRUCTION**

Scope of work decrease due to completion of Cheyenne Facility lease.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
(None)			

**Trends in Total Support Cost by Functional Categories**  
**Oak Ridge National Lab/UT-Battelle (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	990,268	988,324	1,063,388	1,246,157	1,232,410	242,142	24.5%
<b>Capital Construction</b>	103,512	53,965	69,118	71,276	97,336	-6,176	-6.0%
<b>Total Costs Less Construction</b>	886,756	934,359	994,270	1,174,881	1,135,074	248,318	28.0%
<b>Total Support Costs</b>	<b>301,547</b>	<b>339,445</b>	<b>354,618</b>	<b>386,334</b>	<b>409,063</b>	<b>107,516</b>	<b>35.7%</b>
<b>Mission Direct Operation</b>	585,209	594,914	639,652	788,547	726,011	140,802	24.1%
<b>Mission Direct Operation as % of Total Cost</b>	<b>59.1%</b>	<b>60.2%</b>	<b>60.2%</b>	<b>63.3%</b>	<b>58.9%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>10.5%</b>	<b>5.5%</b>	<b>6.5%</b>	<b>5.7%</b>	<b>7.9%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>30.5%</b>	<b>34.3%</b>	<b>33.3%</b>	<b>31.0%</b>	<b>33.2%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>30.5%</b>	<b>34.3%</b>	<b>33.3%</b>	<b>31.0%</b>	<b>33.2%</b>		
<b>TOTAL SUPPORT COST</b>	<b>301,547</b>	<b>339,445</b>	<b>354,618</b>	<b>386,334</b>	<b>409,063</b>	<b>107,516</b>	<b>35.7%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>9.0%</b>	<b>9.2%</b>	<b>8.9%</b>	<b>8.0%</b>	<b>8.4%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>89,423</b>	<b>90,579</b>	<b>94,201</b>	<b>99,466</b>	<b>102,998</b>	<b>13,575</b>	<b>15.2%</b>
EXECUTIVE DIRECTION	13,906	13,520	14,017	15,236	16,224	2,318	16.7%
HUMAN RESOURCES	7,662	8,308	9,645	11,192	10,906	3,244	42.3%
CFO	12,016	13,133	13,996	15,592	15,293	3,277	27.3%
PROCUREMENT	5,658	6,044	6,067	7,319	7,582	1,924	34.0%
LEGAL	1,568	1,819	1,785	1,946	1,966	398	25.4%
CENTRAL ADMIN SERVICES	11,060	8,899	9,756	11,622	12,511	1,451	13.1%
PROGRAM/PROJECT CONTROL	1,136	1,224	1,258	1,462	843	-293	-25.8%
INFORMATION OUTREACH	9,228	10,717	10,320	10,614	11,240	2,012	21.8%
INFORMATION SERVICES	21,737	25,549	26,346	23,528	23,738	2,001	9.2%
OTHER	5,452	1,366	1,011	955	2,695	-2,757	-50.6%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>18.7%</b>	<b>21.8%</b>	<b>21.3%</b>	<b>20.1%</b>	<b>21.8%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>184,932</b>	<b>215,695</b>	<b>226,431</b>	<b>250,241</b>	<b>268,890</b>	<b>83,958</b>	<b>45.4%</b>
ENVIRONMENTAL	9,888	10,060	9,561	10,737	12,647	2,759	27.9%
SAFETY AND HEALTH	25,971	28,787	32,777	38,843	43,564	17,593	67.7%
FACILITIES MANAGEMENT	30,136	47,575	49,813	49,908	44,775	14,639	48.6%
MAINTENANCE	57,405	62,666	66,229	71,932	77,602	20,197	35.2%
UTILITIES	22,929	26,268	25,515	33,284	35,239	12,310	53.7%
SAFEGUARDS AND SECURITY	17,196	19,217	21,886	23,118	27,448	10,252	59.6%
LOGISTICS SUPPORT	6,572	7,300	6,844	6,941	6,647	75	1.1%
QUALITY ASSURANCE	4,662	5,583	4,949	4,933	5,503	841	18.0%
LABORATORY/TECHNICAL SUPPORT	10,173	8,239	8,857	10,545	15,465	5,292	52.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>2.7%</b>	<b>3.4%</b>	<b>3.2%</b>	<b>2.9%</b>	<b>3.0%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>27,192</b>	<b>33,171</b>	<b>33,986</b>	<b>36,627</b>	<b>37,175</b>	<b>9,983</b>	<b>36.7%</b>
MANAGEMENT/INCENTIVE FEE	8,184	10,700	10,987	10,479	10,278	2,094	25.6%
TAXES	1,822	2,384	2,357	2,492	2,507	685	37.6%
LDRD / PDRD / SDRD	17,186	20,087	20,642	23,656	24,390	7,204	41.9%

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**SITE PROFILE**  
**Oak Ridge National Lab/UT-Battelle**

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**SITE OVERVIEW AND CHARACTERISTIC**

**BACKGROUND**

ORNL is a multi-program science and technology laboratory managed for the U.S. Department of Energy (DOE) by UT-Battelle, LLC. ORNL was established in 1943 as part of the Manhattan Project to pioneer a method for producing and separating plutonium for use in the development of the atomic bomb. The Graphite Reactor served as a pilot-scale plutonium production facility for much larger reactors built in Hanford, Washington. After World War II, material irradiation research and isotope production were conducted at the Graphite Reactor. During the 1950s and 1960s, ORNL became an international center for the study of nuclear energy and related research in the physical and life sciences. The 1970s led to an expansion of ORNL's research programs into the areas of energy production, transmission, and conservation. In recent years, ORNL has found opportunities to apply its distinctive capabilities to nonproliferation, arms control, and national and homeland security.

Today, ORNL's primary mission focus is conducting research in neutron science, energy, high-performance computing, systems biology and the environment, materials science, and national security that will lead to innovative solutions to complex problems. As a world leader in a range of scientific areas supporting DOE's basic research, energy, national security, and environmental missions, ORNL is actively engaged in a variety of national and international partnerships with industry and educational institutions. As a DOE steward of critical national research infrastructure, ORNL provides access to university, industry, and government researchers on a competitive basis. The Laboratory hosts some 4000 facility users and visiting scientists every year. With the \$1.4B Spallation Neutron Source and the upgraded High Flux Isotope Reactor, ORNL is on a well-defined path to world leadership in neutron sciences, and the Oak Ridge Leadership Computing Facility (OLCF) is DOE's most powerful computing complex. ORNL also manages the billion-dollar U.S. ITER project for DOE.

ORNL has a staff of over 4,500 contractor employees. The ORNL main site encompasses approximately 1,100 acres in the Bethel and Melton valleys, approximately 10 miles southwest of the center of the city of Oak Ridge, Tennessee, with additional facilities located on the adjacent Copper Ridge. ORNL also leases some space off-site. The ORNL main site currently has 257 active facilities, and 6 active real property trailers representing approximately 4.1 million square feet of active building space.

The last peer review of functional cost was performed at ORNL on 2008 data in January 2009. There were eleven minor recommendations related to how to slot various WBS elements and cost elements into categories. All eleven recommendations were agreed to and implemented in the 2009

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**SITE PROFILE**  
**Oak Ridge National Lab/UT-Battelle**

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submission.

TRENDS

Functional Support Costs have increased over the period from FY 1999 to FY 2009 from \$192.4M in FY 1999 to \$409.1 in FY 2009. This is due mainly to increases in the Office of Science funding and Capital/Construction. Over this same time period the percentage of Functional Support costs to total costs has decreased slightly from 36% to slightly over 33%.

FY 2009 Functional Support returned to a more normal pattern as the SNS project is now a full operations project. FY08 was the first full operational year at the SNS. There is still some construction funding at the SNS, as there will be for several years to come — but the majority of the project is now operational. Another item to note that may impact functional cost in the next 5 — 10 years at ORNL is the International Thermonuclear Experimental Reactor (ITER) Project. The FY 09 actual was \$55.1M and the FY 10 estimate is \$140.2M. The funding will be Major Item of Equipment (MIE).

For the FY2009 Functional Cost analysis, wage costs were distributed based on the Level 4 organization where the employee worked, thus more accurately reflecting the type of work being performed.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**PROGRAM/PROJECT CONTROL**

Program/Project Control costs decreased by \$0.7 million from \$1.5 million to \$0.8 million in FY 2009. The decrease was primarily attributable to removing the Business Analysis costs as directed based on a Peer Review Team recommendation. In addition, Program Project costs have increased because ARRA work has driven project reporting on all ARRA work. Additional work in the Facilities and Development area and the ARRA area account for slightly over \$200,000 of program/project costs in FY 2009.

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**SITE PROFILE**  
**Oak Ridge National Lab/UT-Battelle**

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**OTHER**

Other costs increased by \$1.7 million from \$1 million to \$2.7 million in FY 2009. The primary reason for the increase is that Business Travel Account (BTA) tickets are now accounted for in the Other category. This was also a recommendation made by the Peer Review Team. Also included in Other costs were \$235,000 of Accounts Payable general ledger items that were written off during a cleanup of old outstanding AP vendor items.

**LABORATORY/TECHNICAL SUPPORT**

Laboratory/Technical Support Mission Support costs increased by \$5 million from \$10.5 million to \$15.5 million in FY 2009. The increase was mainly due to moving the machine shop into this category based on a Peer Review Team Recommendation. Other increases in this category include increased engineering services subcontractor support and increased technical subcontractor support.

**CAPITAL CONSTRUCTION**

Capital Construction costs increased by \$26 million from \$71.3 million to \$97.3 million in FY 2009.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT

**SITE PROFILE**  
**Oak Ridge National Lab/UT-Battelle**

<p>Utilize RFID Technology to Improve Inventory Recon</p>	<p>0</p>	<p>This project focused on evaluating whether the use of Radio Frequency Identification (RFID) technology would improve hazardous chemical inventory management at ORNL. A variety of actual chemical storage areas were chosen representing the typical chemical storage configurations at ORNL. It was realized early in the project that RFID is superior to existing barcode inventory management and could enable a new suite of capabilities for safer and more efficient chemical inventory management. New capabilities could include identifying incompatible chemicals stored in close proximity to each other, time or condition sensitive chemical field identification and chemical locator functions. Based on a review of positive field results, the necessary equipment was procured to deploy RFID chemical inventory management on a lab-wide scale. Procurement of necessary equipment and tags has begun and we anticipate placing combination barcode/RFID tag on all new hazardous chemical purchases early in FY10. The deployment of RFID should provide a significant ROI within the first year of deployment.</p>	
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**SITE PROFILE**  
**Oak Ridge National Lab/UT-Battelle**

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<p>Electronic Laboratory Notebook Project: Year 2</p>	<p>0</p>	<p>The evaluation and implementation of Electronic Laboratory Notebooks (ELN) project at ORNL was approved as a continuation of a previously approved (FY08) OIP project on the same topic. During the FY09 period, ELN software was acquired, installed and put into use by researchers from Biosciences Division, Chemical Sciences Division, and Center for Nanophase Materials Sciences. The software demonstrations and associated discussions led to better understanding with respect to the state of research documentation, the potential benefits available and mitigation of risks as well as the requirements and issues to be addressed in order to improve research documentation at ORNL. The conclusion of this project by its investigators is that placing ELN and other advanced technologies in the hands of researchers will provide significant improvements to efficiency, productivity and return on investment for the lab. Efforts are underway to assess feasibility of a broader implementation across the laboratory.</p>	
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**SITE PROFILE**  
**Oak Ridge National Lab/UT-Battelle**

<p>User Enhancement Project</p>	<p>0</p>	<p>Oak Ridge National Laboratory is home to a number of highly sophisticated experimental user facilities. These research laboratories are designed to serve laboratory researchers, engineers, and technical staff, as well as external researchers from universities, industries, foreign institutions and other government laboratories. The state-of-the-art facilities are shared with the scientific and technical community, providing the use of unique and specialized technology, equipment and instrumentation.</p> <p>During FY08, a Process Improvement Team was created to evaluate methods of improving the User experience. The team developed a list of improvement actions which were reviewed and approved by the Leadership Team.</p> <p>The scope of the User Enhancement Project was to design, program, test and implement the recommendations of the Process Improvement Team.</p> <p>The User Enhancement Project provided the implementation of the User's Web Site, User Entry Pass, External Invite, Level One Electronic Signatures, Wireless Network Printers and a review of the Visitor Center staffing and functionality. The project was responsible for influencing the investigation, review or implementation of several other User experience topics such as: multiple hosts, streamlining of Master Agreement Appendix A, visa issues, proximity cards and on-site transportation.</p>	
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**SITE PROFILE**  
**Oak Ridge National Lab/UT-Battelle**

<p>Waste Management Efficiency Improvement Project</p>	<p>0</p>	<p>In early FY 2009, the Laboratory initiated a six sigma process improvement team to evaluate ways to reduce life-cycle cost of managing ORNL newly generated wastes (e.g. waste chemicals and excess radioactively contaminated scrap) in light of the fact that the responsibility for ultimate waste disposal had recently (October 1, 2009) been transferred to the Lab from the DOE-Environmental Management Program. The team concluded that the current waste packing methodology used at ORNL (where waste is packaged in individual laboratories upon it being generated) results in creation of an excessive number of waste containers that contain only a few actual waste items (because that is all the items that were ready to be wasted in the lab where it was packed on that particular day). A new waste packaging strategy was developed where waste items are taken from the laboratories (with no or minimal packaging) and transported on-site to a central waste storage facility, where they would be held until sufficient quantities of similar waste is collected from around the Lab to enable shipment of waste in full drums. This would significantly reduce the cost of waste disposal, especially for radioactively contaminated chemical waste which is very expensive to treat &amp; dispose (all waste treatment &amp; disposal vendors have minimum costs in their contracts for each drum they handle, such that a mostly-empty drum costs almost the same as a mostly-full drum). The six-sigma team developed an project to assist in the implementation of this strategy. The project was to secure funding to procure an on-site chemical waste transport vehicle to facilitate the on-site transport of chemical waste from generator labs around ORNL to the central waste storage facility (located in Melton Valley). The vehicle was procured via the Logistics Organization using the</p>	
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**SITE PROFILE**  
**Oak Ridge National Lab/UT-Battelle**

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		<p>GSA vehicle purchasing system and arrived at ORNL in September, 2009. The final step to enable use of the vehicle will be to complete modifications to the vehicle to install special chemical segregation and spill prevention/containment equipment to allow DOT-equivalent compliant transport with a minimum amount of packaging (which in turn minimizes required labor effort). The vehicle modifications are planned to be completed during the first quarter of FY 2010. Implementation of the new chemical waste process is planned for the 2nd quarter of FY 2010.</p>	
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**Trends in Total Support Cost by Functional Categories**  
**OREMEF/Bechtel Jacobs (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	769,055	576,829	402,818	345,110	368,472	-400,583	-52.1%
<b>Capital Construction</b>	43,948	14,060	9,164	4,804	7,892	-36,056	-82.0%
<b>Total Costs Less Construction</b>	725,107	562,769	393,654	340,306	360,580	-364,527	-50.3%
<b>Total Support Costs</b>	<b>223,338</b>	<b>178,517</b>	<b>143,173</b>	<b>148,016</b>	<b>134,973</b>	<b>-88,365</b>	<b>-39.6%</b>
<b>Mission Direct Operation</b>	501,769	384,252	250,481	192,290	225,607	-276,162	-55.0%
<b>Mission Direct Operation as % of Total Cost</b>	<b>65.2%</b>	<b>66.6%</b>	<b>62.2%</b>	<b>55.7%</b>	<b>61.2%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>5.7%</b>	<b>2.4%</b>	<b>2.3%</b>	<b>1.4%</b>	<b>2.1%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>29.0%</b>	<b>30.9%</b>	<b>35.5%</b>	<b>42.9%</b>	<b>36.6%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>29.0%</b>	<b>30.9%</b>	<b>35.5%</b>	<b>42.9%</b>	<b>36.6%</b>		
<b>TOTAL SUPPORT COST</b>	<b>223,338</b>	<b>178,517</b>	<b>143,173</b>	<b>148,016</b>	<b>134,973</b>	<b>-88,365</b>	<b>-39.6%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>7.6%</b>	<b>9.9%</b>	<b>11.1%</b>	<b>12.2%</b>	<b>11.5%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>58,157</b>	<b>57,192</b>	<b>44,539</b>	<b>42,169</b>	<b>42,494</b>	<b>-15,663</b>	<b>-26.9%</b>
EXECUTIVE DIRECTION	3,187	2,748	1,805	2,060	2,343	-844	-26.5%
HUMAN RESOURCES	9,327	10,752	9,866	9,641	9,636	309	3.3%
CFO	4,071	3,797	3,438	2,948	2,926	-1,145	-28.1%
PROCUREMENT	6,769	5,150	3,703	3,013	3,157	-3,612	-53.4%
LEGAL	1,572	2,357	2,501	1,759	1,927	355	22.6%
CENTRAL ADMIN SERVICES	7,684	4,116	3,743	3,895	3,974	-3,710	-48.3%
PROGRAM/PROJECT CONTROL	9,685	7,758	5,929	5,324	6,090	-3,595	-37.1%
INFORMATION OUTREACH	875	1,172	696	527	523	-352	-40.2%
INFORMATION SERVICES	14,985	13,462	10,339	10,896	9,864	-5,121	-34.2%
OTHER	2	5,880	2,519	2,106	2,054	2,052	102,600.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>19.3%</b>	<b>20.6%</b>	<b>23.5%</b>	<b>27.0%</b>	<b>21.2%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>148,299</b>	<b>118,794</b>	<b>94,486</b>	<b>93,339</b>	<b>78,027</b>	<b>-70,272</b>	<b>-47.4%</b>
ENVIRONMENTAL	4,686	4,237	3,494	3,331	3,964	-722	-15.4%
SAFETY AND HEALTH	63,749	54,103	38,453	35,917	36,819	-26,930	-42.2%
FACILITIES MANAGEMENT	6,532	5,344	4,172	3,847	7,215	683	10.5%
MAINTENANCE	10,610	5,644	4,139	4,346	4,755	-5,855	-55.2%
UTILITIES	19,956	19,326	17,688	18,249	13,404	-6,552	-32.8%
SAFEGUARDS AND SECURITY	34,332	21,834	20,164	21,141	5,307	-29,025	-84.5%
LOGISTICS SUPPORT	2,075	2,309	1,902	1,947	2,020	-55	-2.7%
QUALITY ASSURANCE	5,298	4,932	3,733	3,523	3,603	-1,695	-32.0%
LABORATORY/TECHNICAL SUPPORT	1,061	1,065	741	1,038	940	-121	-11.4%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>2.2%</b>	<b>0.4%</b>	<b>1.0%</b>	<b>3.6%</b>	<b>3.9%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>16,882</b>	<b>2,531</b>	<b>4,148</b>	<b>12,508</b>	<b>14,452</b>	<b>-2,430</b>	<b>-14.4%</b>
MANAGEMENT/INCENTIVE FEE	15,877	1,213	3,292	11,698	14,215	-1,662	-10.5%
TAXES	1,005	1,318	856	810	237	-768	-76.4%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

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**SITE PROFILE**  
**OREMEF/Bechtel Jacobs**

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**SITE OVERVIEW AND CHARACTERISTIC**

**BACKGROUND**

Functional support costs for the Oak Ridge Environmental Management Enrichment Facility (OREMEF) site represent a compilation of the support costs at the East Tennessee Technology Park (ETTP) located in Oak Ridge, Tennessee. The mission is three-fold: environmental cleanup, waste management, and reindustrialization of the ETTP.

Physical characteristics of each site are as follows:

ETTP: Approximately 360 buildings covering 14 million square feet of space. Most buildings are over 30 years old and non-operational. Approximately 1400 Bechtel Jacobs Company employees reside at the site with an additional 1000 subcontractor and Community Reuse Organization of East Tennessee (CROET) tenants also physically located on the site. As of the end of FY 2009 successful D&D has reduced the number of buildings to below 230.

On April 1, 1998, Bechtel Jacobs Company LLC, a Managing and Integrating (M&I) contractor, replaced Lockheed Martin Energy Systems as the managing contractor for the ETTP, Paducah, and Portsmouth sites. In 2005 and 2006 timeframe, DOE transitioned the Paducah and Portsmouth contract scopes from BJC to four small business contractors. As of the end of FY 2009, approximately 45% of the total Bechtel Jacobs workscope is being performed via subcontracts. The subcontractors support the missions functionally, which would be reflected in the appropriate functional category, or fixed price subcontracts utilized for specific scopes of work and would be reflected in the mission direct category. Approximately 5% of the Bechtel Jacobs subcontracted workscope continues to be performed by BWXT Y-12 (formerly Lockheed Martin Energy Systems, Inc.) and UT-Battelle (formerly Lockheed Martin Energy Research Corporation). These costs are not reflected in the BJC functional report, but are reflected in the BWXT Y-12 and UT-Battelle reports.

Beginning October 1, 2003, the Oak Ridge contract became an Accelerated Cleanup Contract utilizing a cost-plus-incentive fee contract structure. Performance incentives provided the motivation to achieve accelerated cleanup at the lowest cost to the DOE. Schedule incentives included disposal of legacy low level waste and legacy mixed low level waste by September 30, 2005 and closure of the Melton Valley Site at ORNL by September 30, 2006. Each of the 2005 and 2006 milestones were completed on schedule.

Due to budget delays and technical issues, a restructured contract agreement and schedule has been negotiated. The restructured contract was converted to a cost plus fixed fee arrangement. The

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contract change commenced in FY 2008 for the clean-up of the ETTP site along with selected scope at the ORNL and Y-12 sites with December 31, 2011 established as the end date.

TRENDS

In FY 2004 and FY 2005, the percentage of Support Costs decreased due to the change in the Oak Ridge contract to an Accelerated Cleanup contract, which requires more field work to be performed in order to meet the contract and DOE milestones. In FY 2005 and FY 2006 the functional support costs decreased as a result of the Paducah and Portsmouth sites transition activities. In FY 2007 functional costs continued to decrease due to the full implementation of Paducah and Portsmouth site transition and Oak Ridge budget reductions. The functional support decreased from FY 2008 to FY2009 due to the removal of the funding for Safeguards & Security from the BJC financial plan.

The reduction in overall costs in FY 2007 is due in part to Paducah and Portsmouth being removed from the Bechtel Jacobs Company contract OR22980. The functional costs reductions in FY 2006 continued and the full impact of the contract change realized in FY 2007. Employment decreased by approximately 86 FTE's (BJC +15 and Subcontractor's -101) in FY 2007. The BJC employment changes were to administrative and technical staff (non-manuals) being reduced by 120 and building trades/bargaining unit staff (manuals) increasing by 135. The increase in manuals was due to the decision to self-perform various D&D activities at ETTP in FY 2007.

