

December 2018

Logan International Airport

Runway Use (Operations)

2018 Jet	YTD		January		February		March		April		May		June		July		August		September		October		November		December		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	
04L	7,274	2	109	0	133	1	934	1	485	0	1,159	0	997	0	1,054	0	556	0	927	0	254	0	298	0	368	0	
04R	57,899	7,437	2,297	191	1,919	128	6,354	1,377	4,152	335	6,798	749	5,780	749	5,216	779	5,622	707	8,249	1,041	3,914	474	4,878	615	2,720	292	
9	0	54,800	0	2,174	0	1,851	0	5,737	0	4,303	0	6,787	0	5,478	0	5,230	0	4,970	0	7,801	0	3,464	0	4,364	0	2,641	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15R	754	8,464	75	543	31	884	46	338	248	601	73	1,115	1	930	128	1,163	91	1,059	37	571	2	448	1	324	21	488	0
22L	56,986	3,222	4,477	176	4,902	260	1,535	83	4,378	200	4,855	273	5,465	238	6,774	371	5,855	388	4,090	211	5,921	541	4,497	300	4,237	181	0
22R	14	61,917	1	4,601	0	5,162	1	1,836	3	4,875	3	5,324	1	5,736	0	7,165	2	6,621	0	4,531	1	6,759	0	4,781	2	4,526	0
27	37,071	18,593	3,605	1,949	3,556	1,729	2,936	1,873	4,094	1,991	1,964	1,281	2,376	1,545	2,014	820	3,094	921	1,585	543	4,278	1,488	3,335	1,675	4,234	2,778	0
33L	21,675	29,868	2,406	3,477	2,115	2,879	2,171	2,937	2,164	3,550	1,559	1,014	1,694	1,745	1,231	968	1,316	2,069	667	869	1,820	3,490	1,776	3,066	2,756	3,804	0
32	2,592	0	213	0	234	0	211	0	300	0	109	0	119	0	68	0	168	0	46	0	463	0	311	0	350	0	0
Total	184,265	184,303	13,183	13,111	12,890	12,894	14,188	14,182	15,824	15,855	16,520	16,543	16,433	16,421	16,485	16,496	16,704	16,735	15,601	15,567	16,653	16,664	15,096	15,125	14,688	14,710	0
Total	368,568		26,294		25,784		28,370		31,679		33,063		32,854		32,981		33,439		31,168		33,317		30,221		29,398		0

Runway 4R/22L was closed from May 15 - June 23, 2017 and had reduced availability through September 15th for 4R arrivals

2017 Jet	YTD		January		February		March		April		May		June		July		August		September		October		November		December		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	
04L	7,903	0	104	0	114	0	396	0	492	0	2,192	0	547	0	1,523	0	698	0	686	0	436	0	486	0	229	0	0
04R	37,606	3,923	3,420	382	1,300	186	4,076	447	6,383	469	2,815	272	0	0	3,452	504	2,946	294	5,080	576	3,050	245	2,913	279	2,171	269	0
9	0	44,338	0	2,858	0	1,308	0	3,792	0	5,979	0	5,877	0	2,852	0	4,655	0	3,440	0	5,094	0	3,338	0	3,257	0	1,888	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15R	7,721	9,266	0	502	129	457	33	424	98	916	1,910	1,188	3,202	1,124	761	1,128	634	1,192	312	609	290	855	352	546	0	325	0
22L	39,464	2,070	3,386	268	3,500	219	2,050	131	3,494	253	1,325	52	1,124	54	4,081	135	4,980	139	2,490	158	6,373	332	3,785	183	2,876	146	0
22R	17	48,162	0	3,768	4	4,193	0	2,344	2	4,146	1	1,966	0	3,588	2	4,799	0	5,351	2	3,422	2	6,689	2	4,573	2	3,323	0
27	47,012	25,637	3,491	2,255	3,817	1,883	4,018	2,513	2,558	1,152	3,915	2,201	7,113	2,412	3,238	1,923	3,855	2,338	2,859	2,377	3,295	1,628	3,929	2,179	4,924	2,776	0
33L	30,987	40,407	2,326	2,884	2,571	3,415	3,280	4,590	1,423	1,677	2,807	3,730	2,926	5,316	2,428	2,421	2,636	3,345	3,051	2,370	1,770	2,330	2,484	3,217	3,285	5,112	0
32	3,170	0	211	0	252	0	403	0	161	0	310	0	421	0	97	0	328	0	155	0	199	0	297	0	336	0	0
Total	173,880	173,803	12,938	12,917	11,687	11,661	14,256	14,241	14,611	14,592	15,275	15,286	15,333	15,346	15,582	15,565	16,077	16,099	14,635	14,606	15,415	15,417	14,248	14,234	13,823	13,839	0
Total	347,683		25,855		23,348		28,497		29,203		30,561		30,679		31,147		32,176		29,241		30,832		28,482		27,662		0

