

United States Environmental Protection Agency
March 1998

Analysis of Carbon Monoxide Exposure for Fourteen Cities using HAPEM-MS3

Appendix A

HAPEM- MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990

Note that the electronic version of Appendix A is not organized the same as the hardcopy.
Instead of being organized just by city, it is organized by type of data and by city.

Baltimore: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1767	84.5	1143	93.8	1326	100.5	1642	88.3	1457	367.2
In transit, bus	3348	7.4	2120	5.6	2341	3.6	2924	7.3	2779	23.8
In transit, truck	2217	4.4	1443	7.1	1613	6.6	1988	5.7	1764	23.8
In transit, van	1786	4.1	1154	4.9	1347	5.1	1604	5.3	1461	19.4
Indoors, public garage	1012	2.8	677	1.7	812	1.1	945	2.5	894	8.1
Outdoors, in a parking lot	1028	12.3	670	12.9	774	13.9	942	11.8	848	50.9
Outdoors, along a roadway	1525	49.3	976	69.4	1143	87.3	1390	55.2	1223	261.2
In transit, motorcycle	1906	0.3	1162	0.8	1350	1.6	1809	0.2	1376	2.9
Indoors, service station	1631	2.3	1037	1.7	1173	1.0	1433	2.3	1370	7.2
Outdoors, service station	0	0.1	0	0.4	0	0.5	0	0.1	0	1.2
Indoors, residential garage	1404	1.0	875	1.0	1035	0.6	1308	1.1	1175	3.7
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	1648	0.1
Indoors, home	683	1570.4	447	1542.7	535	1544.4	637	1590.0	577	6247.4
Indoors, office	708	78.7	477	82.0	532	80.9	618	80.6	583	322.3
Indoors, store	706	48.3	468	47.1	540	48.8	639	46.7	588	190.9
Indoors, restaurant	1271	29.6	819	28.5	944	28.2	1181	28.4	1056	114.7
Indoors, mfg. facility	879	24.2	586	24.9	663	23.5	768	25.1	724	97.7
Indoors, school	870	131.2	583	100.8	647	61.5	756	135.1	734	428.6
Indoors, church	555	14.1	348	13.5	408	11.9	504	15.4	458	55.1
Indoors, shopping mall	3250	3.4	2302	3.0	2714	2.5	3069	3.2	2858	12.1
Indoors, auditorium	218	5.5	134	7.4	164	8.2	204	7.5	177	28.6
Indoors, health care facility	562	22.2	377	19.8	437	15.4	516	23.7	479	81.1
Indoors, public building	614	6.4	411	8.5	489	10.3	582	6.9	514	32.2
Indoors, other location	1458	22.5	952	26.7	1122	24.0	1371	24.8	1216	98.1
Indoors, not specified	1140	0.4	857	0.4	1057	0.6	998	0.2	1018	1.6
Outdoors, construction	1706	2.2	1147	2.8	1293	2.2	1510	2.4	1402	9.6
Outdoors, residential grounds	929	17.1	623	37.1	745	60.2	849	20.2	750	134.7
Outdoors, school grounds	1593	6.8	1088	6.9	1245	4.7	1413	7.6	1343	25.9
Outdoors, sports arena	472	1.0	311	4.7	378	8.0	440	1.1	367	14.7
Outdoors, park/golf course	448	4.3	313	14.0	374	24.2	419	5.9	368	48.4
Outdoors, other location	1087	3.0	684	13.3	817	25.5	1023	2.9	809	44.7
Outdoors, not specified	1507	0.2	1278	0.2	1418	0.2	1368	0.2	1388	0.9
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	0.4	0	0.9	-1	0.0	0	1.2

Baltimore: City-wide, Demographic Group=African americans

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1846	74.3	1236	64.3	1361	68.3	1691	64.9	1543	271.8
In transit, bus	3419	13.0	2366	17.4	2430	14.3	3051	16.9	2791	61.6
In transit, truck	-1	0.0	1462	2.2	1571	3.0	-1	0.0	1524	5.2
In transit, van	-1	0.0	1163	0.2	1284	0.3	-1	0.0	1240	0.5
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1035	9.8	735	9.3	851	13.4	966	7.0	889	39.4
Outdoors, along a roadway	1540	29.4	1049	60.9	1191	90.8	1399	32.4	1230	213.5
In transit, motorcycle	1957	0.6	1115	0.9	1396	0.5	1835	1.0	1566	3.1
Indoors, service station	-1	0.0	1108	0.4	1164	0.5	-1	0.0	1140	1.0
Outdoors, service station	-1	0.0	0	0.2	0	0.3	-1	0.0	0	0.5
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	2244	0.1	2385	0.2	-1	0.0	2325	0.3
Indoors, home	700	1723.4	471	1684.3	539	1684.1	639	1752.6	588	6844.3
Indoors, office	913	3.6	513	25.5	544	28.9	794	7.6	581	65.6
Indoors, store	774	13.5	508	20.3	551	30.6	707	15.0	607	79.4
Indoors, restaurant	1278	14.3	834	4.7	967	2.9	1209	9.1	1161	31.0
Indoors, mfg. facility	840	30.8	602	12.0	661	8.7	739	18.8	750	70.2
Indoors, school	917	100.1	624	115.8	653	67.8	788	132.4	752	416.1
Indoors, church	516	47.9	341	35.7	378	35.7	463	44.2	433	163.4
Indoors, shopping mall	2923	1.3	2368	2.1	2545	1.6	2465	2.7	2532	7.7
Indoors, auditorium	235	2.1	149	3.3	162	2.3	220	4.4	192	12.1
Indoors, health care facility	534	29.2	385	49.3	440	63.3	488	36.9	450	178.7
Indoors, public building	511	1.1	408	4.4	450	8.8	444	1.7	442	16.0
Indoors, other location	1420	47.6	969	17.8	1074	18.8	1337	29.6	1271	113.8
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1083	6.7	661	26.5	763	36.3	1026	10.1	789	79.6
Outdoors, school grounds	1491	5.7	1128	8.0	1266	4.3	1316	8.7	1289	26.7
Outdoors, sports arena	476	5.6	322	8.7	362	6.2	434	11.8	397	32.3
Outdoors, park/golf course	-1	0.0	319	2.8	348	2.4	-1	0.0	333	5.2
Outdoors, other location	1162	0.1	743	4.8	876	11.0	-1	0.0	839	15.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.1	1322	0.2
In transit, train	-1	0.0	1152	2.0	1374	2.7	-1	0.0	1279	4.8
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1810	67.8	1191	65.8	1351	68.6	1664	64.0	1503	266.2
In transit, bus	3374	9.8	2286	13.3	2412	11.9	3023	12.4	2736	47.3
In transit, truck	-1	0.0	1409	2.1	1564	2.8	-1	0.0	1497	4.9
In transit, van	1640	3.3	1068	4.8	1230	3.3	1503	5.5	1353	16.8
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	983	9.8	696	10.7	835	13.6	894	8.6	846	42.7
Outdoors, along a roadway	1474	58.2	1006	103.1	1182	114.1	1355	78.9	1217	354.3
In transit, motorcycle	1916	0.5	1075	0.7	1372	0.4	1819	0.7	1531	2.2
Indoors, service station	-1	0.0	1078	0.4	1167	0.5	-1	0.0	1129	0.9
Outdoors, service station	-1	0.0	0	0.2	0	0.3	-1	0.0	0	0.5
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	2170	0.1	2366	0.2	-1	0.0	2282	0.3
Indoors, home	689	1740.7	456	1668.5	537	1665.4	636	1745.4	581	6819.9
Indoors, office	822	5.5	497	28.4	542	30.8	722	10.3	570	75.0
Indoors, store	753	12.3	486	21.7	544	30.6	683	14.6	587	79.2
Indoors, restaurant	1236	13.6	795	5.7	934	3.5	1134	9.9	1095	32.7
Indoors, mfg. facility	824	26.9	582	10.8	658	8.0	728	16.5	735	62.2
Indoors, school	888	81.5	602	85.5	646	50.9	769	100.7	735	318.7
Indoors, church	501	41.1	328	36.4	372	37.6	444	44.1	415	159.3
Indoors, shopping mall	2842	1.2	2270	1.9	2533	1.4	2440	2.5	2480	7.0
Indoors, auditorium	228	1.9	143	3.0	159	2.1	216	4.0	188	11.0
Indoors, health care facility	523	24.8	374	42.9	437	55.6	481	31.7	442	155.0
Indoors, public building	497	1.0	392	3.9	447	7.8	439	1.6	435	14.3
Indoors, other location	1394	42.7	935	18.4	1074	18.3	1344	28.3	1248	107.6
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1042	7.4	637	30.4	748	50.8	1029	10.3	765	98.9
Outdoors, school grounds	1455	4.1	1093	5.8	1273	3.2	1291	6.2	1264	19.2
Outdoors, sports arena	464	5.1	309	8.2	361	6.1	428	10.7	388	30.2
Outdoors, park/golf course	-1	0.0	307	2.5	347	2.2	-1	0.0	325	4.7
Outdoors, other location	889	0.8	694	6.9	825	15.4	764	1.2	787	24.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.1	1294	0.2
In transit, train	-1	0.0	1112	1.9	1366	2.5	-1	0.0	1257	4.5
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1688	43.0	1167	54.8	1328	72.1	1561	43.7	1407	213.7
In transit, bus	3320	7.7	2153	5.7	2256	3.1	2792	7.8	2740	24.3
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	1110	1.9	1294	6.3	-1	0.0	1250	8.2
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1009	8.5	668	15.6	786	14.4	977	12.3	833	50.8
Outdoors, along a roadway	1585	47.0	1025	60.7	1190	57.0	1473	54.8	1300	219.5
In transit, motorcycle	-1	0.0	1198	0.6	1329	1.7	-1	0.0	1294	2.3
Indoors, service station	-1	0.0	-1	0.1	1048	0.3	-1	0.0	1030	0.3
Outdoors, service station	-1	0.0	0	0.2	0	0.5	-1	0.0	0	0.7
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	705	1830.3	473	1818.5	547	1818.6	649	1868.7	594	7336.1
Indoors, office	916	4.2	553	1.8	499	2.0	842	2.9	760	10.9
Indoors, store	683	38.8	490	46.3	552	75.6	607	30.0	572	190.8
Indoors, restaurant	1323	22.6	869	8.8	1013	6.6	1282	15.5	1198	53.5
Indoors, mfg. facility	931	16.3	609	16.7	669	14.4	795	10.1	748	57.5
Indoors, school	868	88.5	612	75.5	662	36.2	755	101.5	741	301.7
Indoors, church	480	7.4	308	7.4	374	4.1	463	9.9	415	28.8
Indoors, shopping mall	3399	2.3	2460	3.1	2715	1.6	3051	3.5	2902	10.4
Indoors, auditorium	173	5.3	134	10.0	157	11.7	152	11.1	152	38.1
Indoors, health care facility	537	5.9	380	9.3	416	8.2	466	9.0	442	32.5
Indoors, public building	524	9.1	408	3.9	465	1.6	445	5.9	474	20.5
Indoors, other location	1244	9.1	934	10.8	1113	10.3	1175	7.5	1105	37.7
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	961	9.8	660	16.0	766	22.2	926	10.1	797	58.3
Outdoors, school grounds	1427	1.3	1089	1.7	1195	0.9	1263	1.9	1237	5.8
Outdoors, sports arena	-1	0.0	325	3.7	415	7.1	-1	0.0	384	10.8
Outdoors, park/golf course	386	2.8	332	2.4	379	5.4	330	1.2	366	11.9
Outdoors, other location	1084	0.1	699	8.5	788	26.2	911	0.2	768	35.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1763	73.4	1177	82.5	1330	86.2	1636	79.2	1465	321.4
In transit, bus	3773	3.6	2389	4.4	2464	3.1	3320	4.4	2986	15.4
In transit, truck	2147	3.5	1468	9.0	1652	7.9	1978	4.0	1708	24.4
In transit, van	1627	0.6	1109	1.2	1326	1.1	1500	1.2	1359	4.1
Indoors, public garage	-1	0.0	676	0.5	846	1.5	-1	0.0	805	1.9
Outdoors, in a parking lot	1074	20.9	706	16.5	823	19.5	930	16.9	892	73.8
Outdoors, along a roadway	1568	52.3	1033	77.5	1179	102.4	1419	56.7	1257	288.8
In transit, motorcycle	-1	0.0	1230	5.3	1387	11.6	-1	0.0	1338	16.9
Indoors, service station	-1	0.0	1049	0.5	1108	1.2	-1	0.1	1121	1.8
Outdoors, service station	0	0.3	0	0.7	0	1.0	0	0.4	0	2.3
Indoors, residential garage	1280	1.3	887	1.4	992	0.9	1086	1.9	1065	5.5
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.1	-1	0.0	2349	0.1
Indoors, home	699	1609.4	468	1594.2	547	1609.1	647	1635.5	591	6448.2
Indoors, office	679	54.5	483	54.4	530	44.4	598	57.5	575	210.9
Indoors, store	739	34.2	505	44.9	566	53.2	694	37.5	613	169.8
Indoors, restaurant	1335	53.3	885	39.4	985	27.4	1217	50.9	1140	171.1
Indoors, mfg. facility	924	37.6	630	31.3	692	21.2	793	38.4	775	128.5
Indoors, school	907	107.5	620	77.8	670	43.1	783	105.9	770	334.4
Indoors, church	565	13.7	373	15.1	417	13.7	498	16.9	463	59.5
Indoors, shopping mall	3214	5.2	2458	2.9	2799	1.4	2931	3.8	2923	13.3
Indoors, auditorium	209	2.2	143	3.9	156	4.4	204	3.8	173	14.3
Indoors, health care facility	571	36.6	388	29.9	449	33.0	535	34.4	491	133.9
Indoors, public building	585	5.2	429	2.6	477	1.9	522	3.8	522	13.4
Indoors, other location	1474	22.6	991	30.8	1162	21.8	1434	28.4	1254	103.5
Indoors, not specified	1083	0.2	948	0.3	1212	0.4	-1	0.1	1074	0.9
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1013	13.0	677	27.9	777	44.2	930	15.9	804	101.0
Outdoors, school grounds	1668	6.8	1146	7.4	1303	4.9	1485	7.6	1404	26.7
Outdoors, sports arena	-1	0.0	335	3.9	384	7.3	-1	0.0	367	11.2
Outdoors, park/golf course	542	1.6	336	13.1	392	32.5	519	2.4	388	49.6
Outdoors, other location	-1	0.0	736	4.4	843	7.6	-1	0.0	803	12.0
Outdoors, not specified	1440	0.7	1102	0.1	-1	0.0	1300	0.4	1359	1.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1791	86.4	1166	93.2	1335	98.8	1654	89.7	1477	368.1
In transit, bus	3367	7.4	2157	5.2	2393	3.7	2984	6.8	2828	23.1
In transit, truck	2259	3.0	1425	5.1	1578	3.9	1997	4.0	1762	15.9
In transit, van	1776	8.4	1164	8.8	1347	8.5	1604	10.2	1475	35.9
Indoors, public garage	1013	6.5	675	3.0	782	1.2	941	5.5	909	16.3
Outdoors, in a parking lot	1013	10.9	683	11.8	772	12.9	940	10.6	844	46.2
Outdoors, along a roadway	1502	52.1	984	79.8	1139	96.9	1361	63.8	1210	292.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, service station	1509	0.5	1066	0.4	1232	0.3	1283	0.5	1289	1.6
Outdoors, service station	-1	0.1	0	0.1	0	0.2	-1	0.1	0	0.5
Indoors, residential garage	1467	1.4	863	1.1	1046	0.6	1451	1.3	1253	4.4
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	686	1588.5	452	1548.8	535	1544.9	636	1602.2	579	6284.4
Indoors, office	723	78.0	485	86.9	531	87.5	627	84.5	588	336.9
Indoors, store	710	41.5	474	42.8	539	47.6	635	39.0	586	170.8
Indoors, restaurant	1264	20.6	820	21.4	934	22.5	1164	20.6	1041	85.1
Indoors, mfg. facility	858	26.5	587	28.4	656	27.8	746	28.2	710	110.9
Indoors, school	872	104.6	586	79.6	644	50.2	758	104.3	736	338.7
Indoors, church	542	23.4	342	18.6	402	15.3	501	23.8	458	81.1
Indoors, shopping mall	3221	3.3	2313	2.3	2806	2.0	3003	2.8	2879	10.4
Indoors, auditorium	229	5.8	136	6.8	168	5.6	213	7.9	187	26.1
Indoors, health care facility	551	19.6	375	19.1	435	13.8	502	22.0	470	74.5
Indoors, public building	637	6.4	418	10.9	490	14.9	602	7.7	515	39.8
Indoors, other location	1469	27.5	965	26.1	1109	23.2	1392	27.2	1242	104.0
Indoors, not specified	1152	0.5	854	0.5	1046	1.0	982	0.3	1018	2.3
Outdoors, construction	1712	4.9	1163	5.8	1298	4.3	1512	5.3	1416	20.3
Outdoors, residential grounds	923	16.9	623	41.2	735	61.4	831	22.4	740	141.9
Outdoors, school grounds	1590	5.8	1090	5.9	1245	4.2	1396	6.5	1337	22.4
Outdoors, sports arena	462	0.2	317	3.2	389	6.4	415	0.4	369	10.2
Outdoors, park/golf course	472	3.9	314	10.7	367	15.4	430	5.4	372	35.5
Outdoors, other location	1102	5.5	689	16.1	814	32.5	1041	5.2	826	59.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	1105	0.3	1361	0.5	-1	0.0	1251	0.8
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1786	107.7	1139	116.1	1317	118.7	1646	113.6	1464	456.1
In transit, bus	3236	8.2	2061	7.6	2283	4.2	2833	9.4	2667	29.4
In transit, truck	2222	1.6	1397	4.7	1585	9.1	2031	2.1	1645	17.4
In transit, van	-1	0.0	1128	1.4	1366	3.2	-1	0.1	1301	4.7
Indoors, public garage	1068	0.4	697	0.4	870	0.4	980	0.4	903	1.6
Outdoors, in a parking lot	1009	10.4	657	11.4	761	11.4	960	10.8	842	44.0
Outdoors, along a roadway	1533	48.9	968	67.4	1134	89.3	1401	52.2	1221	257.8
In transit, motorcycle	1903	1.0	1041	0.1	-1	0.0	1839	0.6	1812	1.8
Indoors, service station	-1	0.0	1215	0.1	1315	0.2	-1	0.0	1273	0.3
Outdoors, service station	-1	0.1	0	0.5	0	0.7	-1	0.1	0	1.4
Indoors, residential garage	1465	0.2	996	0.6	1132	0.5	1279	0.3	1145	1.6
Indoors, in a repair shop	1968	0.1	1441	0.2	-1	0.1	1616	0.2	1635	0.6
Indoors, home	680	1523.0	443	1474.0	530	1455.8	632	1537.1	573	5990.0
Indoors, office	705	125.5	477	119.9	534	119.1	616	123.3	584	487.9
Indoors, store	702	46.9	465	45.9	536	46.6	632	45.1	584	184.6
Indoors, restaurant	1233	24.2	803	30.0	926	32.6	1159	26.9	1014	113.7
Indoors, mfg. facility	868	30.3	570	27.2	654	22.8	787	29.6	728	109.9
Indoors, school	854	134.8	581	107.4	640	53.6	743	147.3	725	443.2
Indoors, church	546	8.0	359	10.6	409	10.0	502	9.8	448	38.5
Indoors, shopping mall	3447	3.0	2287	5.0	2623	4.9	3282	3.7	2818	16.5
Indoors, auditorium	206	3.7	136	8.4	170	13.0	194	4.6	169	29.6
Indoors, health care facility	584	18.4	395	19.9	446	22.7	538	20.0	488	81.0
Indoors, public building	621	4.5	395	6.4	486	5.7	626	5.4	522	22.0
Indoors, other location	1461	26.8	968	23.7	1139	19.7	1352	25.9	1244	96.1
Indoors, not specified	1153	0.5	872	0.4	985	0.2	1018	0.5	1018	1.7
Outdoors, construction	-1	0.0	1040	0.4	1167	0.6	-1	0.0	1113	1.0
Outdoors, residential grounds	919	16.9	621	43.3	744	85.0	844	18.1	741	163.3
Outdoors, school grounds	1584	6.5	1078	6.5	1217	3.9	1429	7.5	1342	24.4
Outdoors, sports arena	499	1.6	305	7.2	358	9.4	475	2.4	364	20.6
Outdoors, park/golf course	433	5.8	306	18.8	366	35.3	396	9.6	360	69.6
Outdoors, other location	885	1.0	685	16.7	812	24.9	781	1.3	764	44.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	1.6	0	4.2	-1	0.0	0	5.8

Baltimore: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1925	52.9	1163	77.8	1342	92.9	1772	59.0	1492	282.5
In transit, bus	4670	2.9	2315	0.8	1949	1.2	3866	1.7	3673	6.6
In transit, truck	2091	20.9	1534	11.8	1779	6.1	2025	19.1	1923	57.9
In transit, van	1503	5.9	993	9.1	1174	6.1	1366	11.2	1250	32.4
Indoors, public garage	-1	0.0	768	0.4	801	0.5	-1	0.0	787	0.9
Outdoors, in a parking lot	1168	3.5	683	9.2	777	15.8	1108	3.6	829	32.1
Outdoors, along a roadway	1639	48.8	1008	60.7	1154	78.4	1509	53.7	1294	241.7
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	2010	12.5	1294	1.7	-1	0.0	1740	7.6	1859	21.9
Outdoors, service station	-1	0.0	0	0.9	0	1.2	-1	0.0	0	2.2
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	679	1562.8	447	1530.3	532	1483.4	635	1575.9	574	6152.4
Indoors, office	697	75.6	476	89.2	532	99.6	602	70.9	569	335.3
Indoors, store	843	1.6	473	13.6	519	21.4	740	2.5	530	39.0
Indoors, restaurant	1347	33.0	835	40.9	956	46.3	1234	33.4	1068	153.5
Indoors, mfg. facility	-1	0.0	543	1.2	611	1.6	-1	0.0	582	2.8
Indoors, school	862	205.2	588	128.7	653	112.8	752	184.6	737	631.4
Indoors, church	658	9.4	374	8.9	391	7.9	520	8.2	490	34.3
Indoors, shopping mall	2788	0.6	2188	0.8	2496	0.4	2357	0.9	2423	2.7
Indoors, auditorium	207	14.6	132	21.5	159	15.9	192	28.5	172	80.4
Indoors, health care facility	543	15.5	350	13.2	399	7.4	493	18.1	460	54.2
Indoors, public building	-1	0.0	402	6.0	487	18.7	-1	0.0	466	24.7
Indoors, other location	1466	16.6	966	32.4	1169	30.2	1332	34.9	1204	114.0
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	1137	1.8	1293	2.4	-1	0.0	1226	4.2
Outdoors, residential grounds	905	58.6	625	67.1	733	69.6	828	62.7	767	257.9
Outdoors, school grounds	1366	7.3	1031	10.8	1191	8.4	1193	12.5	1180	39.0
Outdoors, sports arena	-1	0.0	311	1.9	380	6.1	-1	0.0	363	7.9
Outdoors, park/golf course	447	12.0	317	34.4	374	53.4	428	19.0	373	118.8
Outdoors, other location	-1	0.0	698	9.0	863	20.3	-1	0.0	813	29.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1789	56.0	1159	65.3	1338	75.1	1664	58.3	1466	254.7
In transit, bus	3428	13.0	2235	10.9	2416	6.2	2978	14.1	2848	44.2
In transit, truck	2190	1.5	1428	1.4	1653	2.3	1917	1.2	1777	6.3
In transit, van	1802	5.3	1175	6.6	1362	5.6	1627	8.2	1489	25.7
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, in a parking lot	1010	6.1	676	7.5	768	9.1	929	5.8	829	28.4
Outdoors, along a roadway	1553	65.9	992	98.3	1148	131.0	1418	71.6	1232	366.8
In transit, motorcycle	1936	0.8	1104	0.3	1325	0.3	1829	0.5	1666	2.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	0	0.1	-1	0.1	-1	0.1	-1	0.1	0	0.3
Indoors, residential garage	1408	0.8	860	1.2	1045	0.8	1380	1.2	1159	4.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	689	1605.2	458	1583.6	542	1584.7	642	1624.6	584	6398.1
Indoors, office	708	1.4	467	4.8	545	8.0	651	1.5	546	15.7
Indoors, store	708	22.6	469	24.2	533	26.1	645	23.5	585	96.4
Indoors, restaurant	1303	9.9	832	14.7	964	17.5	1248	10.6	1048	52.7
Indoors, mfg. facility	922	0.2	535	0.3	639	0.1	904	0.3	759	1.0
Indoors, school	883	279.1	603	208.5	656	126.4	765	281.1	749	895.2
Indoors, church	549	12.7	352	11.7	405	11.4	499	12.8	455	48.7
Indoors, shopping mall	3265	2.6	2360	2.8	2735	2.3	3074	2.6	2853	10.4
Indoors, auditorium	215	5.2	135	7.3	164	7.0	208	8.2	179	27.7
Indoors, health care facility	529	12.8	374	13.2	438	13.9	488	14.4	457	54.4
Indoors, public building	594	2.4	437	4.2	509	6.3	574	2.8	514	15.6
Indoors, other location	1484	6.3	953	8.2	1095	11.8	1320	7.6	1183	33.8
Indoors, not specified	-1	0.0	961	0.2	1221	0.3	-1	0.0	1110	0.5
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	951	28.1	635	54.4	746	81.5	878	31.1	766	195.1
Outdoors, school grounds	1598	15.0	1126	15.3	1258	10.4	1395	16.5	1352	57.2
Outdoors, sports arena	482	3.3	319	6.9	386	9.9	448	4.2	390	24.3
Outdoors, park/golf course	483	3.1	318	17.9	375	29.6	468	4.4	370	55.0
Outdoors, other location	1122	0.2	699	13.9	822	30.1	989	0.4	787	44.6
Outdoors, not specified	1699	0.2	1160	0.3	1337	0.2	1441	0.4	1398	1.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1740	141.7	1182	118.5	1379	129.6	1594	127.4	1486	517.3
In transit, bus	3577	2.4	2300	0.4	-1	0.0	3253	1.4	3360	4.2
In transit, truck	2078	8.6	1485	22.4	1756	41.0	1865	10.4	1730	82.4
In transit, van	-1	0.0	1385	3.5	1467	9.5	-1	0.0	1445	13.0
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	960	9.9	664	16.0	736	21.0	826	13.9	774	60.8
Outdoors, along a roadway	1466	116.6	1000	121.2	1151	85.4	1334	136.8	1246	460.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1900	0.1	1172	0.2	1327	0.2	1712	0.3	1481	0.8
Outdoors, service station	0	0.1	0	2.1	0	2.6	0	0.2	0	5.0
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	694	1558.8	458	1479.1	534	1383.3	637	1591.5	584	6012.7
Indoors, office	672	64.4	477	96.1	528	80.4	591	70.3	556	311.3
Indoors, store	721	10.0	494	12.0	548	9.9	621	12.5	593	44.4
Indoors, restaurant	1276	19.0	840	14.5	939	10.2	1197	16.9	1093	60.6
Indoors, mfg. facility	-1	0.0	573	36.0	635	96.2	-1	0.0	618	132.3
Indoors, school	868	127.6	586	79.9	637	36.9	748	124.2	743	368.7
Indoors, church	519	2.2	333	9.1	380	11.4	512	3.3	392	26.0
Indoors, shopping mall	3932	1.1	2177	1.5	2795	0.8	3721	1.7	3171	5.2
Indoors, auditorium	221	1.7	145	20.7	183	48.6	230	0.8	174	71.8
Indoors, health care facility	534	6.4	393	6.4	466	4.0	482	7.5	470	24.2
Indoors, public building	652	22.6	401	21.6	492	10.6	649	27.6	565	82.4
Indoors, other location	1290	39.4	967	28.4	1208	18.8	1289	32.7	1200	119.2
Indoors, not specified	1725	0.1	1105	0.1	-1	0.1	1555	0.2	1419	0.5
Outdoors, construction	-1	0.0	1162	4.3	1300	5.7	-1	0.0	1241	10.0
Outdoors, residential grounds	804	8.3	624	20.3	740	29.2	712	10.6	709	68.4
Outdoors, school grounds	1562	7.3	1092	9.8	1219	5.0	1412	11.1	1321	33.3
Outdoors, sports arena	440	5.3	325	11.6	376	33.0	393	2.3	372	52.2
Outdoors, park/golf course	483	2.9	307	6.8	364	7.1	435	2.3	370	19.1
Outdoors, other location	835	1.7	678	41.2	778	127.4	727	1.0	754	171.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	1789	1.7	991	0.2	-1	0.0	1693	1.0	1692	2.9
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1804	132.9	1171	135.5	1338	131.5	1643	138.9	1489	538.8
In transit, bus	3349	1.0	2246	1.6	2504	1.9	2894	0.8	2655	5.4
In transit, truck	2250	18.1	1471	18.8	1572	17.8	2063	16.8	1832	71.4
In transit, van	1855	6.5	1210	8.0	1371	11.2	1686	7.3	1497	33.0
Indoors, public garage	1080	14.5	737	12.2	833	7.9	980	15.6	926	50.2
Outdoors, in a parking lot	1074	13.2	701	16.2	780	16.4	966	13.4	866	59.2
Outdoors, along a roadway	1535	51.3	1014	70.4	1163	76.4	1366	62.8	1245	260.9
In transit, motorcycle	-1	0.0	1386	0.5	1717	0.5	-1	0.0	1549	1.0
Indoors, service station	1592	14.4	1068	9.2	1180	5.4	1418	13.4	1371	42.5
Outdoors, service station	0	0.3	0	0.5	0	0.5	0	0.4	0	1.7
Indoors, residential garage	1397	4.2	896	4.5	1044	3.0	1318	6.4	1187	18.1
Indoors, in a repair shop	2441	6.6	1717	1.1	-1	0.1	2141	3.8	2277	11.5
Indoors, home	682	1401.3	445	1370.5	534	1337.0	638	1430.4	576	5539.3
Indoors, office	732	231.3	501	207.0	548	212.4	644	227.6	610	878.2
Indoors, store	729	38.8	496	44.4	560	55.9	662	35.1	602	174.2
Indoors, restaurant	1243	35.8	867	30.4	979	24.8	1128	32.2	1067	123.1
Indoors, mfg. facility	874	38.4	608	54.2	692	61.2	763	42.2	720	196.0
Indoors, school	853	20.6	566	16.7	625	12.5	742	21.1	712	71.0
Indoors, church	572	10.8	366	11.7	417	9.8	525	14.1	473	46.5
Indoors, shopping mall	3605	1.6	2349	1.3	2627	1.0	3137	1.5	2996	5.3
Indoors, auditorium	222	6.9	135	2.8	161	4.4	215	3.8	192	17.8
Indoors, health care facility	602	16.7	401	20.4	437	21.5	538	18.9	488	77.4
Indoors, public building	605	6.2	427	12.7	487	25.2	551	5.2	493	49.2
Indoors, other location	1447	43.7	981	45.1	1168	41.6	1357	42.0	1236	172.3
Indoors, not specified	1447	5.4	918	1.9	980	0.6	1230	3.6	1265	11.5
Outdoors, construction	1737	7.4	1196	9.9	1331	6.9	1546	8.9	1439	33.1
Outdoors, residential grounds	960	7.5	628	24.4	752	50.0	896	9.6	751	91.5
Outdoors, school grounds	1805	0.8	1164	1.0	1332	0.7	1577	1.0	1464	3.4
Outdoors, sports arena	393	1.2	313	4.7	373	6.8	340	1.0	352	13.7
Outdoors, park/golf course	461	4.0	314	11.5	362	17.9	416	6.7	367	40.0
Outdoors, other location	1111	17.3	724	31.3	841	36.8	1035	22.7	891	108.1
Outdoors, not specified	1839	0.1	1400	0.6	1491	0.4	1799	0.2	1530	1.3
In transit, train	2207	1.1	1186	0.9	1394	1.0	1994	0.7	1699	3.8
In transit, airplane	-1	0.0	0	2.5	0	7.2	-1	0.0	0	9.8

Baltimore: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1732	98.2	1146	101.0	1303	106.3	1615	100.0	1445	405.5
In transit, bus	3151	3.1	2000	1.6	2165	1.6	2774	2.3	2654	8.6
In transit, truck	1949	7.0	1333	1.1	-1	0.0	1740	3.7	1824	11.8
In transit, van	2028	0.2	1194	0.7	1282	1.4	1813	0.4	1393	2.7
Indoors, public garage	1095	0.5	731	0.4	815	0.2	1000	0.6	936	1.6
Outdoors, in a parking lot	981	5.3	675	9.1	800	11.7	896	6.0	813	32.0
Outdoors, along a roadway	1468	35.3	988	53.9	1158	67.7	1345	39.6	1205	196.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1080	0.1	1135	0.2	-1	0.0	1116	0.3
Outdoors, service station	-1	0.1	-1	0.0	-1	0.1	-1	0.0	0	0.2
Indoors, residential garage	1341	1.0	958	0.3	-1	0.1	1214	0.6	1239	1.9
Indoors, in a repair shop	1987	0.2	1467	0.3	1589	0.2	1636	0.3	1656	1.0
Indoors, home	690	1822.3	455	1765.6	533	1737.6	633	1838.0	579	7163.5
Indoors, office	738	9.6	492	5.7	545	5.4	656	6.6	629	27.2
Indoors, store	704	35.3	479	52.8	545	72.0	622	36.2	570	196.3
Indoors, restaurant	1301	22.1	828	22.3	964	19.6	1219	21.9	1080	85.9
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	870	35.5	579	44.3	644	31.4	790	51.3	722	162.5
Indoors, church	555	10.3	351	11.7	404	10.8	504	13.7	453	46.4
Indoors, shopping mall	3070	3.0	2299	2.0	2689	2.4	2648	1.5	2723	9.0
Indoors, auditorium	233	12.3	142	13.5	165	14.2	205	15.1	186	55.2
Indoors, health care facility	575	6.9	378	9.3	449	9.0	520	8.5	473	33.7
Indoors, public building	602	6.4	398	4.4	484	4.7	552	5.7	520	21.2
Indoors, other location	1429	27.2	939	29.1	1097	23.0	1331	32.0	1204	111.3
Indoors, not specified	-1	0.0	816	0.3	1038	0.8	-1	0.0	981	1.1
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	866	10.6	615	25.6	737	31.5	780	15.7	724	83.4
Outdoors, school grounds	1730	1.5	1055	2.8	1282	2.6	1630	2.3	1376	9.3
Outdoors, sports arena	454	3.4	313	3.1	370	6.1	414	1.5	383	14.0
Outdoors, park/golf course	460	1.4	312	13.7	362	29.1	420	2.9	354	47.0
Outdoors, other location	1073	1.2	689	9.2	783	18.6	865	1.5	770	30.5
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	1869	0.2	-1	0.0	-1	0.0	1786	0.1	1782	0.4
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1807	121.7	1169	115.0	1339	116.0	1661	119.7	1499	472.4
In transit, bus	3327	4.8	2136	4.6	2376	4.2	2934	4.9	2711	18.5
In transit, truck	2159	5.0	1414	5.3	1650	5.4	2126	5.4	1834	21.1
In transit, van	-1	0.1	1123	1.3	1314	1.4	-1	0.0	1238	2.7
Indoors, public garage	1126	3.1	748	1.6	803	1.0	1017	2.5	978	8.1
Outdoors, in a parking lot	1044	6.3	686	9.9	776	13.0	991	7.3	840	36.5
Outdoors, along a roadway	1511	33.3	1004	46.4	1160	56.9	1378	36.6	1232	173.1
In transit, motorcycle	-1	0.0	1138	4.8	1321	9.6	-1	0.0	1260	14.4
Indoors, service station	1703	0.1	1096	0.2	1227	0.1	1352	0.2	1332	0.7
Outdoors, service station	0	0.2	0	0.7	0	1.0	0	0.3	0	2.1
Indoors, residential garage	1839	0.1	-1	0.1	-1	0.0	1682	0.1	1590	0.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, home	686	1450.4	448	1452.1	534	1463.0	638	1484.3	577	5849.9
Indoors, office	717	249.6	495	240.2	545	216.0	631	252.1	600	957.8
Indoors, store	702	65.6	476	70.0	546	62.8	644	71.3	592	269.7
Indoors, restaurant	1295	42.5	846	38.0	952	39.7	1194	37.2	1076	157.3
Indoors, mfg. facility	940	15.8	637	15.8	693	9.5	821	18.1	783	59.1
Indoors, school	862	53.4	585	40.8	643	22.7	746	54.8	730	171.7
Indoors, church	531	14.0	339	14.6	401	13.7	488	16.9	441	59.2
Indoors, shopping mall	3333	3.8	2322	2.7	2841	1.8	2994	3.9	2928	12.2
Indoors, auditorium	216	5.3	139	6.6	168	9.1	196	6.1	177	27.1
Indoors, health care facility	576	35.3	385	30.5	437	26.0	533	36.4	490	128.2
Indoors, public building	633	6.1	428	7.4	496	11.0	554	6.2	519	30.6
Indoors, other location	1436	35.9	944	31.7	1120	26.8	1367	33.4	1230	127.9
Indoors, not specified	1431	0.5	910	0.4	1036	0.2	1276	0.5	1210	1.5
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	870	4.0	623	18.4	763	39.2	756	5.8	731	67.4
Outdoors, school grounds	1790	0.6	1109	1.5	1309	1.6	1722	0.8	1376	4.5
Outdoors, sports arena	519	0.2	305	5.4	360	9.1	499	0.3	345	15.0
Outdoors, park/golf course	490	1.3	325	7.8	393	19.7	469	1.7	384	30.5
Outdoors, other location	1023	0.7	687	9.7	832	27.4	896	0.7	800	38.4
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	2274	0.5	1411	0.6	1525	0.3	2104	0.7	1870	2.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1729	92.0	1139	103.1	1274	101.1	1544	94.0	1411	390.2
In transit, bus	3878	2.7	1991	10.5	2173	13.3	3079	1.3	2313	27.8
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1767	1.4	1197	2.1	1380	1.5	1559	2.9	1463	7.8
Indoors, public garage	-1	0.1	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, in a parking lot	931	11.0	626	29.1	712	24.9	798	13.3	725	78.2
Outdoors, along a roadway	1408	29.5	950	41.7	1101	38.0	1330	37.6	1178	146.8
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	1193	8.0	843	10.3	957	6.3	1027	13.3	1000	37.8
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	689	1840.5	453	1679.6	533	1562.8	636	1840.1	582	6923.1
Indoors, office	596	8.0	414	4.0	458	5.5	511	5.5	511	23.1
Indoors, store	624	29.6	458	39.1	539	54.8	507	30.0	528	153.4
Indoors, restaurant	1486	11.4	852	5.1	886	9.3	1284	7.6	1177	33.4
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	753	21.0	501	29.6	594	17.3	726	35.8	645	103.7
Indoors, church	516	11.8	316	12.8	341	7.2	405	16.7	399	48.6
Indoors, shopping mall	3905	6.4	2623	1.2	-1	0.0	3332	3.0	3603	10.5
Indoors, auditorium	164	3.8	188	5.5	208	6.7	140	2.3	184	18.3
Indoors, health care facility	663	38.6	448	42.9	474	21.5	584	51.8	551	154.8
Indoors, public building	603	1.4	377	4.3	410	13.3	530	0.9	422	19.9
Indoors, other location	1269	25.1	882	47.4	1055	47.4	1145	27.3	1053	147.3
Indoors, not specified	1397	1.6	920	0.2	-1	0.0	1274	1.0	1316	2.8
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	861	12.9	643	85.3	748	220.5	724	22.1	724	340.8
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	310	5.5	397	7.3	-1	0.0	360	12.8
Outdoors, park/golf course	547	3.2	302	8.2	364	24.4	535	1.4	372	37.1
Outdoors, other location	-1	0.0	658	16.5	792	25.0	-1	0.0	738	41.5
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1827	146.3	1187	146.6	1363	140.1	1680	152.8	1518	585.8
In transit, bus	3354	9.4	2111	4.7	2370	2.4	3002	7.8	2903	24.3
In transit, truck	2152	23.8	1475	26.1	1622	18.6	1910	28.0	1797	96.6
In transit, van	1684	3.2	1194	8.5	1348	8.6	1510	3.9	1364	24.2
Indoors, public garage	1234	4.1	797	4.9	859	2.5	1081	5.7	1005	17.2
Outdoors, in a parking lot	1038	9.7	671	10.9	785	11.0	977	10.2	861	41.8
Outdoors, along a roadway	1545	43.0	1005	57.2	1170	68.6	1378	45.8	1245	214.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1663	5.8	1077	2.5	1225	1.2	1411	5.1	1440	14.6
Outdoors, service station	0	0.2	0	0.6	0	0.8	0	0.2	0	1.8
Indoors, residential garage	1860	0.1	924	0.3	1051	0.2	-1	0.1	1192	0.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	678	1355.1	439	1325.6	530	1295.8	635	1382.8	572	5359.4
Indoors, office	717	280.4	498	266.0	553	321.2	629	263.5	598	1131.2
Indoors, store	758	65.3	510	50.8	570	32.8	684	66.3	648	215.2
Indoors, restaurant	1228	32.4	816	34.7	925	35.3	1139	34.6	1023	137.1
Indoors, mfg. facility	867	32.0	603	68.8	673	89.1	788	48.5	702	238.4
Indoors, school	901	14.4	610	27.5	672	21.8	812	20.9	725	84.6
Indoors, church	536	14.9	354	16.1	400	14.1	488	17.7	446	62.7
Indoors, shopping mall	3481	2.9	2445	1.1	3127	0.7	3482	1.5	3259	6.1
Indoors, auditorium	206	3.3	128	1.7	166	0.9	201	1.8	183	7.7
Indoors, health care facility	581	14.3	387	3.7	455	1.5	526	9.3	532	28.8
Indoors, public building	630	5.6	412	16.4	493	18.7	645	8.4	508	49.1
Indoors, other location	1526	66.2	1015	51.5	1115	30.7	1358	66.4	1293	214.8
Indoors, not specified	1383	5.6	934	1.4	995	0.5	1187	3.7	1246	11.1
Outdoors, construction	-1	0.0	1150	2.7	1311	6.7	-1	0.0	1265	9.4
Outdoors, residential grounds	971	3.1	631	28.3	747	53.9	941	3.9	726	89.2
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	415	6.5	312	13.8	365	17.9	366	9.9	357	48.0
Outdoors, other location	1101	11.8	709	11.1	829	11.3	998	9.1	908	43.4
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	1949	0.4	-1	0.1	-1	0.0	1786	0.3	1837	0.8
In transit, airplane	-1	0.0	0	0.7	0	0.9	-1	0.0	0	1.6

Baltimore: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1606	76.9	1088	73.8	1272	76.0	1456	73.7	1358	300.3
In transit, bus	2681	1.7	1815	1.3	2095	0.9	2219	1.6	2251	5.5
In transit, truck	1791	4.3	1255	0.7	-1	0.0	1603	2.2	1680	7.2
In transit, van	1558	2.2	984	3.3	1185	2.2	1434	4.3	1289	12.0
Indoors, public garage	1019	0.7	688	0.2	-1	0.1	868	0.5	911	1.4
Outdoors, in a parking lot	1035	4.0	647	8.2	748	12.1	934	4.6	788	28.8
Outdoors, along a roadway	1472	32.8	961	35.8	1111	46.1	1327	30.3	1201	145.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1380	0.1	-1	0.1	-1	0.1	-1	0.1	1225	0.3
Outdoors, service station	-1	0.0	0	0.5	0	0.7	-1	0.0	0	1.1
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	688	1905.6	451	1867.2	528	1827.2	631	1945.9	576	7545.9
Indoors, office	620	8.4	428	7.7	470	6.6	526	8.8	515	31.5
Indoors, store	685	33.3	470	33.6	543	30.8	603	33.5	576	131.2
Indoors, restaurant	1271	15.9	798	22.5	927	31.1	1191	18.0	1010	87.5
Indoors, mfg. facility	-1	0.0	502	0.3	579	0.4	-1	0.0	546	0.6
Indoors, school	794	4.6	483	5.0	609	3.9	798	5.9	679	19.4
Indoors, church	525	17.6	333	20.9	376	16.8	448	23.7	419	79.1
Indoors, shopping mall	3351	3.6	2257	3.3	2668	4.8	3111	3.2	2838	14.9
Indoors, auditorium	215	1.9	130	0.8	141	0.7	215	1.0	187	4.5
Indoors, health care facility	574	9.3	376	16.2	429	19.7	481	8.9	447	54.1
Indoors, public building	616	3.4	378	5.6	438	5.0	593	5.4	495	19.4
Indoors, other location	1402	18.7	908	24.3	1065	23.7	1264	18.3	1137	85.0
Indoors, not specified	1416	1.6	916	0.2	-1	0.0	1318	1.0	1342	2.9
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	942	11.9	629	33.7	727	62.1	847	15.9	737	123.6
Outdoors, school grounds	1340	0.3	-1	0.0	-1	0.0	1193	0.2	1264	0.4
Outdoors, sports arena	-1	0.0	320	3.1	392	3.7	-1	0.0	359	6.8
Outdoors, park/golf course	-1	0.0	333	11.6	393	23.5	-1	0.0	373	35.1
Outdoors, other location	853	0.5	680	4.0	847	10.1	715	0.7	798	15.2
Outdoors, not specified	1371	0.6	-1	0.1	-1	0.0	1225	0.4	1293	1.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1756	106.1	1176	104.2	1334	104.0	1619	101.6	1471	415.9
In transit, bus	3259	5.7	1972	4.2	2099	3.9	2844	5.2	2623	19.1
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	2120	2.7	1239	1.2	1379	0.5	1811	2.2	1802	6.6
Indoors, public garage	1170	0.6	793	0.4	842	0.2	1038	0.6	1004	1.8
Outdoors, in a parking lot	992	7.8	681	12.1	810	19.6	915	7.5	824	47.1
Outdoors, along a roadway	1539	34.7	1003	40.0	1162	50.7	1358	35.5	1247	161.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.1	1457	0.1	-1	0.1	2162	0.1	1817	0.4
Outdoors, service station	0	0.6	0	2.5	0	2.8	0	0.9	0	6.9
Indoors, residential garage	-1	0.1	-1	0.0	-1	0.0	-1	0.0	1148	0.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	682	1499.5	443	1478.4	530	1518.6	636	1521.3	574	6017.8
Indoors, office	732	245.0	506	210.9	550	158.5	640	250.4	617	864.8
Indoors, store	689	48.1	473	61.2	537	65.5	627	54.0	573	228.7
Indoors, restaurant	1315	42.4	838	48.9	947	41.6	1213	51.4	1077	184.3
Indoors, mfg. facility	-1	0.0	603	42.3	679	79.8	-1	0.0	652	122.1
Indoors, school	858	44.3	594	33.1	686	26.7	741	43.5	733	147.6
Indoors, church	522	16.0	348	18.2	398	27.1	485	14.9	429	76.3
Indoors, shopping mall	3003	4.4	2259	5.6	2560	3.4	2588	6.4	2584	19.8
Indoors, auditorium	212	1.8	139	2.6	155	1.7	199	3.4	177	9.5
Indoors, health care facility	577	44.6	387	50.1	439	29.6	510	54.0	480	178.3
Indoors, public building	767	2.7	468	2.1	546	4.2	624	1.9	599	10.9
Indoors, other location	1461	45.3	970	42.7	1140	29.2	1412	42.8	1258	160.0
Indoors, not specified	1671	0.1	833	1.2	1040	3.5	1347	0.2	1017	5.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1113	4.5	673	15.7	742	23.7	1046	7.1	796	51.0
Outdoors, school grounds	1562	0.7	1107	1.2	1316	0.8	1374	1.1	1315	3.9
Outdoors, sports arena	389	1.1	302	2.7	392	7.9	341	0.5	370	12.2
Outdoors, park/golf course	638	0.5	404	0.1	-1	0.0	516	0.3	570	0.9
Outdoors, other location	1035	0.5	705	2.1	861	4.3	962	1.0	844	8.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1682	140.9	1143	146.1	1298	135.2	1533	157.5	1416	579.6
In transit, bus	3289	4.1	2172	5.5	2311	2.8	2863	6.2	2669	18.6
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	-1	0.1	1201	0.3	-1	0.0	1161	0.4
Indoors, public garage	884	0.2	-1	0.0	-1	0.0	728	0.1	805	0.4
Outdoors, in a parking lot	980	7.9	674	19.3	812	26.3	916	9.9	807	63.4
Outdoors, along a roadway	1514	32.0	1003	69.6	1150	119.4	1429	41.2	1199	262.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1316	0.6	1302	1.2	-1	0.0	1306	1.8
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	1437	0.1	1020	0.2	1150	0.1	1240	0.2	1194	0.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	690	1714.1	451	1651.5	532	1638.6	635	1690.7	579	6694.9
Indoors, office	717	74.4	465	58.1	501	35.2	602	85.4	590	253.0
Indoors, store	746	15.8	473	19.2	516	29.2	699	14.6	585	78.8
Indoors, restaurant	1414	26.2	892	33.5	920	40.5	1273	32.6	1097	132.7
Indoors, mfg. facility	940	17.5	618	13.1	672	6.1	798	18.7	786	55.4
Indoors, school	674	7.9	506	3.3	654	1.8	574	4.9	614	17.8
Indoors, church	469	20.0	324	21.3	382	17.0	421	27.6	400	85.9
Indoors, shopping mall	3070	4.6	2241	4.4	2504	9.2	2606	2.8	2586	21.0
Indoors, auditorium	210	24.0	129	27.8	162	17.9	213	37.9	182	107.7
Indoors, health care facility	481	5.5	381	13.3	468	22.5	396	7.0	435	48.2
Indoors, public building	530	2.1	377	5.5	437	7.0	475	1.9	433	16.5
Indoors, other location	1419	16.5	939	17.8	1160	9.9	1360	21.4	1230	65.6
Indoors, not specified	-1	0.0	838	1.8	941	2.4	-1	0.0	897	4.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	902	21.9	647	49.5	761	68.5	838	20.1	755	160.0
Outdoors, school grounds	1771	2.1	971	2.8	1263	1.4	1745	3.1	1449	9.4
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	413	19.8	312	15.9	353	7.5	361	22.0	364	65.3
Outdoors, other location	-1	0.0	649	2.6	829	7.5	-1	0.0	782	10.1
Outdoors, not specified	1308	0.6	1020	0.9	1114	0.4	1148	1.0	1140	2.9
In transit, train	1925	2.0	1237	0.3	-1	0.0	1658	1.2	1777	3.5
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1600	75.1	1098	81.7	1270	97.3	1411	73.1	1334	327.2
In transit, bus	2665	1.2	1898	2.2	2183	2.6	2277	1.8	2201	7.8
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1456	0.8	1032	0.1	-1	0.0	1315	0.5	1373	1.4
Indoors, public garage	1103	0.4	708	0.6	917	1.6	1123	0.3	914	2.9
Outdoors, in a parking lot	884	2.1	627	4.9	721	7.1	778	2.2	722	16.4
Outdoors, along a roadway	1428	28.1	986	35.0	1177	51.1	1280	25.6	1199	139.7
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	-1	0.0	0	0.1	0	0.4	-1	0.0	0	0.5
Indoors, residential garage	-1	0.0	1392	0.2	1460	0.1	-1	0.0	1422	0.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	690	1895.1	453	1895.9	531	1852.0	636	1957.7	578	7600.8
Indoors, office	725	14.3	504	4.1	577	2.5	639	9.1	656	30.1
Indoors, store	695	15.8	464	37.2	534	75.6	576	13.5	538	142.1
Indoors, restaurant	1030	19.4	774	23.5	885	27.2	884	20.6	887	90.6
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	-1	0.0	584	0.6	683	0.8	-1	0.0	640	1.3
Indoors, church	571	35.4	355	29.2	407	17.8	477	36.0	464	118.4
Indoors, shopping mall	3415	6.3	2430	8.5	2701	4.5	2919	9.8	2849	29.1
Indoors, auditorium	164	3.3	127	4.4	141	2.3	140	5.0	142	15.0
Indoors, health care facility	520	17.7	374	8.9	439	4.5	484	13.8	472	45.0
Indoors, public building	565	4.7	394	6.8	457	4.9	483	6.1	468	22.5
Indoors, other location	1469	35.6	881	17.4	955	21.2	1288	25.4	1211	99.7
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1336	2.2	692	13.4	761	23.6	1165	1.9	788	41.1
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	451	2.6	315	4.9	365	4.1	381	5.5	369	17.1
Outdoors, park/golf course	-1	0.0	307	2.4	375	3.7	-1	0.0	349	6.0
Outdoors, other location	-1	0.0	674	1.8	793	3.2	-1	0.0	750	5.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1885	78.4	1212	69.7	1370	82.2	1685	73.9	1543	304.2
In transit, bus	-1	0.0	2941	1.2	2836	1.6	-1	0.0	2881	2.7
In transit, truck	2413	66.3	1482	79.6	1565	90.3	2223	61.9	1868	298.2
In transit, van	1664	6.1	1175	0.8	-1	0.0	1487	3.7	1563	10.7
Indoors, public garage	1158	34.4	739	26.8	846	12.6	1116	37.5	1008	111.3
Outdoors, in a parking lot	1120	19.1	756	28.0	836	23.5	1008	25.8	915	96.4
Outdoors, along a roadway	1540	160.3	1062	207.9	1209	249.7	1383	180.5	1277	798.4
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1787	39.9	1140	8.7	1172	3.4	1537	25.2	1606	77.2
Outdoors, service station	0	0.4	0	3.1	0	4.1	0	0.6	0	8.1
Indoors, residential garage	1438	8.4	819	2.0	1038	0.3	1479	4.1	1357	14.7
Indoors, in a repair shop	-1	0.0	2232	0.6	2430	0.8	-1	0.0	2345	1.5
Indoors, home	681	1256.1	446	1217.5	536	1150.7	640	1306.8	578	4931.0
Indoors, office	751	52.4	452	49.9	489	36.0	652	37.7	592	176.0
Indoors, store	665	15.7	459	8.0	530	4.0	613	11.5	594	39.3
Indoors, restaurant	1184	31.6	875	17.3	1032	15.7	1140	29.5	1088	94.1
Indoors, mfg. facility	887	26.6	653	73.6	735	139.3	782	40.3	734	279.8
Indoors, school	855	11.2	591	15.1	647	7.8	741	17.1	708	51.2
Indoors, church	551	29.3	342	13.8	408	6.0	509	21.9	485	71.0
Indoors, shopping mall	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, auditorium	222	6.2	129	23.7	166	36.2	226	2.7	161	68.8
Indoors, health care facility	-1	0.0	439	4.7	445	12.0	-1	0.0	443	16.7
Indoors, public building	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, other location	1543	37.6	962	12.9	1026	5.8	1398	26.0	1370	82.3
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	1740	68.6	1197	102.9	1336	107.2	1549	68.9	1417	347.5
Outdoors, residential grounds	979	17.5	652	25.6	765	19.5	882	23.7	807	86.3
Outdoors, school grounds	1605	0.6	1097	0.9	1277	0.4	1461	1.0	1358	2.9
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	470	10.1	332	14.8	370	9.0	399	16.8	389	50.8
Outdoors, other location	1121	182.9	749	175.1	834	190.1	1041	190.8	939	738.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1826	50.2	1173	68.8	1349	84.3	1701	58.5	1473	261.8
In transit, bus	3486	19.6	2305	14.6	2488	8.0	3076	20.0	2949	62.2
In transit, truck	1864	0.4	1441	1.3	1615	1.6	1579	0.9	1579	4.2
In transit, van	1659	2.4	1094	1.9	1296	2.0	1435	2.2	1391	8.5
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1012	9.1	679	9.0	773	9.6	933	8.2	846	36.0
Outdoors, along a roadway	1544	117.3	994	139.2	1148	173.7	1431	118.3	1255	548.6
In transit, motorcycle	1941	2.3	1091	0.7	1374	0.2	1831	1.6	1761	4.8
Indoors, service station	-1	0.0	-1	0.0	-1	0.1	-1	0.0	1084	0.1
Outdoors, service station	0	0.3	0	0.4	0	0.5	0	0.2	0	1.3
Indoors, residential garage	1565	0.3	922	0.6	1049	0.6	1548	0.4	1187	1.8
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	686	1415.7	457	1430.7	544	1451.5	643	1434.3	582	5732.2
Indoors, office	924	3.0	497	4.1	551	9.3	820	2.0	629	18.4
Indoors, store	724	24.2	470	23.6	542	27.7	660	22.9	597	98.3
Indoors, restaurant	1347	8.5	844	14.7	973	18.0	1314	12.0	1074	53.3
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	889	372.8	609	263.0	661	142.5	773	374.0	759	1152.2
Indoors, church	546	16.0	356	14.2	404	15.2	487	15.5	451	60.8
Indoors, shopping mall	3094	4.1	2358	3.3	2648	1.8	2903	3.5	2788	12.7
Indoors, auditorium	221	4.2	134	7.5	164	8.2	222	7.5	180	27.5
Indoors, health care facility	493	11.0	353	12.3	423	9.0	475	15.3	438	47.6
Indoors, public building	582	8.2	426	8.3	499	8.4	556	8.4	516	33.4
Indoors, other location	1478	9.3	943	9.7	1081	11.0	1250	10.2	1183	40.2
Indoors, not specified	-1	0.0	946	0.2	1203	0.3	-1	0.0	1093	0.6
Outdoors, construction	-1	0.0	1170	0.8	1319	1.0	-1	0.0	1255	1.8
Outdoors, residential grounds	990	35.5	639	64.7	749	97.4	918	37.6	782	235.2
Outdoors, school grounds	1607	31.3	1116	29.6	1243	17.1	1417	35.8	1365	113.8
Outdoors, sports arena	481	10.4	319	15.6	382	20.1	449	12.3	397	58.4
Outdoors, park/golf course	508	3.2	317	22.9	372	43.2	463	5.1	367	74.3
Outdoors, other location	1133	0.6	709	22.4	835	45.7	997	1.1	800	69.7
Outdoors, not specified	-1	0.1	-1	0.0	-1	0.0	-1	0.1	1723	0.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1814	53.1	1165	68.3	1319	76.1	1598	52.8	1441	250.3
In transit, bus	3195	7.6	2016	7.9	2186	4.5	2718	9.4	2572	29.4
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1578	2.9	1001	4.4	1207	3.2	1461	5.9	1309	16.3
Indoors, public garage	-1	0.0	739	0.1	928	0.5	-1	0.0	882	0.6
Outdoors, in a parking lot	1060	4.7	696	6.5	769	7.6	956	4.6	844	23.5
Outdoors, along a roadway	1523	29.5	983	44.3	1162	62.7	1394	28.3	1218	164.9
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1346	0.3	1422	0.3	-1	0.0	1390	0.6
Outdoors, service station	-1	0.0	-1	0.1	0	0.2	-1	0.0	0	0.2
Indoors, residential garage	1367	1.2	950	1.0	1104	0.5	1201	1.2	1177	3.9
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	687	1773.7	453	1732.8	534	1754.9	637	1794.9	579	7056.3
Indoors, office	704	81.4	482	75.9	525	64.4	616	83.5	587	305.3
Indoors, store	676	22.3	469	27.4	542	32.6	602	20.1	563	102.5
Indoors, restaurant	1258	27.1	811	26.1	916	33.4	1124	24.1	1021	110.6
Indoors, mfg. facility	910	21.1	610	27.5	666	20.4	777	24.6	734	93.6
Indoors, school	880	72.1	605	63.7	658	35.0	768	78.2	743	249.0
Indoors, church	542	24.2	323	25.7	369	16.5	450	34.0	426	100.5
Indoors, shopping mall	3683	1.5	2550	3.2	2898	4.8	3194	2.3	2961	11.7
Indoors, auditorium	221	1.5	126	2.0	163	1.0	226	2.3	186	6.9
Indoors, health care facility	667	12.2	413	11.1	434	12.4	582	11.1	525	46.7
Indoors, public building	556	1.0	460	3.6	512	9.0	501	1.1	502	14.7
Indoors, other location	1301	1.5	898	6.6	1045	8.8	1264	2.1	1038	19.0
Indoors, not specified	1511	0.5	833	1.7	1014	3.7	1392	0.2	1014	6.1
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	908	10.8	629	29.7	730	41.7	860	16.8	742	99.0
Outdoors, school grounds	1628	4.8	1056	5.8	1224	2.9	1486	6.6	1358	20.1
Outdoors, sports arena	516	0.1	315	1.9	359	1.5	522	0.2	351	3.8
Outdoors, park/golf course	384	4.7	360	1.9	452	3.6	335	2.9	388	13.1
Outdoors, other location	822	0.4	723	4.6	819	5.7	694	0.6	773	11.3
Outdoors, not specified	-1	0.0	-1	0.1	-1	0.0	-1	0.0	-1	0.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Baltimore: City-wide, Demographic Group=All persons

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1781	105.8	1166	102.3	1330	102.3	1635	105.2	1482	415.5
In transit, bus	3334	5.6	2158	5.0	2350	3.6	2916	5.8	2739	20.1
In transit, truck	2156	8.0	1450	7.3	1616	6.4	1973	7.5	1814	29.2
In transit, van	1806	3.2	1175	4.3	1350	4.6	1616	4.3	1462	16.4
Indoors, public garage	1089	4.0	734	3.0	824	1.8	978	4.0	935	12.8
Outdoors, in a parking lot	1031	7.6	681	10.8	781	13.1	942	8.1	835	39.7
Outdoors, along a roadway	1519	45.5	995	67.9	1151	87.1	1376	51.7	1221	252.1
In transit, motorcycle	1923	0.1	1180	0.8	1357	1.5	-1	0.1	1344	2.5
Indoors, service station	1583	3.4	1062	1.9	1188	1.1	1395	3.0	1371	9.3
Outdoors, service station	0	0.2	0	0.5	0	0.6	0	0.2	0	1.5
Indoors, residential garage	1388	1.1	890	1.2	1041	0.8	1296	1.5	1171	4.5
Indoors, in a repair shop	2395	1.4	1657	0.2	-1	0.0	2082	0.8	2216	2.6
Indoors, home	688	1557.5	453	1546.8	537	1553.3	639	1586.1	580	6243.7
Indoors, office	711	144.7	486	114.2	535	92.2	621	138.4	600	489.4
Indoors, store	706	41.4	478	44.2	543	47.4	637	41.8	588	174.7
Indoors, restaurant	1272	29.1	837	27.2	949	26.6	1171	27.7	1062	110.6
Indoors, mfg. facility	878	13.6	595	19.3	666	20.5	768	15.5	711	68.9
Indoors, school	868	79.6	590	74.7	648	50.1	756	89.2	726	293.7
Indoors, church	545	13.1	351	14.0	403	13.0	491	15.4	448	55.5
Indoors, shopping mall	3339	3.1	2342	2.7	2704	2.3	2984	3.0	2869	11.3
Indoors, auditorium	218	6.1	137	6.6	165	7.2	203	6.9	180	26.8
Indoors, health care facility	568	20.5	384	19.3	438	17.2	513	21.6	479	78.6
Indoors, public building	622	5.2	418	7.2	488	9.7	580	5.4	513	27.5
Indoors, other location	1448	32.9	962	29.0	1119	24.5	1346	31.5	1233	117.8
Indoors, not specified	1435	1.7	912	0.8	1049	0.7	1239	1.2	1224	4.4
Outdoors, construction	1701	1.3	1162	2.0	1297	1.8	1504	1.6	1384	6.7
Outdoors, residential grounds	938	11.0	634	33.4	748	57.9	857	14.3	747	116.6
Outdoors, school grounds	1596	3.7	1107	5.1	1256	3.8	1410	4.8	1328	17.4
Outdoors, sports arena	455	1.6	315	4.8	378	7.8	423	1.7	372	16.0
Outdoors, park/golf course	462	2.8	318	12.4	376	22.2	422	4.1	369	41.5
Outdoors, other location	1083	4.3	701	14.3	820	25.8	995	5.0	826	49.4
Outdoors, not specified	1575	0.1	1270	0.2	1400	0.2	1424	0.2	1399	0.7
In transit, train	2144	0.5	1266	0.3	1410	0.2	1979	0.4	1781	1.3
In transit, airplane	-1	0.0	0	0.3	0	0.8	-1	0.0	0	1.2

Boston: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1834	82.7	1330	92.6	1263	100.6	1531	87.4	1475	363.3
In transit, bus	3294	7.5	2329	5.9	2184	4.0	2651	7.4	2694	24.8
In transit, truck	2237	2.8	1581	6.7	1485	7.6	1791	4.9	1679	22.0
In transit, van	1805	4.0	1283	4.4	1211	4.9	1416	5.1	1414	18.5
Indoors, public garage	1094	3.3	818	1.9	779	1.1	923	2.7	945	9.0
Outdoors, in a parking lot	1076	12.3	788	13.3	745	13.9	888	12.0	868	51.5
Outdoors, along a roadway	1667	46.6	1185	66.1	1120	85.0	1375	53.5	1293	251.2
In transit, motorcycle	2184	0.4	1438	0.8	1366	1.6	1845	0.2	1533	3.1
Indoors, service station	1672	2.4	1221	1.7	1152	1.1	1357	2.3	1397	7.5
Outdoors, service station	0	0.1	0	0.5	0	0.7	0	0.1	0	1.5
Indoors, residential garage	1526	0.8	1105	0.9	1052	0.7	1300	1.0	1249	3.4
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, home	596	1585.0	440	1548.9	423	1537.3	506	1597.7	492	6268.9
Indoors, office	705	76.7	517	82.8	483	84.0	567	79.8	565	323.3
Indoors, store	773	50.7	567	49.4	530	50.7	640	48.0	628	198.7
Indoors, restaurant	1351	30.5	984	30.0	925	29.7	1128	29.0	1098	119.2
Indoors, mfg. facility	848	24.6	624	26.3	591	26.4	683	25.2	684	102.5
Indoors, school	829	130.6	612	101.8	574	65.2	662	134.6	687	432.2
Indoors, church	539	13.7	388	13.1	368	11.9	442	15.1	437	53.9
Indoors, shopping mall	3788	3.1	2877	3.1	2689	2.4	3244	3.1	3178	11.8
Indoors, auditorium	235	4.7	168	6.1	160	7.6	195	6.9	185	25.3
Indoors, health care facility	563	21.4	415	19.6	396	16.0	468	23.2	466	80.2
Indoors, public building	641	5.8	473	8.1	440	9.8	541	6.7	510	30.4
Indoors, other location	1393	20.5	1028	27.5	994	29.1	1161	23.8	1124	101.0
Indoors, not specified	1390	0.5	1070	0.5	1052	0.6	1128	0.3	1153	1.9
Outdoors, construction	1783	1.6	1333	2.9	1247	2.7	1468	2.2	1415	9.4
Outdoors, residential grounds	1075	14.7	764	32.4	718	52.5	885	18.9	801	118.6
Outdoors, school grounds	1819	5.9	1343	6.9	1256	5.9	1485	7.2	1472	25.9
Outdoors, sports arena	563	0.7	394	4.7	376	8.2	473	1.0	398	14.6
Outdoors, park/golf course	521	3.5	391	12.3	366	22.2	447	5.4	396	43.4
Outdoors, other location	1168	2.7	813	12.3	784	23.4	999	2.8	833	41.3
Outdoors, not specified	1741	0.3	1265	0.3	1172	0.3	1405	0.3	1385	1.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	0.3	0	0.7	-1	0.0	0	1.0