In FY 2008, the OREMEF Site costs reduced in total by \$35.6M. The costs in the areas of Functional Support decreased by (\$2.4M), Mission Support decreased by (\$1.1M), Mission Direct decreased by (\$32.0M), Capital/Construction decreased by (\$4.4M), and Government Transfers decreased (\$4.1M) due to budget reductions and program reprioritizations. The FY 2008 reduction was primarily attributable to completed Defense funded activities (i.e., Waste Water Treatment System and MSRE) and D&D subprojects completed in late FY 2007 along with a program reprioritization due to funding shortfalls in out years. The increase in overall cost in FY 2009 is due to the receipt of American Recovery and Reinvestment Act of 2009 (ARRA) funding as well as additional funding in the D&D Fund.

**Major Cost Saving Initiatives: Six Sigma Initiatives**

The Bechtel Jacobs Company (BJC) began implementing the Six Sigma program as a problem-solving methodology that uses a systematic approach to allow an organization to improve quality quickly and effectively. It utilizes a rigorous set of statistical tools and methodologies designed to improve work quality, profitability, customer and employee satisfaction and leadership of business enterprises. BJC has combined the Six Sigma methodologies with behavioral-oriented Performance

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Based Leadership tools to improve the way we do business; tackle the issues that can hinder performance and drive us toward our goal of meeting business objectives and DOE expectations. BJC calculates and tracks the cost savings derived from the Six Sigma Process Improvement Projects (PIPs) on a calendar year basis. The following is a brief description of the results and cost savings associated with PIPs that generated cost savings in 2009. Cost savings are unburdened and are net of any implementation (investment) cost.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**EXECUTIVE DIRECTION**

Includes Bechtel Jacobs Company Executive Management and the Six Sigma Initiatives. Historical Information: The FY 2004 increase (\$600K) was due to the addition of senior management positions to support the Accelerated Cleanup Plan. The FY 2005 decrease was due to the transitioning of Black Belts to field positions (\$300K). The FY 2006 decrease reflects moving the Closure Projects Evaluation Board (CPEB) costs to QA (\$160K). The FY 2007 decrease (\$.9M) was due primarily to the reduction of 4 FTE's.

**HUMAN RESOURCES**

Includes Human Resources Department Management, compensation administration, employment and staffing, benefits services, training services and HR systems support, diversity program, employee recognition and awards, labor relations, and current Worker's Compensation cost. The decreases (\$3.5M) in FY 2004 were a result of stabilization of Worker's Compensation Cost, decrease in training costs since most required training was developed in FY 2003, and a reduction of 10 Human Resource employees during the year. The increase in FY 2005 was due to Worker's Compensation cost (\$800K), an additional employee in Labor Relations (\$100K), accrual of the variable pay plan earned in FY 2005 (\$300K), an increase in the benefits service center in support of WFT employees (\$500K), and an increase in Human Resource management (\$160K). The increase in FY 2006 was due to Worker's Compensation Costs and Claim payments (1.4M).

**CFO**

Includes payroll, general accounting, accounts payable, accounts receivable, treasury, travel, funds control, cost accounting, business systems, rates administration, internal audit, and outside audit coordination. The reduction in FY 2005 reflects the loss of 1.5 FTEs (\$200K) of which .5 FTE transitioned with the Paducah/Portsmouth scopes of work.

**PROCUREMENT**

Includes procurement administration, purchasing activities and most particularly, subcontract procurement and administration, as well as procedure compliance and prime contract management. The decrease in FY 2006 (\$1.6M) was due to Paducah and Portsmouth contract transitioning. The FY 2007 decrease (\$1.4M) was due to the reduction of 14 FTE's.

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**LEGAL**

Includes cost associated with legal counsel support and litigation support. The FY 2005 increase was due to additional support required from outside counsel (\$250K) as well as increased risk management support. The increase in FY 2006 was due to the addition of outside counsel costs that had previously been categorized as Mission Direct costs (\$785K). The decrease (\$742K) in FY 2008 was due to reduced outside counsel costs associated with litigation claims.

**CENTRAL ADMIN SERVICES**

Includes administrative services, records management, and copy machine services. The decrease in FY 2006 (\$4.3M) was due to the reclassification of administrative service costs per the Peer Review Team.

**PROGRAM/PROJECT CONTROL**

Includes overall project management and project controls, systems programs, baseline control and reporting, program performance, technical integration, and programmatic assessments. Project Control cost increased in FY 2005 due to a comprehensive baseline support (5 FTEs, \$550K) and additional support required to facilitate the EVMS review (\$200K). The decrease (\$1.9M) in FY 2006 was due to Paducah and Portsmouth contract transitioning. The FY 2007 decrease (\$1.8M) was due to the reduction of 14 FTE's.

**INFORMATION OUTREACH**

Includes all public affairs activities. The FY 2006 increase (\$300) was due to reclassification of Technical Integration costs per the Peer Review Team. The FY 2007 decrease (\$.5M) was partially due to reduction of 2 FTE's. The decrease (\$169K) in FY 2008 was due to the continued impacts from prior period reductions in staff.

**INFORMATION SERVICES**

Includes Information Technology administration and management; PC maintenance; Server and Desktop support; Application management, maintenance, enhancements, and improvements; software licenses; network support; radios, pagers, cell phones, and telephones. FY 2005 decreases due to reduction in application maintenance costs (\$1M) and PC maintenance and asset management (\$1.3M). Some of these decreases were due to the transition of Paducah and Portsmouth scopes of work. The FY 2006 decrease (\$1.4M) was due to removal of IT Support from Paducah and Portsmouth sites. The FY 2007 decrease (\$3.1M) was primarily due to the reduction of 13 FTE's and hardware procurement.

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**OTHER**

The increase (\$5.9M) in FY 2006 due to reallocating Legacy Workers Compensation and RIF costs from Mission Direct. The FY 2007 decrease (\$4.3M) was due in part to less Legacy Worker Compensation claims and Dr. Panel claims.

FY 2009 =

Termination/RIF - \$225

Retention Incentive - \$1,250

Workplace Access Restriction - \$249

Legacy Worker's Comp./Dr. Panel - \$330

Total - \$2,054

**ENVIRONMENTAL**

Includes environmental compliance and monitoring, water quality, Clean Air Act, EPCRA, NPDES, Clean Water Act, and cleanup standards. Historical information: Decreases in FY 2005 were due to the restructuring of the sampling and analysis subcontract and reduction of FTEs in environmental services (\$2.5M).

**SAFETY AND HEALTH**

Includes safety and health costs, radiation protection, industrial hygiene, medical, fire protection, emergency management, Radcon support, dosimetry and analysis, facility safety, occupational safety, ISMS revalidation, EH investigations, nuclear safety, criticality safety, and shift superintendent operations. Historical information: Additional Radcon support caused the increase in S&H cost in FY 2005 (\$8M) including the cost of 7 additional FTEs. The FY 2006 decrease was due to completed activities requiring Radcon (\$7M) and HP (\$2.6M) services.

**FACILITIES MANAGEMENT**

Includes engineering and construction management, facility transition management, and technical functions management. Historical information: Since the category definition requires facility engineering only facility engineering was included as well as some engineering management and the facilities management organizations. Increases in FY 2005 were due to the lease of four buildings from CROET (\$1.6M) and increases in field services and engineering management (\$1M). Additional increases were due to moves due to reorganizations and repositioning employees from buildings scheduled for demolition to other areas (\$1M). The decrease in FY 2006 was due to reduced facility management (\$400K), engineering management (\$200K), and reclassification of Information/Outreach Activities costs per the Peer Review. The FY 2007 decrease (\$1.2M) was due to the completion of D&D facilities at ETTP. During FY 2009, the transfer of the Fire Department to the City of Oak Ridge was completed. As a result, BJC is now leasing space from the City in one of the buildings that was transferred which caused the increase in facilities management during the period.

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**OREMEF/Bechtel Jacobs**

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**MAINTENANCE**

Includes all maintenance activities and real property management, roads & grounds, and cost to support the infrastructure of the sites. Decreases in FY 2005 were due to leasing of four buildings from CROET, which transferred the cost from the maintenance category to facilities management (\$1.6). In addition, demolished facilities contributed to the further reduction in maintenance cost. The FY 2006 decrease (\$5M) is predominantly the result of reduced costs in the areas of building maintenance, roads and grounds, and fleet maintenance at the Paducah and Portsmouth sites that were transitioned. The FY 2007 decrease (\$1.5M) was due to the decision to minimize facilities maintenance support at ETTP that are scheduled for demolition.

**UTILITIES**

Includes utility costs for infrastructure of the site, as procured by contract, or purchased from BWXT Y-12. Historical information: The responsibility for power and utility distribution ceased to be an ETTP responsibility on April 1, 1998. The employees associated with providing power and utilities were transferred to Y-12 (power) or OMI (utilities). FY 2005 increases were due to higher utility charges (\$2M). During FY 2009, management of the utilities was transferred to the City of Oak Ridge. As a result, utilities cost to BJC have decreased since additional meters have been installed and tenants are now being billed directly by the City for their utilities.

**SAFEGUARDS AND SECURITY**

Includes all cost of personnel for protective forces, program management, protective systems, information security, NMC&A, and costs currently direct funded by program FS50 for Safeguards/Security operations. Historical information: Safeguards and Security cost decreased in FY 2005 due to the transition of contractors at Paducah and Portsmouth in which the security support became GFSI (\$4M). The FY 2006 decrease (\$12.5M) is due to the Paducah and Portsmouth contract transition. During FY 2009, funding for the Security force contractor was transferred out of the BJC financial plan and the cost for this function were maintained at ORO. The remainder represents only the S&S function performed by BJC.

**LOGISTICS SUPPORT**

Includes materials management, property sales, transportation services, fleet management, and shipping/receiving activities. Historical information: Increases in FY 2005 were due to the implementation of a Central Receiving Facility (\$300K). The FY 2006 increase (\$300K) is due to the higher prices of fuel costs.

**QUALITY ASSURANCE**

Includes functional quality assurance costs, QA program and field operations, PAAA reporting process, performance evaluations, procedures/directives management, and program assessments. The FY 2005 increase was due to moving the CPEB function from Executive Management to Quality Assurance (\$250K). The FY 2007 decrease (\$1.2M) was due to the reduction of 6 FTE's.

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**SITE PROFILE**  
**OREMEF/Bechtel Jacobs**

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**LABORATORY/TECHNICAL SUPPORT**

Includes sampling, analysis, and monitoring, as well as laboratory activities. Increased cost in FY 2005 was due to the higher number of samples required to support project activities (\$700K). The FY 2007 decrease (\$.3M) was due to less sampling and laboratory activities. The FY 2008 increase (\$297K) was due to additional sampling for ETPP site characterization activities.

**MANAGEMENT/INCENTIVE FEE**

Fluctuations in fee over the five year period have been due to a change in the fee structure to a performance-based fee structure. The performance measures were largely tied to specific scopes of work that vary from year to year. The fluctuations are a factor of performance and fee available to be earned. With the change to a cost-plus-incentive-fee contract on 10/1/03, the possible fee to be earned increased. Bechtel Jacobs accrues this fee on a percentage of target fee basis as approved by DOE. However, in FY 2006 a decision was made to adjust target fee to minimum fee levels. In FY 2008, as a result of contract restructuring, costs of \$11.698M were recorded to: 1) true-up the fee earned through FY 2007; 2) reflect FY 2008 Performance Fee earned; and 3) record fee earned for MEPP/MEWA. The increase in FY 2009 represents a full year of fixed fee accrued based on the restructured contract as well as MEPP/MEWA fee.

**TAXES**

Includes franchise and excise taxes. Listed at the end of the file are the sales and use taxes paid for the past four years. Bechtel Jacobs does not operate with any direct pay permits and does not separately identify this cost in the accounting system. The FY 2005 increase reflects the taxes paid on earnings which increased during the period. The FY 2006 increase (\$300K) was due to actual FY 2005 4th Qtr franchise & excise tax payments made in FY 2006. Because tax payments are made based on estimated earnings the FY 2009 taxes decreased because 2008 actual earnings were less than the amount estimated and the adjustment was taken in 2009.

**CAPITAL CONSTRUCTION**

Costs in this category increased during FY 2009 due to the start of two new capital projects funded by ARRA which include the Landfill Expansion project and Environmental Management Waste Management Facility (EMWMF) final expansion.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT

**SITE PROFILE**  
**OREMEF/Bechtel Jacobs**

Optimize Sealed Exhaust Header Removal Activities	23	<p>During the Measure Phase, numerous input Variables (X's) were identified using brainstorming, in PIP team meetings, and discussions with craft workers as having an impact to the sealed exhaust header removal process. After development of the process map and ranking using the XY Matrix and Failure Modes and Effects Analysis (FEMA), the possible X's were determined. The possible X's identified during the Measure Phase are: not having enough space in the Withdrawal Alley's (WA) of the building to stage B-25 boxes used to store sealed, lack of good Non-Destructive Assay (NDA) measurement data, length of NDA results approval time, inability to co-mingle waste in the B-25 boxes with piping before the boxes are shipped, the B-25 box gram limits exceeding requirements, and units within the K-25 Building not released for removal due to site gram limits. Once the possible X's were identified data collection was to begin to perform statistical analysis for the Analyze Phase. Unfortunately, work stoppages occurred for an undetermined amount of time that would not provide data to be collected on the X's. Therefore, the team decided to approach process improvements from a Lean Six Sigma point of view.</p>	
HSPD-12 Program Implementation	1,304	<p>BJC was required to implement the HSPD-12 directive for all personnel with a clearance, including subcontractors, tenants, and others who require access to DOE facilities. This involved issuing new credentials as mandated by HSPD-12. A two-step process including an enrollment phase and an activation phase was required. A process was developed that reduced the cycle time for processing these credentials that reduced the amount of time required for this re-badging process. An effort to reduce the number of clearances also reduced the amount of cost required for implementation of this process.</p>	

**SITE PROFILE**  
**OREMEF/Bechtel Jacobs**

<p>Process for USQD Review of Procedures and Forms</p>	<p>285</p>	<p>The completion of the accelerated closure scope requires the implementation of a Nuclear Facility Safety Program to ensure proposed changes are adequately evaluated relative to the approved documented safety analysis (DSA). The process to evaluate a proposed change is implemented by conducting and documenting an unreviewed safety question determination (USQD) for review and approval prior to the change being made. Changes to BJC Project and Functional procedures and forms must be reviewed through the USQD process prior to their approval. Reductions in qualified USQ preparer/reviewer support adversely impacts the efficiency of the USQD process. A reviewed process was defined to ensure compliance with all applicable requirements. The process applied a graded approach to be used to identify when a USQD review was required based on the USQD designation and/or the type of change (i.e., non-intent). Identification of the USQD requirement in the on-line Procedures/Forms listing was determined to be a key action required prior to implementation of the revised process. Additional actions were identified to consolidate the three forms used to request action for a Procedure/Form into a single form.</p>	
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**SITE PROFILE**  
**OREMEF/Bechtel Jacobs**

<p>Optimizing Foaming Operations-K25/K27 D&amp;D Project</p>	<p>215</p>	<p>Stabilization of legacy material in piping and equipment within the K-25/27 facilities is required to ensure compliance with radiological, classification, material accountability and physical security requirements associated with the demolition of the facilities. The stabilization is accomplished by dispensing polyurethane foam into the piping and equipment. The Foaming Delivery Systems (FDS) include the maintenance, inspection, and operation of the equipment to perform the foaming operations. Optimizing the foaming operations, while ensuring compliance with applicable requirements, is a primary element of meeting the overall K-25/27 D&amp;D project schedule. Potential improvements were identified which include revising the requirements in the TSR associated with drum change outs so that at least one drum of both the resin and PMDI can be moved simultaneously rather than one at a time; evaluating the use of a forming protective enclosure unit or a “tank truck” which would allow distribution of larger quantities of foam to be used at a foaming location and minimize/eliminate the time and amount of drum change outs; during the lunch break, put the FDS on “Hot Standby” where a single trained individual acts as a fire watch during the lunch break, avoiding the shut down and start up of the FDS on a daily basis; and begin using the 1.7pcf foam to fill the pipe rather than the 2.3 pcf foam.</p>	
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**SITE PROFILE**  
**OREMEF/Bechtel Jacobs**

<p>Minimize Personnel Protective Equip. Requirements</p>	<p>78</p>	<p>Over 280,000 Radiological Work Permit (RWP) entries have been made into the K-25/27 buildings since the start of the project. Of the 280,000 recorded entries, there have been two personnel contaminations while performing tours, inspections, walk downs, or doing physical work. Different work activities require different levels of PPE which not only cost money, but can affect productivity. PPE can also create additional safety risks such as heat stress and restricted movement for the individuals that use it on a daily basis. By minimizing the PPE requirements for certain work activities; the K-25/27 project will be able to reduce risks to the individual, cut costs associated with PPE, and increase productivity. Based on the cost and safety evaluations from the Measure and Analyze Phases, the following recommendations for the K-25/27 Project are as follows:</p> <ul style="list-style-type: none"> <li>• Assign different minimal levels of PPE based on work activity (e.g. high risk of heat-related injury and low potential for personnel contamination). Estimate that 50% will be able to dress in minimal PPE based on new requirements,</li> <li>• Implement a respirator re-use program that allows individuals to re-use their respirator and cartridge for a period of a week rather than use 3 respirators and cartridges per day,</li> <li>• Utilize Personnel Air Purifying Respirators (PAPR's) for activities such as asbestos abatement which require more than 3 entries per day and have an added risk of heat-related injury.</li> </ul>	
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**Trends in Total Support Cost by Functional Categories**  
**Pacific Northwest National Lab/Battelle Memorial (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	719,778	734,007	753,274	874,985	1,050,389	330,611	45.9%
<b>Capital Construction</b>	17,901	20,931	34,685	46,094	123,879	105,978	592.0%
<b>Total Costs Less Construction</b>	701,877	713,076	718,589	828,891	926,510	224,633	32.0%
<b>Total Support Costs</b>	<b>243,067</b>	<b>258,960</b>	<b>271,327</b>	<b>294,781</b>	<b>314,392</b>	<b>71,325</b>	<b>29.3%</b>
<b>Mission Direct Operation</b>	458,810	454,116	447,262	534,110	612,118	153,308	33.4%
<b>Mission Direct Operation as % of Total Cost</b>	<b>63.7%</b>	<b>61.9%</b>	<b>59.4%</b>	<b>61.0%</b>	<b>58.3%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>2.5%</b>	<b>2.9%</b>	<b>4.6%</b>	<b>5.3%</b>	<b>11.8%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>33.8%</b>	<b>35.3%</b>	<b>36.0%</b>	<b>33.7%</b>	<b>29.9%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>33.8%</b>	<b>35.3%</b>	<b>36.0%</b>	<b>33.7%</b>	<b>29.9%</b>		
<b>TOTAL SUPPORT COST</b>	<b>243,067</b>	<b>258,960</b>	<b>271,327</b>	<b>294,781</b>	<b>314,392</b>	<b>71,325</b>	<b>29.3%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>14.0%</b>	<b>14.7%</b>	<b>15.0%</b>	<b>13.9%</b>	<b>12.8%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>100,486</b>	<b>107,807</b>	<b>113,107</b>	<b>121,885</b>	<b>134,944</b>	<b>34,458</b>	<b>34.3%</b>
EXECUTIVE DIRECTION	7,288	7,977	8,117	5,532	6,600	-688	-9.4%
HUMAN RESOURCES	5,353	6,224	6,207	8,338	9,593	4,240	79.2%
CFO	11,849	13,402	14,813	16,489	14,510	2,661	22.5%
PROCUREMENT	6,710	7,274	8,646	9,871	11,430	4,720	70.3%
LEGAL	955	1,054	1,116	1,569	1,800	845	88.5%
CENTRAL ADMIN SERVICES	5,747	6,026	7,172	7,500	7,897	2,150	37.4%
PROGRAM/PROJECT CONTROL	3,617	3,697	4,695	5,191	6,203	2,586	71.5%
INFORMATION OUTREACH	41,162	41,431	38,596	41,354	43,333	2,171	5.3%
INFORMATION SERVICES	17,805	20,722	23,745	26,041	33,578	15,773	88.6%
OTHER	0	0	0	0	0	0	0.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>15.7%</b>	<b>16.1%</b>	<b>16.7%</b>	<b>15.9%</b>	<b>13.6%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>113,029</b>	<b>118,395</b>	<b>126,042</b>	<b>139,543</b>	<b>142,945</b>	<b>29,916</b>	<b>26.5%</b>
ENVIRONMENTAL	3,949	4,594	5,066	5,360	8,484	4,535	114.8%
SAFETY AND HEALTH	21,936	22,425	24,673	24,257	24,600	2,664	12.1%
FACILITIES MANAGEMENT	31,403	33,544	34,680	45,262	48,566	17,163	54.7%
MAINTENANCE	13,194	14,458	13,445	15,059	16,049	2,855	21.6%
UTILITIES	6,073	7,111	7,383	7,281	5,667	-406	-6.7%
SAFEGUARDS AND SECURITY	17,983	16,522	20,771	18,891	14,568	-3,415	-19.0%
LOGISTICS SUPPORT	2,579	2,893	2,474	3,129	3,283	704	27.3%
QUALITY ASSURANCE	3,982	4,317	4,419	5,670	7,436	3,454	86.7%
LABORATORY/TECHNICAL SUPPORT	11,930	12,531	13,131	14,634	14,292	2,362	19.8%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>4.1%</b>	<b>4.5%</b>	<b>4.3%</b>	<b>3.8%</b>	<b>3.5%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>29,552</b>	<b>32,758</b>	<b>32,178</b>	<b>33,353</b>	<b>36,503</b>	<b>6,951</b>	<b>23.5%</b>
MANAGEMENT/INCENTIVE FEE	12,487	13,863	13,618	13,572	14,986	2,499	20.0%
TAXES	2,840	2,566	3,349	3,286	3,333	493	17.4%
LDRD / PDRD / SDRD	14,225	16,329	15,211	16,495	18,184	3,959	27.8%

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**SITE PROFILE**  
**Pacific Northwest National Lab/Battelle Memorial**

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**SITE OVERVIEW AND CHARACTERISTIC**

As a DOE Office of Science national laboratory, PNNL has an enduring mission to deliver leadership and advancements in science, energy national security, and the environment for the benefit of DOE and the nation. Established in 1965 with 2200 employees and facilities that comprised the Hanford Site research laboratories, PNNL continued its support of Site operations, expanded its nuclear fuel cycle research, and focused on developing advanced reactor designs and materials, fabricating and testing novel reactor fuels, and monitoring and protecting human health and the environment. Since then, PNNL has evolved into a leading multidisciplinary national laboratory with 4,700 staff and \$1.1B in research work that makes scientific discoveries and develops innovative technologies for DOE and other federal and industry customers.

