

**Boston Logan Airport Noise Study
Phase 2 Budget
Consultant Total Summary**

Consultant Team Element/Task/Sub-Task	Project Consultant Team				Independent Consultant Team				Project Total				Percent of Total
	Hours	Labor	Expenses	Total	Hours	Labor	Expenses	Total	Hours	Labor	Expenses	Total	
1 PROJECT MANAGEMENT													
1.1 Project Administration and Coordination	1,424	\$ 230,660	\$ 7,200	\$ 237,860	176	\$ 33,580	\$ -	\$ 33,580	1,600	\$ 264,240	\$ 7,200	\$ 271,440	5.1%
1.2 FAA Coordination	412	\$ 57,994	\$ 12,745	\$ 70,739	76	\$ 17,288	\$ 3,000	\$ 20,288	488	\$ 75,282	\$ 15,745	\$ 91,027	1.7%
1.3 Assemble and Maintain Document Record and Index													
1.3.1 Document Record Database	328	\$ 44,698	\$ 9,050	\$ 53,748				\$ -	328	\$ 44,698	\$ 9,050	\$ 53,748	1.0%
1.3.2 Documents	360	\$ 34,776	\$ 11,978	\$ 46,754				\$ -	360	\$ 34,776	\$ 11,978	\$ 46,754	0.9%
1.3.2 Electronic Files	360	\$ 34,776	\$ 3,840	\$ 38,616				\$ -	360	\$ 34,776	\$ 3,840	\$ 38,616	0.7%
1.4 Work Scope Re-Assessment	679	\$ 105,531	\$ 2,100	\$ 107,631	104	\$ 23,248		\$ 23,248	783	\$ 128,779	\$ 2,100	\$ 130,879	2.5%
Task 1 Subtotal	3,563	\$ 508,435	\$ 46,913	\$ 555,348	356	\$ 74,116	\$ 3,000	\$ 77,116	3,919	\$ 582,551	\$ 49,913	\$ 632,464	11.9%
2 PUBLIC COORDINATION/INVOLVEMENT													
2.1 Develop Decision Process/Communications Protocol	122	\$ 19,899	\$ 3,857	\$ 23,756	88	\$ 19,472	\$ 750	\$ 20,222	210	\$ 39,371	\$ 4,607	\$ 43,978	0.8%
2.2 CAC Coordination	646	\$ 99,452	\$ 21,278	\$ 120,730	1,003	\$ 207,550	\$ 34,250	\$ 241,800	1,649	\$ 307,002	\$ 55,528	\$ 362,530	6.8%
2.3 BOS/TAC Meetings	768	\$ 112,701	\$ 38,268	\$ 150,969	204	\$ 41,672	\$ 15,750	\$ 57,422	972	\$ 154,373	\$ 54,018	\$ 208,391	3.9%
2.4 Elected Representative Meetings	654	\$ 85,697	\$ 20,722	\$ 106,419	56	\$ 11,596	\$ 4,200	\$ 15,796	710	\$ 97,293	\$ 24,922	\$ 122,215	2.3%
2.5 Web-Based Periodic Community Updates	1,608	\$ 134,882	\$ 15,200	\$ 150,082	28	\$ 6,608		\$ 6,608	1,636	\$ 141,490	\$ 15,200	\$ 156,690	2.9%
2.6 Media Outreach	136	\$ 17,377	\$ 900	\$ 18,277	24	\$ 5,664		\$ 5,664	160	\$ 23,041	\$ 900	\$ 23,941	0.4%
Task 2 Subtotal	3,934	\$ 470,008	\$ 100,225	\$ 570,233	1,403	\$ 292,562	\$ 54,950	\$ 347,512	5,337	\$ 762,570	\$ 155,175	\$ 917,745	17.2%
3 PHASE 1 IMPLEMENTATION													