Boston: City-wide, Demographic Group=African americans

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1891	84.2	1437	72.5	1407	70.4	1502	70.2	1573	297.3
In transit, bus	2936	8.2	2413	15.1	2335	14.4	2441	14.6	2481	52.3
In transit, truck	-1	0.0	1649	3.4	1543	5.2	-1	0.0	1584	8.6
In transit, van	-1	0.0	1633	0.2	1542	0.4	-1	0.0	1575	0.6
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1048	12.1	840	10.7	856	13.0	853	8.3	905	44.1
Outdoors, along a roadway	1745	24.6	1282	58.5	1256	87.8	1361	30.4	1339	201.2
In transit, motorcycle	2408	0.2	1644	0.7	1667	0.6	1945	0.8	1820	2.3
Indoors, service station	-1	0.0	1138	0.6	1086	1.0	-1	0.0	1106	1.6
Outdoors, service station	-1	0.0	0	0.4	0	0.6	-1	0.0	0	0.9
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	1982	0.2	1849	0.3	-1	0.0	1901	0.5
Indoors, home	650	1742.2	488	1685.2	473	1666.9	531	1760.6	536	6854.9
Indoors, office	739	2.0	555	31.1	524	48.7	566	6.4	543	88.2
Indoors, store	808	13.0	608	17.7	570	25.8	630	14.6	635	71.1
Indoors, restaurant	1352	18.6	1021	8.0	993	2.7	1111	11.5	1196	40.8
Indoors, mfg. facility	910	47.0	664	24.1	577	17.6	699	26.5	759	115.2
Indoors, school	838	60.0	640	95.4	595	69.7	640	113.4	666	338.4
Indoors, church	554	50.2	412	36.3	387	27.4	431	45.9	458	159.8
Indoors, shopping mall	3650	0.7	3015	1.4	2834	1.7	2784	2.3	2954	6.1
Indoors, auditorium	285	1.2	201	2.1	190	2.3	222	3.7	217	9.3
Indoors, health care facility	508	18.5	362	37.6	363	53.1	385	32.0	387	141.2
Indoors, public building	637	0.4	526	2.8	516	6.5	496	1.4	520	11.0
Indoors, other location	1360	69.4	1081	30.6	1127	20.6	1145	40.3	1223	160.9
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1292	2.3	853	26.4	820	40.0	1027	8.1	867	76.8
Outdoors, school grounds	1753	2.0	1396	6.2	1325	4.6	1372	6.9	1407	19.7
Outdoors, sports arena	589	3.1	435	5.6	423	6.2	462	9.9	462	24.9
Outdoors, park/golf course	-1	0.0	407	3.9	382	6.1	-1	0.0	392	10.0
Outdoors, other location	1179	0.1	855	4.3	830	9.9	-1	0.1	842	14.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.1	1321	0.1
In transit, train	-1	0.0	1030	3.1	1049	4.8	-1	0.0	1042	7.9
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1817	72.5	1357	70.9	1304	71.4	1489	66.5	1493	281.3
In transit, bus	2954	6.6	2320	11.8	2201	11.9	2501	10.9	2435	41.3
In transit, truck	-1	0.0	1572	3.1	1458	4.9	-1	0.0	1503	8.0
In transit, van	1928	1.7	1408	3.8	1325	3.6	1598	4.6	1514	13.7
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1006	10.6	789	11.2	782	13.2	829	9.1	847	44.1
Outdoors, along a roadway	1568	32.1	1158	88.7	1133	110.2	1252	66.6	1214	297.7
In transit, motorcycle	2264	0.2	1531	0.6	1507	0.5	1900	0.6	1707	1.7
Indoors, service station	-1	0.0	1113	0.6	1046	0.9	-1	0.0	1072	1.5
Outdoors, service station	-1	0.0	0	0.4	0	0.5	-1	0.0	0	0.9
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	1913	0.2	1797	0.3	-1	0.0	1843	0.4
Indoors, home	622	1779.4	460	1686.3	439	1653.4	518	1764.5	512	6883.6
Indoors, office	724	2.6	527	33.8	494	50.8	563	8.5	518	95.8
Indoors, store	775	11.3	580	19.7	540	29.2	627	13.9	603	74.2
Indoors, restaurant	1308	16.8	973	8.1	918	3.3	1092	11.7	1145	39.8
Indoors, mfg. facility	884	41.1	634	21.6	560	16.2	706	23.2	739	102.1
Indoors, school	821	58.1	617	73.9	573	52.8	648	89.6	662	274.5
Indoors, church	535	40.8	392	33.4	364	29.1	431	43.8	438	147.1
Indoors, shopping mall	3547	0.7	2842	1.3	2631	1.5	2807	2.1	2854	5.6
Indoors, auditorium	269	1.1	187	1.9	174	2.1	221	3.4	208	8.5
Indoors, health care facility	493	15.6	347	32.6	345	46.8	378	27.4	372	122.5
Indoors, public building	617	0.4	495	2.5	474	5.8	502	1.2	488	9.9
Indoors, other location	1275	60.4	1020	28.9	1055	20.4	1113	36.9	1153	146.7
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1100	3.4	794	26.9	748	46.9	972	8.4	799	85.7
Outdoors, school grounds	1707	1.4	1321	4.5	1243	3.5	1387	4.9	1363	14.3
Outdoors, sports arena	563	2.8	407	5.6	387	6.4	462	9.0	441	23.9
Outdoors, park/golf course	-1	0.0	386	3.5	356	5.5	-1	0.0	368	9.1
Outdoors, other location	1034	0.4	806	5.2	775	12.4	813	1.0	791	18.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	1306	0.1
In transit, train	-1	0.0	942	2.9	945	4.5	-1	0.0	944	7.3
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1824	41.5	1344	51.6	1278	64.4	1500	43.3	1456	200.8
In transit, bus	3243	7.6	2319	6.0	2175	3.6	2518	7.8	2642	24.9
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	1430	0.8	1349	3.2	-1	0.0	1366	4.1
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1076	7.2	811	15.4	778	20.3	913	11.2	855	54.1
Outdoors, along a roadway	1732	38.5	1225	58.5	1154	63.0	1436	50.7	1347	210.7
In transit, motorcycle	-1	0.0	1548	0.4	1410	1.2	-1	0.0	1447	1.6
Indoors, service station	-1	0.0	-1	0.0	1064	0.2	-1	0.0	1079	0.2
Outdoors, service station	-1	0.0	0	0.1	0	0.3	-1	0.0	0	0.5
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	619	1846.6	459	1826.4	441	1829.4	519	1874.8	510	7377.3
Indoors, office	756	6.0	537	2.6	479	1.9	604	3.8	639	14.3
Indoors, store	776	41.1	571	45.2	529	60.5	626	32.5	614	179.4
Indoors, restaurant	1415	30.0	1026	13.5	997	6.1	1188	19.4	1238	69.1
Indoors, mfg. facility	838	24.9	630	27.4	586	32.3	658	14.1	672	98.8
Indoors, school	820	73.3	614	67.5	570	36.3	648	94.3	675	271.4
Indoors, church	509	5.7	400	6.0	390	4.1	454	9.0	443	24.8
Indoors, shopping mall	4043	0.8	3031	2.3	2836	1.6	3324	2.8	3206	7.4
Indoors, auditorium	210	2.9	164	5.9	158	9.3	170	9.3	169	27.4
Indoors, health care facility	551	2.1	424	6.4	401	6.5	440	7.2	434	22.1
Indoors, public building	597	9.8	469	5.7	440	1.7	474	6.8	521	24.0
Indoors, other location	1414	8.5	1091	13.0	1067	14.2	1188	7.6	1164	43.4
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1001	9.4	764	16.6	723	21.8	858	10.0	804	57.8
Outdoors, school grounds	1694	0.4	1316	1.3	1211	0.9	1359	1.5	1350	4.2
Outdoors, sports arena	-1	0.0	393	4.3	392	7.5	-1	0.0	392	11.8
Outdoors, park/golf course	474	3.5	403	2.8	409	3.2	376	1.8	423	11.3
Outdoors, other location	-1	0.0	875	4.1	824	14.5	833	0.1	836	18.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1838	69.4	1335	79.7	1267	85.0	1516	77.1	1474	311.2
In transit, bus	3181	2.4	2283	4.3	2167	3.9	2581	3.8	2483	14.4
In transit, truck	2240	2.2	1592	11.1	1493	14.4	1817	3.5	1617	31.2
In transit, van	1879	0.4	1349	1.0	1287	1.4	1570	1.0	1444	3.9
Indoors, public garage	-1	0.0	796	0.3	797	0.7	-1	0.0	797	1.0
Outdoors, in a parking lot	1055	22.8	783	17.6	759	16.7	845	18.3	875	75.4
Outdoors, along a roadway	1672	51.2	1186	75.4	1127	101.2	1362	55.8	1287	283.7
In transit, motorcycle	-1	0.0	1448	4.3	1382	10.7	-1	0.0	1401	15.1
Indoors, service station	-1	0.0	1141	0.4	1066	1.0	-1	0.0	1099	1.4
Outdoors, service station	0	0.3	0	0.6	0	0.9	0	0.3	0	2.1
Indoors, residential garage	1561	1.0	1105	1.1	1009	0.9	1210	1.7	1223	4.7
Indoors, in a repair shop	-1	0.0	-1	0.1	1815	0.1	-1	0.0	1852	0.2
Indoors, home	606	1626.9	448	1598.9	432	1601.3	512	1643.3	500	6470.4
Indoors, office	681	51.3	519	54.8	494	50.0	558	56.1	563	212.2
Indoors, store	779	32.2	574	43.5	536	53.6	649	36.4	618	165.7
Indoors, restaurant	1303	52.6	969	40.1	921	25.7	1070	51.3	1096	169.7
Indoors, mfg. facility	835	38.4	596	33.7	552	25.5	640	38.7	667	136.3
Indoors, school	830	111.8	614	84.8	573	52.5	656	107.9	688	357.0
Indoors, church	528	11.4	387	13.2	367	12.7	422	15.7	423	52.9
Indoors, shopping mall	3686	5.2	2844	3.8	2655	1.7	3010	4.1	3164	14.7
Indoors, auditorium	228	0.9	167	2.5	156	3.2	192	3.1	177	9.7
Indoors, health care facility	556	37.8	402	27.6	379	25.4	465	35.4	461	126.2
Indoors, public building	614	6.6	479	3.6	462	2.2	499	4.5	535	17.0
Indoors, other location	1410	15.6	1062	30.0	1038	30.4	1200	25.1	1143	101.1
Indoors, not specified	1339	0.2	1080	0.5	1098	0.6	1062	0.1	1128	1.5
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1123	12.4	778	25.5	730	40.0	912	15.2	826	93.1
Outdoors, school grounds	1776	5.4	1344	7.7	1286	6.5	1438	7.0	1442	26.5
Outdoors, sports arena	-1	0.0	396	4.7	377	8.2	-1	0.0	384	12.9
Outdoors, park/golf course	613	0.5	385	7.4	347	22.0	520	1.9	370	31.9
Outdoors, other location	-1	0.0	840	5.5	801	9.4	-1	0.0	816	14.9
Outdoors, not specified	1736	1.0	1330	0.3	-1	0.0	1437	0.6	1578	1.9
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1835	85.6	1334	92.0	1269	98.4	1525	89.2	1481	365.1
In transit, bus	3360	8.3	2356	5.9	2210	4.2	2722	7.3	2761	25.7
In transit, truck	2301	1.7	1598	5.1	1498	5.6	1850	3.4	1694	15.8
In transit, van	1807	8.6	1297	8.5	1223	8.8	1425	10.0	1437	35.9
Indoors, public garage	1093	7.9	820	3.8	783	1.3	918	6.2	962	19.2
Outdoors, in a parking lot	1081	10.6	795	12.0	751	12.8	893	10.6	871	45.8
Outdoors, along a roadway	1647	43.0	1178	72.5	1119	93.2	1342	58.9	1269	267.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
Indoors, service station	1548	0.5	1172	0.4	1106	0.3	1229	0.5	1286	1.7
Outdoors, service station	-1	0.0	0	0.1	0	0.2	-1	0.1	0	0.4
Indoors, residential garage	1511	1.2	1101	1.1	1073	0.7	1323	1.3	1278	4.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	599	1608.3	442	1560.3	424	1540.6	507	1612.8	494	6322.1
Indoors, office	703	70.2	517	81.7	480	84.6	563	81.0	560	317.5
Indoors, store	771	45.5	567	46.0	529	51.2	633	41.0	622	183.7
Indoors, restaurant	1376	20.0	995	20.9	928	21.7	1147	20.4	1107	83.0
Indoors, mfg. facility	847	26.9	626	29.2	594	30.4	681	28.2	683	114.7
Indoors, school	832	108.7	614	85.4	575	58.4	665	106.1	689	358.5
Indoors, church	546	23.8	390	18.6	370	14.2	452	24.0	451	80.6
Indoors, shopping mall	3846	3.2	2892	2.5	2728	1.6	3273	2.9	3274	10.2
Indoors, auditorium	239	4.6	170	5.7	163	5.7	199	7.2	191	23.2
Indoors, health care facility	570	17.8	413	18.7	392	15.7	459	21.0	460	73.2
Indoors, public building	668	5.8	484	10.2	454	14.3	553	7.3	514	37.5
Indoors, other location	1336	28.5	1031	28.0	1009	27.0	1143	27.7	1132	111.3
Indoors, not specified	1399	0.7	1070	0.7	1048	1.0	1136	0.4	1161	2.8
Outdoors, construction	1782	3.5	1340	5.8	1258	5.1	1464	4.8	1429	19.2
Outdoors, residential grounds	1069	11.8	770	36.1	728	57.5	875	19.7	795	125.1
Outdoors, school grounds	1819	5.4	1335	6.1	1248	5.5	1474	6.2	1465	23.2
Outdoors, sports arena	-1	0.1	391	2.9	379	5.9	453	0.3	387	9.2
Outdoors, park/golf course	550	2.9	396	10.4	375	15.9	454	4.8	408	34.1
Outdoors, other location	1133	4.7	835	12.8	799	25.5	987	5.0	860	48.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	-1	0.0	905	0.5	904	0.8	-1	0.0	904	1.3
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1851	104.3	1337	114.7	1268	120.4	1545	111.9	1489	451.3
In transit, bus	3317	6.4	2357	6.9	2227	4.3	2668	8.6	2671	26.2
In transit, truck	2225	0.8	1566	3.4	1480	6.2	1814	1.8	1601	12.1
In transit, van	-1	0.0	1258	1.2	1164	2.6	-1	0.0	1203	3.8
Indoors, public garage	1126	0.4	825	0.4	798	0.4	951	0.4	927	1.5
Outdoors, in a parking lot	1085	9.9	786	11.5	729	11.7	916	10.6	870	43.8
Outdoors, along a roadway	1667	47.5	1187	63.4	1124	83.7	1375	51.4	1297	245.9
In transit, motorcycle	2260	1.5	1496	0.4	-1	0.0	1922	0.9	2043	2.8
Indoors, service station	-1	0.0	1244	0.2	1175	0.3	-1	0.0	1202	0.4
Outdoors, service station	-1	0.1	0	0.7	0	1.1	-1	0.1	0	2.0
Indoors, residential garage	-1	0.1	1105	0.7	1050	1.0	1243	0.2	1110	2.0
Indoors, in a repair shop	-1	0.0	1776	0.1	-1	0.1	1808	0.2	1801	0.4
Indoors, home	595	1546.1	438	1489.1	422	1458.9	504	1548.5	491	6042.5
Indoors, office	712	129.4	520	124.1	485	122.0	572	125.4	574	500.9
Indoors, store	769	48.4	568	49.0	537	49.9	637	46.2	627	193.4
Indoors, restaurant	1382	22.9	994	29.3	932	33.6	1150	26.1	1091	111.9
Indoors, mfg. facility	870	31.5	641	29.9	602	26.5	720	30.2	714	118.2
Indoors, school	825	122.0	612	101.8	574	56.5	659	141.2	684	421.6
Indoors, church	525	7.5	388	10.5	369	12.1	431	9.4	419	39.4
Indoors, shopping mall	3795	2.0	2890	4.8	2666	5.7	3367	3.3	3024	15.8
Indoors, auditorium	230	3.5	170	7.4	162	12.8	192	4.4	177	28.2
Indoors, health care facility	618	18.0	431	18.4	400	20.2	496	19.7	483	76.3
Indoors, public building	682	3.5	461	6.6	427	7.2	592	4.9	514	22.2
Indoors, other location	1435	26.7	1042	25.4	1002	21.2	1184	26.1	1176	99.4
Indoors, not specified	1383	0.4	1080	0.5	1028	0.3	1125	0.5	1162	1.7
Outdoors, construction	-1	0.0	1301	0.6	1205	1.0	-1	0.0	1243	1.6
Outdoors, residential grounds	1096	17.0	760	35.5	702	68.1	895	18.0	790	138.7
Outdoors, school grounds	1840	4.9	1360	6.0	1266	4.3	1535	6.8	1502	21.9
Outdoors, sports arena	609	0.5	399	7.5	373	11.6	511	1.9	400	21.5
Outdoors, park/golf course	512	3.8	389	12.9	357	27.3	435	8.3	389	52.4
Outdoors, other location	1115	0.6	762	19.9	741	34.3	899	1.1	756	56.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	1.1	0	3.0	-1	0.0	0	4.1

Boston: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1949	49.5	1363	77.6	1291	98.4	1625	56.9	1493	282.4
In transit, bus	3354	4.4	2298	1.3	1991	0.7	2564	2.5	2867	8.8
In transit, truck	2245	24.5	1631	13.9	1551	7.0	1868	20.7	1924	66.1
In transit, van	1742	2.8	1300	6.4	1222	6.5	1461	9.3	1390	25.0
Indoors, public garage	-1	0.0	808	0.6	746	0.9	-1	0.0	770	1.5
Outdoors, in a parking lot	1233	3.5	803	9.1	757	14.6	973	3.6	850	30.9
Outdoors, along a roadway	1789	53.5	1211	59.8	1140	75.9	1452	54.7	1370	243.9
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1699	19.1	1217	5.2	-1	0.0	1334	10.8	1515	35.1
Outdoors, service station	-1	0.0	0	1.3	0	2.1	-1	0.0	0	3.4
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	597	1542.0	442	1536.2	425	1488.2	509	1572.6	494	6138.9
Indoors, office	713	83.3	525	103.1	492	120.6	572	74.5	565	381.5
Indoors, store	804	0.6	568	15.0	530	25.1	645	2.0	552	42.7
Indoors, restaurant	1422	35.8	1005	44.4	951	53.0	1171	34.3	1111	167.5
Indoors, mfg. facility	-1	0.0	590	1.8	552	2.8	-1	0.0	567	4.6
Indoors, school	832	238.5	618	133.8	586	89.3	664	200.1	704	661.7
Indoors, church	500	9.3	378	10.2	368	9.6	415	8.4	414	37.5
Indoors, shopping mall	3602	0.2	2747	0.6	2548	0.4	2860	0.7	2835	1.9
Indoors, auditorium	243	9.5	168	15.2	159	16.9	192	24.5	186	66.1
Indoors, health care facility	653	14.6	458	12.3	421	8.3	537	17.4	532	52.7
Indoors, public building	-1	0.0	433	2.8	389	11.1	-1	0.0	398	13.9
Indoors, other location	1053	9.2	877	23.6	901	32.2	900	29.4	909	94.4
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	1316	2.7	1232	4.2	-1	0.0	1265	6.8
Outdoors, residential grounds	1013	45.4	771	59.0	737	58.6	858	57.7	835	220.7
Outdoors, school grounds	1698	3.6	1317	7.5	1214	7.6	1384	10.4	1361	29.2
Outdoors, sports arena	-1	0.0	409	0.8	390	3.2	-1	0.0	393	4.0
Outdoors, park/golf course	537	10.8	396	31.9	374	53.1	470	17.4	410	113.2
Outdoors, other location	-1	0.0	835	7.9	824	17.6	-1	0.0	828	25.5
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1866	55.3	1343	64.1	1272	73.4	1557	57.9	1487	250.7
In transit, bus	3259	11.9	2330	10.6	2187	6.7	2616	13.5	2656	42.8
In transit, truck	2374	1.9	1616	1.5	1495	2.0	1888	1.4	1846	6.7
In transit, van	1861	4.4	1245	5.1	1175	5.6	1404	7.4	1400	22.5
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, in a parking lot	1096	5.9	798	7.6	749	9.0	908	5.8	867	28.4
Outdoors, along a roadway	1704	64.6	1199	95.2	1129	129.3	1407	70.5	1305	359.6
In transit, motorcycle	2187	1.1	1469	0.5	1378	0.3	1854	0.7	1874	2.5
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	0	0.1	-1	0.1	-1	0.0	-1	0.1	0	0.3
Indoors, residential garage	1544	0.3	1124	1.0	1084	0.9	1337	0.9	1215	3.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	599	1614.3	442	1592.0	425	1581.9	509	1630.6	494	6418.8
Indoors, office	834	1.3	479	5.1	453	8.6	663	1.5	510	16.5
Indoors, store	797	23.4	572	24.9	531	26.9	658	23.7	635	99.0
Indoors, restaurant	1412	9.3	1009	14.7	950	18.8	1200	10.3	1096	53.2
Indoors, mfg. facility	-1	0.1	715	0.2	678	0.1	913	0.3	820	0.7
Indoors, school	829	283.1	612	215.2	572	135.9	660	282.9	688	917.1
Indoors, church	535	12.7	388	11.8	367	10.7	438	12.8	436	48.1
Indoors, shopping mall	3891	2.1	2902	2.9	2684	2.5	3336	2.5	3166	10.0
Indoors, auditorium	238	4.0	169	5.6	160	6.6	199	7.3	188	23.5
Indoors, health care facility	590	11.5	432	10.9	392	11.1	492	13.8	479	47.3
Indoors, public building	635	2.0	483	3.5	459	5.3	538	2.6	507	13.5
Indoors, other location	1460	6.2	1037	7.0	1001	9.4	1122	7.4	1135	30.0
Indoors, not specified	-1	0.0	1087	0.3	1094	0.5	-1	0.0	1092	0.9
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1100	25.4	769	50.5	713	77.4	914	29.8	815	183.2
Outdoors, school grounds	1814	13.7	1337	16.0	1245	13.9	1461	15.8	1458	59.3
Outdoors, sports arena	566	2.4	399	6.4	380	9.5	477	3.8	422	22.1
Outdoors, park/golf course	556	2.6	390	17.8	364	32.7	486	4.0	390	57.2
Outdoors, other location	1185	0.1	806	13.2	780	28.5	953	0.3	790	42.1
Outdoors, not specified	1736	0.1	1275	0.2	1197	0.2	1370	0.4	1369	0.9
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1815	157.8	1326	125.0	1273	119.7	1497	135.9	1501	538.5
In transit, bus	3193	3.6	2340	1.0	-1	0.0	2519	2.0	2857	6.7
In transit, truck	2263	5.1	1600	16.0	1500	31.4	1835	9.0	1638	61.5
In transit, van	-1	0.0	1259	2.7	1145	6.0	-1	0.0	1180	8.7
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1031	7.5	723	12.6	617	16.0	815	12.4	759	48.4
Outdoors, along a roadway	1446	95.5	1113	112.9	1090	92.7	1219	126.5	1214	427.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.1	1291	0.2	1227	0.3	1306	0.2	1304	0.8
Outdoors, service station	-1	0.0	0	3.0	0	4.5	0	0.1	0	7.7
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	608	1575.1	446	1501.0	425	1427.2	512	1597.7	500	6101.0
Indoors, office	700	58.0	527	114.9	496	129.6	555	67.3	549	369.7
Indoors, store	755	8.9	571	12.3	539	12.8	591	11.8	603	45.7
Indoors, restaurant	1366	21.4	997	17.7	937	14.4	1112	18.2	1124	71.7
Indoors, mfg. facility	-1	0.0	658	22.3	613	71.6	-1	0.0	624	93.9
Indoors, school	822	135.4	612	84.3	572	38.5	651	127.9	695	386.1
Indoors, church	573	0.8	390	9.0	369	13.7	501	2.6	396	26.0
Indoors, shopping mall	4634	0.4	3079	1.1	3027	0.8	3913	1.4	3544	3.7
Indoors, auditorium	230	2.2	170	16.6	168	41.6	202	1.1	171	61.5
Indoors, health care facility	641	5.6	433	6.4	419	5.3	485	7.0	493	24.3
Indoors, public building	751	16.5	510	18.4	495	10.6	612	24.8	600	70.3
Indoors, other location	1351	42.5	1045	34.7	1065	25.2	1143	35.0	1168	137.4
Indoors, not specified	-1	0.0	1110	0.1	-1	0.1	1186	0.1	1166	0.4
Outdoors, construction	-1	0.0	1319	6.4	1228	10.0	-1	0.0	1264	16.4
Outdoors, residential grounds	967	5.8	745	19.8	687	27.9	788	9.4	746	62.9
Outdoors, school grounds	1922	2.5	1419	7.3	1326	5.0	1581	8.8	1513	23.7
Outdoors, sports arena	538	6.6	400	8.5	377	16.4	442	3.3	419	34.8
Outdoors, park/golf course	498	3.5	406	9.9	392	13.3	428	2.6	413	29.2
Outdoors, other location	1039	2.5	860	19.1	824	73.6	853	1.4	837	96.7
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	2108	2.5	1401	0.7	-1	0.0	1780	1.4	1903	4.7
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1844	128.6	1339	133.5	1271	131.3	1521	136.9	1492	530.3
In transit, bus	3419	1.3	2378	2.2	2243	2.8	2722	1.0	2564	7.3
In transit, truck	2185	19.9	1595	21.9	1494	22.9	1795	17.7	1752	82.4
In transit, van	1751	6.5	1322	6.9	1255	8.0	1450	7.2	1433	28.7
Indoors, public garage	1103	13.2	823	11.6	780	7.4	910	15.0	922	47.2
Outdoors, in a parking lot	1066	11.4	793	16.6	754	17.6	868	12.8	851	58.4
Outdoors, along a roadway	1581	43.8	1177	64.6	1121	76.9	1309	58.4	1264	243.8
In transit, motorcycle	-1	0.0	1387	0.7	1451	1.1	-1	0.0	1426	1.8
Indoors, service station	1574	15.7	1185	10.1	1130	5.6	1291	14.1	1345	45.5
Outdoors, service station	0	0.3	0	0.5	0	0.6	0	0.3	0	1.6
Indoors, residential garage	1507	3.6	1111	3.5	1053	3.1	1280	5.8	1251	16.0
Indoors, in a repair shop	2425	9.7	1816	3.0	-1	0.1	1945	5.3	2180	18.0
Indoors, home	593	1406.1	438	1377.7	422	1348.7	505	1432.8	491	5565.3
Indoors, office	703	239.7	521	200.3	490	188.7	565	231.7	577	860.4
Indoors, store	754	43.4	566	48.5	530	59.5	623	37.5	609	188.9
Indoors, restaurant	1286	39.3	963	35.7	900	31.7	1069	34.1	1065	140.8
Indoors, mfg. facility	844	33.8	620	54.6	586	65.3	669	40.0	658	193.7
Indoors, school	848	20.1	618	16.0	592	11.5	669	20.9	697	68.5
Indoors, church	532	9.3	390	10.2	373	9.7	435	13.1	431	42.4
Indoors, shopping mall	3999	1.4	2986	1.2	2798	0.7	3329	1.5	3356	4.8
Indoors, auditorium	235	9.3	170	4.0	163	2.6	198	5.2	205	21.1
Indoors, health care facility	594	14.5	426	18.9	397	20.2	471	17.8	463	71.5
Indoors, public building	636	7.1	460	11.4	440	20.7	522	5.7	487	44.9
Indoors, other location	1457	46.0	1066	52.4	1023	53.7	1199	43.2	1176	195.3
Indoors, not specified	1305	6.5	984	2.9	1042	0.6	1106	4.3	1168	14.3
Outdoors, construction	1775	4.7	1339	10.0	1253	9.4	1461	7.7	1407	31.9
Outdoors, residential grounds	1080	5.4	783	17.3	748	35.8	899	8.5	803	67.1
Outdoors, school grounds	1879	0.5	1352	0.9	1283	0.8	1462	0.9	1454	3.0
Outdoors, sports arena	495	1.3	392	5.5	377	9.1	400	1.0	393	16.9
Outdoors, park/golf course	532	2.2	403	8.9	383	15.4	443	5.6	410	32.1
Outdoors, other location	1136	13.7	819	28.7	787	39.1	951	20.6	876	102.1
Outdoors, not specified	-1	0.1	1269	0.7	1173	1.0	1824	0.1	1286	1.9
In transit, train	2062	1.6	1068	1.6	918	1.7	1684	1.0	1404	5.9
In transit, airplane	-1	0.0	0	1.5	0	4.8	-1	0.0	0	6.3

Boston: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1802	94.6	1339	97.9	1277	99.3	1521	98.9	1481	390.7
In transit, bus	3217	4.1	2371	2.0	2243	1.5	2643	2.8	2761	10.5
In transit, truck	2099	9.7	1575	3.2	-1	0.0	1724	5.2	1899	18.1
In transit, van	1808	0.1	1402	0.4	1336	0.8	1425	0.3	1401	1.6
Indoors, public garage	1177	0.4	845	0.4	794	0.2	968	0.5	967	1.5
Outdoors, in a parking lot	1103	4.3	789	8.8	753	11.8	899	5.5	839	30.4
Outdoors, along a roadway	1619	30.5	1188	50.5	1133	65.7	1331	37.4	1269	184.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1180	0.1	1114	0.2	-1	0.0	1136	0.4
Outdoors, service station	-1	0.1	-1	0.0	-1	0.0	-1	0.1	0	0.2
Indoors, residential garage	1453	1.2	1071	0.5	-1	0.1	1179	0.7	1286	2.5
Indoors, in a repair shop	-1	0.1	1777	0.2	1604	0.2	1790	0.3	1794	0.7
Indoors, home	615	1848.6	454	1787.5	434	1750.7	515	1851.2	506	7238.0
Indoors, office	726	13.6	531	9.2	493	8.2	596	8.5	605	39.5
Indoors, store	763	36.0	572	51.9	538	72.4	620	36.4	603	196.7
Indoors, restaurant	1387	20.8	1003	23.8	949	22.3	1163	21.6	1119	88.5
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	850	22.2	626	34.8	589	30.6	695	44.2	678	131.9
Indoors, church	534	8.6	392	9.5	374	9.2	443	12.6	435	39.9
Indoors, shopping mall	3639	4.1	2799	3.3	2597	3.1	2924	2.2	3042	12.7
Indoors, auditorium	236	10.5	168	11.0	162	11.9	190	14.0	188	47.4
Indoors, health care facility	595	5.3	434	8.6	410	9.5	491	7.7	468	31.1
Indoors, public building	666	7.4	486	4.5	460	3.3	548	6.2	562	21.4
Indoors, other location	1503	26.1	1105	28.2	1065	27.7	1257	31.0	1229	113.0
Indoors, not specified	-1	0.0	1135	0.2	1084	0.5	-1	0.0	1095	0.7
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1012	4.6	772	22.3	735	31.7	848	12.8	784	71.4
Outdoors, school grounds	1849	0.5	1370	2.2	1331	2.6	1559	1.9	1440	7.2
Outdoors, sports arena	550	4.2	406	3.7	392	4.6	454	2.1	451	14.7
Outdoors, park/golf course	560	0.8	405	11.3	381	23.3	464	2.4	397	37.7
Outdoors, other location	1130	1.0	832	7.9	808	16.7	928	1.4	834	27.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	2194	0.4	1498	0.1	-1	0.0	1842	0.2	1983	0.7
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1885	126.5	1362	118.1	1297	115.4	1550	122.1	1531	482.2
In transit, bus	3294	4.5	2330	4.5	2163	4.1	2665	4.8	2625	18.0
In transit, truck	2251	4.5	1608	4.9	1531	4.7	1860	5.2	1808	19.3
In transit, van	-1	0.1	1364	1.9	1292	2.9	-1	0.0	1335	4.9
Indoors, public garage	1115	3.8	835	2.2	765	1.3	938	2.8	959	10.2
Outdoors, in a parking lot	1075	5.5	799	9.4	758	12.4	911	6.9	851	34.1
Outdoors, along a roadway	1647	31.5	1191	45.0	1140	57.4	1344	35.5	1291	169.3
In transit, motorcycle	-1	0.0	1476	4.2	1385	9.7	-1	0.0	1412	13.9
Indoors, service station	-1	0.1	1170	0.2	1079	0.1	1239	0.2	1238	0.6
Outdoors, service station	0	0.2	0	0.7	0	1.1	0	0.3	0	2.2
Indoors, residential garage	-1	0.1	-1	0.1	-1	0.0	-1	0.1	1209	0.3
Indoors, in a repair shop	-1	0.1	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, home	596	1456.2	442	1450.7	429	1460.1	505	1486.2	493	5853.2
Indoors, office	704	246.7	520	248.2	481	231.1	565	251.4	569	977.3
Indoors, store	782	60.9	578	69.6	543	67.5	647	69.0	633	267.0
Indoors, restaurant	1328	45.7	995	41.6	946	41.0	1105	39.3	1100	167.6
Indoors, mfg. facility	847	14.1	626	15.9	584	13.2	670	17.2	681	60.4
Indoors, school	830	52.0	615	41.7	576	25.2	660	54.2	688	173.2
Indoors, church	540	12.8	391	12.9	368	12.2	441	16.1	436	54.0
Indoors, shopping mall	3843	3.8	2937	2.7	2781	1.6	3192	3.9	3285	12.1
Indoors, auditorium	224	4.6	167	5.0	158	6.7	186	5.8	181	22.2
Indoors, health care facility	546	36.0	406	31.0	396	26.7	453	36.6	456	130.3
Indoors, public building	649	6.1	471	6.1	401	8.5	519	6.2	500	26.8
Indoors, other location	1456	39.4	1057	35.3	1038	33.9	1198	35.2	1196	143.8
Indoors, not specified	1506	0.4	1154	0.4	1114	0.2	1285	0.5	1296	1.4
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	989	2.5	760	13.5	744	28.2	792	4.9	766	49.1
Outdoors, school grounds	2076	0.3	1411	1.7	1327	2.2	1788	0.7	1463	4.9
Outdoors, sports arena	-1	0.1	393	6.0	373	10.4	522	0.3	383	16.6
Outdoors, park/golf course	552	0.7	369	4.4	332	12.6	478	1.4	359	19.1
Outdoors, other location	1181	0.7	845	5.7	824	17.1	952	0.7	843	24.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.1	-1	0.0	1305	0.1
In transit, train	2172	0.3	1463	0.4	1383	0.3	1752	0.6	1673	1.6
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1806	83.8	1339	104.7	1265	107.7	1476	91.2	1452	387.5
In transit, bus	3132	3.6	2366	16.3	2214	23.3	2426	1.9	2351	45.1
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1745	0.8	1298	1.4	1216	1.5	1381	2.4	1367	6.0
Indoors, public garage	-1	0.1	-1	0.0	-1	0.0	-1	0.0	1258	0.1
Outdoors, in a parking lot	1062	8.7	798	34.8	750	47.3	850	12.1	804	103.1
Outdoors, along a roadway	1630	25.3	1190	42.3	1121	48.1	1393	34.9	1289	150.7
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	1496	4.6	1096	7.4	1007	6.3	1198	11.2	1178	29.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	615	1883.9	449	1711.2	426	1578.5	516	1862.0	506	7035.6
Indoors, office	662	10.3	507	4.9	474	3.0	539	6.8	576	25.0
Indoors, store	715	28.9	557	34.0	540	46.0	568	29.8	587	138.6
Indoors, restaurant	1342	16.6	1001	6.5	959	4.6	1092	10.1	1170	37.8
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	847	8.6	632	21.0	600	17.3	719	29.1	682	76.1
Indoors, church	546	8.1	388	10.1	359	7.2	423	14.7	428	40.1
Indoors, shopping mall	3773	8.3	2842	3.1	-1	0.0	3002	4.2	3378	15.6
Indoors, auditorium	202	5.8	169	9.1	162	11.7	162	3.3	172	29.9
Indoors, health care facility	599	22.1	435	34.2	408	21.5	482	44.0	477	121.8
Indoors, public building	627	2.2	465	2.0	422	7.8	509	1.2	471	13.2
Indoors, other location	1382	22.2	918	58.1	853	73.8	1143	26.1	981	180.1
Indoors, not specified	1648	2.4	1187	0.7	-1	0.0	1392	1.4	1501	4.5
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	976	9.7	751	46.7	714	138.0	768	19.5	739	213.9
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	385	8.3	380	12.8	-1	0.0	382	21.1
Outdoors, park/golf course	655	3.9	415	4.1	386	14.3	549	2.0	448	24.3
Outdoors, other location	-1	0.0	827	23.3	799	37.3	-1	0.0	810	60.6
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1854	145.6	1336	146.3	1272	145.0	1536	152.0	1500	588.8
In transit, bus	3364	11.7	2361	6.2	2247	3.1	2749	8.9	2857	29.8
In transit, truck	2203	17.3	1562	23.6	1453	18.9	1738	25.2	1720	84.9
In transit, van	1747	2.3	1328	10.7	1248	14.1	1493	3.5	1341	30.6
Indoors, public garage	1149	2.2	816	3.9	766	2.6	925	4.8	900	13.5
Outdoors, in a parking lot	1094	8.6	795	10.5	751	10.5	904	9.8	876	39.4
Outdoors, along a roadway	1613	42.1	1175	57.9	1122	71.2	1333	45.2	1276	216.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1594	7.7	1179	3.3	1120	1.4	1267	5.9	1378	18.2
Outdoors, service station	-1	0.1	0	0.5	0	0.8	0	0.2	0	1.6
Indoors, residential garage	1566	0.2	1022	0.4	959	0.5	-1	0.1	1085	1.2
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	579	1342.4	428	1318.9	412	1280.0	498	1379.1	481	5320.3
Indoors, office	702	307.5	519	262.3	488	287.5	564	276.5	572	1133.7
Indoors, store	758	68.4	559	53.5	527	38.8	616	67.5	630	228.2
Indoors, restaurant	1335	32.4	981	34.0	912	36.3	1127	34.4	1083	137.0
Indoors, mfg. facility	891	22.0	635	61.1	593	91.4	732	42.4	662	217.0
Indoors, school	861	6.2	617	28.0	576	31.3	689	17.0	635	82.5
Indoors, church	536	15.8	390	16.3	369	17.2	444	17.6	433	66.9
Indoors, shopping mall	3816	3.7	2848	2.2	2704	1.2	3258	2.0	3320	9.0
Indoors, auditorium	235	4.7	168	3.1	164	2.5	201	2.5	198	12.9
Indoors, health care facility	591	20.7	433	7.6	420	2.3	487	12.4	524	42.9
Indoors, public building	659	4.2	487	19.4	461	27.0	569	7.5	498	58.1
Indoors, other location	1424	66.9	1006	55.0	932	36.9	1143	66.8	1158	225.6
Indoors, not specified	1443	7.9	1076	2.8	1039	0.6	1154	4.8	1278	16.1
Outdoors, construction	-1	0.0	1361	2.1	1275	4.6	-1	0.0	1302	6.7
Outdoors, residential grounds	1010	2.2	765	28.1	735	50.4	854	3.5	757	84.1
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	491	5.1	391	12.5	376	18.1	408	8.8	399	44.6
Outdoors, other location	1121	11.6	835	12.7	802	12.3	954	9.6	923	46.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	2054	0.7	1442	0.2	-1	0.0	1712	0.4	1858	1.2
In transit, airplane	-1	0.0	0	1.0	0	1.6	-1	0.0	0	2.6

Boston: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1798	85.9	1326	81.6	1250	84.6	1491	77.7	1468	329.8
In transit, bus	2971	2.0	2213	1.6	2070	1.3	2384	1.7	2460	6.6
In transit, truck	2148	5.8	1604	2.0	-1	0.0	1773	3.1	1941	11.0
In transit, van	1818	1.2	1309	2.2	1243	2.2	1530	3.6	1446	9.2
Indoors, public garage	1029	0.9	768	0.3	-1	0.1	821	0.6	908	1.9
Outdoors, in a parking lot	1074	3.6	788	8.2	746	11.8	890	4.4	823	28.0
Outdoors, along a roadway	1612	37.7	1176	38.7	1113	45.8	1324	32.5	1295	154.7
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1487	0.2	1208	0.1	1158	0.1	1196	0.1	1282	0.6
Outdoors, service station	-1	0.0	0	0.7	0	1.1	-1	0.0	0	1.9
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	613	1897.2	453	1861.5	433	1815.0	517	1943.3	505	7517.1
Indoors, office	680	8.1	515	7.4	473	6.4	553	8.6	561	30.6
Indoors, store	735	34.4	553	36.5	518	37.2	604	34.0	600	142.1
Indoors, restaurant	1424	14.2	1001	19.2	939	25.6	1169	17.1	1097	76.1
Indoors, mfg. facility	-1	0.0	658	0.4	616	0.6	-1	0.0	632	1.0
Indoors, school	851	4.5	623	5.0	606	5.0	740	5.7	703	20.2
Indoors, church	531	13.9	386	17.9	365	17.1	426	21.5	422	70.5
Indoors, shopping mall	3803	4.3	2890	3.3	2786	3.5	3205	3.5	3208	14.6
Indoors, auditorium	221	2.7	161	1.6	146	1.3	190	1.5	187	7.1
Indoors, health care facility	579	9.9	420	18.8	394	25.8	460	9.2	440	63.7
Indoors, public building	672	1.5	488	4.3	454	4.8	582	4.4	523	15.0
Indoors, other location	1438	18.8	993	27.1	938	32.2	1221	18.5	1105	96.6
Indoors, not specified	1654	2.5	1167	0.7	-1	0.0	1383	1.4	1499	4.6
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1052	9.0	765	26.1	725	49.0	864	14.3	786	98.4
Outdoors, school grounds	1675	0.4	1290	0.1	-1	0.0	1408	0.2	1536	0.7
Outdoors, sports arena	-1	0.0	390	4.6	380	7.2	-1	0.0	384	11.7
Outdoors, park/golf course	-1	0.0	398	11.0	372	23.5	-1	0.0	380	34.5
Outdoors, other location	1022	0.2	803	2.4	783	7.0	815	0.5	793	10.0
Outdoors, not specified	1731	0.9	1318	0.2	-1	0.0	1445	0.5	1582	1.6
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1833	111.8	1346	111.5	1284	113.4	1523	104.8	1496	441.5
In transit, bus	3281	6.7	2268	4.6	2062	3.9	2650	5.6	2659	20.7
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1871	3.3	1343	1.5	1276	0.5	1496	2.5	1611	7.8
Indoors, public garage	1200	0.6	813	0.4	738	0.2	926	0.6	969	1.8
Outdoors, in a parking lot	1097	7.4	798	10.5	767	16.1	882	7.5	854	41.4
Outdoors, along a roadway	1607	36.5	1164	39.1	1110	46.5	1312	36.2	1284	158.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1155	0.1	1033	0.1	-1	0.1	1244	0.3
Outdoors, service station	0	0.2	0	3.0	0	4.2	0	0.7	0	8.2
Indoors, residential garage	-1	0.1	-1	0.0	-1	0.0	-1	0.1	1119	0.2
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	598	1510.5	441	1466.9	425	1468.7	509	1527.2	494	5973.3
Indoors, office	695	244.6	517	216.5	487	173.0	558	250.0	572	884.2
Indoors, store	757	43.4	571	60.4	535	70.1	631	51.6	610	225.4
Indoors, restaurant	1307	35.4	962	43.8	905	43.5	1083	47.6	1053	170.3
Indoors, mfg. facility	-1	0.0	626	49.7	598	91.6	-1	0.0	608	141.3
Indoors, school	828	44.9	614	31.0	581	21.0	660	43.9	692	140.8
Indoors, church	539	17.0	387	17.2	366	20.6	442	15.6	430	70.3
Indoors, shopping mall	3606	2.8	2827	4.7	2637	3.9	2945	5.5	2948	16.9
Indoors, auditorium	254	0.9	178	1.8	167	1.7	212	2.8	198	7.2
Indoors, health care facility	549	36.3	363	49.1	328	43.3	426	49.7	410	178.3
Indoors, public building	668	3.8	484	2.3	462	2.5	519	2.4	550	11.0
Indoors, other location	1417	48.4	1069	50.9	1026	48.7	1197	44.5	1175	192.5
Indoors, not specified	-1	0.0	1050	0.5	1079	2.1	921	0.2	1067	2.8
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1038	2.8	776	14.5	738	24.2	848	6.1	781	47.6
Outdoors, school grounds	1731	0.3	1314	1.1	1261	1.0	1415	0.9	1359	3.2
Outdoors, sports arena	494	1.4	383	1.6	380	4.2	405	0.7	403	7.9
Outdoors, park/golf course	541	0.7	389	0.3	-1	0.0	425	0.4	478	1.4
Outdoors, other location	1164	0.3	831	1.3	777	3.0	972	0.9	840	5.4
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1775	131.6	1326	137.2	1256	134.0	1466	152.0	1454	554.9
In transit, bus	3199	1.4	2329	4.1	2170	2.8	2608	4.9	2491	13.3
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	-1	0.0	1303	0.2	-1	0.0	1319	0.2
Indoors, public garage	520	0.3	-1	0.1	-1	0.0	443	0.2	480	0.6
Outdoors, in a parking lot	995	5.9	783	18.3	758	28.5	845	8.9	801	61.7
Outdoors, along a roadway	1572	27.2	1182	55.7	1125	95.6	1356	38.1	1237	216.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1253	0.6	1182	1.2	-1	0.0	1207	1.8
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	-1	0.1	1057	0.2	1005	0.2	1158	0.1	1097	0.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, home	609	1746.4	447	1692.6	427	1658.3	511	1712.2	500	6809.5
Indoors, office	695	77.4	513	56.5	484	39.1	565	84.8	580	257.8
Indoors, store	763	19.1	561	19.4	515	27.1	647	16.0	610	81.5
Indoors, restaurant	1331	23.3	981	26.8	902	33.6	1081	30.6	1056	114.3
Indoors, mfg. facility	877	16.2	641	12.5	596	6.1	690	18.1	724	52.8
Indoors, school	767	12.1	605	6.3	609	4.8	618	6.8	674	30.1
Indoors, church	492	16.3	371	17.0	344	15.3	400	25.2	402	73.9
Indoors, shopping mall	3568	7.0	2763	4.9	2554	7.8	2862	3.9	2949	23.6
Indoors, auditorium	224	17.2	164	20.8	160	17.9	193	33.4	186	89.2
Indoors, health care facility	539	3.6	425	10.3	404	18.4	426	6.1	426	38.4
Indoors, public building	591	2.4	467	7.3	443	10.5	482	2.1	471	22.3
Indoors, other location	1462	10.3	1078	14.4	1048	9.5	1211	18.5	1194	52.7
Indoors, not specified	-1	0.0	1042	2.7	968	4.2	-1	0.0	997	7.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1043	20.9	764	56.3	716	78.8	887	20.2	790	176.2
Outdoors, school grounds	1970	0.7	1348	2.1	1319	1.4	1722	2.5	1547	6.7
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	486	17.3	371	14.6	343	7.5	390	20.8	407	60.4
Outdoors, other location	-1	0.0	824	1.7	810	4.7	-1	0.0	814	6.4
Outdoors, not specified	1599	0.2	1263	0.6	1156	0.4	1297	0.8	1289	2.1
In transit, train	1751	3.0	1263	0.8	-1	0.0	1443	1.7	1584	5.5
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1765	77.1	1320	79.6	1257	91.5	1434	74.4	1435	322.6
In transit, bus	2842	0.4	2245	1.4	2245	1.8	2277	1.5	2303	5.1
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1867	1.3	1384	0.3	-1	0.0	1529	0.7	1691	2.3
Indoors, public garage	1165	0.4	833	0.4	826	1.0	1080	0.3	930	2.0
Outdoors, in a parking lot	1003	1.9	781	5.0	740	7.8	811	2.2	791	16.9
Outdoors, along a roadway	1624	31.8	1184	36.6	1134	47.2	1325	27.4	1292	143.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.1	-1	0.0	1094	0.1
Outdoors, service station	-1	0.0	-1	0.1	0	0.2	-1	0.0	0	0.2
Indoors, residential garage	-1	0.0	1148	0.2	1100	0.3	-1	0.0	1119	0.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	613	1883.4	455	1895.1	435	1874.8	519	1950.2	506	7603.5
Indoors, office	712	21.4	524	8.7	491	4.2	572	12.5	620	46.8
Indoors, store	733	18.7	559	31.7	524	63.2	591	14.9	571	128.5
Indoors, restaurant	1249	15.9	964	20.8	921	22.6	998	19.3	1018	78.6
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	-1	0.0	612	0.9	578	1.3	-1	0.0	591	2.2
Indoors, church	532	30.7	384	28.8	359	19.2	418	34.5	430	113.1
Indoors, shopping mall	3637	2.3	2823	6.3	2594	4.5	2917	7.8	2897	20.9
Indoors, auditorium	202	1.1	157	3.3	145	2.3	163	4.0	161	10.7
Indoors, health care facility	598	20.9	433	12.0	407	5.8	484	15.6	509	54.3
Indoors, public building	672	2.9	478	6.7	454	6.7	504	5.3	503	21.6
Indoors, other location	1471	45.7	1074	21.6	992	12.1	1206	30.8	1267	110.1
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1040	2.5	770	15.2	735	27.2	822	2.1	767	47.0
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	481	1.4	378	4.0	359	5.0	385	4.6	383	15.0
Outdoors, park/golf course	-1	0.0	393	3.3	383	5.3	-1	0.0	387	8.5
Outdoors, other location	-1	0.0	883	2.2	835	4.0	-1	0.0	852	6.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1809	80.4	1326	65.0	1277	64.8	1508	75.7	1499	286.0
In transit, bus	-1	0.0	2307	1.8	2154	2.7	-1	0.0	2214	4.5
In transit, truck	2147	76.7	1579	91.6	1472	109.6	1787	66.4	1711	344.3
In transit, van	1612	9.3	1234	2.5	-1	0.0	1318	5.3	1466	17.1
Indoors, public garage	1218	31.0	847	25.0	800	12.6	1019	35.9	1011	104.4
Outdoors, in a parking lot	1125	9.2	793	22.6	747	22.6	878	21.4	844	75.8
Outdoors, along a roadway	1557	148.5	1177	191.4	1127	234.6	1295	173.5	1264	748.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1619	60.0	1152	20.3	991	5.5	1273	34.7	1412	120.4
Outdoors, service station	0	0.1	0	3.6	0	5.7	0	0.5	0	9.8
Indoors, residential garage	1513	10.1	1084	4.4	1053	0.3	1327	5.5	1364	20.2
Indoors, in a repair shop	-1	0.0	1904	0.9	1812	1.5	-1	0.0	1848	2.4
Indoors, home	576	1250.0	419	1215.5	400	1159.1	494	1300.9	474	4925.5
Indoors, office	688	70.9	516	74.7	483	80.8	547	46.7	556	273.0
Indoors, store	762	17.1	562	10.8	531	4.9	627	12.8	652	45.6
Indoors, restaurant	1378	41.1	1027	19.1	956	13.3	1186	33.3	1203	106.8
Indoors, mfg. facility	864	9.2	642	39.9	606	90.1	696	32.1	645	171.2
Indoors, school	823	3.9	611	11.2	571	7.8	656	13.6	642	36.4
Indoors, church	508	31.5	382	17.9	367	6.0	433	24.1	447	79.5
Indoors, shopping mall	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, auditorium	236	7.8	167	26.6	163	47.2	207	3.9	173	85.5
Indoors, health care facility	-1	0.0	458	4.1	436	8.5	-1	0.0	443	12.5
Indoors, public building	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, other location	1476	50.3	1064	21.7	939	7.7	1198	32.4	1279	112.2
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	1761	55.9	1345	114.2	1265	130.2	1455	64.7	1400	365.0
Outdoors, residential grounds	1067	8.5	766	22.6	732	21.1	867	19.6	819	71.7
Outdoors, school grounds	1909	0.2	1401	0.6	1297	0.4	1552	0.8	1489	2.1
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	488	4.0	378	11.2	354	9.7	392	13.6	389	38.5
Outdoors, other location	1112	184.2	837	164.9	795	161.7	941	190.7	928	701.4
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1893	44.2	1352	61.5	1276	76.9	1574	55.3	1480	238.0
In transit, bus	3264	19.1	2335	14.7	2201	8.4	2638	19.8	2700	62.1
In transit, truck	1966	0.2	1581	1.2	1495	1.9	1581	0.7	1563	4.0
In transit, van	2029	3.2	1354	2.3	1252	2.3	1597	2.5	1600	10.3
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1132	8.7	805	9.5	750	9.4	934	8.3	900	35.9
Outdoors, along a roadway	1684	126.3	1202	140.6	1130	172.7	1410	121.7	1333	561.2
In transit, motorcycle	2188	3.3	1471	1.2	1424	0.3	1853	2.1	1929	6.8
Indoors, service station	-1	0.0	-1	0.1	-1	0.1	-1	0.0	1080	0.1
Outdoors, service station	0	0.3	0	0.6	0	0.8	0	0.2	0	2.0
Indoors, residential garage	-1	0.1	1203	0.6	1118	0.7	1549	0.3	1269	1.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	583	1418.3	434	1442.3	420	1463.7	499	1437.7	483	5762.0
Indoors, office	804	4.2	532	3.7	486	7.1	655	2.6	597	17.6
Indoors, store	835	26.8	576	24.6	529	27.6	691	24.2	658	103.1
Indoors, restaurant	1321	5.1	999	11.5	954	15.3	1155	10.3	1060	42.3
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	830	381.0	613	271.3	573	151.5	660	377.6	693	1181.5
Indoors, church	534	16.7	388	14.2	367	13.0	435	15.9	437	59.8
Indoors, shopping mall	3681	3.7	2889	3.7	2678	2.5	3199	3.5	3151	13.4
Indoors, auditorium	238	1.9	170	4.8	161	6.3	207	6.2	185	19.2
Indoors, health care facility	561	7.9	434	9.5	411	7.9	489	13.6	474	38.9
Indoors, public building	626	7.1	480	7.9	456	7.4	525	8.1	520	30.5
Indoors, other location	1481	8.6	1097	8.7	1051	8.9	1198	9.9	1205	36.0
Indoors, not specified	-1	0.0	1090	0.4	1091	0.6	-1	0.0	1090	1.0
Outdoors, construction	-1	0.0	1309	1.1	1220	1.8	-1	0.0	1255	2.9
Outdoors, residential grounds	1136	34.6	770	61.7	709	94.0	945	37.1	829	227.3
Outdoors, school grounds	1858	26.9	1347	28.7	1242	21.2	1502	33.6	1499	110.3
Outdoors, sports arena	566	8.4	404	14.1	381	17.8	477	11.4	438	51.8
Outdoors, park/golf course	607	2.8	389	21.3	360	42.6	494	4.6	387	71.4
Outdoors, other location	1178	0.3	799	22.1	775	45.5	950	0.9	786	68.7
Outdoors, not specified	1871	0.1	-1	0.0	-1	0.0	-1	0.1	1733	0.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1826	50.7	1338	71.4	1271	84.1	1489	52.2	1442	258.5
In transit, bus	3307	5.1	2326	6.5	2170	4.2	2606	8.3	2602	24.0
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1871	1.7	1339	2.9	1277	3.2	1566	5.0	1483	12.9
Indoors, public garage	-1	0.0	-1	0.1	825	0.3	-1	0.0	822	0.3
Outdoors, in a parking lot	1071	4.5	794	6.8	750	8.4	881	4.6	846	24.4
Outdoors, along a roadway	1643	31.0	1191	46.1	1136	63.3	1356	29.2	1282	169.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1266	0.4	1198	0.6	-1	0.0	1225	1.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.1	-1	0.0	0	0.1
Indoors, residential garage	1633	1.2	1151	1.0	1072	0.7	1333	1.2	1330	4.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	613	1805.8	450	1736.0	432	1728.9	516	1809.1	504	7079.8
Indoors, office	688	77.7	517	76.1	490	64.8	554	82.1	565	300.8
Indoors, store	750	23.7	567	30.6	526	37.1	628	21.1	604	112.5
Indoors, restaurant	1332	27.3	992	24.7	916	25.8	1113	24.8	1093	102.6
Indoors, mfg. facility	868	15.8	636	29.2	592	28.6	684	22.2	672	95.8
Indoors, school	822	61.2	612	62.4	573	40.7	656	73.6	673	237.9
Indoors, church	538	20.1	392	21.7	372	18.8	433	31.1	434	91.6
Indoors, shopping mall	3732	0.5	2853	2.1	2643	2.8	2980	1.8	2867	7.1
Indoors, auditorium	235	0.5	168	1.5	164	1.0	205	1.8	188	4.9
Indoors, health care facility	607	12.7	433	11.3	414	11.3	481	11.5	487	46.8
Indoors, public building	614	0.8	475	1.8	447	5.7	503	1.0	473	9.4
Indoors, other location	1423	0.8	1090	6.8	1059	10.5	1204	1.7	1097	19.8
Indoors, not specified	1694	0.6	1079	1.8	1025	3.5	1454	0.3	1126	6.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1060	8.7	779	26.9	734	44.8	917	15.1	805	95.5
Outdoors, school grounds	2034	2.2	1396	4.5	1306	2.9	1622	5.4	1553	15.0
Outdoors, sports arena	-1	0.0	409	2.6	384	4.0	491	0.2	397	6.8
Outdoors, park/golf course	475	7.1	377	2.7	379	2.4	385	4.1	422	16.2
Outdoors, other location	1015	0.1	845	6.0	796	9.4	811	0.5	817	16.0
Outdoors, not specified	-1	0.0	-1	0.1	1229	0.1	-1	0.0	1256	0.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Boston: City-wide, Demographic Group=All persons

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1843	108.4	1341	104.2	1274	102.7	1526	106.6	1500	421.8
In transit, bus	3273	5.3	2335	5.1	2194	4.0	2633	5.7	2637	20.1
In transit, truck	2188	8.3	1588	8.1	1491	7.4	1783	7.7	1770	31.5
In transit, van	1776	2.8	1296	3.8	1230	4.5	1421	4.0	1400	15.2
Indoors, public garage	1105	4.0	823	3.0	777	1.7	912	4.0	934	12.8
Outdoors, in a parking lot	1076	6.8	792	10.6	751	13.1	885	7.8	847	38.3
Outdoors, along a roadway	1625	41.8	1185	64.1	1128	84.7	1342	49.5	1274	240.2
In transit, motorcycle	2198	0.2	1448	0.7	1380	1.5	1861	0.1	1470	2.5
Indoors, service station	1575	3.9	1184	2.3	1133	1.2	1284	3.2	1354	10.6
Outdoors, service station	0	0.1	0	0.5	0	0.8	0	0.2	0	1.6
Indoors, residential garage	1494	1.0	1107	1.0	1055	0.9	1270	1.4	1237	4.2
Indoors, in a repair shop	2424	2.1	1814	0.7	-1	0.0	1942	1.2	2175	3.9
Indoors, home	600	1563.1	443	1547.2	427	1545.8	508	1589.2	495	6245.2
Indoors, office	702	154.4	519	121.8	485	96.7	564	143.2	580	516.2
Indoors, store	765	42.4	569	45.2	533	49.1	632	42.2	621	179.0
Indoors, restaurant	1324	30.4	983	28.8	930	27.9	1105	28.4	1090	115.5
Indoors, mfg. facility	853	12.2	627	20.0	593	23.7	684	14.8	667	70.7
Indoors, school	830	69.7	614	71.0	576	53.7	662	84.4	675	278.8
Indoors, church	535	12.1	389	12.9	368	12.6	436	14.7	431	52.4
Indoors, shopping mall	3796	3.0	2883	2.8	2687	2.3	3159	3.0	3166	11.2
Indoors, auditorium	231	5.9	168	5.9	161	6.6	193	6.8	188	25.3
Indoors, health care facility	567	20.1	412	18.8	389	17.1	461	21.4	461	77.3
Indoors, public building	653	5.1	476	6.9	443	9.0	542	5.4	512	26.4
Indoors, other location	1444	35.1	1051	32.1	1010	29.3	1189	32.6	1183	129.2
Indoors, not specified	1392	2.2	1039	1.2	1058	0.7	1154	1.4	1212	5.5
Outdoors, construction	1772	0.9	1339	2.1	1253	2.3	1458	1.4	1391	6.7
Outdoors, residential grounds	1070	8.0	768	28.5	724	50.4	881	12.8	785	99.7
Outdoors, school grounds	1819	2.6	1350	4.9	1267	4.9	1473	4.2	1430	16.7
Outdoors, sports arena	538	1.5	395	4.9	379	7.9	453	1.7	407	16.0
Outdoors, park/golf course	530	2.0	393	10.9	368	20.5	447	3.6	392	37.1
Outdoors, other location	1132	3.8	818	12.9	790	23.5	949	4.7	843	45.0
Outdoors, not specified	1745	0.1	1273	0.2	1178	0.3	1432	0.2	1343	0.8
In transit, train	2043	0.6	1193	0.4	986	0.4	1692	0.4	1549	1.8
In transit, airplane	-1	0.0	0	0.3	0	0.7	-1	0.0	0	0.9

Chicago: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1214	82.4	1009	93.3	991	100.5	1153	86.2	1085	362.3
In transit, bus	2253	7.6	1822	5.7	1813	4.1	2131	7.5	2045	24.9
In transit, truck	1496	2.8	1233	6.6	1217	7.8	1431	4.3	1301	21.4
In transit, van	1236	3.5	1003	5.3	993	5.1	1159	4.2	1082	18.2
Indoors, public garage	726	3.3	607	1.9	607	1.2	686	2.9	675	9.2
Outdoors, in a parking lot	719	12.6	592	12.6	579	14.0	680	12.6	641	51.9
Outdoors, along a roadway	1089	45.3	875	69.3	854	84.8	1011	50.2	934	249.7
In transit, motorcycle	1402	0.4	1045	0.8	1025	1.5	1297	0.3	1111	3.0
Indoors, service station	1138	2.4	912	1.7	887	1.1	1072	2.3	1030	7.5
Outdoors, service station	0	0.1	0	0.4	0	0.8	0	0.1	0	1.4
Indoors, residential garage	1003	0.8	801	0.9	789	0.7	948	1.0	887	3.4
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, home	420	1587.8	385	1545.0	384	1534.9	422	1607.8	403	6275.5
Indoors, office	485	77.0	404	81.3	403	84.9	462	79.8	438	323.0
Indoors, store	512	51.2	416	47.6	406	50.8	476	49.8	453	199.5
Indoors, restaurant	893	31.0	734	28.4	709	29.7	841	30.4	796	119.5
Indoors, mfg. facility	595	24.3	501	25.9	503	27.4	568	24.7	540	102.3
Indoors, school	581	130.0	490	101.7	490	66.6	562	133.2	539	431.5
Indoors, church	369	13.5	304	13.6	302	12.0	363	14.5	336	53.5
Indoors, shopping mall	2484	3.4	2074	2.7	2009	2.4	2258	3.5	2229	12.0
Indoors, auditorium	156	4.1	123	7.4	121	7.3	147	5.6	134	24.4
Indoors, health care facility	379	21.2	326	19.8	327	16.3	365	22.6	351	79.8
Indoors, public building	427	5.8	363	8.3	358	9.8	409	6.5	384	30.4
Indoors, other location	944	20.3	831	26.4	830	29.8	920	22.8	874	99.4
Indoors, not specified	920	0.5	788	0.4	790	0.6	795	0.4	824	1.9
Outdoors, construction	1209	1.7	990	2.5	969	2.9	1136	2.2	1057	9.3
Outdoors, residential grounds	692	14.2	560	35.9	551	51.2	629	17.2	582	118.5
Outdoors, school grounds	1183	5.9	966	6.7	942	6.1	1082	6.8	1041	25.5
Outdoors, sports arena	354	0.8	287	4.6	281	8.3	321	1.0	289	14.6
Outdoors, park/golf course	334	3.1	282	13.8	275	21.6	307	4.3	285	42.8
Outdoors, other location	765	2.9	618	12.7	609	22.8	718	3.1	631	41.5
Outdoors, not specified	1130	0.2	1061	0.3	1181	0.3	1053	0.2	1110	1.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	0.3	0	0.7	-1	0.0	0	1.0

Chicago: City-wide, Demographic Group=African americans

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1191	86.2	996	67.2	1015	71.7	1163	77.3	1099	302.4
In transit, bus	2042	7.9	1789	15.8	1830	14.8	2067	12.6	1909	51.1
In transit, truck	-1	0.0	1150	2.6	1193	6.0	-1	0.0	1180	8.6
In transit, van	-1	0.0	992	0.2	959	0.4	-1	0.0	969	0.6
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	660	12.8	589	9.5	608	12.6	640	10.3	626	45.2
Outdoors, along a roadway	1049	24.9	858	59.0	875	88.5	991	29.4	909	201.7
In transit, motorcycle	1384	0.2	1006	0.8	986	0.6	1254	0.6	1101	2.2
Indoors, service station	-1	0.0	871	0.5	918	1.1	-1	0.0	904	1.6
Outdoors, service station	-1	0.0	0	0.3	0	0.6	-1	0.0	0	0.9
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	1609	0.1	1721	0.3	-1	0.0	1687	0.5
Indoors, home	415	1741.0	370	1691.7	381	1664.0	416	1764.5	396	6861.1
Indoors, office	533	0.8	405	27.4	410	51.8	547	3.6	415	83.6
Indoors, store	514	12.6	415	20.0	418	24.8	508	13.7	451	71.1
Indoors, restaurant	834	19.8	714	5.5	753	2.8	820	15.2	809	43.3
Indoors, mfg. facility	580	47.9	477	18.7	497	19.1	551	33.3	542	119.1
Indoors, school	588	57.9	484	101.1	497	69.9	577	96.5	533	325.4
Indoors, church	351	51.8	283	35.3	284	27.6	338	49.8	321	164.6
Indoors, shopping mall	2350	0.3	1941	2.3	1998	1.7	2069	1.3	2010	5.5
Indoors, auditorium	158	0.5	124	3.5	121	2.3	148	2.1	131	8.4
Indoors, health care facility	334	18.4	294	42.2	311	47.5	315	28.3	310	136.4
Indoors, public building	402	0.3	334	3.7	344	5.6	358	1.0	343	10.7
Indoors, other location	829	71.5	771	25.0	826	20.3	833	51.2	821	167.9
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	722	2.1	552	25.8	554	41.8	679	6.2	568	75.9
Outdoors, school grounds	1115	1.8	923	6.7	993	4.7	1024	5.3	989	18.5
Outdoors, sports arena	349	1.2	271	9.3	273	6.2	317	5.6	287	22.4
Outdoors, park/golf course	-1	0.0	264	2.8	269	6.2	-1	0.0	267	9.0
Outdoors, other location	687	0.1	606	4.6	618	9.6	677	0.1	615	14.4
Outdoors, not specified	-1	0.0	-1	0.1	-1	0.0	-1	0.0	1007	0.1
In transit, train	-1	0.0	860	2.4	896	5.5	-1	0.0	885	7.9
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1204	73.5	986	67.7	969	73.0	1164	69.9	1082	284.1
In transit, bus	2040	6.4	1755	12.3	1741	12.3	2036	9.5	1862	40.6
In transit, truck	-1	0.0	1146	2.4	1163	5.6	-1	0.0	1158	8.0
In transit, van	1201	1.2	918	4.6	887	3.7	1093	3.2	980	12.8
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	667	11.0	577	10.6	573	12.9	632	10.1	611	44.6
Outdoors, along a roadway	1002	30.9	837	93.5	830	110.7	938	55.9	871	291.1
In transit, motorcycle	1370	0.1	1000	0.6	935	0.5	1243	0.4	1075	1.6
Indoors, service station	-1	0.0	851	0.4	869	1.0	-1	0.0	863	1.5
Outdoors, service station	-1	0.0	0	0.3	0	0.6	-1	0.0	0	0.9
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	1627	0.1	1719	0.3	-1	0.0	1691	0.4
Indoors, home	420	1783.5	370	1679.9	368	1651.5	417	1784.8	395	6899.6
Indoors, office	511	1.4	404	30.0	400	54.4	513	5.4	410	91.2
Indoors, store	522	10.7	408	21.4	400	28.5	509	12.5	439	73.2
Indoors, restaurant	852	17.6	699	6.4	697	3.4	810	14.3	802	41.6
Indoors, mfg. facility	587	41.9	476	16.8	487	17.6	551	29.2	543	105.5
Indoors, school	586	56.9	483	77.0	486	53.1	570	79.8	531	266.8
Indoors, church	356	40.2	279	37.0	273	29.4	336	42.5	315	149.1
Indoors, shopping mall	2410	0.3	1927	2.1	1918	1.5	2043	1.2	1976	5.0
Indoors, auditorium	155	0.4	121	3.2	114	2.1	146	1.9	127	7.6
Indoors, health care facility	347	15.4	299	36.8	305	41.9	325	24.1	313	118.1
Indoors, public building	404	0.3	325	3.3	326	5.1	354	1.0	331	9.6
Indoors, other location	828	62.0	769	24.3	792	20.3	835	45.7	816	152.2
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	655	3.4	546	28.5	530	46.4	649	7.0	550	85.3
Outdoors, school grounds	1134	1.3	918	4.8	975	3.5	1021	3.8	983	13.4
Outdoors, sports arena	347	1.1	265	8.9	258	6.5	314	5.1	278	21.6
Outdoors, park/golf course	-1	0.0	261	2.5	258	5.6	-1	0.0	259	8.1
Outdoors, other location	685	0.3	590	6.2	588	11.5	627	0.8	592	18.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	1014	0.1
In transit, train	-1	0.0	869	2.2	872	5.1	-1	0.0	871	7.3
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1153	42.0	973	53.1	956	63.1	1089	43.8	1030	202.0
In transit, bus	2231	7.6	1727	5.8	1666	3.7	2073	7.8	1980	24.9
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	969	1.8	928	2.9	-1	0.0	944	4.6
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	689	6.0	571	16.0	550	20.3	654	8.6	591	51.0
Outdoors, along a roadway	1083	37.8	862	58.3	830	64.3	1017	46.7	927	207.1
In transit, motorcycle	-1	0.0	1004	0.6	980	1.1	-1	0.0	988	1.7
Indoors, service station	-1	0.0	-1	0.1	808	0.1	-1	0.0	817	0.2
Outdoors, service station	-1	0.0	0	0.2	0	0.3	-1	0.0	0	0.5
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	418	1843.3	376	1828.7	374	1830.3	416	1873.7	396	7376.0
Indoors, office	545	6.1	425	2.4	372	1.8	551	4.5	506	14.8
Indoors, store	499	44.7	411	42.8	413	58.1	459	40.1	443	185.7
Indoors, restaurant	869	31.2	730	10.9	712	6.3	840	24.0	825	72.5
Indoors, mfg. facility	596	25.3	494	20.8	493	34.1	577	17.7	535	97.8
Indoors, school	572	72.5	484	69.9	489	36.3	553	87.9	531	266.6
Indoors, church	330	5.2	276	7.2	266	4.1	318	7.4	299	23.8
Indoors, shopping mall	2563	0.7	2039	2.5	2016	1.6	2302	2.1	2168	7.0
Indoors, auditorium	138	1.2	114	10.2	112	8.5	121	5.3	116	25.1
Indoors, health care facility	377	1.8	316	7.6	309	5.9	363	5.5	332	20.9
Indoors, public building	403	11.1	346	3.2	360	1.8	366	9.4	379	25.5
Indoors, other location	928	9.5	789	10.1	790	14.9	842	9.2	831	43.6
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	643	9.5	549	16.4	528	23.0	614	10.0	567	58.9
Outdoors, school grounds	1110	0.4	932	1.4	910	0.9	998	1.2	965	3.9
Outdoors, sports arena	-1	0.0	287	4.1	277	8.4	-1	0.0	280	12.4
Outdoors, park/golf course	319	4.1	286	2.3	272	3.3	273	3.0	290	12.8
Outdoors, other location	-1	0.0	595	7.7	573	12.9	736	0.1	582	20.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1197	68.7	980	81.5	964	85.2	1120	74.6	1057	310.0
In transit, bus	2219	2.4	1878	4.1	1831	4.1	2200	3.5	2002	14.1
In transit, truck	1503	2.3	1203	8.9	1212	15.4	1392	3.4	1252	30.0
In transit, van	1219	0.2	969	1.3	987	1.4	1086	0.6	1013	3.6
Indoors, public garage	-1	0.0	613	0.5	601	0.8	-1	0.0	606	1.2
Outdoors, in a parking lot	725	24.2	586	15.7	576	15.9	684	21.6	655	77.5
Outdoors, along a roadway	1081	50.1	867	78.0	850	101.1	1001	53.3	924	282.5
In transit, motorcycle	-1	0.0	1031	4.7	1013	9.6	-1	0.0	1019	14.3
Indoors, service station	-1	0.0	869	0.5	865	0.9	-1	0.0	874	1.4
Outdoors, service station	0	0.3	0	0.6	0	0.9	0	0.3	0	2.1
Indoors, residential garage	990	0.8	732	1.4	726	0.9	846	1.3	812	4.4
Indoors, in a repair shop	-1	0.0	-1	0.1	1709	0.1	-1	0.0	1687	0.2
Indoors, home	419	1626.5	380	1601.2	378	1600.0	418	1648.0	399	6475.6
Indoors, office	459	51.3	391	53.4	396	50.6	435	55.0	420	210.2
Indoors, store	507	31.7	417	44.5	408	53.6	478	34.8	445	164.6
Indoors, restaurant	891	54.4	734	37.3	711	25.2	838	54.4	813	171.4
Indoors, mfg. facility	598	38.1	500	32.7	507	27.3	572	38.4	549	136.5
Indoors, school	587	112.0	489	81.0	492	55.7	566	109.7	544	358.4
Indoors, church	368	10.8	302	14.7	301	12.7	360	13.8	331	52.0
Indoors, shopping mall	2429	5.8	2076	2.4	2013	1.8	2184	5.3	2240	15.4
Indoors, auditorium	140	0.6	120	3.5	116	3.0	131	2.1	123	9.2
Indoors, health care facility	368	38.8	317	28.3	321	22.8	354	37.6	344	127.5
Indoors, public building	418	6.8	356	3.0	355	2.3	390	5.4	390	17.6
Indoors, other location	914	15.3	819	28.5	819	31.0	891	22.2	850	97.0
Indoors, not specified	910	0.3	837	0.3	840	0.7	746	0.2	840	1.5
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	714	11.5	562	28.5	558	39.9	652	13.3	592	93.2
Outdoors, school grounds	1170	5.4	965	7.0	935	7.1	1096	6.7	1033	26.3
Outdoors, sports arena	-1	0.0	287	4.4	281	9.1	-1	0.0	283	13.4
Outdoors, park/golf course	373	0.5	280	11.1	273	18.7	345	1.5	280	31.7
Outdoors, other location	-1	0.0	621	4.9	616	10.3	-1	0.0	617	15.2
Outdoors, not specified	1113	1.0	897	0.2	-1	0.0	984	0.7	1039	2.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1212	85.2	1004	92.9	996	97.8	1156	88.2	1087	364.1
In transit, bus	2252	8.4	1806	5.6	1830	4.4	2127	7.7	2048	26.0
In transit, truck	1508	1.7	1210	4.7	1190	5.9	1435	2.9	1279	15.2
In transit, van	1223	7.9	993	9.8	991	9.2	1152	8.6	1082	35.5
Indoors, public garage	722	8.0	594	3.5	582	1.3	682	6.8	676	19.6
Outdoors, in a parking lot	703	10.9	589	11.4	583	12.7	663	11.1	632	46.1
Outdoors, along a roadway	1066	41.1	860	77.8	848	93.3	985	52.2	912	264.4
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
Indoors, service station	1057	0.5	897	0.4	916	0.3	998	0.5	975	1.8
Outdoors, service station	-1	0.0	0	0.1	0	0.2	-1	0.1	0	0.4
Indoors, residential garage	998	1.3	805	0.9	778	0.7	976	1.4	914	4.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	418	1612.4	381	1552.7	383	1539.3	420	1626.9	401	6331.4
Indoors, office	486	70.2	402	83.2	401	83.7	466	78.4	436	315.4
Indoors, store	511	45.9	411	44.0	406	51.0	475	43.0	450	183.9
Indoors, restaurant	891	20.4	721	20.5	703	21.1	836	21.0	787	83.0
Indoors, mfg. facility	583	26.3	491	29.5	499	31.3	556	27.1	530	114.2
Indoors, school	580	108.4	484	83.0	489	61.3	561	106.8	537	359.4
Indoors, church	365	23.9	298	18.8	296	14.2	356	24.2	334	81.1
Indoors, shopping mall	2503	3.5	2043	2.1	2035	1.6	2224	3.4	2251	10.5
Indoors, auditorium	160	4.1	124	6.7	122	5.6	151	5.9	137	22.3
Indoors, health care facility	380	17.5	317	18.8	320	16.1	359	19.8	344	72.2
Indoors, public building	443	5.5	361	10.9	359	14.4	419	6.5	382	37.3
Indoors, other location	902	28.7	824	26.6	834	27.3	906	28.3	868	110.9
Indoors, not specified	921	0.8	768	0.6	774	0.9	791	0.5	816	2.8
Outdoors, construction	1203	3.7	984	5.1	974	5.5	1132	4.8	1061	19.2
Outdoors, residential grounds	685	11.0	552	39.2	546	56.3	619	16.6	570	123.1
Outdoors, school grounds	1179	5.3	951	6.0	946	5.7	1076	5.8	1034	22.9
Outdoors, sports arena	-1	0.1	286	3.1	285	5.8	315	0.2	287	9.1
Outdoors, park/golf course	346	2.6	279	11.0	272	16.5	316	3.9	285	33.9
Outdoors, other location	750	5.1	612	14.4	607	23.5	715	5.5	636	48.5
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	-1	0.0	902	0.4	915	0.9	-1	0.0	911	1.3
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1221	103.8	1009	115.4	997	120.7	1168	109.9	1094	449.8
In transit, bus	2237	6.4	1786	6.8	1779	4.4	2103	8.1	1997	25.8
In transit, truck	1485	0.8	1207	4.3	1189	6.0	1453	1.5	1245	12.5
In transit, van	-1	0.0	981	1.4	966	2.5	-1	0.0	974	4.0
Indoors, public garage	738	0.4	626	0.4	629	0.3	708	0.4	677	1.5
Outdoors, in a parking lot	709	9.9	587	11.4	577	12.1	675	10.5	633	44.0
Outdoors, along a roadway	1086	47.0	874	66.3	858	81.8	1021	50.0	939	245.0
In transit, motorcycle	1431	1.6	1045	0.3	-1	0.0	1303	1.1	1341	3.0
Indoors, service station	-1	0.0	1014	0.1	1026	0.3	-1	0.0	1023	0.4
Outdoors, service station	-1	0.1	0	0.6	0	1.2	-1	0.1	0	2.0
Indoors, residential garage	-1	0.1	856	0.6	864	1.0	955	0.2	877	1.9
Indoors, in a repair shop	-1	0.0	1272	0.1	-1	0.1	1401	0.1	1326	0.4
Indoors, home	416	1548.5	383	1482.0	386	1460.1	421	1560.6	402	6051.1
Indoors, office	486	130.3	405	121.3	408	123.0	464	128.2	442	502.7
Indoors, store	508	49.3	414	46.2	406	50.7	477	48.3	451	194.5
Indoors, restaurant	887	22.4	728	30.1	712	33.9	836	24.6	779	111.0
Indoors, mfg. facility	594	31.7	499	28.2	501	27.9	569	31.0	543	118.9
Indoors, school	571	121.2	487	103.3	492	57.3	557	135.4	535	417.2
Indoors, church	358	7.0	307	10.9	311	12.1	357	8.2	329	38.2
Indoors, shopping mall	2466	2.0	2060	4.7	1991	5.8	2368	2.9	2145	15.3
Indoors, auditorium	151	3.2	123	8.2	123	12.0	141	3.8	129	27.1
Indoors, health care facility	406	17.6	336	20.0	339	20.0	386	18.8	365	76.3
Indoors, public building	440	3.5	359	6.3	358	7.7	425	4.5	385	22.0
Indoors, other location	966	27.3	841	23.7	851	22.3	939	27.3	904	100.6
Indoors, not specified	891	0.5	774	0.4	759	0.3	813	0.5	816	1.7
Outdoors, construction	-1	0.0	915	0.5	902	1.1	-1	0.0	906	1.6
Outdoors, residential grounds	690	16.6	557	41.7	551	64.0	627	17.4	579	139.6
Outdoors, school grounds	1180	4.9	964	5.9	949	4.4	1086	6.4	1046	21.6
Outdoors, sports arena	373	0.5	280	7.0	273	11.9	339	1.5	283	20.8
Outdoors, park/golf course	329	2.8	277	17.7	274	24.8	304	5.7	282	50.9
Outdoors, other location	709	0.6	610	17.2	608	35.4	629	1.0	610	54.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	1.5	0	2.8	-1	0.0	0	4.3