PNNL's Laboratory agenda translates our strategy into action by bringing multiple elements of the Laboratory's strategy and operations into a unifying and actionable framework. It articulates our enduring mission as a national laboratory, our leadership positions, our critical outcomes and strategic initiatives, and our distinctive core capabilities. These elements enable us to deliver leadership and high-impact advancements in science and science-based solutions that address specific DOE challenges that we call our mission outcomes. PNNL's four mission outcomes are:

- Strengthen U.S. scientific foundations for innovation
- Increase U.S. energy capacity and reduce dependence on foreign oil
- Prevent and counter terrorism and proliferation of weapons of mass destruction
- Reduce environmental effect of human activity and create sustainable systems

In order to advance science and develop solutions towards addressing the nation's needs within these four mission outcomes, PNNL relies on its ten core capabilities in scientific and engineering disciplines, as acknowledged by the Office of Science. Each capability is a powerful combination of people, equipment, and facilities that is nurtured through programmatic, institutional, and corporate investments. PNNL makes discretionary investments in areas of strategic importance so that the Laboratory can respond to emerging and future national needs. PNNL's ten core capabilities are:

- Chemical and Molecular Sciences
- Chemical Engineering
- Biological System Science
- Climate Change Science
- Subsurface Science
- Applied Materials Science and Engineering
- Applied Nuclear Science and Technology
- Applied Computer Science, Visualization and Data

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**SITE PROFILE**  
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- Systems Engineering and Integration
- Large Scale User Facility/Advanced Instrumentation

PNNL has identified critical outcomes that collectively drive the future direction of the Laboratory. These critical outcomes are designed to transform PNNL's capability base by leveraging multiple core capabilities while simultaneously building current programmatic strength. These eight critical outcomes are:

- EMSL: Transformational tools to advance scientific frontiers
- Multi-modal *in situ* chemical imaging and analysis
- Rapid, scalable chemical and materials synthesis for chemical and energy storage and conversions
- Climate change modeling and integrated assessment at regional scales
- Subsurface science for sequestration and environmental remediation
- Secure real-time electric grid monitoring, modeling, analysis, and visualization
- Signature science for next-generation integrated sensing systems
- Multi-source data integration and information analysis for data-intensive applications

Consequently, S&T critical outcomes drive our multi-year initiative investments and annual actions and goals. These Initiatives are in the areas science and technology as well as the management systems required to support research and development. PNNL's two-to-five-year management and operations priorities move the Laboratory from where it is now to where it needs to be to fulfill its highest potential for our customers. Annual actions and goals are assigned at the highest levels of the organization, and organization leaders and staff use those goals to focus efforts and accelerate progress towards our envisioned outcomes and thus establishing its leadership in specific technical domains. Towards this, PNNL has established or aspires to establish its leadership in four areas by providing the distinguishing, world-leading science and technology within the broader scope of the Mission Outcomes defined earlier. These leadership positions are:

- Design and scalable synthesis of materials and chemicals
- Climate change science and emissions management
- Efficient and secure electricity management from generation to end use
- Signature discovery and exploitation for threat detection and reduction

PNNL intends to deliver on its stated mission outcomes and establish its leadership by building world-class capabilities through aligned and optimized investment in facilities, infrastructure and equipment. By stewarding the Laboratory's assets and through the execution of its strategy, PNNL will deliver real, sustained value to the nation. PNNL is operated by Battelle Memorial Institute

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(BMI), a private, non-profit, S&T enterprise that explores emerging areas of science, develops and commercializes technology, and manages laboratories.

The trend in PNNL's total Functional Support Costs as a percentage of Total Costs has decreased as compared to 2004. The percentage in 2004 was 35.1% compared to 29.9% in 2009, a decrease of 5.2percentage points for that period. In 2006 labor rates escalated, reflecting the return to pension funding contributions after an extended period of little or no contributions due to outstanding performance in the investment of pension assets.

The effects of the Laboratory restructure effort as well as the Indirect Hiring process instituted in FY07 has been effective and evident in the Indirect FTE levels. The Lab has increased Indirect FTEs by 4.5% since FY07. This is relatively low considering the Lab growth in FY09 but even more noteworthy in light of a 9.6% increase for Direct FTEs over the same period. In FY05 and FY06 we had been hiring new staff at a rate of 1.2 Direct staff to every 1 Indirect staff, which was having an undesired effect of decreasing the Direct Ratio (Direct FTEs to Total FTEs) efficiency metric. The ratio improved to 1.3 to 1 in FY07 and 1.35 to 1 in FY08. The FY09 ratio is 1.36 to 1, which resulted in increasing the FY09 Direct Ratio to 57.7 percent. This efficiency improvement enables us to pay for the overhead costs associated with the replacement and transition of new facilities recently occupied and facilities currently under construction.

**FY09 PNNL Cost Savings Initiatives**

**Cost Drivers and Management/Mitigation Strategies**

PNNL has addressed numerous cost challenges which are described below. To this end, PNNL management applies mitigation strategies that have enabled the Laboratory to absorb these costs and avoid indirect rate increases through effective cost management, operational efficiencies, and increased recovery from business growth. PNNL also implemented a major restructuring at the beginning of FY 2008 that reduced the number of directorates and achieved efficiencies in lab operations. Further, PNNL is implementing a comprehensive approach to clarify and simplify the delivery of support systems to better enable the conduct of research.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**INFORMATION SERVICES**

Information Services increased by \$7.6 million from \$26 million to \$33.6 million in FY 2009. This increase was driven by the Regional Optical Network Extension and a reclassification of IT labor from the CFO category to the Information Sevices category.

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**SITE PROFILE**  
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**ENVIRONMENTAL**

Environmental Mission Support increased by \$3.1 million from \$5.4 million to \$8.5 million in FY 2009. This increase occurred because in FY 2009, PNNL reviewed the definitions of the Environmental and Safety & Health categories and revised the percentage split to the ES&H organization. In FY 2008, the split was 15 percent to Environmental and 85 percent to Safety and Health. In FY 2009, the percentage assigned was 30 percent to Environmental and 70 percent to Safety and Health.

**UTILITIES**

Utilities Mission Support decreased by \$1.6 million from \$7.3 million to \$5.7 million in FY 2009. This decrease was primarily driven by reduced Utility cost/consumption.

**SAFEGUARDS AND SECURITY**

Safeguards and Security Mission Support decreased by \$4.3 million from \$18.9 million to \$14.6 million in FY 2009. This decrease was primarily driven by Safeguards & Security funding related to the International Nuclear Safety Program (INSP). Remaining funds under B&R FS5509000 were spent in FY 2008 and no additional funding was received in FY 2009. In addition, there was a decrease of \$1.3 million in cost for the NS Mission Adder Service Center. In FY 2008, the NS Mission Adder Service Center paid off the lease costs associated with modifications to the Sensitive Compartmented Information Facility (SCIF).

**QUALITY ASSURANCE**

Quality Assurance Mission Support increased by \$1.7 million from \$5.7 million to \$7.4 million in FY 2009. This increase was primarily driven by the How Do I (HDI) Initiative and the One Laboratory Improvement Management Initiative, which reflect focused investments in areas requiring lab level operational improvements.

**CAPITAL CONSTRUCTION**

Capital Construction increased by \$77.8 million from \$46.1 million to \$123.9 million in FY 2009. The increase was primarily due to funding level changes for 6 B&R's. The B&R's were 39KG01000 which increased by \$32.4 million, 400904120 which increased by \$30.9 million, KP1504020 (ARRA) which increased by \$5 million, 39NN21000 which increased by \$1.5 million, KP1205020 (ARRA) which increased by \$0.8 million, and KG0900000 (ARRA) which increased by \$0.1 million.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT

**SITE PROFILE**  
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<p>Transition from the 300 Area to New Lab Facilities</p>	<p>0</p>	<p>PNNL has fully funded the transition project activities out of Laboratory overhead in accordance with the plan approved by DOE-SC. Consistent with this commitment; the Laboratory is absorbing about \$60 million of overhead costs for CRL and transition with FY 2010 being the peak year at ~\$18 million. PNNL and PNSO are coordinating to manage these transition costs through a project plan integrated into the CRL Project baseline. While transition cost will end in FY 2011, the incremental cost for the new leased facilities will increase operating costs by \$9 million per year starting in FY 2010. Absorbing these costs will not affect the Laboratory's infrastructure funding commitment under the DOE-SC SLI program or its mission readiness profile going forward.</p>	
<p>Employee Pension Costs</p>	<p>0</p>	<p>Fringe costs, such as pension funding, have become a significant cost driver. PNNL pension contributions have been increasing beyond the normal amount of funding of \$33 million per year. In FY 2009, PNNL contributed \$55 million, and the current financial environment makes it difficult to forecast the future levels of required contribution. During FY 2009, PNNL management implemented plan changes that provide significant savings in terms of future pension funding contributions with limited impact on benefits for those staff who work until a normal retirement age. This resulted in cost reduction of approximately 20% of future contributions.</p>	

**SITE PROFILE**  
**Pacific Northwest National Lab/Battelle Memorial**

<p>Cost of Site Services</p>	<p>0</p>	<p>PNNL purchases a number of critical services from the existing DOE-RL Hanford Site service contractors, including occupational medicine services, a portion of the Laboratory facility safety, physical security, electrical, water, roads, and grounds services in the Hanford Site 300 Area. In some cases the cost of the service is competitive; in other instances the cost appears excessive relative to benefit received. PNNL is working closely with PNSO to determine the Laboratory's long-term needs for support services and the best competitive source of those services. A comprehensive approach is under development that includes both purchasing services from the Hanford site, as well as proposals for third-party sources to provide the best value for DOE-SC and PNNL.</p>	
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**SITE PROFILE**  
**Pacific Northwest National Lab/Battelle Memorial**

IT Services and Cyber Security	0	<p>The cost of protecting information resources continues to rise, partly due to increased regulation, but more so because of the sophistication of the adversaries and the challenges of protecting an increasingly large and complex IT environment. As PNNL invests more in IT to conduct science and to improve operational efficiency, the length of the “border” that needs to be protected increases. In spite of these escalating challenges, direct funding for cyber security has remained flat and is increasingly devoted to compliance reporting and audits rather than cyber security operations and improvements. The Laboratory will continue to reduce both cost and vulnerability by decreasing complexity in the IT environment through standardization, virtualization technology, and the use of open-source software and commercial “cloud computing” as alternatives to proprietary software licensing and local application hosting models. PNNL will also propose to DOE an outcome-based (rather than compliance-based) cyber security program that will help optimize cyber security investments.</p>	
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**Trends in Total Support Cost by Functional Categories**  
**Pantex/BWXT (\$000)**  
**FY 2009**

	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>\$ Change 2005 To FY 2009</b>	<b>% Change 2005 To FY 2009</b>
<b>Total Costs</b>	491,626	477,423	492,933	529,415	516,152	24,526	5.0%
<b>Capital Construction</b>	31,469	29,343	19,792	27,748	21,367	-10,102	-32.1%
<b>Total Costs Less Construction</b>	460,157	448,080	473,141	501,667	494,785	34,628	7.5%
<b>Total Support Costs</b>	<b>318,358</b>	<b>316,621</b>	<b>331,390</b>	<b>359,888</b>	<b>359,051</b>	<b>40,693</b>	<b>12.8%</b>
<b>Mission Direct Operation</b>	141,799	131,459	141,751	141,779	135,734	-6,065	-4.3%
<b>Mission Direct Operation as % of Total Cost</b>	<b>28.8%</b>	<b>27.5%</b>	<b>28.8%</b>	<b>26.8%</b>	<b>26.3%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>6.4%</b>	<b>6.1%</b>	<b>4.0%</b>	<b>5.2%</b>	<b>4.1%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>64.8%</b>	<b>66.3%</b>	<b>67.2%</b>	<b>68.0%</b>	<b>69.6%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>64.8%</b>	<b>66.3%</b>	<b>67.2%</b>	<b>68.0%</b>	<b>69.6%</b>		
<b>TOTAL SUPPORT COST</b>	<b>318,358</b>	<b>316,621</b>	<b>331,390</b>	<b>359,888</b>	<b>359,051</b>	<b>40,693</b>	<b>12.8%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>10.9%</b>	<b>10.8%</b>	<b>10.6%</b>	<b>11.2%</b>	<b>10.9%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>53,552</b>	<b>51,405</b>	<b>52,474</b>	<b>59,128</b>	<b>56,095</b>	<b>2,543</b>	<b>4.7%</b>
EXECUTIVE DIRECTION	1,243	1,555	1,413	1,305	1,507	264	21.2%
HUMAN RESOURCES	7,325	6,740	7,611	7,560	6,951	-374	-5.1%
CFO	5,526	4,876	5,029	5,122	5,148	-378	-6.8%
PROCUREMENT	4,594	4,090	4,502	3,876	3,586	-1,008	-21.9%
LEGAL	1,036	1,228	1,618	1,699	1,615	579	55.9%
CENTRAL ADMIN SERVICES	8,784	7,375	7,598	9,334	8,808	24	0.3%
PROGRAM/PROJECT CONTROL	7,996	8,177	7,822	7,138	6,865	-1,131	-14.1%
INFORMATION OUTREACH	1,526	1,528	1,078	1,146	1,171	-355	-23.3%
INFORMATION SERVICES	15,430	15,754	15,705	19,813	18,890	3,460	22.4%
OTHER	92	82	98	2,135	1,554	1,462	1,589.1%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>48.1%</b>	<b>49.3%</b>	<b>49.3%</b>	<b>50.3%</b>	<b>52.2%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>236,683</b>	<b>235,298</b>	<b>242,987</b>	<b>266,112</b>	<b>269,303</b>	<b>32,620</b>	<b>13.8%</b>
ENVIRONMENTAL	11,589	10,805	9,982	10,965	10,689	-900	-7.8%
SAFETY AND HEALTH	45,485	46,123	45,327	48,968	47,888	2,403	5.3%
FACILITIES MANAGEMENT	33,435	20,119	17,591	18,680	17,858	-15,577	-46.6%
MAINTENANCE	43,820	45,236	49,162	49,769	50,732	6,912	15.8%
UTILITIES	10,704	11,528	11,008	12,542	13,559	2,855	26.7%
SAFEGUARDS AND SECURITY	74,572	78,987	84,981	97,482	101,861	27,289	36.6%
LOGISTICS SUPPORT	7,884	9,136	9,901	9,785	8,753	869	11.0%
QUALITY ASSURANCE	6,333	6,755	7,543	10,758	10,921	4,588	72.4%
LABORATORY/TECHNICAL SUPPORT	2,861	6,609	7,492	7,163	7,042	4,181	146.1%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>5.7%</b>	<b>6.3%</b>	<b>7.3%</b>	<b>6.5%</b>	<b>6.5%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>28,123</b>	<b>29,918</b>	<b>35,929</b>	<b>34,648</b>	<b>33,653</b>	<b>5,530</b>	<b>19.7%</b>
MANAGEMENT/INCENTIVE FEE	25,644	27,500	32,695	33,743	31,714	6,070	23.7%
TAXES	1,091	888	1,787	-205	551	-540	-49.5%
LDRD / PDRD / SDRD	1,388	1,530	1,447	1,110	1,388	0	0.0%

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**SITE PROFILE**  
**Pantex/BWXT**

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**SITE OVERVIEW AND CHARACTERISTIC**

**BACKGROUND:**

Pantex Plant, located 17 miles northeast of Amarillo, Texas, is charged with maintaining the safety, security, and reliability of the nation's nuclear weapons stockpile. The facility is managed by B&W Pantex for the U.S. Department of Energy / National Nuclear Security Administration. Originally constructed in 1942 as a conventional bomb plant, Pantex houses 638 buildings, containing slightly over 3.1 million square feet, and employs approximately 3,200 people.

Work performed at Pantex supports three core missions:

1. Stockpile Stewardship
2. Nonproliferation
3. Safeguards and Security.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**OTHER**

The decrease reflects a Voluntary Separation Package that was administered at the Pantex Plant during September 2008 in response to decreased funding levels in FY2009. A similar package was offered in FY2009, but the number of personnel severance payments was significantly less.

**TAXES**

The increase to Taxes is a return to normal spending after processing an adjustment in FY2008 to the Franchise Fee. Effective with the FY2007 payment, the Franchise Fee changed to a gross margins tax, resulting in a reduced tax rate for the FY2007 payment and FY2008 accrual.

**LDRD / PDRD / SDRD**

PDRD efforts fluctuate widely from year-to-year given the small size of the program. The increase for FY2009 reflects the phasing on various contracts. Three contracts were issued late in FY2008, with the majority of costs realized in FY2009.

**CAPITAL CONSTRUCTION**

By definition, this category fluctuates a great deal from year to year. The reduction in FY2009 reflects a decrease across all capitalized efforts (Capital Equipment, GPP, and Line Item Construction) from FY2008, which is consistent with funding availability.

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**SITE PROFILE**  
**Pantex/BWXT**

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**COST SAVINGS INITIATIVES**  
(\$ in 000's)

<b>INITIATIVE TITLE</b>	<b>AMOUNT SAVED PER YEAR</b>  (\$ in 000's)	<b>DESCRIPTION OF EFFORT</b>	<b>POINT OF CONTACT</b>
(None)			

**Trends in Total Support Cost by Functional Categories**  
**Princeton Plasma Physics Lab/Princeton University (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	81,158	78,151	76,635	78,930	81,999	841	1.0%
<b>Capital Construction</b>	16,671	16,513	15,178	14,554	11,402	-5,269	-31.6%
<b>Total Costs Less Construction</b>	64,487	61,638	61,457	64,376	70,597	6,110	9.5%
<b>Total Support Costs</b>	<b>35,367</b>	<b>33,187</b>	<b>35,164</b>	<b>37,882</b>	<b>39,083</b>	<b>3,716</b>	<b>10.5%</b>
<b>Mission Direct Operation</b>	29,120	28,451	26,293	26,494	31,514	2,394	8.2%
<b>Mission Direct Operation as % of Total Cost</b>	<b>35.9%</b>	<b>36.4%</b>	<b>34.3%</b>	<b>33.6%</b>	<b>38.4%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>20.5%</b>	<b>21.1%</b>	<b>19.8%</b>	<b>18.4%</b>	<b>13.9%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>43.6%</b>	<b>42.5%</b>	<b>45.9%</b>	<b>48.0%</b>	<b>47.7%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>43.6%</b>	<b>42.5%</b>	<b>45.9%</b>	<b>48.0%</b>	<b>47.7%</b>		
<b>TOTAL SUPPORT COST</b>	<b>35,367</b>	<b>33,187</b>	<b>35,164</b>	<b>37,882</b>	<b>39,083</b>	<b>3,716</b>	<b>10.5%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>15.8%</b>	<b>11.9%</b>	<b>13.3%</b>	<b>14.5%</b>	<b>15.4%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>12,847</b>	<b>9,266</b>	<b>10,226</b>	<b>11,473</b>	<b>12,588</b>	<b>-259</b>	<b>-2.0%</b>
EXECUTIVE DIRECTION	808	824	901	1,124	1,403	595	73.6%
HUMAN RESOURCES	790	765	781	790	809	19	2.4%
CFO	1,307	1,253	1,272	1,293	1,556	249	19.1%
PROCUREMENT	648	671	693	606	665	17	2.6%
LEGAL	0	0	11	102	220	220	100.0%
CENTRAL ADMIN SERVICES	204	232	257	240	229	25	12.3%
PROGRAM/PROJECT CONTROL	664	692	901	932	867	203	30.6%
INFORMATION OUTREACH	2,982	2,939	2,899	3,013	3,247	265	8.9%
INFORMATION SERVICES	2,391	2,515	2,482	3,435	3,533	1,142	47.8%
OTHER	3,053	-625	29	-62	59	-2,994	-98.1%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>24.2%</b>	<b>26.7%</b>	<b>27.8%</b>	<b>29.0%</b>	<b>27.4%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>19,620</b>	<b>20,871</b>	<b>21,311</b>	<b>22,925</b>	<b>22,502</b>	<b>2,882</b>	<b>14.7%</b>
ENVIRONMENTAL	0	256	277	1,378	1,369	1,369	100.0%
SAFETY AND HEALTH	1,798	1,833	1,865	1,777	1,824	26	1.4%
FACILITIES MANAGEMENT	3,473	3,492	3,355	3,358	3,630	157	4.5%
MAINTENANCE	6,699	7,241	7,847	8,177	8,277	1,578	23.6%
UTILITIES	3,788	3,887	3,513	4,585	3,292	-496	-13.1%
SAFEGUARDS AND SECURITY	1,485	1,464	1,680	1,542	1,659	174	11.7%
LOGISTICS SUPPORT	732	826	889	894	1,004	272	37.2%
QUALITY ASSURANCE	657	775	800	612	624	-33	-5.0%
LABORATORY/TECHNICAL SUPPORT	988	1,097	1,085	602	823	-165	-16.7%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>3.6%</b>	<b>3.9%</b>	<b>4.7%</b>	<b>4.4%</b>	<b>4.9%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>2,900</b>	<b>3,050</b>	<b>3,627</b>	<b>3,484</b>	<b>3,993</b>	<b>1,093</b>	<b>37.7%</b>
MANAGEMENT/INCENTIVE FEE	2,900	3,050	3,100	3,000	3,415	515	17.8%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	0	0	527	484	578	578	100.0%

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**SITE PROFILE**  
**Princeton Plasma Physics Lab/Princeton University**

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**SITE OVERVIEW AND CHARACTERISTIC**

**BACKGROUND**

The Princeton Plasma Physics Laboratory (PPPL) is a Collaborative National Center for plasma and fusion science. Its primary mission is to develop the scientific understanding and key innovations which will lead to an attractive fusion energy source. This research program is carried out in close collaboration with other national and international institutions. Associated missions at PPPL include conducting world-class research along the broad frontier of plasma science and providing the highest quality of scientific education.

PPPL is managed by Princeton University. The Laboratory is sited on 88 acres of Princeton University's James Forrestal Campus, about four miles from the main campus. There are two sites at the Laboratory: C-Site that houses most of the Laboratory's workforce and the smaller experimental devices; and D-Site which is the site of the National Spherical Torus Experiment (NSTX) that began operations in FY1999 and which will be upgraded over the next several years to enhance its capabilities to conduct fusion science research.

PPPL's FY2009 funding was approximately \$97 million, of which approximately \$92 was provided from the Office of Fusion Energy Sciences (including \$7 million for ITER provided via ORNL, and \$14 million for projects funded from the American Recovery and Reinvestment Act of FY2009), approximately \$4 million from other DOE programs, and approximately \$1 million from other federal agencies and non-federal sponsors. The Laboratory costed approximately \$82 million during FY2009. As of September 30, 2009, the number of regular and limited duration employees at PPPL was 435; in addition, approximately 25 subcontractors, 40 graduate students, and visiting research staff work at PPPL.