3.1 Implementation Monitoring Assistance	289	\$ 49,301	\$ 10,086	\$ 59,387	112	\$ 21,952	\$ 4,500	\$ 26,452	401	\$ 71,253	\$ 14,586	\$ 85,839	1.6%
3.2 Post-Implementation Assessment	64	\$ 11,509	\$ 1,250	\$ 12,759	94	\$ 17,784		\$ 17,784	158	\$ 29,293	\$ 1,250	\$ 30,543	0.6%
Task 3 Subtotal	353	\$ 60,810	\$ 11,336	\$ 72,146	206	\$ 39,736	\$ 4,500	\$ 44,236	559	\$ 100,546	\$ 15,836	\$ 116,382	2.2%
4 STUDY AREA DEFINITION													
4.1 Study Area Definition	0	\$ -	\$ -	\$ -				\$ -	0	\$ -	\$ -	\$ -	0.0%
Task 4 Subtotal	0	\$ -	\$ -	\$ -	0	\$ -	\$ -	\$ -	0	\$ -	\$ -	\$ -	0.0%
5 DEVELOP EXISTING CONDITIONS													
5.1 GIS Database													
5.1.1 Update Land Use Base Map	148	\$ 14,040	\$ -	\$ 14,040	24	\$ 3,864		\$ 3,864	172	\$ 17,904	\$ -	\$ 17,904	0.3%
5.1.2 Update Socioeconomic Data	156	\$ 13,912	\$ -	\$ 13,912	12	\$ 1,932		\$ 1,932	168	\$ 15,844	\$ -	\$ 15,844	0.3%
5.1.3 Update Natural & Cultural Resources Data	132	\$ 11,416	\$ -	\$ 11,416	12	\$ 1,932		\$ 1,932	144	\$ 13,348	\$ -	\$ 13,348	0.3%
5.2 Fast-time Air Traffic Simulation													
5.2.1 Model Verification	348	\$ 45,904	\$ 1,918	\$ 47,822	118	\$ 21,405		\$ 21,405	466	\$ 67,309	\$ 1,918	\$ 69,227	1.3%
5.2.2 Development of Existing Conditions Schedule	82	\$ 11,972	\$ -	\$ 11,972	46	\$ 8,248		\$ 8,248	128	\$ 20,220	\$ -	\$ 20,220	0.4%
5.2.3 Existing Conditions Modeling	900	\$ 113,940	\$ 18,368	\$ 132,308	548	\$ 99,858	\$ 2,250	\$ 102,108	1,448	\$ 213,798	\$ 20,618	\$ 234,416	4.4%
5.3 Existing Conditions Noise													
5.3.1 Prepare Noise Modeling and Measurement Protocols	544	\$ 86,968	\$ 9,709	\$ 96,677	308	\$ 55,548	\$ 4,950	\$ 60,498	852	\$ 142,516	\$ 14,659	\$ 157,175	2.9%
5.3.2 Noise Modeling Input and Methodology	3,424	\$ 475,736	\$ 19,750	\$ 495,486	1,908	\$ 308,016	\$ 11,550	\$ 319,566	5,332	\$ 783,752	\$ 31,300	\$ 815,052	15.3%
5.3.3 INM DNL 75, 70, 65, and 60 dB Contours	400	\$ 52,112	\$ 3,000	\$ 55,112	48	\$ 10,292		\$ 10,292	448	\$ 62,404	\$ 3,000	\$ 65,404	1.2%
5.3.4 Alternative Noise Metrics	316	\$ 42,888	\$ 1,100	\$ 43,988	136	\$ 22,868		\$ 22,868	452	\$ 65,756	\$ 1,100	\$ 66,856	1.3%
5.3.5 Identify Pop. & Noise Sensitive Area Impacts	104	\$ 13,904	\$ 800	\$ 14,704	18	\$ 3,582		\$ 3,582	122	\$ 17,486	\$ 800	\$ 18,286	0.3%
5.3.6 Ground/Taxiway Noise	648	\$ 91,816	\$ 19,400	\$ 111,216	104	\$ 18,164	\$ 750	\$ 18,914	752	\$ 109,980	\$ 20,150	\$ 130,130	2.4%