Chicago: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1300	48.3	1044	78.2	1021	100.1	1261	53.6	1121	280.3
In transit, bus	2617	4.4	2117	1.2	1488	0.6	2713	3.1	2515	9.3
In transit, truck	1456	24.4	1285	13.5	1363	7.4	1395	21.7	1391	67.0
In transit, van	1183	1.5	936	9.1	900	6.6	1071	5.8	976	22.9
Indoors, public garage	-1	0.0	656	0.5	650	1.1	-1	0.0	652	1.5
Outdoors, in a parking lot	793	3.5	611	9.5	593	15.0	759	3.5	639	31.6
Outdoors, along a roadway	1157	50.6	909	65.6	878	76.7	1089	50.7	988	243.7
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1231	19.4	1057	4.2	-1	0.0	1266	13.5	1224	37.2
Outdoors, service station	-1	0.0	0	1.0	0	2.3	-1	0.0	0	3.4
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	416	1557.3	389	1506.7	387	1485.6	426	1595.2	405	6144.9
Indoors, office	490	83.7	411	95.1	412	126.7	468	77.8	440	383.1
Indoors, store	560	0.5	421	13.9	408	26.5	546	1.5	419	42.4
Indoors, restaurant	942	35.1	758	43.3	724	54.5	902	34.0	815	167.0
Indoors, mfg. facility	-1	0.0	484	1.4	477	3.2	-1	0.0	479	4.6
Indoors, school	582	239.6	498	137.7	497	81.5	569	212.8	550	671.5
Indoors, church	394	10.0	317	8.4	301	9.8	402	9.7	355	37.8
Indoors, shopping mall	2438	0.2	1956	0.7	1906	0.4	2033	0.5	2016	1.8
Indoors, auditorium	159	5.2	124	23.4	120	17.2	144	14.7	131	60.5
Indoors, health care facility	416	13.8	321	13.5	314	8.5	377	15.7	362	51.5
Indoors, public building	-1	0.0	351	5.2	346	9.4	-1	0.0	348	14.6
Indoors, other location	796	3.7	817	34.1	831	31.9	855	16.6	829	86.3
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	998	2.1	983	4.8	-1	0.0	988	6.8
Outdoors, residential grounds	662	47.9	568	58.4	553	56.6	634	58.2	602	221.1
Outdoors, school grounds	1115	2.5	935	10.2	913	7.4	992	7.1	960	27.1
Outdoors, sports arena	-1	0.0	297	1.6	288	2.8	-1	0.0	292	4.4
Outdoors, park/golf course	336	8.3	288	36.7	281	54.2	316	12.4	291	111.6
Outdoors, other location	-1	0.0	647	8.8	647	17.2	-1	0.0	647	26.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1212	55.1	987	64.9	986	73.0	1149	57.3	1073	250.4
In transit, bus	2224	11.8	1800	10.6	1829	7.0	2118	13.1	2021	42.5
In transit, truck	1496	1.9	1185	1.5	1199	1.9	1397	1.6	1322	6.9
In transit, van	1247	3.5	972	6.9	985	5.5	1123	5.4	1059	21.3
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	685	0.1
Outdoors, in a parking lot	703	6.1	575	7.2	572	9.1	657	6.2	619	28.6
Outdoors, along a roadway	1088	63.2	856	98.7	844	128.4	1010	67.3	922	357.6
In transit, motorcycle	1381	1.1	1016	0.4	981	0.3	1277	0.8	1249	2.6
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	0	0.1	-1	0.0	-1	0.0	0	0.1	0	0.3
Indoors, residential garage	990	0.3	781	1.0	766	1.0	937	0.7	833	3.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	412	1619.2	376	1582.8	383	1581.6	415	1642.9	397	6426.6
Indoors, office	510	1.3	381	4.9	385	8.8	463	1.4	401	16.4
Indoors, store	512	23.1	404	25.1	400	27.7	472	23.4	444	99.3
Indoors, restaurant	893	9.3	722	14.4	703	18.8	847	10.1	769	52.6
Indoors, mfg. facility	-1	0.1	484	0.2	456	0.1	592	0.2	527	0.6
Indoors, school	576	283.1	484	211.9	493	139.3	560	284.1	537	918.3
Indoors, church	362	12.9	295	11.7	295	10.9	356	13.1	329	48.6
Indoors, shopping mall	2481	2.3	2019	2.5	1997	2.6	2223	2.6	2173	10.0
Indoors, auditorium	153	3.1	120	7.5	119	6.4	143	5.2	130	22.2
Indoors, health care facility	381	11.3	313	12.4	325	10.1	353	12.9	343	46.8
Indoors, public building	410	2.0	368	3.8	376	5.0	397	2.5	383	13.4
Indoors, other location	1004	5.8	797	8.5	808	9.2	925	6.5	868	30.1
Indoors, not specified	-1	0.0	845	0.3	859	0.6	-1	0.0	855	0.9
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	689	25.1	547	52.6	544	75.7	631	28.4	579	181.9
Outdoors, school grounds	1167	13.5	949	15.2	948	14.6	1068	15.1	1030	58.5
Outdoors, sports arena	350	2.3	282	6.8	282	9.7	320	3.3	295	22.1
Outdoors, park/golf course	342	2.3	276	17.7	273	32.2	319	3.2	280	55.4
Outdoors, other location	-1	0.1	601	13.8	602	28.2	741	0.2	603	42.3
Outdoors, not specified	-1	0.1	983	0.3	978	0.2	1153	0.2	1047	0.8
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1165	160.9	992	121.3	1000	117.5	1114	146.9	1078	546.7
In transit, bus	2303	3.8	1884	0.8	-1	0.0	2321	2.6	2265	7.1
In transit, truck	1498	5.3	1231	19.0	1284	27.9	1391	8.3	1301	60.5
In transit, van	-1	0.0	1087	3.6	1080	6.3	-1	0.0	1083	10.0
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	701	6.6	547	15.9	540	16.1	639	9.9	584	48.4
Outdoors, along a roadway	939	93.5	840	115.4	843	95.2	921	116.0	885	420.2
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	967	0.3	935	0.3	1241	0.1	1009	0.7
Outdoors, service station	-1	0.0	0	2.3	0	5.2	0	0.1	0	7.7
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	417	1572.2	376	1492.2	375	1434.7	420	1597.3	398	6096.4
Indoors, office	468	57.6	394	100.0	396	142.2	447	64.6	416	364.4
Indoors, store	516	8.2	416	12.6	413	13.7	486	10.2	450	44.8
Indoors, restaurant	853	21.8	725	15.6	708	15.1	809	19.7	783	72.2
Indoors, mfg. facility	-1	0.0	480	30.9	482	61.3	-1	0.0	481	92.1
Indoors, school	577	135.7	482	82.9	482	38.5	558	130.9	541	387.9
Indoors, church	364	0.7	292	8.6	297	13.7	347	2.0	301	24.9
Indoors, shopping mall	2861	0.4	2083	1.3	1951	0.8	2599	1.1	2291	3.5
Indoors, auditorium	146	2.5	125	18.6	124	37.5	146	1.8	126	60.4
Indoors, health care facility	405	5.4	321	6.4	356	5.5	346	6.4	355	23.8
Indoors, public building	451	16.2	360	19.3	351	10.6	420	22.2	400	68.4
Indoors, other location	886	44.9	812	28.0	852	26.0	837	40.6	851	139.5
Indoors, not specified	-1	0.0	894	0.1	-1	0.1	1127	0.1	998	0.3
Outdoors, construction	-1	0.0	977	5.0	980	11.4	-1	0.0	979	16.4
Outdoors, residential grounds	628	5.6	531	20.5	526	29.9	560	8.2	541	64.2
Outdoors, school grounds	1187	2.3	937	8.1	928	5.0	1071	6.8	1002	22.2
Outdoors, sports arena	339	7.6	282	11.3	278	16.4	302	5.6	293	40.9
Outdoors, park/golf course	339	3.6	276	7.6	266	14.7	329	3.0	284	28.9
Outdoors, other location	681	2.6	590	35.9	577	62.4	595	1.8	584	102.7
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	1302	2.6	948	0.6	-1	0.0	1183	1.8	1219	4.9
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1223	128.5	1016	134.0	994	131.7	1163	135.2	1098	529.4
In transit, bus	2255	1.4	1878	1.8	1891	3.1	2127	1.1	1990	7.4
In transit, truck	1475	20.1	1228	19.8	1217	24.0	1431	18.6	1331	82.5
In transit, van	1206	6.3	1022	8.3	993	8.3	1190	6.7	1091	29.5
Indoors, public garage	741	13.1	615	11.8	622	7.6	707	14.5	680	47.1
Outdoors, in a parking lot	725	11.9	599	15.2	585	18.1	697	13.2	642	58.5
Outdoors, along a roadway	1054	41.5	877	69.4	864	77.0	1003	51.6	930	239.5
In transit, motorcycle	-1	0.0	1157	0.5	1196	1.2	-1	0.0	1184	1.7
Indoors, service station	1078	15.9	893	9.6	884	5.6	1035	14.8	1002	45.9
Outdoors, service station	0	0.3	0	0.5	0	0.6	0	0.3	0	1.6
Indoors, residential garage	966	2.9	803	4.8	785	3.1	936	4.3	869	15.1
Indoors, in a repair shop	1653	10.1	1387	1.9	1745	0.1	1604	7.2	1609	19.3
Indoors, home	412	1406.6	382	1373.0	376	1350.5	416	1435.1	397	5565.1
Indoors, office	483	240.5	404	206.1	413	181.4	469	236.0	446	864.0
Indoors, store	504	44.1	419	45.9	417	59.8	481	40.3	451	190.1
Indoors, restaurant	853	40.1	734	31.7	733	33.0	820	36.9	790	141.7
Indoors, mfg. facility	586	33.7	494	53.5	512	67.7	562	38.4	530	193.3
Indoors, school	577	20.1	479	16.3	471	11.1	555	20.8	530	68.4
Indoors, church	365	8.5	312	11.9	309	9.8	367	11.1	337	41.3
Indoors, shopping mall	2648	1.5	2071	1.1	1992	0.7	2440	1.6	2354	4.9
Indoors, auditorium	153	10.1	124	3.0	119	2.3	147	7.4	144	22.7
Indoors, health care facility	402	14.3	331	19.8	332	20.5	388	16.7	359	71.2
Indoors, public building	417	7.4	359	12.3	357	19.6	397	6.4	373	45.8
Indoors, other location	976	46.5	835	47.3	848	57.2	932	44.9	895	195.8
Indoors, not specified	921	7.0	798	1.9	743	0.6	907	5.6	893	15.1
Outdoors, construction	1193	4.9	980	9.0	984	10.2	1142	7.2	1051	31.3
Outdoors, residential grounds	690	5.2	568	22.3	552	33.1	644	7.4	578	68.0
Outdoors, school grounds	1283	0.5	1017	0.9	994	0.8	1208	0.8	1106	2.9
Outdoors, sports arena	325	1.4	283	4.6	277	9.0	281	1.3	283	16.3
Outdoors, park/golf course	342	1.6	282	11.0	270	14.9	316	3.9	284	31.4
Outdoors, other location	747	12.5	624	30.5	616	38.5	722	17.3	653	98.8
Outdoors, not specified	-1	0.1	1167	0.5	1231	1.0	1209	0.1	1208	1.7
In transit, train	1383	1.7	971	1.3	927	2.0	1344	1.2	1144	6.1
In transit, airplane	-1	0.0	0	2.2	0	4.3	-1	0.0	0	6.5

Chicago: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1178	95.8	990	98.0	974	98.3	1127	99.9	1067	392.0
In transit, bus	2153	4.2	1734	1.9	1740	1.4	2063	3.3	1998	10.8
In transit, truck	1379	10.4	1150	1.6	-1	0.0	1306	7.5	1332	19.5
In transit, van	-1	0.0	1024	0.7	990	0.8	1338	0.2	1050	1.7
Indoors, public garage	747	0.4	623	0.4	630	0.2	709	0.5	685	1.4
Outdoors, in a parking lot	707	4.4	584	8.7	581	11.9	660	5.3	614	30.3
Outdoors, along a roadway	1045	30.3	864	51.8	848	65.1	980	35.5	911	182.8
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	937	0.1	935	0.2	-1	0.0	936	0.3
Outdoors, service station	-1	0.1	-1	0.0	-1	0.0	-1	0.1	0	0.2
Indoors, residential garage	957	1.3	820	0.3	-1	0.1	892	1.0	916	2.7
Indoors, in a repair shop	-1	0.1	1285	0.2	1256	0.2	1413	0.2	1340	0.7
Indoors, home	424	1851.8	382	1775.5	382	1754.4	423	1865.8	403	7247.6
Indoors, office	495	13.8	412	7.6	421	9.1	478	10.2	459	40.8
Indoors, store	511	35.8	415	52.4	410	70.4	477	36.3	442	194.9
Indoors, restaurant	899	21.4	728	21.7	708	23.2	854	22.4	796	88.8
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	573	19.4	484	41.2	486	30.4	563	34.6	520	125.6
Indoors, church	368	7.8	302	11.7	298	9.1	364	10.4	331	39.0
Indoors, shopping mall	2425	4.5	2002	2.2	1958	3.3	2182	3.2	2178	13.3
Indoors, auditorium	161	10.0	124	12.8	123	11.1	152	12.5	139	46.4
Indoors, health care facility	407	5.1	327	8.9	334	9.7	387	6.9	356	30.5
Indoors, public building	433	7.4	356	4.8	354	3.2	412	6.6	399	22.0
Indoors, other location	956	24.6	812	29.9	803	27.4	929	27.8	872	109.7
Indoors, not specified	-1	0.0	781	0.2	764	0.5	-1	0.0	769	0.7
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	654	4.2	545	23.5	542	31.6	598	10.0	558	69.2
Outdoors, school grounds	1215	0.5	976	2.4	936	2.6	1170	1.4	1018	6.9
Outdoors, sports arena	346	4.9	285	2.8	278	4.6	311	3.6	308	15.9
Outdoors, park/golf course	348	0.3	278	13.8	269	23.2	313	1.4	274	38.7
Outdoors, other location	796	1.0	606	8.8	607	15.8	736	1.2	619	26.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	1292	0.4	-1	0.1	-1	0.0	1206	0.3	1229	0.7
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1239	127.2	1022	116.6	997	115.8	1175	125.0	1113	484.5
In transit, bus	2240	4.6	1817	4.4	1823	4.1	2127	4.8	2010	18.0
In transit, truck	1470	4.5	1236	5.0	1209	4.7	1394	5.1	1326	19.4
In transit, van	-1	0.1	994	1.4	970	3.1	-1	0.1	985	4.7
Indoors, public garage	761	3.9	634	1.9	624	1.4	729	3.2	709	10.4
Outdoors, in a parking lot	708	5.3	601	9.9	589	12.7	680	6.3	628	34.2
Outdoors, along a roadway	1076	30.9	885	46.1	868	57.2	1003	33.9	938	168.0
In transit, motorcycle	-1	0.0	1030	4.3	984	8.7	-1	0.0	999	13.0
Indoors, service station	-1	0.1	941	0.2	984	0.1	1111	0.1	1036	0.5
Outdoors, service station	0	0.2	0	0.7	0	1.1	0	0.2	0	2.1
Indoors, residential garage	-1	0.1	-1	0.1	-1	0.0	1104	0.1	1057	0.3
Indoors, in a repair shop	-1	0.1	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, home	414	1454.4	384	1455.0	380	1457.9	419	1484.6	399	5851.9
Indoors, office	481	248.2	399	240.4	407	236.5	464	253.3	439	978.3
Indoors, store	508	60.4	413	69.2	408	69.0	473	66.6	448	265.2
Indoors, restaurant	882	47.5	731	37.5	714	40.8	846	43.9	799	169.7
Indoors, mfg. facility	602	13.7	511	15.7	516	13.6	594	15.8	556	58.8
Indoors, school	576	52.2	480	40.6	486	26.2	557	54.1	534	173.1
Indoors, church	360	12.0	299	14.8	290	12.4	354	14.3	325	53.5
Indoors, shopping mall	2536	3.9	2093	2.7	2050	1.6	2323	3.9	2303	12.1
Indoors, auditorium	151	4.5	122	6.0	121	6.0	143	5.4	133	21.9
Indoors, health care facility	371	35.7	322	31.3	327	27.1	363	36.2	348	130.3
Indoors, public building	443	6.1	361	6.9	355	7.6	422	6.2	392	26.9
Indoors, other location	960	39.9	826	32.4	826	33.0	920	37.2	888	142.5
Indoors, not specified	1027	0.4	828	0.3	786	0.2	944	0.5	924	1.4
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	655	2.2	568	17.4	560	27.1	594	3.9	570	50.6
Outdoors, school grounds	1279	0.3	995	1.5	965	2.5	1197	0.6	1020	4.8
Outdoors, sports arena	-1	0.1	280	5.6	269	10.8	353	0.2	274	16.6
Outdoors, park/golf course	357	0.7	285	6.7	280	11.0	333	1.2	288	19.6
Outdoors, other location	764	0.7	627	8.9	611	15.5	696	0.7	623	25.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.1	-1	0.0	913	0.1
In transit, train	1420	0.3	1147	0.5	1134	0.3	1393	0.5	1268	1.5
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1196	86.1	977	98.6	954	109.7	1136	92.9	1058	387.3
In transit, bus	2305	4.0	1696	12.2	1647	26.7	2269	2.9	1757	45.7
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1237	0.3	994	2.3	1029	1.5	1181	1.4	1064	5.4
Indoors, public garage	-1	0.1	-1	0.0	-1	0.0	-1	0.1	767	0.2
Outdoors, in a parking lot	695	8.5	552	28.9	536	48.4	640	10.9	566	96.7
Outdoors, along a roadway	1032	23.3	841	43.1	826	50.9	949	29.7	888	147.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	966	3.4	734	10.0	736	6.3	831	7.8	791	27.5
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	423	1889.6	379	1693.2	384	1579.6	422	1886.7	404	7049.1
Indoors, office	444	10.8	360	4.5	351	3.0	416	8.5	411	26.8
Indoors, store	482	29.1	396	36.6	402	42.2	434	30.0	425	137.9
Indoors, restaurant	937	16.9	740	7.0	683	4.6	932	12.3	873	40.8
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	540	5.9	449	26.9	446	17.3	510	20.0	473	70.1
Indoors, church	391	7.1	279	12.2	267	7.2	338	11.6	316	38.1
Indoors, shopping mall	2615	9.3	2185	1.0	-1	0.0	2640	6.8	2600	17.1
Indoors, auditorium	134	5.9	142	7.1	156	13.3	117	4.1	143	30.5
Indoors, health care facility	405	21.2	356	36.8	368	21.5	411	37.0	385	116.6
Indoors, public building	424	2.2	331	3.7	322	6.0	412	1.6	352	13.4
Indoors, other location	930	22.3	756	49.4	756	80.6	866	25.4	793	177.8
Indoors, not specified	1010	2.5	799	0.5	-1	0.0	925	1.7	955	4.7
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	669	6.9	554	78.2	554	121.5	593	13.1	560	219.7
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	289	6.4	288	14.7	-1	0.0	288	21.1
Outdoors, park/golf course	383	4.5	277	6.3	267	10.9	354	3.4	302	25.1
Outdoors, other location	-1	0.0	591	19.0	592	42.3	-1	0.0	592	61.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1230	144.4	1027	147.2	1020	144.8	1178	149.5	1114	585.9
In transit, bus	2234	11.8	1812	5.6	1804	3.3	2130	9.8	2076	30.5
In transit, truck	1458	17.5	1208	23.4	1206	19.4	1387	23.5	1310	83.8
In transit, van	1177	2.2	1016	9.0	1031	15.8	1117	3.1	1046	30.2
Indoors, public garage	798	2.1	652	4.2	654	2.7	771	4.0	713	12.9
Outdoors, in a parking lot	720	8.9	596	10.3	594	10.7	686	9.8	645	39.7
Outdoors, along a roadway	1070	41.6	881	57.9	880	72.6	1008	44.0	943	216.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1102	7.6	921	3.4	894	1.4	1073	6.2	1044	18.6
Outdoors, service station	-1	0.0	0	0.5	0	0.8	0	0.1	0	1.5
Indoors, residential garage	1122	0.2	818	0.3	784	0.5	1113	0.1	878	1.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	407	1347.7	378	1314.3	376	1277.2	415	1385.1	394	5324.4
Indoors, office	479	309.3	401	268.9	413	273.9	462	288.6	441	1140.6
Indoors, store	513	67.7	427	52.9	424	39.3	493	67.1	472	227.0
Indoors, restaurant	856	31.8	716	35.0	707	35.8	819	33.2	772	135.7
Indoors, mfg. facility	589	18.1	493	68.6	509	92.1	559	31.7	518	210.4
Indoors, school	579	5.8	489	26.1	503	34.5	574	13.6	516	79.9
Indoors, church	355	14.5	304	17.7	300	17.5	349	15.5	325	65.3
Indoors, shopping mall	2514	4.2	2209	1.1	2295	1.3	2395	3.1	2411	9.7
Indoors, auditorium	150	5.0	123	2.0	122	2.5	141	3.6	138	13.1
Indoors, health care facility	393	21.1	327	6.1	355	2.5	378	15.3	377	45.0
Indoors, public building	441	3.5	360	18.0	360	30.2	422	5.6	371	57.4
Indoors, other location	977	67.1	831	52.5	823	38.8	963	67.4	912	225.8
Indoors, not specified	975	8.1	798	2.2	742	0.6	908	6.0	920	16.9
Outdoors, construction	-1	0.0	970	2.7	964	4.6	-1	0.0	966	7.3
Outdoors, residential grounds	663	2.1	567	29.0	555	52.3	629	3.1	564	86.5
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	318	4.1	279	14.4	279	18.6	290	6.5	285	43.6
Outdoors, other location	746	12.9	627	9.9	641	12.3	715	12.1	686	47.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	1307	0.7	1050	0.1	-1	0.0	1237	0.5	1253	1.3
In transit, airplane	-1	0.0	0	0.8	0	1.8	-1	0.0	0	2.6

Chicago: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1169	85.5	961	79.0	956	86.9	1087	79.9	1044	331.3
In transit, bus	1997	2.0	1608	1.5	1620	1.4	1837	1.8	1790	6.7
In transit, truck	1366	6.4	1105	0.9	-1	0.0	1237	4.6	1297	11.9
In transit, van	1197	0.6	921	3.3	892	2.2	1076	2.2	975	8.4
Indoors, public garage	695	0.9	598	0.3	-1	0.1	703	0.7	680	2.0
Outdoors, in a parking lot	730	3.5	575	8.5	570	12.3	697	4.0	609	28.3
Outdoors, along a roadway	1058	37.7	854	38.3	839	46.8	985	34.2	927	157.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	994	0.2	901	0.1	948	0.1	972	0.1	959	0.6
Outdoors, service station	-1	0.0	0	0.6	0	1.3	-1	0.0	0	1.9
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	425	1900.2	382	1860.0	385	1812.9	425	1946.4	405	7519.5
Indoors, office	458	8.1	376	7.6	378	6.3	425	8.5	412	30.5
Indoors, store	494	34.3	409	34.6	407	38.2	467	34.2	443	141.4
Indoors, restaurant	904	14.0	720	21.5	703	24.5	846	16.1	775	76.1
Indoors, mfg. facility	-1	0.0	444	0.3	447	0.7	-1	0.0	446	1.0
Indoors, school	553	4.1	457	5.5	449	5.3	539	4.8	495	19.7
Indoors, church	366	12.6	289	20.6	290	17.3	347	17.7	319	68.2
Indoors, shopping mall	2480	4.3	2069	3.6	2027	3.6	2330	3.8	2238	15.3
Indoors, auditorium	145	2.9	118	1.1	111	1.4	145	2.0	134	7.5
Indoors, health care facility	404	9.9	322	16.9	323	26.7	378	9.5	344	63.0
Indoors, public building	434	1.2	345	5.0	335	4.7	413	3.3	365	14.3
Indoors, other location	974	19.2	794	24.0	795	32.2	931	19.2	859	94.5
Indoors, not specified	1020	2.5	808	0.5	-1	0.0	936	1.8	965	4.9
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	676	8.2	556	31.9	557	46.4	633	11.8	575	98.4
Outdoors, school grounds	1078	0.4	-1	0.1	-1	0.0	959	0.3	1013	0.7
Outdoors, sports arena	-1	0.0	288	3.5	289	7.9	-1	0.0	289	11.4
Outdoors, park/golf course	-1	0.0	288	11.1	286	22.6	-1	0.0	287	33.7
Outdoors, other location	688	0.1	606	3.5	611	6.0	605	0.4	610	10.1
Outdoors, not specified	1104	0.9	895	0.2	-1	0.0	981	0.6	1036	1.7
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1211	113.1	1021	105.9	1026	114.3	1149	109.1	1102	442.4
In transit, bus	2192	6.6	1757	4.6	1704	3.8	2090	5.9	1979	21.0
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1338	3.3	1071	1.4	1007	0.5	1338	2.8	1272	8.0
Indoors, public garage	788	0.6	657	0.4	682	0.2	751	0.6	734	1.8
Outdoors, in a parking lot	709	7.7	595	11.0	592	14.9	661	8.0	628	41.6
Outdoors, along a roadway	1079	36.0	884	41.1	888	46.4	1012	35.8	958	159.4
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1108	0.1	1113	0.1	-1	0.1	1187	0.3
Outdoors, service station	0	0.2	0	2.6	0	4.8	0	0.6	0	8.1
Indoors, residential garage	-1	0.1	-1	0.0	-1	0.0	-1	0.1	878	0.2
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	416	1512.9	381	1477.1	380	1461.1	420	1535.2	400	5986.3
Indoors, office	479	244.2	406	212.8	420	176.3	467	249.0	446	882.3
Indoors, store	496	42.8	408	60.4	405	71.2	464	48.9	436	223.2
Indoors, restaurant	885	33.8	727	46.8	704	42.3	846	42.4	784	165.4
Indoors, mfg. facility	-1	0.0	498	45.4	510	97.9	-1	0.0	506	143.3
Indoors, school	572	45.4	480	31.9	499	19.1	555	45.1	536	141.4
Indoors, church	358	17.4	301	18.2	304	20.4	350	16.7	327	72.7
Indoors, shopping mall	2374	2.4	1992	5.2	1961	4.1	2123	4.3	2077	16.1
Indoors, auditorium	151	0.4	123	2.6	118	1.7	142	1.7	129	6.5
Indoors, health care facility	381	35.0	313	48.2	311	43.8	363	44.5	339	171.4
Indoors, public building	479	3.8	387	2.6	384	2.6	477	2.9	438	11.9
Indoors, other location	958	49.2	832	43.6	847	49.2	942	46.9	896	188.9
Indoors, not specified	-1	0.0	816	1.0	772	1.6	1012	0.1	801	2.7
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	682	2.2	587	15.6	565	24.4	710	4.4	591	46.6
Outdoors, school grounds	1117	0.2	957	1.1	980	1.1	1064	0.7	1001	3.1
Outdoors, sports arena	322	1.6	290	2.3	289	3.6	278	1.2	294	8.7
Outdoors, park/golf course	394	0.8	301	0.1	-1	0.0	385	0.6	382	1.5
Outdoors, other location	728	0.1	616	2.0	621	2.7	675	0.5	627	5.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1193	128.4	993	144.5	990	132.8	1129	142.9	1074	548.6
In transit, bus	2163	1.3	1817	4.5	1794	2.8	2105	3.8	1935	12.4
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	-1	0.1	930	0.1	-1	0.0	934	0.2
Indoors, public garage	530	0.3	-1	0.1	-1	0.0	525	0.2	525	0.6
Outdoors, in a parking lot	671	5.6	592	18.4	589	28.0	659	7.8	607	59.8
Outdoors, along a roadway	1032	24.9	880	67.7	866	91.7	992	32.2	908	216.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1058	0.6	1122	1.3	-1	0.0	1101	1.9
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	-1	0.1	884	0.2	965	0.2	936	0.1	935	0.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
Indoors, home	427	1763.8	385	1651.2	385	1661.7	428	1755.8	407	6832.4
Indoors, office	491	72.5	396	64.3	387	40.4	466	76.6	443	253.8
Indoors, store	513	18.8	413	20.5	391	26.3	497	16.5	446	82.1
Indoors, restaurant	934	21.6	772	32.6	734	31.1	898	26.4	823	111.7
Indoors, mfg. facility	627	16.1	514	12.7	513	6.1	608	17.6	580	52.4
Indoors, school	518	12.4	456	4.8	478	4.8	476	8.6	490	30.6
Indoors, church	338	14.4	287	21.4	287	15.1	325	20.3	308	71.3
Indoors, shopping mall	2406	7.1	1971	5.0	1918	7.3	2174	5.0	2123	24.4
Indoors, auditorium	149	13.5	123	28.3	121	17.9	144	24.1	133	83.8
Indoors, health care facility	369	3.5	324	11.9	337	17.1	341	5.3	336	37.8
Indoors, public building	393	2.4	338	6.1	329	11.5	371	2.2	343	22.3
Indoors, other location	999	10.0	827	15.5	837	9.3	937	15.9	897	50.8
Indoors, not specified	-1	0.0	732	2.1	722	4.9	-1	0.0	725	7.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	668	22.2	565	50.3	560	83.5	617	22.3	582	178.3
Outdoors, school grounds	1293	0.6	966	2.3	924	1.4	1223	1.9	1069	6.3
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	323	17.2	272	15.0	269	7.5	291	19.8	293	59.6
Outdoors, other location	-1	0.0	627	2.5	621	4.5	-1	0.0	623	7.0
Outdoors, not specified	1060	0.2	904	0.7	873	0.4	928	0.6	920	2.0
In transit, train	1230	3.1	1067	0.7	-1	0.0	1203	2.1	1202	5.9
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1178	78.1	967	79.9	953	87.7	1093	76.9	1044	322.5
In transit, bus	1940	0.4	1681	1.8	1628	1.6	1863	1.1	1726	4.9
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1176	1.3	932	0.3	-1	0.0	1043	0.9	1100	2.4
Indoors, public garage	775	0.5	643	0.5	647	0.7	760	0.4	695	2.1
Outdoors, in a parking lot	689	2.0	563	4.8	549	7.9	610	2.2	578	16.8
Outdoors, along a roadway	1050	32.1	876	36.8	879	48.1	966	29.2	933	146.2
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.1	-1	0.0	829	0.1
Outdoors, service station	-1	0.0	0	0.1	0	0.2	-1	0.0	0	0.3
Indoors, residential garage	-1	0.0	1032	0.2	1080	0.3	-1	0.0	1065	0.5
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	429	1877.9	388	1899.1	387	1880.9	431	1935.9	409	7593.7
Indoors, office	493	21.8	414	7.0	430	4.7	476	15.5	470	49.0
Indoors, store	509	19.0	408	35.2	402	57.4	473	16.5	429	128.1
Indoors, restaurant	820	16.5	689	21.2	673	22.0	731	19.4	722	79.1
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	-1	0.0	496	0.7	505	1.5	-1	0.0	502	2.2
Indoors, church	383	32.2	303	25.8	311	18.9	375	35.8	350	112.7
Indoors, shopping mall	2503	1.9	2115	7.2	2083	4.5	2380	5.9	2225	19.5
Indoors, auditorium	136	1.0	112	3.6	109	2.3	117	3.1	115	10.0
Indoors, health care facility	385	21.9	322	9.6	323	6.2	357	18.5	358	56.1
Indoors, public building	433	2.8	353	6.4	349	7.2	393	4.5	372	20.9
Indoors, other location	1013	47.6	792	19.9	735	12.1	970	37.6	933	117.3
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	775	2.6	594	14.0	581	28.1	786	2.2	605	46.8
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	327	0.6	283	5.4	277	5.3	317	2.6	289	13.9
Outdoors, park/golf course	-1	0.0	291	2.7	284	6.0	-1	0.0	286	8.7
Outdoors, other location	-1	0.0	622	2.0	601	4.3	-1	0.0	608	6.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1214	82.6	1018	66.3	1024	60.3	1166	80.6	1116	289.8
In transit, bus	-1	0.0	2204	1.4	2318	3.1	-1	0.0	2283	4.5
In transit, truck	1475	76.2	1220	86.0	1195	113.0	1463	68.8	1317	344.0
In transit, van	1113	9.5	965	2.0	-1	0.0	1080	6.6	1084	18.2
Indoors, public garage	775	30.8	626	25.5	635	12.6	747	34.5	712	103.3
Outdoors, in a parking lot	735	9.2	615	23.6	636	22.0	712	18.1	661	72.9
Outdoors, along a roadway	1044	144.4	881	204.8	899	230.8	1002	161.9	945	742.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1138	61.0	942	16.4	925	6.2	1123	43.1	1097	126.8
Outdoors, service station	0	0.1	0	3.2	0	6.0	0	0.4	0	9.7
Indoors, residential garage	984	11.6	783	1.4	761	0.3	962	8.9	960	22.2
Indoors, in a repair shop	-1	0.0	1636	0.7	1744	1.7	-1	0.0	1711	2.4
Indoors, home	401	1242.2	371	1226.9	372	1169.3	407	1284.2	388	4922.6
Indoors, office	487	72.5	380	57.4	365	83.3	477	55.7	424	268.8
Indoors, store	498	18.7	399	7.3	396	5.2	451	16.4	455	47.6
Indoors, restaurant	860	39.7	723	22.1	768	12.5	785	33.6	798	107.9
Indoors, mfg. facility	594	8.3	513	59.0	542	73.7	570	24.8	538	165.8
Indoors, school	570	3.5	476	12.4	485	7.8	548	10.5	510	34.1
Indoors, church	342	34.5	296	12.0	293	6.0	341	30.5	332	83.0
Indoors, shopping mall	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, auditorium	154	9.0	122	21.6	121	43.8	149	6.6	127	81.0
Indoors, health care facility	-1	0.0	357	5.0	368	9.0	-1	0.0	364	14.0
Indoors, public building	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, other location	1009	52.2	809	16.8	753	8.3	989	40.0	955	117.4
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	1185	60.0	982	99.1	988	140.3	1139	68.4	1047	367.8
Outdoors, residential grounds	697	8.4	557	22.5	562	22.3	649	16.7	598	69.9
Outdoors, school grounds	1213	0.2	952	0.7	961	0.4	1095	0.6	1025	1.9
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	335	2.9	278	13.4	275	9.9	317	9.6	292	35.8
Outdoors, other location	746	182.4	624	176.6	626	160.2	722	187.7	682	706.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1229	42.9	992	66.8	991	75.5	1161	50.8	1071	236.0
In transit, bus	2216	19.2	1824	14.4	1876	8.6	2141	19.9	2054	62.1
In transit, truck	-1	0.1	1199	1.4	1260	1.9	1277	0.4	1241	3.8
In transit, van	1257	3.1	939	2.3	952	2.4	1108	2.6	1079	10.4
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	715	9.3	576	8.5	575	9.6	661	9.3	633	36.6
Outdoors, along a roadway	1066	124.5	854	144.0	841	171.8	997	121.1	928	561.4
In transit, motorcycle	1380	3.3	1025	1.0	982	0.3	1277	2.5	1278	7.1
Indoors, service station	-1	0.0	-1	0.0	-1	0.1	-1	0.0	898	0.1
Outdoors, service station	0	0.4	0	0.5	0	0.9	0	0.3	0	2.0
Indoors, residential garage	-1	0.1	807	0.5	768	0.7	990	0.2	830	1.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	403	1423.7	374	1428.1	382	1465.8	409	1448.7	392	5766.3
Indoors, office	559	4.3	408	4.2	401	6.3	550	3.2	466	18.0
Indoors, store	525	26.9	404	24.3	405	27.1	482	25.2	455	103.6
Indoors, restaurant	841	4.7	729	13.4	709	14.7	844	8.3	758	41.2
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	575	380.8	485	268.3	496	154.9	562	379.8	540	1183.7
Indoors, church	362	17.0	296	14.3	299	13.1	354	16.6	330	61.0
Indoors, shopping mall	2388	4.2	1992	2.7	1976	2.5	2130	4.2	2153	13.5
Indoors, auditorium	151	1.2	121	6.9	120	5.8	145	4.1	128	18.0
Indoors, health care facility	358	7.0	304	11.7	308	7.7	332	10.9	323	37.3
Indoors, public building	406	7.4	362	7.7	368	7.4	392	8.3	382	30.8
Indoors, other location	1026	8.6	795	9.4	803	8.8	944	9.6	891	36.4
Indoors, not specified	-1	0.0	839	0.3	852	0.7	-1	0.0	848	1.0
Outdoors, construction	-1	0.0	970	0.9	979	2.0	-1	0.0	977	2.9
Outdoors, residential grounds	705	34.3	548	63.5	545	91.8	648	36.3	587	225.9
Outdoors, school grounds	1177	26.4	943	28.5	939	21.8	1070	31.3	1036	108.1
Outdoors, sports arena	350	8.3	280	15.0	280	18.2	319	10.5	299	52.1
Outdoors, park/golf course	370	2.2	274	22.9	272	41.7	331	3.3	278	70.1
Outdoors, other location	794	0.2	604	22.4	607	45.6	745	0.6	608	68.7
Outdoors, not specified	1234	0.1	-1	0.0	-1	0.0	-1	0.1	1189	0.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1237	52.1	1003	66.5	995	85.0	1174	54.0	1084	257.6
In transit, bus	2244	5.0	1735	6.8	1673	4.1	2061	7.4	1938	23.3
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1213	0.8	938	4.7	893	3.3	1085	2.9	981	11.7
Indoors, public garage	-1	0.0	656	0.1	659	0.2	-1	0.0	658	0.3
Outdoors, in a parking lot	723	4.7	598	6.3	594	8.5	690	4.8	639	24.3
Outdoors, along a roadway	1076	31.4	873	45.0	861	64.2	1008	30.3	929	170.9
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1063	0.3	1078	0.7	-1	0.0	1074	1.0
Outdoors, service station	-1	0.0	-1	0.1	-1	0.1	-1	0.0	0	0.1
Indoors, residential garage	1012	1.2	821	1.0	909	0.7	915	1.2	920	4.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	424	1805.0	383	1744.0	383	1723.1	423	1817.8	404	7089.9
Indoors, office	478	78.4	402	74.7	400	66.5	459	82.2	437	301.8
Indoors, store	499	24.4	410	27.7	404	37.9	460	23.0	437	113.0
Indoors, restaurant	882	28.9	718	24.1	691	24.5	836	27.7	788	105.2
Indoors, mfg. facility	612	15.9	505	26.5	509	31.3	591	20.8	543	94.6
Indoors, school	578	62.1	496	59.3	502	42.6	565	72.0	539	236.0
Indoors, church	385	17.4	286	26.4	275	18.8	357	24.6	323	87.3
Indoors, shopping mall	2587	0.5	2180	2.8	2175	2.8	2510	1.4	2265	7.4
Indoors, auditorium	152	0.5	123	1.7	119	1.0	149	1.4	133	4.6
Indoors, health care facility	428	13.1	341	10.8	326	11.0	422	12.5	383	47.4
Indoors, public building	401	0.8	377	3.0	388	4.5	385	1.0	385	9.3
Indoors, other location	933	0.8	808	6.4	814	10.7	895	1.4	823	19.3
Indoors, not specified	1038	0.7	757	1.7	734	3.4	967	0.5	792	6.3
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	661	6.8	555	29.9	546	43.7	618	10.9	566	91.4
Outdoors, school grounds	1254	2.1	949	4.7	927	2.9	1113	4.5	1042	14.3
Outdoors, sports arena	-1	0.0	278	1.9	271	4.0	356	0.1	276	6.1
Outdoors, park/golf course	317	7.3	282	2.7	317	2.1	272	5.1	298	17.1
Outdoors, other location	683	0.1	622	4.9	620	10.2	584	0.4	620	15.6
Outdoors, not specified	-1	0.0	-1	0.1	896	0.1	-1	0.0	894	0.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Chicago: City-wide, Demographic Group=All persons

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1212	109.0	1003	102.9	989	102.7	1151	108.5	1091	423.0
In transit, bus	2215	5.3	1799	5.0	1800	4.2	2107	5.6	1995	20.1
In transit, truck	1451	8.5	1218	7.3	1212	7.6	1387	8.2	1323	31.7
In transit, van	1222	2.5	998	4.6	989	4.6	1155	3.2	1067	14.9
Indoors, public garage	744	4.0	622	3.0	620	1.8	711	4.1	688	12.8
Outdoors, in a parking lot	713	6.9	588	10.4	579	13.2	676	7.7	625	38.2
Outdoors, along a roadway	1063	40.6	868	67.4	853	84.5	996	46.1	920	238.5
In transit, motorcycle	1391	0.2	1037	0.7	1023	1.4	1288	0.1	1065	2.4
Indoors, service station	1080	4.0	901	2.1	893	1.2	1032	3.5	1009	10.8
Outdoors, service station	0	0.1	0	0.5	0	0.8	0	0.2	0	1.6
Indoors, residential garage	966	0.9	795	1.2	784	0.9	925	1.1	865	4.1
Indoors, in a repair shop	1653	2.2	1384	0.4	-1	0.0	1590	1.6	1601	4.2
Indoors, home	416	1564.5	381	1546.6	381	1543.3	419	1593.8	399	6248.2
Indoors, office	482	155.4	403	117.9	404	97.9	462	148.3	444	519.5
Indoors, store	505	42.4	414	44.7	407	49.2	473	42.5	448	178.8
Indoors, restaurant	875	30.9	729	27.2	710	27.9	833	29.9	790	116.0
Indoors, mfg. facility	592	11.9	497	19.6	502	24.8	565	13.7	528	70.0
Indoors, school	578	68.9	486	71.9	490	54.9	560	79.7	531	275.4
Indoors, church	363	11.6	300	14.0	299	12.7	356	13.4	328	51.8
Indoors, shopping mall	2501	3.1	2050	2.6	2005	2.3	2299	3.2	2237	11.3
Indoors, auditorium	152	5.7	122	6.6	121	6.3	144	6.3	134	24.9
Indoors, health care facility	383	19.9	323	19.2	325	16.9	366	20.9	350	76.9
Indoors, public building	433	5.1	360	7.1	357	9.0	412	5.3	383	26.5
Indoors, other location	965	35.4	821	30.0	824	30.0	927	33.9	889	129.3
Indoors, not specified	950	2.3	801	0.9	781	0.7	912	1.8	893	5.7
Outdoors, construction	1193	0.9	984	1.9	970	2.5	1132	1.3	1037	6.6
Outdoors, residential grounds	684	7.6	557	31.9	550	49.1	629	10.9	571	99.5
Outdoors, school grounds	1179	2.5	962	4.8	948	5.2	1080	3.7	1018	16.2
Outdoors, sports arena	341	1.5	283	4.8	279	8.0	310	1.7	290	16.0
Outdoors, park/golf course	340	1.7	280	12.0	275	20.0	314	2.8	283	36.6
Outdoors, other location	747	3.7	614	13.9	607	22.9	710	4.4	631	44.9
Outdoors, not specified	-1	0.1	1057	0.2	1156	0.3	1080	0.1	1108	0.8
In transit, train	1347	0.6	1023	0.4	940	0.4	1311	0.5	1186	1.9
In transit, airplane	-1	0.0	0	0.3	0	0.6	-1	0.0	0	0.9

Denver: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1621	83.9	855	93.6	974	100.9	1650	87.2	1253	365.7
In transit, bus	3234	7.3	1681	5.3	1845	3.6	2995	7.4	2596	23.7
In transit, truck	1983	3.3	1099	6.2	1213	7.2	2019	5.0	1485	21.7
In transit, van	1547	5.3	863	5.2	978	4.6	1557	4.6	1234	19.7
Indoors, public garage	875	3.1	495	1.8	609	1.0	916	2.7	778	8.5
Outdoors, in a parking lot	902	11.4	498	12.3	562	13.6	896	12.3	707	49.7
Outdoors, along a roadway	1367	50.7	717	70.5	828	85.6	1390	52.3	1017	259.1
In transit, motorcycle	2084	0.4	797	1.1	888	1.9	2400	0.2	1079	3.6
Indoors, service station	1428	2.4	752	1.7	804	1.1	1372	2.3	1168	7.4
Outdoors, service station	0	0.1	0	0.3	0	0.6	0	0.1	0	1.1
Indoors, residential garage	1294	0.8	645	0.9	764	0.7	1440	1.1	1073	3.4
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	1159	0.1
Indoors, home	594	1574.1	331	1549.1	377	1542.8	593	1599.3	475	6265.3
Indoors, office	609	76.3	354	79.3	383	82.1	566	80.5	476	318.1
Indoors, store	602	48.6	334	46.8	366	50.3	604	48.4	477	194.1
Indoors, restaurant	1158	28.8	604	28.1	673	29.8	1186	29.5	907	116.2
Indoors, mfg. facility	767	25.4	446	23.6	494	24.0	712	24.8	609	97.8
Indoors, school	765	132.4	446	99.0	491	62.3	716	134.0	636	427.6
Indoors, church	518	14.4	268	13.6	314	11.8	537	14.9	417	54.8
Indoors, shopping mall	2789	2.6	1595	2.6	1677	2.3	2691	3.4	2240	10.9
Indoors, auditorium	216	6.3	102	8.3	123	8.3	231	6.4	161	29.3
Indoors, health care facility	502	22.1	282	19.3	322	15.5	501	23.1	414	80.1
Indoors, public building	543	6.0	306	8.3	351	9.8	563	6.7	422	30.8
Indoors, other location	1333	21.4	712	24.5	835	27.5	1330	23.8	1035	97.2
Indoors, not specified	820	0.4	625	0.4	834	0.6	751	0.3	766	1.7
Outdoors, construction	1403	1.4	811	2.0	868	2.2	1332	2.4	1084	8.1
Outdoors, residential grounds	799	16.6	455	39.7	536	55.5	810	18.6	584	130.4
Outdoors, school grounds	1276	6.3	768	6.1	840	5.2	1268	7.2	1057	24.8
Outdoors, sports arena	383	0.7	230	4.4	284	7.8	436	1.0	283	14.0
Outdoors, park/golf course	353	4.9	227	15.3	264	23.5	375	5.0	272	48.7
Outdoors, other location	990	2.4	501	14.0	603	24.7	1036	3.1	622	44.2
Outdoors, not specified	1140	0.3	973	0.3	1339	0.3	1078	0.2	1142	1.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	0.4	0	0.8	-1	0.0	0	1.2

Denver: City-wide, Demographic Group=African americans

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2114	76.3	1219	63.6	1395	67.5	2006	71.5	1708	278.8
In transit, bus	3951	10.0	2405	15.3	2487	13.5	3502	14.9	3017	53.7
In transit, truck	-1	0.0	1337	0.9	1396	3.6	-1	0.0	1384	4.5
In transit, van	-1	0.0	1118	0.1	1304	0.3	-1	0.0	1252	0.5
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1079	9.9	740	10.0	946	13.9	1047	8.8	949	42.5
Outdoors, along a roadway	1924	24.9	1028	58.2	1208	86.2	1817	31.3	1339	200.5
In transit, motorcycle	3004	0.4	1069	0.8	1347	0.6	3532	0.8	2210	2.5
Indoors, service station	-1	0.0	1105	0.2	1133	0.6	-1	0.0	1127	0.8
Outdoors, service station	-1	0.0	0	0.1	0	0.4	-1	0.0	0	0.5
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.1	2524	0.2	-1	0.0	2458	0.2
Indoors, home	757	1741.1	440	1699.1	486	1673.6	704	1757.2	599	6871.0
Indoors, office	1066	5.6	514	19.4	539	41.7	896	5.2	599	71.9
Indoors, store	881	14.1	478	22.6	504	28.1	785	14.2	615	79.0
Indoors, restaurant	1582	14.3	825	4.8	1056	2.4	1605	12.5	1447	33.9
Indoors, mfg. facility	906	41.0	559	13.8	587	14.1	803	25.6	780	94.5
Indoors, school	1032	74.8	607	102.6	634	69.2	831	115.5	771	362.1
Indoors, church	606	45.3	329	35.5	362	26.7	572	47.5	490	155.0
Indoors, shopping mall	2886	2.0	2072	2.3	1921	1.6	2159	1.9	2272	7.8
Indoors, auditorium	284	3.3	148	3.7	166	2.3	316	3.0	229	12.4
Indoors, health care facility	477	21.4	352	54.3	386	65.7	428	33.1	395	174.5
Indoors, public building	503	0.7	379	5.6	409	8.3	397	1.4	401	16.0
Indoors, other location	1540	59.0	884	23.8	1050	21.1	1538	40.2	1359	144.1
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1429	3.9	641	22.3	718	36.0	1632	8.3	840	70.5
Outdoors, school grounds	1583	3.4	981	6.6	1122	4.4	1369	7.1	1232	21.5
Outdoors, sports arena	557	8.7	303	9.9	336	6.2	561	8.1	439	32.9
Outdoors, park/golf course	-1	0.0	282	2.2	282	6.0	-1	0.0	282	8.2
Outdoors, other location	-1	0.1	738	5.3	873	10.5	-1	0.1	835	16.0
Outdoors, not specified	-1	0.0	-1	0.1	-1	0.0	-1	0.0	1241	0.2
In transit, train	-1	0.0	936	0.9	1012	3.2	-1	0.0	996	4.1
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1752	68.8	938	63.9	1078	67.7	1738	67.1	1383	267.6
In transit, bus	3234	7.8	1915	11.7	1953	11.1	3224	11.0	2519	41.7
In transit, truck	-1	0.0	1058	0.9	1122	3.3	-1	0.0	1109	4.2
In transit, van	1628	3.3	761	4.6	828	3.4	1686	4.2	1215	15.5
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	859	9.3	551	11.0	718	13.9	844	9.5	733	43.7
Outdoors, along a roadway	1381	41.3	752	94.6	903	109.2	1330	68.2	1013	313.2
In transit, motorcycle	2313	0.3	792	0.5	1008	0.4	2876	0.6	1722	1.8
Indoors, service station	-1	0.0	903	0.2	893	0.6	-1	0.0	895	0.8
Outdoors, service station	-1	0.0	0	0.1	0	0.4	-1	0.0	0	0.5
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	2206	0.2	-1	0.0	2137	0.2
Indoors, home	649	1759.5	353	1682.5	403	1657.8	644	1764.9	516	6864.7
Indoors, office	892	6.4	418	21.1	440	42.8	774	7.5	504	77.8
Indoors, store	736	13.1	364	23.1	377	30.7	682	13.4	483	80.3
Indoors, restaurant	1289	13.8	623	5.8	750	3.0	1333	12.3	1147	34.9
Indoors, mfg. facility	733	35.9	441	12.2	486	12.9	688	22.4	640	83.5
Indoors, school	852	66.8	497	77.6	519	52.3	768	90.9	669	287.5
Indoors, church	472	42.6	254	37.9	274	28.5	472	43.1	380	152.1
Indoors, shopping mall	2246	1.8	1538	2.1	1510	1.4	1786	1.7	1774	7.1
Indoors, auditorium	210	3.0	104	3.4	113	2.1	241	2.8	167	11.2
Indoors, health care facility	418	18.3	290	47.4	325	57.9	409	28.2	341	151.9
Indoors, public building	376	0.6	269	5.0	284	7.4	311	1.3	285	14.3
Indoors, other location	1304	52.1	684	23.1	816	20.6	1387	36.7	1143	132.5
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1084	4.6	476	30.2	530	48.0	1261	8.8	610	91.5
Outdoors, school grounds	1230	2.4	755	4.8	916	3.3	1129	5.1	985	15.5
Outdoors, sports arena	420	7.9	218	9.2	247	6.2	440	7.3	329	30.6
Outdoors, park/golf course	-1	0.0	212	2.0	212	5.4	-1	0.0	212	7.4
Outdoors, other location	751	0.5	527	8.3	614	14.4	614	1.0	587	24.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	1022	0.2
In transit, train	-1	0.0	751	0.8	893	3.0	-1	0.0	864	3.8
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1618	40.4	896	56.4	996	67.2	1593	44.0	1216	208.1
In transit, bus	3293	7.6	1764	5.4	1696	3.2	2768	7.8	2566	24.0
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	891	2.9	1117	4.1	-1	0.0	1023	6.9
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1009	10.6	526	15.5	586	20.2	1039	10.1	730	56.3
Outdoors, along a roadway	1502	42.2	805	55.7	921	60.1	1623	50.9	1179	208.9
In transit, motorcycle	-1	0.0	783	0.8	848	1.4	-1	0.0	824	2.2
Indoors, service station	-1	0.0	714	0.1	666	0.2	-1	0.0	684	0.4
Outdoors, service station	-1	0.0	0	0.2	0	0.3	-1	0.0	0	0.6
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	659	1852.0	368	1825.9	414	1827.5	645	1869.1	522	7374.4
Indoors, office	896	5.3	437	2.4	321	2.0	871	3.7	720	13.4
Indoors, store	613	30.8	363	48.3	392	66.1	598	36.4	463	181.7
Indoors, restaurant	1417	25.2	680	10.0	788	5.7	1477	19.9	1257	60.8
Indoors, mfg. facility	888	21.8	486	14.5	485	28.4	780	13.7	648	78.4
Indoors, school	794	78.9	495	70.6	532	36.2	720	95.1	660	280.8
Indoors, church	431	7.6	247	7.4	303	4.1	528	8.5	393	27.6
Indoors, shopping mall	2718	1.3	1736	2.6	1778	1.6	2562	2.8	2182	8.4
Indoors, auditorium	138	8.2	98	12.6	116	11.1	113	7.6	114	39.5
Indoors, health care facility	446	3.5	282	9.0	288	7.8	399	7.4	335	27.7
Indoors, public building	425	6.3	302	2.7	339	1.6	351	8.1	368	18.7
Indoors, other location	1098	6.2	725	8.1	864	12.7	1089	8.8	929	35.7
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	841	9.4	500	14.3	558	19.2	934	10.1	664	53.0
Outdoors, school grounds	1159	0.8	805	1.5	784	0.9	969	1.6	913	4.7
Outdoors, sports arena	-1	0.0	293	2.5	386	5.7	-1	0.0	357	8.2
Outdoors, park/golf course	313	1.9	253	2.2	286	2.9	250	2.3	275	9.4
Outdoors, other location	-1	0.1	515	12.2	559	17.9	808	0.1	543	30.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1595	72.0	856	81.7	973	84.7	1625	76.8	1244	315.3
In transit, bus	3884	2.7	2150	3.5	2183	3.3	3787	4.0	2986	13.5
In transit, truck	2100	2.1	1094	6.2	1260	12.2	2188	3.8	1437	24.3
In transit, van	1698	1.0	780	1.2	1031	1.2	1835	0.9	1278	4.2
Indoors, public garage	-1	0.0	563	0.6	753	0.7	-1	0.0	670	1.3
Outdoors, in a parking lot	948	18.5	534	16.9	639	18.3	867	19.7	754	73.5
Outdoors, along a roadway	1461	54.5	759	78.8	878	101.6	1450	54.6	1063	289.5
In transit, motorcycle	-1	0.0	844	7.0	932	13.3	-1	0.0	901	20.3
Indoors, service station	-1	0.0	719	0.6	725	1.1	-1	0.0	760	1.8
Outdoors, service station	0	0.3	0	0.7	0	1.0	0	0.4	0	2.4
Indoors, residential garage	930	1.5	569	1.5	570	0.9	851	1.5	750	5.5
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
Indoors, home	625	1624.2	348	1604.2	396	1604.4	621	1640.7	499	6473.6
Indoors, office	574	52.0	347	51.6	399	48.7	527	56.4	464	208.8
Indoors, store	628	34.0	363	44.7	397	53.8	661	36.1	491	168.5
Indoors, restaurant	1229	48.0	665	37.9	707	26.7	1190	53.4	1004	166.0
Indoors, mfg. facility	852	38.9	506	28.9	540	21.5	746	38.3	689	127.6
Indoors, school	830	110.2	481	73.7	521	45.5	755	107.7	688	337.1
Indoors, church	508	13.4	287	15.1	324	12.7	491	15.3	403	56.5
Indoors, shopping mall	2435	3.4	1741	2.0	1800	1.5	2268	4.8	2168	11.7
Indoors, auditorium	188	1.9	102	4.2	104	3.8	192	2.9	136	12.9
Indoors, health care facility	532	35.0	300	33.7	344	31.1	536	36.3	433	136.1
Indoors, public building	464	5.6	301	2.7	352	2.1	420	4.6	406	15.0
Indoors, other location	1344	18.1	721	26.6	860	29.1	1419	25.5	1055	99.2
Indoors, not specified	814	0.1	811	0.1	1137	0.4	660	0.2	950	0.8
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	952	15.1	494	29.5	566	40.2	1015	14.3	668	99.0
Outdoors, school grounds	1370	5.4	835	5.8	946	5.3	1386	7.3	1149	23.8
Outdoors, sports arena	-1	0.0	240	2.6	295	6.3	-1	0.0	279	8.9
Outdoors, park/golf course	541	0.9	250	18.7	284	29.4	629	2.0	289	50.9
Outdoors, other location	-1	0.0	565	3.0	694	7.3	-1	0.0	656	10.2
Outdoors, not specified	1033	0.9	693	0.2	-1	0.0	879	0.6	936	1.7
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1630	86.8	875	94.2	1003	99.9	1668	88.8	1277	369.7
In transit, bus	3288	8.0	1715	5.1	1976	3.8	3207	7.2	2724	24.1
In transit, truck	2109	2.1	1086	4.0	1178	4.9	2097	3.5	1508	14.5
In transit, van	1537	10.6	860	9.3	983	7.9	1542	9.1	1250	36.8
Indoors, public garage	877	7.4	485	3.4	553	1.2	914	6.1	794	18.2
Outdoors, in a parking lot	872	9.8	503	11.4	577	12.8	883	11.0	697	45.0
Outdoors, along a roadway	1308	50.4	709	79.1	818	93.0	1319	57.6	979	280.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1115	0.5	742	0.4	889	0.3	1129	0.5	994	1.7
Outdoors, service station	-1	0.1	0	0.1	0	0.2	-1	0.1	0	0.4
Indoors, residential garage	1594	1.0	694	0.9	837	0.6	1781	1.4	1342	3.8
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	600	1592.8	334	1553.9	382	1543.7	598	1615.3	480	6305.6
Indoors, office	632	72.2	362	85.6	383	86.5	584	81.8	483	326.0
Indoors, store	596	43.5	336	43.6	366	51.7	588	41.0	465	179.8
Indoors, restaurant	1139	19.0	592	21.4	657	22.9	1189	21.0	881	84.3
Indoors, mfg. facility	722	28.5	431	27.7	489	28.4	674	27.4	579	112.0
Indoors, school	775	108.5	446	76.5	497	51.9	726	105.3	644	342.1
Indoors, church	524	23.6	261	18.9	310	14.2	552	24.0	433	80.7
Indoors, shopping mall	2836	2.5	1593	2.0	1789	1.6	2708	3.2	2343	9.3
Indoors, auditorium	223	6.2	105	7.1	134	5.9	244	6.7	176	26.0
Indoors, health care facility	474	19.0	270	17.9	310	14.7	478	20.8	392	72.4
Indoors, public building	561	6.8	316	11.0	364	14.0	598	7.0	427	38.8
Indoors, other location	1336	27.9	723	25.4	855	26.3	1378	27.8	1084	107.3
Indoors, not specified	815	0.6	607	0.6	797	1.0	764	0.4	752	2.6
Outdoors, construction	1411	3.1	817	4.3	887	4.4	1338	5.3	1103	17.1
Outdoors, residential grounds	779	15.1	448	42.3	532	60.1	780	19.4	568	136.8
Outdoors, school grounds	1327	5.9	759	5.4	856	4.8	1298	6.1	1078	22.2
Outdoors, sports arena	387	0.2	243	3.5	308	6.3	489	0.3	293	10.4
Outdoors, park/golf course	373	4.1	223	9.8	261	14.4	388	4.5	281	32.8
Outdoors, other location	994	3.8	499	19.1	599	30.2	1050	5.5	635	58.6
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	734	0.1	840	0.6	-1	0.0	818	0.7
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1654	106.5	843	114.7	951	119.5	1661	111.7	1264	452.4
In transit, bus	3065	6.6	1539	6.7	1679	4.2	2731	8.9	2343	26.4
In transit, truck	2140	1.0	1049	5.1	1186	6.6	2119	1.8	1320	14.6
In transit, van	-1	0.0	833	1.6	859	2.6	-1	0.0	870	4.3
Indoors, public garage	848	0.4	547	0.4	700	0.4	921	0.4	748	1.6
Outdoors, in a parking lot	892	9.9	486	10.5	547	10.6	940	10.7	715	41.8
Outdoors, along a roadway	1397	49.2	708	70.7	816	88.0	1403	51.0	1013	258.9
In transit, motorcycle	2181	1.3	766	0.3	-1	0.0	2536	0.8	2126	2.5
Indoors, service station	-1	0.0	-1	0.1	1136	0.2	-1	0.0	1100	0.2
Outdoors, service station	-1	0.1	0	0.3	0	0.8	-1	0.1	0	1.3
Indoors, residential garage	1327	0.1	742	0.5	873	0.9	1259	0.2	921	1.7
Indoors, in a repair shop	-1	0.1	980	0.1	-1	0.1	1231	0.2	1134	0.5
Indoors, home	580	1534.2	323	1477.8	368	1456.3	577	1548.7	465	6017.0
Indoors, office	596	126.3	352	118.7	387	119.8	556	125.9	476	490.7
Indoors, store	601	45.6	330	43.8	362	47.9	600	47.0	474	184.3
Indoors, restaurant	1124	24.7	579	29.6	656	32.9	1184	25.6	858	112.7
Indoors, mfg. facility	766	30.6	430	24.9	474	23.3	745	30.3	621	109.3
Indoors, school	724	127.3	436	102.2	477	54.9	681	141.6	609	426.0
Indoors, church	474	9.0	272	10.7	325	12.0	485	8.8	379	40.6
Indoors, shopping mall	2709	2.4	1550	4.5	1546	5.7	3096	3.3	2046	15.9
Indoors, auditorium	205	4.4	103	9.8	122	14.6	207	4.1	138	32.9
Indoors, health care facility	543	19.2	301	20.9	339	20.7	526	19.3	423	80.0
Indoors, public building	620	3.9	296	5.2	345	6.0	699	4.9	474	20.0
Indoors, other location	1341	25.0	727	21.2	849	18.6	1271	26.9	1079	91.7
Indoors, not specified	837	0.3	605	0.3	649	0.3	740	0.5	717	1.4
Outdoors, construction	-1	0.0	678	0.2	686	0.7	-1	0.0	685	0.8
Outdoors, residential grounds	767	18.0	452	51.6	517	77.3	786	17.6	553	164.5
Outdoors, school grounds	1237	5.1	746	5.6	812	3.9	1261	7.0	1042	21.5
Outdoors, sports arena	448	0.9	210	6.2	236	10.9	495	2.0	264	19.9
Outdoors, park/golf course	334	7.0	219	23.9	249	33.1	351	7.4	258	71.4
Outdoors, other location	636	0.8	498	13.8	584	31.8	560	1.1	559	47.5
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	2.0	0	3.5	-1	0.0	0	5.5

Denver: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1855	53.4	848	74.8	960	94.6	1879	56.0	1286	278.8
In transit, bus	4731	3.8	1947	1.6	977	1.1	4212	2.4	3633	8.8
In transit, truck	1629	23.9	1073	12.7	1389	6.3	1852	20.2	1564	63.2
In transit, van	1235	7.1	685	9.3	750	6.2	1375	8.1	1008	30.7
Indoors, public garage	-1	0.0	585	0.2	613	0.6	-1	0.0	607	0.8
Outdoors, in a parking lot	1146	3.6	481	8.9	534	13.7	1133	3.5	664	29.7
Outdoors, along a roadway	1436	60.1	728	65.1	826	74.0	1541	50.9	1093	250.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1731	16.7	975	3.8	-1	0.0	1633	10.4	1605	30.9
Outdoors, service station	-1	0.0	0	0.5	0	1.6	-1	0.0	0	2.0
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	551	1505.2	313	1507.1	351	1493.8	544	1592.7	441	6098.8
Indoors, office	559	80.4	327	80.6	360	106.8	502	74.1	430	342.0
Indoors, store	725	1.0	320	10.9	332	22.0	698	2.0	360	36.0
Indoors, restaurant	1230	36.8	611	39.7	671	49.7	1275	33.3	911	159.5
Indoors, mfg. facility	-1	0.0	385	0.5	390	1.9	-1	0.0	389	2.4
Indoors, school	703	228.1	421	153.8	466	107.0	649	197.5	587	686.4
Indoors, church	553	7.6	278	7.6	279	9.1	516	9.2	406	33.4
Indoors, shopping mall	2029	0.3	1361	0.7	1261	0.4	1660	0.7	1548	2.1
Indoors, auditorium	188	22.3	94	24.1	110	16.1	193	20.1	146	82.6
Indoors, health care facility	468	16.8	233	13.4	257	8.1	499	16.7	389	55.0
Indoors, public building	-1	0.0	264	9.4	290	15.0	-1	0.0	280	24.4
Indoors, other location	1129	25.7	690	36.0	784	32.6	1054	23.9	885	118.3
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	758	0.7	822	2.8	-1	0.0	809	3.6
Outdoors, residential grounds	727	41.7	432	63.4	507	63.1	700	62.0	578	230.2
Outdoors, school grounds	963	7.5	670	11.1	708	8.2	821	9.5	779	36.4
Outdoors, sports arena	-1	0.0	240	2.9	312	4.3	-1	0.0	283	7.2
Outdoors, park/golf course	357	17.7	215	35.4	248	50.5	371	14.7	270	118.4
Outdoors, other location	-1	0.0	519	9.8	666	18.4	-1	0.0	615	28.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1661	55.9	848	66.1	982	74.5	1703	57.8	1260	254.2
In transit, bus	3229	12.2	1749	10.1	1899	6.2	2955	13.6	2591	42.1
In transit, truck	1756	1.7	1039	1.7	1220	2.2	1892	1.4	1441	7.0
In transit, van	1596	7.0	865	7.4	995	5.8	1628	6.5	1270	26.7
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, in a parking lot	859	5.3	480	7.0	537	8.8	860	6.1	658	27.3
Outdoors, along a roadway	1394	68.8	708	101.0	814	131.2	1431	69.0	1008	369.9
In transit, motorcycle	2098	0.9	756	0.4	834	0.3	2447	0.7	1788	2.3
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.1	-1	0.0	-1	0.0	-1	0.1	0	0.3
Indoors, residential garage	1472	0.5	640	1.0	780	0.8	1615	1.0	1089	3.2
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	599	1599.0	333	1582.1	383	1582.6	599	1635.3	480	6399.0
Indoors, office	691	1.4	340	4.4	377	8.2	709	1.5	426	15.4
Indoors, store	619	24.1	322	23.7	349	25.2	647	23.3	482	96.3
Indoors, restaurant	1215	9.4	601	14.2	674	18.9	1298	10.4	874	52.9
Indoors, mfg. facility	965	0.1	376	0.2	447	0.1	1129	0.3	740	0.8
Indoors, school	774	282.3	456	204.2	496	128.3	716	282.4	643	897.2
Indoors, church	499	12.4	261	11.5	296	10.4	517	13.0	401	47.3
Indoors, shopping mall	2657	1.8	1559	2.3	1604	2.4	2468	2.7	2053	9.2
Indoors, auditorium	216	6.7	101	8.2	120	7.0	234	6.4	163	28.3
Indoors, health care facility	446	12.5	276	14.7	329	13.2	457	13.6	374	54.0
Indoors, public building	516	2.1	331	4.5	403	6.0	509	2.6	415	15.3
Indoors, other location	1305	7.4	676	9.3	778	9.7	1271	6.9	969	33.2
Indoors, not specified	-1	0.0	-1	0.1	1085	0.4	-1	0.0	1027	0.4
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	812	26.8	449	56.6	518	81.3	854	29.8	590	194.5
Outdoors, school grounds	1248	14.3	769	13.5	821	12.3	1197	15.8	1024	55.9
Outdoors, sports arena	396	3.0	229	6.6	297	9.1	437	3.7	314	22.4
Outdoors, park/golf course	411	3.7	227	18.2	262	33.8	454	3.7	273	59.3
Outdoors, other location	780	0.2	491	14.5	581	29.1	825	0.3	554	44.1
Outdoors, not specified	1344	0.3	817	0.3	884	0.2	1283	0.3	1093	1.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1599	145.8	921	125.4	1101	124.8	1600	137.6	1323	533.6
In transit, bus	3246	3.1	1846	0.7	-1	0.0	3102	2.0	3031	5.8
In transit, truck	2051	5.3	1176	26.8	1397	39.3	2135	9.6	1454	80.9
In transit, van	-1	0.0	1374	3.6	1312	5.3	-1	0.0	1337	8.9
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	779	10.5	483	16.7	530	15.7	728	11.6	606	54.6
Outdoors, along a roadway	1239	105.4	713	111.1	810	87.1	1220	126.7	1011	430.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1664	0.2	924	0.2	1021	0.2	1639	0.2	1268	0.8
Outdoors, service station	-1	0.1	0	0.9	0	3.1	0	0.1	0	4.2
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	627	1579.4	347	1472.5	386	1410.2	619	1592.4	501	6054.6
Indoors, office	555	60.3	364	70.4	395	101.4	531	67.6	451	299.7
Indoors, store	611	10.9	367	10.8	404	10.7	568	11.2	488	43.5
Indoors, restaurant	1284	19.9	651	13.5	709	12.7	1230	18.3	1023	64.4
Indoors, mfg. facility	-1	0.0	427	53.2	459	94.7	-1	0.0	448	147.9
Indoors, school	805	132.9	474	82.2	504	38.5	724	127.3	676	380.9
Indoors, church	626	1.3	265	8.3	337	13.7	720	2.7	368	26.0
Indoors, shopping mall	4751	0.7	1657	1.3	2110	0.8	5649	1.4	3595	4.2
Indoors, auditorium	262	1.2	124	26.9	154	50.8	287	1.4	148	80.2
Indoors, health care facility	573	6.4	273	5.9	371	4.7	535	6.9	448	23.9
Indoors, public building	641	18.8	325	19.6	417	10.6	749	25.1	562	74.1
Indoors, other location	1025	35.4	733	24.8	987	23.3	1105	37.4	983	120.9
Indoors, not specified	-1	0.1	856	0.1	-1	0.1	1489	0.1	1207	0.4
Outdoors, construction	-1	0.0	852	1.8	913	6.8	-1	0.0	900	8.6
Outdoors, residential grounds	641	7.0	435	17.1	484	23.3	575	9.4	503	56.8
Outdoors, school grounds	1198	4.3	764	8.3	804	5.0	1168	9.1	978	26.7
Outdoors, sports arena	346	3.6	247	13.3	281	16.4	333	4.3	281	37.6
Outdoors, park/golf course	390	3.0	226	4.1	267	10.1	466	2.7	304	19.9
Outdoors, other location	635	2.2	481	64.0	530	98.9	525	1.4	512	166.6
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	2162	2.2	754	0.5	-1	0.0	2570	1.4	2125	4.1
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1687	129.9	907	133.6	1017	130.4	1669	137.2	1321	531.1
In transit, bus	3357	1.2	1956	1.1	2284	2.1	3129	1.0	2608	5.5
In transit, truck	2062	18.9	1149	17.1	1213	20.6	2093	17.7	1624	74.3
In transit, van	1611	7.3	932	8.4	1014	7.4	1600	6.9	1270	30.0
Indoors, public garage	955	13.6	559	11.6	638	7.0	936	15.1	805	47.3
Outdoors, in a parking lot	967	10.4	541	14.0	597	16.3	924	13.6	735	54.3
Outdoors, along a roadway	1334	51.7	758	70.0	863	76.7	1321	56.6	1031	255.0
In transit, motorcycle	-1	0.0	1041	0.3	1290	1.0	-1	0.0	1227	1.3
Indoors, service station	1383	14.9	792	9.6	817	5.8	1295	14.1	1154	44.4
Outdoors, service station	0	0.3	0	0.4	0	0.5	0	0.4	0	1.6
Indoors, residential garage	1298	5.6	679	5.0	786	3.1	1392	5.1	1074	18.8
Indoors, in a repair shop	2057	7.7	1263	1.6	-1	0.1	1893	5.5	1911	14.9
Indoors, home	603	1403.9	332	1367.8	377	1344.8	603	1432.7	481	5549.2
Indoors, office	647	235.6	385	222.1	413	205.0	597	231.7	515	894.5
Indoors, store	643	40.6	375	44.5	401	58.8	617	37.8	493	181.6
Indoors, restaurant	1084	36.2	657	28.0	733	28.8	1064	34.7	906	127.6
Indoors, mfg. facility	781	35.1	480	48.8	535	59.9	704	40.5	604	184.2
Indoors, school	764	20.1	436	17.1	489	12.2	706	21.0	619	70.5
Indoors, church	549	11.9	295	12.0	340	9.4	543	12.4	438	45.6
Indoors, shopping mall	3354	1.2	1607	1.1	1585	0.7	2867	1.6	2485	4.6
Indoors, auditorium	228	6.8	107	3.5	139	3.3	241	5.8	195	19.4
Indoors, health care facility	562	15.7	308	19.7	324	19.8	524	17.8	420	72.9
Indoors, public building	495	6.3	315	14.8	350	23.0	490	5.9	375	50.0
Indoors, other location	1318	44.1	751	39.1	905	46.0	1311	43.5	1078	172.7
Indoors, not specified	1226	4.9	659	1.8	600	0.6	1126	4.8	1071	12.0
Outdoors, construction	1455	4.8	871	7.2	922	7.5	1374	8.3	1136	27.8
Outdoors, residential grounds	853	6.5	492	29.5	605	42.0	889	8.5	613	86.5
Outdoors, school grounds	1584	0.6	879	0.8	1026	0.7	1446	0.9	1218	3.0
Outdoors, sports arena	294	1.0	228	4.5	267	9.4	248	1.1	256	16.1
Outdoors, park/golf course	357	4.3	225	12.5	252	16.5	365	5.1	270	38.3
Outdoors, other location	1027	17.6	557	31.7	644	40.4	1049	19.7	753	109.5
Outdoors, not specified	-1	0.1	1283	0.5	1531	1.0	2304	0.2	1552	1.7
In transit, train	2253	1.4	975	0.7	874	1.2	2339	1.0	1687	4.3
In transit, airplane	-1	0.0	0	3.6	0	6.1	-1	0.0	0	9.7