**ANALYSIS OF CHANGE IN SUPPORT COSTS FROM FY2005 TO FY2009**

From FY2005 to FY2009, Total Costs increased from \$78.3 million to \$82.0 million; Total Functional Support Costs increased from \$32.5 million (excluding severance costs) to \$39.1 million. The increases in cost are due to different drivers each year, as follows. From FY2005 to FY2006, excluding \$2.9M of severance costs from the Voluntary Separation Program in 2005, Total Costs remained constant at approximately \$78 million; however, Total Functional Support Costs increased from \$32.5 million (excludes severance costs) to \$33.6 million (excludes a \$.5 million cost reversal for liabilities that were favorably resolved). The most significant increase was in the maintenance category (\$.5M), primarily due to an increase in facility maintenance work in order to meet the DOE maintenance investment spending goal. Total Functional Support costs increased from FY2006

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**SITE PROFILE**  
**Princeton Plasma Physics Lab/Princeton University**

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(\$33.6 million) to FY2007 (\$35.2 million). The major contributors to this increase are the implementation of a Laboratory Directed Research and Development (LDRD) program (\$.5 million), an increase in maintenance activities on the NSTX experimental device (\$.6 million), additional resources to address cyber security deficiencies (\$.2 million) and additional resources for project/program planning (\$.2 million), primarily due to the increase in ITER activities. Although FY2007 was the first year that single purpose laboratories were eligible for LDRD, PPPL did conduct a similar program at approximately the same cost level, Laboratory Program Development Activities (LPDA), in prior fiscal years with DOE approval. The costs for this program were included in the Mission Direct — Science category for those years. Total Mission Direct and Capital/Construction costs decreased from FY2006 (\$45.0 million) to FY2007 (\$41.5 million). This decrease in total costs reflects the lower funding level in FY2007 compared to FY2006 of approximately \$5.0 million.

Total Costs increased by \$2.3 million from FY2007 to FY2008 primarily as a result of an increase in NSTX funding of approximately \$3.0 million. Total Functional Support Costs increased from \$35.2 million in FY2007 to \$37.9 million in FY2008; however, \$1.1 million of the \$2.7 million increase is due to a reclassification of Environmental/Waste Management activities, previously a direct funded activity, from the Mission Direct category to the Environmental category. For consistency purposes, PPPL continued to report the Environmental/Waste Management activities in the Mission Direct category after the Office of Fusion Energy Sciences discontinued the direct funding for these activities, which was noted in the SCFAR submission for each year. A peer review of PPPL's FY2007 SCFAR resulted in a recommendation to reclassify these activities to the Environmental category. PPPL accepted this recommendation, subsequently increasing Mission Support costs and decreasing Mission Direct costs by \$1.1 million in FY2008. The most significant actual increase in FY2008 Support Costs was in the Utilities category (\$1.1 million). The primary reasons for this increase were additional electricity consumption by the NSTX project due to an increase in the number of run weeks from 12.6 weeks in FY2007 to 16.6 weeks in FY2008, and an increase in the cost of electricity of approximately 27%.

Total Costs increased by approximately \$3.1 million from FY2008 to FY2009, primarily as a result of funding received from the American Recovery and Reinvestment Act of FY2009 (\$1.3 million) and an increase in ITER activities (\$1.3 million). Total Functional Support Costs increased from \$37.9 million to \$39.1 million. This increase was primarily driven by higher support costs resulting from the new prime contract.

General Support Costs are largely fixed, and provide general management and administrative support services which benefit the entire Laboratory. The majority of these expenses do not vary based on top-line funding changes, over a relevant range. Furthermore, these expenses are predominately driven by staffing costs. If one considers inflation at 3.0% per year, General Support Costs have

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**SITE PROFILE**  
**Princeton Plasma Physics Lab/Princeton University**

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increased by approximately \$.9 million as measured in FY2009 dollars. In 2009, as a result of the new prime contract with DOE, PPPL added a second Deputy Director position, paid a significantly higher percentage of the Director's salary and benefits, and paid directly for internal audit support. These requirements resulted in an increase of approximately \$.5M. In addition, since 2005, legal fees have increased by \$.2M. PPPL had five legal claims during FY2009 for which litigation services were provided.

Mission Support Costs include both infrastructure costs, which are largely fixed, and costs that are in support of the Laboratory's experimental programs, which are largely variable. In the aggregate, Mission Support Costs increased by \$2.0 million, or 9.8%, during the period from FY2005 through FY2009. Within the Mission Support group, the Maintenance line increased from \$6.7M million in FY2005 to \$8.3 million in FY2008, an increase of \$1.6 million. Of this \$1.6 million, the increase in infrastructure maintenance was approximately \$1.4 million. It is noteworthy that the increase in the infrastructure maintenance costs results from the DOE's directed initiative to increase the amount of facilities maintenance investment and reduction in deferred maintenance during the FY2005 through FY2009 time period.

Site Specific Costs as a percentage of Total Costs, increased from 4.3% in FY2005 to 4.9% in FY2009. This increase is largely due to the restructuring of the Management Fee and payments for administrative support provided by Princeton University pursuant to the terms of the new Prime Contract, resulting in an increase in FY2009 of \$.4M.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**EXECUTIVE DIRECTION**

Pursuant to the University's proposal to DOE for the new contract effective 4/1/09, PPPL has added a second Deputy Director position (Deputy Director position replaced with a Deputy Director for Research and a Deputy Director for Operations). In addition, PPPL is paying a significantly higher percentage of the Director's salary and benefits than in FY2008.

**CFO**

Beginning in FY2009, PPPL pays separately for internal audit services under the new prime contract. Previously, audit services were covered under the management allowance paid to Princeton University.

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**SITE PROFILE**  
**Princeton Plasma Physics Lab/Princeton University**

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**LEGAL**

Increase in litigation services. In addition, there were five legal claims against the Laboratory in FY2009 compared to two claims in FY2008.

**OTHER**

FY2008 includes a cost credit of \$50K for the reversal of an accrual made in a previous fiscal year for probable PPPL obligations to Princeton University. An analysis of PPPL's balance sheet accounts completed in FY2008 indicated that this accrual was not needed. In addition, the labor rate variance for overhead staff was \$(13)K in FY2008, as compared to \$21K in FY2009.

**UTILITIES**

The reduction in utilities costs is due to the decrease in the cost of electricity in FY2009 as compared to FY2008.

**LABORATORY/TECHNICAL SUPPORT**

The increase in Lab/Tech Support costs in FY2009 is due to additional purchases and leases of ANSYS software to support newly hired engineers.

**CAPITAL CONSTRUCTION**

The decrease in Capital/Construction costs in FY2009 is primarily due to the termination of the National Compact Stellarator Experiment MIE project in FY2008. This decrease is offset by an increase in SC Mission Direct costs as funding for other PPPL fusion projects increased in FY2009, resulting in no material change in total costs for the base fusion program from FY2008 to FY2009.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Laboratory Operations Consolidation	225	The Laboratory was reorganized in October 2007 following the resignation of the Head of the ES&H/Infrastructure Department. The reorganization eliminated this senior management position, resulting in FY2009 savings of approximately \$225 thousand.	Marie Iseicz

**SITE PROFILE**  
**Princeton Plasma Physics Lab/Princeton University**

Career Development Program	237	This program was implemented throughout the Business Operations Department starting in FY2000. The key element of this program is to replace all departing staff (resignations/retirements) with recent college graduates from local colleges and universities. Specifically, new hires are limited to recent graduates with majors in the business administration/accounting/mathematics disciplines who have earned high grade-point averages and demonstrated the desire/ability to work part-time while attending school. These staff are hired at entry level salaries and then are trained, developed, and continually mentored as they gain experience. The staff which we have hired under this program during the last eight years have gained significant on the job experience, and have increased the capability and competency of the Business Operations Department. This program has contributed annual savings of approximately \$237 thousand during FY2009.	Marie Iseicz
Electric Utility Demand Response Program	40	Through Energy Curtailment Specialists, Inc. (ECS), PPPL participates in an electric utility demand response program to reduce its electric demand in order to help balance supply and demand on the electric grid when needed. As the result of PPPL's performance in September FY2009, PPPL will receive approximately \$40 thousand in FY2010.	Marie Iseicz
Travel	35	<ul style="list-style-type: none"> <li>• The Travel Office negotiated rates, below the government rate, with local hotels when PPPL hosted large conferences. The approximate cost savings was \$10,000.</li>   <li>• The Travel Office negotiated favorable hotel rates for PPPL attendees at large conferences, including SOFE and APS, that were lower than the published conference rates . The total cost savings was approximately \$25,000.</li> </ul>	Marie Iseicz

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**SITE PROFILE**

**Princeton Plasma Physics Lab/Princeton University**

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Energy Conservation	27	<ul style="list-style-type: none"><li>• The replacement of three large roll-up doors with insulated doors, with an increase in R value of 3, is estimated to save approximately \$1,300 annually in energy costs.</li> <li>• The completed installation and commissioning of a new burner and controls on a boiler which uses 10% less natural gas results in \$22,000 savings from a single boiler.</li> <li>• The R-20 roof with a 20 year warranty on the Engineering Building was replaced with an R-30 roof that has a 30 year warranty. The 50% longer life decreases the life cycle replacement cost by \$35,000. The increased insulation value will save \$4,000 annually in energy costs</li></ul>	Marie Iseicz
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**Trends in Total Support Cost by Functional Categories**  
**Sandia National Lab/Lockheed Martin (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	2,273,769	2,272,618	2,239,578	2,261,091	2,224,952	-48,817	-2.1%
<b>Capital Construction</b>	219,298	212,445	119,599	71,808	70,187	-149,111	-68.0%
<b>Total Costs Less Construction</b>	2,054,471	2,060,173	2,119,979	2,189,283	2,154,765	100,294	4.9%
<b>Total Support Costs</b>	<b>755,103</b>	<b>771,592</b>	<b>763,803</b>	<b>790,389</b>	<b>782,317</b>	<b>27,214</b>	<b>3.6%</b>
<b>Mission Direct Operation</b>	1,299,368	1,288,581	1,356,176	1,398,894	1,372,448	73,080	5.6%
<b>Mission Direct Operation as % of Total Cost</b>	<b>57.1%</b>	<b>56.7%</b>	<b>60.6%</b>	<b>61.9%</b>	<b>61.7%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>9.6%</b>	<b>9.3%</b>	<b>5.3%</b>	<b>3.2%</b>	<b>3.2%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>33.2%</b>	<b>34.0%</b>	<b>34.1%</b>	<b>35.0%</b>	<b>35.2%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>33.2%</b>	<b>34.0%</b>	<b>34.1%</b>	<b>35.0%</b>	<b>35.2%</b>		
<b>TOTAL SUPPORT COST</b>	<b>755,103</b>	<b>771,592</b>	<b>763,803</b>	<b>790,389</b>	<b>782,317</b>	<b>27,214</b>	<b>3.6%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>12.4%</b>	<b>12.6%</b>	<b>12.9%</b>	<b>14.0%</b>	<b>13.5%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>282,871</b>	<b>286,403</b>	<b>288,357</b>	<b>315,560</b>	<b>299,478</b>	<b>16,607</b>	<b>5.9%</b>
EXECUTIVE DIRECTION	24,124	24,311	24,511	26,910	27,181	3,057	12.7%
HUMAN RESOURCES	29,143	30,707	25,947	21,668	21,271	-7,872	-27.0%
CFO	11,006	11,563	11,693	9,258	10,490	-516	-4.7%
PROCUREMENT	15,638	17,311	16,859	14,628	13,866	-1,772	-11.3%
LEGAL	6,043	6,777	9,265	8,630	8,127	2,084	34.5%
CENTRAL ADMIN SERVICES	15,953	15,552	14,207	13,666	13,158	-2,795	-17.5%
PROGRAM/PROJECT CONTROL	55,332	55,893	63,653	66,662	73,602	18,270	33.0%
INFORMATION OUTREACH	15,697	13,084	13,048	10,893	5,436	-10,261	-65.4%
INFORMATION SERVICES	105,703	111,657	103,299	128,623	125,897	20,194	19.1%
OTHER	4,232	-452	5,875	14,622	450	-3,782	-89.4%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>12.2%</b>	<b>12.7%</b>	<b>12.5%</b>	<b>12.4%</b>	<b>12.6%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>276,616</b>	<b>287,639</b>	<b>278,907</b>	<b>281,060</b>	<b>281,165</b>	<b>4,549</b>	<b>1.6%</b>
ENVIRONMENTAL	1,707	11,262	7,380	19,939	21,560	19,853	1,163.0%
SAFETY AND HEALTH	39,140	50,408	54,427	44,054	42,757	3,617	9.2%
FACILITIES MANAGEMENT	102,712	74,448	74,037	63,653	45,184	-57,528	-56.0%
MAINTENANCE	37,511	46,462	50,117	63,195	82,240	44,729	119.2%
UTILITIES	21,180	25,979	25,212	24,703	29,321	8,141	38.4%
SAFEGUARDS AND SECURITY	61,118	64,373	52,309	47,997	43,076	-18,042	-29.5%
LOGISTICS SUPPORT	12,523	13,359	14,160	15,687	14,330	1,807	14.4%
QUALITY ASSURANCE	725	1,348	1,265	1,832	2,697	1,972	272.0%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>8.6%</b>	<b>8.7%</b>	<b>8.8%</b>	<b>8.6%</b>	<b>9.1%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>195,616</b>	<b>197,550</b>	<b>196,539</b>	<b>193,769</b>	<b>201,674</b>	<b>6,058</b>	<b>3.1%</b>
MANAGEMENT/INCENTIVE FEE	24,726	26,045	24,985	27,385	25,394	668	2.7%
TAXES	68,883	67,578	69,162	59,548	68,838	-45	-0.1%
LDRD / PDRD / SDRD	102,007	103,927	102,392	106,836	107,442	5,435	5.3%

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**SITE PROFILE**  
**Sandia National Lab/Lockheed Martin**

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**SITE OVERVIEW AND CHARACTERISTIC**

Sandia is a National Security Laboratory operated for the U.S. Department of Energy by the Sandia Corporation, a Lockheed Martin Company. We design all non-nuclear components for the nation's nuclear weapons, perform a wide variety of energy research and development projects, and work on assignments that respond to national security threats -- both military and economic. We encourage and seek partnerships with appropriate U.S. industry and government groups to collaborate on emerging technologies that support our mission.

Mission Statement

Sandia National Laboratories provides scientific and engineering solutions to meet national needs in nuclear weapons and related defense systems, energy security, and environmental integrity, and to address emerging national challenges for both government and industry. As a Department of Energy National Laboratory, Sandia works in partnership with universities and industry to enhance the security, prosperity, and well being of the nation.

Attributes of SNL — FY08 approximations

4 major sites (Albuquerque, NM; Livermore, CA; Tonopah Test Range, NV; Kauai Test Range, HI)  
Acres of land — 188,441  
Number of buildings — 1,152  
Building square footage — 7,496,240  
Number of buildings leased — 49  
Leased building square footage — 554,871  
Employees — 8,232

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**INFORMATION OUTREACH**

California partnership costs moved to corporate PM.

**OTHER**

The decrease is due to elimination of legal settlements and associated fees.

**FACILITIES MANAGEMENT**

The decrease is due to significant reductions in capital expenditures, demolition and decommissioning projects, as well as customer-funded activities.

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**SITE PROFILE**  
**Sandia National Lab/Lockheed Martin**

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**MAINTENANCE**

Maintenance increased primarily as a result of growth in customer funded maintenance requests, together with increases in utilities costs.

**QUALITY ASSURANCE**

The increase is due to additional resources being focused on lean activities.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

<b>INITIATIVE TITLE</b>	<b>AMOUNT SAVED PER YEAR</b>  (\$ in 000's)	<b>DESCRIPTION OF EFFORT</b>	<b>POINT OF CONTACT</b>
(None)			

**Trends in Total Support Cost by Functional Categories**  
**Savannah River/Westinghouse & Wackenhut (\$000)**  
**FY 2009**

	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>\$ Change 2005 To FY 2009</b>	<b>% Change 2005 To FY 2009</b>
<b>Total Costs</b>	1,597,448	1,675,307	1,541,065	1,447,352	1,779,426	181,978	11.4%
<b>Capital Construction</b>	68,871	71,042	63,215	33,322	43,635	-25,236	-36.6%
<b>Total Costs Less Construction</b>	1,528,577	1,604,265	1,477,850	1,414,030	1,735,791	207,214	13.6%
<b>Total Support Costs</b>	<b>870,063</b>	<b>793,469</b>	<b>879,519</b>	<b>752,346</b>	<b>931,316</b>	<b>61,253</b>	<b>7.0%</b>
<b>Mission Direct Operation</b>	658,514	810,796	598,331	661,684	804,475	145,961	22.2%
<b>Mission Direct Operation as % of Total Cost</b>	<b>41.2%</b>	<b>48.4%</b>	<b>38.8%</b>	<b>45.7%</b>	<b>45.2%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>4.3%</b>	<b>4.2%</b>	<b>4.1%</b>	<b>2.3%</b>	<b>2.5%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>54.5%</b>	<b>47.4%</b>	<b>57.1%</b>	<b>52.0%</b>	<b>52.3%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>54.5%</b>	<b>47.4%</b>	<b>57.1%</b>	<b>52.0%</b>	<b>52.3%</b>		
<b>TOTAL SUPPORT COST</b>	<b>870,063</b>	<b>793,469</b>	<b>879,519</b>	<b>752,346</b>	<b>931,316</b>	<b>61,253</b>	<b>7.0%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>13.5%</b>	<b>10.9%</b>	<b>10.8%</b>	<b>10.3%</b>	<b>13.2%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>215,593</b>	<b>182,919</b>	<b>167,189</b>	<b>148,757</b>	<b>234,064</b>	<b>18,471</b>	<b>8.6%</b>
EXECUTIVE DIRECTION	7,361	8,036	8,306	8,869	23,487	16,126	219.1%
HUMAN RESOURCES	13,669	13,123	13,538	12,348	20,387	6,718	49.1%
CFO	13,353	12,517	13,193	12,848	17,298	3,945	29.5%
PROCUREMENT	15,158	16,331	16,336	14,956	24,670	9,512	62.8%
LEGAL	3,626	3,932	3,548	3,273	4,372	746	20.6%
CENTRAL ADMIN SERVICES	19,123	12,376	12,357	11,250	13,154	-5,969	-31.2%
PROGRAM/PROJECT CONTROL	41,920	36,538	35,437	31,587	47,765	5,845	13.9%
INFORMATION OUTREACH	5,607	5,107	5,040	4,625	6,113	506	9.0%
INFORMATION SERVICES	47,256	42,981	45,367	41,934	54,285	7,029	14.9%
OTHER	48,520	31,978	14,067	7,067	22,533	-25,987	-53.6%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>33.7%</b>	<b>29.7%</b>	<b>33.0%</b>	<b>34.2%</b>	<b>34.7%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>538,724</b>	<b>498,226</b>	<b>508,862</b>	<b>494,704</b>	<b>616,638</b>	<b>77,914</b>	<b>14.5%</b>
ENVIRONMENTAL	21,673	18,693	21,530	18,538	26,509	4,836	22.3%
SAFETY AND HEALTH	126,978	130,196	135,548	127,342	165,062	38,084	30.0%
FACILITIES MANAGEMENT	39,318	28,822	26,638	24,934	27,272	-12,046	-30.6%
MAINTENANCE	133,417	106,184	103,898	99,419	127,814	-5,603	-4.2%
UTILITIES	46,521	51,594	46,947	50,595	75,290	28,769	61.8%
SAFEGUARDS AND SECURITY	87,924	91,697	101,571	104,659	113,924	26,000	29.6%
LOGISTICS SUPPORT	28,307	25,801	23,880	23,085	25,319	-2,988	-10.6%
QUALITY ASSURANCE	24,182	21,178	22,921	19,730	25,122	940	3.9%
LABORATORY/TECHNICAL SUPPORT	30,404	24,061	25,929	26,402	30,326	-78	-0.3%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>7.2%</b>	<b>6.7%</b>	<b>13.2%</b>	<b>7.5%</b>	<b>4.5%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>115,746</b>	<b>112,324</b>	<b>203,468</b>	<b>108,885</b>	<b>80,614</b>	<b>-35,132</b>	<b>-30.4%</b>
MANAGEMENT/INCENTIVE FEE	115,746	111,206	200,173	105,465	75,305	-40,441	-34.9%
TAXES	0	610	691	594	1,178	1,178	100.0%
LDRD / PDRD / SDRD	0	508	2,604	2,826	4,131	4,131	100.0%

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**SITE PROFILE**  
**Savannah River/Westinghouse & Wackenhut**

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**SITE OVERVIEW AND CHARACTERISTIC**

**BACKGROUND**

The Savannah River Site (SRS) is a unique site comprised of blended and interdependent missions critically linked to both Department of Energy (DOE) and National Nuclear Security Administration (NNSA) strategic goals. From 1998 to 2008, the site was managed by Washington Savannah River Company (WSRC). When new contracts were awarded, the Management & Operating (M&O) portion was assumed by Savannah River Nuclear Solutions (SRNS) in FY08 and the Liquid Waste portion went to Savannah River Remediation (SRR) in FY09.

SRS covers 198,344 acres, or 310 square miles in three counties in South Carolina, bordering the Savannah River. The site was constructed during the early 1950s to produce basic materials used in nuclear weapons, primarily tritium and plutonium-239.

Common infrastructure, waste handling and treatment facilities serve DOE, NNSA, the United States Forestry Service, and other smaller entities located in SRS. At present, the landlord infrastructure of the site is provided by EM and EM missions currently comprise approximately 80% of the site's efforts.

Several DOE Office of Environment Management (EM) facilities, such as the H Canyon Complex and site waste treatment facilities are also processing NNSA legacy nuclear materials including highly enriched uranium and waste from the tritium facilities. Other NNSA missions, such as the Mixed Oxide Fuel Fabrication Facility (MOX), the Waste Solidification Building (WSB) are being constructed, and the Pit Disassembly and Conversion Facility (PDCF) are in the planning stage. SRNS is currently implementing a plan designed to reduce the site's operational footprint by 40% at the end of FY11. It will also eliminate environmental threats and reduce life-cycle costs.

At FY09 year-end, the Savannah River Site Force Report showed 10,046 full time equivalent (FTE) site employees. This included 6,613 full-service FTEs for Savannah River Nuclear Solutions (SRNS), 2,045 full-service FTEs for Savannah River Remediation (SRR), and 827 Wackenhut Services, Incorporated (WSI) FTEs. The remainder consisted of construction craft, DOE and Forest Service employees, Savannah River Ecology Lab (SREL) employees, and various subcontractors.

**TRENDS IN SUPPORT COSTS FROM FY05 TO FY09**

The SRS Functional Support Cost Report combines costs for SRNS, SRS, and WSI into an integrated report. As a percent of total site costs, Functional Support Costs decreased from 54.5% in FY05 to 47.4% in FY06, increased to 57.1% in FY07, decreased to 52.0% in FY08, and

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**SITE PROFILE**  
**Savannah River/Westinghouse & Wackenhut**

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increased to 52.3% in FY09. Total Functional Support Costs for SRS increased by 7.0% (\$61.3M) from FY05 to FY09. This compares to an increase in the consumer price index of 13.7% over the same period.