Task 5 Subtotal	7,202	\$ 974,608	\$ 74,045	\$ 1,048,653	3,282	\$ 555,709	\$ 19,500	\$ 575,209	10,484	\$ 1,530,317	\$ 93,545	\$ 1,623,862	30.5%
6 ALTERNATIVES IDENTIFICATION & EVALUATION													
6.1 Identify Measures													
6.1.1 Measures Recommended for Evaluation from Phase 1	240	\$ 34,160	\$ -	\$ 34,160	220	\$ 44,792		\$ 44,792	460	\$ 78,952	\$ -	\$ 78,952	1.5%
6.1.2 Ground Noise Measures	200	\$ 28,760	\$ -	\$ 28,760	80	\$ 15,360		\$ 15,360	280	\$ 44,120	\$ -	\$ 44,120	0.8%
6.1.3 Other Measures	160	\$ 25,760	\$ -	\$ 25,760	276	\$ 56,480	\$ 3,750	\$ 60,230	436	\$ 82,240	\$ 3,750	\$ 85,990	1.6%
6.2 Level 1 Screening Analysis	652	\$ 92,055	\$ -	\$ 92,055	168	\$ 33,544		\$ 33,544	820	\$ 125,599	\$ -	\$ 125,599	2.4%
6.3 Level 2 Screening Analysis													
6.3.1 Refine Measures	1,740	\$ 235,406	\$ -	\$ 235,406	104	\$ 21,056		\$ 21,056	1,844	\$ 256,462	\$ -	\$ 256,462	4.8%
6.3.2 Screening Analysis	680	\$ 97,248	\$ 3,200	\$ 100,448	332	\$ 60,808		\$ 60,808	1,012	\$ 158,056	\$ 3,200	\$ 161,256	3.0%
6.4 Level 3 Screening Analysis													
6.4.1 Forecasting and Flight Schedule	0	\$ -	\$ -	\$ -	148	\$ 26,536		\$ 26,536	148	\$ 26,536	\$ -	\$ 26,536	0.5%
6.4.2 Operational Modeling	2,192	\$ 277,040	\$ 40,418	\$ 317,458	388	\$ 65,810	\$ 1,500	\$ 67,310	2,580	\$ 342,850	\$ 41,918	\$ 384,768	7.2%
6.4.3 Noise Modeling	2,384	\$ 312,904	\$ 12,116	\$ 325,020	1,232	\$ 206,232	\$ 3,000	\$ 209,232	3,616	\$ 519,136	\$ 15,116	\$ 534,252	10.0%
6.4.4 Preferred Alternative Development	1,292	\$ 170,552	\$ 6,418	\$ 176,970	120	\$ 22,488		\$ 22,488	1,412	\$ 193,040	\$ 6,418	\$ 199,458	3.7%
Task 6 Subtotal	9,540	\$ 1,273,885	\$ 62,152	\$ 1,336,037	3,068	\$ 553,106	\$ 8,250	\$ 561,356	12,608	\$ 1,826,991	\$ 70,402	\$ 1,897,393	35.6%
7 SCOPE OF SERVICES - PHASE 3													
7.1 PRAS Objectives	96	\$ 16,296	\$ 2,218	\$ 18,514				\$ -	96	\$ 16,296	\$ 2,218	\$ 18,514	0.3%
7.2 Phase 3 Scope of Services	540	\$ 86,571	\$ 2,826	\$ 89,397	140	\$ 30,412	\$ 3,000	\$ 33,412	680	\$ 116,983	\$ 5,826	\$ 122,809	2.3%
Task 7 Subtotal	636	\$ 102,867	\$ 5,044	\$ 107,911	140	\$ 30,412	\$ 3,000	\$ 33,412	776	\$ 133,279	\$ 8,044	\$ 141,323	2.7%
TOTAL	25,228	\$ 3,390,613	\$ 299,715	\$ 3,690,328	8,455	\$ 1,545,641	\$ 93,200	\$ 1,638,841	33,683	\$ 4,936,254	\$ 392,915	\$ 5,329,169	100.0%