Denver: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1585	92.4	867	100.6	969	101.5	1617	100.6	1252	395.1
In transit, bus	2896	3.7	1480	2.0	1568	1.6	2825	2.8	2388	10.1
In transit, truck	1592	7.1	961	1.3	-1	0.0	1614	5.7	1543	14.1
In transit, van	1739	0.3	885	0.8	950	0.8	1712	0.3	1133	2.1
Indoors, public garage	938	0.4	597	0.4	691	0.2	1043	0.5	854	1.5
Outdoors, in a parking lot	851	4.3	513	8.4	610	11.5	822	5.7	658	30.0
Outdoors, along a roadway	1293	32.2	754	53.3	887	66.8	1291	37.7	999	190.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	797	0.1	899	0.2	-1	0.0	867	0.3
Outdoors, service station	-1	0.1	-1	0.1	-1	0.1	-1	0.1	0	0.3
Indoors, residential garage	1191	0.9	788	0.2	-1	0.1	1088	0.8	1093	2.0
Indoors, in a repair shop	1494	0.1	1052	0.3	1060	0.2	1292	0.3	1206	0.8
Indoors, home	617	1834.0	346	1764.9	390	1742.2	606	1851.9	493	7193.0
Indoors, office	676	12.1	374	5.3	423	6.2	665	8.3	574	31.9
Indoors, store	596	36.4	356	55.8	391	76.6	570	36.1	449	205.0
Indoors, restaurant	1258	19.3	638	19.4	733	20.2	1324	22.5	998	81.5
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	807	32.8	446	43.1	499	31.2	809	42.5	640	149.6
Indoors, church	518	11.3	278	12.4	318	9.5	530	11.8	413	44.9
Indoors, shopping mall	2402	2.8	1644	1.6	1518	2.7	2009	2.5	1926	9.6
Indoors, auditorium	217	12.2	109	14.8	129	13.7	222	13.7	167	54.3
Indoors, health care facility	536	6.1	291	8.6	346	9.1	521	7.7	411	31.5
Indoors, public building	526	7.0	304	5.0	363	3.4	558	6.1	458	21.6
Indoors, other location	1360	30.4	708	30.2	822	28.2	1381	29.3	1070	118.2
Indoors, not specified	-1	0.0	680	0.4	909	0.7	-1	0.0	825	1.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	726	7.1	457	24.0	543	31.9	717	13.0	563	75.9
Outdoors, school grounds	1811	0.9	838	2.5	1063	2.6	1951	1.9	1291	7.9
Outdoors, sports arena	399	2.3	241	2.9	312	4.6	409	2.8	333	12.6
Outdoors, park/golf course	370	2.1	228	14.9	253	23.4	375	2.0	256	42.4
Outdoors, other location	796	1.3	500	10.7	601	18.7	760	1.3	581	32.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	1737	0.3	-1	0.1	-1	0.0	2026	0.2	1723	0.6
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1690	123.6	899	115.7	1025	114.7	1709	122.4	1343	476.3
In transit, bus	3317	4.4	1747	4.5	1974	4.1	3048	4.9	2543	18.0
In transit, truck	2134	4.5	1151	5.0	1352	4.5	2225	5.3	1721	19.4
In transit, van	-1	0.0	807	0.8	932	2.4	-1	0.0	918	3.3
Indoors, public garage	989	3.4	576	1.6	621	1.1	967	2.8	863	8.9
Outdoors, in a parking lot	948	6.1	519	9.5	585	11.7	991	6.8	712	34.1
Outdoors, along a roadway	1370	33.5	756	46.5	870	57.7	1357	35.1	1035	172.8
In transit, motorcycle	-1	0.0	810	6.0	866	11.8	-1	0.0	847	17.8
Indoors, service station	1365	0.1	798	0.2	982	0.1	1308	0.2	1106	0.6
Outdoors, service station	0	0.2	0	0.7	0	1.2	0	0.2	0	2.3
Indoors, residential garage	-1	0.1	-1	0.1	-1	0.0	1826	0.1	1628	0.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, home	608	1459.7	339	1459.7	385	1465.1	605	1483.5	485	5868.0
Indoors, office	628	243.3	372	228.0	398	218.8	575	253.4	499	943.5
Indoors, store	609	63.2	347	66.2	383	64.3	609	69.0	488	262.6
Indoors, restaurant	1204	40.0	632	37.2	697	41.6	1213	41.1	941	159.9
Indoors, mfg. facility	883	15.6	518	14.6	519	12.3	771	16.9	686	59.4
Indoors, school	778	51.9	452	38.4	492	23.0	704	54.6	640	167.9
Indoors, church	491	15.0	259	15.0	291	11.9	515	15.4	395	57.3
Indoors, shopping mall	2677	3.7	1668	2.8	1927	1.7	2781	3.9	2375	12.1
Indoors, auditorium	211	5.1	106	7.8	119	8.4	210	5.7	152	27.1
Indoors, health care facility	527	36.7	293	30.6	324	25.9	519	36.2	429	129.4
Indoors, public building	546	5.9	301	8.7	324	10.3	496	6.2	394	31.2
Indoors, other location	1343	37.4	729	32.7	878	35.8	1342	35.3	1083	141.2
Indoors, not specified	1485	0.4	709	0.3	707	0.2	1173	0.5	1091	1.3
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	731	3.5	485	21.1	620	30.6	672	4.8	583	60.0
Outdoors, school grounds	1899	0.4	828	1.0	975	1.7	2159	0.7	1246	3.7
Outdoors, sports arena	618	0.1	219	4.6	242	9.4	725	0.3	247	14.4
Outdoors, park/golf course	480	0.8	255	10.8	293	16.3	559	1.5	298	29.4
Outdoors, other location	929	0.7	537	13.5	668	21.0	890	0.7	628	35.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.1	-1	0.0	690	0.1
In transit, train	2337	0.3	1131	0.5	1326	0.3	2439	0.6	1853	1.7
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1544	79.6	868	93.8	919	103.3	1502	94.8	1189	371.4
In transit, bus	3702	2.4	1475	4.5	1586	15.8	3736	2.2	1959	25.0
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1503	2.1	878	2.4	979	1.5	1406	2.0	1192	8.0
Indoors, public garage	-1	0.1	-1	0.0	-1	0.0	-1	0.0	1216	0.1
Outdoors, in a parking lot	793	10.0	447	24.0	470	45.0	694	12.1	529	91.0
Outdoors, along a roadway	1322	31.8	701	37.4	805	41.9	1303	33.1	1006	144.2
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	888	8.7	567	10.5	575	6.3	794	10.2	712	35.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	628	1858.8	347	1685.8	397	1576.1	622	1863.6	506	6984.3
Indoors, office	483	8.4	280	4.6	258	3.0	403	7.1	389	23.1
Indoors, store	517	28.3	324	44.8	354	54.6	415	30.1	386	157.9
Indoors, restaurant	1403	14.6	651	7.4	571	4.6	1348	9.8	1130	36.4
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	781	18.7	386	28.1	465	17.3	707	27.4	578	91.6
Indoors, church	521	11.6	239	12.6	225	7.2	386	14.0	354	45.4
Indoors, shopping mall	3097	5.0	1865	0.6	-1	0.0	3013	5.2	2985	10.9
Indoors, auditorium	127	5.1	138	3.2	194	7.9	103	3.2	152	19.4
Indoors, health care facility	608	28.2	382	37.7	429	21.5	603	44.9	513	132.2
Indoors, public building	483	1.9	264	7.8	251	11.9	444	1.2	285	22.8
Indoors, other location	1125	22.4	644	33.3	701	58.4	1026	26.6	817	140.7
Indoors, not specified	1066	2.1	654	0.5	-1	0.0	1154	1.3	1045	3.9
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	707	18.0	492	120.9	558	175.0	597	16.7	544	330.6
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	274	2.3	377	8.7	-1	0.0	355	11.0
Outdoors, park/golf course	579	2.2	220	13.7	264	21.9	675	2.6	292	40.3
Outdoors, other location	-1	0.0	487	8.2	611	26.1	-1	0.0	581	34.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1723	148.9	931	147.3	1064	145.5	1710	150.7	1361	592.4
In transit, bus	3292	10.8	1698	5.0	1920	2.6	3295	8.7	2868	27.2
In transit, truck	1957	18.2	1141	22.6	1205	17.7	1791	26.2	1530	84.7
In transit, van	1441	2.6	894	5.2	1046	10.3	1429	3.5	1120	21.6
Indoors, public garage	1182	2.9	654	4.2	690	2.6	1100	4.9	916	14.5
Outdoors, in a parking lot	966	8.3	520	10.0	607	10.0	960	10.1	755	38.5
Outdoors, along a roadway	1378	43.5	754	55.1	919	68.2	1324	44.7	1056	211.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1435	7.6	820	3.3	836	1.4	1299	5.5	1233	17.8
Outdoors, service station	-1	0.1	0	0.5	0	0.8	0	0.2	0	1.6
Indoors, residential garage	1938	0.1	722	0.2	707	0.5	-1	0.1	993	0.9
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	593	1331.0	321	1320.5	367	1286.1	594	1386.6	471	5324.3
Indoors, office	627	296.5	380	296.9	415	318.0	574	275.5	496	1187.0
Indoors, store	691	69.6	396	51.3	415	37.8	648	66.3	565	225.0
Indoors, restaurant	1112	34.0	606	35.9	681	37.4	1157	33.7	880	141.0
Indoors, mfg. facility	756	35.0	448	68.4	498	89.7	747	39.0	564	232.1
Indoors, school	806	9.2	479	19.4	528	24.2	789	17.4	615	70.3
Indoors, church	491	18.9	280	16.9	314	16.4	502	16.1	399	68.4
Indoors, shopping mall	3696	2.4	1863	0.6	2231	0.8	3654	2.4	3311	6.2
Indoors, auditorium	202	3.5	101	1.6	147	2.5	220	2.7	178	10.4
Indoors, health care facility	562	18.0	291	5.2	366	1.7	544	12.2	509	37.1
Indoors, public building	688	6.5	319	11.3	360	19.9	726	6.8	454	44.5
Indoors, other location	1401	66.2	799	48.1	842	32.7	1314	66.9	1153	214.0
Indoors, not specified	1213	6.7	714	1.9	677	0.5	1040	4.8	1066	13.9
Outdoors, construction	-1	0.0	824	2.9	901	4.5	-1	0.0	871	7.3
Outdoors, residential grounds	874	2.6	461	26.0	543	46.0	884	3.5	542	78.1
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	305	8.0	218	13.7	271	17.0	271	7.9	261	46.7
Outdoors, other location	1021	8.0	548	9.4	731	12.3	986	11.1	816	40.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	1707	0.6	945	0.1	-1	0.0	1785	0.4	1639	1.1
In transit, airplane	-1	0.0	0	0.3	0	1.1	-1	0.0	0	1.3

Denver: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1394	84.9	799	73.3	918	79.4	1372	76.2	1129	313.8
In transit, bus	2306	1.9	1273	1.2	1459	1.0	1865	1.7	1824	5.7
In transit, truck	1412	3.9	877	0.6	-1	0.0	1379	3.6	1356	8.1
In transit, van	1555	3.0	723	3.6	827	2.2	1722	3.1	1213	11.8
Indoors, public garage	786	0.8	496	0.3	-1	0.1	736	0.6	714	1.8
Outdoors, in a parking lot	979	4.1	483	7.6	567	10.7	943	4.3	666	26.7
Outdoors, along a roadway	1283	36.4	719	36.3	834	43.6	1267	32.0	1009	148.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1040	0.2	-1	0.1	963	0.1	-1	0.1	952	0.5
Outdoors, service station	-1	0.0	0	0.2	0	0.8	-1	0.0	0	1.0
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	618	1891.0	344	1865.1	389	1819.8	608	1947.7	492	7523.7
Indoors, office	514	8.2	300	7.7	308	6.6	455	8.6	401	31.2
Indoors, store	580	34.4	348	31.8	377	34.9	551	33.8	465	134.9
Indoors, restaurant	1258	15.2	600	24.2	683	27.8	1312	17.0	890	84.3
Indoors, mfg. facility	-1	0.0	333	0.1	349	0.4	-1	0.0	346	0.5
Indoors, school	898	5.8	394	4.8	510	4.1	947	5.2	708	20.0
Indoors, church	465	18.4	250	20.8	284	16.7	457	20.4	365	76.3
Indoors, shopping mall	2819	4.1	1625	3.5	1960	3.1	2860	3.5	2345	14.2
Indoors, auditorium	234	2.1	104	0.6	88	0.8	235	1.6	194	5.2
Indoors, health care facility	533	9.7	294	14.3	320	23.7	449	9.2	370	56.9
Indoors, public building	577	2.7	283	5.3	308	4.9	709	4.3	442	17.3
Indoors, other location	1336	17.9	681	22.8	784	32.3	1344	18.8	981	91.7
Indoors, not specified	1246	2.2	658	0.5	-1	0.0	1353	1.4	1209	4.1
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	801	11.8	462	38.8	535	54.7	841	13.7	573	119.0
Outdoors, school grounds	980	0.3	-1	0.1	-1	0.0	809	0.2	881	0.6
Outdoors, sports arena	-1	0.0	253	1.7	321	5.5	-1	0.0	305	7.2
Outdoors, park/golf course	-1	0.0	257	12.9	290	25.7	-1	0.0	279	38.6
Outdoors, other location	652	0.3	557	5.6	706	9.0	553	0.6	646	15.4
Outdoors, not specified	1008	0.8	662	0.2	-1	0.0	850	0.5	912	1.4
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1572	107.0	893	102.3	1054	111.4	1602	105.6	1281	426.3
In transit, bus	3105	6.5	1527	4.6	1458	3.9	3115	5.5	2439	20.5
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	2039	3.1	999	1.4	1024	0.5	1939	2.5	1747	7.4
Indoors, public garage	1076	0.6	660	0.4	748	0.2	1075	0.6	945	1.8
Outdoors, in a parking lot	835	6.5	519	13.6	629	18.9	832	7.9	660	46.9
Outdoors, along a roadway	1397	37.4	756	41.9	900	46.6	1357	35.4	1078	161.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.1	-1	0.1	-1	0.1	1736	0.3
Outdoors, service station	0	0.4	0	1.5	0	3.1	0	0.8	0	5.7
Indoors, residential garage	-1	0.1	-1	0.0	-1	0.0	-1	0.1	876	0.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	601	1501.7	330	1497.0	376	1485.9	601	1528.7	478	6013.2
Indoors, office	651	246.0	389	205.0	420	165.7	587	249.5	526	866.2
Indoors, store	567	46.2	335	58.1	361	67.6	557	51.4	442	223.3
Indoors, restaurant	1214	41.2	632	49.4	660	46.2	1206	46.6	916	183.4
Indoors, mfg. facility	-1	0.0	458	32.3	527	77.6	-1	0.0	507	109.9
Indoors, school	760	43.3	455	36.0	524	25.2	686	44.5	624	149.1
Indoors, church	492	15.7	257	19.4	306	21.1	511	15.9	379	72.0
Indoors, shopping mall	2209	4.0	1497	5.0	1474	3.6	1882	5.3	1766	17.9
Indoors, auditorium	186	2.2	97	2.8	106	1.7	193	2.4	146	9.2
Indoors, health care facility	507	41.9	292	45.9	293	42.0	454	49.1	387	178.9
Indoors, public building	751	3.4	370	2.6	387	2.4	644	2.4	553	10.8
Indoors, other location	1360	45.7	731	39.6	850	47.6	1414	45.0	1097	177.9
Indoors, not specified	-1	0.1	659	2.0	845	3.1	1300	0.2	799	5.4
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1189	4.8	513	15.5	541	23.7	1009	5.6	648	49.6
Outdoors, school grounds	1180	0.4	788	0.9	1016	0.9	1048	0.9	980	3.2
Outdoors, sports arena	283	0.8	261	3.8	362	5.4	235	0.9	310	10.9
Outdoors, park/golf course	560	0.5	-1	0.1	-1	0.0	594	0.4	542	1.0
Outdoors, other location	751	0.7	524	2.7	620	3.6	791	0.7	614	7.7
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1513	142.4	889	148.1	1007	136.7	1466	149.3	1220	576.6
In transit, bus	3062	2.4	1804	4.7	1937	2.8	2975	5.1	2429	15.0
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	764	0.2	806	0.2	-1	0.0	790	0.4
Indoors, public garage	676	0.3	-1	0.1	-1	0.0	557	0.2	609	0.5
Outdoors, in a parking lot	834	7.1	555	19.2	677	29.7	805	8.8	676	64.9
Outdoors, along a roadway	1364	34.5	797	79.0	918	104.3	1419	36.0	1012	253.8
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	975	0.4	1318	0.9	-1	0.0	1206	1.4
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	-1	0.1	861	0.1	1132	0.1	1242	0.1	1148	0.5
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	642	1692.1	355	1636.1	401	1650.8	634	1728.6	511	6707.6
Indoors, office	683	89.7	371	62.6	368	36.1	620	78.9	549	267.4
Indoors, store	672	19.1	354	22.1	350	28.8	713	15.3	488	85.3
Indoors, restaurant	1513	28.5	769	38.6	735	39.0	1372	29.0	1046	135.1
Indoors, mfg. facility	923	16.6	507	12.7	532	6.1	803	18.2	739	53.7
Indoors, school	536	10.6	409	4.1	657	4.7	455	6.6	517	26.1
Indoors, church	404	22.4	266	22.8	314	15.8	392	23.3	347	84.3
Indoors, shopping mall	2447	6.1	1553	6.0	1452	8.9	2043	3.8	1812	24.8
Indoors, auditorium	251	28.7	113	29.6	149	17.9	260	29.9	198	106.1
Indoors, health care facility	402	4.3	307	15.1	360	21.5	323	6.2	342	47.0
Indoors, public building	406	2.3	279	3.7	299	8.0	372	2.0	319	16.1
Indoors, other location	1368	12.6	774	16.2	977	9.8	1412	18.8	1148	57.4
Indoors, not specified	-1	0.0	575	0.8	554	2.9	-1	0.0	559	3.6
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	728	17.7	500	39.8	560	68.0	742	21.7	591	147.3
Outdoors, school grounds	2244	1.2	813	2.4	1085	1.4	2624	2.6	1709	7.6
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	321	18.3	226	15.2	233	7.5	281	21.0	274	61.9
Outdoors, other location	-1	0.0	583	3.3	813	5.2	-1	0.0	723	8.4
Outdoors, not specified	1054	0.4	742	0.7	698	0.4	837	0.8	816	2.4
In transit, train	1762	2.6	1123	0.6	-1	0.0	1702	1.6	1663	4.9
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1423	74.1	839	87.2	949	99.9	1341	75.3	1113	336.5
In transit, bus	2171	0.7	1456	2.3	1637	2.4	1903	1.5	1688	6.9
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1139	1.1	749	0.3	-1	0.0	996	0.7	1043	2.0
Indoors, public garage	1373	0.3	662	1.0	895	1.4	1562	0.3	940	3.0
Outdoors, in a parking lot	801	1.9	472	4.6	509	7.7	706	2.2	559	16.5
Outdoors, along a roadway	1253	30.1	818	35.4	1015	45.1	1271	27.3	1067	138.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	-1	0.0	0	0.1	0	0.2	-1	0.0	0	0.3
Indoors, residential garage	-1	0.0	1197	0.1	1412	0.3	-1	0.0	1355	0.5
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	653	1901.1	364	1886.8	410	1861.3	641	1945.1	518	7594.3
Indoors, office	664	18.8	395	5.4	460	2.9	614	12.1	597	39.2
Indoors, store	581	17.1	351	47.4	381	76.3	549	15.0	410	155.8
Indoors, restaurant	872	15.1	572	22.9	607	24.0	705	20.4	670	82.4
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	-1	0.0	461	0.2	525	0.9	-1	0.0	512	1.2
Indoors, church	527	27.7	289	25.8	351	19.8	510	36.7	434	110.0
Indoors, shopping mall	2752	4.2	1828	7.4	1894	4.5	2445	7.9	2203	24.0
Indoors, auditorium	131	1.9	89	3.8	85	2.3	105	4.1	100	12.0
Indoors, health care facility	431	17.6	284	8.3	324	4.8	450	16.4	401	47.0
Indoors, public building	462	3.6	304	5.3	368	5.6	410	5.4	379	19.9
Indoors, other location	1433	38.3	673	20.2	627	12.0	1394	31.8	1176	102.3
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1476	2.4	562	11.8	607	25.1	1387	2.1	684	41.3
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	362	4.0	244	5.0	290	4.3	318	3.7	300	17.1
Outdoors, park/golf course	-1	0.0	259	1.2	348	3.7	-1	0.0	326	4.9
Outdoors, other location	-1	0.0	517	1.3	634	3.4	-1	0.0	601	4.7
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1737	74.0	965	76.3	1114	75.0	1737	78.0	1389	303.4
In transit, bus	-1	0.0	3008	0.5	3306	1.9	-1	0.0	3244	2.4
In transit, truck	2315	75.6	1167	76.8	1182	102.0	2366	64.7	1687	319.2
In transit, van	1338	8.1	824	1.9	-1	0.0	1243	5.1	1242	15.1
Indoors, public garage	1245	32.2	591	25.7	693	12.6	1322	36.1	1048	106.6
Outdoors, in a parking lot	1079	11.5	606	25.3	700	24.2	1023	22.4	811	83.5
Outdoors, along a roadway	1300	162.2	799	215.4	957	243.0	1269	170.1	1051	790.7
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1661	52.6	961	13.8	857	3.9	1499	33.6	1485	103.9
Outdoors, service station	0	0.2	0	2.3	0	4.8	0	0.5	0	7.8
Indoors, residential garage	1706	5.7	680	0.9	918	0.3	1915	7.0	1727	13.9
Indoors, in a repair shop	-1	0.0	1799	0.3	2138	1.0	-1	0.0	2067	1.3
Indoors, home	605	1272.3	327	1209.6	371	1136.3	609	1292.7	483	4910.9
Indoors, office	686	62.4	347	45.3	302	75.1	617	46.4	479	229.3
Indoors, store	623	12.4	341	6.1	393	4.2	551	14.5	523	37.3
Indoors, restaurant	955	42.8	654	23.9	864	15.1	1012	30.6	895	112.3
Indoors, mfg. facility	796	15.6	535	96.7	606	126.7	722	33.0	606	272.0
Indoors, school	757	6.6	451	12.8	492	7.8	697	14.0	591	41.1
Indoors, church	509	22.9	259	11.1	308	6.0	538	27.3	462	67.3
Indoors, shopping mall	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, auditorium	264	4.3	110	25.7	152	54.7	299	5.1	153	89.8
Indoors, health care facility	-1	0.0	301	4.5	405	7.2	-1	0.0	365	11.7
Indoors, public building	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, other location	1569	42.5	770	14.4	636	6.3	1470	33.1	1354	96.4
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	1459	47.8	869	76.6	941	107.3	1378	70.9	1107	302.6
Outdoors, residential grounds	873	10.5	487	20.2	612	18.2	855	20.6	687	69.6
Outdoors, school grounds	1213	0.4	771	0.7	836	0.4	1122	0.8	974	2.3
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	355	8.4	236	13.4	252	9.1	338	13.1	292	44.0
Outdoors, other location	1015	188.8	565	183.7	609	164.9	1031	188.4	813	725.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1719	49.2	863	71.0	991	80.2	1768	54.4	1262	254.9
In transit, bus	3229	19.0	1781	13.9	1986	7.8	3073	20.0	2685	60.8
In transit, truck	1354	0.6	967	1.2	1229	1.7	1245	0.6	1173	4.2
In transit, van	1485	3.3	734	2.1	839	2.1	1540	2.3	1196	9.8
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	863	7.2	482	8.0	542	8.9	863	9.0	685	33.2
Outdoors, along a roadway	1341	129.1	700	146.0	800	174.8	1415	118.6	1026	568.4
In transit, motorcycle	2080	2.9	780	0.9	1045	0.2	2418	2.0	1959	6.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.1	-1	0.0	922	0.1
Outdoors, service station	0	0.2	0	0.2	0	0.5	0	0.2	0	1.2
Indoors, residential garage	1548	0.2	627	0.4	713	0.5	1799	0.3	1012	1.4
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	593	1403.3	329	1420.9	381	1459.0	595	1443.5	474	5726.8
Indoors, office	984	3.8	371	5.8	387	8.7	987	2.6	564	20.9
Indoors, store	653	25.9	325	25.0	364	28.5	716	24.0	509	103.4
Indoors, restaurant	1276	7.1	615	15.2	705	16.7	1364	10.1	896	49.2
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	773	379.8	458	260.5	503	143.9	723	376.4	652	1160.6
Indoors, church	491	15.9	262	14.3	297	12.7	500	16.1	396	59.0
Indoors, shopping mall	2179	2.7	1492	2.5	1465	2.5	1970	4.0	1807	11.7
Indoors, auditorium	227	4.3	102	8.4	123	7.5	252	5.6	162	25.7
Indoors, health care facility	421	10.9	251	12.6	310	8.4	424	12.9	353	44.8
Indoors, public building	490	6.6	306	7.7	367	7.4	475	8.5	409	30.3
Indoors, other location	1233	8.9	638	9.8	757	9.0	1162	9.9	945	37.6
Indoors, not specified	-1	0.0	792	0.1	1073	0.4	-1	0.0	1015	0.5
Outdoors, construction	-1	0.0	801	0.3	866	1.2	-1	0.0	852	1.5
Outdoors, residential grounds	873	35.5	448	68.0	512	98.8	933	36.9	612	239.2
Outdoors, school grounds	1216	29.1	750	27.1	794	19.8	1203	33.6	1021	109.5
Outdoors, sports arena	391	9.2	221	14.7	276	16.9	430	11.5	315	52.4
Outdoors, park/golf course	433	4.7	223	24.8	254	44.5	474	3.9	266	77.9
Outdoors, other location	780	0.6	498	22.2	592	45.1	833	0.8	566	68.8
Outdoors, not specified	2053	0.1	-1	0.0	-1	0.0	-1	0.1	1999	0.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1656	47.7	885	63.6	1002	82.2	1634	54.0	1236	247.5
In transit, bus	3173	5.7	1564	7.1	1608	4.4	2843	8.5	2351	25.8
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1651	4.5	729	5.0	829	3.2	1779	4.1	1251	16.7
Indoors, public garage	-1	0.0	646	0.3	858	0.4	-1	0.0	777	0.7
Outdoors, in a parking lot	939	4.2	523	6.1	585	8.3	938	4.8	705	23.3
Outdoors, along a roadway	1419	29.7	756	43.2	894	61.4	1458	29.4	1054	163.7
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1159	0.1	1337	0.4	-1	0.0	1300	0.5
Outdoors, service station	-1	0.0	-1	0.1	-1	0.1	-1	0.0	0	0.2
Indoors, residential garage	1073	1.2	696	0.9	985	0.7	1053	1.2	965	4.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	617	1800.7	343	1757.3	390	1742.0	611	1804.5	492	7104.6
Indoors, office	617	76.7	367	71.5	385	61.0	563	83.3	492	292.6
Indoors, store	558	21.3	342	25.3	374	35.2	552	21.8	442	103.7
Indoors, restaurant	1186	23.2	595	27.2	616	28.8	1165	26.5	873	105.8
Indoors, mfg. facility	837	16.7	479	20.5	512	22.4	737	23.0	632	82.5
Indoors, school	802	61.1	486	55.1	529	36.4	734	76.0	660	228.6
Indoors, church	467	28.2	240	26.9	262	18.6	454	28.5	366	102.1
Indoors, shopping mall	2956	0.9	1869	3.1	2026	2.8	2732	1.8	2214	8.6
Indoors, auditorium	263	0.9	107	1.7	147	1.0	295	1.9	204	5.5
Indoors, health care facility	687	11.4	338	11.4	342	12.1	636	11.9	500	46.9
Indoors, public building	400	0.9	366	5.5	410	8.1	388	1.1	393	15.6
Indoors, other location	1181	1.1	708	5.9	939	10.1	1183	1.8	903	18.8
Indoors, not specified	1143	0.3	627	1.8	739	3.6	1347	0.4	766	6.1
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	740	14.2	458	32.0	527	47.1	779	13.2	566	106.5
Outdoors, school grounds	1443	2.9	752	4.8	834	2.9	1468	5.7	1138	16.3
Outdoors, sports arena	-1	0.1	221	1.6	236	4.0	710	0.2	252	5.8
Outdoors, park/golf course	292	6.2	270	3.3	382	3.1	242	3.9	293	16.5
Outdoors, other location	626	0.3	513	2.8	595	7.4	513	0.5	571	11.0
Outdoors, not specified	-1	0.0	-1	0.0	674	0.1	-1	0.0	668	0.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Denver: City-wide, Demographic Group=All persons

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1640	106.3	882	102.5	999	102.6	1648	106.9	1299	418.3
In transit, bus	3214	5.3	1713	4.6	1872	3.7	3010	5.8	2539	19.4
In transit, truck	1954	7.6	1125	6.7	1240	7.0	1953	7.9	1592	29.2
In transit, van	1596	3.9	892	4.4	1002	4.1	1598	3.6	1250	16.1
Indoors, public garage	954	4.0	558	2.9	634	1.6	936	4.1	816	12.6
Outdoors, in a parking lot	912	6.7	511	10.3	585	12.9	901	8.0	689	37.8
Outdoors, along a roadway	1349	45.9	737	68.5	852	85.1	1351	48.6	1010	248.1
In transit, motorcycle	2148	0.1	822	1.0	914	1.8	2516	0.1	996	3.0
Indoors, service station	1356	3.7	782	2.0	835	1.2	1273	3.2	1154	10.1
Outdoors, service station	0	0.2	0	0.4	0	0.6	0	0.2	0	1.4
Indoors, residential garage	1281	1.2	665	1.2	783	0.8	1372	1.3	1057	4.5
Indoors, in a repair shop	1993	1.7	1211	0.4	-1	0.0	1847	1.2	1847	3.3
Indoors, home	610	1557.9	339	1551.6	385	1551.4	607	1590.3	486	6251.1
Indoors, office	617	149.5	367	114.5	396	94.2	573	143.3	506	501.5
Indoors, store	606	42.2	346	44.2	375	48.8	596	42.1	475	177.3
Indoors, restaurant	1158	28.5	625	26.8	692	28.0	1176	29.0	919	112.3
Indoors, mfg. facility	781	13.4	457	17.3	505	21.3	720	14.5	595	66.5
Indoors, school	776	74.2	456	69.8	499	50.9	720	84.6	629	279.4
Indoors, church	502	13.7	270	14.1	313	12.5	512	14.3	401	54.6
Indoors, shopping mall	2734	2.8	1621	2.5	1679	2.2	2616	3.2	2218	10.7
Indoors, auditorium	215	6.5	105	7.2	125	7.3	222	6.5	164	27.7
Indoors, health care facility	508	20.6	291	19.5	326	17.4	492	21.2	410	78.8
Indoors, public building	552	5.2	312	7.3	353	9.1	563	5.4	422	27.0
Indoors, other location	1326	33.8	726	27.9	850	27.8	1322	32.7	1080	122.2
Indoors, not specified	1230	1.8	678	0.8	812	0.7	1131	1.5	1040	4.8
Outdoors, construction	1395	0.9	832	1.5	889	1.8	1335	1.5	1068	5.7
Outdoors, residential grounds	820	10.0	470	35.6	549	53.3	831	12.6	580	111.4
Outdoors, school grounds	1307	3.1	789	4.3	872	4.3	1280	4.2	1044	15.9
Outdoors, sports arena	378	1.5	235	4.5	289	7.6	399	1.7	294	15.3
Outdoors, park/golf course	375	3.0	234	13.4	270	21.7	391	3.4	276	41.4
Outdoors, other location	964	4.1	521	15.3	618	24.9	982	4.7	651	49.0
Outdoors, not specified	1248	0.2	1009	0.2	1349	0.3	1280	0.2	1224	0.8
In transit, train	2128	0.5	1025	0.3	952	0.3	2262	0.4	1762	1.5
In transit, airplane	-1	0.0	0	0.4	0	0.7	-1	0.0	0	1.1

Houston: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	974	88.2	693	94.5	1069	100.8	1392	90.1	1029	373.5
In transit, bus	1773	7.0	1309	5.1	2106	3.0	2525	7.1	1952	22.3
In transit, truck	1199	7.2	873	6.6	1346	5.7	1744	7.1	1294	26.6
In transit, van	972	5.2	694	5.2	1116	4.9	1437	5.6	1062	21.0
Indoors, public garage	554	1.9	410	1.5	649	1.1	787	2.0	608	6.5
Outdoors, in a parking lot	560	11.6	402	12.5	613	13.6	802	11.7	592	49.4
Outdoors, along a roadway	804	56.6	591	72.7	903	89.0	1138	58.2	850	276.5
In transit, motorcycle	-1	0.0	682	0.9	1016	1.9	-1	0.0	918	2.9
Indoors, service station	788	2.1	595	1.6	883	0.9	1147	2.2	872	6.8
Outdoors, service station	0	0.1	0	0.2	0	0.3	0	0.1	0	0.9
Indoors, residential garage	786	1.3	539	0.9	824	0.5	1076	1.3	827	4.0
Indoors, in a repair shop	-1	0.1	-1	0.0	-1	0.0	-1	0.1	1072	0.2
Indoors, home	396	1539.9	267	1544.5	448	1553.4	599	1575.8	429	6213.6
Indoors, office	365	81.5	279	79.3	433	77.4	532	82.3	403	320.5
Indoors, store	367	43.2	277	44.7	420	47.4	523	44.4	397	179.7
Indoors, restaurant	690	26.9	494	26.9	738	27.4	990	27.3	729	108.4
Indoors, mfg. facility	462	24.2	348	22.1	551	19.6	680	25.0	513	90.9
Indoors, school	449	133.5	343	97.6	542	56.7	667	136.0	507	423.7
Indoors, church	293	15.4	207	13.8	324	11.8	433	16.0	318	57.0
Indoors, shopping mall	1789	3.5	1366	2.9	2027	2.4	2541	3.3	1941	12.1
Indoors, auditorium	122	8.1	83	8.7	130	9.2	172	8.5	126	34.5
Indoors, health care facility	309	24.0	227	19.5	364	14.5	451	24.5	342	82.5
Indoors, public building	342	7.4	245	9.0	395	10.6	496	7.4	366	34.4
Indoors, other location	827	26.2	562	23.0	873	19.7	1216	26.6	881	95.6
Indoors, not specified	600	0.2	538	0.4	863	0.6	868	0.2	743	1.3
Outdoors, construction	849	3.1	662	2.3	989	1.4	1227	3.0	940	9.8
Outdoors, residential grounds	485	22.2	377	44.7	591	67.4	685	22.5	528	156.8
Outdoors, school grounds	825	8.3	644	6.1	966	3.5	1164	8.3	910	26.2
Outdoors, sports arena	256	1.3	191	4.5	295	7.7	353	1.2	265	14.7
Outdoors, park/golf course	242	6.5	191	16.4	299	26.5	338	6.8	266	56.2
Outdoors, other location	592	3.2	410	15.2	629	27.9	824	3.1	571	49.4
Outdoors, not specified	733	0.2	606	0.1	-1	0.1	1131	0.2	864	0.7
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	0.5	0	1.0	-1	0.0	0	1.6

Houston: City-wide, Demographic Group=African americans

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1023	53.4	739	58.0	1099	64.4	1467	55.3	1079	231.1
In transit, bus	2108	21.6	1491	18.2	2143	13.5	2966	21.2	2207	74.6
In transit, truck	-1	0.0	-1	0.0	1244	0.2	-1	0.0	1244	0.2
In transit, van	-1	0.0	-1	0.1	934	0.2	-1	0.0	850	0.3
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	659	4.4	455	8.9	691	14.5	922	4.6	654	32.4
Outdoors, along a roadway	852	36.8	639	63.3	955	91.0	1198	36.5	889	227.6
In transit, motorcycle	1188	1.4	763	1.0	1140	0.4	1708	1.3	1252	4.1
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	407	1694.2	285	1695.6	460	1699.9	612	1736.8	442	6826.6
Indoors, office	494	8.8	329	10.0	447	11.4	741	9.6	499	39.7
Indoors, store	388	15.1	293	24.9	420	35.3	580	15.7	408	91.0
Indoors, restaurant	824	4.6	515	3.0	767	2.8	1165	4.8	861	15.1
Indoors, mfg. facility	434	1.7	-1	0.0	602	0.4	629	4.3	575	6.4
Indoors, school	474	172.0	366	124.9	545	66.3	711	168.3	533	531.4
Indoors, church	280	40.5	205	39.7	293	39.9	409	41.3	298	161.4
Indoors, shopping mall	1570	3.2	1366	2.4	1943	1.4	2265	3.4	1802	10.5
Indoors, auditorium	119	5.1	90	4.0	128	2.3	160	5.6	127	17.0
Indoors, health care facility	315	47.4	230	63.9	384	80.5	498	46.3	351	238.1
Indoors, public building	274	2.4	240	7.0	346	11.9	380	2.4	310	23.6
Indoors, other location	810	6.6	549	10.4	779	18.3	1188	9.6	817	44.8
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	585	14.5	409	23.5	608	30.6	810	14.0	582	82.6
Outdoors, school grounds	791	12.4	638	8.7	930	4.0	1142	12.0	884	37.1
Outdoors, sports arena	259	13.7	196	10.6	281	6.2	356	14.9	279	45.4
Outdoors, park/golf course	-1	0.0	-1	0.1	311	0.1	-1	0.0	278	0.2
Outdoors, other location	-1	0.0	459	5.8	711	12.3	-1	0.0	631	18.2
Outdoors, not specified	-1	0.1	-1	0.1	-1	0.0	-1	0.1	873	0.2
In transit, train	-1	0.0	-1	0.0	1109	0.2	-1	0.0	1109	0.2
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	967	57.8	691	60.7	1035	63.7	1348	59.4	1009	241.6
In transit, bus	1998	15.5	1385	13.7	1984	11.1	2746	15.2	2049	55.6
In transit, truck	-1	0.0	-1	0.0	1180	0.2	-1	0.0	1180	0.2
In transit, van	882	6.9	646	5.1	926	2.8	1164	7.1	924	22.0
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	541	7.7	411	10.8	636	14.4	758	7.7	581	40.6
Outdoors, along a roadway	788	104.6	580	112.2	898	115.3	1117	102.2	841	434.3
In transit, motorcycle	1174	1.0	724	0.7	1084	0.3	1596	1.0	1196	3.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	390	1667.1	266	1667.1	433	1676.3	570	1709.7	416	6720.2
Indoors, office	430	12.9	305	12.5	427	12.1	626	13.5	450	50.9
Indoors, store	371	15.2	277	23.9	398	32.8	527	15.8	383	87.7
Indoors, restaurant	698	6.4	473	4.5	704	3.4	950	6.7	731	21.0
Indoors, mfg. facility	420	1.5	-1	0.0	567	0.4	581	3.7	537	5.6
Indoors, school	453	123.4	345	90.1	511	49.4	655	121.6	499	384.5
Indoors, church	260	42.8	192	42.8	274	41.9	358	44.7	272	172.1
Indoors, shopping mall	1549	2.9	1318	2.2	1848	1.3	2097	3.1	1716	9.5
Indoors, auditorium	115	4.7	85	3.6	122	2.1	148	5.1	120	15.5
Indoors, health care facility	289	40.7	216	55.6	361	70.7	447	39.7	325	206.8
Indoors, public building	266	2.2	227	6.2	329	10.5	350	2.1	295	21.1
Indoors, other location	843	9.5	528	11.9	750	17.4	1167	12.0	814	50.7
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	592	14.2	380	34.6	553	54.1	789	13.8	534	116.7
Outdoors, school grounds	776	8.9	609	6.2	887	2.8	1056	8.6	839	26.5
Outdoors, sports arena	252	12.4	185	9.6	268	5.7	330	13.6	264	41.3
Outdoors, park/golf course	-1	0.0	-1	0.1	295	0.1	-1	0.0	264	0.2
Outdoors, other location	449	1.7	405	9.9	613	18.9	616	1.6	541	32.0
Outdoors, not specified	-1	0.1	-1	0.1	-1	0.0	-1	0.1	822	0.2
In transit, train	-1	0.0	-1	0.0	1028	0.2	-1	0.0	1028	0.2
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	932	44.4	701	61.4	1013	79.1	1287	44.8	967	229.7
In transit, bus	1681	7.8	1304	5.3	1957	2.4	2322	7.9	1841	23.3
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	701	4.4	1032	8.8	-1	0.0	920	13.2
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	597	13.2	417	12.5	619	11.0	820	14.1	619	50.7
Outdoors, along a roadway	864	62.7	639	57.7	963	51.0	1168	62.6	911	233.9
In transit, motorcycle	-1	0.0	651	1.0	932	2.1	-1	0.0	839	3.1
Indoors, service station	-1	0.0	582	0.2	799	0.4	-1	0.0	729	0.6
Outdoors, service station	-1	0.0	0	0.3	0	0.6	-1	0.0	0	0.9
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	406	1809.8	284	1808.6	454	1810.6	596	1856.3	436	7285.3
Indoors, office	541	1.0	302	1.5	379	2.2	777	1.3	473	6.0
Indoors, store	357	27.5	281	56.2	400	89.3	489	26.2	372	199.2
Indoors, restaurant	708	7.7	526	6.4	781	6.4	989	8.5	766	28.9
Indoors, mfg. facility	494	1.1	307	0.1	617	0.5	732	2.5	642	4.2
Indoors, school	455	115.7	360	79.4	545	36.1	663	115.1	512	346.3
Indoors, church	302	11.4	202	8.1	296	4.1	404	11.7	312	35.2
Indoors, shopping mall	1765	5.0	1425	3.5	1996	1.6	2306	4.8	1886	14.9
Indoors, auditorium	93	12.8	82	14.2	125	14.8	125	14.0	107	55.8
Indoors, health care facility	259	12.9	216	12.0	309	10.4	380	12.5	290	47.8
Indoors, public building	263	5.2	232	2.7	332	1.4	373	4.6	300	13.9
Indoors, other location	792	8.0	586	6.9	871	6.7	1095	7.5	840	29.2
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	574	10.4	400	15.4	603	20.1	811	10.5	581	56.2
Outdoors, school grounds	750	2.8	647	1.9	892	0.9	1024	2.7	830	8.3
Outdoors, sports arena	-1	0.0	218	2.7	337	5.2	-1	0.0	297	7.9
Outdoors, park/golf course	211	0.5	208	3.4	294	6.4	291	0.4	263	10.6
Outdoors, other location	483	0.2	425	18.2	602	36.0	733	0.2	543	54.7
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	931	81.5	661	84.6	987	86.6	1328	83.1	976	335.8
In transit, bus	2263	5.5	1587	3.9	2490	2.1	3210	5.3	2435	16.8
In transit, truck	1114	5.3	783	3.7	1218	2.1	1598	5.1	1204	16.2
In transit, van	909	1.4	639	1.1	949	0.8	1286	1.5	969	4.8
Indoors, public garage	-1	0.0	426	1.0	676	1.8	-1	0.0	590	2.8
Outdoors, in a parking lot	520	14.7	399	17.8	631	22.7	752	14.5	574	69.6
Outdoors, along a roadway	792	56.4	586	79.5	882	103.3	1125	58.2	833	297.3
In transit, motorcycle	-1	0.0	686	6.9	1016	14.4	-1	0.0	909	21.3
Indoors, service station	-1	0.1	554	0.7	787	1.5	-1	0.1	730	2.4
Outdoors, service station	0	0.4	0	0.8	0	1.1	0	0.4	0	2.7
Indoors, residential garage	598	2.1	482	1.6	700	0.9	811	2.3	654	6.9
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	394	1580.9	268	1597.2	447	1616.3	594	1620.5	426	6415.0
Indoors, office	338	60.0	265	50.6	397	40.0	489	60.3	374	211.0
Indoors, store	389	38.5	284	45.4	425	53.1	558	39.4	411	176.5
Indoors, restaurant	721	50.8	502	40.0	737	29.4	1039	50.6	767	170.7
Indoors, mfg. facility	488	37.0	368	26.6	618	15.1	738	37.9	559	116.6
Indoors, school	451	99.9	345	67.3	547	31.4	670	102.1	512	300.6
Indoors, church	280	18.7	208	16.8	322	14.3	413	19.2	308	69.1
Indoors, shopping mall	1662	3.8	1338	2.2	1970	1.0	2496	3.5	1902	10.5
Indoors, auditorium	115	5.1	80	5.5	112	5.5	160	5.1	116	21.1
Indoors, health care facility	319	32.4	228	36.6	383	42.6	465	32.8	348	144.5
Indoors, public building	285	2.3	227	1.7	327	1.5	418	2.4	321	8.0
Indoors, other location	835	34.9	549	26.0	851	15.7	1211	34.6	887	111.2
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	540	15.9	387	31.8	593	46.7	758	16.8	552	111.3
Outdoors, school grounds	864	9.0	647	6.1	991	2.9	1246	8.8	954	26.8
Outdoors, sports arena	-1	0.0	182	2.5	269	5.0	-1	0.0	240	7.5
Outdoors, park/golf course	288	3.4	196	23.8	316	45.3	397	3.3	281	75.8
Outdoors, other location	-1	0.0	401	2.4	618	4.7	-1	0.0	545	7.1
Outdoors, not specified	-1	0.1	-1	0.0	-1	0.0	1010	0.1	875	0.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	982	88.5	700	94.5	1089	100.3	1415	90.6	1044	373.8
In transit, bus	1839	5.8	1348	4.4	2302	3.0	2613	6.0	2041	19.2
In transit, truck	1199	5.2	878	3.9	1338	2.4	1714	5.1	1300	16.6
In transit, van	951	9.5	682	8.8	1096	7.6	1419	10.3	1050	36.2
Indoors, public garage	548	4.0	401	2.6	612	1.2	785	4.3	607	12.0
Outdoors, in a parking lot	560	10.7	405	11.8	613	13.0	808	10.7	593	46.2
Outdoors, along a roadway	783	71.4	581	85.8	901	98.8	1127	72.6	842	328.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	692	0.4	562	0.4	876	0.3	1062	0.5	806	1.5
Outdoors, service station	0	0.1	0	0.1	0	0.2	0	0.1	0	0.5
Indoors, residential garage	916	1.4	568	1.0	897	0.6	1293	1.4	954	4.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	396	1546.7	267	1545.6	450	1550.0	602	1583.0	430	6225.3
Indoors, office	373	91.2	281	91.5	437	91.0	551	91.3	411	365.0
Indoors, store	363	33.9	275	39.2	421	45.9	521	35.3	394	154.3
Indoors, restaurant	665	20.8	483	22.3	716	24.1	957	20.9	702	88.1
Indoors, mfg. facility	442	27.2	337	26.1	522	24.4	655	28.2	492	105.9
Indoors, school	446	98.3	339	70.5	543	39.6	665	100.9	505	309.4
Indoors, church	291	22.6	204	19.3	321	15.9	430	23.4	316	81.1
Indoors, shopping mall	1782	2.8	1371	2.4	2110	2.2	2498	2.7	1945	10.2
Indoors, auditorium	127	8.8	85	7.4	137	5.7	180	9.2	135	31.2
Indoors, health care facility	301	23.4	217	18.0	348	11.8	447	23.7	334	77.0
Indoors, public building	357	8.1	252	11.6	408	15.0	515	8.3	377	43.0
Indoors, other location	852	25.5	566	22.8	877	20.4	1264	26.2	902	94.9
Indoors, not specified	-1	0.0	545	0.5	865	1.0	-1	0.1	762	1.6
Outdoors, construction	846	6.8	658	5.0	988	3.2	1232	6.4	939	21.4
Outdoors, residential grounds	471	27.2	369	46.7	575	66.0	668	27.2	515	167.1
Outdoors, school grounds	810	6.7	631	5.0	980	3.0	1162	6.9	904	21.6
Outdoors, sports arena	265	0.5	195	3.8	310	7.1	372	0.5	274	11.9
Outdoors, park/golf course	235	6.3	187	10.3	284	13.8	335	6.5	257	36.8
Outdoors, other location	601	5.9	407	22.8	625	40.7	847	5.6	573	75.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	974	114.4	693	115.7	1080	117.0	1407	116.8	1039	463.9
In transit, bus	1651	11.1	1233	7.8	1922	4.0	2374	10.9	1819	33.9
In transit, truck	1212	2.9	846	7.1	1334	11.1	1805	2.8	1229	24.0
In transit, van	-1	0.1	728	1.9	1255	3.6	-1	0.1	1080	5.7
Indoors, public garage	577	0.4	433	0.5	703	0.5	833	0.4	634	1.9
Outdoors, in a parking lot	594	11.1	404	10.9	634	10.3	845	11.2	621	43.5
Outdoors, along a roadway	820	52.4	588	73.7	901	96.3	1175	53.7	856	276.1
In transit, motorcycle	-1	0.1	-1	0.0	-1	0.0	1662	0.1	1518	0.2
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.1	0	0.2	0	0.3	-1	0.1	0	0.6
Indoors, residential garage	795	0.4	581	0.3	922	0.1	1113	0.4	862	1.1
Indoors, in a repair shop	917	0.3	791	0.2	-1	0.1	1399	0.3	1068	0.8
Indoors, home	396	1479.3	265	1463.9	449	1451.6	605	1515.9	430	5910.7
Indoors, office	366	117.3	281	115.5	446	115.5	538	119.5	409	467.8
Indoors, store	367	42.5	279	41.9	427	43.0	530	43.4	402	170.8
Indoors, restaurant	681	27.5	487	29.7	732	31.4	990	28.3	720	116.9
Indoors, mfg. facility	477	27.9	344	22.9	548	17.7	690	28.5	521	97.0
Indoors, school	447	158.1	343	108.2	548	50.4	668	158.8	508	475.5
Indoors, church	302	9.9	209	9.6	320	8.8	450	10.5	323	38.8
Indoors, shopping mall	1937	4.6	1380	4.6	2003	4.3	2781	4.5	2024	18.0
Indoors, auditorium	113	4.6	84	9.4	135	14.7	158	4.9	121	33.7
Indoors, health care facility	317	19.9	241	22.2	395	24.6	470	20.6	356	87.2
Indoors, public building	382	6.3	249	5.2	399	3.8	542	6.3	400	21.6
Indoors, other location	796	25.5	568	21.3	894	16.6	1180	25.6	870	89.0
Indoors, not specified	594	0.6	503	0.4	748	0.2	884	0.5	685	1.7
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	479	17.4	379	59.1	610	103.0	680	18.2	536	197.7
Outdoors, school grounds	828	9.1	646	6.5	955	3.4	1152	8.9	905	27.8
Outdoors, sports arena	264	3.4	186	5.7	275	7.6	365	3.3	263	20.0
Outdoors, park/golf course	236	11.2	188	27.9	301	45.2	333	11.8	264	96.1
Outdoors, other location	454	1.6	411	9.2	642	17.3	639	1.6	560	29.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	2.6	0	5.4	-1	0.0	0	8.0

Houston: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1087	61.0	751	74.0	1134	86.4	1506	62.5	1106	283.9
In transit, bus	3098	0.2	1056	0.9	1516	1.9	4281	0.4	1798	3.3
In transit, truck	1452	15.0	1037	10.1	1639	4.9	2044	16.0	1587	46.0
In transit, van	908	13.9	655	10.4	960	5.7	1251	14.6	968	44.6
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	671	3.5	420	9.7	610	15.7	961	3.6	598	32.4
Outdoors, along a roadway	961	47.0	657	62.8	955	78.1	1313	51.2	955	239.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1076	0.7	-1	0.0	-1	0.0	1604	1.7	1453	2.4
Outdoors, service station	-1	0.0	0	0.1	0	0.3	-1	0.0	0	0.4
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	405	1565.6	280	1523.0	458	1485.8	606	1586.2	439	6160.6
Indoors, office	357	61.9	283	67.0	430	75.2	513	64.1	396	268.1
Indoors, store	520	3.5	293	10.0	396	16.4	706	3.4	409	33.3
Indoors, restaurant	810	29.8	561	34.6	809	39.4	1138	31.3	822	135.1
Indoors, mfg. facility	-1	0.0	-1	0.0	518	0.1	-1	0.0	518	0.1
Indoors, school	475	147.1	365	144.0	559	142.2	693	155.2	526	588.5
Indoors, church	383	8.0	250	7.0	339	6.5	504	7.9	374	29.4
Indoors, shopping mall	1548	1.3	1350	0.9	1934	0.4	2163	1.2	1742	3.8
Indoors, auditorium	116	32.0	85	24.7	126	14.6	165	35.0	126	106.2
Indoors, health care facility	281	18.6	222	13.1	314	6.6	380	19.3	305	57.6
Indoors, public building	-1	0.0	237	12.9	385	26.5	-1	0.0	336	39.4
Indoors, other location	905	40.5	605	36.6	1006	29.5	1392	44.1	995	150.7
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	981	0.1	-1	0.0	981	0.1
Outdoors, residential grounds	486	75.5	393	77.8	591	79.9	686	72.8	537	306.0
Outdoors, school grounds	732	15.9	628	13.1	895	9.3	1000	16.3	815	54.6
Outdoors, sports arena	-1	0.0	209	4.3	317	8.7	-1	0.0	281	13.0
Outdoors, park/golf course	257	19.2	200	35.7	296	51.3	345	21.3	271	127.4
Outdoors, other location	-1	0.0	443	11.2	690	22.6	-1	0.0	608	33.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	965	57.6	677	67.2	1045	77.0	1379	59.0	1008	260.8
In transit, bus	1824	15.0	1333	10.6	2121	5.4	2596	15.1	1999	46.1
In transit, truck	980	0.8	824	1.6	1340	2.6	1442	0.8	1167	5.7
In transit, van	996	8.7	686	7.5	1106	5.9	1480	9.4	1087	31.6
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	544	5.9	392	7.3	591	8.9	776	5.9	568	28.0
Outdoors, along a roadway	800	71.0	580	101.6	882	133.7	1128	73.4	834	379.7
In transit, motorcycle	1148	0.2	651	0.3	940	0.4	1634	0.3	1063	1.2
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	-1	0.0	-1	0.1	-1	0.1	-1	0.0	0	0.2
Indoors, residential garage	838	1.7	537	1.2	841	0.7	1174	1.6	871	5.2
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	394	1579.7	265	1580.4	447	1586.9	598	1614.2	427	6361.1
Indoors, office	347	1.6	270	4.2	431	7.2	502	1.6	383	14.6
Indoors, store	361	22.0	268	23.0	395	24.1	514	23.0	385	92.1
Indoors, restaurant	710	11.0	501	13.9	766	16.7	1016	11.2	738	52.8
Indoors, mfg. facility	496	0.5	339	0.3	507	0.1	698	0.4	526	1.4
Indoors, school	448	272.6	342	198.0	542	114.1	668	277.7	507	862.4
Indoors, church	286	12.4	200	12.0	307	11.5	425	12.7	306	48.6
Indoors, shopping mall	1735	3.1	1347	2.6	2025	2.0	2388	3.0	1877	10.7
Indoors, auditorium	121	9.1	82	8.6	127	7.6	171	9.7	127	35.1
Indoors, health care facility	280	15.4	222	16.5	378	17.5	399	15.7	320	65.0
Indoors, public building	323	3.1	252	5.2	411	7.4	479	3.1	364	18.8
Indoors, other location	786	7.3	538	10.4	832	13.4	1181	7.8	815	38.9
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	487	33.2	371	59.6	585	87.4	685	33.6	526	213.8
Outdoors, school grounds	794	17.6	632	12.6	937	6.9	1134	17.8	885	54.9
Outdoors, sports arena	254	4.9	190	7.4	300	9.8	352	5.0	271	27.0
Outdoors, park/golf course	259	4.8	190	16.4	299	28.8	359	5.0	268	54.9
Outdoors, other location	529	0.5	400	15.3	612	31.5	767	0.5	544	47.9
Outdoors, not specified	732	0.5	601	0.4	900	0.2	1148	0.5	862	1.5
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	953	108.2	728	121.7	1152	139.9	1344	111.9	1045	481.7
In transit, bus	1635	0.2	-1	0.0	-1	0.0	2656	0.3	2311	0.5
In transit, truck	1098	13.9	881	32.9	1403	53.7	1553	13.3	1233	113.7
In transit, van	-1	0.0	1060	5.7	1771	10.9	-1	0.0	1526	16.7
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	505	15.9	392	20.7	655	23.6	720	16.5	567	76.6
Outdoors, along a roadway	797	156.2	582	120.0	877	76.1	1158	156.2	869	508.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	879	0.3	685	0.2	1048	0.1	1394	0.3	1026	1.0
Outdoors, service station	0	0.2	0	0.2	0	0.2	0	0.2	0	0.9
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	405	1537.6	281	1439.7	456	1343.0	602	1578.8	439	5899.0
Indoors, office	371	76.0	294	51.9	443	26.7	533	76.1	416	230.6
Indoors, store	353	13.2	284	9.9	410	6.3	521	13.8	399	43.2
Indoors, restaurant	672	14.1	496	10.1	705	6.3	957	14.6	730	45.1
Indoors, mfg. facility	-1	0.0	340	62.5	504	131.3	-1	0.0	451	193.8
Indoors, school	461	114.0	358	76.8	547	35.9	671	117.4	519	344.1
Indoors, church	334	4.7	191	7.9	266	10.1	464	4.6	289	27.3
Indoors, shopping mall	2442	2.5	1545	1.7	2297	0.8	3413	2.4	2531	7.4
Indoors, auditorium	145	0.3	94	28.9	147	60.9	201	0.2	130	90.3
Indoors, health care facility	290	8.0	215	5.6	322	2.8	408	8.2	316	24.6
Indoors, public building	402	33.5	262	23.1	398	10.5	552	33.1	419	100.3
Indoors, other location	880	29.1	583	20.8	932	13.5	1258	28.7	939	92.1
Indoors, not specified	798	0.2	622	0.2	-1	0.1	1266	0.2	925	0.7
Outdoors, construction	-1	0.0	-1	0.0	971	0.4	-1	0.0	971	0.4
Outdoors, residential grounds	441	13.0	364	20.2	585	25.7	613	12.9	502	71.9
Outdoors, school grounds	818	15.9	654	11.1	919	5.0	1063	15.4	870	47.4
Outdoors, sports arena	232	1.0	198	22.5	288	42.4	308	0.7	257	66.5
Outdoors, park/golf course	315	1.6	205	1.0	296	0.8	433	1.7	329	5.1
Outdoors, other location	-1	0.1	418	89.0	599	181.0	618	0.2	539	270.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.1	-1	0.0	-1	0.0	1553	0.2	1427	0.3
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	979	140.4	721	136.4	1130	130.8	1393	142.7	1058	550.3
In transit, bus	1381	0.5	1537	0.6	3115	0.8	2049	0.6	2128	2.5
In transit, truck	1329	14.6	906	13.7	1247	12.8	1881	15.1	1355	56.2
In transit, van	1027	7.1	721	10.2	1105	12.5	1492	7.4	1061	37.2
Indoors, public garage	581	16.7	447	12.8	675	7.8	817	16.8	636	54.0
Outdoors, in a parking lot	574	15.2	426	14.9	642	14.6	828	14.7	616	59.4
Outdoors, along a roadway	804	68.8	612	73.3	933	75.9	1136	70.5	870	288.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	821	11.8	628	8.7	904	5.4	1182	12.2	904	38.1
Outdoors, service station	0	0.4	0	0.4	0	0.4	0	0.4	0	1.7
Indoors, residential garage	744	6.7	541	5.0	800	3.0	1032	7.2	800	21.9
Indoors, in a repair shop	1190	0.6	-1	0.0	-1	0.0	1770	0.9	1538	1.5
Indoors, home	400	1392.4	266	1359.2	446	1326.7	606	1426.1	431	5504.4
Indoors, office	391	215.4	302	227.6	454	240.7	558	219.9	426	903.6
Indoors, store	385	29.5	304	40.0	460	53.2	550	30.8	423	153.5
Indoors, restaurant	672	28.1	530	22.9	807	18.2	965	28.7	750	97.9
Indoors, mfg. facility	468	46.3	375	50.4	607	54.1	676	46.2	531	197.0
Indoors, school	439	21.4	340	17.9	517	13.8	645	21.6	489	74.6
Indoors, church	310	15.1	218	12.6	336	9.6	462	15.8	338	53.1
Indoors, shopping mall	1723	1.7	1331	1.4	1923	1.1	2324	1.6	1834	5.9
Indoors, auditorium	124	1.3	84	3.2	133	6.0	182	1.3	124	11.9
Indoors, health care facility	325	20.8	238	21.7	345	21.7	470	20.9	344	85.1
Indoors, public building	315	4.2	253	16.4	399	29.8	458	4.3	353	54.7
Indoors, other location	822	38.7	581	32.6	931	27.7	1193	39.7	893	138.7
Indoors, not specified	677	2.5	505	1.3	736	0.6	947	2.4	744	6.8
Outdoors, construction	880	11.7	705	7.9	1036	3.8	1243	11.2	975	34.5
Outdoors, residential grounds	512	11.6	392	37.5	614	63.7	710	11.6	547	124.4
Outdoors, school grounds	861	1.3	682	1.0	1037	0.6	1273	1.3	970	4.1
Outdoors, sports arena	205	0.8	181	3.1	271	5.7	285	0.8	240	10.4
Outdoors, park/golf course	233	8.2	188	14.5	279	20.4	327	8.5	254	51.6
Outdoors, other location	625	25.8	447	31.7	670	36.6	875	26.4	647	120.6
Outdoors, not specified	1036	0.2	704	0.2	-1	0.1	1453	0.2	1096	0.7
In transit, train	1265	0.2	-1	0.1	-1	0.1	1811	0.3	1434	0.6
In transit, airplane	-1	0.0	0	4.7	0	9.7	-1	0.0	0	14.4

Houston: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	961	101.7	689	106.8	1024	112.3	1357	102.5	1005	423.3
In transit, bus	1480	1.2	1095	1.5	1571	1.9	2081	1.4	1555	6.0
In transit, truck	1020	0.8	-1	0.0	-1	0.0	1421	0.9	1229	1.8
In transit, van	918	0.5	682	1.2	975	1.7	1461	0.5	944	3.9
Indoors, public garage	683	0.6	487	0.4	770	0.2	932	0.6	730	1.9
Outdoors, in a parking lot	519	6.9	404	9.1	629	11.3	731	6.8	567	34.1
Outdoors, along a roadway	799	43.8	602	57.0	920	69.9	1121	43.9	852	214.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.1	791	0.2	-1	0.0	716	0.3
Outdoors, service station	-1	0.0	-1	0.1	0	0.1	-1	0.0	0	0.2
Indoors, residential garage	819	0.3	669	0.1	-1	0.1	1173	0.3	945	0.8
Indoors, in a repair shop	942	0.5	815	0.3	1156	0.2	1416	0.5	1089	1.4
Indoors, home	396	1771.4	273	1744.8	449	1722.5	593	1813.5	429	7052.3
Indoors, office	379	2.3	269	1.8	388	1.9	533	3.0	410	9.0
Indoors, store	354	34.6	283	54.2	428	75.6	504	35.7	389	200.0
Indoors, restaurant	710	22.9	509	19.4	788	16.1	994	22.7	757	81.1
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	467	63.6	339	50.1	509	32.3	685	64.2	510	210.2
Indoors, church	299	14.9	212	13.8	323	11.9	434	15.5	320	56.2
Indoors, shopping mall	1560	0.4	1386	0.8	2036	1.6	2242	0.4	1836	3.2
Indoors, auditorium	121	16.4	85	16.6	130	17.2	174	16.9	128	67.1
Indoors, health care facility	297	10.1	225	9.3	369	8.3	430	10.0	330	37.7
Indoors, public building	331	4.6	241	5.2	373	5.6	480	4.9	355	20.3
Indoors, other location	766	32.0	566	27.3	866	20.8	1102	33.7	836	113.8
Indoors, not specified	-1	0.0	550	0.5	881	1.1	-1	0.0	774	1.6
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	460	21.6	372	27.2	579	31.6	636	21.1	510	101.5
Outdoors, school grounds	995	3.3	669	3.1	1059	2.7	1432	3.2	1042	12.3
Outdoors, sports arena	242	0.6	195	3.5	294	6.9	333	0.4	263	11.4
Outdoors, park/golf course	237	3.3	191	18.3	282	32.5	316	3.6	252	57.7
Outdoors, other location	485	1.5	396	11.4	585	21.6	647	1.6	524	36.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	993	112.3	716	113.6	1106	115.6	1415	115.2	1059	456.6
In transit, bus	1693	5.1	1340	4.7	2316	4.2	2427	5.1	1940	19.2
In transit, truck	1320	5.8	896	5.8	1436	5.7	1901	5.9	1388	23.2
In transit, van	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
Indoors, public garage	583	1.7	446	1.1	662	0.5	795	1.8	638	5.1
Outdoors, in a parking lot	605	7.9	409	10.4	603	12.8	856	8.0	603	39.1
Outdoors, along a roadway	815	37.5	608	47.0	926	56.9	1156	38.4	869	179.8
In transit, motorcycle	-1	0.0	696	5.6	1030	11.5	-1	0.0	922	17.1
Indoors, service station	728	0.3	583	0.2	872	0.1	1101	0.3	831	0.8
Outdoors, service station	0	0.3	0	0.6	0	0.9	0	0.3	0	2.2
Indoors, residential garage	1321	0.1	-1	0.1	-1	0.0	1868	0.1	1448	0.4
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	402	1444.5	271	1456.0	454	1469.2	610	1480.3	435	5850.0
Indoors, office	375	251.3	293	224.4	440	196.3	537	253.8	413	925.8
Indoors, store	371	74.4	286	66.8	423	57.1	518	75.6	402	273.9
Indoors, restaurant	712	33.2	504	35.2	715	39.5	1013	33.5	733	141.4
Indoors, mfg. facility	521	19.4	404	13.4	645	6.5	760	19.7	588	59.0
Indoors, school	441	55.4	345	38.3	529	19.2	645	55.9	496	168.8
Indoors, church	280	17.5	201	16.3	311	14.3	414	18.3	304	66.5
Indoors, shopping mall	1817	3.8	1409	2.8	2195	1.9	2587	3.9	2022	12.4
Indoors, auditorium	118	6.6	86	9.1	132	11.9	167	6.7	124	34.4
Indoors, health care facility	333	34.7	233	29.7	346	24.8	480	35.9	354	125.2
Indoors, public building	307	6.1	237	9.9	383	14.1	458	6.2	343	36.2
Indoors, other location	845	29.0	567	26.3	847	24.6	1222	30.1	882	110.0
Indoors, not specified	712	0.6	554	0.4	803	0.2	980	0.5	774	1.6
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	447	7.2	385	27.7	609	47.7	650	7.3	531	90.0
Outdoors, school grounds	993	1.1	700	0.9	1124	0.7	1386	1.0	1057	3.7
Outdoors, sports arena	319	0.5	185	4.2	270	7.5	455	0.4	250	12.6
Outdoors, park/golf course	295	2.3	202	14.4	336	27.1	411	2.2	296	46.0
Outdoors, other location	485	0.6	428	18.5	665	36.7	683	0.6	586	56.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	1220	0.9	870	0.6	1404	0.3	1757	0.9	1333	2.7
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	953	101.1	713	96.9	1030	93.3	1344	100.0	1012	391.2
In transit, bus	2803	0.4	-1	0.0	1777	0.8	3359	0.3	2384	1.6
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	868	3.3	695	2.6	1047	1.5	1331	3.6	1005	11.0
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	469	15.4	385	12.8	544	9.9	674	15.4	522	53.5
Outdoors, along a roadway	779	40.8	601	34.4	891	26.5	1076	42.3	844	144.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	629	16.3	510	11.9	724	6.3	840	16.8	682	51.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	405	1755.8	279	1653.8	455	1551.7	604	1799.6	439	6760.8
Indoors, office	292	3.1	237	5.0	343	7.0	408	3.3	317	18.3
Indoors, store	306	30.2	281	48.6	421	67.7	432	30.5	365	177.0
Indoors, restaurant	794	2.1	482	7.1	670	12.0	1106	3.0	680	24.1
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	428	47.4	313	34.3	470	17.3	599	47.9	462	146.9
Indoors, church	220	20.0	185	14.4	261	7.2	315	20.4	248	62.0
Indoors, shopping mall	1840	1.1	-1	0.0	-1	0.0	2811	0.8	2259	1.9
Indoors, auditorium	88	0.2	-1	0.0	197	0.4	126	0.5	145	1.2
Indoors, health care facility	383	68.1	287	47.2	460	21.5	550	66.5	424	203.3
Indoors, public building	-1	0.1	226	9.6	317	20.2	438	0.2	289	30.1
Indoors, other location	714	29.8	544	23.2	829	18.5	986	29.8	776	101.3
Indoors, not specified	-1	0.1	-1	0.0	-1	0.0	918	0.2	857	0.3
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	434	24.2	397	161.0	596	301.1	630	26.4	528	512.7
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	332	0.5	-1	0.0	332	0.5
Outdoors, park/golf course	298	0.6	200	17.7	296	37.0	407	0.4	266	55.7
Outdoors, other location	-1	0.0	373	3.5	558	7.8	-1	0.0	501	11.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1022	150.0	757	144.3	1219	137.7	1461	154.0	1118	585.9
In transit, bus	1893	5.3	1377	3.4	2148	1.6	2671	5.7	2086	16.1
In transit, truck	1150	34.4	905	26.8	1392	17.5	1652	33.6	1280	112.3
In transit, van	911	4.8	703	3.3	1099	1.9	1287	4.7	1009	14.7
Indoors, public garage	682	7.6	510	5.3	797	2.4	960	7.4	745	22.6
Outdoors, in a parking lot	592	11.1	414	11.2	635	10.9	840	11.0	619	44.2
Outdoors, along a roadway	787	45.6	609	54.6	953	64.3	1116	46.8	864	211.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	728	3.0	574	2.0	869	1.1	1141	3.5	863	9.7
Outdoors, service station	0	0.3	0	0.6	0	0.8	0	0.3	0	2.1
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	400	1365.4	265	1338.5	444	1310.4	607	1391.1	430	5405.4
Indoors, office	382	231.2	300	294.4	460	368.1	546	239.1	421	1132.9
Indoors, store	422	61.5	317	45.9	481	28.5	607	64.0	466	199.9
Indoors, restaurant	688	33.8	507	34.9	748	35.7	974	35.0	730	139.4
Indoors, mfg. facility	466	57.0	355	71.6	530	86.3	652	59.2	497	274.1
Indoors, school	490	29.0	370	20.2	576	10.0	708	28.2	542	87.4
Indoors, church	309	16.1	227	14.2	344	11.6	439	17.6	335	59.4
Indoors, shopping mall	1987	0.6	1343	0.1	-1	0.1	2904	0.5	2292	1.4
Indoors, auditorium	129	0.4	-1	0.0	-1	0.0	172	0.4	152	0.8
Indoors, health care facility	262	2.5	193	1.2	304	0.6	403	3.5	318	7.9
Indoors, public building	401	9.5	257	8.5	419	7.5	566	10.0	417	35.5
Indoors, other location	854	64.6	643	45.2	983	23.4	1248	65.7	951	198.9
Indoors, not specified	624	1.2	517	0.6	725	0.3	941	1.5	748	3.6
Outdoors, construction	-1	0.0	678	4.1	972	7.8	-1	0.0	871	11.9
Outdoors, residential grounds	567	4.8	385	29.4	581	51.9	813	4.8	529	90.8
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	215	10.8	183	14.2	279	16.7	300	11.6	245	53.3
Outdoors, other location	581	9.3	436	9.6	678	10.8	782	8.6	618	38.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.1	-1	0.1
In transit, airplane	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1