During the past five years, the site's primary emphasis from an environmental management perspective has been on:

- Consolidation of materials and operations
- Elimination of hazards with high control costs
- Reduction of "hotel loads" associated with maintaining the operational status of nuclear facilities with redundant capabilities
- Reduction of the landlord infrastructure to a level necessary to support the site in future years
- Site footprint reduction via special funding through the American Reinvestment and Recovery Act (ARRA)

In support of the above customer priorities, major emphases were placed on Decommissioning and Demolition (D&D) and transuranic (TRU) waste shipment programs. During this period, 120 excess buildings and facilities were demolished. This D&D work has resulted in the removal of 1.87M square feet of buildings and facilities. At the same time, the TRU waste shipment program has disposed of over 5,000 cubic meters of waste. During this period, major workforce restructuring (WFR) programs were completed and reduced the site's manpower by 2,479 employees. Manpower reductions by fiscal year were FY05 (1,185), FY06 (640), FY07 (318), and FY09 (336). These reductions were designed to realign the workforce skills for the requirements of the site's evolving scope. In February of 2009, Congress approved ARRA. Under this act, SRS was allocated \$1.6 Billion to accelerate environmental clean-up projects that were previously planned as future scope. In addition, this work is creating and/or saving about 3,000 jobs at SRS.

#### General Support

The overall change in General Support costs from FY05 to FY09 was an increase of 8.6% (\$18.5M). Eight of the ten categories increased over this time period. Significant increases were in Executive Direction, Human Resources and Procurement, offset by decreases in Central Administrative Services and Other (WFR).

#### Mission Support

The overall change in Mission Support costs from FY05 to FY09 was an increase of 14.5% (\$77.9M). Five of the ten categories increased over this time period with significant increases in Utilities (61.8%, \$28.8M), Safeguards & Security (30.0%, \$26.0), and Safety and Health (30.0%, \$38.1M). Following the events of September 11, 2001, DOE made a series of programmatic

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**SITE PROFILE**  
**Savannah River/Westinghouse & Wackenhut**

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decisions to consolidate nuclear materials and enhance associated security. Implementing these decisions increased costs for staff associated with K Area Material Storage (KAMS), heightened security and related preventive measures such as Design Basis Threat (DBT), and Pu Stabilization. The WSI increases were \$11.2M and the SRNS/SRR increases were \$87.4M. The above increases were offset by decreases of \$20.7M primarily in Facilities Management (30.6%, \$12.0M), Maintenance (4.2%, \$5.6M), and Logistics Support (10.6%, \$3.0M).

Site Specific

The Management/Award/Incentive Fee decreased every year from FY05 to FY09 except for FY07. WSRC's contract with DOE was modified in FY03. Those modifications required the contractor to accept significantly increased risk and provided a corresponding increase in earnings opportunity. This contract period ended in FY07 and resulted in a one-time EM fee payment based on cumulative contract performance. In addition WSRC received NNSA super stretch fees for successful completion of the Tritium Extraction Facility (TEF) under budget and ahead of schedule. During this period, Laboratory Directed Research and Development (LDRD) program costs were authorized and initial expenditures were made in FY06. These program expenditures are corporately sized.

ANALYSIS OF CHANGE IN SUPPORT COSTS FROM FY08 TO FY09

As a percentage of total costs, Functional Support Costs remained relatively unchanged from FY08 to FY09 (52.0% in FY08 to %52.3% in FY09).

General Support

The overall change in General Support costs from the prior year was an increase of 57.3% (\$85.3M). The major increases in this category are primarily due to pension increases, additional management structure for Liquid Waste scope, new SRNS management/corporate pay structure, ARRA support, SRR transition, enterprise business system consultants, EVMS certification efforts, and WFR costs.

Mission Support

Mission Support costs increased 24.6% (\$28.3M) from the prior year. The decrease was primarily caused by low initial fee payments for the first six months of the SRNS contract. The Laboratory Directed Research and Development (LDRD) program costs increased slightly due to pension increases and minor program expansion.

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**SITE PROFILE**  
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COST SAVINGS INITIATIVES

In FY01, the site began implementing a Six Sigma program aimed at improving performance throughout the organization. The program includes training key resources in the use of statistical and process management tools to identify and narrow performance gaps in core business processes. In FY09, SRNS began implementation of a hybrid approach based on central management resources in combination with resources deployed throughout the organization. This strategy is designed to ensure consistency across work groups and maintaining priority and work control within the operating divisions. A Continuous Improvement Steering Committee of senior leadership was established. A core team of experts was assembled, and Lean Six Sigma and other expert training were completed. These programs are expected to generate savings in subsequent years.

Process improvement projects resulted in approximately \$35M of savings in FY09. Fifteen percent of those savings were hard dollar.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**EXECUTIVE DIRECTION**

New SR liquid waste contract - establishment of SRR LW management team; new SRNS management team and new corporate pay structure, pension increase

**HUMAN RESOURCES**

New SR liquid waste contract - establishment of LW HR, Gen site training/development moved to HR, pension increase

**CFO**

New SR liquid waste contract - establishment of LW CFO Org, increased ARRA support, pension increase

**PROCUREMENT**

Increased SRNS procurement support due to ARRA, New SR liquid waste contract - establishment of LW procurement group, pension increase

**LEGAL**

New SR liquid waste contract - establishment of LW legal group, increased litigations, pension increase

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**SITE PROFILE**  
**Savannah River/Westinghouse & Wackenhut**

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**PROGRAM/PROJECT CONTROL**

SRNS EVMS certification effort, pension increase

**INFORMATION OUTREACH**

New SR liquid waste contract - establishment LW Public Affairs group, pension increase

**INFORMATION SERVICES**

Increased IT multiple contract transition work, Enterprise business system consultants, pension increase

**OTHER**

WFRs in FY09 (SRNS, WSRC/SRR, WSI, \$17.3M), and lower transition costs - SRNS transitioned to new M&O contract in FY 2008

**ENVIRONMENTAL**

New SR liquid waste contract - establishment of LW effort, pension increase

**SAFETY AND HEALTH**

Multiple contract Safety Mgmt scope, new ARRA scope and increased safety documentation support, pension increase

**MAINTENANCE**

D-Area Powerhouse and other maintenance increases, pension increase

**UTILITIES**

Commodity cost increase (Fuel; coal; etc.) pension increase

**QUALITY ASSURANCE**

New ARRA scope, pension increase

**MANAGEMENT/INCENTIVE FEE**

Low initial fee for SRNS first six months per contract

**TAXES**

Primarily DOE taxes on WSRC/SRR Fee per FAR contract

**LDRD / PDRD / SDRD**

Minor LDRD program expansion, pension increase

**CAPITAL CONSTRUCTION**

Increases to site capital construction projects (SRNS NNSA Waste Solidification Building TEC)

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**SITE PROFILE**  
**Savannah River/Westinghouse & Wackenhut**

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**COST SAVINGS INITIATIVES**  
**(\$ in 000's)**

<b>INITIATIVE TITLE</b>	<b>AMOUNT SAVED PER YEAR</b>  (\$ in 000's)	<b>DESCRIPTION OF EFFORT</b>	<b>POINT OF CONTACT</b>
(None)			

**Trends in Total Support Cost by Functional Categories**  
**SLAC National Accelerator Lab/Stanford Univ. (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	269,840	319,781	352,698	336,100	299,019	29,179	10.8%
<b>Capital Construction</b>	65,295	97,193	107,959	91,271	58,575	-6,720	-10.3%
<b>Total Costs Less Construction</b>	204,545	222,588	244,739	244,829	240,444	35,899	17.6%
<b>Total Support Costs</b>	<b>67,257</b>	<b>77,781</b>	<b>85,182</b>	<b>85,506</b>	<b>85,008</b>	<b>17,751</b>	<b>26.4%</b>
<b>Mission Direct Operation</b>	137,288	144,807	159,557	159,323	155,436	18,148	13.2%
<b>Mission Direct Operation as % of Total Cost</b>	<b>50.9%</b>	<b>45.3%</b>	<b>45.2%</b>	<b>47.4%</b>	<b>52.0%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>24.2%</b>	<b>30.4%</b>	<b>30.6%</b>	<b>27.2%</b>	<b>19.6%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>24.9%</b>	<b>24.3%</b>	<b>24.2%</b>	<b>25.4%</b>	<b>28.4%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>24.9%</b>	<b>24.3%</b>	<b>24.2%</b>	<b>25.4%</b>	<b>28.4%</b>		
<b>TOTAL SUPPORT COST</b>	<b>67,257</b>	<b>77,781</b>	<b>85,182</b>	<b>85,506</b>	<b>85,008</b>	<b>17,751</b>	<b>26.4%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>10.2%</b>	<b>9.2%</b>	<b>8.9%</b>	<b>9.5%</b>	<b>11.3%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>27,626</b>	<b>29,436</b>	<b>31,546</b>	<b>31,991</b>	<b>33,784</b>	<b>6,158</b>	<b>22.3%</b>
EXECUTIVE DIRECTION	3,013	3,442	3,174	3,688	3,934	921	30.6%
HUMAN RESOURCES	2,555	2,739	2,573	2,959	2,508	-47	-1.8%
CFO	5,057	5,054	5,287	4,899	4,622	-435	-8.6%
PROCUREMENT	1,980	2,192	2,425	2,556	3,110	1,130	57.1%
LEGAL	104	103	115	122	165	61	58.7%
CENTRAL ADMIN SERVICES	768	868	908	756	729	-39	-5.1%
PROGRAM/PROJECT CONTROL	1,075	1,149	1,339	1,516	2,688	1,613	150.0%
INFORMATION OUTREACH	3,147	3,396	3,747	3,257	4,123	976	31.0%
INFORMATION SERVICES	6,289	6,250	7,421	7,347	6,914	625	9.9%
OTHER	3,638	4,243	4,557	4,891	4,991	1,353	37.2%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>14.7%</b>	<b>15.1%</b>	<b>15.2%</b>	<b>15.9%</b>	<b>16.6%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>39,631</b>	<b>48,345</b>	<b>53,636</b>	<b>53,515</b>	<b>49,778</b>	<b>10,147</b>	<b>25.6%</b>
ENVIRONMENTAL	2,876	3,403	3,372	3,558	3,748	872	30.3%
SAFETY AND HEALTH	7,609	8,305	8,887	9,703	10,775	3,166	41.6%
FACILITIES MANAGEMENT	2,334	3,316	4,558	4,871	5,275	2,941	126.0%
MAINTENANCE	7,097	10,341	12,928	13,365	12,191	5,094	71.8%
UTILITIES	14,641	17,994	18,197	16,133	10,603	-4,038	-27.6%
SAFEGUARDS AND SECURITY	2,121	2,115	2,373	2,321	2,173	52	2.5%
LOGISTICS SUPPORT	2,759	2,667	3,014	3,194	3,602	843	30.6%
QUALITY ASSURANCE	194	204	307	370	1,411	1,217	627.3%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.5%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,446</b>	<b>1,446</b>	<b>100.0%</b>
MANAGEMENT/INCENTIVE FEE	0	0	0	0	0	0	0.0%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	0	0	0	0	1,446	1,446	100.0%

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**SITE PROFILE**  
**SLAC National Accelerator Lab/Stanford Univ.**

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**SITE OVERVIEW AND CHARACTERISTIC**

**BACKGROUND**

SLAC National Accelerator Laboratory (SLAC) is operated by Stanford University for the Department of Energy's Office of Science. SLAC's primary mission is designing, constructing, operating and utilizing state-of-the-art electron accelerators and related experimental facilities to advance the boundaries of scientific understanding. SLAC was founded in 1962 to perform accelerator-based particle physics, and has since broadened its mission to include photon science and non-accelerator-based particle physics. Major SLAC on-site facilities and supporting research programs include the Linac Coherent Light Source (LCLS) and the Stanford Synchrotron Radiation Lightsource (SSRL). LCLS is the world's first hard x-ray free electron laser in its final phase of construction. It is expected to be completed in summer FY 2010. LCLS positions SLAC to become the world leader in the dynamic new field of ultrafast x-ray science. SSRL is a national synchrotron light source user facility for probing the electronic and atomic structure of matter across a wide range of scientific disciplines. SLAC has a multifaceted program in particle physics and astrophysics involving ground and space-based experiments to explore frontier questions about the nature and origin of our universe. SLAC participates in the ATLAS experiment at the Large Hadron Collider (LHC), supports the completion of data analysis for the BABAR experiment, and hosts the Instrument Science and Operations Center (ISOC) for the Large Area Telescope (LAT) on the Fermi Gamma-ray Space Telescope (FGST) launched in FY 2008.

SLAC's science programs and its role in training the next generation of scientific talent is strongly enhanced by three joint SLAC-Stanford institutes, the Photon Ultrafast Laser Science and Engineering (PULSE) Institute for Ultrafast Energy Science, the Stanford Institute for Materials and Energy Science (SIMES), and the Kavli Institute for Particle Astrophysics and Cosmology (KIPAC).

Approximately 3,000 students and scientists from the U.S. and around the world make use of SLAC's facilities for their research in photon science, and particle physics and astrophysics. Six scientists have been awarded the Nobel Prize for work carried out at SLAC.

SLAC is located on the San Francisco Peninsula in Menlo Park, California, west of the main Stanford campus. The SLAC site occupies 426 acres leased by DOE from Stanford University at no fee. There are about 144 buildings and structures on site. The FY2009 year end staffing level at SLAC was 1,565 FTEs.

The core competencies underpinning activities at SLAC are:

- Innovate electron-based accelerator research and technology
- Design advanced instrumentation, diagnostics and systems integration

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**SITE PROFILE**  
**SLAC National Accelerator Lab/Stanford Univ.**

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- Develop theory and innovative techniques for data analysis, modeling, and simulation in Photon Science, and Particle Physics and Particle Astrophysics
- Manage ultra-large data sets for users and collaborations distributed worldwide

These four competencies enable SLAC to deliver its mission and customer focus, to perform a complementary role in the DOE laboratory system, and to pursue its vision for scientific excellence.

### TRENDS

Functional Support Costs increased 27% between FY2005 and FY2007 and then remained essentially unchanged at the level of \$85M between FY2007 and FY2009, then increased 27% between FY2005 and FY2007. The increase in support costs was primarily due to an 85% increase in Facility Management and Maintenance, the implementation of the Integrated Performance Management (IPM) plan to improve Quality Assurance (QA) and the newly established Laboratory Directed Research and Development (LDRD) indirect cost pool. The cost of electrical power remains to be a significant fraction of the functional support costs at SLAC.

The combined cost of Facility Management and Maintenance increased \$8.5M from \$9M in FY2005 or 14% of support to \$17.5M in FY2009 or 21% of support costs. The linear accelerator and most of the laboratory infrastructure have been in operation for more than 40 years and are in need of upgrading. At the same time, SLAC is making a concerted effort to reduce the real property deferred maintenance backlog to meet the Mission Readiness goals set by the Integrated Facilities and Infrastructure (IFI) Division of the Office of Safety.

In FY2009, SLAC fully established the IPM effort, which increased Quality Assurance costs by approximately \$1M. IPM was established to ensure DOE goals and objectives are integrated into a single effective quality assurance program. IPM helps line management define, capture, and communicate goals and objectives which can be measured and used to continuously improve plans for achieving the laboratory's mission. Services offered by IPM include business planning, requirements management, policies and procedures, assurance, data analysis and project management.

Due to the transition from a single program laboratory to a multi-program laboratory, FY2009 led SLAC to establish two new indirect cost pools, Institutional General Plant Projects (IGPP) and Laboratory Directed Research and Development (LDRD). IGPP provides funding for infrastructure improvement projects that benefits the site and in FY2009 IGPP was \$505K. LDRD is directed toward scientific research that is either too new or high-risk to be funded by existing programs. FY2009 LDRD spending of \$1.4M is expected to double over the next few years.

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**SITE PROFILE**  
**SLAC National Accelerator Lab/Stanford Univ.**

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Cost of Utilities, which mainly consists of electrical power, had another year of decrease. DOE procures power for the three-Lab consortium (SLAC, LBNL, and LLNL) in the San Francisco Bay Area through competitive bids. More than 90% of the electrical power consumption at SLAC is “process” power for the operation of the experimental facilities for scientific research. Annual electrical power consumption is heavily dependent on the experimental facilities that operate and the duration of experimental runs during the fiscal year. At the height of the B-Factory/BABAR experiment in FY2007, power costs were \$17.2M or 20% of support costs. In FY2008, power costs declined to about \$15M due to the shutdown of the B-Factory/BABAR experiment and to \$9.8M in FY2009 when it comprised only 11.5% of total support costs. As LCLS transitions from construction/commissioning to experimental operations in FY2010, the electrical power cost is expected to increase.

The Functional Support to Total Site ratio remained around 25% from FY2005 through FY2007. This ratio increased to 28.4% in FY2009 as a result of the decrease in mission direct costs attributable to the near completion of the LCLS construction project. While LCLS construction costs will come to an end in FY2010, SLAC received \$90M in American Reinvestment and Recovery Act (ARRA) funding in FY2009. Therefore, in the next couple years, the laboratory expects to maintain a level of direct cost spending similar to the level in FY2009.

Science projects declined \$35M or 39% from \$89M in FY2008 to \$54M in FY2009 primarily due to the near completion of the LCLS construction project. The final phase of LCLS is scheduled to complete in summer of FY2010.

Non DOE costs incurred (activities not funded through the DOE contract) increased \$1.9M or 109% from \$1.7M in FY2008 to \$3.6M in FY2009 due to construction of the macromolecular crystallography beam line and the Pixel Array Detector funded by the Gordon and Betty Moore Foundation which enable the structural characterization of complicated biological systems at atomic resolutions.

### COST SAVINGS INITIATIVES

SLAC has continuously taken steps to streamline administrative functions, procedures, and practices resulting in cost avoidance and small cost reductions. One of the initiatives is the reduction of GSA pool in FY2009. Due to the reduced number of GSA vehicles, a reduction of costs of 28%, approximately 200K, was seen from FY2008 to FY2009.

SLAC’s Operations Directorate just completed recruiting of a new leadership team. With this team of new senior executives, who are in charge of facilities, information technology, business and financial organizations, SLAC is poised to take on improvement initiatives that will ultimately result in new business and administrative systems and process improvements.

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**SITE PROFILE**  
**SLAC National Accelerator Lab/Stanford Univ.**

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**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**PROCUREMENT**

Procurement costs increased by \$0.5 million from \$2.6 million to \$3.1 million in FY 2009. The increase was due to an assessment of work processes compared to other laboratories. After the assessment, it was determined that production procurement personnel should increase to meet customer and stakeholder schedules and quality requirements.

**LEGAL**

Legal costs increased by \$43,000 from \$122,000 to \$165,000 in FY 2009. This increase was due to new staffing.

**PROGRAM/PROJECT CONTROL**

Program/Project Control costs increased by \$1.2 million from \$1.5 million to \$2.7 million. This increase was primarily due to additional staffing required to accommodate the increasing complexity of SLAC's scientific programs as it transitions from a single program laboratory to a multi-program laboratory. Significant program growth in SIMES, PULSE, and LCS instrument user facilities require increased planning.

**INFORMATION OUTREACH**

Information Outreach costs increased by \$0.8 million from \$3.3 million to \$4.1 million in FY 2009. This increase was attributed to a new SLAC project called Information Portal which was used to assess SLAC's current online information services in order to provide consistent and easy access to lab-wide information. Software requirements are currently being assessed. SLAC also augmented media outreach to develop press kits, displays, and audio visual aids.

**UTILITIES**

Utility costs decreased by \$5.5 million from \$16.1 million to \$10.6 million in FY 2009. The primary reason for the decrease was power costs decreased as a result of the conclusion of BABAR experimental operations in April 2008. However, costs are expected to increase in FY 2010 with the commissioning and operation of the LCLS.

**QUALITY ASSURANCE**

Quality Assurance costs increased by \$1 million from \$0.4 million to \$1.4 million in FY 2009. This increase was attributable to the establishment of the IPM office in FY 2009.

**LDRD / PDRD / SDRD**

The LDRD indirect pool was established in FY 2009 and incurred costs of \$1.446 in its first year.

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**SITE PROFILE**  
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**CAPITAL CONSTRUCTION**

Capital Construction costs decreased by \$32.7 million from \$91.3 million to \$58.6 million in FY 2009. The main reason for the decrease was that Science Projects declined. The main Science project was the LCLS construction project which was near completion. The final phase of the LCLS is scheduled to be complete in the Summer of FY 2010.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

<b>INITIATIVE TITLE</b>	<b>AMOUNT SAVED PER YEAR</b>  (\$ in 000's)	<b>DESCRIPTION OF EFFORT</b>	<b>POINT OF CONTACT</b>
(None)			

**Trends in Total Support Cost by Functional Categories**  
**Strategic Petroleum Reserve/DynMcDermott Petroleum (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	105,331	114,064	107,143	106,690	131,301	25,970	24.7%
<b>Capital Construction</b>	0	0	0	0	0	0	0.0%
<b>Total Costs Less Construction</b>	105,331	114,064	107,143	106,690	131,301	25,970	24.7%
<b>Total Support Costs</b>	<b>80,957</b>	<b>85,688</b>	<b>81,666</b>	<b>85,744</b>	<b>106,150</b>	<b>25,193</b>	<b>31.1%</b>
<b>Mission Direct Operation</b>	24,374	28,376	25,477	20,946	25,151	777	3.2%
<b>Mission Direct Operation as % of Total Cost</b>	<b>23.1%</b>	<b>24.9%</b>	<b>23.8%</b>	<b>19.6%</b>	<b>19.2%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>76.9%</b>	<b>75.1%</b>	<b>76.2%</b>	<b>80.4%</b>	<b>80.8%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>76.9%</b>	<b>75.1%</b>	<b>76.2%</b>	<b>80.4%</b>	<b>80.8%</b>		
<b>TOTAL SUPPORT COST</b>	<b>80,957</b>	<b>85,688</b>	<b>81,666</b>	<b>85,744</b>	<b>106,150</b>	<b>25,193</b>	<b>31.1%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>18.8%</b>	<b>18.0%</b>	<b>18.8%</b>	<b>18.5%</b>	<b>22.7%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>19,803</b>	<b>20,579</b>	<b>20,093</b>	<b>19,739</b>	<b>29,785</b>	<b>9,982</b>	<b>50.4%</b>
EXECUTIVE DIRECTION	325	383	330	293	536	211	64.9%
HUMAN RESOURCES	1,657	1,512	1,902	2,498	3,020	1,363	82.3%
CFO	1,811	1,719	1,743	1,642	3,385	1,574	86.9%
PROCUREMENT	1,503	1,478	1,460	1,211	1,168	-335	-22.3%
LEGAL	418	612	974	1,305	4,115	3,697	884.4%
CENTRAL ADMIN SERVICES	572	617	553	357	333	-239	-41.8%
PROGRAM/PROJECT CONTROL	4,040	3,604	3,866	3,406	3,096	-944	-23.4%
INFORMATION OUTREACH	842	825	812	617	657	-185	-22.0%
INFORMATION SERVICES	8,599	9,750	8,453	8,391	13,398	4,799	55.8%
OTHER	36	79	0	19	77	41	113.9%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>51.9%</b>	<b>50.1%</b>	<b>50.1%</b>	<b>52.8%</b>	<b>52.0%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>54,654</b>	<b>57,167</b>	<b>53,683</b>	<b>56,300</b>	<b>68,341</b>	<b>13,687</b>	<b>25.0%</b>
ENVIRONMENTAL	2,386	2,335	2,288	2,443	2,530	144	6.0%
SAFETY AND HEALTH	2,915	3,158	2,665	3,159	3,054	139	4.8%
FACILITIES MANAGEMENT	728	849	1,139	1,111	1,118	390	53.6%
MAINTENANCE	22,012	22,241	22,447	23,736	33,852	11,840	53.8%
UTILITIES	5,416	6,149	3,471	3,748	2,402	-3,014	-55.6%
SAFEGUARDS AND SECURITY	17,928	19,266	18,878	19,127	22,233	4,305	24.0%
LOGISTICS SUPPORT	2,171	2,113	1,816	1,958	2,127	-44	-2.0%
QUALITY ASSURANCE	1,098	1,056	979	1,018	1,025	-73	-6.6%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>6.2%</b>	<b>7.0%</b>	<b>7.4%</b>	<b>9.1%</b>	<b>6.1%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>6,500</b>	<b>7,942</b>	<b>7,890</b>	<b>9,705</b>	<b>8,024</b>	<b>1,524</b>	<b>23.4%</b>
MANAGEMENT/INCENTIVE FEE	6,203	7,693	7,524	9,234	7,643	1,440	23.2%
TAXES	297	249	366	471	381	84	28.3%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

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**SITE PROFILE**  
**Strategic Petroleum Reserve/DynMcDermott Petroleum**

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**SITE OVERVIEW AND CHARACTERISTIC**

The Strategic Petroleum Reserve (SPR) was established in 1975 in response to the 1973 Arab oil embargo. It is authorized by the Energy Policy and Conservation Act (EPCA) (Public Law 94-463), and by the comprehensive energy plans of all Administrations since 1975, in recognition of the long-term dependence of the United States on imported crude oil and petroleum products.