Runway 4L/22R was closed from Sept. 16 - Oct. 17, 2016

2016 Jet	YTD		January		February		March		April		May		June		July		August		September		October		November		December		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	
04L	6,011	0	171	0	253	0	437	0	1,074	0	820	0	747	0	574	0	801	0	509	0	120	0	367	0	138	0	0
04R	51,858	7,007	2,350	416	2,310	374	5,116	662	5,466	734	6,596	616	3,767	549	4,694	732	4,490	752	6,971	789	5,705	597	3,222	513	1,171	273	0
9	0	50,140	0	2,242	0	2,121	0	4,758	0	5,776	0	6,816	0	3,961	0	4,385	0	4,317	0	6,659	0	5,035	0	2,935	0	1,135	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15R	1,219	10,627	46	482	8	358	5	498	89	590	161	822	255	951	139	833	44	883	72	2,360	197	1,893	0	429	203	528	0
22L	40,459	3,719	2,446	183	3,702	258	3,199	229	3,258	203	3,112	216	3,758	359	4,103	646	4,864	595	3,782	189	2,294	249	2,625	213	3,316	379	0
22R	9	44,617	0	3,397	1	4,229	3	3,822	0	3,760	0	3,387	1	4,866	1	4,761	1	5,742	0	2,223	0	866	1	3,602	1	3,962	0
27	38,336	21,229	4,142	2,349	2,808	1,975	2,309	1,898	2,227	1,151	2,657	986	4,283	1,355	3,077	1,828	3,449	844	1,723	752	3,194	2,331	3,961	2,760	4,506	3,000	0
33L	25,998	30,079	2,737	3,146	2,306	2,384	2,353	1,791	1,499	1,599	1,314	2,108	1,865	3,012	2,297	2,022	1,399	2,135	1,084	1,371	2,736	3,615	3,051	3,128	3,357	3,768	0
32	2,496	0	240	0	169	0	135	0	110	0	187	0	321	0	174	0	203	0	132	0	287	0	243	0	295	0	0
Total	166,386	167,418	12,132	12,215	11,557	11,699	13,557	13,658	13,723	13,813	14,847	14,951	14,997	15,053	15,059	15,207	15,251	15,268	14,273	14,343	14,533	14,586	13,470	13,580	12,987	13,045	0
Total	333,804		24,347		23,256		27,215		27,536		29,798		30,050		30,266		30,519		28,616		29,119		27,050		26,032		0

2015 Jet	YTD		January		February		March		April		May		June		July		August		September		October		November		December		
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	
04L	7,272	0	228	0	145	0	211	0	580	0	663	0	1,041	0	941	0	587	0	1,123	0	730	0	635	0	388	0	0
04R	45,461	7,000	1,940	345	2,449	646	1,980	348	3,800	431	3,622	374	6,480	999	4,216	747	3,899	692	6,005	781	4,327	617	3,259	512	3,484	508	0
9	0	45,242	0	1,983	0	1,816	0	2,067	0	3,981	0	3,906	0	6,360	0	4,347	0	3,705	0	5,841	0	4,539	0	3,553	0	3,144	0
14	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15R	2,150	8,506	125	248	134	72	119	616	497	735	496	1,165	157	884	227	1,058	57	801	39	952	192	534	4	547	103	894	0
22L	39,092	3,572	2,501	175	1,371	103	3,657	220	2,392	216	3,897	410	3,227	341	4,412	531	4,519	527	3,293	260	3,003	281	3,034	278	3,786	230	0
22R	35	50,497	4	2,793	1	1,660	4	4,000	2	3,406	6	5,368	3	4,227	2	5,594	4	5,898	5	4,186	2	4,388	2	4,552	0	4,425	0
27	36,564	19,289	2,788	2,561	1,435	3,112	3,190	2,691	3,109	1,243	3,712	684	2,301	774	3,486	1,042	4,155	1,000	2,183	856	3,720	1,821	3,803	1,869	2,682	1,636	0
33L	25,817	24,492	2,216	2,816	4,169	2,280	3,546	2,921	2,456	3,131	1,116	1,792	1,075	807	1,454	1,546	1,298	2,129	1,064	971	2,146	2,206	2,153	1,899</			