Houston: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	854	62.5	665	63.8	1033	66.3	1210	66.1	944	258.7
In transit, bus	1240	1.3	1010	0.8	1496	0.4	1749	1.3	1393	3.8
In transit, truck	948	0.6	-1	0.0	-1	0.0	1287	0.6	1109	1.2
In transit, van	931	5.2	649	3.9	963	2.2	1304	5.5	992	16.8
Indoors, public garage	498	0.2	388	0.1	-1	0.1	748	0.3	584	0.7
Outdoors, in a parking lot	524	4.8	392	8.1	602	11.2	762	5.0	558	29.1
Outdoors, along a roadway	797	24.6	595	34.0	902	44.2	1129	26.1	847	128.8
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	399	1913.3	276	1877.5	449	1838.5	596	1951.7	432	7581.0
Indoors, office	296	9.0	245	8.0	348	6.9	428	9.0	331	32.9
Indoors, store	363	31.5	289	27.9	454	25.1	524	32.6	410	117.1
Indoors, restaurant	688	19.3	492	27.9	728	36.4	970	19.6	703	103.1
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	503	5.8	322	4.2	504	2.5	717	6.2	534	18.7
Indoors, church	265	26.7	199	22.3	294	16.3	381	27.6	288	92.9
Indoors, shopping mall	1976	2.5	1391	4.0	2046	5.3	2894	2.7	2010	14.3
Indoors, auditorium	113	0.2	-1	0.0	-1	0.0	183	0.3	149	0.5
Indoors, health care facility	258	8.2	235	11.0	395	14.4	384	8.4	325	42.0
Indoors, public building	372	7.2	246	6.4	350	5.2	515	7.2	376	26.0
Indoors, other location	766	17.8	549	18.0	798	18.8	1091	18.0	801	72.7
Indoors, not specified	-1	0.1	-1	0.0	-1	0.0	1000	0.2	923	0.3
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	507	18.4	379	46.5	566	74.8	728	18.8	524	158.4
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	304	0.2	-1	0.0	304	0.2
Outdoors, park/golf course	-1	0.0	203	12.4	314	25.5	-1	0.0	278	37.9
Outdoors, other location	444	1.0	437	7.1	698	13.7	644	0.9	603	22.7
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.1	922	0.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1013	93.6	721	94.5	1079	96.7	1439	96.0	1064	380.9
In transit, bus	1814	4.2	1229	4.1	1694	4.0	2578	4.4	1845	16.7
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1006	1.6	723	1.0	1110	0.5	1516	1.7	1137	4.8
Indoors, public garage	750	0.6	552	0.4	910	0.2	1049	0.6	823	1.9
Outdoors, in a parking lot	544	7.9	417	15.5	650	24.0	793	7.8	590	55.2
Outdoors, along a roadway	823	32.8	611	43.0	936	53.2	1171	34.2	877	163.2
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1276	0.1	886	0.1	-1	0.0	1937	0.1	1428	0.4
Outdoors, service station	0	1.3	0	1.2	0	1.0	0	1.3	0	4.7
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	401	1476.0	271	1516.4	454	1562.6	605	1510.5	433	6065.6
Indoors, office	393	246.7	304	198.2	444	143.5	564	251.0	432	839.4
Indoors, store	366	57.3	282	58.5	406	60.6	512	58.4	392	234.7
Indoors, restaurant	747	57.3	518	51.3	747	42.9	1068	58.2	780	209.8
Indoors, mfg. facility	-1	0.0	358	28.5	537	60.4	-1	0.0	480	88.9
Indoors, school	440	42.3	351	38.3	559	33.8	639	42.7	498	157.2
Indoors, church	286	13.4	201	22.5	305	31.2	428	13.8	294	81.0
Indoors, shopping mall	1553	8.0	1320	5.7	1915	2.8	2225	8.0	1761	24.5
Indoors, auditorium	106	4.2	84	3.1	122	1.7	148	4.4	117	13.4
Indoors, health care facility	317	61.4	237	42.7	375	20.7	470	61.9	356	186.7
Indoors, public building	282	0.8	277	3.0	460	5.0	454	1.0	389	9.7
Indoors, other location	878	38.4	583	27.1	911	17.1	1278	39.6	947	122.3
Indoors, not specified	1098	0.3	577	2.7	886	5.3	1633	0.3	819	8.5
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	639	8.6	414	16.0	588	23.1	957	8.9	604	56.6
Outdoors, school grounds	767	1.6	635	1.1	919	0.5	1072	1.6	851	4.9
Outdoors, sports arena	208	0.2	205	5.6	331	11.2	288	0.1	288	17.2
Outdoors, park/golf course	398	0.1	-1	0.0	-1	0.0	509	0.1	419	0.3
Outdoors, other location	582	1.3	432	3.5	663	5.7	786	1.3	600	11.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	945	163.2	711	152.3	1013	138.4	1315	167.2	1002	621.0
In transit, bus	1773	8.9	1384	6.2	2079	2.8	2444	8.6	1932	26.6
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	673	0.2	919	0.4	-1	0.0	840	0.6
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	547	11.8	431	18.8	643	26.2	771	11.8	591	68.5
Outdoors, along a roadway	850	44.7	643	92.6	949	140.8	1166	46.5	879	324.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	624	0.5	894	1.0	-1	0.0	802	1.6
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	815	0.2	625	0.1	-1	0.1	1103	0.2	881	0.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	406	1623.4	285	1615.1	453	1620.5	597	1653.8	436	6512.8
Indoors, office	380	79.5	298	56.8	430	30.2	517	85.3	414	251.8
Indoors, store	474	10.8	299	20.8	404	31.9	655	11.9	425	75.5
Indoors, restaurant	861	34.6	590	42.3	798	49.4	1193	36.0	845	162.3
Indoors, mfg. facility	482	19.8	381	13.5	578	6.1	698	19.9	542	59.3
Indoors, school	348	0.4	-1	0.0	-1	0.0	492	1.1	451	1.5
Indoors, church	251	30.2	208	24.9	344	18.4	360	31.7	290	105.2
Indoors, shopping mall	1609	0.3	1377	5.2	1927	11.0	2262	0.6	1767	17.1
Indoors, auditorium	135	43.3	89	32.0	135	17.9	186	45.8	141	138.9
Indoors, health care facility	236	8.8	234	17.8	369	27.6	333	8.6	307	62.8
Indoors, public building	281	1.6	233	2.0	325	2.8	416	1.7	312	8.0
Indoors, other location	849	27.4	602	19.9	983	10.5	1179	26.9	912	84.7
Indoors, not specified	-1	0.0	-1	0.0	723	0.2	-1	0.0	723	0.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	509	21.0	417	37.4	629	52.9	663	20.4	555	131.6
Outdoors, school grounds	1162	4.5	711	3.1	1073	1.4	1592	4.4	1186	13.4
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	219	24.2	188	16.6	263	7.5	311	24.2	247	72.6
Outdoors, other location	-1	0.0	451	4.8	700	9.5	-1	0.0	617	14.3
Outdoors, not specified	725	1.4	650	1.0	887	0.4	981	1.4	808	4.2
In transit, train	1137	0.1	-1	0.0	-1	0.0	1550	0.3	1432	0.4
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	860	69.6	694	88.0	1010	108.2	1199	70.9	936	336.8
In transit, bus	1318	2.6	1215	3.1	1803	3.5	1927	2.5	1566	11.7
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	-1	0.0	-1	0.0	1032	0.1	969	0.2
Indoors, public garage	667	0.2	479	1.2	726	2.4	883	0.2	656	4.1
Outdoors, in a parking lot	487	2.4	401	4.4	568	6.7	682	2.4	527	15.8
Outdoors, along a roadway	781	21.1	675	35.9	1078	51.4	1053	22.1	915	130.7
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	0	0.3	0	0.5	-1	0.0	0	0.7
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	409	1926.3	288	1881.0	456	1826.7	594	1970.7	438	7604.7
Indoors, office	388	1.6	307	0.6	462	0.4	566	2.8	476	5.4
Indoors, store	355	10.3	290	50.2	419	94.5	475	10.9	380	165.8
Indoors, restaurant	542	23.9	493	27.6	706	31.0	747	23.3	623	105.8
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, church	275	40.1	219	28.4	379	17.5	398	39.3	315	125.4
Indoors, shopping mall	1702	13.7	1462	9.7	2053	4.5	2484	13.4	1938	41.4
Indoors, auditorium	91	7.2	79	5.0	110	2.3	124	6.9	101	21.4
Indoors, health care facility	284	10.4	230	6.3	336	3.0	420	10.6	325	30.2
Indoors, public building	278	7.8	240	5.6	337	2.9	402	7.7	316	24.0
Indoors, other location	785	14.7	535	20.3	737	26.3	1071	15.7	761	77.0
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1006	1.5	456	9.9	623	19.7	1349	1.6	625	32.7
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	220	6.3	190	4.9	267	2.9	323	6.9	253	21.0
Outdoors, park/golf course	-1	0.0	187	0.6	265	1.4	-1	0.0	241	2.0
Outdoors, other location	-1	0.0	448	1.0	650	2.2	-1	0.0	587	3.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	987	70.4	738	84.0	1189	101.4	1410	71.0	1078	326.8
In transit, bus	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
In transit, truck	1469	50.0	906	60.9	1212	72.4	2062	53.2	1379	236.5
In transit, van	829	0.3	-1	0.0	-1	0.0	1254	0.8	1132	1.2
Indoors, public garage	669	40.5	480	27.7	728	12.6	921	40.6	716	121.4
Outdoors, in a parking lot	616	35.7	459	31.4	705	25.4	873	34.4	665	126.9
Outdoors, along a roadway	822	188.7	628	227.4	967	265.9	1153	192.8	889	874.9
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	883	4.0	568	1.3	1016	0.8	1364	7.2	1120	13.4
Outdoors, service station	0	0.8	0	1.7	0	2.5	0	0.8	0	5.8
Indoors, residential garage	928	2.3	533	0.6	864	0.3	1299	1.8	1013	5.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
Indoors, home	396	1282.6	258	1209.6	435	1125.3	604	1316.0	427	4933.4
Indoors, office	383	18.0	301	10.5	443	5.4	567	20.8	443	54.8
Indoors, store	359	10.0	276	5.7	410	2.9	520	9.5	402	28.1
Indoors, restaurant	639	18.7	573	18.5	1052	18.6	871	22.0	788	77.8
Indoors, mfg. facility	474	57.8	400	127.3	644	200.6	673	55.9	555	441.6
Indoors, school	434	24.4	336	17.1	531	7.8	642	23.7	489	72.9
Indoors, church	284	19.3	193	11.2	298	6.0	419	18.5	312	55.0
Indoors, shopping mall	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, auditorium	142	1.2	85	17.5	137	36.7	199	0.8	122	56.1
Indoors, health care facility	-1	0.0	224	6.8	331	12.9	-1	0.0	294	19.6
Indoors, public building	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, other location	729	12.5	559	6.8	856	3.4	1114	14.0	856	36.8
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	884	81.4	698	77.8	993	73.4	1241	77.8	953	310.4
Outdoors, residential grounds	493	32.8	391	25.4	595	15.9	691	31.6	543	105.7
Outdoors, school grounds	805	1.4	639	1.0	929	0.4	1106	1.3	877	4.1
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	221	22.7	182	16.3	269	8.1	333	22.7	254	69.7
Outdoors, other location	638	184.5	452	197.6	645	209.2	884	190.6	653	781.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	997	63.1	687	77.5	1066	91.4	1422	64.4	1030	296.4
In transit, bus	1907	20.2	1368	14.2	2197	7.4	2723	20.4	2086	62.1
In transit, truck	836	1.0	719	1.2	1139	1.4	1281	1.1	999	4.7
In transit, van	743	1.3	627	1.5	1008	1.7	1077	1.6	874	6.1
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	547	8.5	395	8.7	598	9.3	774	8.3	576	34.8
Outdoors, along a roadway	814	106.1	581	139.9	881	176.2	1143	111.5	844	533.7
In transit, motorcycle	1145	0.6	714	0.4	1107	0.2	1632	0.8	1259	1.9
Indoors, service station	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
Outdoors, service station	0	0.1	-1	0.1	-1	0.1	0	0.1	0	0.4
Indoors, residential garage	794	0.6	563	0.5	838	0.4	1111	0.5	828	2.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	397	1400.0	263	1415.9	450	1440.4	606	1429.3	430	5685.5
Indoors, office	417	0.7	273	6.0	430	12.0	638	0.9	391	19.7
Indoors, store	366	19.5	270	23.3	412	28.6	515	20.5	389	92.0
Indoors, restaurant	746	15.2	498	18.3	757	20.8	1067	15.2	754	69.4
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	453	359.6	344	251.9	550	130.4	679	367.0	515	1108.8
Indoors, church	285	14.2	200	15.3	302	16.2	421	14.7	301	60.4
Indoors, shopping mall	1650	3.9	1316	2.6	1926	1.5	2247	3.6	1797	11.5
Indoors, auditorium	131	9.7	82	10.3	126	10.3	183	10.0	130	40.3
Indoors, health care facility	276	18.1	212	14.5	365	9.9	389	18.5	309	61.0
Indoors, public building	311	9.4	237	9.1	376	8.9	470	9.2	349	36.6
Indoors, other location	683	10.6	520	11.4	814	12.4	969	10.8	746	45.1
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
Outdoors, residential grounds	500	37.6	372	69.4	591	103.7	701	38.5	533	249.2
Outdoors, school grounds	792	39.6	629	27.5	932	13.5	1119	39.8	878	120.5
Outdoors, sports arena	254	14.0	189	17.4	293	20.5	353	14.1	270	66.1
Outdoors, park/golf course	254	5.2	188	24.6	296	45.3	352	5.7	265	80.8
Outdoors, other location	531	1.3	402	22.5	621	45.5	775	1.4	553	70.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	956	54.3	705	61.5	1063	69.9	1352	54.2	1012	239.9
In transit, bus	1614	11.9	1237	8.8	1840	4.9	2276	11.7	1762	37.3
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	920	6.8	655	5.2	964	3.1	1296	7.4	988	22.4
Indoors, public garage	-1	0.0	462	0.3	721	0.7	-1	0.0	637	1.0
Outdoors, in a parking lot	606	4.8	418	5.8	589	7.0	851	4.8	604	22.4
Outdoors, along a roadway	864	26.3	610	42.5	926	60.7	1195	26.9	876	156.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	0	0.1	0	0.2	-1	0.0	0	0.4
Indoors, residential garage	668	1.2	532	0.8	762	0.4	883	1.2	720	3.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	399	1721.5	274	1749.7	448	1781.6	597	1767.4	430	7020.2
Indoors, office	373	86.1	287	74.6	430	60.8	544	86.3	411	307.8
Indoors, store	360	18.4	283	22.7	430	28.4	492	18.6	391	88.0
Indoors, restaurant	644	23.6	478	31.5	684	40.4	907	23.1	665	118.6
Indoors, mfg. facility	464	29.7	362	20.4	567	10.1	684	29.1	524	89.3
Indoors, school	472	88.5	365	59.8	577	27.8	697	87.2	533	263.3
Indoors, church	249	36.8	189	26.9	278	15.1	353	39.0	273	117.8
Indoors, shopping mall	1730	3.2	1424	4.9	2099	5.9	2650	3.1	1939	17.2
Indoors, auditorium	143	3.3	87	2.3	137	1.0	200	3.2	148	9.8
Indoors, health care facility	363	10.4	264	11.7	398	13.7	531	10.4	386	46.1
Indoors, public building	279	1.3	277	6.9	444	13.1	418	1.3	382	22.6
Indoors, other location	766	2.8	523	5.4	759	7.5	1047	2.7	733	18.4
Indoors, not specified	-1	0.1	561	1.8	870	3.9	-1	0.1	772	5.9
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	491	18.2	383	30.2	574	42.1	667	19.6	524	110.1
Outdoors, school grounds	864	9.2	645	6.4	939	2.9	1160	8.9	917	27.5
Outdoors, sports arena	341	0.3	196	0.2	-1	0.1	474	0.3	347	0.9
Outdoors, park/golf course	238	0.3	237	2.4	386	4.8	309	0.7	330	8.3
Outdoors, other location	435	0.9	395	1.3	618	1.8	619	0.9	526	4.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Houston: City-wide, Demographic Group=All persons

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	973	100.3	703	101.0	1073	102.0	1385	102.6	1035	405.9
In transit, bus	1789	6.1	1323	4.7	2068	3.1	2533	6.1	1951	20.0
In transit, truck	1208	7.1	881	6.2	1348	5.4	1743	7.1	1307	25.7
In transit, van	993	4.5	710	4.6	1124	4.4	1452	4.8	1073	18.3
Indoors, public garage	582	4.0	440	2.9	681	1.7	831	4.0	642	12.6
Outdoors, in a parking lot	558	8.9	406	10.9	617	12.9	800	8.8	588	41.5
Outdoors, along a roadway	803	54.1	597	71.4	908	88.8	1136	55.4	852	269.8
In transit, motorcycle	-1	0.1	693	0.9	1022	1.8	-1	0.1	933	2.8
Indoors, service station	795	2.3	605	1.7	903	1.0	1170	2.5	891	7.4
Outdoors, service station	0	0.3	0	0.3	0	0.4	0	0.3	0	1.2
Indoors, residential garage	761	1.6	538	1.2	810	0.7	1056	1.7	813	5.2
Indoors, in a repair shop	1106	0.2	-1	0.0	-1	0.0	1696	0.2	1404	0.4
Indoors, home	399	1545.0	270	1552.0	450	1562.7	601	1580.5	431	6240.2
Indoors, office	371	126.1	284	107.0	438	87.3	542	129.4	412	449.9
Indoors, store	368	39.7	281	42.6	422	46.1	526	40.9	399	169.3
Indoors, restaurant	696	25.9	502	25.6	744	25.8	996	26.3	736	103.6
Indoors, mfg. facility	465	16.6	353	16.6	553	16.4	682	16.8	514	66.4
Indoors, school	452	98.0	346	73.9	540	45.5	668	98.3	507	315.7
Indoors, church	286	15.9	206	14.8	317	13.1	419	16.5	310	60.4
Indoors, shopping mall	1742	3.1	1366	2.7	2015	2.3	2460	3.1	1905	11.2
Indoors, auditorium	119	6.9	84	7.4	130	8.1	169	7.2	125	29.6
Indoors, health care facility	308	21.6	229	19.7	368	17.5	451	22.1	341	80.9
Indoors, public building	341	5.5	247	7.7	393	10.1	493	5.6	363	28.9
Indoors, other location	817	28.4	569	24.3	869	20.4	1191	29.3	876	102.4
Indoors, not specified	690	0.7	538	0.6	849	0.7	977	0.7	771	2.7
Outdoors, construction	851	2.0	667	1.6	985	1.1	1229	2.0	940	6.7
Outdoors, residential grounds	494	17.0	382	40.8	592	64.7	694	17.1	531	139.7
Outdoors, school grounds	827	5.9	649	4.4	968	2.7	1166	5.8	910	18.8
Outdoors, sports arena	250	1.8	192	4.7	295	7.5	348	1.8	266	15.9
Outdoors, park/golf course	242	4.8	193	14.4	301	24.2	338	5.0	267	48.3
Outdoors, other location	590	5.4	418	16.6	633	28.4	835	5.5	585	55.8
Outdoors, not specified	793	0.2	632	0.2	-1	0.1	1176	0.2	899	0.7
In transit, train	1214	0.2	861	0.1	-1	0.1	1736	0.2	1346	0.6
In transit, airplane	-1	0.0	0	0.5	0	1.0	-1	0.0	0	1.4

Los Angeles: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2278	88.3	1215	94.5	1197	100.5	2364	90.5	1739	373.7
In transit, bus	4098	7.0	2278	5.8	2330	4.5	4072	7.1	3333	24.4
In transit, truck	2978	7.2	1610	8.1	1600	8.6	2981	7.4	2247	31.4
In transit, van	2467	5.3	1275	5.1	1249	5.0	2548	5.7	1913	21.1
Indoors, public garage	1245	1.9	728	1.5	778	1.1	1287	1.9	1055	6.5
Outdoors, in a parking lot	1321	11.5	720	12.7	703	14.1	1352	11.6	1001	49.9
Outdoors, along a roadway	1797	57.0	1029	69.7	1007	82.9	1814	58.9	1357	268.4
In transit, motorcycle	-1	0.0	1202	0.8	1174	1.5	-1	0.0	1198	2.3
Indoors, service station	1839	2.1	1085	1.7	1054	1.2	1795	2.2	1518	7.1
Outdoors, service station	0	0.1	0	0.5	0	0.9	0	0.1	0	1.8
Indoors, residential garage	1649	1.3	902	1.1	912	0.8	1731	1.3	1365	4.5
Indoors, in a repair shop	-1	0.1	-1	0.0	-1	0.0	-1	0.1	2046	0.2
Indoors, home	1049	1539.2	506	1533.3	507	1528.4	1122	1572.6	799	6173.4
Indoors, office	901	81.3	534	84.0	546	87.6	866	82.7	708	335.7
Indoors, store	820	43.0	497	47.2	499	52.4	813	43.9	646	186.5
Indoors, restaurant	1607	26.7	880	28.8	870	31.0	1673	27.1	1237	113.6
Indoors, mfg. facility	1153	24.4	668	26.8	694	30.1	1134	24.9	896	106.2
Indoors, school	1171	133.7	670	103.5	690	70.0	1139	136.1	968	443.3
Indoors, church	750	15.5	394	13.8	400	12.0	771	16.1	597	57.3
Indoors, shopping mall	3835	3.4	2421	2.9	2400	2.4	3768	3.4	3190	12.0
Indoors, auditorium	279	8.3	141	7.7	136	6.7	300	8.8	221	31.4
Indoors, health care facility	761	24.1	419	20.5	430	16.9	772	24.7	618	86.2
Indoors, public building	836	7.4	448	8.3	451	9.4	878	7.6	636	32.7
Indoors, other location	2133	26.3	1045	30.2	1037	34.3	2271	27.1	1566	117.9
Indoors, not specified	1426	0.1	955	0.4	917	0.6	1304	0.1	1027	1.2
Outdoors, construction	1978	3.1	1225	3.2	1221	3.4	1891	3.1	1566	12.7
Outdoors, residential grounds	1044	22.3	651	33.5	643	44.3	1037	23.1	791	123.2
Outdoors, school grounds	1814	8.3	1152	7.8	1124	7.2	1732	8.5	1474	31.8
Outdoors, sports arena	509	1.3	321	4.8	312	8.4	522	1.3	348	15.7
Outdoors, park/golf course	503	6.6	318	13.4	306	19.8	498	7.0	366	46.8
Outdoors, other location	1278	3.1	727	12.0	719	20.9	1357	3.1	817	39.1
Outdoors, not specified	2051	0.2	1675	0.3	1901	0.4	1905	0.2	1866	1.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	0.2	0	0.5	-1	0.0	0	0.8

Los Angeles: City-wide, Demographic Group=African americans

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2502	52.9	1244	61.9	1118	73.7	2765	53.1	1815	241.6
In transit, bus	5565	21.6	2540	18.7	2246	14.9	5860	22.2	4281	77.5
In transit, truck	-1	0.0	1494	3.6	1408	8.0	-1	0.0	1434	11.6
In transit, van	-1	0.0	1004	0.2	805	0.5	-1	0.0	867	0.7
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1698	4.2	741	8.0	640	12.2	1863	4.0	1000	28.5
Outdoors, along a roadway	1897	36.7	1024	60.1	900	86.0	2036	37.4	1293	220.2
In transit, motorcycle	2409	1.4	1054	1.1	874	0.7	2975	1.4	2032	4.6
Indoors, service station	-1	0.0	1318	0.6	1250	1.5	-1	0.0	1271	2.1
Outdoors, service station	-1	0.0	0	0.4	0	0.8	-1	0.0	0	1.2
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	2456	0.2	2378	0.4	-1	0.0	2402	0.6
Indoors, home	1148	1695.0	495	1670.9	451	1648.7	1296	1733.0	854	6747.7
Indoors, office	1557	9.2	549	38.1	499	69.2	1606	10.0	678	126.5
Indoors, store	982	15.2	522	18.0	466	20.6	1019	15.8	719	69.6
Indoors, restaurant	1843	4.2	934	2.8	1151	2.6	2289	3.8	1650	13.4
Indoors, mfg. facility	1042	1.7	695	12.9	681	27.1	1066	0.9	708	42.5
Indoors, school	1377	172.0	697	127.5	663	71.5	1391	176.8	1130	547.8
Indoors, church	700	40.0	361	29.2	320	20.6	763	40.7	584	130.5
Indoors, shopping mall	3280	3.3	2315	2.6	2107	1.8	3101	3.6	2815	11.3
Indoors, auditorium	204	5.4	127	4.0	102	2.3	239	5.8	185	17.5
Indoors, health care facility	1016	47.3	394	45.8	367	37.7	1153	48.5	757	179.3
Indoors, public building	489	2.4	362	3.2	318	3.4	482	2.5	402	11.6
Indoors, other location	1795	6.3	957	12.5	891	21.8	1888	4.9	1142	45.5
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1106	14.5	619	29.9	553	45.2	1355	15.0	763	104.6
Outdoors, school grounds	1687	12.4	1117	9.1	1220	5.0	1704	12.8	1501	39.4
Outdoors, sports arena	471	14.3	289	10.6	241	6.2	524	15.5	417	46.6
Outdoors, park/golf course	-1	0.0	310	4.9	284	9.4	-1	0.0	293	14.4
Outdoors, other location	-1	0.0	763	4.1	689	8.5	-1	0.0	715	12.6
Outdoors, not specified	-1	0.1	-1	0.1	-1	0.0	-1	0.1	1814	0.3
In transit, train	-1	0.0	1142	3.2	993	7.3	-1	0.0	1039	10.6
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2435	57.6	1330	65.7	1295	75.6	2632	58.4	1862	257.3
In transit, bus	5142	15.5	2567	14.1	2444	12.4	5365	15.9	3997	57.9
In transit, truck	-1	0.0	1583	3.3	1621	7.5	-1	0.0	1609	10.8
In transit, van	1821	7.1	1125	5.7	1059	4.1	1984	7.5	1580	24.3
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1383	7.6	791	10.1	762	12.5	1432	7.5	1028	37.7
Outdoors, along a roadway	2024	104.6	1107	107.7	1081	107.5	2186	107.7	1596	427.4
In transit, motorcycle	2653	1.0	1199	0.8	1090	0.6	3188	1.0	2211	3.4
Indoors, service station	-1	0.0	1334	0.6	1345	1.4	-1	0.0	1342	2.0
Outdoors, service station	-1	0.0	0	0.4	0	0.8	-1	0.0	0	1.2
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	2430	0.2	2503	0.4	-1	0.0	2480	0.6
Indoors, home	1102	1666.3	533	1649.9	525	1640.8	1220	1701.4	849	6658.4
Indoors, office	1233	13.3	578	41.4	575	72.2	1261	14.1	706	141.1
Indoors, store	909	15.4	534	21.5	514	27.2	933	16.0	679	80.1
Indoors, restaurant	1661	6.2	962	4.2	1154	3.2	1828	6.0	1478	19.5
Indoors, mfg. facility	1005	1.5	719	11.8	752	24.9	1010	0.7	756	38.9
Indoors, school	1258	123.4	714	92.8	727	54.7	1261	126.6	1059	397.5
Indoors, church	634	43.0	378	32.1	367	22.1	661	44.8	543	142.0
Indoors, shopping mall	3314	3.0	2566	2.4	2575	1.6	3022	3.3	2932	10.2
Indoors, auditorium	219	4.9	139	3.6	126	2.1	250	5.3	199	15.9
Indoors, health care facility	903	40.6	432	39.9	434	33.4	990	41.7	704	155.6
Indoors, public building	507	2.2	399	2.9	390	3.2	481	2.3	437	10.6
Indoors, other location	2181	9.3	1049	14.4	1051	22.0	2557	8.3	1475	53.9
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1370	14.2	689	29.0	669	42.9	1649	14.6	916	100.7
Outdoors, school grounds	1706	8.9	1228	6.6	1429	3.8	1685	9.2	1551	28.5
Outdoors, sports arena	503	13.0	322	10.1	304	6.8	543	14.1	444	44.1
Outdoors, park/golf course	-1	0.0	342	4.5	345	8.5	-1	0.0	344	13.0
Outdoors, other location	1088	1.7	806	5.2	802	8.8	989	1.7	849	17.4
Outdoors, not specified	-1	0.1	-1	0.1	-1	0.0	-1	0.1	1753	0.2
In transit, train	-1	0.0	1265	3.0	1219	6.8	-1	0.0	1233	9.9
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2116	44.2	1248	50.3	1197	56.3	2228	45.1	1655	195.9
In transit, bus	3872	7.8	2250	6.1	2024	4.2	3818	7.9	3176	25.9
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	1173	0.2	1067	0.2	-1	0.0	1120	0.4
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1403	13.6	691	20.0	628	25.3	1597	14.4	979	73.3
Outdoors, along a roadway	1827	62.8	1034	66.5	969	69.6	1993	64.4	1440	263.3
In transit, motorcycle	-1	0.0	1150	0.3	1021	0.7	-1	0.0	1064	1.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	0	0.1	0	0.2	-1	0.0	0	0.3
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1111	1811.3	533	1823.4	517	1839.7	1219	1853.0	845	7327.4
Indoors, office	1583	1.0	569	1.2	464	1.6	1686	0.9	959	4.8
Indoors, store	772	26.2	536	34.6	559	44.7	774	25.6	637	131.0
Indoors, restaurant	1618	7.4	865	6.0	771	6.0	1733	6.9	1282	26.3
Indoors, mfg. facility	1367	1.1	701	24.8	721	49.8	1382	0.7	730	76.3
Indoors, school	1224	115.7	709	79.5	724	36.4	1206	118.3	1049	349.9
Indoors, church	664	11.5	325	8.1	290	4.1	767	12.0	579	35.8
Indoors, shopping mall	3168	5.0	2341	3.5	2162	1.6	3102	5.1	2851	15.2
Indoors, auditorium	184	13.4	139	10.3	136	6.2	168	14.6	161	44.6
Indoors, health care facility	669	12.9	436	9.3	437	4.4	637	13.3	579	39.9
Indoors, public building	628	4.7	476	3.0	526	1.9	562	4.4	561	14.0
Indoors, other location	1802	7.7	993	12.5	919	18.4	1939	7.6	1254	46.2
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1429	10.3	696	15.9	641	22.9	1572	10.5	956	59.7
Outdoors, school grounds	1653	2.8	1202	1.9	1215	0.9	1492	2.9	1450	8.5
Outdoors, sports arena	-1	0.0	352	3.9	318	8.9	-1	0.0	328	12.8
Outdoors, park/golf course	436	0.4	316	0.7	276	1.5	391	0.2	315	2.7
Outdoors, other location	1395	0.2	694	1.8	615	2.6	1323	0.3	719	4.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2264	81.7	1246	83.2	1219	84.2	2429	83.9	1787	333.0
In transit, bus	5909	5.4	2766	5.1	2517	4.8	6215	5.6	4438	21.0
In transit, truck	2797	5.2	1619	13.0	1665	21.2	3085	5.3	1953	44.8
In transit, van	2031	1.4	1231	1.5	1317	1.7	2170	1.5	1674	6.1
Indoors, public garage	-1	0.0	-1	0.1	1183	0.1	-1	0.0	1178	0.2
Outdoors, in a parking lot	1297	14.2	748	13.4	724	13.4	1313	14.0	1028	55.0
Outdoors, along a roadway	1870	56.7	1105	77.9	1066	100.1	1926	58.5	1404	293.1
In transit, motorcycle	-1	0.0	1256	4.8	1203	8.7	-1	0.0	1222	13.5
Indoors, service station	-1	0.1	1300	0.4	1299	0.7	-1	0.1	1449	1.2
Outdoors, service station	0	0.4	0	0.7	0	0.8	0	0.5	0	2.4
Indoors, residential garage	1135	2.2	855	1.6	814	0.9	1055	2.3	1005	6.9
Indoors, in a repair shop	-1	0.0	-1	0.1	2482	0.2	-1	0.0	2467	0.3
Indoors, home	1096	1581.4	524	1586.0	510	1593.0	1199	1616.9	834	6377.5
Indoors, office	834	59.9	537	58.4	561	55.5	808	61.0	689	234.8
Indoors, store	947	38.6	540	45.9	530	53.9	999	39.9	728	178.3
Indoors, restaurant	1838	50.2	944	37.3	897	23.7	1996	50.6	1544	161.8
Indoors, mfg. facility	1374	37.1	755	33.8	778	31.4	1379	37.8	1092	140.0
Indoors, school	1237	99.9	706	82.2	728	64.3	1222	101.2	1013	347.5
Indoors, church	756	18.9	421	15.5	426	11.8	770	19.7	623	65.8
Indoors, shopping mall	4401	3.6	2857	2.7	2738	2.1	4342	3.4	3738	11.8
Indoors, auditorium	274	5.1	146	3.8	138	1.9	303	5.4	237	16.2
Indoors, health care facility	833	32.1	415	24.5	404	15.8	914	32.5	696	104.9
Indoors, public building	717	2.2	474	2.3	461	2.6	695	2.1	579	9.2
Indoors, other location	2277	34.9	1029	37.5	1004	38.5	2600	36.0	1704	146.9
Indoors, not specified	-1	0.0	1035	0.4	949	1.0	-1	0.0	979	1.4
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1215	16.2	708	26.3	695	36.3	1277	17.0	890	95.9
Outdoors, school grounds	2139	8.9	1240	8.6	1146	8.5	2173	9.1	1686	35.2
Outdoors, sports arena	-1	0.0	368	4.5	353	10.0	-1	0.0	357	14.5
Outdoors, park/golf course	592	3.4	331	7.2	306	9.0	681	3.5	413	23.2
Outdoors, other location	-1	0.0	811	5.5	783	12.0	-1	0.0	792	17.5
Outdoors, not specified	-1	0.1	-1	0.0	-1	0.0	-1	0.1	1591	0.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2385	88.6	1261	93.4	1220	97.4	2517	90.8	1827	370.3
In transit, bus	4300	5.8	2314	5.2	2371	4.9	4434	5.8	3426	21.8
In transit, truck	2866	5.2	1576	6.3	1543	7.3	2919	5.4	2140	24.3
In transit, van	2466	9.7	1286	9.4	1257	9.4	2600	10.3	1923	38.9
Indoors, public garage	1262	4.0	719	2.7	695	1.3	1337	4.0	1102	11.9
Outdoors, in a parking lot	1363	10.6	752	11.6	727	12.6	1407	10.7	1042	45.6
Outdoors, along a roadway	1830	72.0	1051	81.1	1016	90.2	1885	74.6	1413	317.9
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.1	-1	0.0	1133	0.1
Indoors, service station	1988	0.4	1269	0.4	1292	0.4	1863	0.5	1628	1.7
Outdoors, service station	0	0.1	0	0.2	0	0.2	0	0.1	0	0.6
Indoors, residential garage	2133	1.4	938	1.1	854	0.7	2468	1.4	1752	4.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1079	1545.6	513	1539.0	507	1535.4	1172	1578.6	820	6198.7
Indoors, office	963	91.1	550	87.0	547	81.0	943	92.9	760	352.0
Indoors, store	828	33.8	512	43.6	511	54.1	836	34.5	643	166.0
Indoors, restaurant	1549	20.7	891	20.7	868	20.3	1620	21.0	1235	82.7
Indoors, mfg. facility	1136	27.4	683	30.3	710	33.7	1108	28.2	895	119.6
Indoors, school	1186	98.5	673	83.6	693	68.8	1175	100.1	964	351.0
Indoors, church	746	22.6	388	17.9	385	13.3	788	23.3	614	77.0
Indoors, shopping mall	3608	2.7	2330	2.0	2274	1.3	3647	2.7	3135	8.7
Indoors, auditorium	300	9.0	145	7.5	135	5.7	335	9.5	244	31.6
Indoors, health care facility	778	23.5	419	20.9	423	17.8	806	24.1	626	86.3
Indoors, public building	884	8.2	449	10.9	440	13.9	970	8.5	639	41.5
Indoors, other location	2276	25.5	1086	28.0	1076	30.6	2474	26.0	1687	110.0
Indoors, not specified	-1	0.0	939	0.4	919	0.9	-1	0.0	935	1.4
Outdoors, construction	2023	6.6	1253	6.4	1235	6.3	1973	6.7	1631	26.0
Outdoors, residential grounds	1020	27.3	660	40.7	644	52.8	1033	28.3	791	149.1
Outdoors, school grounds	1832	6.8	1189	6.8	1191	6.8	1789	7.0	1502	27.4
Outdoors, sports arena	552	0.5	328	3.0	310	5.3	584	0.6	345	9.4
Outdoors, park/golf course	516	6.4	326	11.5	306	17.0	513	6.7	377	41.5
Outdoors, other location	1351	5.8	717	11.9	685	17.1	1485	5.8	903	40.6
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	-1	0.0	1231	0.6	1199	1.2	-1	0.0	1209	1.8
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2276	114.5	1204	118.1	1185	122.2	2373	117.5	1750	472.3
In transit, bus	3773	11.1	2145	8.1	2164	4.5	3742	11.3	3179	34.9
In transit, truck	3067	2.9	1538	3.2	1454	3.4	3122	3.0	2240	12.5
In transit, van	-1	0.1	1022	1.1	988	2.0	-1	0.1	1086	3.2
Indoors, public garage	1323	0.4	747	0.4	728	0.3	1369	0.4	1091	1.5
Outdoors, in a parking lot	1366	11.1	699	11.6	686	12.4	1462	11.3	1041	46.5
Outdoors, along a roadway	1869	52.5	1029	64.8	995	76.7	1917	54.0	1390	248.0
In transit, motorcycle	-1	0.1	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, service station	-1	0.0	1349	0.2	1381	0.4	-1	0.0	1371	0.6
Outdoors, service station	-1	0.1	0	0.8	0	1.6	-1	0.1	0	2.5
Indoors, residential garage	1714	0.4	1105	0.9	1135	1.5	1720	0.4	1266	3.2
Indoors, in a repair shop	2343	0.3	1734	0.2	-1	0.1	2077	0.3	2053	0.9
Indoors, home	1055	1478.8	500	1468.9	500	1462.9	1136	1511.0	801	5921.6
Indoors, office	909	117.1	532	120.1	544	125.6	884	118.7	714	481.5
Indoors, store	837	42.2	496	46.8	485	53.7	823	43.0	646	185.8
Indoors, restaurant	1586	27.7	880	31.2	883	34.8	1663	28.6	1224	122.3
Indoors, mfg. facility	1129	27.9	619	29.0	642	31.4	1177	28.2	882	116.5
Indoors, school	1178	158.1	670	112.6	684	59.9	1144	161.5	991	492.2
Indoors, church	799	10.1	409	12.3	413	13.9	822	10.7	588	47.0
Indoors, shopping mall	4267	4.6	2437	5.7	2410	6.6	4386	4.7	3245	21.6
Indoors, auditorium	247	4.7	134	8.5	127	11.7	264	5.0	171	29.9
Indoors, health care facility	797	20.0	440	18.8	448	17.8	801	20.7	631	77.3
Indoors, public building	868	6.3	429	7.5	451	9.0	989	6.5	654	29.3
Indoors, other location	2075	25.3	1068	24.1	1050	23.7	2158	25.6	1604	98.7
Indoors, not specified	1464	0.6	994	0.5	898	0.4	1331	0.6	1208	2.0
Outdoors, construction	-1	0.0	1113	0.7	1109	1.5	-1	0.0	1110	2.2
Outdoors, residential grounds	1044	17.5	647	33.8	630	48.8	1049	18.2	761	118.2
Outdoors, school grounds	1699	9.0	1109	7.0	1117	4.7	1643	9.2	1452	30.0
Outdoors, sports arena	500	3.4	305	8.7	296	13.8	529	3.6	350	29.5
Outdoors, park/golf course	494	11.5	311	15.3	292	17.4	485	12.3	380	56.6
Outdoors, other location	925	1.6	760	22.2	753	43.6	837	1.7	761	69.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	0.9	0	1.7	-1	0.0	0	2.6

Los Angeles: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2277	61.4	1150	82.5	1154	105.0	2384	63.3	1623	312.2
In transit, bus	7711	0.2	-1	0.1	-1	0.1	-1	0.1	5250	0.4
In transit, truck	3467	15.1	1704	11.6	1788	8.2	3626	15.3	2833	50.2
In transit, van	1858	14.3	1031	10.9	1050	6.9	1868	15.3	1553	47.4
Indoors, public garage	-1	0.0	875	0.6	916	1.4	-1	0.0	904	2.1
Outdoors, in a parking lot	1622	3.5	706	8.6	681	14.1	1711	3.5	922	29.7
Outdoors, along a roadway	2061	48.2	1008	60.3	961	74.7	2142	50.4	1455	233.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	2888	0.7	-1	0.0	-1	0.0	2862	0.3	2879	1.0
Outdoors, service station	-1	0.0	0	1.4	0	3.1	-1	0.0	0	4.5
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1026	1559.7	492	1526.9	493	1489.3	1088	1589.6	781	6165.5
Indoors, office	811	61.9	508	99.4	531	145.7	761	62.4	610	369.4
Indoors, store	1165	3.5	492	16.1	476	30.0	1180	3.6	573	53.1
Indoors, restaurant	1767	30.1	854	44.6	802	60.6	1796	30.8	1175	166.1
Indoors, mfg. facility	-1	0.0	645	1.9	651	4.3	-1	0.0	649	6.3
Indoors, school	1184	147.4	650	106.8	646	59.9	1149	148.2	980	462.3
Indoors, church	838	7.8	395	9.4	384	11.3	800	7.8	574	36.3
Indoors, shopping mall	2928	1.3	2213	0.9	2202	0.4	2490	1.3	2540	3.8
Indoors, auditorium	255	33.4	137	26.3	134	18.1	262	36.3	211	114.1
Indoors, health care facility	501	18.9	323	14.5	342	9.3	488	19.6	432	62.2
Indoors, public building	-1	0.0	404	1.7	377	2.6	-1	0.0	388	4.3
Indoors, other location	2489	42.3	1092	39.0	1030	33.6	2650	46.0	1892	160.9
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	1232	2.8	1242	6.4	-1	0.0	1239	9.2
Outdoors, residential grounds	1019	74.3	622	62.0	591	46.9	969	75.4	832	258.6
Outdoors, school grounds	1417	16.2	1040	12.0	1047	6.7	1221	17.1	1218	52.1
Outdoors, sports arena	-1	0.0	311	0.2	296	0.2	-1	0.0	303	0.5
Outdoors, park/golf course	450	20.0	302	36.3	307	54.1	447	21.6	350	132.1
Outdoors, other location	-1	0.0	706	7.4	693	14.8	-1	0.0	697	22.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2341	57.7	1251	64.7	1209	71.5	2536	59.2	1788	253.0
In transit, bus	4502	15.0	2441	11.5	2414	7.5	4586	15.3	3731	49.3
In transit, truck	2603	0.8	1609	1.2	1582	1.7	2545	0.8	1935	4.3
In transit, van	2680	9.0	1333	7.4	1300	5.4	2884	9.7	2191	31.5
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1293	5.8	737	7.3	714	9.0	1349	5.9	974	28.1
Outdoors, along a roadway	1810	71.5	1054	98.6	1003	126.8	1907	73.8	1352	370.6
In transit, motorcycle	2575	0.2	1164	0.2	1090	0.2	3021	0.2	1974	0.8
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, residential garage	1909	1.7	915	1.4	824	1.0	2224	1.7	1570	5.8
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1097	1578.1	520	1576.5	514	1579.2	1208	1612.0	837	6345.9
Indoors, office	794	1.6	509	5.2	509	9.4	827	1.6	564	17.8
Indoors, store	822	22.1	512	24.7	505	28.5	846	22.9	658	98.2
Indoors, restaurant	1650	11.0	890	15.6	857	20.0	1811	11.3	1203	57.8
Indoors, mfg. facility	1031	0.5	529	0.3	477	0.1	1206	0.5	917	1.4
Indoors, school	1229	272.7	699	213.2	716	148.0	1217	276.9	1018	910.8
Indoors, church	769	12.3	400	11.3	391	10.3	814	12.7	608	46.6
Indoors, shopping mall	3423	3.0	2401	3.0	2398	2.8	3488	3.1	2943	11.9
Indoors, auditorium	286	9.4	145	8.0	134	6.1	327	10.0	237	33.4
Indoors, health care facility	639	15.4	400	12.0	421	7.5	669	15.9	560	50.9
Indoors, public building	828	3.1	492	3.7	498	4.2	868	3.2	651	14.2
Indoors, other location	2141	7.4	1079	7.2	1073	7.2	2303	7.8	1668	29.6
Indoors, not specified	-1	0.0	1038	0.4	962	0.8	-1	0.0	985	1.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1057	33.2	672	52.8	655	71.8	1118	34.2	812	192.0
Outdoors, school grounds	1846	17.6	1227	17.7	1199	17.7	1782	18.0	1514	71.1
Outdoors, sports arena	522	4.9	339	7.0	332	9.4	561	5.2	414	26.4
Outdoors, park/golf course	531	4.9	335	20.0	321	34.8	583	5.1	362	64.8
Outdoors, other location	1293	0.5	762	13.1	731	26.8	1263	0.5	755	40.9
Outdoors, not specified	2145	0.5	1405	0.4	1439	0.2	2034	0.5	1846	1.5
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2280	107.4	1274	107.0	1259	108.6	2407	108.4	1805	431.4
In transit, bus	4624	0.2	-1	0.0	-1	0.0	-1	0.1	4624	0.2
In transit, truck	2560	13.8	1624	17.4	1774	19.1	2729	14.0	2111	64.2
In transit, van	-1	0.0	1207	1.5	1229	3.4	-1	0.0	1222	4.9
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1229	16.2	753	14.4	745	11.9	1216	17.0	1014	59.5
Outdoors, along a roadway	2006	156.5	1073	131.6	1028	102.0	2120	160.7	1635	550.8
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	2648	0.3	1320	0.3	1093	0.3	2654	0.3	1910	1.3
Outdoors, service station	0	0.2	0	3.2	0	6.9	0	0.2	0	10.6
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1092	1539.0	524	1502.7	513	1473.6	1186	1575.6	836	6090.9
Indoors, office	937	76.0	536	126.4	524	186.6	914	77.5	659	466.4
Indoors, store	904	13.4	554	14.4	517	16.4	865	14.1	699	58.2
Indoors, restaurant	1701	14.0	929	16.1	931	18.8	1810	14.1	1298	63.0
Indoors, mfg. facility	-1	0.0	624	21.6	599	38.3	-1	0.0	608	59.8
Indoors, school	1207	114.1	688	78.9	695	39.9	1201	115.7	1029	348.6
Indoors, church	761	4.7	392	10.8	410	15.6	909	4.9	518	35.9
Indoors, shopping mall	5226	2.5	2318	1.7	2125	0.8	6121	2.6	4539	7.6
Indoors, auditorium	357	0.2	147	16.3	139	30.8	435	0.1	143	47.4
Indoors, health care facility	723	8.1	427	7.5	486	6.6	759	8.3	609	30.5
Indoors, public building	951	33.5	420	23.2	387	10.7	1131	34.4	832	101.8
Indoors, other location	2437	28.3	1048	29.7	1002	31.6	2884	27.9	1807	117.5
Indoors, not specified	2404	0.2	1336	0.2	-1	0.1	2410	0.2	2051	0.7
Outdoors, construction	-1	0.0	1330	6.8	1344	15.3	-1	0.0	1340	22.1
Outdoors, residential grounds	948	13.1	665	20.4	645	29.2	904	13.4	748	76.1
Outdoors, school grounds	1435	15.9	1036	11.1	945	5.0	1401	16.4	1281	48.4
Outdoors, sports arena	424	0.7	308	1.2	276	2.2	410	0.3	317	4.3
Outdoors, park/golf course	691	1.6	308	10.1	284	20.2	803	1.6	335	33.4
Outdoors, other location	-1	0.1	679	9.9	636	14.3	-1	0.0	654	24.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.1	-1	0.0	-1	0.0	-1	0.0	2513	0.1
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2296	140.4	1245	136.5	1212	131.5	2377	143.6	1799	552.0
In transit, bus	3169	0.5	2431	2.0	2499	3.9	2889	0.5	2557	7.0
In transit, truck	3221	14.6	1622	21.1	1579	28.5	3345	14.7	2222	78.9
In transit, van	2573	7.2	1325	6.3	1175	5.6	2616	7.4	1993	26.4
Indoors, public garage	1339	16.7	783	12.3	795	7.2	1340	17.0	1137	53.2
Outdoors, in a parking lot	1412	14.9	761	16.9	725	19.2	1426	15.1	1049	66.2
Outdoors, along a roadway	1838	69.5	1081	74.0	1059	77.5	1834	72.2	1440	293.2
In transit, motorcycle	-1	0.0	1384	0.9	1329	1.7	-1	0.0	1348	2.6
Indoors, service station	1921	11.8	1112	8.9	1052	5.8	1898	11.9	1595	38.4
Outdoors, service station	0	0.4	0	0.5	0	0.6	0	0.4	0	2.1
Indoors, residential garage	1631	6.9	931	5.1	914	3.1	1725	7.4	1403	22.6
Indoors, in a repair shop	3099	0.5	-1	0.1	2429	0.2	2954	0.2	2904	1.0
Indoors, home	1085	1392.4	505	1375.9	498	1360.9	1186	1425.1	823	5554.2
Indoors, office	963	215.3	548	190.7	549	159.8	942	218.1	772	783.8
Indoors, store	895	29.4	527	45.0	519	62.9	893	29.8	654	167.0
Indoors, restaurant	1615	27.9	972	33.0	970	39.1	1586	28.0	1246	127.9
Indoors, mfg. facility	1151	46.3	671	57.7	686	71.5	1134	47.2	874	222.6
Indoors, school	1133	21.3	653	16.2	643	10.2	1100	21.7	938	69.4
Indoors, church	834	15.3	418	12.6	407	9.8	865	16.2	669	53.9
Indoors, shopping mall	3173	1.7	2228	1.1	2097	0.5	2952	1.7	2779	5.0
Indoors, auditorium	321	1.1	160	0.7	134	0.7	334	0.8	248	3.2
Indoors, health care facility	821	20.8	449	20.3	450	19.5	823	21.4	641	82.0
Indoors, public building	799	4.1	469	9.7	462	15.6	764	4.1	543	33.6
Indoors, other location	2071	38.6	1061	51.3	1070	68.2	2249	39.2	1498	197.2
Indoors, not specified	1400	2.3	855	1.3	821	0.6	1252	2.2	1183	6.4
Outdoors, construction	2014	11.5	1235	11.8	1204	12.5	1943	11.8	1590	47.7
Outdoors, residential grounds	1096	11.6	652	16.8	621	20.4	1137	12.0	822	60.8
Outdoors, school grounds	2181	1.3	1297	1.1	1195	0.8	2095	1.3	1762	4.5
Outdoors, sports arena	397	0.8	319	6.0	302	10.9	351	0.8	314	18.5
Outdoors, park/golf course	494	8.4	318	10.8	292	12.6	477	8.9	381	40.7
Outdoors, other location	1447	26.1	770	34.2	749	40.4	1512	27.3	1059	128.0
Outdoors, not specified	2076	0.2	1822	0.9	2045	1.4	2365	0.3	2006	2.9
In transit, train	3223	0.2	1252	1.2	1203	2.6	3489	0.1	1385	4.2
In transit, airplane	-1	0.0	0	1.1	0	2.1	-1	0.0	0	3.2

Los Angeles: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2273	101.2	1238	97.0	1199	92.1	2415	103.1	1804	393.4
In transit, bus	2913	1.2	2006	1.2	2193	1.2	2935	1.2	2513	4.9
In transit, truck	2478	0.6	-1	0.0	-1	0.0	2546	0.3	2501	0.9
In transit, van	2800	0.5	1541	0.4	1435	0.3	2784	0.5	2276	1.7
Indoors, public garage	1574	0.6	819	0.4	808	0.2	1657	0.7	1351	1.9
Outdoors, in a parking lot	1172	6.9	723	9.4	706	12.1	1193	7.0	898	35.3
Outdoors, along a roadway	1848	43.8	1069	53.9	1014	63.3	1902	44.9	1399	206.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1403	0.1	1382	0.3	-1	0.0	1389	0.4
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	2054	0.3	1237	0.1	-1	0.1	2166	0.2	1864	0.7
Indoors, in a repair shop	2446	0.5	1806	0.3	1862	0.2	2206	0.5	2157	1.5
Indoors, home	1081	1770.7	525	1765.0	516	1766.3	1169	1807.9	825	7109.9
Indoors, office	782	2.3	563	6.2	604	11.7	834	2.1	633	22.3
Indoors, store	818	34.7	523	53.0	514	70.4	809	35.5	625	193.6
Indoors, restaurant	1662	22.6	886	23.8	863	25.8	1813	23.0	1288	95.2
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	1231	64.3	662	48.9	666	29.7	1269	67.1	1031	210.0
Indoors, church	758	15.1	395	11.7	386	7.8	796	15.9	629	50.5
Indoors, shopping mall	3355	0.3	2390	1.9	2368	4.0	3030	0.1	2436	6.4
Indoors, auditorium	300	16.5	158	12.9	152	8.9	319	17.3	249	55.7
Indoors, health care facility	709	10.1	422	10.1	450	10.1	735	10.4	580	40.7
Indoors, public building	839	4.6	465	3.4	455	2.1	890	4.7	715	14.8
Indoors, other location	1877	32.6	1014	33.1	934	31.4	1944	34.0	1451	131.0
Indoors, not specified	-1	0.0	879	0.1	786	0.2	-1	0.0	820	0.4
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	961	21.6	642	27.4	609	31.7	954	22.4	766	103.1
Outdoors, school grounds	2447	3.3	1192	3.0	1057	2.5	2703	3.4	1928	12.3
Outdoors, sports arena	487	0.4	334	1.6	302	3.3	495	0.2	333	5.6
Outdoors, park/golf course	437	3.5	312	10.9	295	18.3	439	3.8	328	36.3
Outdoors, other location	911	1.5	740	8.2	701	14.0	836	1.6	735	25.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2303	112.1	1220	113.2	1188	115.4	2407	114.2	1777	454.9
In transit, bus	3864	5.1	2269	4.6	2409	4.0	3883	5.2	3171	18.9
In transit, truck	3310	5.8	1504	4.9	1440	4.1	3697	6.0	2624	20.8
In transit, van	-1	0.0	1158	2.2	1145	4.5	-1	0.0	1150	6.7
Indoors, public garage	1136	1.7	751	1.6	850	1.8	1159	1.6	973	6.7
Outdoors, in a parking lot	1418	7.9	733	9.9	732	12.2	1526	8.2	1046	38.2
Outdoors, along a roadway	1852	37.6	1057	47.4	1038	57.6	1889	38.8	1394	181.4
In transit, motorcycle	-1	0.0	1139	4.8	1096	8.6	-1	0.0	1111	13.4
Indoors, service station	1993	0.3	1327	0.2	1563	0.2	1847	0.3	1715	0.9
Outdoors, service station	0	0.3	0	0.8	0	1.2	0	0.3	0	2.6
Indoors, residential garage	3530	0.1	-1	0.1	-1	0.0	3683	0.1	2969	0.4
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1081	1445.3	506	1450.3	500	1455.0	1171	1479.2	816	5829.8
Indoors, office	912	250.7	535	248.6	540	250.4	884	254.4	719	1004.0
Indoors, store	795	74.5	485	74.2	476	73.3	794	76.6	639	298.6
Indoors, restaurant	1682	32.7	878	36.7	822	41.9	1755	32.7	1243	143.9
Indoors, mfg. facility	1345	19.5	724	18.6	715	16.9	1323	20.0	1043	75.0
Indoors, school	1121	55.3	653	42.5	670	28.6	1086	56.2	930	182.6
Indoors, church	714	17.8	377	14.5	368	11.1	733	18.6	579	62.0
Indoors, shopping mall	3953	3.8	2427	2.7	2344	1.5	3928	3.9	3397	11.8
Indoors, auditorium	271	6.6	139	5.4	132	3.8	289	6.9	221	22.8
Indoors, health care facility	832	34.9	417	31.0	416	27.8	877	35.8	656	129.4
Indoors, public building	775	6.1	479	5.9	485	5.3	742	6.2	626	23.5
Indoors, other location	2144	28.9	995	34.6	937	38.9	2363	29.4	1535	131.8
Indoors, not specified	1351	0.6	852	0.4	781	0.2	1319	0.6	1170	1.6
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1028	7.3	673	12.5	657	17.4	978	7.6	776	44.9
Outdoors, school grounds	1945	1.1	1065	2.0	1027	3.1	2162	1.1	1346	7.2
Outdoors, sports arena	665	0.5	316	6.2	305	11.9	761	0.5	329	19.1
Outdoors, park/golf course	614	2.3	328	3.8	316	4.6	687	2.3	438	13.0
Outdoors, other location	1010	0.6	705	3.8	665	6.4	935	0.6	710	11.4
Outdoors, not specified	-1	0.0	-1	0.1	947	0.1	-1	0.0	958	0.2
In transit, train	2942	0.9	1418	0.6	1409	0.3	3109	0.9	2491	2.8
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2250	100.1	1227	107.2	1138	115.7	2283	101.6	1697	424.6
In transit, bus	7143	0.3	2046	15.8	2003	35.8	7336	0.1	2058	52.1
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	2316	3.5	1393	2.6	1397	1.5	2252	3.8	1963	11.3
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1073	15.4	646	42.7	598	67.9	1008	15.9	710	141.8
Outdoors, along a roadway	1588	41.5	984	50.0	947	60.1	1649	43.3	1249	194.9
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	1136	16.6	833	11.9	790	6.3	1049	17.6	996	52.4
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1080	1754.6	519	1674.9	517	1593.2	1170	1790.3	834	6812.9
Indoors, office	552	2.9	393	1.7	382	0.8	490	2.7	482	8.1
Indoors, store	626	30.1	469	33.8	459	33.9	550	30.6	522	128.4
Indoors, restaurant	1695	2.1	761	1.1	682	0.6	1740	1.9	1425	5.7
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	943	48.2	524	34.3	497	17.3	1032	50.6	826	150.4
Indoors, church	479	20.3	342	14.4	333	7.2	437	21.3	417	63.1
Indoors, shopping mall	5278	0.7	-1	0.0	-1	0.0	5079	0.4	5211	1.1
Indoors, auditorium	191	0.2	224	7.9	231	17.9	169	0.1	228	26.2
Indoors, health care facility	1002	68.1	518	47.2	533	21.5	1012	70.0	846	206.8
Indoors, public building	-1	0.1	434	0.9	448	0.9	-1	0.0	459	2.0
Indoors, other location	1587	29.6	988	63.2	988	104.4	1665	30.4	1156	227.7
Indoors, not specified	-1	0.1	-1	0.0	-1	0.0	-1	0.0	1219	0.1
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1019	25.2	695	40.2	684	47.9	929	27.2	795	140.5
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	340	8.7	315	19.7	-1	0.0	322	28.4
Outdoors, park/golf course	560	0.4	300	1.7	279	1.7	641	0.2	334	4.0
Outdoors, other location	-1	0.0	688	23.8	647	53.8	-1	0.0	660	77.5
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2402	150.4	1263	150.4	1234	149.0	2502	154.2	1856	603.9
In transit, bus	4366	5.3	2277	4.5	2294	3.9	4488	5.3	3482	18.9
In transit, truck	2817	34.2	1624	27.5	1584	19.7	2739	35.0	2302	116.3
In transit, van	1987	4.8	1292	12.0	1319	20.9	1977	4.9	1462	42.6
Indoors, public garage	1617	7.6	864	5.4	832	2.8	1633	7.8	1356	23.5
Outdoors, in a parking lot	1379	11.0	715	10.7	717	10.2	1499	11.2	1089	43.1
Outdoors, along a roadway	1768	45.8	1072	59.3	1071	75.2	1770	47.1	1356	227.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	2045	3.1	1231	2.2	1193	1.5	1926	3.1	1695	9.9
Outdoors, service station	0	0.3	0	0.6	0	0.8	0	0.3	0	2.1
Indoors, residential garage	-1	0.0	1091	0.4	1107	0.8	-1	0.0	1119	1.2
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1069	1363.3	494	1315.7	487	1263.2	1165	1393.4	815	5335.6
Indoors, office	929	231.1	542	238.9	551	242.5	903	233.4	728	945.9
Indoors, store	1030	61.9	557	54.0	533	44.5	1039	63.4	819	223.8
Indoors, restaurant	1549	34.0	879	35.7	876	36.5	1596	35.1	1217	141.3
Indoors, mfg. facility	1063	58.3	656	75.2	705	94.2	1073	61.5	842	289.1
Indoors, school	1242	29.0	676	35.2	696	43.2	1249	29.9	926	137.3
Indoors, church	749	16.5	401	18.5	392	20.3	754	17.5	562	72.9
Indoors, shopping mall	4814	0.5	3180	0.9	3267	1.7	4875	0.3	3619	3.4
Indoors, auditorium	286	0.3	138	2.1	130	3.9	325	0.1	144	6.4
Indoors, health care facility	590	2.5	420	2.4	470	3.2	520	2.2	499	10.2
Indoors, public building	959	9.7	427	22.1	422	37.9	1124	10.3	579	80.0
Indoors, other location	2199	64.6	1158	54.8	1082	44.4	2183	65.5	1730	229.3
Indoors, not specified	1484	1.2	963	0.8	864	0.8	1280	1.0	1192	3.8
Outdoors, construction	-1	0.0	1196	1.4	1167	2.8	-1	0.0	1177	4.3
Outdoors, residential grounds	1414	4.8	658	26.6	634	49.7	1548	4.9	737	86.1
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	447	11.2	335	15.0	332	18.9	405	11.9	371	57.0
Outdoors, other location	1150	8.8	748	10.8	791	13.1	1135	8.6	928	41.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	1.1	0	2.4	-1	0.0	0	3.4

Los Angeles: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1898	62.8	1163	77.0	1144	94.8	1925	64.2	1475	298.8
In transit, bus	2387	1.3	1943	1.4	2077	1.8	2115	1.3	2120	5.7
In transit, truck	1823	0.4	-1	0.0	-1	0.0	1781	0.2	1809	0.7
In transit, van	2020	5.3	1088	3.9	1068	2.2	2148	5.7	1730	17.2
Indoors, public garage	1263	0.2	757	0.1	-1	0.1	1223	0.2	1094	0.6
Outdoors, in a parking lot	1243	4.9	719	8.3	704	12.2	1262	5.0	887	30.4
Outdoors, along a roadway	1824	24.6	1030	34.6	1002	46.8	1893	25.1	1334	131.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1248	0.1	1199	0.2	-1	0.0	1228	0.3
Outdoors, service station	-1	0.0	0	0.8	0	1.7	-1	0.0	0	2.5
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1059	1912.1	516	1860.0	510	1802.1	1136	1953.2	814	7527.3
Indoors, office	673	9.0	493	7.7	541	6.1	627	9.1	591	31.8
Indoors, store	853	31.6	518	37.1	515	43.8	837	32.4	662	144.8
Indoors, restaurant	1591	19.3	861	19.8	817	19.6	1693	19.9	1240	78.6
Indoors, mfg. facility	-1	0.0	489	0.4	461	1.0	-1	0.0	470	1.4
Indoors, school	1203	5.9	540	5.9	521	6.3	1408	6.3	919	24.5
Indoors, church	638	27.1	376	22.8	383	17.6	634	28.5	528	96.0
Indoors, shopping mall	4805	2.5	2569	2.4	2337	2.5	5089	2.5	3712	9.9
Indoors, auditorium	306	0.1	150	0.8	155	1.9	-1	0.1	166	3.0
Indoors, health care facility	630	8.2	428	19.5	444	32.0	589	8.3	479	67.9
Indoors, public building	815	7.3	403	6.1	402	4.5	922	7.6	674	25.5
Indoors, other location	1742	17.7	1008	28.9	995	39.5	1802	18.0	1265	104.1
Indoors, not specified	-1	0.1	-1	0.0	-1	0.0	-1	0.0	1449	0.1
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1190	18.6	695	27.2	671	34.7	1203	19.4	877	99.9
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	329	5.1	307	11.0	-1	0.0	314	16.2
Outdoors, park/golf course	-1	0.0	326	11.6	308	22.4	-1	0.0	314	34.0
Outdoors, other location	983	1.0	728	2.3	702	3.2	888	1.0	772	7.5
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2320	93.3	1266	107.4	1279	122.5	2402	94.7	1763	417.9
In transit, bus	4210	4.2	2284	3.9	2306	3.8	4278	4.2	3312	16.1
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	2491	1.6	1283	1.0	1275	0.5	2520	1.6	2112	4.7
Indoors, public garage	1821	0.6	953	0.4	986	0.2	1833	0.6	1543	1.9
Outdoors, in a parking lot	1321	7.8	724	9.9	670	11.8	1307	7.8	954	37.3
Outdoors, along a roadway	1852	33.0	1096	37.5	1131	42.8	1860	33.9	1452	147.2
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	3657	0.1	1682	0.2	1787	0.2	3760	0.2	2711	0.6
Outdoors, service station	0	1.3	0	3.4	0	6.1	0	1.4	0	12.2
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1051	1475.4	491	1445.5	480	1417.0	1133	1508.1	795	5845.9
Indoors, office	971	246.9	562	219.8	581	189.4	941	251.1	782	907.2
Indoors, store	788	57.4	478	65.4	464	75.3	780	59.4	613	257.5
Indoors, restaurant	1794	57.8	893	52.7	873	43.8	1918	59.8	1418	214.0
Indoors, mfg. facility	-1	0.0	700	49.2	715	109.1	-1	0.0	710	158.3
Indoors, school	1104	42.1	651	29.2	664	13.8	1056	42.6	937	127.8
Indoors, church	749	13.3	415	14.0	441	14.8	771	13.6	589	55.7
Indoors, shopping mall	3346	8.0	2405	6.5	2300	4.6	2959	8.4	2833	27.5
Indoors, auditorium	207	4.3	131	3.1	121	1.7	210	4.6	180	13.8
Indoors, health care facility	831	61.7	430	60.8	415	55.6	841	63.7	637	241.7
Indoors, public building	612	0.8	390	0.9	394	1.2	500	0.7	461	3.6
Indoors, other location	2261	38.2	1051	52.6	1079	66.0	2530	38.9	1591	195.8
Indoors, not specified	3018	0.3	1189	0.4	1022	0.3	2971	0.3	1920	1.3
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1694	8.7	713	16.8	633	24.8	1709	9.3	979	59.5
Outdoors, school grounds	1683	1.6	1145	1.5	1080	1.3	1543	1.7	1386	6.0
Outdoors, sports arena	388	0.1	323	0.3	304	0.3	-1	0.1	330	0.8
Outdoors, park/golf course	-1	0.1	-1	0.0	-1	0.0	-1	0.1	793	0.2
Outdoors, other location	1251	1.3	681	1.5	651	1.5	1273	1.4	952	5.6
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2167	164.2	1240	149.7	1221	131.5	2188	169.3	1744	614.7
In transit, bus	4122	8.9	2368	6.2	2383	2.8	4078	9.2	3524	27.1
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1332	11.8	715	21.1	673	29.8	1356	12.2	900	75.0
Outdoors, along a roadway	1893	45.5	1049	58.6	1007	70.7	1971	47.6	1406	222.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1747	0.6	1838	1.3	-1	0.0	1810	1.8
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	1688	0.2	1212	0.2	1488	0.2	1664	0.2	1507	0.9
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.1	-1	0.0	1346	0.1
Indoors, home	1062	1617.8	514	1643.5	505	1679.2	1136	1646.1	802	6586.5
Indoors, office	832	81.3	502	63.1	493	44.0	788	84.9	688	273.3
Indoors, store	1075	11.0	517	17.4	513	24.4	1148	11.2	722	64.1
Indoors, restaurant	2061	35.2	1036	31.3	993	24.8	2146	36.7	1628	127.9
Indoors, mfg. facility	1224	19.8	703	13.5	718	6.1	1177	20.2	1038	59.5
Indoors, school	803	0.4	556	3.9	514	7.4	713	0.2	542	11.9
Indoors, church	635	30.8	383	22.6	396	13.7	625	32.6	542	99.6
Indoors, shopping mall	3678	0.3	2462	2.9	2494	6.0	3231	0.1	2526	9.3
Indoors, auditorium	318	44.4	143	32.0	135	17.9	364	47.4	271	141.7
Indoors, health care facility	538	8.8	407	11.4	403	13.3	471	9.0	446	42.5
Indoors, public building	775	1.6	408	7.5	383	14.7	721	1.6	436	25.3
Indoors, other location	2074	27.4	993	19.2	964	8.9	2279	28.2	1777	83.7
Indoors, not specified	-1	0.0	883	2.9	879	6.5	-1	0.0	880	9.4
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	948	20.5	676	54.8	677	93.2	941	20.5	735	189.1
Outdoors, school grounds	2487	4.5	1038	3.1	971	1.4	2879	4.6	2130	13.7
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	520	24.2	364	16.6	368	7.5	467	24.8	451	73.1
Outdoors, other location	-1	0.0	737	1.0	686	2.1	-1	0.0	703	3.1
Outdoors, not specified	1581	1.4	1174	1.0	1219	0.4	1342	1.4	1369	4.3
In transit, train	2559	0.1	-1	0.0	-1	0.0	-1	0.1	2564	0.2
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1941	69.3	1185	77.2	1135	82.1	1846	70.4	1502	299.0
In transit, bus	3366	2.6	2233	2.0	2206	1.0	3045	2.7	2858	8.2
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, public garage	1238	0.2	677	0.2	648	0.2	1354	0.2	995	0.8
Outdoors, in a parking lot	1108	2.4	680	5.3	651	8.4	1067	2.4	772	18.5
Outdoors, along a roadway	1674	21.1	1030	31.8	1001	45.0	1663	21.4	1246	119.2
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	1177	0.1	-1	0.0	1173	0.2
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	-1	0.0	1479	0.3	1524	0.5	-1	0.0	1508	0.8
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1046	1928.1	511	1915.7	502	1901.5	1112	1973.4	796	7718.7
Indoors, office	1043	1.6	600	3.2	602	6.3	1058	1.3	706	12.4
Indoors, store	727	10.2	494	29.1	490	45.7	664	10.2	535	95.3
Indoors, restaurant	1163	23.6	845	21.2	822	18.0	1012	24.0	973	86.7
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	-1	0.0	708	0.9	711	2.1	-1	0.0	710	3.0
Indoors, church	702	39.5	404	30.0	431	20.1	688	40.2	587	129.7
Indoors, shopping mall	4313	13.8	2900	9.7	2937	4.5	3901	14.3	3703	42.3
Indoors, auditorium	187	7.2	140	5.0	141	2.3	161	7.4	162	21.8
Indoors, health care facility	763	10.1	444	8.3	393	7.3	749	9.8	609	35.5
Indoors, public building	694	7.8	456	8.3	423	8.8	624	8.1	545	32.9
Indoors, other location	1659	14.2	880	8.6	862	4.3	1650	13.5	1406	40.7
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	2574	1.5	756	15.3	730	31.3	2668	1.5	854	49.7
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	567	6.6	370	6.3	339	6.2	512	7.2	451	26.3
Outdoors, park/golf course	-1	0.0	322	3.3	297	7.5	-1	0.0	305	10.8
Outdoors, other location	-1	0.0	667	2.3	614	5.1	-1	0.0	631	7.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2397	69.6	1308	57.6	1279	44.5	2484	70.5	1958	242.2
In transit, bus	-1	0.0	3609	1.9	3885	4.2	-1	0.0	3801	6.1
In transit, truck	3649	50.3	1656	88.7	1601	130.1	3885	51.1	2302	320.2
In transit, van	2243	0.3	-1	0.0	-1	0.0	2234	0.2	2240	0.5
Indoors, public garage	1491	40.5	770	27.7	738	12.6	1609	41.3	1290	122.1
Outdoors, in a parking lot	1530	35.5	846	29.7	873	21.1	1551	36.4	1258	122.8
Outdoors, along a roadway	1910	190.0	1150	204.7	1159	217.2	1896	195.5	1512	807.4
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	2442	4.0	1279	4.6	1271	8.1	2475	3.0	1695	19.8
Outdoors, service station	0	0.8	0	4.0	0	7.4	0	0.9	0	13.1
Indoors, residential garage	2191	1.8	898	0.6	848	0.3	2628	1.4	2065	4.0
Indoors, in a repair shop	-1	0.0	2381	1.0	2427	2.2	-1	0.0	2413	3.2
Indoors, home	1105	1285.2	503	1229.4	488	1178.3	1221	1317.8	843	5010.7
Indoors, office	1000	17.8	460	70.2	430	122.0	971	16.9	525	227.0
Indoors, store	859	9.5	518	7.1	485	6.0	882	9.1	719	31.7
Indoors, restaurant	1261	19.4	848	14.7	877	10.3	1351	20.1	1134	64.6
Indoors, mfg. facility	1151	57.8	685	49.5	705	28.6	1125	59.6	960	195.5
Indoors, school	1151	24.4	674	17.1	694	7.8	1121	25.2	984	74.4
Indoors, church	747	18.3	387	11.2	393	6.0	783	17.9	644	53.3
Indoors, shopping mall	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, auditorium	334	0.8	144	28.7	134	52.7	401	0.4	140	82.5
Indoors, health care facility	-1	0.0	633	2.7	670	6.1	-1	0.0	659	8.8
Indoors, public building	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, other location	1819	12.1	1013	9.8	960	10.1	1751	11.3	1418	43.3
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	2018	79.7	1242	116.4	1214	161.8	1955	80.2	1503	438.1
Outdoors, residential grounds	1103	32.6	689	28.6	652	24.0	1082	33.5	906	118.6
Outdoors, school grounds	1647	1.4	1124	1.0	1046	0.4	1577	1.4	1441	4.2
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	588	22.9	386	17.4	373	10.5	548	24.0	498	74.9
Outdoors, other location	1463	185.2	788	159.8	798	135.6	1540	190.4	1190	671.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2423	63.5	1264	66.8	1225	69.0	2646	65.7	1874	265.0
In transit, bus	4799	20.1	2510	14.8	2521	9.0	4933	20.5	3997	64.4
In transit, truck	2320	1.1	1712	1.6	1819	2.2	2155	1.2	1946	5.9
In transit, van	1655	1.4	1182	1.9	1169	2.6	1550	1.4	1337	7.4
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, in a parking lot	1243	8.3	733	8.6	728	9.4	1312	8.3	993	34.6
Outdoors, along a roadway	1829	106.9	1045	137.7	993	170.7	1950	109.7	1377	525.1
In transit, motorcycle	2579	0.6	1165	0.4	1103	0.3	3023	0.6	2150	2.0
Indoors, service station	-1	0.0	-1	0.1	1351	0.1	-1	0.0	1372	0.2
Outdoors, service station	0	0.1	0	0.6	0	1.2	-1	0.1	0	1.9
Indoors, residential garage	1601	0.6	879	0.7	789	0.8	1866	0.6	1220	2.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1115	1398.1	519	1433.4	514	1476.6	1238	1428.4	842	5736.5
Indoors, office	922	0.7	521	2.5	534	4.3	982	0.6	600	8.1
Indoors, store	801	19.5	513	22.8	522	26.9	831	20.0	650	89.2
Indoors, restaurant	1879	15.3	914	14.3	870	12.3	2119	15.9	1492	57.8
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	1258	359.8	707	266.6	726	163.3	1250	365.3	1053	1154.9
Indoors, church	762	14.2	410	12.6	403	11.3	789	14.5	608	52.6
Indoors, shopping mall	3141	3.7	2375	3.4	2402	3.0	3059	3.7	2768	13.8
Indoors, auditorium	307	9.9	143	7.5	132	4.2	367	10.5	266	32.0
Indoors, health care facility	604	18.3	366	13.1	353	6.8	655	19.2	537	57.4
Indoors, public building	825	9.2	497	7.8	519	6.6	852	9.4	695	33.0
Indoors, other location	1587	10.6	996	8.6	1024	7.0	1610	11.0	1351	37.1
Indoors, not specified	-1	0.0	1032	0.4	954	0.9	-1	0.0	978	1.3
Outdoors, construction	-1	0.0	1329	1.2	1345	2.7	-1	0.0	1340	3.9
Outdoors, residential grounds	1074	37.7	673	63.1	658	88.5	1155	38.7	815	228.1
Outdoors, school grounds	1770	39.7	1201	33.3	1197	25.4	1726	40.8	1517	139.1
Outdoors, sports arena	522	14.0	332	14.8	328	16.4	563	14.5	432	59.8
Outdoors, park/golf course	510	5.4	334	23.1	321	41.0	551	5.8	356	75.4
Outdoors, other location	1316	1.4	771	22.4	739	45.4	1287	1.5	772	70.6
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2246	53.8	1257	72.5	1229	92.0	2260	54.6	1643	272.9
In transit, bus	3671	11.9	2175	8.3	2175	3.8	3651	12.2	3166	36.1
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1982	7.1	1084	5.3	1053	3.3	2082	7.7	1678	23.4
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, in a parking lot	1442	4.8	770	6.9	751	9.2	1475	4.8	1019	25.7
Outdoors, along a roadway	1944	26.2	1050	44.1	1025	64.8	2059	26.5	1350	161.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1483	0.4	1524	0.9	-1	0.0	1511	1.3
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	1217	1.2	1006	1.1	1229	0.9	1153	1.2	1150	4.4
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1065	1722.4	511	1711.1	503	1699.8	1152	1760.8	811	6894.1
Indoors, office	945	85.8	544	76.6	540	67.1	919	87.1	755	316.6
Indoors, store	711	18.1	498	29.1	518	41.9	710	18.2	578	107.4
Indoors, restaurant	1394	23.1	863	20.6	860	17.8	1399	23.0	1154	84.5
Indoors, mfg. facility	1205	29.6	703	33.3	722	38.8	1168	30.2	928	131.9
Indoors, school	1261	87.9	707	68.9	726	47.9	1237	89.4	1037	294.1
Indoors, church	569	37.7	340	29.8	321	20.8	563	40.0	474	128.4
Indoors, shopping mall	4749	3.2	3048	2.3	3109	1.0	4466	3.3	4092	9.9
Indoors, auditorium	336	3.3	138	2.3	128	1.0	401	3.4	291	10.0
Indoors, health care facility	957	10.2	455	10.1	385	10.1	953	10.2	689	40.6
Indoors, public building	732	1.3	509	1.7	533	1.5	689	1.3	605	5.7
Indoors, other location	1714	2.8	962	7.7	910	12.2	1898	2.8	1123	25.4
Indoors, not specified	-1	0.1	886	1.5	884	3.3	-1	0.0	891	4.9
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	949	18.9	645	33.2	634	46.2	962	20.2	743	118.3
Outdoors, school grounds	1647	9.2	1028	6.4	953	2.9	1682	9.5	1446	28.0
Outdoors, sports arena	774	0.3	296	3.4	273	6.1	921	0.3	316	10.1
Outdoors, park/golf course	547	0.3	364	0.6	320	1.0	673	0.2	402	2.2
Outdoors, other location	925	0.9	771	6.8	770	13.5	815	1.0	779	22.2
Outdoors, not specified	-1	0.0	-1	0.1	966	0.2	-1	0.0	976	0.3
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Los Angeles: City-wide, Demographic Group=All persons