The United States (U.S.) is a member of the International Energy Agency (IEA), which requires member nations to maintain stocks of crude oil in the public and private sectors. The U.S. relies on a combination of oil in the SPR and private stocks to meet its oil storage obligations to the IEA.

Our mission is to maintain a state of readiness to respond to a Presidential order to drawdown the SPR emergency crude oil stockpile. The SPR maintains a goal of being drawdown ready within 13 days of notification. The SPR has stockpiled 725 million barrels of oil as of September 30, FY2009. Major accomplishments during FY 2009 included the completion of RIK phase IVb, Hurricanes Gustav/Ike Emergency Exchange, SPR 2009 Oil Acquisition and the award of RIK phase IVd. During 2009 approximately 23 million barrels of crude oil was received into the SPR inventory with the delivery of RIK IVb deferred barrels totaling 2,293,705 (622,537 of WH sweet and 1,671,168 of BM sour) during March and May 2009, the return of Gustav/Ike exchange, including premium barrels, totaling 5,492,363 barrels (4,217,499 of WH/BC sweet and 1,274,864 of WH/BC sour) during January through June 2009, the receipt of 10,611,581 barrels (4,037,310 of WH sweet, 1,515,763 of BH sweet and 5,058,508 of BM sour) pursuant to the 2009 SPR Oil Acquisition during January through April 2009 and the receipt of 4,902,148 exchange barrels (1,319,280 of BM sweet and 3,582,868 of BM sour) under RIK phase IVd during May through September 2009.

The SPR's Operating and Maintenance contractor has one project management office and four operation and maintenance sites. The operation and maintenance sites are listed below.

- Bryan Mound located in east Texas near the city of Freeport.
  - ◆ 254 million barrels of crude oil can be stored in the site's 20 caverns.
  - ◆ 84 people are employed at the site as of September 2009.
  - ◆ The site contains 252.6 million barrels of oil in storage as of September 30, 2009.
  - ◆ The site consists of 49 buildings.
  
- Big Hill is located in east Texas near the city of Beaumont.
  - ◆ 170 million barrels of crude oil can be stored in the site's 14 caverns.
  - ◆ 75 people are employed at the site as of September 2009.
  - ◆ The site contains 170.4 million barrels of oil in storage as of September 30, 2009.
  - ◆ The site consists of 38 buildings.

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**SITE PROFILE**  
**Strategic Petroleum Reserve/DynMcDermott Petroleum**

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- Bayou Choctaw is located in central Louisiana near the city of Baton Rouge.
  - ◆ 73 million barrels of crude oil can be stored in the site's 6 caverns.
  - ◆ 50 people are employed at the site as of September 2009.
  - ◆ The site contains 73.4 million barrels of oil in storage as of September 30, 2009.
  - ◆ The site consists of 30 buildings.
  
- West Hackberry is in Southwest Louisiana near the city of Lake Charles.
  - ◆ 228.6 million barrels of crude oil can be stored in the site's 22 caverns.
  - ◆ 82 people are employed at the site as of September 2009 including a traveling workover crew.
  - ◆ The site contains 228.6 million barrels of oil in storage as of September 30, 2009.
  - ◆ The site consists of 30 buildings.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**EXECUTIVE DIRECTION**

Increase in labor/fringe in FY2009 was due to a reorganization in the Project Management Office.

**HUMAN RESOURCES**

Additional training expenses were incurred in FY2009. This included refresher training for medical responders at all sites, support for the SAP LSO system, public information officer training in support of the incident command system, Human Capital Management (SAP) training, commercial drivers license training, behavioral training, Incident Command System 300 and 400 training, professional locksmith training for personnel to attend the security system implementation for ADAS and Hirsch in support of the security site wide card access system.

**CFO**

Variable pay program occurred in FY2009 to enhance the total compensation plan that will link to performance and not increase base pay.

**LEGAL**

Additional expenses were incurred due to a large case being worked and extensive outside legal counsel support was required.

**INFORMATION SERVICES**

Increase in labor/fringe in FY2009 was due to 2 new hires in Data Systems. Additional tasks were planned in FY2009 this included PC and Thin Client purchases, MS Office Application Upgrade, Sharepoint and SQL upgrade, Replace Crude Oil Valuation Tracking System, Cyber Security Business OPS GSS, Business Systems Support and Data Center Replication.

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**SITE PROFILE**  
**Strategic Petroleum Reserve/DynMcDermott Petroleum**

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**OTHER**

In FY2008 a refund was received against the Auto Liability Policy.

**MAINTENANCE**

Additional tasks were completed in FY2009 due to hurricane Ike such as: WH Dredge RWIS, BH Upgrade Site Perimeter Fence, BH Repairs to site roofs and facilities/grounds. Also additional equipment rental, I&C electrical expenses, and miscellaneous equipment and supplies were procured. Hazardous Duty Pay was reclassified from Safety & Health. Purchase 2 High Water Vehicles for transporting personnel and materials into sites during hurricanes and emergencies. Pump, Motor, Valve, and Actuator Services at all sites is attributed to the account balance fluctuating due to material issues and receipts of PMVA and to materials issued to excess warehouse for sale. Electrical PM/CM Shutdown was performed at BM in FY2009. Repairs to the BM Brine Pump Discharge Header were required in FY2009. WH Transformer FINS WHTX 1&2 were replaced.

**UTILITIES**

In FY2008 fuel charges were much higher than FY2009. Also in FY2009 power usage decreased due to less time to complete normal testing of pumps and motors, and oil/brine transfers due to Fill 727.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
Change in Inventory	548	Fluctuations in inventory increase/decrease based on net receipts/issues.	Sheron Lee
SPO II Training and Certification	180	Training and the associated budget was no longer required.	Sheron Lee
RT Environmental Assessment	324	Contract was awarded to a small business entity which resulted in lower cost than originally planned. Assessment was completed as scheduled.	Sheron Lee

**Trends in Total Support Cost by Functional Categories**  
**West Valley/West Valley Nuclear Services (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	70,786	69,247	72,376	61,844	88,795	18,009	25.4%
<b>Capital Construction</b>	0	0	0	0	0	0	0.0%
<b>Total Costs Less Construction</b>	70,786	69,247	72,376	61,844	88,795	18,009	25.4%
<b>Total Support Costs</b>	<b>31,486</b>	<b>26,351</b>	<b>24,177</b>	<b>24,946</b>	<b>33,407</b>	<b>1,921</b>	<b>6.1%</b>
<b>Mission Direct Operation</b>	39,300	42,896	48,199	36,898	55,388	16,088	40.9%
<b>Mission Direct Operation as % of Total Cost</b>	<b>55.5%</b>	<b>61.9%</b>	<b>66.6%</b>	<b>59.7%</b>	<b>62.4%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>44.5%</b>	<b>38.1%</b>	<b>33.4%</b>	<b>40.3%</b>	<b>37.6%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>44.5%</b>	<b>38.1%</b>	<b>33.4%</b>	<b>40.3%</b>	<b>37.6%</b>		
<b>TOTAL SUPPORT COST</b>	<b>31,486</b>	<b>26,351</b>	<b>24,177</b>	<b>24,946</b>	<b>33,407</b>	<b>1,921</b>	<b>6.1%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>10.3%</b>	<b>9.3%</b>	<b>7.7%</b>	<b>11.9%</b>	<b>10.9%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>7,296</b>	<b>6,473</b>	<b>5,586</b>	<b>7,355</b>	<b>9,637</b>	<b>2,341</b>	<b>32.1%</b>
EXECUTIVE DIRECTION	371	461	387	351	432	61	16.4%
HUMAN RESOURCES	952	646	452	829	650	-302	-31.7%
CFO	934	1,189	1,196	1,312	2,013	1,079	115.5%
PROCUREMENT	834	733	366	479	1,023	189	22.7%
LEGAL	162	164	137	128	65	-97	-59.9%
CENTRAL ADMIN SERVICES	604	528	427	510	660	56	9.3%
PROGRAM/PROJECT CONTROL	766	484	347	775	1,952	1,186	154.8%
INFORMATION OUTREACH	955	722	714	804	1,174	219	22.9%
INFORMATION SERVICES	1,718	1,546	1,560	2,167	1,668	-50	-2.9%
OTHER	0	0	0	0	0	0	0.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>24.5%</b>	<b>22.3%</b>	<b>18.3%</b>	<b>22.9%</b>	<b>21.8%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>17,331</b>	<b>15,462</b>	<b>13,245</b>	<b>14,152</b>	<b>19,340</b>	<b>2,009</b>	<b>11.6%</b>
ENVIRONMENTAL	1,047	1,050	1,053	1,035	966	-81	-7.7%
SAFETY AND HEALTH	5,620	4,756	3,818	3,714	6,427	807	14.4%
FACILITIES MANAGEMENT	1,110	1,261	1,038	1,408	2,405	1,295	116.7%
MAINTENANCE	3,703	3,190	2,745	2,473	3,972	269	7.3%
UTILITIES	2,052	1,919	1,702	1,789	1,682	-370	-18.0%
SAFEGUARDS AND SECURITY	1,104	1,073	1,147	1,583	1,721	617	55.9%
LOGISTICS SUPPORT	730	658	484	650	539	-191	-26.2%
QUALITY ASSURANCE	709	574	549	519	838	129	18.2%
LABORATORY/TECHNICAL SUPPORT	1,256	981	709	981	790	-466	-37.1%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>9.7%</b>	<b>6.4%</b>	<b>7.4%</b>	<b>5.6%</b>	<b>5.0%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>6,859</b>	<b>4,416</b>	<b>5,346</b>	<b>3,439</b>	<b>4,430</b>	<b>-2,429</b>	<b>-35.4%</b>
MANAGEMENT/INCENTIVE FEE	6,859	4,416	5,346	3,439	4,430	-2,429	-35.4%
TAXES	0	0	0	0	0	0	0.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

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**SITE PROFILE**  
**West Valley/West Valley Nuclear Services**

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**SITE OVERVIEW AND CHARACTERISTIC**

**BACKGROUND**

**Site Characteristics**

The West Valley Demonstration Project (WVDP) Act chartered the Department of Energy (DOE) with, among other mandates, the task of solidifying the liquid high level waste (HLW) at the Western New York Nuclear Service Center (WNYNSC). The site is owned by New York State (NYS) and administered through its agency, the New York State Energy Research and Development Authority (NYSERDA). The WNYNSC is a 3,300 acre site located approximately 35 miles south of Buffalo, New York. A commercial spent nuclear fuel reprocessing facility operated at the site from 1966 until 1972. This reprocessing facility occupied about 165 acres of the larger 3,300 acre tract. During its operational years, the facility was used to reprocess uranium and plutonium from spent nuclear fuel (SNF), 60% of which originated from defense facilities. Spent Fuel reprocessing operations resulted in approximately 600,000 gallons of liquid HLW stored in underground tanks, which required treatment, interim solidified waste storage and ultimate disposal.

In 1980, the United States Congress passed the West Valley Demonstration Project Act (Public Law 96368), which authorized DOE to conduct a technology demonstration project to solidify the liquid HLW. A subsequent decision was made by DOE to develop vitrification technology as the process to solidify the liquid HLW. In accordance with WVDP Act requirements, DOE also has responsibility for: 1) developing containers suitable for the permanent disposal of the solidified HLW at an appropriate Federal repository; 2) transporting the HLW containers to the Federal repository; 3) disposing of low level waste (LLW) and transuranic (TRU) waste resulting from HLW solidification; and 4) the decontamination and decommissioning of the tanks, hardware and facilities used for liquid HLW solidification. Under a separate agreement, the DOE also had responsibility for 125 spent nuclear fuel (SNF) assemblies stored at the site. These assemblies have been removed from a “wet” storage facility, placed into certified transportation casks, and transferred to the then Idaho National Environmental and Engineering Laboratory (INEEL) site.

HLW solidification was performed in consultation with the U.S. Nuclear Regulatory Commission (NRC) per a Memorandum of Understanding between the DOE and NRC, and consistent with a Cooperative Agreement between DOE and NYSEDA. NYSEDA holds title to the WNYNSC and the NRC license to operate the site. The NRC license was placed in abeyance while DOE conducts the Project. DOE has exclusive use and possession of the WVDP premises (i.e., 230 acres) and is responsible for maintaining these premises, managing environmental risk, ensuring site worker and public safety, and accomplishing the scope of the WVDP Act as mandated by its implementing agreements. Per the WVDP Act, NYSEDA is responsible for ten percent of WVDP costs.

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**SITE PROFILE**  
**West Valley/West Valley Nuclear Services**

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**Mission**

The prime management and operating (M&O) contractor for the WVDP during the FY2005-FY2007 portion of the reporting period was the West Valley Nuclear Services Company (WVNSCO), which managed the facility according to a performance based contract. Beginning in September 2007, the West Valley Environmental Services LLC, assumed prime contract responsibilities under a Federal Acquisition Regulation (FAR) based Cost Plus Award Fee (CPAF) type site closure contract. During the time period encompassed by the Functional Cost Report (FY2005 to FY2009), the Project has evolved from decontamination and dismantlement of the former HLW treatment/vitrification processing system, to the current broader site facility decontamination, dismantlement, demolition and waste management phase. Significant challenges are managed to assure that the Project has the required disciplines to support this evolutionary risk reduction process.

TRENDS

The actual current year dollars spent for functional costs increased by approximately \$1,922K from \$31,486K in FY2005 to \$33,408K in FY2009. As the work scope has progressed during the functional cost reporting period from post HLW processing decontamination, facility dismantlement and demolition, and waste management scopes, the site continues to experience a significant evolution in subcontracted Mission related expenditures. Direct employment levels decreased from 345 full time equivalents (FTEs) in FY2005 to 256 FTEs by the end of FY2008 as labor resource requirements evolved to the site closure type activities and funding availability. With the addition of American Reinvestment and Recovery Act (ARRA) funding, the headcount at the end of September 2009 increased to 318. Total DOE Project expenditures decreased approximately 14.5% from \$70,787K in FY2005 to \$61,844K in FY2008. With \$10.4M of reprogrammed funding from Brookhaven National Laboratory, additional ARRA funding and the inclusion of the New York State 10% contribution at the direction of EM-CBC, FY 2009 WVES expenditures totaled \$88,795K, an increase of 43.6%. These expenditures reflect additional efforts toward the evolution to the Project's current facility decontamination, dismantlement, and waste management mission activities geared toward site closure.

The FY2009 WVDP total functional cost increased from \$24,946K in FY2008 to \$33,408K, an increase of \$8,462K increase. Factors which contribute to the increase from the FY2008 support total level are:

1) Pension costs (Total 2009 contribution of \$10,630K) factor into all site functional cost categories as the pension is allocated on labor costs.

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**SITE PROFILE**  
**West Valley/West Valley Nuclear Services**

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- 2) Overhead Fringe benefits are allocated at the same rate as the Direct Labor fringe benefits rate due to the use of Defense Contractor Audit Agency (DCAA) provisional rates and the changeover to the Costpoint accounting system.
- 3) Costpoint accounting system reporting capability facilitates reporting of all subcontract materials and services by using a Performing Organization coding system.

At DOE-CBCs' direction, the FY2009 WVDP report includes the 10% NYSERDA contribution.

In FY2009, WVES directly paid \$579K of New York State (NYS) Sales and Use tax which was included as a part of the respective functional cost categories, an increase of \$153K from the FY2008 total of \$426.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**EXECUTIVE DIRECTION**

Commensurate with the increase in overall site expenditures, additional pension costs to attain contractually required funding levels, and the reporting capability differences using the Costpoint accounting system, WVES is reporting increased costs in this category.

**HUMAN RESOURCES**

Human Resources decreased from \$819K to \$650K as contract relocation costs were less.

**CFO**

Commensurate with the increase in overall site expenditures, additional pension costs to attain contractually required funding levels, and the reporting capability differences using the Costpoint accounting system, WVES is reporting increased costs in this category.

**PROCUREMENT**

Commensurate with the increase in overall site expenditures, additional pension costs to attain contractually required funding levels, and the reporting capability differences using the Costpoint accounting system, WVES is reporting increased costs in this category.

**LEGAL**

Legal decreased from \$128K to 65K as demand for subcontracted legal services decreased.

**CENTRAL ADMIN SERVICES**

Commensurate with the increase in overall site expenditures, additional pension costs to attain contractually required funding levels, and the reporting capability differences using the Costpoint accounting system, WVES is reporting increased costs in this category.

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**SITE PROFILE**  
**West Valley/West Valley Nuclear Services**

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**PROGRAM/PROJECT CONTROL**

Commensurate with the increase in overall site expenditures, additional pension costs to attain contractually required funding levels, and the reporting capability differences using the Costpoint accounting system, WVES is reporting increased costs in this category. Contract performance baseline development, earned value management system certification, and project control management system upgrades also contributed to increased costs.

**INFORMATION OUTREACH**

Commensurate with the increase in overall site expenditures, additional pension costs to attain contractually required funding levels, and the reporting capability differences using the Costpoint accounting system, WVES is reporting increased costs in this category.

**INFORMATION SERVICES**

Information Services decreased from \$2,167K to \$1,669K as the Accounting/Project Management computer system procurement was incurred primarily in FY2008.

**SAFETY AND HEALTH**

Commensurate with the increase in overall site expenditures, additional pension costs to attain contractually required funding levels, and the reporting capability differences using the Costpoint accounting system, WVES is reporting increased costs in this category.

**FACILITIES MANAGEMENT**

Commensurate with the increase in overall site expenditures, additional pension costs to attain contractually required funding levels, and the reporting capability differences using the Costpoint accounting system, WVES is reporting increased costs in this category.

**MAINTENANCE**

Commensurate with the increase in overall site expenditures, additional pension costs to attain contractually required funding levels, and the reporting capability differences using the Costpoint accounting system, WVES is reporting increased costs in this category.

**QUALITY ASSURANCE**

Commensurate with the increase in overall site expenditures, additional pension costs to attain contractually required funding levels, and the reporting capability differences using the Costpoint accounting system, WVES is reporting increased costs in this category.

**MANAGEMENT/INCENTIVE FEE**

Management /Award/Incentive Fee increased from \$3,439K to \$4,430K as Mission related activities increased as a function of the greater overall funding expenditures.

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**SITE PROFILE**  
**West Valley/West Valley Nuclear Services**

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**COST SAVINGS INITIATIVES**  
(\$ in 000's)

<b>INITIATIVE TITLE</b>	<b>AMOUNT SAVED PER YEAR</b>  (\$ in 000's)	<b>DESCRIPTION OF EFFORT</b>	<b>POINT OF CONTACT</b>
(None)			

**Trends in Total Support Cost by Functional Categories**  
**WIPP/Westinghouse (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	153,927	170,356	181,582	202,488	202,923	48,996	31.8%
<b>Capital Construction</b>	2,293	2,175	2,247	5,523	2,467	174	7.6%
<b>Total Costs Less Construction</b>	151,634	168,181	179,335	196,965	200,456	48,822	32.2%
<b>Total Support Costs</b>	<b>58,802</b>	<b>55,631</b>	<b>61,488</b>	<b>70,402</b>	<b>70,289</b>	<b>11,487</b>	<b>19.5%</b>
<b>Mission Direct Operation</b>	92,832	112,550	117,847	126,563	130,167	37,335	40.2%
<b>Mission Direct Operation as % of Total Cost</b>	<b>60.3%</b>	<b>66.1%</b>	<b>64.9%</b>	<b>62.5%</b>	<b>64.1%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>1.5%</b>	<b>1.3%</b>	<b>1.2%</b>	<b>2.7%</b>	<b>1.2%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>38.2%</b>	<b>32.7%</b>	<b>33.9%</b>	<b>34.8%</b>	<b>34.6%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>38.2%</b>	<b>32.7%</b>	<b>33.9%</b>	<b>34.8%</b>	<b>34.6%</b>		
<b>TOTAL SUPPORT COST</b>	<b>58,802</b>	<b>55,631</b>	<b>61,488</b>	<b>70,402</b>	<b>70,289</b>	<b>11,487</b>	<b>19.5%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>9.3%</b>	<b>8.0%</b>	<b>8.7%</b>	<b>8.8%</b>	<b>8.7%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>14,354</b>	<b>13,632</b>	<b>15,880</b>	<b>17,763</b>	<b>17,698</b>	<b>3,344</b>	<b>23.3%</b>
EXECUTIVE DIRECTION	476	2,032	2,085	2,766	2,406	1,930	405.5%
HUMAN RESOURCES	2,668	2,408	2,745	3,210	3,788	1,120	42.0%
CFO	1,456	1,359	1,650	1,881	1,534	78	5.4%
PROCUREMENT	1,079	957	1,070	1,126	1,418	339	31.4%
LEGAL	915	802	717	669	598	-317	-34.6%
CENTRAL ADMIN SERVICES	1,772	1,581	1,965	2,095	2,256	484	27.3%
PROGRAM/PROJECT CONTROL	1,661	1,125	1,334	1,617	1,922	261	15.7%
INFORMATION OUTREACH	1,133	900	987	1,115	1,046	-87	-7.7%
INFORMATION SERVICES	3,194	2,468	3,327	3,284	2,730	-464	-14.5%
OTHER	0	0	0	0	0	0	0.0%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>16.1%</b>	<b>16.2%</b>	<b>16.3%</b>	<b>16.7%</b>	<b>15.9%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>24,801</b>	<b>27,663</b>	<b>29,563</b>	<b>33,784</b>	<b>32,363</b>	<b>7,562</b>	<b>30.5%</b>
ENVIRONMENTAL	1,686	2,338	3,128	3,147	2,885	1,199	71.1%
SAFETY AND HEALTH	5,308	4,950	6,179	9,329	6,710	1,402	26.4%
FACILITIES MANAGEMENT	1,315	1,255	2,070	2,871	4,016	2,701	205.4%
MAINTENANCE	8,054	10,193	8,426	8,829	8,884	830	10.3%
UTILITIES	1,207	1,424	1,249	1,411	1,019	-188	-15.6%
SAFEGUARDS AND SECURITY	3,532	3,986	4,479	4,162	4,599	1,067	30.2%
LOGISTICS SUPPORT	1,198	1,107	1,197	1,214	1,082	-116	-9.7%
QUALITY ASSURANCE	2,501	2,410	2,835	2,821	3,168	667	26.7%
LABORATORY/TECHNICAL SUPPORT	0	0	0	0	0	0	0.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>12.8%</b>	<b>8.4%</b>	<b>8.8%</b>	<b>9.3%</b>	<b>10.0%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>19,647</b>	<b>14,336</b>	<b>16,045</b>	<b>18,855</b>	<b>20,228</b>	<b>581</b>	<b>3.0%</b>
MANAGEMENT/INCENTIVE FEE	14,315	7,179	9,689	10,087	11,050	-3,265	-22.8%
TAXES	5,332	7,157	6,356	8,768	9,178	3,846	72.1%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

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**SITE PROFILE**  
**WIPP/Westinghouse**

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**SITE OVERVIEW AND CHARACTERISTIC**

**Background**

The Waste Isolation Pilot Plant, or WIPP, is the world's first underground repository licensed to safely and permanently dispose of transuranic radioactive waste left from the research and production of nuclear weapons. After more than 20 years of scientific study, public input, and regulatory struggles, WIPP began disposal operations on March 26, 1999.