**Boston Logan Airport Noise Study
Phase 2 Budget
Project Consultant Summary**

Project Consultant Team Element/Task/Sub-Task	Ricondo & Associates				Subconsultants				PC Total				Percent of Total
	Hours	Labor	Expenses	Total	Hours	Labor	Expenses	Total	Hours	Labor	Expenses	Total	
1 PROJECT MANAGEMENT													
1.1 Project Administration and Coordination	1,424	\$230,660	\$7,200	\$237,860				\$0	1,424	\$230,660	\$7,200	\$237,860	6.4%
1.2 FAA Coordination	412	\$57,994	\$12,745	\$70,739				\$0	412	\$57,994	\$12,745	\$70,739	1.9%
1.3 Assemble and Maintain Document Record and Index													
1.3.1 Document Record Database	128	\$16,744	\$6,050	\$22,794	200	\$27,954	\$3,000	\$30,954	328	\$44,698	\$9,050	\$53,748	1.5%
1.3.2 Documents	360	\$34,776	\$11,978	\$46,754				\$0	360	\$34,776	\$11,978	\$46,754	1.3%
1.3.2 Electronic Files	360	\$34,776	\$3,840	\$38,616				\$0	360	\$34,776	\$3,840	\$38,616	1.0%
1.4 Work Scope Re-Assessment	387	\$63,711	\$2,100	\$65,811	292	\$41,820		\$41,820	679	\$105,531	\$2,100	\$107,631	2.9%
Task 1 Subtotal	3,071	\$438,661	\$43,913	\$482,574	492	\$69,774	\$3,000	\$72,774	3,563	\$508,435	\$46,913	\$555,348	15.0%
2 PUBLIC COORDINATION/INVOLVEMENT													
2.1 Develop Decision Process/Communications Protocol	100	\$17,920	\$3,827	\$21,747	22	\$1,979	\$30	\$2,009	122	\$19,899	\$3,857	\$23,756	0.6%
2.2 CAC Coordination	392	\$68,944	\$9,278	\$78,222	254	\$30,508	\$12,000	\$42,508	646	\$99,452	\$21,278	\$120,730	3.3%
2.3 BOS/TAC Meetings	368	\$61,032	\$15,708	\$76,740	400	\$51,669	\$22,560	\$74,229	768	\$112,701	\$38,268	\$150,969	4.1%
2.4 Elected Representative Meetings	284	\$43,552	\$9,872	\$53,424	370	\$42,145	\$10,850	\$52,995	654	\$85,697	\$20,722	\$106,419	2.9%
2.5 Web-Based Periodic Community Updates	312	\$43,848	\$7,200	\$51,048	1,296	\$91,034	\$8,000	\$99,034	1,608	\$134,882	\$15,200	\$150,082	4.1%
2.6 Media Outreach	68	\$11,316	\$800	\$12,116	68	\$6,061	\$100	\$6,161	136	\$17,377	\$900	\$18,277	0.5%
Task 2 Subtotal	1,524	\$246,612	\$46,685	\$293,297	2,410	\$223,396	\$53,540	\$276,936	3,934	\$470,008	\$100,225	\$570,233	15.5%
3 PHASE 1 IMPLEMENTATION													
3.1 Implementation Monitoring Assistance	64	\$11,024	\$4,086	\$15,110	225	\$38,277	\$6,000	\$44,277	289	\$49,301	\$10,086	\$59,387	1.6%
3.2 Post-Implementation Assessment	24	\$4,704	\$1,250	\$5,954	40	\$6,805		\$6,805	64	\$11,509	\$1,250	\$12,759	0.3%
Task 3 Subtotal	88	\$15,728	\$5,336	\$21,064	265	\$45,082	\$6,000	\$51,082	353	\$60,810	\$11,336	\$72,146	2.0%
4 STUDY AREA DEFINITION													
4.1 Study Area Definition				\$-				\$0	0	\$-	\$-	\$-	0.0%
Task 4 Subtotal	0	\$-	\$-	\$-	0	\$-	\$-	\$-	0	\$-	\$-	\$-	0.0%
5 DEVELOP EXISTING CONDITIONS													
5.1 GIS Database													
5.1.1 Update Land Use Base Map				\$-	148	\$14,040		\$14,040	148	\$14,040	\$-	\$14,040	0.4%
5.1.2 Update Socioeconomic Data				\$-	156	\$13,912		\$13,912	156	\$13,912	\$-	\$13,912	0.4%
5.1.3 Update Natural & Cultural Resources Data				\$-	132	\$11,416		\$11,416	132	\$11,416	\$-	\$11,416	0.3%
5.2 Fast-time Air Traffic Simulation													
5.2.1 Model Verification	348	\$45,904	\$1,918	\$47,822				\$0	348	\$45,904	\$1,918	\$47,822	1.3%