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2300	100.1	1246	101.5	1210	103.0	2412	102.1	1789	406.7
In transit, bus	4240	6.1	2344	5.3	2351	4.6	4282	6.2	3405	22.2
In transit, truck	3033	7.0	1625	7.7	1603	8.6	3142	7.1	2297	30.4
In transit, van	2517	4.6	1293	4.5	1248	4.5	2638	4.9	1941	18.5
Indoors, public garage	1382	4.0	803	2.9	820	1.8	1402	4.0	1177	12.7
Outdoors, in a parking lot	1346	8.8	738	11.0	711	13.2	1394	9.0	997	42.0
Outdoors, along a roadway	1835	54.5	1056	68.2	1018	82.4	1886	56.3	1385	261.3
In transit, motorcycle	-1	0.1	1218	0.8	1174	1.4	-1	0.0	1257	2.3
Indoors, service station	1951	2.3	1147	1.8	1113	1.3	1934	2.4	1620	7.8
Outdoors, service station	0	0.3	0	0.6	0	1.0	0	0.3	0	2.1
Indoors, residential garage	1679	1.6	940	1.3	926	1.0	1801	1.7	1415	5.6
Indoors, in a repair shop	2903	0.1	-1	0.0	-1	0.0	-1	0.1	2605	0.3
Indoors, home	1082	1544.6	513	1540.1	506	1536.4	1178	1579.2	822	6200.3
Indoors, office	942	125.9	548	113.9	554	101.9	923	127.3	757	469.0
Indoors, store	844	39.7	513	44.9	507	50.8	848	40.7	663	176.1
Indoors, restaurant	1667	25.7	914	27.3	890	29.1	1747	26.0	1287	108.1
Indoors, mfg. facility	1180	16.7	683	21.8	704	27.8	1180	17.2	892	83.4
Indoors, school	1196	98.1	680	79.6	696	58.2	1179	100.4	982	336.3
Indoors, church	738	16.1	398	14.3	398	12.4	761	16.8	592	59.6
Indoors, shopping mall	3770	3.1	2478	2.7	2435	2.3	3667	3.1	3156	11.1
Indoors, auditorium	280	6.9	145	6.5	138	5.8	304	7.2	223	26.5
Indoors, health care facility	783	21.7	428	19.5	435	16.8	807	22.2	630	80.2
Indoors, public building	842	5.5	457	6.9	453	8.4	899	5.6	629	26.4
Indoors, other location	2101	28.3	1059	31.0	1036	34.2	2257	28.8	1577	122.3
Indoors, not specified	1492	0.6	935	0.6	904	0.7	1377	0.6	1169	2.6
Outdoors, construction	2017	2.0	1252	2.4	1237	2.9	1963	2.1	1566	9.4
Outdoors, residential grounds	1077	17.1	668	30.1	649	42.5	1100	17.8	797	107.5
Outdoors, school grounds	1842	5.9	1180	6.0	1147	6.2	1792	6.1	1487	24.2
Outdoors, sports arena	517	1.8	329	4.9	314	8.1	534	1.9	365	16.7
Outdoors, park/golf course	510	4.9	327	11.8	310	18.5	512	5.1	365	40.3
Outdoors, other location	1377	5.4	757	13.2	728	20.9	1437	5.6	902	45.0
Outdoors, not specified	2016	0.2	1636	0.3	1903	0.4	1962	0.2	1863	1.2
In transit, train	2999	0.2	1321	0.3	1229	0.5	3211	0.2	1864	1.3
In transit, airplane	-1	0.0	0	0.2	0	0.5	-1	0.0	0	0.7

Minneapolis/St. Paul:: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2188	82.2	1616	93.1	1713	100.6	2083	85.5	1883	361.4
In transit, bus	3850	7.6	2661	5.8	2771	4.1	3521	7.6	3299	25.1
In transit, truck	2663	2.7	1844	6.8	1944	8.0	2468	3.9	2099	21.4
In transit, van	2156	3.2	1538	4.7	1644	4.7	2018	3.7	1800	16.3
Indoors, public garage	1284	3.3	987	1.8	1041	1.1	1273	3.0	1193	9.3
Outdoors, in a parking lot	1265	12.8	944	13.0	1013	14.0	1211	12.9	1106	52.7
Outdoors, along a roadway	2004	44.4	1440	67.6	1533	83.7	1911	48.2	1668	244.0
In transit, motorcycle	2497	0.4	1834	0.9	1924	1.7	2513	0.3	2037	3.3
Indoors, service station	1939	2.4	1465	1.7	1567	1.1	1868	2.4	1755	7.6
Outdoors, service station	0	0.1	0	0.5	0	0.8	0	0.1	0	1.5
Indoors, residential garage	1811	0.8	1334	0.9	1424	0.7	1747	0.9	1576	3.4
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, home	702	1589.9	564	1546.1	588	1535.7	650	1613.8	627	6285.5
Indoors, office	810	77.2	598	82.3	634	85.2	769	79.7	700	324.5
Indoors, store	915	51.6	682	48.6	726	51.5	890	50.9	805	202.6
Indoors, restaurant	1606	31.4	1187	29.4	1260	30.6	1554	31.1	1406	122.5
Indoors, mfg. facility	966	24.1	718	26.0	760	27.2	911	24.4	834	101.7
Indoors, school	932	129.5	696	101.7	740	66.3	892	132.5	834	430.0
Indoors, church	603	13.3	454	13.3	481	11.8	586	14.2	533	52.7
Indoors, shopping mall	4591	3.5	3556	2.9	3826	2.5	4541	3.7	4185	12.5
Indoors, auditorium	276	3.8	205	6.8	220	7.3	266	4.9	235	22.7
Indoors, health care facility	661	21.0	497	19.7	521	16.2	628	22.2	582	79.1
Indoors, public building	753	5.8	574	8.1	605	9.6	737	6.4	653	29.9
Indoors, other location	1688	20.2	1292	27.5	1373	31.1	1558	22.2	1454	101.0
Indoors, not specified	1727	0.5	1340	0.4	1460	0.6	1686	0.4	1551	2.0
Outdoors, construction	2059	1.8	1578	2.8	1687	2.9	2006	2.2	1796	9.6
Outdoors, residential grounds	1313	13.9	932	33.8	988	49.4	1257	16.2	1049	113.3
Outdoors, school grounds	2222	5.8	1591	6.9	1719	6.3	2134	6.5	1905	25.5
Outdoors, sports arena	712	0.8	485	4.6	518	8.2	681	0.9	528	14.5
Outdoors, park/golf course	631	2.8	482	13.0	511	21.4	627	3.7	520	40.9
Outdoors, other location	1383	3.0	1014	12.5	1075	22.7	1337	3.2	1099	41.3
Outdoors, not specified	2172	0.2	1287	0.3	1184	0.4	1974	0.2	1572	1.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	0.3	0	0.6	-1	0.0	0	0.9

Minneapolis/St. Paul:: City-wide, Demographic Group=African americans

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2161	87.8	1649	69.0	1737	71.5	2058	81.5	1922	309.8
In transit, bus	3606	7.7	2605	15.6	2763	14.3	3273	11.3	2963	49.0
In transit, truck	-1	0.0	1872	3.0	1994	6.0	-1	0.0	1953	9.0
In transit, van	-1	0.0	1931	0.2	1944	0.4	-1	0.0	1940	0.6
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1238	13.2	985	10.1	1040	13.1	1181	11.5	1117	47.9
Outdoors, along a roadway	1994	25.0	1480	58.5	1564	86.5	1912	28.7	1644	198.6
In transit, motorcycle	2613	0.2	2089	0.8	2150	0.6	2634	0.5	2277	2.1
Indoors, service station	-1	0.0	1174	0.5	1237	1.1	-1	0.0	1216	1.6
Outdoors, service station	-1	0.0	0	0.3	0	0.6	-1	0.0	0	1.0
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	2240	0.2	2248	0.3	-1	0.0	2245	0.5
Indoors, home	741	1740.6	585	1685.5	604	1659.7	673	1767.1	652	6852.9
Indoors, office	-1	0.0	619	30.8	659	55.8	738	2.0	647	88.6
Indoors, store	887	12.3	678	18.6	726	24.0	866	13.2	769	68.1
Indoors, restaurant	1531	20.7	1139	6.4	1130	2.9	1453	17.4	1425	47.4
Indoors, mfg. facility	1067	48.7	736	20.7	731	21.0	1028	37.6	947	128.0
Indoors, school	941	55.7	694	101.6	742	70.4	885	85.9	801	313.7
Indoors, church	609	52.9	457	34.5	491	24.2	599	52.0	557	163.6
Indoors, shopping mall	-1	0.0	3625	1.9	3885	1.6	4536	0.7	3881	4.1
Indoors, auditorium	-1	0.0	230	2.8	234	2.1	329	1.2	251	6.1
Indoors, health care facility	581	18.1	454	41.7	465	50.5	499	25.9	483	136.2
Indoors, public building	785	0.3	606	3.3	650	5.7	743	0.9	647	10.1
Indoors, other location	1554	73.2	1303	26.5	1421	21.7	1418	57.9	1457	179.4
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1504	1.8	999	26.2	1033	41.1	1466	5.1	1063	74.2
Outdoors, school grounds	2109	1.6	1594	6.7	1672	4.7	2047	4.3	1775	17.4
Outdoors, sports arena	-1	0.0	505	7.5	534	5.6	666	3.1	546	16.2
Outdoors, park/golf course	-1	0.0	463	3.9	500	7.7	-1	0.0	487	11.6
Outdoors, other location	1358	0.2	989	4.4	1048	9.5	1231	0.1	1035	14.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	-1	0.0	1402	2.7	1441	5.5	-1	0.0	1428	8.2
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul:: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1992	74.2	1546	68.7	1674	72.4	1952	71.9	1795	287.3
In transit, bus	3289	6.3	2475	12.2	2687	11.8	3098	8.7	2810	39.0
In transit, truck	-1	0.0	1771	2.8	1923	5.6	-1	0.0	1872	8.4
In transit, van	2233	0.9	1631	4.3	1770	3.6	2214	2.4	1849	11.1
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1130	11.3	910	10.9	983	13.3	1116	10.7	1032	46.2
Outdoors, along a roadway	1751	29.6	1348	92.5	1477	108.5	1667	49.2	1497	279.8
In transit, motorcycle	2398	0.1	1975	0.6	2123	0.5	2458	0.3	2163	1.6
Indoors, service station	-1	0.0	1099	0.5	1188	1.0	-1	0.0	1158	1.5
Outdoors, service station	-1	0.0	0	0.3	0	0.6	-1	0.0	0	0.9
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	2193	0.2	2243	0.3	-1	0.0	2227	0.5
Indoors, home	677	1786.9	542	1679.4	576	1649.6	647	1797.2	612	6913.0
Indoors, office	757	0.6	582	33.3	632	58.1	722	3.5	618	95.5
Indoors, store	822	10.3	650	20.7	708	28.6	828	11.7	728	71.3
Indoors, restaurant	1414	18.2	1074	6.9	1110	3.4	1404	15.9	1334	44.4
Indoors, mfg. facility	996	42.6	699	18.6	711	19.3	976	32.9	893	113.4
Indoors, school	870	55.7	666	77.5	724	53.6	848	73.6	773	260.4
Indoors, church	569	39.8	433	33.8	476	25.2	573	41.8	521	140.6
Indoors, shopping mall	-1	0.0	3400	1.7	3726	1.4	4245	0.7	3670	3.8
Indoors, auditorium	-1	0.0	219	2.5	230	1.9	315	1.1	242	5.5
Indoors, health care facility	541	15.1	422	36.3	447	44.5	497	21.9	461	117.9
Indoors, public building	722	0.3	563	3.0	621	5.1	694	0.8	611	9.2
Indoors, other location	1406	63.4	1209	25.6	1356	21.5	1361	51.0	1354	161.5
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1225	3.2	926	27.7	990	45.3	1262	6.1	998	82.4
Outdoors, school grounds	1942	1.1	1493	4.9	1602	3.5	1924	3.1	1669	12.6
Outdoors, sports arena	-1	0.0	470	7.2	510	6.0	631	2.8	513	16.0
Outdoors, park/golf course	-1	0.0	434	3.5	478	7.0	-1	0.0	463	10.5
Outdoors, other location	1197	0.3	926	5.7	1019	11.4	1217	0.7	1000	18.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	-1	0.0	1262	2.5	1342	5.1	-1	0.0	1315	7.6
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul:: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2099	42.3	1560	52.0	1661	61.7	2047	44.0	1813	199.9
In transit, bus	3521	7.6	2504	5.9	2680	3.7	3292	7.8	3084	25.0
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	1591	1.0	1685	2.0	-1	0.0	1654	3.0
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1210	5.3	957	16.5	1041	22.4	1181	7.1	1051	51.3
Outdoors, along a roadway	2004	37.2	1416	59.4	1485	65.1	1945	44.2	1658	206.0
In transit, motorcycle	-1	0.0	1799	0.5	1880	1.0	-1	0.0	1854	1.5
Indoors, service station	-1	0.0	-1	0.0	1391	0.1	-1	0.0	1355	0.2
Outdoors, service station	-1	0.0	0	0.1	0	0.3	-1	0.0	0	0.4
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	690	1841.5	552	1827.0	575	1832.3	648	1873.6	616	7374.3
Indoors, office	765	6.2	627	2.4	670	1.8	748	5.0	727	15.4
Indoors, store	886	47.1	639	43.1	680	56.0	879	44.4	768	190.7
Indoors, restaurant	1603	32.1	1189	11.6	1268	6.2	1567	26.8	1501	76.6
Indoors, mfg. facility	896	25.8	683	25.2	739	39.5	853	19.9	783	110.4
Indoors, school	878	71.7	667	69.9	704	36.3	862	83.9	792	261.8
Indoors, church	532	4.8	454	6.7	500	3.9	569	6.4	513	21.8
Indoors, shopping mall	4809	0.6	3474	2.5	3698	1.6	4608	1.7	3963	6.5
Indoors, auditorium	-1	0.0	191	8.0	210	7.9	245	2.9	208	18.8
Indoors, health care facility	589	1.6	467	7.3	525	5.9	590	4.5	523	19.4
Indoors, public building	667	11.9	515	4.5	565	2.2	682	10.9	642	29.5
Indoors, other location	1625	10.0	1290	12.0	1389	16.0	1607	10.1	1459	48.1
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1147	9.5	920	16.0	979	21.4	1119	9.9	1015	56.8
Outdoors, school grounds	2017	0.4	1422	1.4	1561	0.9	2024	1.0	1675	3.6
Outdoors, sports arena	-1	0.0	454	3.9	492	7.5	-1	0.0	479	11.4
Outdoors, park/golf course	549	4.4	498	2.2	537	2.4	565	3.7	543	12.7
Outdoors, other location	-1	0.0	1023	4.9	1086	9.9	-1	0.1	1065	14.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul:: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2176	68.2	1601	80.6	1694	84.3	2084	73.1	1870	306.2
In transit, bus	3705	2.4	2404	4.3	2565	4.1	3277	3.2	2874	14.0
In transit, truck	2471	2.4	1843	10.6	1922	17.0	2467	3.2	1989	33.2
In transit, van	2150	0.1	1635	1.2	1694	1.4	2220	0.4	1756	3.1
Indoors, public garage	-1	0.0	933	0.3	978	0.4	-1	0.0	961	0.7
Outdoors, in a parking lot	1191	25.2	916	16.5	1006	16.1	1140	23.5	1084	81.4
Outdoors, along a roadway	1987	49.4	1411	76.6	1504	100.4	1888	51.9	1636	278.2
In transit, motorcycle	-1	0.0	1805	4.9	1910	10.7	-1	0.0	1877	15.6
Indoors, service station	-1	0.0	1237	0.4	1326	0.9	-1	0.0	1301	1.3
Outdoors, service station	0	0.3	0	0.6	0	0.9	0	0.3	0	2.1
Indoors, residential garage	2092	0.7	1317	1.3	1411	0.8	1836	1.0	1621	3.8
Indoors, in a repair shop	-1	0.0	-1	0.1	2248	0.1	-1	0.0	2241	0.2
Indoors, home	703	1626.5	564	1598.0	590	1597.9	653	1651.1	628	6473.4
Indoors, office	793	51.2	601	54.9	638	52.3	764	54.3	698	212.8
Indoors, store	926	31.4	678	44.2	717	53.7	904	33.9	786	163.1
Indoors, restaurant	1507	55.5	1152	38.9	1247	25.7	1439	56.1	1369	176.3
Indoors, mfg. facility	932	38.0	648	33.0	677	26.8	853	38.3	791	136.0
Indoors, school	923	112.2	687	82.5	729	55.7	879	110.8	826	361.3
Indoors, church	561	10.4	439	13.9	474	12.1	560	12.8	505	49.1
Indoors, shopping mall	4471	6.3	3295	3.2	3585	2.0	4345	6.0	4111	17.5
Indoors, auditorium	254	0.4	208	3.1	215	2.7	260	1.6	224	7.8
Indoors, health care facility	644	39.4	486	28.0	494	23.1	603	38.9	571	129.4
Indoors, public building	707	7.0	558	3.2	619	2.4	708	6.0	670	18.6
Indoors, other location	1728	14.9	1360	30.8	1432	33.9	1594	20.4	1487	100.1
Indoors, not specified	1599	0.3	1339	0.4	1434	0.7	1620	0.3	1467	1.7
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1353	10.9	934	26.3	979	37.9	1302	12.2	1057	87.4
Outdoors, school grounds	2112	5.5	1567	7.5	1743	7.1	2025	6.5	1839	26.6
Outdoors, sports arena	-1	0.0	471	4.3	506	8.4	-1	0.0	494	12.6
Outdoors, park/golf course	741	0.4	470	9.2	480	18.4	725	1.2	491	29.3
Outdoors, other location	-1	0.0	976	5.1	1046	9.9	-1	0.0	1022	14.9
Outdoors, not specified	2143	1.0	1549	0.2	-1	0.0	1985	0.8	2012	2.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul:: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2180	84.9	1613	92.7	1713	98.4	2074	87.6	1884	363.6
In transit, bus	3972	8.4	2735	5.7	2795	4.4	3653	7.9	3416	26.4
In transit, truck	2815	1.7	1875	5.1	1994	6.2	2562	2.6	2136	15.6
In transit, van	2135	7.4	1550	8.9	1648	8.5	2035	7.9	1825	32.7
Indoors, public garage	1282	8.1	995	3.5	1078	1.3	1271	7.2	1214	20.1
Outdoors, in a parking lot	1311	11.1	949	11.7	1011	12.8	1247	11.3	1123	46.9
Outdoors, along a roadway	1985	39.6	1439	75.1	1535	91.1	1880	48.3	1643	254.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
Indoors, service station	1866	0.5	1337	0.4	1434	0.3	1804	0.5	1641	1.7
Outdoors, service station	-1	0.0	0	0.1	0	0.2	-1	0.0	0	0.4
Indoors, residential garage	1754	1.4	1334	1.0	1450	0.7	1709	1.5	1596	4.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	705	1615.4	565	1555.3	589	1540.3	652	1635.3	629	6346.3
Indoors, office	803	70.0	594	83.1	634	83.7	759	76.7	692	313.4
Indoors, store	908	46.2	676	45.3	722	52.9	883	44.3	794	188.7
Indoors, restaurant	1655	20.7	1196	20.9	1272	21.6	1608	21.4	1431	84.5
Indoors, mfg. facility	976	25.9	724	29.3	766	31.1	926	26.5	841	112.8
Indoors, school	939	108.3	702	83.7	744	60.9	899	107.4	839	360.2
Indoors, church	622	23.9	464	18.5	490	13.8	605	24.3	558	80.5
Indoors, shopping mall	4655	3.6	3672	2.3	3888	1.5	4604	3.6	4331	11.0
Indoors, auditorium	275	3.8	206	6.3	222	5.6	266	5.1	238	20.8
Indoors, health care facility	669	17.2	498	19.0	528	16.3	634	19.1	582	71.6
Indoors, public building	786	5.3	586	10.4	620	13.9	764	6.0	659	35.6
Indoors, other location	1613	28.8	1273	27.6	1362	28.5	1491	28.7	1436	113.6
Indoors, not specified	1751	0.8	1371	0.6	1475	0.9	1735	0.6	1582	3.0
Outdoors, construction	2060	3.9	1591	5.6	1705	5.5	2007	4.8	1816	19.8
Outdoors, residential grounds	1319	10.4	939	38.0	1003	56.0	1254	14.7	1041	118.9
Outdoors, school grounds	2196	5.2	1589	6.1	1698	5.9	2116	5.6	1885	22.8
Outdoors, sports arena	-1	0.0	489	3.0	521	5.8	657	0.1	513	8.9
Outdoors, park/golf course	680	2.3	486	10.5	520	15.8	649	3.3	534	31.9
Outdoors, other location	1333	5.3	1038	13.6	1105	23.3	1302	5.8	1135	48.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	-1	0.0	1342	0.5	1404	0.9	-1	0.0	1384	1.4
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul:: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2214	103.4	1633	115.3	1727	120.8	2099	108.6	1905	448.2
In transit, bus	3813	6.5	2790	7.0	2941	4.4	3576	7.8	3312	25.7
In transit, truck	2615	0.7	1884	3.6	1980	5.0	2470	1.3	2053	10.6
In transit, van	-1	0.0	1629	1.3	1739	2.3	-1	0.0	1705	3.6
Indoors, public garage	1389	0.4	982	0.4	1063	0.3	1318	0.4	1195	1.5
Outdoors, in a parking lot	1301	10.0	958	11.3	1012	11.7	1249	10.5	1121	43.5
Outdoors, along a roadway	1997	46.7	1445	64.9	1546	81.7	1904	49.1	1678	242.3
In transit, motorcycle	2631	1.6	2078	0.3	-1	0.0	2649	1.2	2579	3.2
Indoors, service station	-1	0.0	1413	0.2	1444	0.3	-1	0.0	1433	0.5
Outdoors, service station	-1	0.1	0	0.7	0	1.2	-1	0.1	0	2.1
Indoors, residential garage	-1	0.1	1299	0.7	1373	1.2	1622	0.2	1380	2.2
Indoors, in a repair shop	-1	0.0	1896	0.1	-1	0.1	-1	0.1	2173	0.4
Indoors, home	703	1550.5	565	1483.8	589	1460.3	647	1567.9	627	6062.6
Indoors, office	823	130.9	604	122.4	636	123.2	779	129.9	713	506.4
Indoors, store	911	49.9	690	47.7	743	51.3	885	49.6	808	198.4
Indoors, restaurant	1656	22.0	1204	29.7	1270	33.8	1620	23.8	1406	109.3
Indoors, mfg. facility	1015	31.9	762	28.9	796	27.8	966	31.5	890	120.1
Indoors, school	935	120.4	698	103.6	741	57.5	895	131.9	836	413.4
Indoors, church	591	6.6	449	10.9	477	12.8	578	7.6	509	37.9
Indoors, shopping mall	4661	1.9	3639	4.9	3902	6.1	4749	2.6	4058	15.6
Indoors, auditorium	275	3.0	210	8.1	225	12.9	265	3.4	231	27.4
Indoors, health care facility	731	17.3	508	18.9	518	19.1	694	18.3	609	73.6
Indoors, public building	819	3.4	580	6.5	590	7.6	798	4.2	663	21.7
Indoors, other location	1704	27.8	1301	24.3	1371	21.7	1593	28.0	1506	101.8
Indoors, not specified	1729	0.5	1262	0.4	1438	0.3	1606	0.6	1528	1.8
Outdoors, construction	-1	0.0	1544	0.6	1676	1.1	-1	0.0	1632	1.7
Outdoors, residential grounds	1360	16.4	922	37.9	971	61.9	1295	17.0	1046	133.2
Outdoors, school grounds	2266	4.9	1614	6.1	1717	4.4	2209	6.1	1953	21.5
Outdoors, sports arena	759	0.4	493	7.5	521	12.4	729	1.2	528	21.5
Outdoors, park/golf course	617	2.1	476	15.3	504	24.3	612	4.2	510	46.0
Outdoors, other location	1388	0.6	960	19.4	1015	38.0	1276	0.9	1005	58.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	1.2	0	2.5	-1	0.0	0	3.7

Minneapolis/St. Paul:: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2379	47.5	1685	78.1	1770	99.9	2224	51.7	1935	277.1
In transit, bus	3967	4.5	2258	1.2	3275	0.6	3067	3.5	3400	9.7
In transit, truck	2843	24.4	1992	13.4	1993	7.3	2681	22.3	2529	67.3
In transit, van	2238	0.6	1657	7.9	1782	6.2	2167	3.7	1822	18.4
Indoors, public garage	-1	0.0	858	0.5	908	1.1	-1	0.0	892	1.6
Outdoors, in a parking lot	1533	3.5	991	9.0	1051	14.0	1390	3.5	1129	29.9
Outdoors, along a roadway	2246	48.9	1496	61.3	1581	73.5	2080	48.7	1803	232.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1868	19.8	1340	4.2	-1	0.0	1714	15.3	1752	39.2
Outdoors, service station	-1	0.0	0	1.2	0	2.4	-1	0.0	0	3.6
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	720	1566.8	577	1526.7	601	1496.8	663	1607.2	641	6197.5
Indoors, office	843	84.1	619	98.9	656	127.8	789	79.8	714	390.5
Indoors, store	999	0.4	683	14.5	742	26.3	861	1.2	728	42.4
Indoors, restaurant	1735	34.8	1225	43.9	1314	55.2	1645	33.9	1445	167.8
Indoors, mfg. facility	-1	0.0	658	1.6	712	3.2	-1	0.0	694	4.9
Indoors, school	970	240.9	713	133.0	767	81.2	911	220.8	876	675.9
Indoors, church	547	10.4	403	9.5	467	10.5	440	10.3	466	40.7
Indoors, shopping mall	4499	0.2	3934	0.6	4174	0.4	4489	0.4	4196	1.7
Indoors, auditorium	367	2.4	210	19.3	226	15.8	287	9.1	238	46.5
Indoors, health care facility	822	13.3	576	13.0	586	8.5	800	14.7	710	49.6
Indoors, public building	-1	0.0	555	3.6	582	8.4	-1	0.0	574	12.0
Indoors, other location	-1	0.0	1154	29.2	1302	31.2	1067	9.2	1209	69.6
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	1521	2.4	1657	4.8	-1	0.0	1612	7.1
Outdoors, residential grounds	1221	49.2	948	59.4	1032	55.6	1201	58.1	1095	222.4
Outdoors, school grounds	2255	1.7	1579	9.0	1712	7.1	2101	5.1	1787	22.9
Outdoors, sports arena	-1	0.0	497	1.0	531	2.2	-1	0.0	520	3.2
Outdoors, park/golf course	654	6.7	501	33.6	529	51.7	645	9.5	539	101.6
Outdoors, other location	-1	0.0	1077	8.1	1144	16.5	-1	0.0	1122	24.6
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul:: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2185	55.0	1605	64.5	1703	72.8	2099	57.0	1875	249.4
In transit, bus	3697	11.8	2582	10.7	2717	6.9	3371	12.8	3156	42.2
In transit, truck	2945	1.9	1847	1.5	1939	1.9	2721	1.6	2381	6.9
In transit, van	2465	2.9	1486	6.0	1579	5.3	2074	4.3	1801	18.5
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	1346	0.1
Outdoors, in a parking lot	1309	6.2	938	7.4	1003	9.0	1243	6.4	1105	29.1
Outdoors, along a roadway	2010	62.2	1437	97.0	1530	128.3	1932	65.5	1664	353.0
In transit, motorcycle	2454	1.1	1913	0.4	1925	0.3	2480	0.9	2330	2.7
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	0	0.1	-1	0.1	-1	0.0	0	0.1	0	0.4
Indoors, residential garage	1788	0.2	1355	1.0	1473	0.9	1752	0.6	1515	2.8
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	693	1622.5	557	1586.9	580	1582.4	645	1650.0	619	6441.9
Indoors, office	1003	1.3	594	5.0	613	8.8	945	1.4	667	16.5
Indoors, store	940	22.9	680	24.7	723	26.9	922	23.2	810	97.7
Indoors, restaurant	1659	9.3	1224	14.8	1294	19.4	1628	10.0	1400	53.5
Indoors, mfg. facility	-1	0.1	936	0.2	964	0.1	1287	0.2	1073	0.6
Indoors, school	911	283.1	684	213.1	726	138.9	876	284.9	820	920.0
Indoors, church	580	13.0	449	11.6	480	10.5	576	13.3	526	48.3
Indoors, shopping mall	4640	2.4	3555	2.8	3776	2.7	4600	2.7	4127	10.5
Indoors, auditorium	280	2.5	202	6.6	217	6.2	270	4.0	231	19.3
Indoors, health care facility	695	11.1	508	11.7	506	10.1	682	12.4	601	45.3
Indoors, public building	735	2.0	563	3.7	595	5.0	737	2.4	633	13.2
Indoors, other location	1720	5.5	1246	7.4	1350	8.2	1583	6.0	1448	27.2
Indoors, not specified	-1	0.0	1330	0.3	1430	0.6	-1	0.0	1397	0.9
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1323	24.9	922	51.9	970	76.1	1280	27.6	1052	180.5
Outdoors, school grounds	2185	13.4	1548	15.9	1676	15.2	2095	14.7	1861	59.2
Outdoors, sports arena	700	2.2	482	6.5	510	9.2	671	2.9	544	20.9
Outdoors, park/golf course	657	2.0	470	18.4	499	34.1	661	2.7	503	57.3
Outdoors, other location	-1	0.0	986	13.4	1055	27.9	1261	0.1	1034	41.4
Outdoors, not specified	-1	0.0	1377	0.3	1533	0.2	1854	0.1	1581	0.6
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul:: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2127	163.2	1574	121.7	1662	116.9	2019	153.5	1878	555.4
In transit, bus	3265	3.9	2694	0.8	-1	0.0	3250	3.0	3198	7.7
In transit, truck	2455	5.4	1849	17.9	1922	28.4	2486	7.8	2023	59.6
In transit, van	-1	0.0	1270	2.5	1350	4.4	-1	0.0	1321	6.9
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1198	5.9	863	13.6	887	13.5	1148	8.4	976	41.4
Outdoors, along a roadway	1700	91.9	1373	115.7	1473	94.8	1612	109.6	1533	412.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1520	0.2	1635	0.3	-1	0.1	1593	0.6
Outdoors, service station	-1	0.0	0	2.7	0	5.2	-1	0.1	0	8.0
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	690	1570.6	551	1497.9	569	1442.4	643	1597.5	615	6108.5
Indoors, office	796	57.3	595	109.6	640	147.1	766	62.9	672	376.9
Indoors, store	851	7.8	658	12.5	709	13.6	825	9.3	745	43.2
Indoors, restaurant	1628	22.1	1183	16.8	1244	16.0	1530	20.5	1421	75.4
Indoors, mfg. facility	-1	0.0	758	27.5	804	63.9	-1	0.0	790	91.4
Indoors, school	910	136.0	669	83.2	712	39.2	866	132.8	824	391.1
Indoors, church	639	0.6	442	9.2	466	14.6	636	1.7	472	26.1
Indoors, shopping mall	5134	0.3	4120	1.3	4335	0.8	5218	0.9	4566	3.2
Indoors, auditorium	258	2.7	205	18.4	218	39.9	252	2.3	217	63.2
Indoors, health care facility	732	5.3	547	6.5	549	5.7	694	6.0	626	23.4
Indoors, public building	919	15.9	616	19.3	650	10.6	843	20.6	764	66.5
Indoors, other location	1594	46.5	1318	31.9	1428	28.4	1531	43.7	1486	150.5
Indoors, not specified	-1	0.0	1284	0.1	-1	0.1	-1	0.1	1383	0.3
Outdoors, construction	-1	0.0	1451	5.7	1576	11.4	-1	0.0	1534	17.1
Outdoors, residential grounds	1178	5.4	892	19.3	951	26.7	1152	7.4	978	58.8
Outdoors, school grounds	2346	2.0	1609	8.1	1716	5.0	2202	5.6	1866	20.7
Outdoors, sports arena	654	8.3	473	7.5	505	9.6	629	6.9	562	32.4
Outdoors, park/golf course	534	3.7	496	9.0	530	15.5	551	3.3	523	31.5
Outdoors, other location	1248	2.6	1053	24.6	1119	53.8	1198	2.0	1105	83.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	2336	2.6	1875	0.6	-1	0.0	2374	2.0	2302	5.2
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2179	128.3	1599	133.9	1686	131.1	2061	134.2	1879	527.6
In transit, bus	4074	1.4	2667	2.0	2698	3.1	3750	1.2	3101	7.6
In transit, truck	2557	20.3	1836	21.0	1933	24.8	2411	19.2	2165	85.4
In transit, van	1986	6.1	1555	7.0	1689	6.5	1929	6.4	1781	25.9
Indoors, public garage	1283	13.1	965	11.7	1025	7.1	1246	14.2	1151	46.1
Outdoors, in a parking lot	1219	12.2	929	16.1	993	18.1	1170	13.4	1062	59.8
Outdoors, along a roadway	1855	39.8	1400	67.4	1498	76.4	1793	47.6	1592	231.2
In transit, motorcycle	-1	0.0	1954	0.7	2020	1.4	-1	0.0	1998	2.1
Indoors, service station	1820	16.1	1396	9.8	1512	5.8	1746	15.3	1670	47.0
Outdoors, service station	0	0.3	0	0.5	0	0.6	0	0.3	0	1.7
Indoors, residential garage	1743	2.5	1298	4.1	1389	2.9	1712	3.5	1514	13.0
Indoors, in a repair shop	2732	10.5	2072	2.2	2214	0.2	2661	8.3	2629	21.2
Indoors, home	692	1406.9	563	1375.9	586	1353.3	640	1436.5	621	5572.6
Indoors, office	803	241.2	594	202.3	632	180.7	762	238.6	707	862.9
Indoors, store	881	44.6	665	47.3	707	61.1	854	42.0	768	194.9
Indoors, restaurant	1507	40.7	1116	33.9	1167	34.5	1465	38.5	1327	147.7
Indoors, mfg. facility	968	33.6	707	54.0	746	66.3	906	37.4	805	191.3
Indoors, school	972	20.1	710	16.2	777	11.1	924	20.8	863	68.2
Indoors, church	595	8.0	450	11.0	484	9.4	563	9.9	518	38.3
Indoors, shopping mall	4764	1.5	3534	1.1	3843	0.6	4446	1.6	4255	5.0
Indoors, auditorium	275	10.6	203	3.2	219	2.2	265	8.7	258	24.6
Indoors, health care facility	691	14.1	486	19.2	511	19.6	644	16.0	572	68.9
Indoors, public building	763	7.5	561	11.6	595	19.1	731	6.9	635	45.2
Indoors, other location	1724	46.8	1293	50.0	1361	58.1	1635	45.9	1492	200.8
Indoors, not specified	1470	7.3	1226	2.4	1375	0.8	1375	6.4	1395	16.8
Outdoors, construction	2035	4.9	1574	9.8	1685	10.4	2001	6.8	1772	31.9
Outdoors, residential grounds	1285	5.0	938	19.1	1000	30.5	1243	6.8	1031	61.4
Outdoors, school grounds	2121	0.5	1552	0.9	1693	0.8	2032	0.7	1803	2.8
Outdoors, sports arena	611	1.5	481	5.4	516	10.2	589	1.4	519	18.5
Outdoors, park/golf course	633	1.2	489	9.9	529	14.2	624	2.9	529	28.2
Outdoors, other location	1327	11.7	995	30.4	1052	39.9	1285	15.3	1104	97.3
Outdoors, not specified	-1	0.0	1244	0.7	1108	1.2	2515	0.1	1255	2.1
In transit, train	2436	1.7	1440	1.4	1412	2.0	2243	1.3	1867	6.4
In transit, airplane	-1	0.0	0	1.8	0	4.0	-1	0.0	0	5.7

Minneapolis/St. Paul:: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2114	96.4	1623	97.8	1723	97.1	2048	100.4	1877	391.7
In transit, bus	3710	4.3	2766	1.9	2941	1.4	3540	3.6	3398	11.1
In transit, truck	2475	11.0	1869	2.3	2018	0.2	2422	8.8	2388	22.3
In transit, van	-1	0.0	1634	0.5	1749	0.5	1855	0.1	1710	1.1
Indoors, public garage	1477	0.4	960	0.4	998	0.2	1361	0.4	1229	1.4
Outdoors, in a parking lot	1322	4.4	955	8.8	1023	11.8	1261	5.2	1087	30.2
Outdoors, along a roadway	1921	30.1	1424	51.5	1531	65.0	1855	34.3	1627	180.8
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1350	0.1	1398	0.2	-1	0.0	1383	0.4
Outdoors, service station	0	0.1	-1	0.0	-1	0.0	-1	0.1	0	0.2
Indoors, residential garage	1710	1.4	1177	0.4	-1	0.1	1596	1.2	1585	3.1
Indoors, in a repair shop	-1	0.1	1872	0.2	2067	0.2	2485	0.2	2148	0.6
Indoors, home	715	1854.4	564	1779.9	589	1755.9	663	1874.6	634	7264.8
Indoors, office	824	14.1	608	8.1	630	9.1	794	11.3	734	42.6
Indoors, store	880	35.7	673	52.9	722	73.0	865	36.2	764	197.8
Indoors, restaurant	1617	21.8	1206	22.9	1279	23.5	1582	22.8	1418	91.1
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	975	17.4	730	38.8	770	29.6	934	28.9	829	114.7
Indoors, church	560	7.2	462	10.4	494	8.3	573	9.2	518	35.1
Indoors, shopping mall	4313	4.8	3515	2.7	3875	3.5	4260	3.9	4050	14.9
Indoors, auditorium	271	9.7	200	12.0	218	11.0	257	11.7	235	44.3
Indoors, health care facility	651	5.0	514	8.9	540	9.6	647	6.4	574	29.9
Indoors, public building	777	7.5	562	4.4	611	2.7	751	6.9	704	21.4
Indoors, other location	1803	23.6	1351	29.8	1449	29.2	1702	25.9	1560	108.6
Indoors, not specified	-1	0.0	1305	0.2	1428	0.5	-1	0.0	1392	0.7
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1221	3.8	935	23.4	1005	31.7	1211	8.3	1018	67.3
Outdoors, school grounds	2077	0.4	1654	2.4	1825	2.6	2059	1.2	1820	6.5
Outdoors, sports arena	673	5.3	493	3.1	524	4.2	656	4.5	599	17.0
Outdoors, park/golf course	-1	0.0	497	11.7	525	20.7	663	0.8	518	33.2
Outdoors, other location	1147	0.9	1042	8.5	1110	16.1	1201	1.1	1093	26.6
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	2766	0.4	-1	0.1	-1	0.0	2673	0.3	2634	0.8
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul:: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2245	127.7	1646	116.8	1736	115.3	2132	126.7	1951	486.4
In transit, bus	3852	4.6	2647	4.5	2627	4.1	3599	4.8	3206	18.1
In transit, truck	2737	4.6	1952	4.9	2046	4.4	2565	5.0	2328	18.8
In transit, van	-1	0.1	1681	1.8	1775	3.5	-1	0.1	1770	5.4
Indoors, public garage	1307	3.9	954	2.0	950	1.4	1251	3.4	1175	10.8
Outdoors, in a parking lot	1279	5.2	956	9.5	1005	12.0	1228	6.0	1076	32.7
Outdoors, along a roadway	1973	30.5	1448	45.7	1536	57.4	1886	32.9	1661	166.5
In transit, motorcycle	-1	0.0	1805	4.7	1922	10.0	-1	0.0	1885	14.6
Indoors, service station	-1	0.1	1261	0.2	1247	0.1	1685	0.1	1452	0.5
Outdoors, service station	0	0.1	0	0.7	0	1.2	0	0.2	0	2.2
Indoors, residential garage	-1	0.1	-1	0.1	-1	0.0	1468	0.1	1341	0.3
Indoors, in a repair shop	-1	0.1	-1	0.0	-1	0.0	-1	0.0	2446	0.1
Indoors, home	696	1453.3	564	1452.7	590	1458.7	641	1483.9	623	5848.7
Indoors, office	809	249.1	599	244.5	632	236.5	772	254.3	705	984.3
Indoors, store	939	60.0	693	69.8	738	69.1	909	65.1	814	264.1
Indoors, restaurant	1561	48.7	1196	39.8	1289	42.3	1503	46.5	1399	177.3
Indoors, mfg. facility	952	13.4	694	16.2	742	14.6	888	15.1	814	59.3
Indoors, school	939	52.3	702	41.2	745	26.1	901	54.0	842	173.6
Indoors, church	621	11.5	459	13.6	491	11.3	597	13.3	541	49.7
Indoors, shopping mall	4614	3.9	3596	2.7	3880	1.6	4545	4.0	4268	12.2
Indoors, auditorium	260	4.4	203	5.5	216	5.9	250	5.1	230	21.0
Indoors, health care facility	639	35.5	491	31.0	521	26.8	599	36.1	568	129.3
Indoors, public building	744	6.1	558	6.5	580	7.6	720	6.3	646	26.5
Indoors, other location	1746	40.3	1337	35.0	1447	37.2	1634	38.4	1549	150.9
Indoors, not specified	1799	0.4	1361	0.3	1491	0.2	1694	0.5	1622	1.5
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1206	2.0	928	14.4	1005	23.7	1138	3.3	999	43.5
Outdoors, school grounds	2422	0.3	1717	1.6	1764	2.4	2485	0.5	1858	4.8
Outdoors, sports arena	-1	0.1	480	5.8	514	10.8	715	0.2	505	16.8
Outdoors, park/golf course	662	0.6	446	5.3	453	10.0	657	1.1	472	17.0
Outdoors, other location	1411	0.7	1046	6.6	1118	13.2	1383	0.7	1115	21.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.1	-1	0.0	1714	0.1
In transit, train	2528	0.2	1761	0.5	1760	0.3	2384	0.4	2070	1.4
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2106	87.4	1563	102.7	1697	111.0	2033	93.6	1832	394.7
In transit, bus	3660	4.2	2801	14.2	2971	26.8	3111	3.5	2991	48.7
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	1625	1.8	1709	1.4	1897	0.8	1707	3.9
Indoors, public garage	-1	0.1	-1	0.0	-1	0.0	-1	0.1	1666	0.2
Outdoors, in a parking lot	1245	8.3	1000	34.8	1085	56.6	1178	10.1	1079	109.8
Outdoors, along a roadway	1916	21.9	1433	43.1	1524	51.0	1926	26.7	1632	142.7
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	2007	2.5	1297	8.9	1399	5.9	1748	5.8	1515	23.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	716	1894.0	566	1700.9	584	1586.1	665	1901.7	637	7082.8
Indoors, office	749	11.2	600	4.2	681	2.0	741	9.5	718	27.0
Indoors, store	821	29.3	679	35.8	736	43.4	826	30.2	759	138.6
Indoors, restaurant	1469	17.2	1134	5.7	1305	2.6	1401	13.7	1385	39.2
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	1028	4.0	732	24.7	794	16.5	971	14.6	827	59.8
Indoors, church	610	6.4	426	11.3	471	6.9	558	9.8	507	34.5
Indoors, shopping mall	3948	10.0	3158	2.0	3478	0.3	3970	8.3	3872	20.7
Indoors, auditorium	245	6.0	191	7.9	192	13.3	248	4.7	210	32.0
Indoors, health care facility	693	20.4	465	36.8	478	21.5	624	32.7	556	111.4
Indoors, public building	695	2.3	536	2.8	584	6.0	677	1.8	606	12.8
Indoors, other location	1576	22.4	1176	54.9	1215	83.2	1572	25.0	1295	185.5
Indoors, not specified	2086	2.5	1393	0.5	-1	0.0	1982	1.9	1972	5.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1155	5.0	887	57.7	956	106.4	1116	9.5	948	178.5
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	456	7.3	498	14.7	-1	0.0	484	22.0
Outdoors, park/golf course	813	4.9	524	5.2	545	11.1	790	4.1	633	25.4
Outdoors, other location	-1	0.0	1029	20.8	1108	41.2	-1	0.0	1081	61.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul:: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2185	143.6	1590	147.5	1670	146.8	2071	148.1	1878	585.9
In transit, bus	3996	11.9	2764	5.7	2958	3.3	3687	10.4	3559	31.3
In transit, truck	2599	17.5	1791	23.9	1892	19.0	2413	22.4	2153	82.8
In transit, van	2013	2.2	1537	10.0	1601	16.0	2022	2.9	1649	31.1
Indoors, public garage	1339	2.0	906	4.2	950	2.7	1207	3.5	1071	12.4
Outdoors, in a parking lot	1292	9.0	945	10.4	1009	10.3	1233	9.8	1112	39.4
Outdoors, along a roadway	1888	41.3	1414	57.7	1504	71.9	1824	43.3	1618	214.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1818	7.5	1315	3.2	1489	1.4	1699	6.5	1667	18.5
Outdoors, service station	-1	0.0	0	0.5	0	0.8	0	0.1	0	1.5
Indoors, residential garage	1830	0.2	1107	0.4	1240	0.7	1533	0.1	1309	1.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	685	1350.9	564	1317.2	588	1276.1	633	1388.1	619	5332.2
Indoors, office	801	310.9	593	264.5	631	277.0	762	296.1	702	1148.6
Indoors, store	878	67.3	649	53.5	705	40.9	838	67.0	782	228.8
Indoors, restaurant	1596	31.4	1159	34.8	1216	36.6	1561	32.6	1373	135.3
Indoors, mfg. facility	1048	15.3	735	65.3	754	90.9	1007	25.4	803	196.8
Indoors, school	994	5.4	700	27.7	730	34.5	922	11.4	765	78.9
Indoors, church	615	13.7	448	17.1	478	18.0	601	14.4	528	63.2
Indoors, shopping mall	4538	4.5	3369	1.6	3547	1.5	4429	3.7	4206	11.3
Indoors, auditorium	281	5.2	206	2.7	223	3.3	269	4.2	252	15.5
Indoors, health care facility	681	21.6	510	6.3	532	2.5	654	17.1	640	47.6
Indoors, public building	757	3.0	584	18.6	622	29.4	746	4.6	627	55.6
Indoors, other location	1647	67.3	1176	53.8	1243	39.1	1524	67.8	1430	227.9
Indoors, not specified	1691	8.3	1270	2.3	1486	0.7	1621	6.7	1603	18.1
Outdoors, construction	-1	0.0	1602	2.1	1716	3.7	-1	0.0	1675	5.7
Outdoors, residential grounds	1175	2.0	947	27.2	1010	48.3	1138	2.8	997	80.4
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	595	3.4	474	13.3	518	17.8	585	5.2	519	39.7
Outdoors, other location	1304	13.8	984	11.6	1036	13.2	1260	13.4	1153	52.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	2537	0.7	1700	0.1	-1	0.0	2382	0.5	2388	1.4
In transit, airplane	-1	0.0	0	0.9	0	1.8	-1	0.0	0	2.7

Minneapolis/St. Paul:: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2153	85.5	1615	79.7	1725	87.4	2089	81.3	1897	333.9
In transit, bus	3462	2.1	2624	1.5	2816	1.4	3362	1.9	3116	6.9
In transit, truck	2680	6.8	1925	1.4	2127	0.2	2589	5.6	2562	14.0
In transit, van	2160	0.2	1676	2.8	1812	2.0	2177	1.4	1844	6.4
Indoors, public garage	1097	0.9	870	0.3	-1	0.1	1095	0.8	1061	2.1
Outdoors, in a parking lot	1215	3.4	953	8.1	1026	11.6	1198	3.8	1052	26.9
Outdoors, along a roadway	1920	37.8	1419	37.6	1524	45.4	1850	35.2	1668	156.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1645	0.2	1383	0.1	1536	0.2	1631	0.1	1559	0.6
Outdoors, service station	-1	0.0	0	0.7	0	1.3	-1	0.0	0	2.0
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	722	1902.0	571	1861.0	597	1811.6	670	1947.8	641	7522.5
Indoors, office	783	8.1	601	7.5	646	6.3	781	8.4	709	30.3
Indoors, store	850	34.3	664	35.9	713	39.6	843	34.4	764	144.2
Indoors, restaurant	1710	13.8	1216	20.1	1299	23.4	1637	15.5	1426	72.9
Indoors, mfg. facility	-1	0.0	777	0.4	849	0.7	-1	0.0	825	1.1
Indoors, school	964	3.8	764	5.2	837	5.2	959	4.3	871	18.5
Indoors, church	594	11.6	451	19.4	486	16.8	575	15.5	517	63.4
Indoors, shopping mall	4524	4.3	3548	3.2	3943	2.8	4447	3.9	4169	14.2
Indoors, auditorium	251	3.0	184	1.3	198	1.5	244	2.4	229	8.1
Indoors, health care facility	661	10.0	483	18.3	517	28.1	627	9.7	546	66.0
Indoors, public building	833	1.0	614	4.8	640	4.7	819	2.6	681	13.1
Indoors, other location	1648	19.4	1273	26.9	1338	36.0	1616	19.5	1433	101.8
Indoors, not specified	2090	2.6	1450	0.5	-1	0.0	2029	2.0	1998	5.1
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1278	7.7	935	28.4	1002	43.8	1205	10.4	1028	90.2
Outdoors, school grounds	2092	0.4	-1	0.1	-1	0.0	1939	0.3	1976	0.8
Outdoors, sports arena	-1	0.0	488	4.2	522	8.5	-1	0.0	511	12.7
Outdoors, park/golf course	-1	0.0	488	11.5	516	23.8	-1	0.0	507	35.3
Outdoors, other location	1197	0.1	1005	2.9	1077	5.9	1206	0.3	1061	9.2
Outdoors, not specified	2158	0.9	1574	0.2	-1	0.0	1999	0.7	2034	1.8
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2206	114.1	1619	109.3	1708	117.5	2092	111.7	1907	452.7
In transit, bus	3930	6.7	2565	4.5	2628	3.8	3657	6.1	3324	21.1
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	2010	3.3	1587	1.4	1771	0.5	1910	3.0	1887	8.2
Indoors, public garage	1428	0.6	910	0.4	878	0.2	1300	0.6	1206	1.8
Outdoors, in a parking lot	1352	7.9	970	10.8	1043	15.1	1269	8.3	1127	42.2
Outdoors, along a roadway	1899	35.8	1385	39.3	1459	44.5	1806	35.7	1622	155.2
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1229	0.1	982	0.1	-1	0.1	1273	0.3
Outdoors, service station	0	0.2	0	2.8	0	4.7	0	0.5	0	8.2
Indoors, residential garage	-1	0.1	-1	0.0	-1	0.0	-1	0.1	1332	0.2
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	709	1514.6	573	1467.4	600	1450.1	655	1540.0	635	5972.1
Indoors, office	789	243.9	585	215.3	620	178.2	747	248.4	694	885.8
Indoors, store	890	42.3	687	60.9	737	71.6	876	47.2	782	221.9
Indoors, restaurant	1538	32.7	1150	46.5	1231	44.3	1463	39.3	1325	162.8
Indoors, mfg. facility	-1	0.0	716	46.5	759	94.9	-1	0.0	745	141.4
Indoors, school	932	45.7	697	31.5	746	19.2	892	45.8	842	142.2
Indoors, church	619	17.7	454	16.8	480	18.0	605	17.3	540	69.8
Indoors, shopping mall	4434	2.2	3435	5.1	3772	4.0	4398	3.6	3908	14.9
Indoors, auditorium	230	0.1	215	2.2	226	1.6	291	1.1	235	5.1
Indoors, health care facility	633	33.9	450	50.9	457	48.6	579	41.3	518	174.7
Indoors, public building	717	3.9	566	2.1	619	1.8	668	3.2	658	11.0
Indoors, other location	1661	49.7	1303	49.6	1382	57.1	1581	48.4	1478	204.8
Indoors, not specified	-1	0.0	1296	0.7	1509	1.6	-1	0.1	1419	2.5
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1140	1.8	916	15.1	989	24.1	1117	3.4	980	44.4
Outdoors, school grounds	2007	0.2	1504	1.1	1680	1.1	1917	0.6	1682	3.0
Outdoors, sports arena	612	1.8	467	1.6	508	2.8	584	1.5	538	7.7
Outdoors, park/golf course	624	0.8	454	0.2	-1	0.0	558	0.7	576	1.7
Outdoors, other location	-1	0.1	1033	1.6	1093	2.4	1284	0.3	1088	4.4
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul:: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2158	126.1	1626	141.6	1743	132.8	2067	137.6	1892	538.2
In transit, bus	3906	1.1	2655	4.5	2786	2.8	3654	3.1	3077	11.6
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	-1	0.0	1820	0.1	-1	0.0	1778	0.2
Indoors, public garage	554	0.3	-1	0.1	-1	0.0	456	0.2	504	0.6
Outdoors, in a parking lot	1152	5.4	980	19.0	1062	29.6	1161	7.1	1056	61.1
Outdoors, along a roadway	1910	23.3	1477	60.1	1565	85.8	1856	28.8	1621	198.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1374	0.6	1362	1.1	-1	0.0	1366	1.7
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	-1	0.1	1122	0.2	1107	0.2	1404	0.1	1211	0.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
Indoors, home	738	1775.6	581	1672.5	608	1671.5	676	1780.9	653	6900.4
Indoors, office	810	69.5	612	59.6	668	38.6	760	72.1	723	239.8
Indoors, store	900	18.7	688	19.6	732	26.2	877	16.9	790	81.4
Indoors, restaurant	1615	20.5	1108	29.8	1183	30.7	1494	24.1	1317	105.1
Indoors, mfg. facility	1005	16.0	751	12.7	803	6.1	950	17.2	901	52.0
Indoors, school	933	12.6	742	5.7	831	6.1	919	9.7	879	34.0
Indoors, church	576	13.1	431	19.2	448	14.1	566	17.5	501	63.8
Indoors, shopping mall	4395	7.2	3539	4.8	3911	7.3	4381	5.6	4085	24.9
Indoors, auditorium	266	11.0	203	24.7	222	16.7	261	18.8	233	71.2
Indoors, health care facility	610	3.4	504	11.2	547	17.1	617	4.8	549	36.5
Indoors, public building	754	2.5	599	6.8	663	11.6	729	2.3	661	23.1
Indoors, other location	1726	9.7	1372	15.4	1469	9.3	1646	14.3	1541	48.8
Indoors, not specified	-1	0.0	1344	2.4	1461	4.9	-1	0.0	1422	7.3
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1308	23.0	940	53.0	1002	82.3	1260	23.4	1056	181.7
Outdoors, school grounds	2327	0.6	1799	2.3	1937	1.4	2314	1.6	2022	5.9
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	616	17.1	447	15.0	483	7.5	590	19.2	547	58.8
Outdoors, other location	-1	0.0	1016	1.8	1113	3.6	-1	0.0	1080	5.3
Outdoors, not specified	2138	0.2	1499	0.7	1651	0.4	2149	0.5	1773	1.8
In transit, train	2123	3.1	1318	0.7	-1	0.0	1871	2.4	1939	6.2
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul:: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2189	78.7	1656	80.5	1807	90.4	2095	78.3	1930	327.8
In transit, bus	3379	0.3	2701	1.6	3153	1.6	3337	0.9	3043	4.5
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	2407	1.3	1675	0.3	-1	0.0	2208	1.0	2251	2.6
Indoors, public garage	1398	0.5	1090	0.5	1144	0.8	1403	0.5	1245	2.2
Outdoors, in a parking lot	1235	2.0	988	5.0	1071	8.1	1210	2.1	1083	17.3
Outdoors, along a roadway	2084	32.4	1477	35.4	1563	45.3	1986	30.3	1749	143.4
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.1	-1	0.0	1377	0.1
Outdoors, service station	-1	0.0	-1	0.1	-1	0.1	-1	0.0	0	0.1
Indoors, residential garage	-1	0.0	1373	0.2	1359	0.4	-1	0.0	1364	0.7
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	745	1874.1	591	1898.1	620	1881.1	687	1927.6	661	7580.8
Indoors, office	848	22.2	628	7.3	659	4.7	801	17.3	784	51.5
Indoors, store	880	19.3	691	34.0	748	59.6	871	17.4	769	130.3
Indoors, restaurant	1604	16.8	1193	21.0	1327	21.1	1556	19.3	1407	78.2
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	-1	0.0	723	0.8	778	1.5	-1	0.0	760	2.3
Indoors, church	590	33.1	454	28.1	473	20.5	569	36.5	531	118.2
Indoors, shopping mall	4316	1.6	3262	7.0	3577	4.5	4284	4.6	3704	17.7
Indoors, auditorium	262	0.9	204	3.6	221	2.3	259	2.5	229	9.3
Indoors, health care facility	760	22.5	531	10.7	562	6.5	712	20.2	681	59.8
Indoors, public building	870	2.8	572	6.7	642	7.3	777	4.1	676	20.8
Indoors, other location	1756	49.0	1343	18.8	1470	8.6	1661	41.7	1636	118.2
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1288	2.6	936	14.6	1012	28.4	1082	2.3	1007	48.0
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	440	4.7	503	5.0	555	1.4	483	11.2
Outdoors, park/golf course	-1	0.0	513	2.9	552	5.8	-1	0.0	539	8.7
Outdoors, other location	-1	0.0	1121	2.1	1187	4.3	-1	0.0	1165	6.4
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul:: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990

Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2131	84.1	1543	65.2	1618	59.4	1988	83.3	1854	292.0
In transit, bus	-1	0.0	2060	1.6	1966	3.1	-1	0.0	1997	4.7
In transit, truck	2468	76.1	1835	89.2	1949	116.5	2317	70.5	2106	352.3
In transit, van	1872	9.7	1563	2.0	-1	0.0	1855	7.5	1833	19.2
Indoors, public garage	1452	30.6	1012	25.5	1042	12.6	1390	33.6	1272	102.3
Outdoors, in a parking lot	1360	9.0	900	24.1	953	22.6	1211	16.0	1044	71.8
Outdoors, along a roadway	1789	141.6	1375	198.1	1477	227.9	1751	155.2	1569	722.7
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1797	62.1	1241	16.8	1160	6.2	1674	48.4	1653	133.4
Outdoors, service station	0	0.1	0	3.5	0	6.2	0	0.3	0	10.1
Indoors, residential garage	1723	12.6	1295	2.9	1410	0.8	1700	10.8	1659	27.1
Indoors, in a repair shop	-1	0.0	2230	0.8	2248	1.7	-1	0.0	2242	2.5
Indoors, home	674	1237.1	553	1217.7	570	1157.2	623	1274.8	606	4886.7
Indoors, office	757	73.9	596	69.9	664	99.4	705	61.2	679	304.5
Indoors, store	897	19.8	651	9.1	710	5.7	857	18.4	821	53.0
Indoors, restaurant	1672	39.0	1227	19.6	1229	11.8	1645	34.1	1530	104.5
Indoors, mfg. facility	986	7.3	726	50.8	757	73.6	938	20.2	782	151.9
Indoors, school	916	3.1	692	12.4	734	7.8	884	8.5	775	31.8
Indoors, church	585	36.5	458	15.1	489	7.0	551	34.2	545	92.8
Indoors, shopping mall	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, auditorium	268	9.8	200	27.1	217	53.2	265	8.2	222	98.3
Indoors, health care facility	-1	0.0	517	3.8	503	6.8	-1	0.0	508	10.6
Indoors, public building	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, other location	1664	53.6	1243	18.4	1277	8.8	1592	44.6	1550	125.3
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	2000	62.3	1584	107.1	1701	138.8	1972	70.1	1767	378.3
Outdoors, residential grounds	1265	8.3	905	23.0	971	21.6	1215	14.8	1038	67.6
Outdoors, school grounds	2262	0.2	1586	0.7	1709	0.4	2122	0.5	1826	1.8
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	549	2.1	430	12.7	480	9.6	547	7.2	480	31.6
Outdoors, other location	1284	181.3	995	167.0	1062	149.2	1247	186.0	1155	683.5
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul:: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2225	41.9	1605	64.1	1695	73.8	2116	48.1	1856	228.0
In transit, bus	3653	19.3	2596	14.6	2697	8.5	3374	19.9	3186	62.2
In transit, truck	-1	0.0	1761	1.3	1910	1.9	2183	0.2	1873	3.4
In transit, van	2461	3.0	1638	2.2	1704	2.3	2352	2.6	2081	10.2
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, in a parking lot	1366	9.7	945	9.0	999	9.4	1288	9.8	1155	37.9
Outdoors, along a roadway	1999	123.5	1444	141.6	1528	171.7	1928	121.1	1698	557.9
In transit, motorcycle	2445	3.4	1939	1.0	1992	0.3	2472	2.7	2367	7.5
Indoors, service station	-1	0.0	-1	0.1	-1	0.1	-1	0.0	1158	0.1
Outdoors, service station	0	0.4	0	0.5	0	0.9	0	0.3	0	2.2
Indoors, residential garage	-1	0.1	1510	0.5	1522	0.7	2227	0.2	1645	1.5
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	674	1427.2	552	1436.4	574	1470.2	625	1455.0	606	5788.8
Indoors, office	868	4.4	614	3.9	639	6.3	816	3.5	723	18.0
Indoors, store	992	27.1	685	24.4	714	27.6	960	25.9	839	105.0
Indoors, restaurant	1567	4.3	1207	12.6	1287	14.3	1518	7.1	1335	38.3
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	909	380.8	682	268.9	723	154.2	875	381.2	823	1185.1
Indoors, church	574	17.1	442	13.9	474	12.1	570	17.0	522	60.1
Indoors, shopping mall	4426	4.4	3491	3.4	3748	2.9	4418	4.5	4086	15.3
Indoors, auditorium	273	0.7	202	5.9	216	5.5	270	2.9	223	14.9
Indoors, health care facility	672	6.4	523	10.7	551	7.3	678	9.3	600	33.7
Indoors, public building	721	7.6	552	7.7	591	7.1	721	8.4	648	30.8
Indoors, other location	1673	8.6	1292	8.8	1407	8.0	1608	9.4	1498	34.7
Indoors, not specified	-1	0.0	1309	0.3	1414	0.7	-1	0.0	1379	1.0
Outdoors, construction	-1	0.0	1457	1.0	1586	2.0	-1	0.0	1543	3.1
Outdoors, residential grounds	1359	34.1	925	63.1	962	93.1	1314	35.8	1067	226.1
Outdoors, school grounds	2275	26.1	1557	29.2	1667	22.6	2166	30.0	1923	107.9
Outdoors, sports arena	698	8.2	487	14.3	514	16.8	670	10.0	568	49.2
Outdoors, park/golf course	792	1.7	468	22.4	495	42.3	723	2.5	502	68.9
Outdoors, other location	-1	0.1	981	22.2	1045	45.3	1241	0.4	1025	67.9
Outdoors, not specified	2125	0.1	-1	0.0	-1	0.0	2095	0.1	2053	0.3
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul:: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2146	52.9	1601	70.1	1717	87.8	2045	54.9	1839	265.7
In transit, bus	3880	5.0	2725	6.8	2901	4.1	3660	6.9	3291	22.8
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	2177	0.2	1726	3.8	1857	3.0	2261	1.7	1886	8.7
Indoors, public garage	-1	0.0	-1	0.1	1073	0.2	-1	0.0	1053	0.3
Outdoors, in a parking lot	1259	4.7	944	6.7	1013	8.8	1198	4.9	1077	25.2
Outdoors, along a roadway	1997	31.7	1431	45.2	1542	63.4	1898	31.0	1661	171.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1444	0.3	1449	0.7	-1	0.0	1448	1.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, residential garage	2099	1.2	1330	1.0	1346	0.8	1943	1.2	1726	4.2
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	723	1805.1	573	1735.9	599	1718.6	670	1823.6	643	7083.2
Indoors, office	788	78.8	599	75.1	650	64.8	754	82.2	702	300.9
Indoors, store	893	24.9	678	29.4	715	39.0	887	24.0	779	117.4
Indoors, restaurant	1590	29.8	1183	24.1	1268	23.5	1555	29.3	1418	106.7
Indoors, mfg. facility	962	15.9	721	28.3	760	31.4	923	19.8	816	95.5
Indoors, school	932	62.5	688	61.9	728	43.2	885	70.7	818	238.3
Indoors, church	582	15.6	465	24.4	516	18.8	574	20.9	528	79.7
Indoors, shopping mall	4165	0.4	3213	2.2	3489	1.9	4152	1.1	3562	5.7
Indoors, auditorium	273	0.4	207	1.7	226	1.0	268	1.2	235	4.3
Indoors, health care facility	661	13.4	499	11.0	544	11.1	627	13.0	588	48.6
Indoors, public building	754	0.8	540	2.4	570	4.5	693	0.9	592	8.7
Indoors, other location	1609	0.7	1325	6.8	1442	11.2	1622	1.2	1419	20.0
Indoors, not specified	2204	0.7	1361	1.7	1469	3.5	2118	0.6	1585	6.6
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1253	5.6	949	29.3	1005	45.8	1251	8.5	1026	89.1
Outdoors, school grounds	2587	2.1	1678	4.8	1794	2.9	2346	3.9	2030	13.8
Outdoors, sports arena	-1	0.0	495	2.6	527	5.0	623	0.1	518	7.8
Outdoors, park/golf course	591	7.4	479	2.4	512	2.0	586	5.7	565	17.5
Outdoors, other location	1232	0.1	1016	5.6	1075	10.7	1236	0.3	1059	16.8
Outdoors, not specified	-1	0.0	-1	0.1	1724	0.1	-1	0.0	1674	0.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Minneapolis/St. Paul:: City-wide, Demographic Group=All persons

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2181	109.4	1611	103.4	1708	103.0	2080	109.6	1902	425.4
In transit, bus	3822	5.3	2647	5.1	2764	4.2	3522	5.6	3222	20.1
In transit, truck	2589	8.6	1846	7.8	1943	7.9	2450	8.5	2221	32.8
In transit, van	2094	2.3	1540	4.1	1650	4.2	1965	2.8	1757	13.4
Indoors, public garage	1284	4.0	956	3.0	1009	1.7	1238	4.1	1157	12.8
Outdoors, in a parking lot	1264	6.9	945	10.6	1013	13.1	1210	7.6	1079	38.3
Outdoors, along a roadway	1928	39.8	1430	65.7	1529	83.3	1853	44.1	1630	232.8
In transit, motorcycle	2491	0.2	1829	0.8	1924	1.6	2515	0.1	1959	2.6
Indoors, service station	1821	4.0	1385	2.2	1507	1.2	1737	3.7	1673	11.0
Outdoors, service station	0	0.1	0	0.5	0	0.8	0	0.2	0	1.7
Indoors, residential garage	1752	0.8	1309	1.1	1408	0.9	1697	1.0	1528	3.8
Indoors, in a repair shop	2738	2.3	2065	0.5	-1	0.1	2662	1.8	2629	4.6
Indoors, home	701	1565.6	564	1546.5	588	1543.7	649	1596.5	626	6252.3
Indoors, office	804	156.3	595	119.3	632	98.5	764	151.4	713	525.4
Indoors, store	901	42.4	676	45.0	723	49.8	877	42.7	790	180.0
Indoors, restaurant	1556	31.3	1171	28.2	1250	28.7	1507	30.8	1378	119.0
Indoors, mfg. facility	973	11.7	717	19.9	757	24.7	919	13.1	813	69.3
Indoors, school	934	68.2	696	72.2	740	54.7	893	76.8	820	271.9
Indoors, church	598	11.3	451	13.4	481	12.3	582	12.7	525	49.7
Indoors, shopping mall	4506	3.2	3498	2.7	3802	2.3	4439	3.3	4109	11.5
Indoors, auditorium	269	5.6	203	6.3	219	6.4	260	6.0	237	24.4
Indoors, health care facility	661	19.8	488	19.0	509	17.0	624	20.6	574	76.4
Indoors, public building	764	5.1	571	7.0	603	8.8	741	5.3	654	26.0
Indoors, other location	1701	35.7	1286	31.3	1372	31.2	1607	34.7	1501	132.9
Indoors, not specified	1609	2.4	1274	1.0	1436	0.7	1513	2.0	1502	6.2
Outdoors, construction	2032	0.9	1569	2.1	1682	2.5	1997	1.2	1755	6.7
Outdoors, residential grounds	1296	7.2	928	29.9	986	47.5	1245	9.8	1018	94.4
Outdoors, school grounds	2209	2.4	1589	5.0	1715	5.3	2115	3.3	1833	16.0
Outdoors, sports arena	664	1.5	482	4.8	516	7.9	644	1.7	534	15.9
Outdoors, park/golf course	632	1.5	479	11.5	509	19.9	626	2.3	513	35.2
Outdoors, other location	1322	3.7	1003	13.4	1070	22.7	1281	4.2	1091	43.9
Outdoors, not specified	-1	0.1	1314	0.3	1211	0.3	2038	0.1	1475	0.8
In transit, train	2418	0.6	1533	0.4	1453	0.4	2257	0.5	1994	1.9
In transit, airplane	-1	0.0	0	0.3	0	0.6	-1	0.0	0	0.9