Located in the remote Chihuahuan Desert of Southeastern New Mexico, project facilities include disposal rooms mined 2,150 feet underground in a 2,000-foot thick salt formation that has been stable for more than 200 million years. Transuranic waste is currently stored at sites nationwide. From these sites waste is transported in NRC approved containers to the WIPP sites where it is unloaded, processed, and disposed of in the mine.

Washington TRU Solutions, as the management and operating (M&O) contractor, is responsible for operations at the Waste Isolation Pilot Plant (WIPP) and for integration, characterization, and disposal of legacy defense transuranic (TRU) waste for the National TRU Waste Program. WTS participates in a coordinated approach to waste retrieval, characterization, transportation, and disposal activities at the associated generator sites throughout the Department of Energy (DOE) complex. WTS employs the Central Characterization Project (CCP) throughout the complex to assist in the efficient characterization, certification, and transportation of legacy TRU to WIPP.

At the end of Fiscal Year 2009, WIPP has been in disposal operations for 10 ½ years and celebrates ten years of safe operations. As of September 30, 2009 over 7,800 shipments have been received and 62,951 cubic meters (m<sup>3</sup>), or 121,672 containers, of TRU waste have been emplaced in the facility. Almost 9.3 million miles have been traveled safely transporting waste throughout the United States. Thirteen DOE small quantity sites, Rocky Flats (a large quantity site), and the Nevada Test Site have been cleaned up of legacy TRU waste. Following the first remote handled (RH) shipment in FY07, steady state operations were established in FY08 for both RH and contact handled (CH) waste. In 2009 four sites sent their first RH waste shipments to WIPP. In addition, due to project acceleration and the age of the facility, more than 16,000 hours were worked to complete extensive facility upgrades on time and without injuries.

More recently, WTS was awarded Recovery Act (RA) funding under stimulus legislation. The funding brings with it a two and a half year scope of work designed to further accelerate waste disposal and align objectives throughout the complex.

WTS recognizes that there are objectives associated with the DOE vision that will be considered in

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**SITE PROFILE**  
**WIPP/Westinghouse**

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the management, integration, and operation of WIPP and in conducting legacy defense TRU waste activities. These objectives are:

- (i) Safety and Environmental Management Excellence — Protection of the employees, the public and the environment;
- (ii) Operational Efficiencies — Pursue efficiencies in waste retrieval, characterization, transportation and disposal;
- (iii) Support to Small Quantity Sites (SQS) — Support the removal and disposal of TRU waste from each SQS;
- (iv) Standardization Efficiencies — Develop a standardized and certified characterization approach;

**Trends:**

WTS total costs for FY09 in support of the above mission were \$202.9M. WTS spent 64.15% or \$130.2M in mission-direct activities. Mission-support activities represented 15.95% or \$32,363, a slight increase in FY08 and FY09 costs due to the need to maintain and refurbish the aging facility and equipment. The WTS General Support costs represented 8.72% or \$17.70M, essentially the same as FY08. Site Specific Support represented the remaining 9.97% or \$20.23M. Therefore, total support costs were 34.64 % of the project costs.

**Cost Savings Initiatives:**

Cost savings which resulted from WTS aggressively reducing administrative support costs have continued. No new major initiatives were introduced in FY09. WTS has reduced General Support Costs from 19.59% in 2002 to 8.72% in 2009. This is a reduction of 10.87% over 8 years.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

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**SITE PROFILE**  
**WIPP/Westinghouse**

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**SAFETY AND HEALTH**

In Fiscal Year 2008 a new driver for this category required the development of a new combined CH & RH Document Safety Analysis (DSA) for the WIPP facility. A major engineering effort in support of radiological safety involved a cost of 3 million dollars. Since this cost was absorbed during fiscal year 2008, costs in this Support Cost category was less in Fiscal Year 2009.

**FACILITIES MANAGEMENT**

Due to the aging facility, considerable effort was spent on upgrading and refurbishing site equipment and facilities. In Fiscal Year 2009, over 1 million dollars was spent in the design and procurement of spare parts to facilitate the pending hoist control upgrades. This effort will extend the useful life of the equipment and ensure that waste disposal operations are not negatively impacted.

**MANAGEMENT/INCENTIVE FEE**

The award fee is based on objective performance incentives per the negotiated contract. In Fiscal Year 2009, an increase in the numbers of RH and CH containers safely disposed of within the WIPP facility resulted in a relative increase in the award fee paid to WTS.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
(None)			

**Trends in Total Support Cost by Functional Categories**  
**Y-12/BWXT (\$000)**  
**FY 2009**

	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>\$ Change 2005 To FY 2009</b>	<b>% Change 2005 To FY 2009</b>
<b>Total Costs</b>	823,985	830,873	883,300	1,036,888	958,781	134,796	16.4%
<b>Capital Construction</b>	97,529	96,821	138,091	170,424	104,614	7,085	7.3%
<b>Total Costs Less Construction</b>	726,456	734,052	745,209	866,464	854,167	127,711	17.6%
<b>Total Support Costs</b>	<b>498,083</b>	<b>493,191</b>	<b>492,279</b>	<b>572,023</b>	<b>572,684</b>	<b>74,601</b>	<b>15.0%</b>
<b>Mission Direct Operation</b>	228,373	240,861	252,930	294,441	281,483	53,110	23.3%
<b>Mission Direct Operation as % of Total Cost</b>	<b>27.7%</b>	<b>29.0%</b>	<b>28.6%</b>	<b>28.4%</b>	<b>29.4%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>11.8%</b>	<b>11.7%</b>	<b>15.6%</b>	<b>16.4%</b>	<b>10.9%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>60.4%</b>	<b>59.4%</b>	<b>55.7%</b>	<b>55.2%</b>	<b>59.7%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>60.4%</b>	<b>59.4%</b>	<b>55.7%</b>	<b>55.2%</b>	<b>59.7%</b>		
<b>TOTAL SUPPORT COST</b>	<b>498,083</b>	<b>493,191</b>	<b>492,279</b>	<b>572,023</b>	<b>572,684</b>	<b>74,601</b>	<b>15.0%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>15.2%</b>	<b>14.0%</b>	<b>13.8%</b>	<b>14.1%</b>	<b>14.9%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>125,423</b>	<b>116,359</b>	<b>121,478</b>	<b>146,143</b>	<b>143,087</b>	<b>17,664</b>	<b>14.1%</b>
EXECUTIVE DIRECTION	6,493	9,114	9,131	8,383	8,727	2,234	34.4%
HUMAN RESOURCES	23,907	16,300	14,554	12,647	12,949	-10,958	-45.8%
CFO	9,331	8,655	8,873	8,024	7,631	-1,700	-18.2%
PROCUREMENT	7,428	5,210	5,021	5,557	5,783	-1,645	-22.1%
LEGAL	3,801	4,495	4,709	3,390	4,040	239	6.3%
CENTRAL ADMIN SERVICES	11,581	11,825	11,671	10,854	11,077	-504	-4.4%
PROGRAM/PROJECT CONTROL	21,265	21,217	14,534	18,098	18,927	-2,338	-11.0%
INFORMATION OUTREACH	3,447	4,559	8,435	6,213	5,938	2,491	72.3%
INFORMATION SERVICES	37,005	24,267	31,533	29,373	30,692	-6,313	-17.1%
OTHER	1,165	10,717	13,017	43,604	37,323	36,158	3,103.7%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>40.8%</b>	<b>40.9%</b>	<b>37.5%</b>	<b>34.5%</b>	<b>39.0%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>335,843</b>	<b>340,196</b>	<b>331,370</b>	<b>357,880</b>	<b>374,104</b>	<b>38,261</b>	<b>11.4%</b>
ENVIRONMENTAL	9,743	9,359	9,821	15,791	21,733	11,990	123.1%
SAFETY AND HEALTH	44,860	46,048	47,170	47,967	52,382	7,522	16.8%
FACILITIES MANAGEMENT	20,970	21,977	18,226	25,057	27,209	6,239	29.8%
MAINTENANCE	82,168	78,585	73,328	81,543	77,573	-4,595	-5.6%
UTILITIES	41,981	42,283	38,521	41,413	47,333	5,352	12.7%
SAFEGUARDS AND SECURITY	98,509	107,251	110,068	117,949	120,939	22,430	22.8%
LOGISTICS SUPPORT	7,266	5,757	7,691	5,595	4,631	-2,635	-36.3%
QUALITY ASSURANCE	11,195	11,329	10,096	7,499	7,683	-3,512	-31.4%
LABORATORY/TECHNICAL SUPPORT	19,151	17,607	16,449	15,066	14,621	-4,530	-23.7%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>4.5%</b>	<b>4.4%</b>	<b>4.5%</b>	<b>6.6%</b>	<b>5.8%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>36,817</b>	<b>36,636</b>	<b>39,431</b>	<b>68,000</b>	<b>55,493</b>	<b>18,676</b>	<b>50.7%</b>
MANAGEMENT/INCENTIVE FEE	29,450	31,300	32,000	58,471	47,444	17,994	61.1%
TAXES	2,263	1,465	3,891	4,636	4,205	1,942	85.8%
LDRD / PDRD / SDRD	5,104	3,871	3,540	4,893	3,844	-1,260	-24.7%

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**SITE PROFILE**  
**Y-12/BWXT**

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**SITE OVERVIEW AND CHARACTERISTIC**

**BACKGROUND**

The Y-12 National Security Complex performs missions that are vital to the U. S. Department of Energy (DOE) National Nuclear Security Administration (NNSA). These missions are:

- Manufacturing and assessing nuclear weapons secondaries, cases, and other weapons components;
- Safeguarding special nuclear materials; and
- Preventing the proliferation of weapons of mass destruction.

The Y-12 Complex covers approximately 811 acres, nearly 600 acres of which are enclosed by perimeter security fences. Security and emergency management buffer areas exist outside the main site but within the Oak Ridge Reservation. Real property includes approximately 431 buildings and other structures with floor area of approximately 7 million square feet.

A BWXT Y-12 workforce of approximately 4,400 people (including 227 construction direct hire) support NNSA-related activities and rely upon a diverse infrastructure to perform assigned tasks in support of Y-12 missions. Buildings and facility types include large production, light and heavy laboratory, sophisticated and standard warehousing, and a mix of new and World War II-vintage technical and administrative office structures. The majority of the floor space at Y-12 was constructed prior to 1950 as part of the Manhattan Project.

In looking at raw data, the functional cost at the Y-12 plant has increased by approximately \$75 million since 2005. The cost increases are primarily driven by external events, evolving requirements and ongoing efforts to provide a modern, recapitalized and efficient operation at Y-12.

Taxes — Total Sales and Use taxes paid for FY 2008 were \$8.3M. These costs are incurred as a part of material costs and are spread across the functional categories as a part of material cost.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

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**SITE PROFILE**  
**Y-12/BWXT**

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**ENVIRONMENTAL**

Increase is primarily associated with the continued emphasis on cleaning legacy materials at Y-12 as well as cost associated with the ARRA program.

**LDRD / PDRD / SDRD**

The decrease is directly associated with decreased mission direct. The PDRD program spending is tied to the site mission direct funding levels.

**CAPITAL CONSTRUCTION**

Construction costs decreased with the completion of the HEU Materials facility.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
(None)			

**Trends in Total Support Cost by Functional Categories**  
**Yucca Mountain/Bechtel-SAIC (\$000)**  
**FY 2009**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	\$ Change 2005 To FY 2009	% Change 2005 To FY 2009
<b>Total Costs</b>	266,446	255,572	238,612	167,325	86,617	-179,829	-67.5%
<b>Capital Construction</b>	162	2,365	1,025	0	0	-162	-100.0%
<b>Total Costs Less Construction</b>	266,284	253,207	237,587	167,325	86,617	-179,667	-67.5%
<b>Total Support Costs</b>	<b>125,167</b>	<b>85,896</b>	<b>95,671</b>	<b>72,826</b>	<b>45,986</b>	<b>-79,181</b>	<b>-63.3%</b>
<b>Mission Direct Operation</b>	141,117	167,311	141,916	94,499	40,631	-100,486	-71.2%
<b>Mission Direct Operation as % of Total Cost</b>	<b>53.0%</b>	<b>65.5%</b>	<b>59.5%</b>	<b>56.5%</b>	<b>46.9%</b>		
<b>Capital Construction as % of Total Cost</b>	<b>0.1%</b>	<b>0.9%</b>	<b>0.4%</b>	<b>0.0%</b>	<b>0.0%</b>		
<b>Total Support Cost as % of Total Cost</b>	<b>47.0%</b>	<b>33.6%</b>	<b>40.1%</b>	<b>43.5%</b>	<b>53.1%</b>		
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>		
<b>TOTAL SUPPORT COST as % of TOTAL COST</b>	<b>47.0%</b>	<b>33.6%</b>	<b>40.1%</b>	<b>43.5%</b>	<b>53.1%</b>		
<b>TOTAL SUPPORT COST</b>	<b>125,167</b>	<b>85,896</b>	<b>95,671</b>	<b>72,826</b>	<b>45,986</b>	<b>-79,181</b>	<b>-63.3%</b>
<b>TOTAL GENERAL SUPPORT as % of TOTAL</b>	<b>22.7%</b>	<b>21.7%</b>	<b>19.3%</b>	<b>17.9%</b>	<b>36.0%</b>		
<b>TOTAL GENERAL SUPPORT</b>	<b>60,550</b>	<b>55,547</b>	<b>46,088</b>	<b>29,919</b>	<b>31,162</b>	<b>-29,388</b>	<b>-48.5%</b>
EXECUTIVE DIRECTION	7,000	5,174	6,783	4,792	4,279	-2,721	-38.9%
HUMAN RESOURCES	5,374	4,691	6,780	3,650	6,553	1,179	21.9%
CFO	2,895	2,689	2,482	1,962	1,303	-1,592	-55.0%
PROCUREMENT	2,698	2,856	2,715	1,649	930	-1,768	-65.5%
LEGAL	6,411	5,875	1,885	575	171	-6,240	-97.3%
CENTRAL ADMIN SERVICES	9,926	8,272	6,986	3,787	1,574	-8,352	-84.1%
PROGRAM/PROJECT CONTROL	3,986	3,406	3,043	1,883	727	-3,259	-81.8%
INFORMATION OUTREACH	3,178	2,403	2,391	1,699	703	-2,475	-77.9%
INFORMATION SERVICES	16,738	18,056	12,107	7,989	5,292	-11,446	-68.4%
OTHER	2,344	2,125	916	1,933	9,630	7,286	310.8%
<b>TOTAL MISSION SUPPORT as % of TOTAL</b>	<b>14.7%</b>	<b>12.8%</b>	<b>12.1%</b>	<b>14.3%</b>	<b>9.7%</b>		
<b>TOTAL MISSION SUPPORT</b>	<b>39,267</b>	<b>32,587</b>	<b>28,891</b>	<b>23,862</b>	<b>8,414</b>	<b>-30,853</b>	<b>-78.6%</b>
ENVIRONMENTAL	3,312	3,472	2,700	1,952	639	-2,673	-80.7%
SAFETY AND HEALTH	5,310	6,536	4,025	2,315	939	-4,371	-82.3%
FACILITIES MANAGEMENT	9,333	8,291	9,970	8,025	4,759	-4,574	-49.0%
MAINTENANCE	6,729	7	1,272	449	0	-6,729	-100.0%
UTILITIES	697	1,476	1,551	1,014	0	-697	-100.0%
SAFEGUARDS AND SECURITY	2,172	2,099	2,274	4,974	1,539	-633	-29.1%
LOGISTICS SUPPORT	2,803	3,128	1,622	1,015	348	-2,455	-87.6%
QUALITY ASSURANCE	8,911	7,562	5,477	4,118	190	-8,721	-97.9%
LABORATORY/TECHNICAL SUPPORT	0	16	0	0	0	0	0.0%
<b>TOTAL SITE SPECIFIC as % of TOTAL</b>	<b>9.5%</b>	<b>-0.9%</b>	<b>8.7%</b>	<b>11.4%</b>	<b>7.4%</b>		
<b>TOTAL SITE SPECIFIC</b>	<b>25,350</b>	<b>-2,238</b>	<b>20,692</b>	<b>19,045</b>	<b>6,410</b>	<b>-18,940</b>	<b>-74.7%</b>
MANAGEMENT/INCENTIVE FEE	25,248	-2,327	20,650	18,924	6,410	-18,838	-74.6%
TAXES	102	89	42	121	0	-102	-100.0%
LDRD / PDRD / SDRD	0	0	0	0	0	0	0.0%

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**SITE PROFILE**  
**Yucca Mountain/Bechtel-SAIC**

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**SITE OVERVIEW AND CHARACTERISTIC**

Yucca Mountain, Nevada, is the congressionally-approved site of the nation's first repository for spent nuclear fuel and high-level radioactive waste. The agency within the Department of Energy (DOE or the Department) that has the responsibility to design, license, construct, and operate the repository is the Office of Civilian Radioactive Waste Management (OCRWM).

For more than 25 years, OCRWM dedicated its resources to gathering and analyzing information about Yucca Mountain for Congressional consideration as the nation's first repository. In 2002, Congress approved that Yucca Mountain be further developed as an underground repository.

Before the DOE can build the repository and begin waste emplacement, the Department must be licensed to do so by the Nuclear Regulatory Commission (NRC or the Commission). In June 2008, OCRWM submitted a license application to the Commission for a detailed review that is expected to take three to four years. Today the mission is to defend and update the license application.

In 1987, Congress amended the Nuclear Waste Policy Act and directed DOE to study only Yucca Mountain. As a result, Yucca Mountain's activities are unique within the Department's complex. Annual funding for the Yucca Mountain Project has historically been unpredictable, which has impacted schedules and milestones. The OCRWM and the Office of Repository Development (ORD) managers frequently have had to change focus and shift gears to respond to the limitations imposed by ongoing funding constraints. As a result of funding reductions, the project has experienced layoffs over the past four years. In FY 2009, Bechtel SAIC Company had a reduction in force totaling 355 employees.

**DISCUSSION OF MAJOR TRENDS AND CHANGES FROM PRIOR YEAR TRENDS**

**EXECUTIVE DIRECTION**

Difference due to reduction in budget.

**HUMAN RESOURCES**

Difference due to reduction in force and processing severance pay.

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**SITE PROFILE**  
**Yucca Mountain/Bechtel-SAIC**

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**CFO**

Difference due to reduction in budget.

**PROCUREMENT**

Difference due to reduction in budget.

**LEGAL**

Difference due to reduction in budget.

**CENTRAL ADMIN SERVICES**

Difference due to reduction in budget.

**PROGRAM/PROJECT CONTROL**

Difference due to reduction in budget.

**INFORMATION OUTREACH**

Difference due to reduction in budget.

**INFORMATION SERVICES**

Difference due to reduction in budget.

**OTHER**

Difference due to increase in pension costs.

**ENVIRONMENTAL**

Difference due to reduction in budget.

**SAFETY AND HEALTH**

Difference due to reduction in budget.

**FACILITIES MANAGEMENT**

Difference due to reduction in budget.

**MAINTENANCE**

Difference due to reduction in budget.

**UTILITIES**

Difference due to reduction in budget.

**SAFEGUARDS AND SECURITY**

Difference due to reduction in budget.

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**SITE PROFILE**  
**Yucca Mountain/Bechtel-SAIC**

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**LOGISTICS SUPPORT**

Difference due to reduction in budget.

**QUALITY ASSURANCE**

Difference due to reduction in budget.

**MANAGEMENT/INCENTIVE FEE**

Difference due to reduction in budget.

**TAXES**

Difference due to reduction in budget.

**COST SAVINGS INITIATIVES**

(\$ in 000's)

INITIATIVE TITLE	AMOUNT SAVED PER YEAR  (\$ in 000's)	DESCRIPTION OF EFFORT	POINT OF CONTACT
(None)			

## Support Cost Definitions

\* **Signifies the definition has been revised since the FY 2005 report.**

### **A. General Terms**

1. \***Capital/construction** - Prime capital and construction cost related to Line Items, Capital Equipment and General Plant Projects. This includes the cost of Institutional General Plant Projects and Capital Equipment that are paid for with indirect funds. All identifiable support cost should be included in the appropriate general support, mission support or site specific categories.
  
2. \***Functional Support Cost**: The Department's major sites are funded from multiple appropriations and programs. These appropriations and programs represent the Department's missions as defined by Congress. There are many activities necessary that provide support to carry out these core missions. The cost of these activities is assigned to programs either directly or indirectly. Once charged or assigned they are usually absorbed into the cost of the mission activity and are not uniquely identified in the financial systems. Functional Support cost is intended to capture these costs at their point of origin, prior to any distributions, and provide visibility for management.