5.2.2 Development of Existing Conditions Schedule	82	\$11,972		\$11,972				\$0	82	\$11,972	\$-	\$11,972	0.3%
5.2.3 Existing Conditions Modeling	900	\$113,940	\$18,368	\$132,308				\$0	900	\$113,940	\$18,368	\$132,308	3.6%
5.3 Existing Conditions Noise													
5.3.1 Prepare Noise Modeling and Measurement Protocols	200	\$34,760	\$6,509	\$41,269	344	\$52,208	\$3,200	\$55,408	544	\$86,968	\$9,709	\$96,677	2.6%
5.3.2 Noise Modeling Input and Methodology	268	\$47,052	\$6,950	\$54,002	3,156	\$428,684	\$12,800	\$441,484	3,424	\$475,736	\$19,750	\$495,486	13.4%
5.3.3 INM DNL 75, 70, 65, and 60 dB Contours	40	\$6,952	\$1,000	\$7,952	360	\$45,160	\$2,000	\$47,160	400	\$52,112	\$3,000	\$55,112	1.5%
5.3.4 Alternative Noise Metrics	52	\$9,600	\$1,100	\$10,700	264	\$33,288		\$33,288	316	\$42,888	\$1,100	\$43,988	1.2%
5.3.5 Identify Pop. & Noise Sensitive Area Impacts	64	\$10,024	\$800	\$10,824	40	\$3,880		\$3,880	104	\$13,904	\$800	\$14,704	0.4%
5.3.6 Ground/Taxiway Noise	48	\$8,816	\$1,200	\$10,016	600	\$83,000	\$18,200	\$101,200	648	\$91,816	\$19,400	\$111,216	3.0%
Task 5 Subtotal	2,002	\$289,020	\$37,845	\$326,865	5,200	\$685,588	\$36,200	\$721,788	7,202	\$974,608	\$74,045	\$1,048,653	28.4%
6 ALTERNATIVES IDENTIFICATION & EVALUATION													
6.1 Identify Measures													
6.1.1 Measures Recommended for Evaluation from Phase 1	152	\$22,384		\$22,384	88	\$11,776		\$11,776	240	\$34,160	\$-	\$34,160	0.9%
6.1.2 Ground Noise Measures	112	\$16,984		\$16,984	88	\$11,776		\$11,776	200	\$28,760	\$-	\$28,760	0.8%
6.1.3 Other Measures	120	\$18,880		\$18,880	40	\$6,880		\$6,880	160	\$25,760	\$-	\$25,760	0.7%
6.2 Level 1 Screening Analysis	264	\$43,920		\$43,920	388	\$48,135		\$48,135	652	\$92,055	\$-	\$92,055	2.5%
6.3 Level 2 Screening Analysis													
6.3.1 Refine Measures	564	\$87,760		\$87,760	1,176	\$147,646		\$147,646	1,740	\$235,406	\$-	\$235,406	6.4%
6.3.2 Screening Analysis	280	\$44,096		\$44,096	400	\$53,152	\$3,200	\$56,352	680	\$97,248	\$3,200	\$100,448	2.7%
6.4 Level 3 Screening Analysis													
6.4.1 Forecasting and Flight Schedule				\$-				\$0	0	\$-	\$-	\$-	0.0%
6.4.2 Operational Modeling	2,192	\$277,040	\$40,418	\$317,458				\$0	2,192	\$277,040	\$40,418	\$317,458	8.6%
6.4.3 Noise Modeling	812	\$104,596	\$5,416	\$110,012	1,572	\$208,308	\$6,700	\$215,008	2,384	\$312,904	\$12,116	\$325,020	8.8%
6.4.4 Preferred Alternative Development	980	\$128,320	\$6,418	\$134,738	312	\$42,232		\$42,232	1,292	\$170,552	\$6,418	\$176,970	4.8%
Task 6 Subtotal	5,476	\$743,980	\$52,252	\$796,232	4,064	\$529,905	\$9,900	\$539,805	9,540	\$1,273,885	\$62,152	\$1,336,037	36.2%
7 SCOPE OF SERVICES - PHASE 3													
7.1 PRAS Objectives	96	\$16,296	\$2,218	\$18,514				\$0	96	\$16,296	\$2,218	\$18,514	0.5%
7.2 Phase 3 Scope of Services	396	\$63,960	\$2,826	\$66,786	144	\$22,611		\$22,611	540	\$86,571	\$2,826	\$89,397	2.4%
Task 7 Subtotal	492	\$80,256	\$5,044	\$85,300	144	\$22,611	\$-	\$22,611	636	\$102,867	\$5,044	\$107,911	2.9%
TOTAL	12,653	\$1,814,257	\$191,075	\$2,005,332	12,575	\$1,576,356	\$108,640	\$1,684,996	25,228	\$3,390,613	\$299,715	\$3,690,328	100.0%