New York City: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2353	83.2	1939	93.4	1981	100.8	2166	87.5	2099	364.9
In transit, bus	4213	7.5	3281	5.8	3290	3.7	3656	7.3	3682	24.3
In transit, truck	2859	3.2	2319	7.1	2323	7.2	2517	5.1	2442	22.6
In transit, van	2318	4.0	1883	4.9	1923	4.8	2021	5.1	2024	18.7
Indoors, public garage	1413	3.2	1209	1.8	1241	1.1	1322	2.6	1322	8.6
Outdoors, in a parking lot	1379	12.3	1148	13.0	1169	13.7	1256	12.0	1235	51.0
Outdoors, along a roadway	2128	47.3	1718	68.4	1762	85.7	1935	53.6	1855	255.0
In transit, motorcycle	2860	0.4	2067	0.8	2101	1.8	2663	0.2	2223	3.2
Indoors, service station	2147	2.4	1776	1.7	1785	1.1	1912	2.3	1938	7.4
Outdoors, service station	0	0.1	0	0.5	0	0.6	0	0.1	0	1.3
Indoors, residential garage	1979	0.8	1593	1.0	1637	0.7	1851	1.1	1770	3.5
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	2623	0.1
Indoors, home	783	1581.2	684	1542.8	705	1541.5	736	1596.5	727	6262.0
Indoors, office	906	77.2	755	82.7	748	82.4	795	80.1	799	322.5
Indoors, store	992	50.0	822	47.9	826	50.2	906	47.8	887	195.9
Indoors, restaurant	1737	30.3	1440	29.0	1464	29.6	1603	29.0	1563	117.7
Indoors, mfg. facility	1093	24.5	914	26.0	922	24.6	959	25.1	971	100.1
Indoors, school	1071	130.7	912	101.9	901	63.0	933	134.6	965	430.2
Indoors, church	702	13.8	593	13.5	593	11.9	635	15.2	632	54.3
Indoors, shopping mall	4864	3.2	4160	3.0	4164	2.4	4602	3.2	4473	11.8
Indoors, auditorium	304	4.9	247	7.0	252	8.1	283	6.9	268	26.9
Indoors, health care facility	727	21.6	614	19.9	621	15.6	666	23.3	661	80.4
Indoors, public building	827	6.0	708	8.3	703	9.9	779	6.7	745	30.9
Indoors, other location	1804	21.0	1552	27.5	1602	27.4	1672	24.0	1648	100.0
Indoors, not specified	1763	0.4	1576	0.4	1704	0.6	1587	0.3	1669	1.8
Outdoors, construction	2292	1.7	1931	2.9	1937	2.4	2061	2.3	2032	9.3
Outdoors, residential grounds	1367	15.3	1107	34.8	1133	55.4	1243	19.1	1171	124.7
Outdoors, school grounds	2318	6.2	1910	7.1	1947	5.3	2084	7.3	2064	25.8
Outdoors, sports arena	714	0.8	574	4.7	595	8.0	663	1.0	600	14.5
Outdoors, park/golf course	666	3.7	563	13.3	573	23.2	629	5.4	584	45.6
Outdoors, other location	1498	2.8	1206	12.6	1246	24.5	1412	2.9	1262	42.8
Outdoors, not specified	2233	0.2	1852	0.3	1756	0.3	1992	0.2	1949	1.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	0.3	0	0.8	-1	0.0	0	1.1

New York City: City-wide, Demographic Group=African americans

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2194	81.6	1836	67.1	1865	68.4	1987	69.4	1981	286.5
In transit, bus	3738	9.5	3073	16.8	3059	13.9	3285	15.1	3241	55.3
In transit, truck	-1	0.0	2120	3.0	2080	3.9	-1	0.0	2097	6.9
In transit, van	-1	0.0	1906	0.2	1942	0.3	-1	0.0	1929	0.5
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1206	11.5	1093	9.4	1155	13.6	1120	8.1	1148	42.7
Outdoors, along a roadway	1986	25.9	1604	60.2	1668	87.2	1780	31.0	1706	204.2
In transit, motorcycle	2766	0.3	2065	0.9	2185	0.6	2543	0.8	2330	2.6
Indoors, service station	-1	0.0	1395	0.5	1377	0.7	-1	0.0	1385	1.3
Outdoors, service station	-1	0.0	0	0.3	0	0.4	-1	0.0	0	0.7
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	2910	0.2	2772	0.2	-1	0.0	2831	0.4
Indoors, home	749	1737.2	649	1682.8	660	1673.3	688	1758.3	687	6851.7
Indoors, office	940	2.4	742	29.7	727	41.8	787	6.4	744	80.3
Indoors, store	947	13.1	776	19.0	764	27.8	845	14.6	815	74.5
Indoors, restaurant	1549	17.5	1362	5.6	1362	2.5	1482	11.2	1487	36.8
Indoors, mfg. facility	1059	42.7	864	16.7	833	14.2	936	24.8	962	98.5
Indoors, school	1035	70.5	873	109.9	841	69.1	882	117.6	901	367.2
Indoors, church	649	49.6	539	35.2	533	28.2	581	45.9	584	158.9
Indoors, shopping mall	4154	0.9	3619	2.0	3636	1.6	3720	2.3	3725	6.8
Indoors, auditorium	312	1.4	231	3.0	241	2.3	284	3.7	263	10.5
Indoors, health care facility	567	21.4	495	43.0	520	62.0	489	33.2	513	159.5
Indoors, public building	729	0.6	611	3.4	637	7.9	648	1.4	635	13.3
Indoors, other location	1524	63.7	1414	21.5	1494	20.6	1455	38.1	1485	144.0
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1438	3.5	1057	27.4	1074	37.1	1327	8.5	1112	76.5
Outdoors, school grounds	2055	3.0	1719	7.5	1734	4.5	1825	7.3	1802	22.2
Outdoors, sports arena	661	3.7	511	8.1	524	6.2	599	9.9	565	28.0
Outdoors, park/golf course	-1	0.0	491	3.4	491	5.5	-1	0.0	491	8.9
Outdoors, other location	1290	0.1	1157	4.4	1193	10.4	-1	0.1	1183	15.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.1	1830	0.2
In transit, train	-1	0.0	1424	2.7	1499	3.6	-1	0.0	1466	6.3
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2486	71.3	2160	68.0	2198	68.8	2228	66.1	2271	274.3
In transit, bus	4190	7.5	3586	13.0	3597	11.4	3653	11.2	3711	43.1
In transit, truck	-1	0.0	2484	2.8	2438	3.7	-1	0.0	2458	6.4
In transit, van	2659	2.1	2126	4.6	2188	3.4	2395	4.7	2301	14.9
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1367	10.4	1266	10.7	1338	13.7	1235	9.1	1306	43.8
Outdoors, along a roadway	2100	39.0	1835	98.7	1934	110.2	1849	69.4	1905	317.2
In transit, motorcycle	3163	0.2	2473	0.7	2623	0.4	2879	0.6	2716	1.9
Indoors, service station	-1	0.0	1626	0.5	1609	0.7	-1	0.0	1616	1.2
Outdoors, service station	-1	0.0	0	0.3	0	0.4	-1	0.0	0	0.7
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	3320	0.2	3161	0.2	-1	0.0	3230	0.4
Indoors, home	848	1769.2	759	1672.0	770	1657.7	768	1760.7	787	6859.7
Indoors, office	1005	3.3	858	32.7	846	43.3	844	8.7	856	88.0
Indoors, store	1071	11.6	907	20.8	902	30.3	947	14.0	937	76.7
Indoors, restaurant	1786	15.9	1568	6.3	1568	3.1	1655	11.4	1689	36.9
Indoors, mfg. facility	1208	37.4	1007	15.1	969	13.1	1061	21.7	1101	87.2
Indoors, school	1141	64.3	1010	82.3	978	52.3	976	92.1	1022	290.9
Indoors, church	738	40.9	626	35.3	622	30.0	652	43.7	663	149.8
Indoors, shopping mall	4772	0.8	4298	1.8	4327	1.5	4266	2.1	4354	6.1
Indoors, auditorium	361	1.3	279	2.8	291	2.1	327	3.4	310	9.5
Indoors, health care facility	656	18.1	592	37.4	609	54.6	562	28.4	601	138.5
Indoors, public building	845	0.5	728	3.1	761	7.0	745	1.3	755	12.0
Indoors, other location	1729	55.8	1684	21.5	1766	20.2	1647	35.2	1706	132.6
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1497	4.5	1253	28.9	1261	48.1	1452	8.9	1289	90.3
Outdoors, school grounds	2363	2.1	2035	5.4	2047	3.3	2082	5.2	2096	16.1
Outdoors, sports arena	765	3.4	615	7.8	634	6.2	688	9.0	663	26.5
Outdoors, park/golf course	-1	0.0	583	3.0	583	5.0	-1	0.0	583	8.0
Outdoors, other location	1399	0.5	1318	5.9	1338	14.0	1235	1.0	1329	21.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	2102	0.1
In transit, train	-1	0.0	1665	2.5	1737	3.3	-1	0.0	1706	5.9
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2333	41.9	1971	52.8	2024	67.2	2107	43.5	2091	205.4
In transit, bus	4226	7.6	3251	5.9	3212	3.3	3495	7.8	3625	24.6
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	2053	1.3	2148	4.2	-1	0.0	2126	5.5
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1382	7.5	1199	16.1	1238	19.4	1299	11.2	1259	54.2
Outdoors, along a roadway	2225	40.7	1777	60.9	1822	60.5	2003	51.6	1929	213.6
In transit, motorcycle	-1	0.0	2104	0.5	2055	1.4	-1	0.0	2069	1.9
Indoors, service station	-1	0.0	-1	0.0	1671	0.2	-1	0.0	1668	0.3
Outdoors, service station	-1	0.0	0	0.2	0	0.4	-1	0.0	0	0.5
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	808	1842.2	717	1822.6	728	1826.7	735	1872.5	747	7364.0
Indoors, office	1019	5.5	828	2.0	728	2.0	860	3.6	902	13.1
Indoors, store	997	40.6	838	43.6	834	66.0	886	32.8	881	182.9
Indoors, restaurant	1814	28.1	1526	10.1	1574	5.9	1688	18.7	1708	62.8
Indoors, mfg. facility	1106	22.6	959	21.6	939	27.4	934	13.2	988	84.9
Indoors, school	1078	77.3	944	73.1	916	36.2	926	95.9	971	282.5
Indoors, church	669	6.2	597	7.0	611	4.1	652	9.1	635	26.4
Indoors, shopping mall	5145	1.2	4111	2.8	4165	1.6	4585	2.9	4427	8.5
Indoors, auditorium	269	3.5	232	8.6	252	10.7	238	9.3	244	32.1
Indoors, health care facility	722	3.1	646	8.1	642	7.5	633	7.6	650	26.3
Indoors, public building	767	9.7	694	4.3	701	1.6	682	6.9	722	22.4
Indoors, other location	1821	8.7	1604	11.8	1667	12.8	1676	7.8	1683	41.1
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1289	9.5	1149	16.6	1168	20.3	1209	10.0	1190	56.5
Outdoors, school grounds	2167	0.7	1861	1.6	1869	0.9	1922	1.6	1926	4.8
Outdoors, sports arena	-1	0.0	618	4.2	648	6.4	-1	0.0	636	10.6
Outdoors, park/golf course	599	3.4	586	2.4	635	3.3	536	1.8	597	10.9
Outdoors, other location	-1	0.1	1233	5.9	1269	18.1	1232	0.1	1260	24.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990

Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2310	70.4	1898	81.7	1925	85.0	2090	77.5	2045	314.6
In transit, bus	4084	2.7	3178	4.5	3193	3.4	3467	4.0	3429	14.6
In transit, truck	2856	2.5	2303	10.4	2270	12.2	2569	3.7	2372	28.7
In transit, van	2419	0.5	1952	1.2	1993	1.2	2196	1.0	2084	3.9
Indoors, public garage	-1	0.0	1209	0.4	1280	0.8	-1	0.0	1257	1.2
Outdoors, in a parking lot	1340	22.3	1121	16.2	1173	18.0	1169	18.3	1211	74.8
Outdoors, along a roadway	2099	51.5	1696	76.9	1739	101.6	1872	55.7	1818	285.8
In transit, motorcycle	-1	0.0	2027	4.5	2067	12.4	-1	0.0	2056	16.9
Indoors, service station	-1	0.0	1579	0.4	1587	1.1	-1	0.0	1599	1.6
Outdoors, service station	0	0.3	0	0.6	0	1.0	0	0.4	0	2.2
Indoors, residential garage	1918	1.1	1435	1.3	1425	0.9	1630	1.7	1604	5.0
Indoors, in a repair shop	-1	0.0	-1	0.1	-1	0.1	-1	0.0	2939	0.1
Indoors, home	776	1622.3	680	1594.9	695	1604.2	718	1641.2	717	6462.6
Indoors, office	864	52.1	746	55.0	756	48.5	771	56.4	784	212.1
Indoors, store	985	32.7	821	44.5	820	53.7	901	36.5	870	167.4
Indoors, restaurant	1657	52.9	1397	39.0	1413	26.6	1483	51.6	1507	170.0
Indoors, mfg. facility	1066	38.2	867	33.0	848	22.6	887	38.5	927	132.3
Indoors, school	1065	110.7	909	81.6	886	47.0	914	107.5	957	346.8
Indoors, church	679	12.0	581	14.6	577	12.8	593	15.8	605	55.2
Indoors, shopping mall	4615	5.2	4120	3.1	4113	1.5	4206	4.2	4328	14.0
Indoors, auditorium	278	1.3	234	3.4	234	3.7	263	3.2	247	11.6
Indoors, health care facility	702	37.5	590	27.6	581	29.8	646	35.4	635	130.4
Indoors, public building	780	6.2	704	2.9	707	2.1	701	4.4	734	15.6
Indoors, other location	1774	17.4	1573	31.3	1616	28.4	1668	25.8	1643	102.9
Indoors, not specified	1639	0.2	1623	0.4	1745	0.5	1480	0.1	1659	1.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1417	12.6	1105	27.1	1115	40.7	1252	15.2	1174	95.5
Outdoors, school grounds	2240	5.7	1926	7.8	1975	5.6	2006	7.2	2027	26.3
Outdoors, sports arena	-1	0.0	581	4.5	585	6.9	-1	0.0	583	11.5
Outdoors, park/golf course	770	0.8	542	9.6	535	27.8	712	2.0	551	40.2
Outdoors, other location	-1	0.0	1220	5.2	1236	7.9	-1	0.0	1230	13.1
Outdoors, not specified	2175	0.9	1759	0.2	-1	0.0	1926	0.6	2048	1.7
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2312	85.8	1901	92.6	1939	99.3	2110	89.2	2058	367.0
In transit, bus	4230	8.1	3257	5.5	3247	3.9	3691	7.2	3701	24.6
In transit, truck	2874	2.1	2267	5.3	2293	4.9	2528	3.5	2413	15.8
In transit, van	2285	8.5	1852	9.0	1885	8.2	1991	9.9	2002	35.6
Indoors, public garage	1386	7.5	1182	3.2	1206	1.3	1288	6.0	1304	18.1
Outdoors, in a parking lot	1353	10.6	1126	11.8	1146	12.8	1233	10.7	1209	45.9
Outdoors, along a roadway	2055	45.4	1666	77.7	1708	93.6	1848	59.6	1783	276.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, service station	1959	0.5	1758	0.4	1741	0.3	1733	0.5	1807	1.7
Outdoors, service station	-1	0.0	0	0.1	0	0.2	-1	0.1	0	0.4
Indoors, residential garage	1944	1.3	1608	1.1	1669	0.6	1883	1.3	1800	4.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	770	1603.1	669	1551.0	686	1543.0	718	1611.2	711	6308.3
Indoors, office	891	72.3	739	84.8	726	86.1	774	81.8	778	325.0
Indoors, store	971	44.5	801	43.8	800	51.0	876	40.6	860	179.8
Indoors, restaurant	1735	20.1	1418	20.9	1426	22.5	1592	20.6	1539	84.1
Indoors, mfg. facility	1074	26.8	901	29.2	909	28.9	940	28.0	954	112.9
Indoors, school	1060	107.6	898	83.0	885	53.4	923	105.5	953	349.5
Indoors, church	700	23.7	580	18.5	582	14.4	636	23.9	632	80.6
Indoors, shopping mall	4824	3.2	4030	2.3	4143	1.6	4513	2.9	4441	10.1
Indoors, auditorium	305	4.9	247	6.5	255	5.8	281	7.2	271	24.5
Indoors, health care facility	718	18.3	599	19.3	607	14.8	641	21.1	642	73.5
Indoors, public building	842	6.0	699	10.7	699	14.2	776	7.3	736	38.2
Indoors, other location	1704	28.3	1521	27.0	1571	26.0	1611	27.6	1603	108.9
Indoors, not specified	1735	0.7	1522	0.6	1650	1.0	1566	0.4	1632	2.6
Outdoors, construction	2253	3.9	1896	5.9	1903	4.6	2015	5.0	2000	19.3
Outdoors, residential grounds	1330	13.1	1086	39.1	1118	59.6	1202	20.2	1142	132.0
Outdoors, school grounds	2282	5.5	1865	6.2	1893	4.9	2033	6.3	2017	22.9
Outdoors, sports arena	695	0.1	564	3.0	590	6.2	632	0.3	585	9.7
Outdoors, park/golf course	682	3.2	554	11.0	571	14.9	621	4.9	583	34.0
Outdoors, other location	1435	4.9	1195	13.9	1220	29.3	1367	5.1	1248	53.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	1492	0.5	1584	0.6	-1	0.0	1544	1.1
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2314	105.2	1887	116.0	1921	119.6	2132	112.2	2056	453.0
In transit, bus	4134	6.9	3225	7.4	3265	4.2	3601	8.8	3581	27.3
In transit, truck	2807	1.0	2248	4.1	2270	6.9	2512	1.8	2334	13.8
In transit, van	-1	0.0	1747	1.3	1766	2.7	-1	0.0	1770	4.1
Indoors, public garage	1408	0.4	1151	0.4	1231	0.4	1297	0.4	1272	1.5
Outdoors, in a parking lot	1354	10.0	1110	11.6	1113	11.0	1270	10.7	1207	43.3
Outdoors, along a roadway	2074	47.9	1668	65.2	1714	87.0	1893	51.5	1807	251.5
In transit, motorcycle	2889	1.4	2146	0.2	-1	0.0	2703	0.8	2759	2.4
Indoors, service station	-1	0.0	1770	0.2	1776	0.2	-1	0.0	1774	0.4
Outdoors, service station	-1	0.1	0	0.7	0	0.9	-1	0.1	0	1.7
Indoors, residential garage	1855	0.1	1591	0.7	1626	0.9	1670	0.2	1633	1.9
Indoors, in a repair shop	-1	0.1	2511	0.2	-1	0.1	2510	0.2	2544	0.5
Indoors, home	761	1540.0	657	1478.9	680	1456.9	717	1546.3	705	6022.1
Indoors, office	890	128.4	737	121.6	730	120.3	782	125.1	786	495.4
Indoors, store	964	48.0	799	47.2	810	48.2	878	46.1	863	189.6
Indoors, restaurant	1727	23.2	1405	30.0	1432	33.0	1598	26.1	1524	112.5
Indoors, mfg. facility	1091	31.2	906	28.7	905	24.1	991	30.1	979	114.2
Indoors, school	1039	125.4	884	106.2	871	55.1	907	142.5	936	429.3
Indoors, church	665	7.6	576	10.8	576	11.7	601	9.4	599	39.5
Indoors, shopping mall	4816	2.3	4052	5.0	3960	5.6	4661	3.4	4255	16.2
Indoors, auditorium	290	3.6	236	7.8	244	13.9	271	4.4	251	29.7
Indoors, health care facility	771	18.1	610	19.3	606	20.9	679	19.7	664	77.9
Indoors, public building	863	3.8	679	6.7	678	6.3	841	5.0	748	21.8
Indoors, other location	1805	26.7	1523	24.6	1559	19.5	1651	26.2	1643	97.0
Indoors, not specified	1727	0.5	1495	0.4	1544	0.3	1529	0.5	1577	1.7
Outdoors, construction	-1	0.0	1773	0.6	1770	0.7	-1	0.0	1771	1.3
Outdoors, residential grounds	1343	17.0	1056	38.5	1066	75.9	1221	18.0	1114	149.4
Outdoors, school grounds	2284	5.3	1837	6.4	1870	4.0	2083	7.0	2023	22.7
Outdoors, sports arena	745	0.8	547	7.5	558	10.8	692	2.0	574	21.2
Outdoors, park/golf course	638	4.3	535	15.8	539	31.9	596	8.4	553	60.4
Outdoors, other location	1357	0.7	1108	18.7	1158	31.5	1211	1.2	1144	52.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	1.3	0	3.5	-1	0.0	0	4.7

New York City: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2544	50.4	2035	78.8	2077	95.4	2374	57.2	2209	281.7
In transit, bus	4412	4.0	3291	0.8	3095	1.0	3500	2.3	3872	8.1
In transit, truck	2897	23.5	2441	12.6	2507	6.5	2687	20.3	2698	62.9
In transit, van	2311	3.6	1971	8.6	1976	6.3	2163	9.4	2081	27.9
Indoors, public garage	-1	0.0	1185	0.5	1171	0.7	-1	0.0	1177	1.2
Outdoors, in a parking lot	1570	3.5	1202	9.3	1217	14.2	1412	3.6	1276	30.6
Outdoors, along a roadway	2304	52.2	1793	61.2	1836	75.1	2105	53.8	1986	242.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	2243	17.4	1905	2.8	-1	0.0	1915	10.1	2103	30.2
Outdoors, service station	-1	0.0	0	1.2	0	1.7	-1	0.0	0	2.8
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	799	1547.8	710	1528.4	729	1490.8	764	1577.3	751	6144.3
Indoors, office	929	81.3	782	96.9	775	109.5	822	73.7	821	361.4
Indoors, store	1041	0.8	829	14.7	826	22.8	928	2.1	836	40.4
Indoors, restaurant	1856	35.0	1488	43.0	1529	50.1	1687	33.9	1622	162.1
Indoors, mfg. facility	-1	0.0	878	1.6	866	2.1	-1	0.0	871	3.7
Indoors, school	1090	229.7	939	126.1	940	103.0	957	196.5	997	655.3
Indoors, church	653	9.4	564	9.3	588	9.0	570	8.5	595	36.2
Indoors, shopping mall	4572	0.3	4025	0.7	3969	0.4	4197	0.7	4148	2.2
Indoors, auditorium	310	10.8	255	20.5	260	16.3	286	24.4	275	72.0
Indoors, health care facility	848	14.8	651	13.2	660	8.0	779	17.4	749	53.4
Indoors, public building	-1	0.0	678	4.0	675	14.5	-1	0.0	676	18.4
Indoors, other location	1437	11.0	1405	30.7	1538	32.2	1360	29.4	1437	103.3
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	1990	2.4	1972	3.1	-1	0.0	1980	5.5
Outdoors, residential grounds	1332	48.9	1146	62.7	1187	62.8	1247	59.6	1222	234.0
Outdoors, school grounds	2211	4.6	1878	9.9	1909	8.1	1998	10.7	1970	33.2
Outdoors, sports arena	-1	0.0	606	1.2	638	4.3	-1	0.0	631	5.5
Outdoors, park/golf course	701	11.1	582	34.5	598	51.6	676	17.2	615	114.4
Outdoors, other location	-1	0.0	1280	8.4	1347	18.5	-1	0.0	1326	26.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2332	55.5	1904	64.7	1933	74.3	2118	57.9	2056	252.4
In transit, bus	4079	12.2	3192	10.9	3183	6.3	3469	13.7	3529	43.1
In transit, truck	2918	1.8	2291	1.4	2304	2.1	2532	1.3	2510	6.6
In transit, van	2295	4.6	1774	6.3	1836	5.7	1919	7.4	1934	24.0
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, in a parking lot	1353	5.9	1109	7.5	1128	8.9	1218	5.9	1189	28.2
Outdoors, along a roadway	2116	64.9	1671	97.2	1714	130.6	1895	70.4	1810	363.2
In transit, motorcycle	2799	1.0	2110	0.3	2008	0.3	2574	0.6	2526	2.3
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	0	0.1	-1	0.1	-1	0.0	-1	0.1	0	0.3
Indoors, residential garage	1958	0.4	1581	1.2	1655	0.8	1848	1.0	1723	3.4
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	761	1612.0	662	1585.0	680	1582.7	706	1630.3	702	6410.1
Indoors, office	1030	1.4	705	5.0	718	8.3	891	1.5	756	16.1
Indoors, store	997	23.2	798	24.8	799	25.8	894	23.6	869	97.4
Indoors, restaurant	1764	9.5	1419	14.8	1453	18.7	1629	10.4	1533	53.3
Indoors, mfg. facility	1342	0.1	989	0.3	1049	0.1	1232	0.3	1132	0.8
Indoors, school	1047	282.1	894	212.4	875	130.1	900	282.5	941	907.0
Indoors, church	682	12.7	578	11.7	572	10.6	610	12.9	613	48.0
Indoors, shopping mall	4789	2.3	3930	2.8	3970	2.4	4430	2.6	4260	10.1
Indoors, auditorium	300	4.3	240	6.8	243	6.9	277	7.3	261	25.4
Indoors, health care facility	735	11.9	601	12.0	587	12.7	667	13.9	647	50.5
Indoors, public building	793	2.1	705	3.8	714	5.9	738	2.6	728	14.4
Indoors, other location	1827	6.2	1481	7.8	1555	9.9	1534	7.3	1586	31.2
Indoors, not specified	-1	0.0	1604	0.3	1710	0.4	-1	0.0	1664	0.7
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1359	26.1	1068	52.3	1081	80.3	1228	30.1	1139	188.8
Outdoors, school grounds	2238	14.0	1835	16.0	1857	12.4	1959	16.0	1970	58.4
Outdoors, sports arena	697	2.7	560	6.8	586	9.3	637	3.8	600	22.7
Outdoors, park/golf course	688	2.8	543	17.9	550	32.9	649	4.0	562	57.6
Outdoors, other location	1457	0.1	1155	13.5	1193	29.1	1277	0.3	1182	43.1
Outdoors, not specified	2198	0.2	1953	0.3	1898	0.2	1920	0.4	1970	1.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2313	153.6	1951	118.7	2013	124.1	2113	134.6	2111	530.9
In transit, bus	4227	3.3	3710	0.5	-1	0.0	3638	1.9	3983	5.8
In transit, truck	2933	6.0	2456	18.5	2428	37.4	2646	9.4	2507	71.3
In transit, van	-1	0.0	1781	3.2	1713	6.1	-1	0.0	1736	9.3
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1327	8.1	1062	14.9	998	16.5	1158	12.6	1106	52.1
Outdoors, along a roadway	1859	101.0	1660	120.2	1714	88.3	1725	128.6	1736	438.2
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.1	1976	0.3	1990	0.2	1905	0.2	1985	0.8
Outdoors, service station	-1	0.1	0	2.7	0	3.4	0	0.1	0	6.3
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	792	1570.8	693	1491.7	705	1411.0	733	1595.4	732	6068.8
Indoors, office	899	59.7	773	109.3	772	106.0	786	68.0	797	342.9
Indoors, store	972	9.2	843	12.7	838	11.2	852	11.8	871	44.9
Indoors, restaurant	1702	20.8	1462	16.0	1490	12.8	1572	18.0	1571	67.5
Indoors, mfg. facility	-1	0.0	954	26.6	935	88.7	-1	0.0	939	115.3
Indoors, school	1070	133.4	916	81.3	903	38.3	925	127.0	972	380.0
Indoors, church	755	1.1	606	9.2	600	13.3	724	2.8	622	26.4
Indoors, shopping mall	6064	0.6	4630	1.4	4882	0.8	5615	1.5	5213	4.3
Indoors, auditorium	298	2.0	250	17.5	266	48.0	299	1.1	263	68.6
Indoors, health care facility	814	5.8	632	6.6	650	4.8	679	7.1	693	24.3
Indoors, public building	932	18.1	751	20.6	790	10.6	867	25.4	840	74.8
Indoors, other location	1731	41.7	1616	30.6	1725	23.1	1633	35.0	1677	130.5
Indoors, not specified	-1	0.1	1811	0.1	-1	0.1	1730	0.1	1800	0.4
Outdoors, construction	-1	0.0	1965	5.7	1933	7.5	-1	0.0	1947	13.2
Outdoors, residential grounds	1234	6.5	1073	20.9	1087	25.4	1113	9.6	1102	62.4
Outdoors, school grounds	2409	3.8	1872	9.1	1903	5.0	2183	9.3	2059	27.2
Outdoors, sports arena	678	6.3	574	9.6	589	18.7	614	3.3	602	37.9
Outdoors, park/golf course	654	3.3	586	8.6	608	10.5	623	2.5	608	25.0
Outdoors, other location	1333	2.3	1215	27.2	1248	96.2	1187	1.3	1242	127.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	2759	2.3	2107	0.4	-1	0.0	2555	1.3	2631	4.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2360	129.8	1937	135.0	1969	130.8	2147	137.3	2102	532.9
In transit, bus	4349	1.3	3401	1.9	3405	2.3	3801	0.9	3650	6.4
In transit, truck	2808	19.4	2294	20.4	2283	20.8	2523	17.5	2470	78.1
In transit, van	2272	6.5	1929	7.6	1964	8.1	2050	7.1	2044	29.4
Indoors, public garage	1418	13.5	1194	12.1	1210	7.2	1288	15.2	1289	48.0
Outdoors, in a parking lot	1370	11.9	1158	16.5	1166	16.7	1230	13.1	1220	58.1
Outdoors, along a roadway	2029	45.7	1708	69.1	1745	76.7	1849	58.9	1811	250.4
In transit, motorcycle	-1	0.0	2089	0.6	2237	1.0	-1	0.0	2179	1.6
Indoors, service station	2030	15.4	1713	9.5	1725	5.7	1827	13.9	1860	44.5
Outdoors, service station	0	0.3	0	0.5	0	0.5	0	0.4	0	1.7
Indoors, residential garage	1932	3.8	1626	4.3	1651	3.1	1840	5.8	1772	16.9
Indoors, in a repair shop	3121	8.9	2688	1.6	-1	0.1	2756	5.0	2958	15.6
Indoors, home	775	1404.9	687	1374.0	705	1344.7	733	1432.3	726	5555.9
Indoors, office	903	237.5	754	200.8	745	201.7	794	230.9	803	870.9
Indoors, store	968	42.2	818	45.9	809	58.6	884	37.1	863	183.7
Indoors, restaurant	1657	38.3	1412	32.7	1403	29.0	1518	33.9	1507	133.9
Indoors, mfg. facility	1083	35.0	901	55.4	902	61.5	945	40.6	944	192.5
Indoors, school	1088	20.2	913	16.3	943	12.1	946	21.0	979	69.6
Indoors, church	691	9.7	598	11.4	598	9.5	622	13.2	626	43.9
Indoors, shopping mall	5097	1.4	4057	1.2	4041	0.7	4673	1.5	4547	4.9
Indoors, auditorium	303	8.7	254	2.8	265	3.3	287	5.0	285	19.8
Indoors, health care facility	759	15.1	622	19.9	607	20.1	665	18.0	657	73.2
Indoors, public building	812	6.9	683	11.6	694	22.7	740	5.6	714	46.8
Indoors, other location	1869	45.4	1581	49.2	1621	47.5	1708	43.0	1691	185.0
Indoors, not specified	1703	6.2	1481	2.1	1546	0.6	1566	4.3	1615	13.2
Outdoors, construction	2277	5.4	1916	10.3	1899	8.0	2056	8.1	2009	31.8
Outdoors, residential grounds	1373	6.0	1147	20.4	1192	41.5	1272	8.7	1203	76.6
Outdoors, school grounds	2400	0.6	1993	1.0	2028	0.7	2081	0.9	2100	3.1
Outdoors, sports arena	628	1.3	565	5.0	584	9.0	562	1.0	580	16.3
Outdoors, park/golf course	677	2.7	570	10.5	590	16.4	623	5.7	596	35.2
Outdoors, other location	1458	14.6	1210	30.6	1246	39.6	1350	20.9	1285	105.6
Outdoors, not specified	-1	0.1	1822	0.6	1721	0.9	2586	0.2	1874	1.7
In transit, train	2661	1.5	1635	1.3	1619	1.3	2339	0.9	2071	5.0
In transit, airplane	-1	0.0	0	1.9	0	5.9	-1	0.0	0	7.8

New York City: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2300	95.6	1946	99.0	1979	101.6	2124	99.4	2085	395.7
In transit, bus	4137	3.9	3360	1.7	3364	1.6	3678	2.7	3754	9.8
In transit, truck	2676	9.0	2308	1.6	-1	0.0	2431	5.0	2559	15.6
In transit, van	2385	0.1	2046	0.6	2028	0.9	2063	0.3	2064	1.9
Indoors, public garage	1494	0.4	1175	0.4	1179	0.2	1331	0.5	1313	1.5
Outdoors, in a parking lot	1389	4.6	1147	9.0	1184	11.6	1248	5.6	1215	30.8
Outdoors, along a roadway	2051	31.8	1720	52.5	1778	66.6	1857	37.9	1824	188.9
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1727	0.1	1684	0.2	-1	0.0	1698	0.3
Outdoors, service station	-1	0.1	-1	0.0	-1	0.1	-1	0.1	0	0.2
Indoors, residential garage	1829	1.2	1476	0.3	-1	0.1	1621	0.7	1704	2.2
Indoors, in a repair shop	2863	0.1	2601	0.3	2545	0.2	2553	0.3	2611	0.8
Indoors, home	795	1841.7	692	1774.0	705	1743.9	729	1848.7	731	7208.3
Indoors, office	936	12.6	790	7.2	772	6.6	834	8.1	850	34.5
Indoors, store	974	35.8	824	51.9	828	74.8	870	36.3	861	198.9
Indoors, restaurant	1776	21.1	1462	23.2	1490	20.7	1634	21.8	1589	86.8
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	1097	25.7	943	41.7	928	31.1	981	45.3	979	143.7
Indoors, church	696	9.1	597	11.0	598	9.6	626	12.6	627	42.3
Indoors, shopping mall	4607	3.8	3968	2.4	3939	2.8	4119	2.1	4209	11.2
Indoors, auditorium	303	10.9	250	12.4	253	13.3	269	14.2	267	50.8
Indoors, health care facility	769	5.7	649	9.2	646	9.2	692	7.9	680	32.0
Indoors, public building	852	7.1	732	4.4	740	3.6	776	6.1	786	21.1
Indoors, other location	1907	26.4	1615	29.3	1650	27.3	1765	30.8	1732	113.9
Indoors, not specified	-1	0.0	1644	0.2	1747	0.7	-1	0.0	1725	0.9
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1289	6.2	1090	24.6	1132	31.8	1180	13.4	1140	76.0
Outdoors, school grounds	2408	0.8	2052	2.6	2139	2.6	2240	2.0	2162	8.0
Outdoors, sports arena	693	4.0	578	3.1	613	4.8	628	2.1	631	14.0
Outdoors, park/golf course	699	0.9	562	12.7	579	24.2	633	2.4	580	40.2
Outdoors, other location	1458	1.1	1209	8.4	1236	18.2	1281	1.4	1239	29.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	2728	0.3	-1	0.1	-1	0.0	2514	0.2	2594	0.6
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2405	125.3	1971	116.0	2015	115.1	2193	121.7	2152	478.0
In transit, bus	4225	4.6	3286	4.6	3200	4.1	3723	4.9	3621	18.2
In transit, truck	2864	4.6	2378	5.1	2409	4.7	2655	5.3	2574	19.7
In transit, van	-1	0.1	1969	1.6	2000	2.4	-1	0.0	2002	4.1
Indoors, public garage	1440	3.6	1180	1.9	1161	1.1	1322	2.8	1320	9.3
Outdoors, in a parking lot	1378	5.7	1162	9.9	1175	12.1	1296	6.9	1229	34.6
Outdoors, along a roadway	2094	32.0	1728	46.0	1768	57.5	1905	35.7	1847	171.1
In transit, motorcycle	-1	0.0	2075	4.2	2112	10.9	-1	0.0	2102	15.2
Indoors, service station	2099	0.1	1777	0.2	1699	0.1	1790	0.2	1819	0.6
Outdoors, service station	0	0.2	0	0.7	0	1.1	0	0.3	0	2.2
Indoors, residential garage	-1	0.1	-1	0.1	-1	0.0	1637	0.1	1680	0.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, home	777	1454.6	690	1451.1	711	1463.5	734	1485.3	728	5854.4
Indoors, office	904	247.5	754	245.2	734	221.7	797	251.9	799	966.3
Indoors, store	998	62.1	826	70.8	833	64.9	918	69.4	891	267.3
Indoors, restaurant	1707	44.8	1450	38.7	1467	41.2	1579	39.3	1555	164.0
Indoors, mfg. facility	1097	14.6	916	16.2	891	12.1	941	17.3	962	60.2
Indoors, school	1072	52.4	909	41.6	892	23.5	936	54.4	965	171.9
Indoors, church	697	13.1	596	14.2	593	12.3	637	16.1	631	55.6
Indoors, shopping mall	4935	3.8	4264	2.7	4338	1.7	4573	3.9	4585	12.1
Indoors, auditorium	288	4.8	243	5.7	240	8.1	269	5.8	257	24.4
Indoors, health care facility	705	35.8	598	30.9	614	26.1	648	36.5	645	129.3
Indoors, public building	837	6.1	692	6.5	648	9.9	741	6.2	718	28.7
Indoors, other location	1863	38.5	1581	32.8	1651	34.0	1717	34.9	1710	140.2
Indoors, not specified	1934	0.4	1569	0.4	1610	0.2	1788	0.5	1756	1.4
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1250	2.9	1134	15.9	1191	31.2	1131	5.1	1172	55.0
Outdoors, school grounds	2670	0.4	2023	1.7	2061	1.8	2540	0.7	2168	4.6
Outdoors, sports arena	805	0.1	570	5.8	574	9.6	753	0.3	577	15.8
Outdoors, park/golf course	713	0.8	544	5.7	534	15.8	686	1.5	552	23.8
Outdoors, other location	1496	0.7	1257	7.3	1302	20.8	1345	0.7	1297	29.6
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.1	-1	0.0	1802	0.1
In transit, train	2752	0.3	2123	0.5	2154	0.3	2431	0.6	2351	1.7
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2304	86.0	1919	104.2	1946	104.2	2060	92.5	2046	386.9
In transit, bus	4050	3.4	3377	14.0	3454	17.5	3300	1.8	3472	36.7
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	2252	0.9	2001	2.0	1954	1.5	1976	2.4	2015	6.8
Indoors, public garage	-1	0.1	-1	0.0	-1	0.0	-1	0.0	1641	0.1
Outdoors, in a parking lot	1340	9.3	1123	32.5	1152	42.7	1181	12.4	1164	97.0
Outdoors, along a roadway	2063	26.4	1697	43.8	1739	43.0	1924	35.1	1828	148.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	1862	5.5	1445	9.6	1443	6.3	1628	11.4	1578	32.8
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	796	1872.5	690	1689.8	700	1574.9	734	1858.0	732	6995.2
Indoors, office	850	9.7	712	4.1	688	3.3	755	6.6	777	23.7
Indoors, store	909	29.1	785	35.5	816	52.3	795	29.9	823	146.8
Indoors, restaurant	1741	15.2	1429	5.3	1370	5.3	1522	9.5	1580	35.3
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	1076	11.9	902	27.4	931	17.3	1013	30.1	970	86.7
Indoors, church	690	9.1	543	12.1	543	7.2	582	15.0	587	43.4
Indoors, shopping mall	4902	7.8	4495	1.6	-1	0.0	4331	4.2	4679	13.5
Indoors, auditorium	254	5.3	262	7.5	257	8.8	228	3.1	254	24.6
Indoors, health care facility	769	26.4	637	40.3	623	21.5	663	45.7	670	133.9
Indoors, public building	811	2.0	663	2.6	653	11.0	715	1.2	678	16.8
Indoors, other location	1763	23.0	1386	54.6	1407	61.0	1625	26.4	1485	165.0
Indoors, not specified	2061	2.2	1569	0.4	-1	0.0	1885	1.3	1957	3.8
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1245	10.5	1106	63.2	1128	171.5	1077	19.5	1124	264.7
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	596	7.3	625	9.6	-1	0.0	613	17.0
Outdoors, park/golf course	811	3.7	584	5.0	605	20.2	752	2.0	636	30.9
Outdoors, other location	-1	0.0	1198	21.2	1231	28.9	-1	0.0	1217	50.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2374	145.8	1939	146.9	1986	144.6	2159	151.9	2115	589.1
In transit, bus	4285	11.1	3388	5.3	3506	2.7	3803	8.6	3888	27.6
In transit, truck	2782	19.0	2263	25.4	2249	18.2	2417	25.9	2417	88.6
In transit, van	2250	2.5	1908	10.1	1914	11.1	2091	3.6	1966	27.3
Indoors, public garage	1470	2.7	1158	4.6	1146	2.6	1278	5.0	1253	14.9
Outdoors, in a parking lot	1393	8.9	1168	10.8	1183	10.3	1294	9.9	1254	39.9
Outdoors, along a roadway	2059	42.3	1717	58.1	1782	69.1	1872	45.2	1838	214.7
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	2037	7.2	1786	2.8	1825	1.3	1785	5.6	1896	17.0
Outdoors, service station	-1	0.1	0	0.6	0	0.8	0	0.2	0	1.6
Indoors, residential garage	2001	0.1	1570	0.3	1550	0.5	-1	0.1	1633	1.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	765	1345.9	679	1320.6	701	1285.8	729	1381.3	719	5333.7
Indoors, office	896	300.4	749	257.8	740	310.2	787	273.7	794	1142.1
Indoors, store	971	67.5	814	52.3	811	37.4	867	67.0	877	224.2
Indoors, restaurant	1705	32.4	1429	34.5	1422	36.8	1600	34.3	1534	137.9
Indoors, mfg. facility	1131	24.6	919	67.6	905	90.0	1025	43.0	957	225.1
Indoors, school	1099	8.4	910	29.4	885	25.8	970	17.9	935	81.4
Indoors, church	691	15.5	582	16.7	588	16.3	627	17.3	621	65.8
Indoors, shopping mall	4941	3.5	4444	1.4	4473	0.9	4831	2.0	4770	7.8
Indoors, auditorium	303	4.3	254	2.2	271	2.3	290	2.4	284	11.2
Indoors, health care facility	758	19.0	629	5.0	640	1.8	690	11.7	714	37.5
Indoors, public building	858	4.6	710	19.1	712	21.6	842	7.5	743	52.8
Indoors, other location	1834	66.7	1489	53.6	1485	33.6	1613	66.7	1631	220.6
Indoors, not specified	1834	7.3	1547	1.8	1630	0.5	1609	4.6	1717	14.2
Outdoors, construction	-1	0.0	1941	2.4	1947	4.8	-1	0.0	1945	7.2
Outdoors, residential grounds	1300	2.4	1133	28.8	1165	48.3	1213	3.6	1160	83.1
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	624	5.4	567	13.8	591	17.5	573	8.9	584	45.5
Outdoors, other location	1430	11.7	1210	11.4	1280	12.2	1339	9.8	1314	45.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	2597	0.6	-1	0.1	-1	0.0	2359	0.4	2461	1.1
In transit, airplane	-1	0.0	0	0.9	0	1.2	-1	0.0	0	2.1

New York City: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2291	83.5	1915	77.6	1954	80.3	2085	76.6	2064	318.1
In transit, bus	3813	2.0	3186	1.5	3238	1.1	3306	1.7	3427	6.1
In transit, truck	2711	5.5	2212	1.0	-1	0.0	2458	3.0	2577	9.5
In transit, van	2370	1.5	1934	3.0	1977	2.2	2180	3.7	2092	10.3
Indoors, public garage	1330	0.9	1185	0.2	-1	0.1	1187	0.6	1255	1.7
Outdoors, in a parking lot	1399	3.7	1154	8.4	1174	11.2	1262	4.4	1212	27.7
Outdoors, along a roadway	2057	36.4	1709	37.1	1755	44.5	1845	32.0	1836	150.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1914	0.2	1812	0.1	1819	0.1	-1	0.1	1829	0.5
Outdoors, service station	-1	0.0	0	0.7	0	0.9	-1	0.0	0	1.5
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	799	1899.5	695	1863.4	709	1819.6	737	1944.7	735	7527.2
Indoors, office	873	8.2	756	7.6	738	6.5	778	8.7	789	31.0
Indoors, store	948	34.1	814	35.2	809	34.9	851	33.9	855	138.1
Indoors, restaurant	1810	14.6	1465	20.8	1481	27.7	1649	17.3	1573	80.4
Indoors, mfg. facility	-1	0.0	870	0.4	876	0.5	-1	0.0	873	0.8
Indoors, school	1108	4.6	960	5.3	997	4.3	1080	5.6	1036	19.8
Indoors, church	686	14.9	570	20.3	572	16.9	601	21.7	603	73.7
Indoors, shopping mall	4849	4.1	4321	3.3	4368	3.5	4553	3.5	4540	14.3
Indoors, auditorium	286	2.5	237	1.2	226	0.9	279	1.4	266	6.0
Indoors, health care facility	743	9.7	621	17.7	622	23.7	642	9.2	644	60.3
Indoors, public building	873	2.0	716	5.2	704	4.9	835	4.6	764	16.7
Indoors, other location	1866	18.8	1527	25.6	1550	31.0	1724	18.5	1641	93.9
Indoors, not specified	2080	2.3	1620	0.4	-1	0.0	1902	1.3	1978	4.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1331	9.8	1112	29.8	1123	54.2	1211	14.5	1151	108.2
Outdoors, school grounds	2151	0.3	-1	0.1	-1	0.0	1903	0.2	2031	0.6
Outdoors, sports arena	-1	0.0	572	4.0	600	5.7	-1	0.0	588	9.7
Outdoors, park/golf course	-1	0.0	580	11.1	588	24.8	-1	0.0	586	35.9
Outdoors, other location	1282	0.2	1224	3.0	1292	8.6	1158	0.6	1269	12.4
Outdoors, not specified	2198	0.8	1760	0.1	-1	0.0	1955	0.5	2077	1.4
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2348	110.3	1950	107.1	1998	110.9	2148	104.3	2111	432.6
In transit, bus	4203	6.4	3196	4.3	3099	3.9	3711	5.5	3639	20.1
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	2445	3.1	2041	1.3	2030	0.5	2125	2.5	2240	7.3
Indoors, public garage	1517	0.6	1137	0.4	1087	0.2	1283	0.6	1304	1.8
Outdoors, in a parking lot	1391	7.5	1159	10.9	1217	18.2	1243	7.6	1237	44.2
Outdoors, along a roadway	2061	36.1	1704	39.6	1746	47.1	1858	35.9	1833	158.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1752	0.1	-1	0.1	-1	0.1	1840	0.3
Outdoors, service station	0	0.3	0	2.9	0	3.4	0	0.8	0	7.4
Indoors, residential garage	-1	0.1	-1	0.0	-1	0.0	-1	0.1	1544	0.2
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	786	1507.7	692	1468.9	712	1485.9	744	1526.3	734	5988.8
Indoors, office	891	244.7	750	214.8	740	166.7	780	250.0	796	876.2
Indoors, store	966	44.6	815	61.7	818	67.9	893	52.0	863	226.3
Indoors, restaurant	1678	37.2	1411	47.3	1429	44.8	1542	48.1	1507	177.4
Indoors, mfg. facility	-1	0.0	916	47.5	931	81.7	-1	0.0	926	129.2
Indoors, school	1066	44.7	907	31.3	921	24.3	929	44.0	965	144.3
Indoors, church	702	16.7	600	17.4	594	21.8	642	15.5	631	71.5
Indoors, shopping mall	4596	3.2	4011	5.4	3972	3.6	4188	5.6	4163	17.9
Indoors, auditorium	315	1.1	248	2.4	258	1.7	294	2.9	275	8.1
Indoors, health care facility	698	38.5	549	51.0	537	40.6	602	50.4	593	180.5
Indoors, public building	865	3.5	717	2.1	721	2.7	729	2.3	770	10.6
Indoors, other location	1837	47.6	1612	46.4	1618	45.3	1742	44.2	1703	183.5
Indoors, not specified	-1	0.1	1601	0.7	1782	2.9	1187	0.2	1718	3.9
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1350	3.2	1129	15.5	1138	23.8	1185	6.2	1155	48.8
Outdoors, school grounds	2187	0.4	1905	1.2	1969	0.9	1977	1.0	1973	3.4
Outdoors, sports arena	627	1.3	593	1.9	633	5.5	567	0.7	619	9.4
Outdoors, park/golf course	697	0.7	573	0.1	-1	0.0	593	0.4	649	1.2
Outdoors, other location	1440	0.3	1190	1.7	1211	3.5	1348	0.9	1236	6.4
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2263	134.0	1912	143.4	1932	135.8	2055	152.6	2038	565.7
In transit, bus	4096	2.1	3342	5.1	3328	2.8	3618	5.2	3538	15.3
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	-1	0.0	1819	0.2	-1	0.0	1816	0.3
Indoors, public garage	766	0.3	-1	0.0	-1	0.0	678	0.2	727	0.5
Outdoors, in a parking lot	1279	6.4	1146	18.9	1188	28.9	1192	9.1	1185	63.4
Outdoors, along a roadway	2000	28.4	1707	63.0	1743	104.1	1892	38.3	1789	233.8
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1815	0.6	1752	1.0	-1	0.0	1776	1.7
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	-1	0.1	1458	0.2	1471	0.2	1564	0.1	1523	0.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, home	790	1738.2	682	1663.4	699	1651.1	732	1711.2	726	6763.9
Indoors, office	891	76.5	728	59.2	725	36.8	784	83.8	794	256.3
Indoors, store	979	18.2	809	18.9	798	28.4	911	15.6	863	81.1
Indoors, restaurant	1700	24.0	1393	30.4	1371	37.8	1502	30.7	1473	122.9
Indoors, mfg. facility	1132	16.5	950	12.9	926	6.1	968	18.2	1009	53.8
Indoors, school	977	11.0	914	4.4	997	4.3	878	6.4	945	26.1
Indoors, church	632	17.3	563	20.2	547	15.9	579	25.3	580	78.6
Indoors, shopping mall	4520	6.3	3905	4.3	3819	8.6	4072	3.7	4070	22.9
Indoors, auditorium	291	18.9	249	26.3	260	17.9	283	33.6	271	96.7
Indoors, health care facility	687	4.1	625	11.6	642	20.8	606	6.3	636	42.8
Indoors, public building	757	2.3	681	6.7	679	8.5	688	2.0	690	19.6
Indoors, other location	1858	12.0	1599	16.7	1650	9.8	1728	19.2	1705	57.6
Indoors, not specified	-1	0.0	1440	2.4	1434	3.2	-1	0.0	1437	5.6
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1315	21.2	1102	53.7	1114	71.0	1224	20.5	1149	166.3
Outdoors, school grounds	2601	1.1	2054	2.6	2148	1.4	2483	2.6	2294	7.7
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	611	18.0	540	15.5	536	7.5	550	21.1	564	62.2
Outdoors, other location	-1	0.0	1270	2.1	1330	5.4	-1	0.0	1314	7.5
Outdoors, not specified	2040	0.3	1771	0.8	1778	0.4	1821	0.8	1827	2.4
In transit, train	2222	2.7	1671	0.4	-1	0.0	1930	1.6	2074	4.8
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2247	76.6	1897	79.2	1942	97.3	2018	74.3	2020	327.4
In transit, bus	3659	0.6	3340	1.8	3605	2.3	3269	1.5	3451	6.2
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	2301	1.1	1793	0.2	-1	0.0	2089	0.7	2183	2.0
Indoors, public garage	1549	0.4	1252	0.4	1321	1.3	1539	0.3	1372	2.5
Outdoors, in a parking lot	1265	2.0	1117	5.0	1136	7.7	1153	2.2	1148	16.8
Outdoors, along a roadway	2052	30.8	1699	35.6	1761	46.5	1849	27.0	1826	140.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
Outdoors, service station	-1	0.0	-1	0.1	0	0.2	-1	0.0	0	0.3
Indoors, residential garage	-1	0.0	1772	0.2	1714	0.3	-1	0.0	1736	0.5
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	797	1886.4	692	1900.1	708	1863.6	743	1950.7	735	7600.9
Indoors, office	914	19.6	790	5.8	789	3.2	802	11.7	854	40.3
Indoors, store	941	17.9	804	32.6	812	72.7	837	14.7	830	137.9
Indoors, restaurant	1576	16.8	1363	22.0	1414	24.1	1402	19.8	1431	82.8
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	-1	0.0	978	0.8	952	1.0	-1	0.0	963	1.8
Indoors, church	691	32.0	587	28.7	570	19.3	600	35.2	617	115.2
Indoors, shopping mall	4691	3.3	4197	7.9	4123	4.5	4175	8.2	4244	23.9
Indoors, auditorium	255	1.7	221	4.1	220	2.3	229	4.2	228	12.3
Indoors, health care facility	754	20.1	638	10.0	640	5.0	680	15.4	697	50.5
Indoors, public building	830	3.4	707	7.1	724	5.8	713	5.5	732	21.7
Indoors, other location	1885	43.1	1548	17.9	1499	13.3	1706	29.9	1727	104.2
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1352	2.4	1118	14.4	1153	25.5	1114	2.1	1151	44.4
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	618	1.7	570	5.0	577	4.5	554	4.6	573	15.8
Outdoors, park/golf course	-1	0.0	592	3.0	616	4.1	-1	0.0	606	7.1
Outdoors, other location	-1	0.0	1249	2.1	1301	3.5	-1	0.0	1281	5.6
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2270	79.9	1852	65.2	1891	73.3	2047	75.8	2025	294.2
In transit, bus	-1	0.0	3245	1.6	3093	2.1	-1	0.0	3159	3.6
In transit, truck	2724	73.9	2259	85.8	2238	102.4	2462	65.2	2398	327.3
In transit, van	2065	8.5	1858	1.4	-1	0.0	1868	4.9	1980	14.8
Indoors, public garage	1555	31.9	1203	26.2	1224	12.6	1445	36.3	1392	106.9
Outdoors, in a parking lot	1393	11.8	1145	26.0	1138	23.6	1224	22.5	1199	83.9
Outdoors, along a roadway	1974	151.6	1677	201.3	1721	241.7	1792	174.2	1776	768.8
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	2069	54.7	1605	12.6	1390	4.3	1767	32.6	1891	104.1
Outdoors, service station	0	0.2	0	3.4	0	4.9	0	0.5	0	9.1
Indoors, residential garage	1936	9.7	1613	2.5	1690	0.3	1916	5.5	1882	17.9
Indoors, in a repair shop	-1	0.0	2938	0.8	2842	1.1	-1	0.0	2884	1.9
Indoors, home	737	1251.5	639	1222.5	654	1144.5	698	1300.5	683	4919.0
Indoors, office	876	66.1	714	60.7	706	71.1	756	44.8	763	242.7
Indoors, store	942	16.8	788	8.8	815	4.4	858	12.9	872	42.8
Indoors, restaurant	1693	38.6	1399	17.7	1420	14.7	1593	32.0	1573	103.0
Indoors, mfg. facility	1099	13.8	932	54.5	929	118.6	967	33.9	946	220.8
Indoors, school	1037	5.8	884	14.0	865	7.8	899	14.3	907	41.9
Indoors, church	639	31.0	573	14.5	586	6.0	602	24.3	610	75.8
Indoors, shopping mall	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, auditorium	303	7.4	247	23.7	260	50.0	297	3.9	262	85.0
Indoors, health care facility	-1	0.0	646	4.5	658	8.2	-1	0.0	654	12.7
Indoors, public building	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, other location	1887	47.0	1509	15.7	1377	6.6	1703	31.3	1737	100.6
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	2240	59.3	1912	110.6	1918	113.5	2028	66.8	1991	350.1
Outdoors, residential grounds	1347	10.9	1098	25.2	1132	19.2	1206	20.6	1172	75.8
Outdoors, school grounds	2298	0.3	1811	0.8	1818	0.4	2069	0.8	1968	2.4
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	615	5.6	547	14.0	544	9.3	544	14.2	554	43.0
Outdoors, other location	1417	183.9	1196	170.2	1207	167.6	1318	190.3	1288	712.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2355	45.8	1902	65.8	1928	79.9	2135	55.8	2047	247.3
In transit, bus	4093	19.2	3220	14.7	3193	8.0	3499	19.9	3578	61.9
In transit, truck	2456	0.3	2313	1.3	2304	1.7	2190	0.7	2297	4.1
In transit, van	2487	3.0	1825	2.1	1856	2.1	2139	2.4	2116	9.6
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1390	8.8	1106	9.1	1125	9.1	1243	8.4	1214	35.5
Outdoors, along a roadway	2082	123.9	1661	139.6	1701	174.1	1893	120.4	1817	557.9
In transit, motorcycle	2789	3.0	2144	0.8	2254	0.2	2565	2.0	2606	6.1
Indoors, service station	-1	0.0	-1	0.1	-1	0.1	-1	0.0	1587	0.1
Outdoors, service station	0	0.3	0	0.5	0	0.6	0	0.2	0	1.7
Indoors, residential garage	2242	0.1	1609	0.6	1679	0.6	2057	0.3	1774	1.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	740	1417.7	650	1434.7	672	1459.2	693	1438.2	689	5749.8
Indoors, office	1035	3.9	762	3.6	743	8.4	890	2.5	829	18.3
Indoors, store	1041	26.1	797	23.7	794	28.1	933	23.9	891	101.8
Indoors, restaurant	1647	6.0	1424	13.4	1461	16.5	1589	10.6	1504	46.6
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	1046	378.8	897	267.4	876	145.7	900	376.6	944	1168.6
Indoors, church	680	16.5	571	14.1	565	13.1	600	15.8	607	59.6
Indoors, shopping mall	4526	3.8	3816	3.3	3828	2.4	4211	3.6	4133	13.2
Indoors, auditorium	299	2.5	242	6.5	245	7.3	287	6.3	262	22.6
Indoors, health care facility	698	8.7	595	11.5	614	8.3	662	13.8	642	42.3
Indoors, public building	778	7.4	702	8.1	713	7.5	720	8.2	727	31.3
Indoors, other location	1850	8.8	1538	9.2	1597	9.3	1618	9.9	1648	37.2
Indoors, not specified	-1	0.0	1605	0.3	1705	0.4	-1	0.0	1662	0.8
Outdoors, construction	-1	0.0	1879	1.0	1850	1.3	-1	0.0	1863	2.4
Outdoors, residential grounds	1402	34.8	1062	62.8	1065	97.3	1265	37.1	1147	232.1
Outdoors, school grounds	2274	28.0	1820	29.9	1836	19.8	1998	34.0	1991	111.7
Outdoors, sports arena	694	9.0	553	15.2	578	17.6	635	11.6	603	53.4
Outdoors, park/golf course	741	2.9	537	22.2	540	43.8	655	4.6	554	73.5
Outdoors, other location	1448	0.3	1147	22.3	1189	45.3	1272	0.9	1178	68.9
Outdoors, not specified	2442	0.1	-1	0.0	-1	0.0	-1	0.1	2377	0.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2337	51.4	1931	69.7	1958	81.9	2081	52.7	2052	255.7
In transit, bus	4198	5.7	3293	7.4	3329	4.4	3614	8.6	3604	26.0
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	2430	2.0	1936	4.1	2008	3.2	2221	5.0	2121	14.3
Indoors, public garage	-1	0.0	-1	0.1	1317	0.4	-1	0.0	1302	0.5
Outdoors, in a parking lot	1372	4.6	1155	6.7	1162	8.2	1226	4.6	1212	24.1
Outdoors, along a roadway	2090	30.6	1722	45.1	1777	62.1	1901	29.1	1841	166.9
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1869	0.3	1852	0.5	-1	0.0	1859	0.8
Outdoors, service station	-1	0.0	-1	0.0	-1	0.1	-1	0.0	0	0.1
Indoors, residential garage	2037	1.2	1537	1.0	1578	0.7	1811	1.2	1772	4.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	793	1797.3	689	1730.5	707	1740.3	738	1805.3	732	7073.5
Indoors, office	884	78.7	754	76.5	751	62.5	774	82.6	793	300.4
Indoors, store	958	23.3	814	28.8	818	35.4	880	21.0	859	108.5
Indoors, restaurant	1707	27.3	1432	24.5	1425	28.7	1569	25.0	1534	105.4
Indoors, mfg. facility	1119	17.2	932	29.4	907	23.8	959	22.9	967	93.3
Indoors, school	1059	64.1	910	64.1	890	37.3	918	75.0	949	240.6
Indoors, church	695	21.1	570	25.1	577	18.3	610	31.1	612	95.7
Indoors, shopping mall	4828	0.8	4342	2.7	4260	3.0	4267	1.9	4340	8.4
Indoors, auditorium	307	0.8	257	1.9	269	1.0	302	1.9	282	5.6
Indoors, health care facility	791	12.6	628	10.9	621	11.9	672	11.5	681	46.9
Indoors, public building	788	0.9	714	2.4	701	7.6	707	1.1	711	12.0
Indoors, other location	1811	1.0	1602	6.8	1656	10.0	1744	1.8	1653	19.6
Indoors, not specified	2142	0.6	1525	1.7	1639	3.6	1985	0.3	1670	6.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1338	9.2	1107	28.9	1129	45.7	1260	15.1	1162	99.0
Outdoors, school grounds	2502	2.9	1891	5.4	1927	2.9	2238	5.7	2119	16.8
Outdoors, sports arena	-1	0.1	551	2.3	562	3.6	711	0.2	564	6.2
Outdoors, park/golf course	598	6.5	558	2.0	605	3.0	539	3.8	580	15.2
Outdoors, other location	1269	0.2	1209	5.5	1230	7.7	1145	0.5	1219	14.0
Outdoors, not specified	-1	0.0	-1	0.1	1746	0.1	-1	0.0	1744	0.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

New York City: City-wide, Demographic Group=All persons

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	2340	107.7	1930	102.8	1967	102.6	2126	106.4	2094	419.5
In transit, bus	4167	5.3	3278	5.1	3276	3.8	3609	5.7	3610	20.0
In transit, truck	2778	8.2	2300	7.7	2306	7.0	2481	7.7	2475	30.6
In transit, van	2270	2.9	1878	4.3	1918	4.3	1997	4.0	1994	15.5
Indoors, public garage	1412	4.0	1186	3.0	1201	1.7	1271	4.0	1287	12.7
Outdoors, in a parking lot	1366	7.0	1145	10.8	1166	13.0	1236	7.9	1211	38.7
Outdoors, along a roadway	2060	42.8	1704	66.7	1752	85.3	1868	49.8	1816	244.5
In transit, motorcycle	2850	0.1	2056	0.7	2091	1.7	2651	0.1	2144	2.7
Indoors, service station	2017	3.8	1719	2.0	1737	1.1	1795	3.2	1856	10.1
Outdoors, service station	0	0.2	0	0.5	0	0.7	0	0.2	0	1.5
Indoors, residential garage	1901	1.0	1593	1.1	1632	0.8	1791	1.4	1734	4.3
Indoors, in a repair shop	3105	1.9	2688	0.4	-1	0.0	2728	1.1	2936	3.4
Indoors, home	777	1561.6	682	1545.3	699	1550.2	726	1588.8	721	6245.9
Indoors, office	898	151.9	755	117.1	745	94.6	785	142.3	804	505.8
Indoors, store	973	42.1	816	44.6	819	48.7	884	42.1	870	177.6
Indoors, restaurant	1690	30.0	1430	27.7	1451	27.8	1553	28.4	1534	113.9
Indoors, mfg. facility	1091	12.6	914	20.2	917	21.8	954	14.9	956	69.4
Indoors, school	1066	72.3	911	74.3	897	51.5	927	85.4	953	283.6
Indoors, church	689	12.4	587	13.8	585	12.6	619	14.8	619	53.5
Indoors, shopping mall	4817	3.1	4104	2.8	4091	2.2	4428	3.1	4387	11.1
Indoors, auditorium	295	6.0	246	6.3	250	7.1	274	6.7	266	26.1
Indoors, health care facility	723	20.2	604	19.1	605	17.3	646	21.4	647	77.9
Indoors, public building	833	5.1	702	7.1	696	9.2	767	5.4	738	26.8
Indoors, other location	1841	34.5	1557	30.4	1598	27.7	1675	32.4	1675	125.1
Indoors, not specified	1778	2.1	1519	0.9	1664	0.7	1599	1.4	1667	5.1
Outdoors, construction	2264	1.0	1925	2.2	1924	1.9	2033	1.4	2000	6.5
Outdoors, residential grounds	1347	8.8	1104	31.1	1127	53.2	1225	13.0	1150	106.1
Outdoors, school grounds	2293	2.9	1901	5.2	1938	4.4	2046	4.3	2016	16.8
Outdoors, sports arena	678	1.5	570	4.9	591	7.7	629	1.7	597	15.8
Outdoors, park/golf course	669	2.2	560	11.7	568	21.4	620	3.7	576	39.0
Outdoors, other location	1441	3.9	1200	13.6	1236	24.7	1324	4.7	1251	46.9
Outdoors, not specified	2232	0.1	1859	0.2	1762	0.3	2026	0.2	1921	0.8
In transit, train	2612	0.6	1802	0.4	1721	0.3	2319	0.4	2201	1.6
In transit, airplane	-1	0.0	0	0.3	0	0.7	-1	0.0	0	1.0

Philadelphia: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1421	84.2	860	93.6	1000	100.5	1203	87.9	1110	366.1
In transit, bus	2655	7.4	1580	5.7	1739	3.5	2145	7.3	2109	23.9
In transit, truck	1770	4.2	1091	7.0	1210	6.5	1462	5.4	1335	23.1
In transit, van	1426	4.0	864	5.0	987	5.2	1163	4.9	1092	19.1
Indoors, public garage	833	2.9	523	1.7	626	1.2	710	2.5	702	8.3
Outdoors, in a parking lot	831	12.3	510	12.9	587	13.9	692	12.1	651	51.2
Outdoors, along a roadway	1246	48.7	744	69.2	877	87.5	1041	53.8	945	259.3
In transit, motorcycle	1608	0.3	879	0.8	1029	1.6	1452	0.2	1078	2.9
Indoors, service station	1316	2.3	803	1.7	896	1.0	1062	2.3	1061	7.2
Outdoors, service station	0	0.1	0	0.4	0	0.5	0	0.1	0	1.2
Indoors, residential garage	1143	0.9	670	1.0	797	0.6	988	1.1	913	3.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	1338	0.1
Indoors, home	518	1573.0	321	1542.7	367	1545.0	440	1594.0	412	6254.6
Indoors, office	566	78.5	362	82.2	395	80.6	454	80.7	443	322.0
Indoors, store	580	48.7	361	47.3	415	48.6	482	47.4	460	192.1
Indoors, restaurant	1038	29.8	625	28.5	726	28.0	877	28.9	820	115.2
Indoors, mfg. facility	698	24.2	442	25.6	490	23.2	561	24.9	547	97.9
Indoors, school	693	131.0	443	101.5	482	61.2	553	134.5	560	428.2
Indoors, church	442	14.0	270	13.5	308	11.9	370	15.2	350	54.7
Indoors, shopping mall	2736	3.4	1792	2.9	2080	2.5	2344	3.3	2267	12.2
Indoors, auditorium	178	5.3	103	7.3	126	8.2	154	7.0	137	27.7
Indoors, health care facility	446	22.0	284	19.9	325	15.3	376	23.4	363	80.7
Indoors, public building	499	6.3	314	8.4	359	10.4	427	6.9	389	32.0
Indoors, other location	1133	22.2	700	26.9	818	23.4	960	24.4	893	96.9
Indoors, not specified	967	0.4	661	0.4	821	0.6	786	0.3	811	1.7
Outdoors, construction	1385	2.2	882	2.8	983	2.1	1118	2.5	1079	9.5
Outdoors, residential grounds	771	16.7	476	36.2	565	61.1	645	19.5	578	133.6
Outdoors, school grounds	1325	6.6	836	6.9	966	4.6	1083	7.4	1058	25.6
Outdoors, sports arena	394	0.9	239	4.7	292	8.1	339	1.1	285	14.8
Outdoors, park/golf course	373	4.1	239	13.7	282	24.3	320	5.5	282	47.6
Outdoors, other location	881	3.0	516	12.9	619	25.8	753	3.0	616	44.7
Outdoors, not specified	1237	0.2	962	0.2	1027	0.1	1033	0.2	1064	0.8
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	0.3	0	0.9	-1	0.0	0	1.3