December 2018
Logan International Airport
Runway Use (%)

2018 Jet	YTD		January		February		March		April		May		June		July		August		September		October		November		December	
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep
04L	3.9%	0.0%	0.8%	0.0%	1.0%	0.0%	6.6%	0.0%	3.1%	0.0%	7.0%	0.0%	6.1%	0.0%	6.4%	0.0%	3.3%	0.0%	5.9%	0.0%	1.5%	0.0%	2.0%	0.0%	2.5%	0.0%
04R	31.4%	4.0%	17.4%	1.5%	14.9%	1.0%	44.8%	9.7%	26.2%	2.1%	41.2%	4.5%	35.2%	4.6%	31.6%	4.7%	33.7%	4.2%	52.9%	6.7%	23.5%	2.8%	32.3%	4.1%	18.5%	2.0%
9	0.0%	29.7%	0.0%	16.6%	0.0%	14.4%	0.0%	40.5%	0.0%	27.1%	0.0%	41.0%	0.0%	33.4%	0.0%	31.7%	0.0%	29.7%	0.0%	50.1%	0.0%	20.8%	0.0%	28.9%	0.0%	18.0%
14	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15R	0.4%	4.6%	0.6%	4.1%	0.2%	6.9%	0.3%	2.4%	1.6%	3.8%	0.4%	6.7%	0.0%	5.7%	0.8%	7.1%	0.5%	6.3%	0.2%	3.7%	0.0%	2.7%	0.0%	2.1%	0.1%	3.3%
22L	30.9%	1.7%	34.0%	1.3%	38.0%	2.0%	10.8%	0.6%	27.7%	1.3%	29.4%	1.7%	33.3%	1.4%	41.1%	2.2%	35.1%	2.3%	26.2%	1.4%	35.6%	3.2%	29.8%	2.0%	28.8%	1.2%
22R	0.0%	33.6%	0.0%	35.1%	0.0%	40.0%	0.0%	12.9%	0.0%	30.7%	0.0%	32.2%	0.0%	34.9%	0.0%	43.4%	0.0%	39.6%	0.0%	29.1%	0.0%	40.6%	0.0%	31.6%	0.0%	30.8%
27	20.1%	10.1%	27.3%	14.9%	27.6%	13.4%	20.7%	13.2%	25.9%	12.6%	11.9%	7.7%	14.5%	9.4%	12.2%	5.0%	18.5%	5.5%	10.2%	3.5%	25.7%	8.9%	22.1%	11.1%	28.8%	18.9%
33L	11.8%	16.2%	18.3%	26.5%	16.4%	22.3%	15.3%	20.7%	13.7%	22.4%	9.4%	6.1%	10.3%	10.6%	7.5%	5.9%	7.9%	12.4%	4.3%	5.6%	10.9%	20.9%	11.8%	20.3%	18.8%	25.9%
32	1.4%	0.0%	1.6%	0.0%	1.8%	0.0%	1.5%	0.0%	1.9%	0.0%	0.7%	0.0%	0.7%	0.0%	0.4%	0.0%	1.0%	0.0%	0.3%	0.0%	2.8%	0.0%	2.1%	0.0%	2.4%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Runway 4R/22L was closed from May 15 - June 23, 2017 and had reduced availability through September 15th for 4R arrivals