7-Aug-06

**Boston Logan International Airport Noise and Overflight Study
Independent Consultant Staffing and Cost Allocations**

\$ 1,638,841

Phase 2 Independent Consultant Team		Landrum & Brown				Subconsultants Total				Total Project				Percent
Element/Task/SubTask		L&BTotal												of Total
		Hours	Labor	Expenses	Total	Hours	Labor Cost	Expenses	Total	Hours	Labor	Expenses	Total Cost	
1	PROJECT MANAGEMENT													
	Project Administration and Coordination	176	\$ 33,580	\$ -	\$ 33,580	0	\$ -	\$ -	\$ -	176	\$ 33,580	\$ -	\$ 33,580	2.0%
	1.1													
	1.2	76	\$ 17,288	\$ 3,000	\$ 20,288	0	\$ -	\$ -	\$ -	76	\$ 17,288	\$ 3,000	\$ 20,288	1.2%
	1.3	104	\$ 23,248	\$ -	\$ 23,248	0	\$ -	\$ -	\$ -	104	\$ 23,248	\$ -	\$ 23,248	1.4%
	Subtotal	356	\$ 74,116	\$ 3,000	\$ 77,116	0	\$ -	\$ -	\$ -	356	\$ 74,116	\$ 3,000	\$ 77,116	4.7%
2	PUBLIC COORDINATION/INVOLVEMENT													
	2.1	88	\$ 19,472	\$ 750	\$ 20,222	0	\$ -	\$ -	\$ -	88	\$ 19,472	\$ 750	\$ 20,222	1.2%
	2.2	819	\$ 176,126	\$ 25,950	\$ 202,076	184	\$ 31,424	\$ 8,300	\$ 39,724	1,003	\$ 207,550	\$ 34,250	\$ 241,800	14.8%
	2.3	148	\$ 32,152	\$ 11,250	\$ 43,402	56	\$ 9,520	\$ 4,500	\$ 14,020	204	\$ 41,672	\$ 15,750	\$ 57,422	3.5%
	2.4	56	\$ 11,596	\$ 4,200	\$ 15,796	0	\$ -	\$ -	\$ -	56	\$ 11,596	\$ 4,200	\$ 15,796	1.0%
	2.5	28	\$ 6,608	\$ -	\$ 6,608	0	\$ -	\$ -	\$ -	28	\$ 6,608	\$ -	\$ 6,608	0.4%
	2.6	0	\$ -	\$ -	\$ -	0	\$ -	\$ -	\$ -	0	\$ -	\$ -	\$ -	0.0%
	2.7	24	\$ 5,664	\$ -	\$ 5,664	0	\$ -	\$ -	\$ -	24	\$ 5,664	\$ -	\$ 5,664	0.3%
	Subtotal	1163	\$ 251,618	\$ 42,150	\$ 293,768	240	\$ 40,944	\$ 12,800	\$ 53,744	1,403	\$ 292,562	\$ 54,950	\$ 347,512	21.2%
3	PHASE 1 IMPLEMENTATION													
	3.1	48	\$ 10,496	\$ -	\$ 10,496	64	\$ 11,456	\$ 4,500	\$ 15,956	112	\$ 21,952	\$ 4,500	\$ 26,452	1.6%
	3.2	46	\$ 9,192	\$ -	\$ 9,192	48	\$ 8,592	\$ -	\$ 8,592	94	\$ 17,784	\$ -	\$ 17,784	1.1%
	Subtotal	94	\$ 19,688	\$ 0	\$ 19,688	112	\$ 20,048	\$ 4,500	\$ 24,548	206	\$ 39,736	\$ 4,500	\$ 44,236	2.7%
4	STUDY AREA DEFINITION													
	Subtotal	0	\$ -	\$ -	\$ -	0	\$ -	\$ -	\$ -	0	\$ -	\$ -	\$ -	0.0%
5	DEVELOP BASELINE CONDITIONS													
	5.1													
	5.1.1	24	\$ 3,864	\$ -	\$ 3,864	0	\$ -	\$ -	\$ -	24	\$ 3,864	\$ -	\$ 3,864	0.2%
	5.1.2	12	\$ 1,932	\$ -	\$ 1,932	0	\$ -	\$ -	\$ -	12	\$ 1,932	\$ -	\$ 1,932	0.1%
	5.1.3	12	\$ 1,932	\$ -	\$ 1,932	0	\$ -	\$ -	\$ -	12	\$ 1,932	\$ -	\$ 1,932	0.1%