For reported Functional Support Cost purposes the Department has defined the following categories and subcategories:

- General Support: Executive Direction, Human Resources, CFO, Procurement, Legal, Central Administrative Services, Program/Project Planning & Control, Information Outreach, Information Services and Other.
  
- Mission Support: Environmental, Safety and Health; Facilities Management; Maintenance; Utilities; Safeguards and Security; Logistic Support; Quality Assurance; and Laboratory/Technical Support.
  
- Site-Specific: Management/Award Fee/Incentive Fee, Taxes and LDRD/PDRD/SDRD.

Functional support cost attributes:

- Determined in accordance with these definitions.
- Determined without regard to funding source.
- Determined without regard to Cost Accounting Standards (CAS) classification of indirect or direct. May be defined as indirect or direct in CAS Disclosure Statement.
- Determined prior to overhead distributions so costs are prime (direct labor, direct material and other direct costs).
- Costs are usually assigned to more than one program.
- Represent activities necessary to complete mission, but are not mission activities.

- Crosscuts costs by programmatic budget reporting classification as recorded in DOE financial systems. Functional Support cost and Mission Direct cost together at each site should equal the contractor's total cost. However, there are some sites that combine two contractors' costs into one report (such as the inclusion of a security contract), or sites where DOE pays the security costs but has the prime contractor included it in their functional cost report. In these cases the reported costs will be higher. All Functional Support and Mission Direct costs together should equal the total DOE contractor cost with those exceptions.
  - Includes the cost of work performed for and charged to other DOE sites. In other words, the performing site includes the cost of doing the work for other DOE sites in their functional cost report. The site having the work done does not include the cost.
3. **General Support:** Represents cost categories which would exist regardless of the specific mission.
  4. **\*Mission Direct:** For purposes of reporting, Mission Direct cost is all the costs that do not meet any of the "support" definitions provided in this guidance. These are generally prime costs (direct labor, direct material and other direct costs) incurred to directly accomplish the Department's mission. These represent activities that may be funded directly or indirectly.
  5. **Mission Support:** Represents support cost categories that exist solely due to the unique mission being accomplished.
  6. **Site Specific:** Represents cost categories not defined as general support, mission support or construction.
  7. **\*Support Cost By Functional Activity (SCFA) System:** This system is used to collect and report Functional Support Cost. The web address for the SCFA is <https://scfa.doe.gov>. Your computer or workstation must have access through DOE-Net, the DOE Firewall. A user can request a password and user-ID at the web site.
  8. **Total Cost:** Includes Mission Direct, Construction and Functional Support Costs and is equal to total program costs.

## **B. All 22 Support Cost Categories**

### **General Support**

1. **Executive Direction** - Includes costs normally associated with the executive level of management. Examples of activities in this account may be the Laboratory Director, President and other top level management and immediate staff (Secretary, Special Assistants, etc.), Science Advisors and Deputy Directors, Vice Presidents, etc. This category also includes Total Quality Management (TQM) type activities, such as the development and administration of Total Quality Improvement Plans, cost savings and reengineering programs administration, etc.; and institutional/strategic planning, including development and control, and any site specific development. All other management/supervisor activities, including related incidental costs, should be reported in the appropriate support/mission category.
2. **Human Resources** - Includes costs associated with recruiting, wage and salary administration, equal employment opportunity and diversity activities, benefits administration, employee concerns programs, central training development services (job specific training development curriculum should be included in the specific category to which it applies), industrial relations, personnel records, employee claims, adjudications, grievances, arbitration, educational programs providing for undergraduate and graduate course work and other personnel services.
3. **Chief Financial Officer** - Includes costs associated with activities of a financial nature, such as general accounting, payroll, travel accounting, funds control, cost accounting, financial systems management and non-project/program specific budget coordination and control, such as indirects and internal audit.
4. **Procurement** - Includes costs associated with activities related to make/buy decisions, contracting, purchasing, contract administration (including prime) and acquisition of resources to conduct activities, as well as to conduct audit and cost/price analysis activities.
5. **Legal** - Includes costs associated with legal counsel support and litigation support. Includes outside legal support and ethics functions.
6. **\*Central Administrative Services** – Includes costs associated with travel reservation support, food service, printing and graphic support services including cost-per-copy contracts (convenience copiers), records management, and all library-related activities. Also includes clerical support pool costs, but does not include the cost of secretarial and clerical positions that are permanent in nature and directly support another category or mission direct. These should be included in the respective category (or mission direct) they support, even if they are considered in a secretarial or clerical pool.

7. **\*Program/Project Planning & Control** - Includes cost associated with support and execution of program/project budgeting, funding requests, baseline control and preparation (including planning, scheduling, coordination, change control, cost estimating, and program specific reporting and analysis). Also includes master scheduling, project management system administration, and baseline pricing and validation efforts. This category does not include actual program/project management functions. This type of cost should be reported in the specific mission or support categories it is related to.
8. **\*Information/Outreach Activities** - Cost associated with media communication, public relations, technology transfer, business development, technical information management, educational programs, employee outreach program, stakeholder-related outreach, activities contributing to the development of the local/regional economy, and other information or outreach activities such as HBCU (Historically Black Colleges and Universities) and other University-related activities, including stakeholder agencies and Washington, D.C., liaison activities. This category includes:

**Information Outreach Activities:**

**Public Relations/Information** – includes all cost associated with activities which provide non-technical information about the M&O Contractor and its activities to the general public, news media, etc.

**Technology Transfer/Business Development** – Includes all cost associated with activities that encourage the further development of promising technologies; disseminate information to appropriate researchers, organizations, industry, governmental bodies and other institutions; and other activities that assist in affecting the introduction of technologies into the marketplace.

**Technical Information Management** – Includes all cost associated with activities to develop and make available technical information.

**Employee Outreach Programs** – Includes all cost associated with activities by employees utilizing their technical expertise for the benefit of external stakeholders.

**Other Information Outreach Activities** – Includes all cost associated with other outreach activities that are not defined above.

**Stakeholder-Related Outreach** – Community relations and education programs to promote enhanced understanding of the site by local and State stakeholders.

9. **Information Services** - Costs associated with Automated Data Processing (ADP) services (central computer facilities and service organizations including business and scientific), communications (mail, both electronic and hard copy including postage, subcontracted delivery services, etc.), networking (groups of computers that communicate with each other, share peripherals and access remote hosts or other networks) and telecommunications services (communication by electronic submission of impulses over telephone/optic lines including cell phones). Includes pagers and related systems, but not the maintenance of these systems. Also includes computer

leases. Does not include computer bill-out rates in any other functional category. This category includes systems analysts/programmers; however, specific systems management and administrative costs for various business and scientific systems should be included in their respective functional categories. (Note: Dedicated scientific activities, experiments, analysis, etc., should be included in the appropriate category. Also computer hardware maintenance activities are to be reported within the maintenance category.)

10. **\*Other** - Cost which is not identified in another functional cost category. This includes legal settlements (excluding attorney fees), workforce restructuring activities (severance, benefits and outplacement services), general company liability insurance expenditures, contractor transition cost and legacy workers' compensation cost. Specifically identify significant cost activities and provide footnotes.

## **Mission Support**

11. **\*Environmental** - (Note: only the "Permitting" section of this definition changed.) Includes costs associated with the development, implementation and maintenance of effluent controls, environmental monitoring and surveillance, permitting, auditing and evaluation to assure environmental compliance and pollution prevention. These activities, performed on a routine basis, are necessary to maintain compliance with Federal, State and local regulations, as well as applicable DOE Orders and directives. This category does not include actual waste storage or cleanup activities. The category includes:

**Effluent and Environmental Monitoring and Surveillance** - Monitoring activities include data base monitoring as required by DOE directive or compliance monitoring as required by the environmental regulatory authorities, such as air and water monitoring. (Note: Actual sample analysis should be included in Laboratory Support or Other Technical Support Activities.)

**Permitting** - Includes activities involved in the preparation, certification and maintenance of environmental permits and permit applications. Also includes those activities involved in reporting the results of environmental monitoring, analysis and evaluation. These activities are necessary to obtain permits from regulatory agencies regarding plant releases, discharges and/or material storage. (Note: Environmental Impact Statement costs and related activities are to be included in the appropriate category they support.)

**Auditing and Evaluation** - These audits are done as a routine mechanism to ensure environmental compliance with internal and external directives, including the National Environmental Policy Act (NEPA). Encompasses costs associated with implementation of the Environmental, Safety and Health Compliance Assessment activities (such as related "Tiger Team" activities). Also includes the development of performance objectives and environmental auditing procedures.

**Non-Environmental Management Waste Management** - The Non-EM Waste Management functional area includes those activities addressing the treatment, storage and disposal of wastes. Activities include characterization and certification of waste to ensure its proper treatment or disposal; waste handling and temporary storage activities, such as operation of 90-day satellite accumulation areas for the storage of hazardous waste; operation and management of all waste treatment and disposal systems; and final disposal of all wastes.

12. **\*Safety & Health** - Costs associated with safety and health programs, such as emergency preparedness, fire protection, industrial hygiene, industrial safety, occupational medical services, nuclear safety, work smart programs, radiation protection, transportation safety (does not include traffic management functions – include this item in logistics) and management oversight. This category excludes remediation which is included in mission direct. Further definitions are as follows:

**Emergency Preparedness** – Emergency Preparedness includes all those activities that are intended to provide personnel with a special capability to respond to incidents and accidents, excluding fire protection activities described in the next section. Activities in this area include maintenance inspection of emergency facilities and equipment; emergency response team; personnel training; developing and implementing drills and exercises; purchase of self-help supplies; maintaining and updating emergency management and self-help plans based on site specific safety analyses; coordination with State and local authorities and Federal Agencies. This area excludes plant and equipment that are part of safety systems relied upon to prevent or mitigate accidents (HVAC process monitors, facility egress signs and equipment, etc.), as they are addressed in Industrial Safety or Nuclear Safety.

**Fire Protection** – Fire Protection includes all those activities that are intended to prevent, detect, alert and suppress fires. Activities in this area include inspection and testing of fire prevention, detection (e.g., alarm systems) and suppression systems; fire fighting and emergency response, loss prevention; operation of ambulances and fire fighting equipment; testing and inspection of fire protection equipment and alarm systems; flammable and explosive material control; Federal, state and local certification and training, such as the National Fire Protection Association certification; review of construction and design plans for fire hazards; dispatch centers and mutual aid agreements with local authorities. This area excludes those fire protection activities and/or systems that are solely for the benefit or protection of nuclear systems, storage areas and/or processes (e.g., glove box inerting systems). These excluded activities are to be included in Nuclear Safety.

**Industrial Hygiene (IH)** – Industrial Hygiene includes all those activities that are intended to provide protection to workers from physical and chemical hazards. IH is concerned with recognizing, evaluating and controlling hazards for solvents, carcinogens, non-ionizing radiation, asbestos, beryllium, heat stress, noise and ventilation systems. Activities in this area include interpreting regulations and policy, developing engineering and administrative controls, performing inspections and

assessments, sharing best practices and lessons learned, reengineering tasks, identifying hazardous materials (but not removal of), and written and verbal communication of real and perceived hazards. Include radiological and non-radiological laundry services. Exclude medical surveillance and employee medical records, which are covered in Occupational Medical Services. Exclude exposure of workers to radioactivity which is covered in Radiation Protection (note that non-ionizing radiation is included).

**Industrial Safety (IS)** – Industrial Safety includes all those activities that are intended for the protection of workers from physical trauma in the areas of electrical safety; laser protection; ergonomics; machinery and machine guarding; personnel protection from slips, trips and falls; compressed gas and pressure system safety; hoisting, rigging and material handling; lockout/tag-out; confined space controls; platform man-lift and scaffolding usage; safe surfaces for walking and working; cutting, welding and boring safety; hand and portable power tool safety; explosives and hazardous material handling, storage and use; construction safety; firearms safety; and facility egress. Activities in this area include interpreting regulations and policy, developing engineering and administrative controls, performing inspections and assessments, sharing best practices and lessons learned, and conducting accident investigations. Include Personnel Protection Equipment (PPE) such as hard hats, gloves, safety glasses, safety shoes, noise protection and respirators. Include the purchase and installation of physical plant and equipment that are part of industrial safety systems relied upon to prevent or mitigate accidents (e.g., HVAC process monitors, facility egress signs and equipment, etc.)

**Occupational Medical Services** – Occupational Medical Services includes all those activities that are intended to ensure that workers are physically and psychologically capable of performing their assigned work duties and protected from hazards that may result in adverse health effects. Activities in this area include providing a comprehensive occupational medical program, including employee health examinations for pre-placement and qualification, periodic, return to work, fitness for duty and termination examinations; eye examinations; diagnosis and treatment of occupational illnesses and injuries; employee health counseling (employee assistance program and wellness); maintenance of medical records; emergency medical treatment and triage; specialized medical equipment; and immunization programs.

**Nuclear Safety** – Nuclear Safety includes activities that are intended to maintain criticality safety and nuclear operations safety. Activities in this area include control of systems and parameters within sub critical limits, and use of systems, procedure, equipment, analyses, programs, and personnel to ensure safe nuclear reactor and nuclear non-reactor operations. Include fire protection activities and/or systems that are solely for the benefit or protection of nuclear systems, storage areas and/or processes (e.g., glove box inerting systems).

**Radiation Protection** – Radiation Protection includes all those activities that are intended to control exposures of workers and the public to radioactivity. Activities in

this area include interpreting regulations and policy; developing engineering and administrative controls and procedures; performing inspections and assessments; sharing best practices and lessons learned; conducting event investigations; personnel dosimetry; bioassay and ALARA (As Low As Reasonably Achievable) programs; creating and maintaining radiation exposure records; and responding to exposure of workers to radioactive contamination. Also includes verifying effectiveness of engineered controls, such as control equipment for radiation sources; interlocks, instrumentation, and shielding for radiation-generating devices; control of paths for inhalation or ingestion of radiation; equipment used to minimize or mitigate external exposure; fixed and portable instrumentation for radiation detection and measurement; and contamination control.

**Transportation Safety** – Transportation Safety includes all those activities that are intended to ensure safe packaging and transportation. Activities in this area include packaging certification; coordination of intra-building and on-site movements and transfers; off-site and international shipments; transportation (including marking and labeling) of material; maintenance inspection of transportation equipment; testing and technology of transportation operators; aviation safety; motor vehicle safety; water craft safety; and rail safety.

**Management and Oversight** – Management and Oversight includes all those activities that are intended to coordinate, direct, integrate and control Safety and Health (S&H) activities **across multiple areas**. Activities in this area include S&H documentation and document control activities; configuration management; providing training, S&H performance trending, analyses and lessons learned feedback; corrective action tracking; S&H self-assessment activities; dedicated internal S&H personnel; coordination and communication with DOE, State and local authorities; internal audits and surveillance; external S&H program reviews; operational readiness reviews; and performance and documentation of comprehensive safety analyses. Nuclear safety analyses are included in Nuclear Safety. Program elements such as quality assurance, management systems, oversight and physical infrastructure are inherent to all areas and are intended to be accounted for in the specific areas.

13. **\*Facilities Management** - Cost associated with efforts that either create or improve property plant and equipment, and do not meet the capitalization criteria; or support activities that create or improve property, plant and equipment. Facilities management activities add to existing property, plant and equipment or extend the life of existing property, plant and equipment. This is distinct from maintenance activities. Maintenance activities only sustain existing property, plant and equipment in a usable condition and do not result in increasing capabilities of existing property, plant or equipment. Examples of activities in this category are: facilities remodeling, facilities utilization analysis, modification and upgrade analysis, facilities planning and condition determinations, and lease and rental of real property. Rents and leases of other than real property are included in the appropriate category. Facilities Management includes engineering activities such as HVAC systems, electrical

mechanical activities, and repair and maintenance analysis if they extend the current useful life or result in improvements beyond existing capabilities.

- 14. \*Maintenance** - Includes the cost of actual work incurred to sustain or continue the functionality of property, plant and equipment. It includes all phases of maintenance: preventive maintenance, predictive maintenance and corrective maintenance. This category includes all maintenance activities regardless of source of funds. (Note: All maintenance is included even though it is recognized these costs are incurred in support of other support and mission categories.) Maintenance activities include:

**Preventive Maintenance** - includes all those systematically planned and scheduled actions performed for the purpose of preventing equipment, system or facility failure.

**Predictive Maintenance** - includes actions necessary to monitor, find trends and analyze parameters associated with equipment, systems or facilities that are indicative of decreasing performance or impending failure.

**Corrective Maintenance** - The repair of failed or malfunctioning equipment, system or facility to restore the intended function or design condition. This maintenance does not result in significant extension of expected useful life. Includes asbestos removal and material replacement.

**Facilities Maintenance**

Cost to perform activities that sustain or continue existing functionality of real property. These are not activities that increase functionality or extend useful life. Costs that increase functionality or that extend useful life are treated in accordance with the capital assets accounting requirements. Maintenance functions include supervision, planning and scheduling, and storage and staging of materials and supplies. All phases of maintenance are included: preventive, predictive and corrective maintenance. Major functions also included in this category are the cost of janitorial services, pest control and other services to keep these facilities usable.

**General Maintenance**

Costs to perform activities that sustain or continue existing functionality of all other property and equipment not included in facilities maintenance. These are not activities that increase functionality or extend useful life. Costs that increase functionality or that extend useful life are treated in accordance with the capital assets accounting requirements. Examples of functions included in this category are: maintenance on production and process equipment/machines; computer hardware and network maintenance; maintenance of roads and grounds; maintenance of utilities; calibration, care, repair and storage of equipment used in monitoring, or the actual performance of, maintenance work; and planning and scheduling, and storage and staging of materials and supplies.

- 15. Utilities** - Costs include utility-related engineering associated with labor, operating plants and equipment, contract services for fuel, water treatment chemicals, or

support needed to provide electric power, heat, steam, chilled water, potable water, process gases and sanitary waste disposal to support business and research. This element includes all costs associated with contract services in support of utilities, such as fuel, water treatment chemicals and control systems (also include energy management related activities). Utilities include:

**Central Steam Facility** - Includes the fuel handling and storage facilities, all assigned personnel and the main steam distribution system.

**Central Chilled Water Facility** - Includes all assigned personnel and the main chilled water distribution system.

**Water Supply System** - Includes wells, treatment facilities, storage tanks, the main distribution system and all assigned personnel.

**Sanitary Waste Disposal System** - Includes the main collection system, refuse collection (internal as well as contracted services), treatment facilities and all assigned personnel.

**Electrical Power** - Distribution system including main substations and high-voltage distribution systems, and all assigned personnel, as well as all electricity purchases.

16. **Safeguards and Security** – Includes all costs associated with the development and implementation of a Safeguards and Security Program to protect nuclear materials, nuclear weapons, classified information and government property from theft, sabotage, espionage, or other acts that may cause adverse impacts on national security or to the health and safety of the public and employees. Specifically includes the following:

**Program Direction** - Includes all persons and operating costs for program management; vulnerability assessment; safeguards and security alarming process; professional development and training; inspections, surveys, assessments, facility approval (including Foreign Ownership, Control or Influence), tests and evaluations; policy oversight and administration and technology development oversight and program management, associated with the Safeguards and Security Program.

**Protective Forces** - Includes all personnel and operating costs associated with Protective Forces. This includes such things as salaries, overtime, benefits, travel, materials and supplies, uniforms, equipment, facilities, vehicles, helicopters, training, communications, federal and contractor management and oversight of protective forces.

**Physical Security Protection Systems** - Includes all personnel and operating costs associated with designing, installing, performance testing, contraband detection, alarm communications and control, intrusion detection and assessment, barriers and

access denial, entry and egress control, and vital components tampering and monitoring.

**Transportation** - All security-related transportation costs for transport of special nuclear materials, weapons and other classified material. Includes such costs as personnel, equipment, facilities security upgrades to vehicles and communications. Transportation costs associated with off-site shipment of wastes should be included in the Mission Category.

**Information Security** - Includes all personnel and operating costs associated with classified documents and material, classification, unclassified controlled nuclear information, security infractions, computer security, technical surveillance countermeasures and operations security.

**Material Control and Accountability (MC&A)** - Includes all personnel and operating costs associated with control and accountability of special nuclear materials (SNM), nuclear weapons, test devices and weapons components. Includes MC&A access areas, surveillance, containment, detection, assessment, testing, transfers, verifications and measurements, inventories, reconciliation and statistical analyses.

**Research & Development** - Includes all personnel and operating costs associated with research and development of physical security, information security, personnel security, material control and accountability, integrated systems, vulnerability assessment methods, technology application and tests and technology transfer to users or potential vendors.

**Personnel Security** - Includes initial investigations, reinvestigations, adjudication, security education, personnel security assurance program, visitor control, national agency checks and administrative review activities.

**Cyber Security** - Includes management of unclassified and classified data, information technology security assets, cyber information systems, including information technical utilities which include grid research, threat assessments, wireless networks, performance measures, risk management, configuration management, certification/accreditation, training, network monitoring and intrusion detection systems.

**17. Logistics Support** - Costs associated with shipping, receiving, transportation (excluding maintenance which is included in the Maintenance category), warehousing, motor pools, office equipment pools, property management and excessing activities; routine inventory write-offs and other logistic support activities. (Note: Final disposal costs for radiological/hazardous waste shipments are a Mission Direct cost.)

**18. Quality Assurance** - Costs associated with all quality assurance, reliability and regulatory activities. Included in this category are costs for quality engineering and

inspection services, quality assurance audits, occurrence reporting (such as the Occurrence Reporting and Processing System), development of quality program plans, operational readiness review coordination and other activities related to ensuring the quality assurance of site operations and facilities. This does not include costs incurred for weapons stockpile certification.

- 19. Laboratory/Tech Support** - Measurement and testing conducted within the context of sampling, field investigations, analytical chemistry and other similar studies. Includes the cost of other technical support services/activities, such as non-destructive assay, electronics services, machine shops, etc.

### **Site Specific**

- 20. Management/Award Fee/Incentive Fee** - The management allowance is an amount paid to not-for-profit educational institutions for the equivalent of home or corporate office general and accounting expenses. The award and incentive fee is a fee that is paid to a contractor based on performance and includes shared savings incentive payments (such as cost savings incentives).
- 21. Taxes** - Includes State and municipal taxes, as well as "payments in lieu of taxes." Does not include taxes that are payroll related.
- 22. Laboratory Directed Research and Development (LDRD); Plant Directed Research, Development and Demonstration Program (PDRD); and Site Directed Research, Development and Demonstration Program (SDRD)** – LDRD portion reflects costs incurred in accordance with DOE Order 413.2A for the purpose of pursuing new and innovative scientific concepts of benefit to the DOE. Excludes allocations of overhead. The PDRD and SDRD portions reflect costs incurred in accordance with the legislative authority for these activities.