2017 Jet	YTD		January		February		March		April		May		June		July		August		September		October		November		December	
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep
04L	4.5%	0.0%	0.8%	0.0%	1.0%	0.0%	2.8%	0.0%	3.4%	0.0%	14.4%	0.0%	3.6%	0.0%	9.8%	0.0%	4.3%	0.0%	4.7%	0.0%	2.8%	0.0%	3.4%	0.0%	1.7%	0.0%
04R	21.6%	2.3%	26.4%	3.0%	11.1%	1.6%	28.6%	3.1%	43.7%	3.2%	18.4%	1.8%	0.0%	0.0%	22.2%	3.2%	18.3%	1.8%	34.7%	3.9%	19.8%	1.6%	20.4%	2.0%	15.7%	1.9%
9	0.0%	25.5%	0.0%	22.1%	0.0%	11.2%	0.0%	26.6%	0.0%	41.0%	0.0%	38.4%	0.0%	18.6%	0.0%	29.9%	0.0%	21.4%	0.0%	34.9%	0.0%	21.7%	0.0%	22.9%	0.0%	13.6%
14	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15R	4.4%	5.3%	0.0%	3.9%	1.1%	3.9%	0.2%	3.0%	0.7%	6.3%	12.5%	7.8%	20.9%	7.3%	4.9%	7.2%	3.9%	7.4%	2.1%	4.2%	1.9%	5.5%	2.5%	3.8%	0.0%	2.3%
22L	22.7%	1.2%	26.2%	2.1%	29.9%	1.9%	14.4%	0.9%	23.9%	1.7%	8.7%	0.3%	7.3%	0.4%	26.2%	0.9%	31.0%	0.9%	17.0%	1.1%	41.3%	2.2%	26.6%	1.3%	20.8%	1.1%
22R	0.0%	27.7%	0.0%	29.2%	0.0%	36.0%	0.0%	16.5%	0.0%	28.4%	0.0%	12.9%	0.0%	23.4%	0.0%	30.8%	0.0%	33.2%	0.0%	23.4%	0.0%	43.4%	0.0%	32.1%	0.0%	24.0%
27	27.0%	14.8%	27.0%	17.5%	32.7%	16.1%	28.2%	17.6%	17.5%	7.9%	25.6%	14.4%	46.4%	15.7%	20.8%	12.4%	24.0%	14.5%	19.5%	16.3%	21.4%	10.6%	27.6%	15.3%	35.6%	20.1%
33L	17.8%	23.2%	18.0%	22.3%	22.0%	29.3%	23.0%	32.2%	9.7%	11.5%	18.4%	24.4%	19.1%	34.6%	15.6%	15.6%	16.4%	20.8%	20.8%	16.2%	11.5%	15.1%	17.4%	22.6%	23.8%	36.9%
32	1.8%	0.0%	1.6%	0.0%	2.2%	0.0%	2.8%	0.0%	1.1%	0.0%	2.0%	0.0%	2.7%	0.0%	0.6%	0.0%	2.0%	0.0%	1.1%	0.0%	1.3%	0.0%	2.1%	0.0%	2.4%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Runway 4L/22R was closed from Sept. 16 - Oct. 17