7-Aug-06

**Boston Logan International Airport Noise and Overflight Study
Independent Consultant Staffing and Cost Allocations**

\$ 1,638,841

Phase 2 Independent Consultant Team		Landrum & Brown				Subconsultants Total				Total Project				Percent
Element/Task/SubTask		L&BTotal												of Total
		Hours	Labor	Expenses	Total	Hours	Labor Cost	Expenses	Total	Hours	Labor	Expenses	Total Cost	
5.2	Fast-time Air Traffic Simulation													
5.2.1	Model Calibration Development of Baseline Schedule	58	\$ 11,160	\$ -	\$ 11,160	60	\$ 10,245	\$ -	\$ 10,245	118	\$ 21,405	\$ -	\$ 21,405	1.3%
5.2.2	Baseline Modeling	38	\$ 6,816	\$ -	\$ 6,816	8	\$ 1,432	\$ -	\$ 1,432	46	\$ 8,248	\$ -	\$ 8,248	0.5%
5.2.3	Baseline Noise	332	\$ 63,768	\$ 1,500	\$ 65,268	216	\$ 36,090	\$ 750	\$ 36,840	548	\$ 99,858	\$ 2,250	\$ 102,108	6.2%
5.3	Baseline Noise Protocol													
5.3.1	Noise Modeling Input and Methodology	172	\$ 34,560	\$ 4,000	\$ 38,560	136	\$ 20,988	\$ 950	\$ 21,938	308	\$ 55,548	\$ 4,950	\$ 60,498	3.7%
5.3.2	INM DNL 75, 70, 65, and 60, 55 dB Contours	1142	\$ 189,188	\$ 5,250	\$ 194,438	766	\$ 118,828	\$ 6,300	\$ 125,128	1,908	\$ 308,016	\$ 11,550	\$ 319,566	19.5%
5.3.3	Alternative Noise Metrics[FAA will discuss at June 1, 2006 meeting]	48	\$ 10,292	\$ -	\$ 10,292	0	\$ -	\$ -	\$ -	48	\$ 10,292	\$ -	\$ 10,292	0.6%
5.3.4	Identify Population and Noise Sensitive Area	136	\$ 22,868	\$ -	\$ 22,868	0	\$ -	\$ -	\$ -	136	\$ 22,868	\$ -	\$ 22,868	1.4%
5.3.5	Impacts Ground/ Taxiway Noise	18	\$ 3,582	\$ -	\$ 3,582	0	\$ -	\$ -	\$ -	18	\$ 3,582	\$ -	\$ 3,582	0.2%
5.3.6		104	\$ 18,164	\$ 750	\$ 18,914	0	\$ -	\$ -	\$ -	104	\$ 18,164	\$ 750	\$ 18,914	1.2%
Subtotal		2096	\$ 368,126	\$ 11,500	\$ 379,626	1186	\$ 187,583	\$ 8,000	\$ 195,583	3,282	\$ 555,709	\$ 19,500	\$ 575,209	35.1%
6	ALTERNATIVES IDENTIFICATION & EVALUATION													
6.1	Identify Alternatives													
6.1.1	Recommended for Evaluation from Phase 1	172	\$ 36,200	\$ -	\$ 36,200	48	\$ 8,592	\$ -	\$ 8,592	220	\$ 44,792	\$ -	\$ 44,792	2.7%
6.1.2	Ground Noise Alternatives	80	\$ 15,360	\$ -	\$ 15,360	0	\$ -	\$ -	\$ -	80	\$ 15,360	\$ -	\$ 15,360	0.9%
6.1.4	Other Alternatives Level 1 Screening Analysis	228	\$ 47,888	\$ 3,000	\$ 50,888	48	\$ 8,592	\$ 750	\$ 9,342	276	\$ 56,480	\$ 3,750	\$ 60,230	3.7%
6.2	Level 2 Screening Analysis	112	\$ 23,520	\$ -	\$ 23,520	56	\$ 10,024	\$ -	\$ 10,024	168	\$ 33,544	\$ -	\$ 33,544	2.0%
6.3	Level 3 Screening Analysis													
6.3.1	Refine Alternatives	72	\$ 15,328	\$ -	\$ 15,328	32	\$ 5,728	\$ -	\$ 5,728	104	\$ 21,056	\$ -	\$ 21,056	1.3%
6.3.2	Screening Analysis	284	\$ 52,216	\$ -	\$ 52,216	48	\$ 8,592	\$ -	\$ 8,592	332	\$ 60,808	\$ -	\$ 60,808	3.7%
6.4	Level 3 Screening Analysis													
6.4.1	Forecasting and Flight Schedule Operational	140	\$ 25,104	\$ -	\$ 25,104	8	\$ 1,432	\$ -	\$ 1,432	148	\$ 26,536	\$ -	\$ 26,536	1.6%
6.4.2	Modeling	208	\$ 36,560	\$ 750	\$ 37,310	180	\$ 29,250	\$ 750	\$ 30,000	388	\$ 65,810	\$ 1,500	\$ 67,310	4.1%
6.4.3	Noise Modeling	1012	\$ 171,560	\$ 1,500	\$ 173,060	220	\$ 34,672	\$ 1,500	\$ 36,172	1,232	\$ 206,232	\$ 3,000	\$ 209,232	12.8%

7-Aug-06

**Boston Logan International Airport Noise and Overflight Study
Independent Consultant Staffing and Cost Allocations**

\$ 1,638,841

Phase 2 Independent Consultant Team		Landrum & Brown				Subconsultants Total				Total Project				Percent
Element/Task/SubTask		L&BTotal												of Total
		Hours	Labor	Expenses	Total	Hours	Labor Cost	Expenses	Total	Hours	Labor	Expenses	Total Cost	
6.4.4	Preferred Alternative Development	120	\$ 22,488	\$ -	\$ 22,488	0	\$ -	\$ -	\$ -	120	\$ 22,488	\$ -	\$ 22,488	1.4%
Subtotal		2428	\$ 446,224	\$ 5,250	\$ 451,474	640	\$ 106,882	\$ 3,000	\$ 109,882	3,068	\$ 553,106	\$ 8,250	\$ 561,356	34.3%
7	Develop Scope of Services -- Phase 3	140	\$ 30,412	\$ 3,000	\$ 33,412	0	\$ -	\$ -	\$ -	140	\$ 30,412	\$ 3,000	\$ 33,412	2.0%
Subtotal		140	\$ 30,412	\$ 3,000	\$ 33,412	0	\$ -	\$ -	\$ -	140	\$ 30,412	\$ 3,000	\$ 33,412	2.0%
GRAND TOTAL		6,277	\$ 1,190,184	\$ 64,900	\$ 1,255,084	2,178	\$ 355,457	\$ 28,300	\$ 383,757	8,455	\$ 1,545,641	\$ 93,200	\$ 1,638,841	100%

Equivalent Staff Years Assigned

52%

203%

0.770026157