2016 Jet	YTD		January		February		March		April		May		June		July		August		September		October		November		December	
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep
04L	3.6%	0.0%	1.4%	0.0%	2.2%	0.0%	3.2%	0.0%	7.8%	0.0%	5.5%	0.0%	5.0%	0.0%	3.8%	0.0%	5.3%	0.0%	3.6%	0.0%	0.8%	0.0%	2.7%	0.0%	1.1%	0.0%
04R	31.2%	4.2%	19.4%	3.4%	20.0%	3.2%	37.7%	4.8%	39.8%	5.3%	44.4%	4.1%	25.1%	3.6%	31.2%	4.8%	29.4%	4.9%	48.8%	5.5%	39.3%	4.1%	23.9%	3.8%	9.0%	2.1%
9	0.0%	29.9%	0.0%	18.4%	0.0%	18.1%	0.0%	34.8%	0.0%	41.8%	0.0%	45.6%	0.0%	26.3%	0.0%	28.8%	0.0%	28.3%	0.0%	46.4%	0.0%	34.5%	0.0%	21.6%	0.0%	8.7%
14	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15R	0.7%	6.3%	0.4%	3.9%	0.1%	3.1%	0.0%	3.6%	0.6%	4.3%	1.1%	5.5%	1.7%	6.3%	0.9%	5.5%	0.3%	5.8%	0.5%	16.5%	1.4%	13.0%	0.0%	3.2%	1.6%	4.0%
22L	24.3%	2.2%	20.2%	1.5%	32.0%	2.2%	23.6%	1.7%	23.7%	1.5%	21.0%	1.4%	25.1%	2.4%	27.2%	4.2%	31.9%	3.9%	26.5%	1.3%	15.8%	1.7%	19.5%	1.6%	25.5%	2.9%
22R	0.0%	26.7%	0.0%	27.8%	0.0%	36.1%	0.0%	28.0%	0.0%	27.2%	0.0%	22.7%	0.0%	32.3%	0.0%	31.3%	0.0%	37.6%	0.0%	15.5%	0.0%	5.9%	0.0%	26.5%	0.0%	30.4%
27	23.0%	12.7%	34.1%	19.2%	24.3%	16.9%	17.0%	13.9%	16.2%	8.3%	17.9%	6.6%	28.6%	9.0%	20.4%	12.0%	22.6%	5.5%	12.1%	5.2%	22.0%	16.0%	29.4%	20.3%	34.7%	23.0%
33L	15.6%	18.0%	22.6%	25.8%	20.0%	20.4%	17.4%	13.1%	10.9%	11.6%	8.9%	14.1%	12.4%	20.0%	15.3%	13.3%	9.2%	14.0%	7.6%	9.6%	18.8%	24.8%	22.7%	23.0%	25.8%	28.9%
32	1.5%	0.0%	2.0%	0.0%	1.5%	0.0%	1.0%	0.0%	0.8%	0.0%	1.3%	0.0%	2.1%	0.0%	1.2%	0.0%	1.3%	0.0%	0.9%	0.0%	2.0%	0.0%	1.8%	0.0%	2.3%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

2015 Jet	YTD		January		February		March		April		May		June		July		August		September		October		November		December	
	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep	Arr	Dep
04L	4.6%	0.0%	2.1%	0.0%	1.5%	0.0%	1.6%	0.0%	4.4%	0.0%	4.9%	0.0%	7.3%	0.0%	6.3%	0.0%	4.0%	0.0%	8.1%	0.0%	5.1%	0.0%	4.8%	0.0%	3.0%	0.0%
04R	28.7%	4.4%	17.8%	3.2%	25.2%	6.7%	15.3%	2.7%	29.0%	3.3%	26.6%	2.7%	45.1%	6.9%	28.4%	5.0%	26.5%	4.7%	43.5%	5.6%	30.2%	4.3%	24.9%	3.9%	27.4%	4.0%
9	0.0%	28.5%	0.0%	18.2%	0.0%	18.7%	0.0%	16.1%	0.0%	30.3%	0.0%	28.5%	0.0%	44.2%	0.0%	29.2%	0.0%	25.1%	0.0%	42.2%	0.0%	31.6%	0.0%	26.9%	0.0%	24.5%
14	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15R	1.4%	5.4%	1.1%	2.3%	1.4%	0.7%	0.9%	4.8%	3.8%	5.6%	3.6%	8.5%	1.1%	6.1%	1.5%	7.1%	0.4%	5.4%	0.3%	6.9%	1.3%	3.7%	0.0%	4.1%	0.8%	7.0%
22L	24.7%	2.3%	22.9%	1.6%	14.1%	1.1%	28.2%	1.7%	18.3%	1.6%	28.6%	3.0%	22.5%	2.4%	29.7%	3.6%	30.7%	3.6%	23.9%	1.9%	21.0%	2.0%	23.1%	2.1%	29.7%	1.8%
22R	0.0%	31.8%	0.0%	25.6%	0.0%	17.1%	0.0%	31.1%	0.0%	25.9%	0.0%	39.2%	0.0%	29.4%	0.0%	37.6%	0.0%	40.0%	0.0%	30.2%	0.0%	30.5%	0.0%	34.5%	0.0%	34.5%
27	23.1%	12.2%	25.5%	23.5%	14.8%	12.1%	24.6%	20.9%	23.7%	9.5																