Philadelphia: City-wide, Demographic Group=African americans

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1670	76.1	1170	65.7	1250	68.2	1426	67.8	1389	277.8
In transit, bus	2967	12.2	2108	17.0	2110	14.4	2528	16.1	2398	59.8
In transit, truck	-1	0.0	1369	2.6	1430	2.8	-1	0.0	1400	5.4
In transit, van	-1	0.0	1173	0.2	1251	0.3	-1	0.0	1221	0.5
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	936	10.2	687	9.3	784	13.4	808	7.8	805	40.6
Outdoors, along a roadway	1430	28.7	1014	60.7	1120	91.3	1233	32.1	1148	212.8
In transit, motorcycle	1867	0.6	1172	0.9	1342	0.5	1801	0.9	1535	2.9
Indoors, service station	-1	0.0	1021	0.5	966	0.5	-1	0.0	993	1.0
Outdoors, service station	-1	0.0	0	0.3	0	0.3	-1	0.0	0	0.6
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	1923	0.1	1971	0.2	-1	0.0	1948	0.3
Indoors, home	601	1726.1	426	1685.1	433	1686.0	514	1753.7	494	6850.9
Indoors, office	762	3.2	476	27.0	492	26.7	642	6.4	514	63.3
Indoors, store	714	13.3	496	19.8	518	31.1	598	14.6	561	78.9
Indoors, restaurant	1163	15.1	824	5.1	905	2.9	1069	10.6	1060	33.8
Indoors, mfg. facility	796	33.3	563	14.5	565	7.7	651	21.4	689	76.8
Indoors, school	816	93.8	570	111.7	580	67.5	669	126.1	660	399.1
Indoors, church	484	48.4	332	35.8	354	36.9	413	45.8	403	167.0
Indoors, shopping mall	3039	1.1	2272	2.1	2428	1.6	2421	2.3	2478	7.1
Indoors, auditorium	222	1.9	148	3.3	158	2.3	188	3.7	176	11.2
Indoors, health care facility	457	27.6	335	45.3	354	63.7	370	35.6	369	172.1
Indoors, public building	525	1.0	406	3.9	432	9.0	412	1.6	429	15.5
Indoors, other location	1218	51.1	909	19.9	1000	18.4	1066	33.8	1094	123.3
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1008	6.0	653	27.0	718	36.1	904	9.4	740	78.5
Outdoors, school grounds	1489	5.1	1096	7.6	1165	4.3	1220	8.1	1228	25.2
Outdoors, sports arena	469	5.0	327	8.7	350	6.2	394	9.9	378	29.8
Outdoors, park/golf course	-1	0.0	313	2.8	335	1.9	-1	0.0	322	4.7
Outdoors, other location	984	0.1	719	4.6	814	11.2	-1	0.1	788	15.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.1	1260	0.2
In transit, train	-1	0.0	962	2.4	930	2.6	-1	0.0	945	5.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1630	68.6	1171	67.0	1339	68.5	1453	65.4	1399	269.5
In transit, bus	2939	9.3	2124	13.1	2254	12.0	2617	11.9	2448	46.3
In transit, truck	-1	0.0	1358	2.4	1516	2.6	-1	0.0	1440	5.1
In transit, van	1586	3.0	1119	4.8	1300	3.2	1445	4.9	1345	15.9
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	899	10.0	677	10.6	823	13.6	794	9.0	799	43.2
Outdoors, along a roadway	1340	54.1	990	100.5	1174	114.7	1183	74.9	1148	344.3
In transit, motorcycle	1834	0.4	1182	0.7	1464	0.4	1845	0.6	1564	2.1
Indoors, service station	-1	0.0	1038	0.4	1047	0.5	-1	0.0	1043	0.9
Outdoors, service station	-1	0.0	0	0.3	0	0.3	-1	0.0	0	0.6
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	1912	0.1	2039	0.1	-1	0.0	1978	0.3
Indoors, home	596	1747.1	429	1671.2	465	1666.8	530	1753.2	506	6838.3
Indoors, office	703	4.9	475	30.0	520	28.5	609	9.0	525	72.5
Indoors, store	689	12.1	492	21.3	552	30.7	600	14.0	565	78.1
Indoors, restaurant	1139	14.2	810	6.0	955	3.6	1067	11.0	1040	34.7
Indoors, mfg. facility	769	29.2	561	13.0	600	7.1	664	18.7	683	68.0
Indoors, school	784	77.8	567	83.2	612	50.7	670	97.0	661	308.8
Indoors, church	465	41.0	331	36.6	375	38.9	412	43.6	398	160.0
Indoors, shopping mall	2896	1.0	2239	1.9	2625	1.4	2470	2.1	2504	6.5
Indoors, auditorium	217	1.7	149	3.0	171	2.1	196	3.4	180	10.2
Indoors, health care facility	453	23.4	342	39.4	383	56.0	386	30.4	384	149.2
Indoors, public building	499	0.9	406	3.5	467	8.0	426	1.4	450	13.9
Indoors, other location	1208	45.5	912	20.1	1071	18.0	1117	31.6	1110	115.3
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	953	6.8	653	29.7	761	51.3	919	9.8	757	97.5
Outdoors, school grounds	1424	3.7	1094	5.5	1250	3.2	1247	5.8	1237	18.1
Outdoors, sports arena	455	4.5	328	8.3	382	6.1	408	9.0	386	27.9
Outdoors, park/golf course	-1	0.0	311	2.5	360	1.7	-1	0.0	331	4.2
Outdoors, other location	873	0.8	699	6.4	825	15.6	749	1.1	790	23.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	1254	0.1
In transit, train	-1	0.0	971	2.2	1007	2.4	-1	0.0	990	4.6
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1504	42.8	1031	54.0	1133	73.0	1280	44.0	1212	213.8
In transit, bus	2847	7.7	1851	5.8	1871	3.0	2246	7.8	2294	24.3
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	1022	1.8	1182	6.7	-1	0.0	1148	8.4
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	888	8.2	600	15.6	693	13.6	791	11.2	718	48.5
Outdoors, along a roadway	1407	45.6	912	60.4	1037	56.4	1208	53.3	1122	215.7
In transit, motorcycle	-1	0.0	1078	0.6	1122	1.7	-1	0.0	1111	2.3
Indoors, service station	-1	0.0	-1	0.1	923	0.3	-1	0.0	909	0.3
Outdoors, service station	-1	0.0	0	0.2	0	0.5	-1	0.0	0	0.7
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	577	1832.3	393	1821.3	413	1817.2	493	1867.8	470	7338.5
Indoors, office	743	4.5	464	1.9	416	2.0	619	3.2	606	11.7
Indoors, store	629	39.7	439	44.8	473	77.3	521	33.4	505	195.1
Indoors, restaurant	1153	23.9	772	9.5	878	6.6	1032	17.4	1021	57.4
Indoors, mfg. facility	789	17.7	531	18.5	550	12.1	635	11.4	631	59.7
Indoors, school	750	86.1	524	73.9	541	36.2	607	99.1	620	295.3
Indoors, church	434	7.1	290	7.3	339	4.1	394	9.3	369	27.7
Indoors, shopping mall	3130	2.1	2213	2.9	2362	1.6	2539	3.2	2537	9.8
Indoors, auditorium	165	4.7	121	9.6	140	11.9	133	9.3	136	35.5
Indoors, health care facility	484	5.3	342	8.6	358	8.4	386	8.4	383	30.7
Indoors, public building	497	9.4	360	3.9	395	1.6	395	7.1	433	21.9
Indoors, other location	1148	9.1	826	10.9	964	9.8	996	8.2	975	38.1
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	846	9.8	580	16.6	623	22.5	747	10.1	669	59.0
Outdoors, school grounds	1364	1.1	974	1.6	1051	0.9	1100	1.8	1110	5.5
Outdoors, sports arena	-1	0.0	295	4.1	368	7.2	-1	0.0	342	11.3
Outdoors, park/golf course	375	3.0	298	2.5	340	5.8	299	1.8	334	13.0
Outdoors, other location	962	0.1	631	7.7	694	27.6	765	0.2	682	35.6
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1464	72.7	939	82.2	1050	86.4	1242	78.2	1163	319.6
In transit, bus	2946	3.4	1811	4.4	1873	3.0	2479	4.2	2266	15.0
In transit, truck	1797	3.3	1175	9.4	1289	7.1	1538	4.0	1356	23.7
In transit, van	1429	0.6	915	1.2	1066	1.1	1276	1.0	1126	3.9
Indoors, public garage	-1	0.0	561	0.5	698	1.6	-1	0.0	666	2.0
Outdoors, in a parking lot	889	21.4	562	16.1	649	19.8	711	18.3	713	75.6
Outdoors, along a roadway	1311	52.0	831	77.5	947	102.5	1102	55.6	1012	287.6
In transit, motorcycle	-1	0.0	982	4.7	1106	11.5	-1	0.0	1070	16.2
Indoors, service station	-1	0.0	846	0.5	885	1.3	-1	0.0	891	1.8
Outdoors, service station	0	0.3	0	0.6	0	1.0	0	0.4	0	2.3
Indoors, residential garage	1098	1.2	723	1.4	781	0.9	860	1.7	865	5.2
Indoors, in a repair shop	-1	0.0	-1	0.1	-1	0.1	-1	0.0	1729	0.1
Indoors, home	545	1612.0	356	1595.5	387	1610.0	466	1637.1	439	6454.6
Indoors, office	565	54.0	386	54.3	417	43.7	459	57.2	458	209.2
Indoors, store	619	33.8	408	44.7	452	53.2	530	36.8	491	168.5
Indoors, restaurant	1097	53.5	700	38.8	770	27.6	916	52.3	900	172.2
Indoors, mfg. facility	746	37.7	489	32.3	501	20.9	592	38.3	596	129.2
Indoors, school	739	108.2	488	79.8	513	42.3	592	106.6	605	337.0
Indoors, church	461	13.2	301	15.0	326	13.9	374	16.2	363	58.3
Indoors, shopping mall	2822	5.3	2038	2.9	2247	1.4	2354	4.4	2455	13.9
Indoors, auditorium	173	2.0	114	3.7	125	4.5	151	3.4	136	13.6
Indoors, health care facility	460	36.9	303	28.6	332	33.7	397	35.4	378	134.5
Indoors, public building	502	5.4	350	2.7	380	1.8	406	4.2	429	14.1
Indoors, other location	1163	21.5	767	30.4	887	20.7	1021	27.3	947	99.8
Indoors, not specified	981	0.2	768	0.4	983	0.3	782	0.1	884	1.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	857	12.8	543	28.0	615	44.8	736	15.0	644	100.6
Outdoors, school grounds	1415	6.6	934	7.5	1053	4.8	1174	7.5	1144	26.4
Outdoors, sports arena	-1	0.0	277	4.4	310	7.3	-1	0.0	297	11.7
Outdoors, park/golf course	456	1.4	263	11.4	291	33.5	411	2.2	295	48.5
Outdoors, other location	-1	0.0	596	4.9	677	7.5	-1	0.0	645	12.4
Outdoors, not specified	1252	0.7	896	0.1	-1	0.0	1018	0.5	1129	1.4
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1462	86.2	906	92.9	1037	98.7	1237	89.3	1152	367.1
In transit, bus	2729	7.6	1648	5.4	1816	3.6	2255	7.0	2201	23.6
In transit, truck	1835	2.8	1108	5.1	1227	3.7	1515	3.8	1370	15.4
In transit, van	1450	8.3	901	9.2	1024	8.6	1187	9.6	1135	35.6
Indoors, public garage	851	6.7	541	3.2	628	1.2	725	5.7	734	16.9
Outdoors, in a parking lot	836	10.9	536	11.7	609	12.9	705	10.8	666	46.3
Outdoors, along a roadway	1248	50.5	773	79.1	901	97.4	1038	61.1	956	288.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, service station	1258	0.5	865	0.4	961	0.3	1004	0.5	1037	1.7
Outdoors, service station	-1	0.1	0	0.1	0	0.2	-1	0.1	0	0.4
Indoors, residential garage	1206	1.4	693	1.1	848	0.6	1115	1.4	1004	4.4
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	529	1592.0	335	1549.8	375	1545.2	450	1607.9	423	6295.0
Indoors, office	587	76.8	377	85.5	403	87.7	471	83.6	456	333.7
Indoors, store	595	42.1	378	43.0	427	47.0	490	39.8	470	172.0
Indoors, restaurant	1062	20.6	650	21.0	745	22.5	900	20.9	836	84.9
Indoors, mfg. facility	699	26.5	457	29.0	503	27.5	561	27.7	553	110.8
Indoors, school	708	105.2	457	81.5	495	49.6	568	104.5	574	340.8
Indoors, church	443	23.5	274	18.7	314	15.5	381	23.8	362	81.5
Indoors, shopping mall	2788	3.3	1855	2.3	2219	2.0	2382	3.0	2362	10.7
Indoors, auditorium	189	5.5	109	6.7	134	5.6	163	7.4	148	25.2
Indoors, health care facility	450	19.3	292	19.2	332	13.6	375	21.5	365	73.5
Indoors, public building	525	6.3	330	10.9	377	15.0	449	7.3	401	39.5
Indoors, other location	1143	27.7	736	26.4	846	22.7	989	27.4	935	104.2
Indoors, not specified	999	0.5	683	0.5	842	1.0	805	0.3	836	2.4
Outdoors, construction	1419	4.7	920	5.7	1018	4.3	1146	5.4	1119	20.1
Outdoors, residential grounds	782	16.0	495	40.2	584	61.8	650	21.1	591	139.1
Outdoors, school grounds	1361	5.7	869	6.0	996	4.1	1111	6.3	1088	22.2
Outdoors, sports arena	402	0.2	251	3.1	311	6.5	347	0.4	295	10.1
Outdoors, park/golf course	398	3.7	250	11.0	295	15.5	333	5.0	297	35.2
Outdoors, other location	902	5.4	541	14.9	638	33.1	777	5.4	651	58.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	769	0.4	857	0.4	-1	0.0	814	0.8
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1456	107.1	885	116.0	1027	118.6	1235	112.8	1144	454.5
In transit, bus	2619	7.9	1592	7.4	1779	4.2	2113	9.2	2069	28.8
In transit, truck	1802	1.4	1088	4.5	1235	9.4	1522	2.0	1277	17.4
In transit, van	-1	0.0	842	1.4	943	3.3	-1	0.1	921	4.8
Indoors, public garage	867	0.4	541	0.4	671	0.4	738	0.4	704	1.6
Outdoors, in a parking lot	833	10.3	515	11.5	584	11.4	721	10.8	658	44.1
Outdoors, along a roadway	1271	48.7	765	66.3	903	89.7	1070	51.6	971	256.3
In transit, motorcycle	1648	1.1	865	0.2	-1	0.0	1519	0.7	1525	2.0
Indoors, service station	-1	0.0	907	0.1	1003	0.2	-1	0.0	958	0.3
Outdoors, service station	-1	0.1	0	0.6	0	0.7	-1	0.1	0	1.5
Indoors, residential garage	1180	0.2	780	0.6	874	0.4	972	0.3	888	1.5
Indoors, in a repair shop	1726	0.1	1165	0.2	-1	0.1	1346	0.2	1364	0.6
Indoors, home	520	1526.8	326	1476.8	372	1455.6	443	1541.8	417	6001.0
Indoors, office	572	126.2	371	120.7	410	118.9	462	124.4	455	490.3
Indoors, store	588	47.2	371	46.4	428	46.3	490	46.1	470	186.0
Indoors, restaurant	1043	23.9	639	30.1	745	32.5	896	26.3	815	112.8
Indoors, mfg. facility	703	30.6	441	28.0	500	22.5	585	29.9	564	111.0
Indoors, school	689	132.8	451	106.5	493	53.3	557	145.1	563	437.7
Indoors, church	437	7.8	283	10.7	317	9.7	369	9.3	345	37.6
Indoors, shopping mall	2930	2.8	1842	4.9	2095	4.7	2554	3.6	2266	16.0
Indoors, auditorium	172	3.6	106	8.0	131	12.8	147	4.4	132	28.8
Indoors, health care facility	477	18.3	305	19.8	341	23.0	400	19.6	377	80.7
Indoors, public building	518	4.4	310	6.6	370	5.6	474	5.2	407	21.8
Indoors, other location	1163	26.8	734	24.1	854	19.7	976	26.4	943	97.2
Indoors, not specified	991	0.5	694	0.4	799	0.2	813	0.5	835	1.7
Outdoors, construction	-1	0.0	825	0.5	933	0.5	-1	0.0	881	1.0
Outdoors, residential grounds	781	16.8	485	41.3	569	86.6	654	17.8	579	162.6
Outdoors, school grounds	1342	6.2	852	6.4	982	3.9	1111	7.4	1081	23.9
Outdoors, sports arena	425	1.4	244	7.2	289	9.2	368	2.2	291	20.1
Outdoors, park/golf course	372	5.3	243	17.5	283	36.0	314	8.5	283	67.4
Outdoors, other location	759	0.9	525	17.3	628	23.8	614	1.2	589	43.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	1.5	0	4.4	-1	0.0	0	5.8

Philadelphia: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1552	52.2	892	78.4	1052	92.5	1322	57.6	1156	280.7
In transit, bus	3402	3.1	1772	0.9	1562	1.3	2733	2.0	2699	7.2
In transit, truck	1702	21.4	1151	12.4	1344	6.0	1497	19.4	1483	59.2
In transit, van	1299	5.3	798	9.0	968	6.1	1109	9.7	1021	30.1
Indoors, public garage	-1	0.0	575	0.5	632	0.5	-1	0.0	605	1.0
Outdoors, in a parking lot	942	3.5	530	9.4	615	16.1	798	3.6	646	32.6
Outdoors, along a roadway	1339	49.2	779	62.1	923	78.9	1131	51.8	1015	242.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1528	13.5	972	2.4	-1	0.0	1241	8.7	1372	24.7
Outdoors, service station	-1	0.0	0	1.0	0	1.2	-1	0.0	0	2.2
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	517	1561.7	328	1524.3	375	1482.3	443	1586.6	417	6154.9
Indoors, office	563	76.8	369	93.0	413	97.7	452	72.1	443	339.7
Indoors, store	663	1.4	370	14.2	416	21.1	543	2.3	416	39.0
Indoors, restaurant	1109	33.4	651	42.0	768	45.6	946	33.1	848	154.1
Indoors, mfg. facility	-1	0.0	423	1.4	462	1.5	-1	0.0	443	2.9
Indoors, school	688	210.4	450	128.4	505	114.8	559	189.3	570	642.9
Indoors, church	492	9.4	282	8.9	311	7.7	384	8.7	371	34.7
Indoors, shopping mall	2493	0.5	1741	0.8	2006	0.4	1979	0.8	2019	2.5
Indoors, auditorium	176	13.2	107	21.8	129	15.8	150	24.2	138	75.0
Indoors, health care facility	462	15.3	276	13.3	327	7.2	388	17.4	373	53.2
Indoors, public building	-1	0.0	299	5.2	346	19.4	-1	0.0	336	24.6
Indoors, other location	1048	14.7	675	32.2	797	29.9	880	29.4	818	106.2
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	907	2.1	1026	2.2	-1	0.0	969	4.3
Outdoors, residential grounds	763	56.9	497	64.2	595	70.8	638	63.3	618	255.2
Outdoors, school grounds	1197	6.6	821	10.4	971	8.4	960	11.1	966	36.6
Outdoors, sports arena	-1	0.0	248	1.6	313	6.4	-1	0.0	300	8.0
Outdoors, park/golf course	379	11.5	250	35.2	300	53.6	329	16.7	297	117.1
Outdoors, other location	-1	0.0	532	8.8	668	20.6	-1	0.0	627	29.4
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1486	55.9	932	65.0	1068	75.2	1275	58.1	1172	254.3
In transit, bus	2757	12.8	1737	10.9	1854	6.2	2236	13.9	2211	43.8
In transit, truck	1812	1.5	1158	1.4	1308	2.3	1485	1.3	1428	6.5
In transit, van	1467	5.0	915	6.6	1034	5.6	1213	7.3	1145	24.6
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, in a parking lot	846	6.1	548	7.5	624	9.1	716	6.0	671	28.6
Outdoors, along a roadway	1309	65.5	808	98.0	937	131.1	1107	70.2	1002	364.8
In transit, motorcycle	1674	0.8	935	0.3	1053	0.3	1539	0.6	1412	2.1
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	0	0.1	-1	0.1	-1	0.1	-1	0.1	0	0.3
Indoors, residential garage	1192	0.7	719	1.2	874	0.8	1091	1.1	948	3.8
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	536	1607.2	349	1583.7	386	1585.0	459	1629.8	433	6405.7
Indoors, office	606	1.4	366	4.9	415	7.9	514	1.5	427	15.7
Indoors, store	607	22.7	386	24.7	436	26.2	515	23.3	482	96.9
Indoors, restaurant	1100	9.8	681	14.6	790	17.3	967	10.5	854	52.3
Indoors, mfg. facility	801	0.2	444	0.3	534	0.1	726	0.3	627	0.9
Indoors, school	720	279.7	476	210.7	509	125.6	580	281.5	589	897.6
Indoors, church	451	12.7	288	11.8	322	11.5	382	12.9	363	49.0
Indoors, shopping mall	2846	2.6	1932	2.8	2224	2.3	2406	2.7	2349	10.3
Indoors, auditorium	182	4.9	112	7.2	134	7.1	162	7.3	145	26.5
Indoors, health care facility	452	12.6	301	12.6	337	14.2	384	14.1	368	53.4
Indoors, public building	507	2.4	353	4.0	401	6.4	439	2.7	412	15.4
Indoors, other location	1202	6.2	753	8.2	860	12.1	972	7.2	921	33.7
Indoors, not specified	-1	0.0	766	0.3	977	0.3	-1	0.0	875	0.5
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	816	27.7	516	53.2	593	81.8	694	30.6	620	193.3
Outdoors, school grounds	1375	14.8	912	15.5	1022	10.0	1116	16.2	1111	56.6
Outdoors, sports arena	414	3.1	265	7.0	317	10.0	356	4.0	321	24.1
Outdoors, park/golf course	413	3.0	259	17.6	299	29.0	365	4.0	298	53.7
Outdoors, other location	929	0.2	564	13.8	657	30.2	738	0.3	630	44.6
Outdoors, not specified	1427	0.2	984	0.3	1073	0.2	1146	0.3	1138	1.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1463	144.5	966	118.8	1099	130.7	1238	131.8	1204	525.8
In transit, bus	2926	2.6	1975	0.5	-1	0.0	2350	1.7	2630	4.8
In transit, truck	1806	8.1	1243	20.2	1388	41.8	1539	10.2	1413	80.3
In transit, van	-1	0.0	1062	3.6	1063	10.1	-1	0.0	1062	13.7
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	831	9.4	535	15.9	498	21.7	664	12.8	596	59.9
Outdoors, along a roadway	1206	113.2	814	120.4	912	84.8	1014	132.8	990	451.2
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1549	0.1	1004	0.3	1080	0.2	1237	0.2	1161	0.8
Outdoors, service station	-1	0.1	0	2.4	0	2.5	0	0.2	0	5.1
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	552	1560.9	359	1485.1	384	1378.4	470	1590.8	444	6015.2
Indoors, office	578	63.4	399	101.7	428	75.6	469	69.3	458	310.0
Indoors, store	623	9.7	422	12.5	452	9.6	498	11.9	494	43.7
Indoors, restaurant	1082	19.4	701	15.1	776	9.8	918	17.5	894	61.8
Indoors, mfg. facility	-1	0.0	481	30.9	516	97.9	-1	0.0	508	128.8
Indoors, school	727	128.9	485	80.7	512	36.7	586	125.4	606	371.6
Indoors, church	445	2.0	285	8.9	315	11.1	428	3.1	328	25.1
Indoors, shopping mall	3492	1.0	1935	1.5	2345	0.8	3301	1.6	2779	4.9
Indoors, auditorium	184	1.8	118	18.7	148	48.8	179	1.1	141	70.4
Indoors, health care facility	466	6.2	312	6.5	357	3.8	388	7.2	383	23.7
Indoors, public building	555	21.7	339	20.9	415	10.6	503	26.7	462	79.9
Indoors, other location	1090	40.2	765	28.8	943	18.0	955	35.0	953	122.1
Indoors, not specified	-1	0.1	956	0.1	-1	0.1	1123	0.2	1114	0.5
Outdoors, construction	-1	0.0	995	5.0	1065	5.4	-1	0.0	1031	10.3
Outdoors, residential grounds	734	7.9	515	21.1	553	29.7	599	10.1	569	68.9
Outdoors, school grounds	1384	6.6	937	9.3	1032	5.0	1130	10.3	1110	31.3
Outdoors, sports arena	393	5.6	276	11.6	315	35.3	322	3.3	315	55.9
Outdoors, park/golf course	427	3.0	266	7.5	308	6.5	369	2.4	317	19.5
Outdoors, other location	766	1.8	574	35.7	650	133.1	616	1.2	635	171.7
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	1589	1.8	881	0.3	-1	0.0	1502	1.2	1488	3.3
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1474	132.3	914	135.3	1041	131.6	1232	138.3	1165	537.4
In transit, bus	2719	1.1	1712	1.7	1916	1.8	2182	0.9	2053	5.6
In transit, truck	1803	18.4	1120	19.5	1219	17.3	1515	17.1	1411	72.3
In transit, van	1480	6.5	935	8.1	1035	11.7	1231	7.0	1139	33.4
Indoors, public garage	876	14.3	562	12.2	649	8.0	725	15.4	716	49.9
Outdoors, in a parking lot	868	13.0	547	16.2	613	16.3	713	13.7	674	59.1
Outdoors, along a roadway	1257	49.9	793	69.9	914	76.4	1034	59.9	976	256.1
In transit, motorcycle	-1	0.0	967	0.5	1217	0.4	-1	0.0	1075	0.9
Indoors, service station	1278	14.7	821	9.3	911	5.3	1040	13.7	1057	43.0
Outdoors, service station	0	0.3	0	0.5	0	0.5	0	0.4	0	1.6
Indoors, residential garage	1158	4.0	718	4.5	846	3.0	997	5.7	936	17.2
Indoors, in a repair shop	1963	7.2	1313	1.3	-1	0.1	1574	4.5	1762	13.0
Indoors, home	525	1402.1	333	1371.8	373	1335.7	449	1431.3	421	5541.0
Indoors, office	578	232.7	375	204.2	411	214.5	467	229.2	461	880.5
Indoors, store	595	39.5	383	45.0	433	55.4	493	36.2	469	176.2
Indoors, restaurant	1022	36.4	669	31.3	754	24.0	853	33.3	837	125.0
Indoors, mfg. facility	692	37.7	451	54.9	509	61.1	556	41.6	538	195.2
Indoors, school	689	20.5	444	16.5	495	12.6	555	21.1	558	70.7
Indoors, church	457	10.5	291	11.7	324	9.8	384	13.3	364	45.3
Indoors, shopping mall	3017	1.6	1891	1.2	2077	1.0	2427	1.6	2411	5.4
Indoors, auditorium	184	7.4	110	2.8	133	4.6	162	4.7	156	19.4
Indoors, health care facility	480	16.3	305	20.3	331	21.7	394	18.5	371	76.7
Indoors, public building	494	6.4	331	12.2	368	25.6	409	5.5	380	49.7
Indoors, other location	1171	44.1	745	47.0	873	40.5	985	42.7	941	174.2
Indoors, not specified	1140	5.6	720	2.0	790	0.6	918	4.2	981	12.4
Outdoors, construction	1400	7.0	908	10.0	1017	6.7	1135	8.8	1098	32.5
Outdoors, residential grounds	805	7.2	505	22.8	609	51.5	681	9.2	606	90.7
Outdoors, school grounds	1490	0.7	950	1.0	1065	0.7	1181	1.0	1160	3.3
Outdoors, sports arena	351	1.2	252	4.7	300	6.4	278	1.0	286	13.4
Outdoors, park/golf course	395	3.6	256	11.1	295	18.2	324	5.9	297	38.9
Outdoors, other location	895	16.6	556	30.8	655	36.3	761	21.3	686	105.0
Outdoors, not specified	1578	0.1	1041	0.6	1079	0.3	1435	0.2	1163	1.2
In transit, train	1740	1.2	826	1.1	878	0.9	1472	0.8	1238	4.1
In transit, airplane	-1	0.0	0	2.2	0	7.5	-1	0.0	0	9.7

Philadelphia: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1458	97.8	946	99.9	1063	107.1	1248	100.6	1175	405.4
In transit, bus	2646	3.3	1672	1.6	1793	1.6	2175	2.5	2184	9.1
In transit, truck	1670	7.5	1115	1.3	-1	0.0	1381	4.6	1516	13.4
In transit, van	1654	0.2	1016	0.7	1075	1.5	1321	0.3	1128	2.7
Indoors, public garage	917	0.5	600	0.4	660	0.2	788	0.5	761	1.6
Outdoors, in a parking lot	847	5.2	558	9.0	644	11.7	703	5.9	663	31.8
Outdoors, along a roadway	1263	34.6	823	53.1	953	67.9	1060	38.9	994	194.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	882	0.1	920	0.2	-1	0.0	907	0.3
Outdoors, service station	-1	0.1	-1	0.0	-1	0.1	-1	0.0	0	0.2
Indoors, residential garage	1154	1.0	777	0.3	-1	0.1	952	0.7	1026	2.0
Indoors, in a repair shop	1815	0.2	1249	0.3	1346	0.2	1412	0.3	1437	1.0
Indoors, home	548	1826.7	357	1769.9	388	1736.4	464	1843.7	441	7176.8
Indoors, office	618	10.2	407	6.5	434	5.1	512	7.2	512	29.1
Indoors, store	609	35.4	403	52.0	449	71.6	496	36.1	474	195.1
Indoors, restaurant	1103	22.0	687	22.6	799	19.3	952	22.3	887	86.2
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	725	33.1	478	43.1	516	31.5	608	47.4	578	155.1
Indoors, church	463	9.9	294	11.6	327	11.0	388	12.7	366	45.3
Indoors, shopping mall	2786	3.2	1954	2.2	2222	2.3	2226	2.0	2351	9.7
Indoors, auditorium	196	12.0	119	13.0	135	14.4	162	14.4	152	53.9
Indoors, health care facility	489	6.7	322	9.2	359	8.9	407	8.2	387	33.0
Indoors, public building	521	6.5	345	4.5	403	4.8	445	5.9	438	21.8
Indoors, other location	1198	26.8	779	29.1	894	22.3	1034	30.6	978	108.8
Indoors, not specified	-1	0.0	715	0.2	906	0.8	-1	0.0	863	1.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	770	9.6	516	25.0	607	31.4	643	14.6	605	80.7
Outdoors, school grounds	1486	1.4	910	2.7	1098	2.6	1326	2.2	1158	8.8
Outdoors, sports arena	405	3.6	265	3.1	316	6.3	342	2.1	330	15.0
Outdoors, park/golf course	403	1.2	264	13.7	304	29.9	335	2.4	296	47.1
Outdoors, other location	924	1.1	569	8.8	646	18.8	698	1.4	636	30.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	1605	0.3	-1	0.0	-1	0.0	1400	0.2	1468	0.5
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1497	122.5	932	115.6	1068	116.1	1262	120.8	1195	475.1
In transit, bus	2707	4.8	1663	4.6	1823	4.2	2210	4.9	2116	18.4
In transit, truck	1776	5.0	1120	5.2	1294	5.5	1557	5.4	1431	21.1
In transit, van	-1	0.1	908	1.4	1057	1.2	-1	0.0	992	2.7
Indoors, public garage	918	3.2	577	1.8	634	0.9	757	2.6	766	8.5
Outdoors, in a parking lot	859	6.1	548	10.0	621	13.1	741	7.1	664	36.4
Outdoors, along a roadway	1270	32.9	805	46.2	931	56.8	1059	35.9	989	171.7
In transit, motorcycle	-1	0.0	943	4.3	1088	9.4	-1	0.0	1043	13.7
Indoors, service station	1401	0.1	903	0.2	966	0.1	1064	0.2	1069	0.6
Outdoors, service station	0	0.2	0	0.7	0	0.9	0	0.3	0	2.1
Indoors, residential garage	-1	0.1	-1	0.1	-1	0.0	1210	0.1	1177	0.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, home	531	1451.0	341	1451.9	381	1463.1	454	1483.5	427	5849.5
Indoors, office	572	249.3	372	242.3	405	214.8	461	253.0	455	959.5
Indoors, store	588	64.8	378	70.3	437	62.4	491	70.4	472	267.8
Indoors, restaurant	1061	43.2	665	37.9	758	39.5	898	39.1	852	159.7
Indoors, mfg. facility	735	15.5	473	15.9	510	9.0	592	17.5	585	57.8
Indoors, school	694	53.2	451	41.2	495	22.5	557	54.8	566	171.6
Indoors, church	440	13.7	282	14.6	321	14.0	373	16.1	354	58.5
Indoors, shopping mall	2921	3.8	1932	2.7	2277	1.8	2442	3.9	2455	12.2
Indoors, auditorium	180	5.2	111	6.1	129	9.3	152	6.0	140	26.5
Indoors, health care facility	453	35.4	290	30.8	332	25.9	382	36.2	369	128.3
Indoors, public building	524	6.1	334	6.9	343	11.2	423	6.2	393	30.4
Indoors, other location	1160	36.5	727	31.6	862	25.7	990	34.2	948	128.0
Indoors, not specified	1198	0.5	755	0.4	854	0.2	973	0.5	979	1.5
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	754	3.8	508	17.7	616	40.6	609	5.4	595	67.4
Outdoors, school grounds	1547	0.5	891	1.6	1069	1.5	1389	0.7	1116	4.4
Outdoors, sports arena	456	0.2	254	5.6	297	9.0	424	0.3	286	15.0
Outdoors, park/golf course	416	1.2	255	6.9	288	20.5	375	1.6	290	30.1
Outdoors, other location	884	0.7	557	8.9	673	28.5	718	0.7	651	38.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	1820	0.5	1067	0.5	1182	0.3	1539	0.6	1420	1.9
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1486	91.1	966	102.8	1069	100.5	1233	95.0	1179	389.4
In transit, bus	3059	2.9	1652	12.2	1842	12.5	2460	1.7	1920	29.3
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1508	1.2	1038	2.1	1113	1.5	1206	2.4	1188	7.2
Indoors, public garage	-1	0.1	-1	0.0	-1	0.0	-1	0.0	957	0.1
Outdoors, in a parking lot	833	10.6	539	29.4	601	21.8	666	12.8	621	74.7
Outdoors, along a roadway	1253	28.6	813	42.9	941	37.0	1082	35.4	1000	143.9
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	1078	7.3	732	10.1	797	6.3	857	11.8	856	35.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	553	1847.8	360	1684.2	389	1560.8	472	1849.8	448	6942.7
Indoors, office	534	8.4	357	4.2	376	5.9	423	6.2	438	24.8
Indoors, store	568	29.5	392	37.0	453	55.4	441	30.1	458	152.0
Indoors, restaurant	1233	12.2	728	5.6	748	10.0	1007	8.5	969	36.3
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	655	18.8	432	28.6	508	17.3	571	32.1	535	96.8
Indoors, church	449	11.1	271	12.6	294	7.2	337	15.5	339	46.4
Indoors, shopping mall	3343	6.8	2305	1.2	-1	0.0	2653	4.1	3007	12.1
Indoors, auditorium	155	4.1	149	6.6	158	6.3	124	2.6	150	19.6
Indoors, health care facility	539	36.0	360	41.2	374	21.5	445	49.2	434	147.8
Indoors, public building	521	1.6	323	3.5	353	13.8	419	1.0	364	19.8
Indoors, other location	1124	24.7	717	50.4	780	44.9	933	27.2	844	147.2
Indoors, not specified	1204	1.7	776	0.3	-1	0.0	1004	1.1	1091	3.1
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	776	12.1	546	77.1	626	229.3	613	19.4	613	337.8
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	267	6.4	343	6.9	-1	0.0	306	13.3
Outdoors, park/golf course	488	3.4	263	6.5	310	25.3	437	2.0	325	37.1
Outdoors, other location	-1	0.0	563	19.0	659	24.1	-1	0.0	617	43.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1493	146.0	923	146.6	1065	139.4	1262	151.7	1187	583.7
In transit, bus	2734	9.7	1631	5.0	1853	2.4	2291	8.1	2289	25.3
In transit, truck	1739	22.9	1118	25.6	1238	18.7	1410	27.5	1377	94.6
In transit, van	1419	3.0	919	9.3	1035	8.1	1182	3.8	1062	24.2
Indoors, public garage	966	3.8	590	4.7	642	2.5	786	5.4	750	16.4
Outdoors, in a parking lot	851	9.6	537	10.8	625	11.1	729	10.2	680	41.7
Outdoors, along a roadway	1271	42.8	789	57.8	934	68.5	1046	45.3	986	214.4
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1324	6.1	876	2.7	976	1.2	1057	5.2	1126	15.2
Outdoors, service station	0	0.1	0	0.6	0	0.8	0	0.2	0	1.7
Indoors, residential garage	1436	0.1	771	0.3	814	0.2	-1	0.1	953	0.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	522	1353.9	328	1322.0	371	1297.6	448	1385.8	418	5359.4
Indoors, office	571	284.7	373	262.0	414	323.6	460	268.1	455	1138.5
Indoors, store	611	65.7	391	51.5	439	32.1	506	66.1	500	215.3
Indoors, restaurant	1032	32.4	644	34.5	739	35.1	884	34.1	821	136.1
Indoors, mfg. facility	694	30.0	451	68.7	503	88.9	574	44.0	526	231.6
Indoors, school	710	13.1	457	28.3	502	21.0	585	19.6	539	82.0
Indoors, church	436	14.9	281	16.5	316	13.7	372	16.8	351	61.8
Indoors, shopping mall	2940	3.1	2054	1.2	2456	0.6	2656	1.9	2661	6.8
Indoors, auditorium	174	3.6	106	1.8	138	0.7	156	2.2	151	8.3
Indoors, health care facility	469	15.3	299	4.5	348	1.5	392	10.4	414	31.7
Indoors, public building	519	5.3	322	17.9	385	18.1	477	7.6	391	48.9
Indoors, other location	1199	66.4	754	52.5	815	30.2	986	66.6	971	215.6
Indoors, not specified	1135	6.0	724	1.7	800	0.4	902	4.1	988	12.2
Outdoors, construction	-1	0.0	890	2.7	1015	7.0	-1	0.0	981	9.7
Outdoors, residential grounds	798	2.9	505	29.2	599	54.7	685	3.8	579	90.6
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	359	6.1	253	14.1	296	17.9	291	8.9	290	47.0
Outdoors, other location	886	11.9	551	10.9	672	11.2	738	10.2	715	44.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	1566	0.5	-1	0.1	-1	0.0	1308	0.3	1414	0.9
In transit, airplane	-1	0.0	0	0.8	0	0.8	-1	0.0	0	1.6

Philadelphia: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1402	78.2	915	76.0	1044	75.1	1172	74.4	1135	303.8
In transit, bus	2365	1.8	1541	1.4	1733	0.9	1841	1.6	1918	5.6
In transit, truck	1593	4.6	1059	0.8	-1	0.0	1318	2.8	1446	8.3
In transit, van	1391	2.0	847	3.2	1006	2.2	1237	3.7	1105	11.1
Indoors, public garage	877	0.7	596	0.2	-1	0.1	695	0.5	762	1.5
Outdoors, in a parking lot	880	3.9	550	8.5	624	12.2	734	4.4	654	29.0
Outdoors, along a roadway	1273	33.6	805	36.9	935	46.3	1059	30.9	1005	147.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1234	0.1	-1	0.1	-1	0.1	-1	0.1	1054	0.3
Outdoors, service station	-1	0.0	0	0.6	0	0.6	-1	0.0	0	1.2
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	549	1904.7	356	1864.7	390	1828.5	467	1947.5	441	7545.5
Indoors, office	548	8.4	365	7.6	393	6.6	437	8.7	440	31.4
Indoors, store	599	33.5	397	34.2	442	30.0	491	33.6	483	131.3
Indoors, restaurant	1097	15.6	675	21.8	785	31.8	946	17.6	846	86.8
Indoors, mfg. facility	-1	0.0	430	0.3	475	0.3	-1	0.0	453	0.6
Indoors, school	682	4.6	419	5.2	518	3.8	634	5.5	564	19.1
Indoors, church	445	16.9	280	20.8	309	16.8	358	22.1	345	76.6
Indoors, shopping mall	2974	3.7	1963	3.4	2218	5.0	2575	3.3	2419	15.5
Indoors, auditorium	181	2.0	111	1.0	120	0.7	164	1.3	154	5.0
Indoors, health care facility	487	9.4	315	16.7	350	19.0	383	9.0	368	54.2
Indoors, public building	533	3.1	322	5.4	373	5.0	483	4.9	414	18.4
Indoors, other location	1198	18.8	743	24.3	834	22.4	1023	18.6	930	84.1
Indoors, not specified	1235	1.8	758	0.3	-1	0.0	1053	1.1	1124	3.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	819	11.4	531	32.2	597	63.6	690	14.9	612	122.0
Outdoors, school grounds	1205	0.3	-1	0.0	-1	0.0	986	0.2	1094	0.5
Outdoors, sports arena	-1	0.0	263	3.5	319	3.3	-1	0.0	290	6.8
Outdoors, park/golf course	-1	0.0	279	11.1	320	23.3	-1	0.0	307	34.5
Outdoors, other location	777	0.4	580	3.5	709	10.4	621	0.6	676	14.9
Outdoors, not specified	1234	0.6	870	0.1	-1	0.0	1007	0.4	1118	1.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1462	107.1	934	105.1	1061	102.8	1240	103.4	1176	418.4
In transit, bus	2698	5.9	1583	4.3	1678	3.9	2243	5.3	2120	19.4
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1691	2.8	994	1.3	1073	0.5	1361	2.3	1408	6.8
Indoors, public garage	962	0.6	611	0.4	642	0.2	794	0.6	791	1.8
Outdoors, in a parking lot	834	7.8	543	11.4	647	19.9	696	7.8	661	46.8
Outdoors, along a roadway	1290	35.0	807	40.2	932	51.3	1064	35.3	1007	161.8
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.1	1052	0.1	-1	0.1	-1	0.1	1296	0.4
Outdoors, service station	0	0.5	0	2.7	0	2.7	0	0.9	0	6.9
Indoors, residential garage	-1	0.1	-1	0.0	-1	0.0	-1	0.1	931	0.2
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	532	1501.5	338	1475.5	381	1524.4	456	1524.5	427	6025.9
Indoors, office	579	244.9	380	212.6	413	157.0	466	249.9	467	864.4
Indoors, store	578	47.3	376	61.3	431	65.0	479	52.9	458	226.5
Indoors, restaurant	1064	41.1	651	47.8	751	41.1	896	49.3	836	179.2
Indoors, mfg. facility	-1	0.0	456	45.4	515	79.3	-1	0.0	494	124.7
Indoors, school	690	44.5	456	32.1	525	27.2	552	44.0	568	147.7
Indoors, church	437	16.2	289	18.2	318	28.0	376	15.4	348	77.8
Indoors, shopping mall	2687	4.1	1873	5.5	2097	3.4	2158	5.9	2180	19.0
Indoors, auditorium	182	1.6	111	2.6	130	1.7	155	2.9	142	8.8
Indoors, health care facility	452	43.2	281	49.7	308	27.8	364	51.9	353	172.5
Indoors, public building	596	2.9	366	2.3	416	4.4	461	2.1	459	11.7
Indoors, other location	1175	45.9	761	43.2	882	26.5	1024	43.7	973	159.3
Indoors, not specified	1271	0.1	701	1.0	872	3.6	1001	0.2	852	4.9
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	898	4.1	540	15.7	605	23.7	763	6.4	629	50.0
Outdoors, school grounds	1279	0.7	881	1.2	1049	0.8	1032	1.1	1031	3.7
Outdoors, sports arena	348	1.2	252	2.4	331	8.3	280	0.7	315	12.6
Outdoors, park/golf course	501	0.6	302	0.1	-1	0.0	403	0.4	443	1.1
Outdoors, other location	857	0.5	547	2.0	648	4.5	710	0.9	643	7.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1415	139.0	922	144.9	1032	135.2	1179	153.7	1136	572.8
In transit, bus	2686	3.7	1699	5.2	1827	2.8	2189	5.8	2089	17.5
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	-1	0.1	977	0.3	-1	0.0	957	0.4
Indoors, public garage	646	0.2	-1	0.0	-1	0.0	521	0.1	579	0.4
Outdoors, in a parking lot	826	7.5	541	18.8	639	25.9	685	9.5	639	61.7
Outdoors, along a roadway	1256	30.9	801	67.5	922	122.1	1077	38.7	953	259.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1015	0.6	992	1.3	-1	0.0	1000	1.9
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	1184	0.1	803	0.2	865	0.1	965	0.2	935	0.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	540	1721.2	342	1654.2	378	1636.4	459	1709.1	431	6721.0
Indoors, office	593	74.2	369	59.8	394	34.8	472	81.6	472	250.5
Indoors, store	625	16.2	383	19.3	417	29.4	540	14.7	474	79.6
Indoors, restaurant	1152	25.5	705	32.2	738	41.0	963	30.8	865	129.6
Indoors, mfg. facility	774	17.3	493	13.0	520	6.1	610	18.5	624	54.9
Indoors, school	598	8.6	415	3.7	539	1.3	476	5.5	523	19.2
Indoors, church	401	19.2	269	21.1	304	17.2	332	25.5	326	83.0
Indoors, shopping mall	2755	5.0	1836	4.4	2002	9.3	2195	3.2	2167	21.9
Indoors, auditorium	177	22.5	107	27.6	135	17.9	164	34.0	146	102.0
Indoors, health care facility	426	5.2	313	12.4	363	22.8	330	6.7	352	47.1
Indoors, public building	467	2.2	312	6.1	351	6.6	384	2.0	356	16.8
Indoors, other location	1173	15.5	741	17.1	901	10.0	1012	20.4	960	63.0
Indoors, not specified	-1	0.0	681	2.1	753	2.3	-1	0.0	718	4.4
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	773	22.0	524	51.5	603	67.9	650	21.1	607	162.5
Outdoors, school grounds	1512	1.9	818	2.6	1049	1.4	1444	2.9	1208	8.9
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	366	19.4	259	15.7	285	7.5	297	21.6	307	64.3
Outdoors, other location	-1	0.0	537	2.5	695	7.8	-1	0.0	657	10.4
Outdoors, not specified	1203	0.6	825	0.8	930	0.4	974	0.9	970	2.8
In transit, train	1516	2.1	933	0.4	-1	0.0	1243	1.4	1363	3.9
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1385	75.5	904	80.0	1031	97.4	1137	74.2	1106	327.1
In transit, bus	2344	1.1	1589	2.0	1824	2.6	1855	1.7	1845	7.4
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1288	0.9	871	0.2	-1	0.0	1050	0.6	1163	1.6
Indoors, public garage	930	0.4	560	0.5	720	1.6	893	0.3	738	2.9
Outdoors, in a parking lot	779	2.1	521	4.9	592	7.0	641	2.2	602	16.2
Outdoors, along a roadway	1230	28.7	795	35.9	948	51.8	1020	26.2	979	142.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	-1	0.0	0	0.1	0	0.4	-1	0.0	0	0.5
Indoors, residential garage	-1	0.0	1021	0.2	-1	0.1	-1	0.0	1033	0.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	545	1892.6	349	1898.5	384	1849.9	465	1951.7	436	7592.6
Indoors, office	602	15.5	409	5.2	448	2.4	487	10.2	526	33.2
Indoors, store	602	16.3	385	34.6	434	76.3	477	14.1	445	141.3
Indoors, restaurant	937	18.9	638	22.7	736	27.7	747	20.8	756	90.1
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	-1	0.0	502	0.7	536	0.7	-1	0.0	519	1.4
Indoors, church	473	34.9	293	28.3	319	17.6	372	36.7	375	117.5
Indoors, shopping mall	3005	5.6	2038	8.1	2210	4.5	2373	9.0	2376	27.3
Indoors, auditorium	150	3.0	104	4.2	115	2.3	121	4.7	121	14.1
Indoors, health care facility	446	18.3	315	9.4	352	4.4	378	15.0	389	47.1
Indoors, public building	495	4.4	330	6.9	377	4.8	394	5.8	391	21.9
Indoors, other location	1231	37.4	729	18.3	777	22.5	1019	28.2	993	106.4
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1032	2.2	558	13.9	613	23.3	861	2.0	629	41.3
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	397	2.3	267	5.1	302	4.0	313	4.6	308	16.0
Outdoors, park/golf course	-1	0.0	254	2.7	311	3.6	-1	0.0	286	6.3
Outdoors, other location	-1	0.0	557	2.0	655	3.2	-1	0.0	618	5.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1499	79.0	929	67.3	1063	83.9	1249	76.0	1192	306.2
In transit, bus	-1	0.0	2085	1.4	2041	1.5	-1	0.0	2062	2.8
In transit, truck	1873	67.8	1121	82.5	1210	88.2	1589	62.7	1414	301.2
In transit, van	1333	6.6	907	1.2	-1	0.0	1081	4.2	1202	12.0
Indoors, public garage	933	33.8	554	26.4	652	12.6	822	37.0	772	109.8
Outdoors, in a parking lot	893	17.6	572	26.6	635	23.5	735	24.7	693	92.3
Outdoors, along a roadway	1241	158.0	810	205.3	942	251.2	1022	175.7	985	790.2
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1392	43.1	847	11.1	794	3.2	1107	28.3	1204	85.8
Outdoors, service station	0	0.3	0	3.2	0	4.0	0	0.5	0	8.1
Indoors, residential garage	1190	8.8	677	2.0	870	0.3	1135	5.5	1105	16.6
Indoors, in a repair shop	-1	0.0	1598	0.7	1716	0.8	-1	0.0	1659	1.5
Indoors, home	518	1254.1	327	1223.0	363	1151.3	446	1299.5	415	4928.0
Indoors, office	589	55.4	344	53.0	379	30.1	472	41.1	455	179.7
Indoors, store	562	16.2	362	8.1	428	3.9	472	13.1	482	41.3
Indoors, restaurant	1006	32.9	669	18.2	792	15.9	868	29.4	865	96.3
Indoors, mfg. facility	704	23.8	479	63.6	540	143.4	568	37.6	544	268.4
Indoors, school	696	10.1	459	14.3	496	7.8	558	15.9	547	48.1
Indoors, church	437	30.0	276	13.6	320	6.0	374	24.7	377	74.3
Indoors, shopping mall	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, auditorium	184	6.6	106	22.0	138	34.0	176	3.9	134	66.5
Indoors, health care facility	-1	0.0	331	5.0	354	12.6	-1	0.0	347	17.6
Indoors, public building	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, other location	1225	39.8	731	14.4	749	5.7	1011	29.0	1045	88.8
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	1401	67.2	909	105.9	1024	105.7	1135	70.9	1084	349.7
Outdoors, residential grounds	801	16.2	505	25.2	612	19.5	660	22.7	629	83.5
Outdoors, school grounds	1354	0.6	902	0.8	1016	0.4	1092	0.9	1078	2.7
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	398	9.1	267	14.4	295	8.9	314	15.2	312	47.6
Outdoors, other location	895	182.9	567	174.9	645	193.9	757	189.4	717	741.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1509	49.1	938	67.6	1074	85.0	1298	56.7	1170	258.5
In transit, bus	2789	19.5	1771	14.6	1885	8.0	2291	20.0	2273	62.2
In transit, truck	1603	0.4	1183	1.3	1296	1.6	1280	0.7	1284	4.1
In transit, van	1453	2.5	883	2.0	1036	2.0	1196	2.2	1161	8.7
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	852	9.1	549	9.0	622	9.7	722	8.7	685	36.5
Outdoors, along a roadway	1296	118.4	808	140.0	935	173.7	1107	117.8	1017	550.0
In transit, motorcycle	1676	2.5	938	0.8	1147	0.2	1538	1.8	1499	5.2
Indoors, service station	-1	0.0	-1	0.0	-1	0.1	-1	0.0	876	0.1
Outdoors, service station	0	0.3	0	0.5	0	0.4	0	0.2	0	1.4
Indoors, residential garage	1358	0.2	749	0.6	875	0.6	1209	0.4	963	1.8
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	530	1416.8	346	1431.2	384	1450.2	456	1439.2	428	5737.3
Indoors, office	729	3.2	397	3.9	430	9.5	617	2.2	496	18.8
Indoors, store	620	24.6	385	23.6	439	27.6	534	23.3	493	99.1
Indoors, restaurant	1096	8.0	683	14.1	800	18.3	972	11.2	851	51.6
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	723	374.0	480	265.6	513	141.8	584	374.7	596	1156.1
Indoors, church	450	16.1	290	14.3	320	15.5	376	15.7	361	61.7
Indoors, shopping mall	2713	4.1	1922	3.1	2141	1.7	2258	3.8	2306	12.8
Indoors, auditorium	183	3.8	111	7.1	135	8.4	170	6.7	144	25.9
Indoors, health care facility	426	10.4	287	12.0	344	9.1	374	14.2	357	45.7
Indoors, public building	499	8.1	350	8.2	398	8.6	428	8.6	419	33.4
Indoors, other location	1227	9.2	766	9.6	873	11.3	969	10.1	953	40.2
Indoors, not specified	-1	0.0	763	0.3	977	0.3	-1	0.0	874	0.6
Outdoors, construction	-1	0.0	961	0.9	1051	1.0	-1	0.0	1008	1.8
Outdoors, residential grounds	843	35.3	517	63.6	589	97.5	722	37.3	629	233.7
Outdoors, school grounds	1379	30.6	905	29.5	1013	16.6	1125	34.9	1120	111.6
Outdoors, sports arena	413	10.1	264	15.6	313	20.5	356	12.0	326	58.2
Outdoors, park/golf course	435	3.0	258	22.5	294	43.1	368	4.5	293	73.1
Outdoors, other location	935	0.5	567	22.4	661	45.7	742	0.9	634	69.6
Outdoors, not specified	-1	0.1	-1	0.0	-1	0.0	-1	0.1	1405	0.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1505	52.9	937	68.2	1053	75.2	1238	53.7	1157	250.0
In transit, bus	2674	7.2	1615	7.5	1767	4.6	2145	9.1	2079	28.4
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1403	2.6	839	4.4	997	3.2	1246	5.0	1103	15.1
Indoors, public garage	-1	0.0	581	0.1	725	0.5	-1	0.0	697	0.6
Outdoors, in a parking lot	877	4.7	563	6.5	621	7.5	733	4.7	679	23.5
Outdoors, along a roadway	1282	29.8	802	44.8	948	62.8	1090	28.8	993	166.2
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1014	0.3	1075	0.3	-1	0.0	1045	0.6
Outdoors, service station	-1	0.0	-1	0.1	0	0.2	-1	0.0	0	0.3
Indoors, residential garage	1154	1.2	771	1.0	858	0.5	931	1.2	951	3.9
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	540	1778.4	346	1733.7	385	1757.6	461	1797.8	434	7067.5
Indoors, office	583	80.9	387	76.3	414	64.7	471	83.7	467	305.6
Indoors, store	585	22.6	385	27.9	438	32.1	484	20.9	465	103.5
Indoors, restaurant	1073	27.4	668	25.2	749	34.2	899	25.4	844	112.1
Indoors, mfg. facility	750	20.3	487	28.2	515	19.7	595	24.1	579	92.4
Indoors, school	720	70.6	480	63.3	509	34.5	583	77.8	585	246.2
Indoors, church	451	23.3	269	25.7	301	16.2	353	31.3	345	96.4
Indoors, shopping mall	3137	1.3	2137	3.1	2330	5.1	2491	2.1	2401	11.6
Indoors, auditorium	185	1.4	107	1.9	138	1.0	177	2.1	151	6.5
Indoors, health care facility	536	12.3	324	10.9	343	12.5	439	11.5	412	47.2
Indoors, public building	473	1.0	369	3.0	399	9.3	393	1.1	397	14.3
Indoors, other location	1103	1.4	733	6.6	838	8.6	963	1.9	834	18.6
Indoors, not specified	1229	0.5	692	1.7	843	3.7	1043	0.3	842	6.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	781	10.2	517	29.2	596	41.1	672	15.0	604	95.5
Outdoors, school grounds	1411	4.4	875	5.5	1007	2.9	1182	6.3	1120	19.1
Outdoors, sports arena	432	0.1	257	1.9	295	1.2	415	0.2	285	3.4
Outdoors, park/golf course	349	5.1	277	2.0	344	3.7	281	3.3	321	14.1
Outdoors, other location	750	0.4	588	5.0	655	5.3	596	0.6	625	11.2
Outdoors, not specified	-1	0.0	-1	0.1	-1	0.0	-1	0.0	-1	0.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Philadelphia: City-wide, Demographic Group=All persons

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1478	106.3	933	102.5	1058	102.2	1249	105.9	1183	416.9
In transit, bus	2722	5.5	1696	5.1	1829	3.6	2224	5.8	2156	20.0
In transit, truck	1778	8.1	1156	7.4	1273	6.3	1495	7.7	1440	29.5
In transit, van	1480	3.1	930	4.4	1041	4.7	1221	4.0	1139	16.1
Indoors, public garage	905	4.0	589	3.0	661	1.8	751	4.1	749	12.8
Outdoors, in a parking lot	860	7.5	550	10.8	624	13.2	720	8.1	668	39.6
Outdoors, along a roadway	1277	44.8	806	67.6	932	87.4	1067	50.2	987	249.9
In transit, motorcycle	1670	0.1	953	0.7	1094	1.5	-1	0.1	1098	2.4
Indoors, service station	1311	3.5	861	2.0	940	1.0	1067	3.1	1099	9.5
Outdoors, service station	0	0.2	0	0.5	0	0.6	0	0.2	0	1.5
Indoors, residential garage	1168	1.1	735	1.2	856	0.8	1012	1.4	950	4.4
Indoors, in a repair shop	2005	1.6	1349	0.3	-1	0.0	1607	1.0	1794	2.9
Indoors, home	536	1558.5	345	1545.9	382	1554.0	458	1588.0	431	6246.4
Indoors, office	587	146.3	388	115.7	416	91.8	475	140.3	477	494.1
Indoors, store	600	41.5	391	44.3	439	47.1	499	41.9	480	174.9
Indoors, restaurant	1068	29.4	678	27.3	770	26.4	906	28.3	861	111.4
Indoors, mfg. facility	721	13.4	472	19.8	516	20.2	584	15.1	558	68.4
Indoors, school	713	78.0	470	74.3	506	49.8	576	87.4	574	289.6
Indoors, church	449	12.9	287	14.0	320	13.1	376	14.8	357	54.8
Indoors, shopping mall	2905	3.1	1939	2.7	2190	2.3	2408	3.1	2388	11.4
Indoors, auditorium	183	6.1	113	6.5	133	7.2	158	6.7	146	26.4
Indoors, health care facility	466	20.4	304	19.2	338	17.1	387	21.4	377	78.2
Indoors, public building	522	5.2	338	7.2	376	9.8	444	5.4	407	27.5
Indoors, other location	1184	33.2	758	29.5	865	24.0	1004	32.0	965	118.7
Indoors, not specified	1167	1.8	738	0.8	865	0.7	945	1.3	981	4.7
Outdoors, construction	1434	1.3	946	2.1	1040	1.7	1164	1.6	1115	6.7
Outdoors, residential grounds	805	10.5	516	32.5	599	58.7	677	13.6	604	115.2
Outdoors, school grounds	1379	3.6	905	5.1	1028	3.7	1130	4.6	1092	17.0
Outdoors, sports arena	396	1.6	260	4.9	311	7.8	340	1.7	307	16.1
Outdoors, park/golf course	400	2.7	260	12.1	299	22.3	336	3.8	297	40.8
Outdoors, other location	906	4.2	565	14.0	658	26.0	766	4.8	663	49.1
Outdoors, not specified	1354	0.1	1004	0.2	1064	0.1	1141	0.2	1121	0.7
In transit, train	1718	0.5	934	0.3	955	0.2	1478	0.4	1351	1.4
In transit, airplane	-1	0.0	0	0.3	0	0.9	-1	0.0	0	1.2

Phoenix: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1738	88.3	963	94.5	1142	100.8	2012	90.3	1448	373.9
In transit, bus	3030	7.0	1655	5.1	1938	3.0	3316	7.1	2657	22.2
In transit, truck	2265	7.1	1152	6.6	1308	5.7	2438	7.3	1834	26.7
In transit, van	1902	5.7	1041	5.2	1197	4.9	2105	5.5	1582	21.4
Indoors, public garage	934	1.9	566	1.5	768	1.1	1123	1.9	877	6.5
Outdoors, in a parking lot	1021	11.2	565	12.5	675	13.6	1141	11.7	838	49.1
Outdoors, along a roadway	1316	57.7	797	72.7	994	89.0	1544	58.4	1125	277.8
In transit, motorcycle	-1	0.0	815	0.9	1039	1.9	-1	0.0	983	2.9
Indoors, service station	1347	2.1	746	1.6	896	0.9	1479	2.2	1189	6.8
Outdoors, service station	0	0.1	0	0.2	0	0.3	0	0.1	0	0.9
Indoors, residential garage	1252	1.3	691	0.9	879	0.5	1612	1.3	1195	4.1
Indoors, in a repair shop	-1	0.1	-1	0.0	-1	0.0	-1	0.1	1524	0.2
Indoors, home	816	1538.3	458	1544.5	499	1553.4	927	1574.0	676	6210.2
Indoors, office	675	80.9	368	79.3	420	77.4	680	82.7	539	320.3
Indoors, store	602	42.8	354	44.7	435	47.4	695	44.1	519	179.1
Indoors, restaurant	1215	26.3	674	26.9	799	27.4	1433	27.3	1030	107.9
Indoors, mfg. facility	865	24.7	484	22.1	555	19.6	908	24.8	718	91.2
Indoors, school	905	134.1	461	97.6	517	56.7	906	135.9	751	424.3
Indoors, church	601	15.6	279	13.8	323	11.8	669	16.0	485	57.2
Indoors, shopping mall	2738	3.2	1692	2.9	2129	2.4	3258	3.4	2510	11.9
Indoors, auditorium	230	8.6	123	8.7	151	9.2	283	8.6	196	35.0
Indoors, health care facility	583	24.1	314	19.5	359	14.5	643	24.6	498	82.8
Indoors, public building	679	7.3	362	9.0	421	10.6	776	7.5	539	34.4
Indoors, other location	1703	26.2	915	23.0	1013	19.7	1897	26.9	1426	95.8
Indoors, not specified	1052	0.1	710	0.4	1008	0.6	1035	0.1	931	1.3
Outdoors, construction	1415	2.9	829	2.3	982	1.4	1482	3.1	1235	9.7
Outdoors, residential grounds	739	22.5	529	44.7	660	67.4	884	22.8	667	157.4
Outdoors, school grounds	1283	8.3	807	6.1	1016	3.5	1442	8.5	1189	26.3
Outdoors, sports arena	343	1.2	262	4.5	338	7.7	467	1.3	327	14.7
Outdoors, park/golf course	344	6.9	257	16.4	321	26.5	424	6.8	318	56.7
Outdoors, other location	943	3.0	582	15.2	715	27.9	1206	3.2	719	49.3
Outdoors, not specified	1549	0.2	850	0.1	-1	0.1	1494	0.2	1305	0.7
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	0.5	0	1.0	-1	0.0	0	1.6

Phoenix: City-wide, Demographic Group=African americans

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1718	52.1	972	58.0	1145	64.4	1955	54.1	1423	228.6
In transit, bus	3467	21.4	1918	18.2	2075	13.5	3748	22.0	2923	75.1
In transit, truck	-1	0.0	-1	0.0	1195	0.2	-1	0.0	1195	0.2
In transit, van	-1	0.0	-1	0.1	935	0.2	-1	0.0	865	0.3
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1104	3.9	724	8.9	876	14.5	1262	4.3	914	31.7
Outdoors, along a roadway	1258	36.0	843	63.3	1045	91.0	1432	37.3	1086	227.6
In transit, motorcycle	1805	1.4	771	1.0	1138	0.4	2968	1.4	1886	4.2
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	803	1697.7	464	1695.6	505	1699.9	936	1733.4	679	6826.6
Indoors, office	1001	10.0	443	10.0	417	11.4	1019	9.6	707	40.9
Indoors, store	659	15.5	371	24.9	429	35.3	676	15.7	494	91.4
Indoors, restaurant	1538	3.7	594	3.0	794	2.8	2248	4.4	1409	13.7
Indoors, mfg. facility	654	2.6	-1	0.0	566	0.4	687	1.7	659	4.7
Indoors, school	879	169.9	494	124.9	505	66.3	890	174.7	747	535.7
Indoors, church	486	38.9	270	39.7	297	39.9	571	41.3	407	159.7
Indoors, shopping mall	2057	3.6	1719	2.4	2018	1.4	2075	3.4	1982	10.9
Indoors, auditorium	118	5.8	89	4.0	120	2.3	157	5.6	124	17.7
Indoors, health care facility	701	46.4	385	63.9	378	80.5	796	48.0	527	238.8
Indoors, public building	306	2.4	263	7.0	342	11.9	311	2.5	312	23.7
Indoors, other location	1225	6.7	658	10.4	791	18.3	1539	6.3	941	41.7
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	766	14.3	514	23.5	681	30.6	1094	14.7	721	83.1
Outdoors, school grounds	1098	12.2	785	8.7	955	4.0	1227	12.6	1054	37.5
Outdoors, sports arena	311	15.5	212	10.6	284	6.2	398	14.9	313	47.2
Outdoors, park/golf course	-1	0.0	-1	0.1	307	0.1	-1	0.0	276	0.2
Outdoors, other location	-1	0.0	650	5.8	756	12.3	-1	0.0	723	18.1
Outdoors, not specified	-1	0.1	-1	0.1	-1	0.0	-1	0.1	1198	0.3
In transit, train	-1	0.0	-1	0.0	1395	0.2	-1	0.0	1395	0.2
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1735	57.2	950	60.7	1144	63.7	1980	58.8	1440	240.5
In transit, bus	3517	15.3	1881	13.7	2107	11.1	3838	15.7	2925	55.9
In transit, truck	-1	0.0	-1	0.0	1200	0.2	-1	0.0	1200	0.2
In transit, van	1137	7.3	708	5.1	968	2.8	1513	7.3	1139	22.5
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	959	7.3	671	10.8	852	14.4	1059	7.7	862	40.2
Outdoors, along a roadway	1444	103.0	871	112.2	1057	115.3	1649	106.3	1244	436.9
In transit, motorcycle	1797	1.0	757	0.7	1141	0.3	2962	1.0	1879	3.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	816	1666.7	458	1667.1	510	1676.3	959	1704.0	687	6714.1
Indoors, office	896	13.9	415	12.5	423	12.1	918	13.7	677	52.1
Indoors, store	638	15.8	353	23.9	428	32.8	673	15.8	489	88.3
Indoors, restaurant	1197	5.8	577	4.5	764	3.4	1652	6.3	1128	20.1
Indoors, mfg. facility	665	2.2	-1	0.0	573	0.4	711	1.5	673	4.1
Indoors, school	895	122.2	473	90.1	505	49.4	919	125.3	755	387.0
Indoors, church	431	43.5	251	42.8	295	41.9	504	44.6	372	172.7
Indoors, shopping mall	2086	3.3	1637	2.2	2022	1.3	2159	3.1	2000	9.9
Indoors, auditorium	119	5.3	87	3.6	119	2.1	161	5.1	125	16.1
Indoors, health care facility	679	39.9	365	55.6	377	70.7	768	41.2	510	207.5
Indoors, public building	308	2.2	253	6.2	338	10.5	323	2.3	309	21.1
Indoors, other location	1674	9.7	722	11.9	824	17.4	2140	9.4	1225	48.3
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	992	13.9	517	34.6	634	54.1	1335	14.4	729	117.0
Outdoors, school grounds	1111	8.7	752	6.2	955	2.8	1263	9.0	1062	26.8
Outdoors, sports arena	312	14.1	206	9.6	282	5.7	405	13.6	314	43.0
Outdoors, park/golf course	-1	0.0	-1	0.1	308	0.1	-1	0.0	275	0.2
Outdoors, other location	703	1.6	547	9.9	682	18.9	722	1.7	644	32.1
Outdoors, not specified	-1	0.1	-1	0.1	-1	0.0	-1	0.1	1217	0.2
In transit, train	-1	0.0	-1	0.0	1407	0.2	-1	0.0	1407	0.2
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1473	43.6	921	61.4	1116	79.1	1722	45.2	1251	229.3
In transit, bus	2613	7.8	1654	5.3	1875	2.4	2743	7.9	2364	23.3
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	888	4.4	1183	8.8	-1	0.0	1084	13.2
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1147	14.3	598	12.5	732	11.0	1403	14.0	996	51.8
Outdoors, along a roadway	1240	62.5	862	57.7	1182	51.0	1592	63.9	1230	235.0
In transit, motorcycle	-1	0.0	776	1.0	993	2.1	-1	0.0	922	3.1
Indoors, service station	-1	0.0	712	0.2	843	0.4	-1	0.0	801	0.6
Outdoors, service station	-1	0.0	0	0.3	0	0.6	-1	0.0	0	0.9
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	823	1815.5	468	1808.6	507	1810.6	950	1852.7	689	7287.5
Indoors, office	1185	1.1	375	1.5	384	2.2	1192	1.0	672	5.8
Indoors, store	523	23.6	349	56.2	420	89.3	617	26.7	439	195.7
Indoors, restaurant	1156	7.2	657	6.4	775	6.4	1410	7.5	1020	27.4
Indoors, mfg. facility	954	1.6	667	0.1	589	0.5	996	1.1	898	3.3
Indoors, school	869	114.9	471	79.4	513	36.1	872	117.5	742	347.9
Indoors, church	527	11.8	263	8.1	343	4.1	725	11.8	511	35.8
Indoors, shopping mall	1907	4.9	1601	3.5	2065	1.6	2113	5.1	1922	15.0
Indoors, auditorium	115	14.6	102	14.2	144	14.8	121	14.0	121	57.6
Indoors, health care facility	465	12.7	270	12.0	314	10.4	459	13.1	382	48.2
Indoors, public building	408	3.8	294	2.7	349	1.4	416	4.8	380	12.7
Indoors, other location	1359	6.9	774	6.9	1048	6.7	1647	7.8	1222	28.3
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1068	10.3	586	15.4	675	20.1	1301	10.5	840	56.2
Outdoors, school grounds	1042	2.7	781	1.9	938	0.9	1079	2.8	983	8.4
Outdoors, sports arena	-1	0.0	436	2.7	484	5.2	-1	0.0	468	7.9
Outdoors, park/golf course	-1	0.0	215	3.4	291	6.4	290	0.4	265	10.1
Outdoors, other location	990	0.2	479	18.2	624	36.0	950	0.2	579	54.7
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990

Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1672	81.8	940	84.6	1116	86.6	1956	83.6	1415	336.6
In transit, bus	4279	5.3	2188	3.9	2258	2.1	4757	5.5	3701	16.9
In transit, truck	2180	5.0	1162	3.7	1387	2.1	2658	5.3	2002	16.1
In transit, van	1418	1.5	757	1.1	1026	0.8	2076	1.5	1401	4.9
Indoors, public garage	-1	0.0	735	1.0	899	1.8	-1	0.0	842	2.8
Outdoors, in a parking lot	921	13.3	654	17.8	817	22.7	1017	14.5	837	68.2
Outdoors, along a roadway	1326	57.5	807	79.5	1005	103.3	1527	58.1	1116	298.4
In transit, motorcycle	-1	0.0	830	6.9	1066	14.4	-1	0.0	990	21.3
Indoors, service station	-1	0.1	726	0.7	864	1.5	-1	0.1	884	2.4
Outdoors, service station	0	0.4	0	0.8	0	1.1	0	0.5	0	2.7
Indoors, residential garage	698	2.3	588	1.6	759	0.9	766	2.3	703	7.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	825	1583.5	465	1597.2	512	1616.3	951	1617.5	688	6414.5
Indoors, office	586	59.6	341	50.6	415	40.0	604	60.9	500	211.2
Indoors, store	699	38.8	374	45.4	454	53.1	797	39.7	564	177.0
Indoors, restaurant	1396	48.7	752	40.0	825	29.4	1596	51.1	1205	169.1
Indoors, mfg. facility	993	37.3	557	26.6	597	15.1	1029	37.7	854	116.8
Indoors, school	917	100.1	473	67.3	527	31.4	926	101.4	780	300.2
Indoors, church	572	19.1	288	16.8	330	14.3	598	19.5	461	69.7
Indoors, shopping mall	3295	3.1	1834	2.2	2203	1.0	3437	3.6	2914	9.9
Indoors, auditorium	206	5.2	120	5.5	129	5.5	240	5.3	172	21.4
Indoors, health care facility	637	31.5	355	36.6	390	42.6	750	32.8	518	143.5
Indoors, public building	505	2.2	295	1.7	353	1.5	506	2.2	427	7.7
Indoors, other location	1823	34.5	994	26.0	1080	15.7	2106	35.7	1616	111.9
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	850	16.9	529	31.8	656	46.7	1056	16.7	709	112.2
Outdoors, school grounds	1599	8.7	879	6.1	1074	2.9	1799	9.1	1446	26.8
Outdoors, sports arena	-1	0.0	225	2.5	293	5.0	-1	0.0	270	7.5
Outdoors, park/golf course	405	3.4	307	23.8	359	45.3	603	3.5	356	75.9
Outdoors, other location	-1	0.0	620	2.4	762	4.7	-1	0.0	714	7.1
Outdoors, not specified	-1	0.1	-1	0.0	-1	0.0	-1	0.1	1064	0.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1764	88.9	965	94.5	1154	100.3	2014	90.6	1459	374.2
In transit, bus	3073	5.8	1682	4.4	2071	3.0	3505	5.9	2729	19.1
In transit, truck	2007	5.1	1110	3.9	1297	2.4	2233	5.3	1767	16.7
In transit, van	1840	10.4	1010	8.8	1177	7.6	2023	10.1	1555	36.9
Indoors, public garage	923	4.0	516	2.6	654	1.2	1104	4.0	869	11.8
Outdoors, in a parking lot	1017	10.3	544	11.8	662	13.0	1103	10.8	815	46.0
Outdoors, along a roadway	1299	72.7	788	85.8	989	98.8	1498	73.7	1118	330.9
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1442	0.5	791	0.4	923	0.3	1417	0.5	1196	1.5
Outdoors, service station	0	0.1	0	0.1	0	0.2	0	0.1	0	0.5
Indoors, residential garage	1774	1.3	771	1.0	993	0.6	2338	1.4	1630	4.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	816	1544.3	453	1545.6	502	1550.0	923	1580.5	675	6220.4
Indoors, office	705	90.4	378	91.5	431	91.0	706	92.6	555	365.5
Indoors, store	591	33.9	352	39.2	438	45.9	675	34.7	503	153.7
Indoors, restaurant	1104	20.3	627	22.3	767	24.1	1317	21.1	942	87.7
Indoors, mfg. facility	821	28.0	464	26.1	557	24.4	836	28.0	677	106.5
Indoors, school	895	99.1	459	70.5	532	39.6	901	100.1	751	309.4
Indoors, church	577	22.6	273	19.3	325	15.9	663	23.3	480	81.1
Indoors, shopping mall	2407	2.5	1679	2.4	2203	2.2	3027	2.8	2359	9.9
Indoors, auditorium	243	9.3	123	7.4	162	5.7	302	9.3	217	31.7
Indoors, health care facility	579	23.6	314	18.0	361	11.8	636	24.0	502	77.4
Indoors, public building	709	8.4	359	11.6	417	15.0	819	8.4	536	43.3
Indoors, other location	1767	25.4	900	22.8	999	20.4	1988	26.1	1454	94.8
Indoors, not specified	-1	0.0	678	0.5	985	1.0	-1	0.0	883	1.6
Outdoors, construction	1413	6.3	825	5.0	990	3.2	1473	6.7	1230	21.2
Outdoors, residential grounds	697	27.5	493	46.7	638	66.0	828	27.9	639	168.2
Outdoors, school grounds	1272	6.9	797	5.0	1073	3.0	1463	6.9	1196	21.8
Outdoors, sports arena	378	0.5	295	3.8	373	7.1	556	0.5	357	11.9
Outdoors, park/golf course	339	6.6	235	10.3	310	13.8	390	6.5	308	37.2
Outdoors, other location	972	5.4	573	22.8	708	40.7	1243	5.9	728	74.7
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1709	114.6	932	115.7	1121	117.0	1963	117.2	1432	464.6
In transit, bus	2749	10.8	1484	7.8	1767	4.0	2932	11.2	2402	33.9
In transit, truck	2389	2.8	1105	7.1	1304	11.1	2571	2.9	1526	24.0
In transit, van	-1	0.1	1212	1.9	1288	3.6	-1	0.1	1301	5.7
Indoors, public garage	975	0.4	715	0.5	927	0.5	1128	0.4	931	1.9
Outdoors, in a parking lot	1066	11.0	559	10.9	656	10.3	1257	11.3	892	43.5
Outdoors, along a roadway	1390	52.8	799	73.7	991	96.3	1605	53.8	1136	276.6
In transit, motorcycle	-1	0.1	-1	0.0	-1	0.0	-1	0.1	2210	0.1
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.1	0	0.2	0	0.3	-1	0.1	0	0.6
Indoors, residential garage	1188	0.4	721	0.3	860	0.1	1368	0.4	1105	1.1
Indoors, in a repair shop	1709	0.3	1076	0.2	-1	0.1	1680	0.3	1506	0.9
Indoors, home	800	1479.0	449	1463.9	488	1451.6	899	1512.5	662	5907.1
Indoors, office	678	116.8	365	115.5	417	115.5	675	119.0	535	466.9
Indoors, store	606	41.7	346	41.9	427	43.0	677	43.3	515	169.9
Indoors, restaurant	1183	28.0	637	29.7	783	31.4	1411	28.4	993	117.5
Indoors, mfg. facility	852	27.8	472	22.9	537	17.7	949	28.3	733	96.8
Indoors, school	895	157.6	455	108.2	507	50.4	872	160.8	746	477.1
Indoors, church	644	10.5	284	9.6	312	8.8	668	10.5	489	39.3
Indoors, shopping mall	3084	4.6	1670	4.6	2082	4.3	3796	4.7	2675	18.1
Indoors, auditorium	199	5.0	134	9.4	155	14.7	230	4.9	166	34.0
Indoors, health care facility	609	20.3	314	22.2	360	24.6	623	20.5	468	87.6
Indoors, public building	731	6.3	352	5.2	424	3.8	930	6.4	645	21.7
Indoors, other location	1644	24.8	899	21.3	1036	16.6	1701	25.8	1368	88.5
Indoors, not specified	1086	0.5	662	0.4	779	0.2	1049	0.6	945	1.6
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	736	17.9	563	59.1	669	103.0	853	18.1	660	198.0
Outdoors, school grounds	1127	8.8	757	6.5	948	3.4	1299	9.2	1076	27.8
Outdoors, sports arena	315	3.4	211	5.7	280	7.6	447	3.5	295	20.1
Outdoors, park/golf course	349	12.2	252	27.9	312	45.2	418	11.9	312	97.2
Outdoors, other location	621	1.6	565	9.2	723	17.3	644	1.7	664	29.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	2.6	0	5.4	-1	0.0	0	8.0

Phoenix: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1763	62.0	974	74.0	1095	86.4	2109	62.8	1432	285.2
In transit, bus	6156	0.2	1232	0.9	1428	1.9	6039	0.2	1959	3.2
In transit, truck	2644	15.5	1226	10.1	1321	4.9	3027	15.4	2320	45.9
In transit, van	1489	15.1	807	10.4	962	5.7	1867	14.8	1391	46.0
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1293	3.5	573	9.7	606	15.7	1338	3.5	750	32.4
Outdoors, along a roadway	1554	50.9	860	62.8	936	78.1	1812	49.7	1227	241.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	2298	1.0	-1	0.0	-1	0.0	2157	0.7	2242	1.7
Outdoors, service station	-1	0.0	0	0.1	0	0.3	-1	0.0	0	0.4
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	774	1545.5	441	1523.0	452	1485.8	854	1593.2	634	6147.5
Indoors, office	604	62.3	333	67.0	366	75.2	589	62.8	466	267.3
Indoors, store	913	3.4	354	10.0	372	16.4	944	3.5	483	33.4
Indoors, restaurant	1309	30.8	731	34.6	818	39.4	1583	30.7	1081	135.5
Indoors, mfg. facility	-1	0.0	-1	0.0	482	0.1	-1	0.0	482	0.1
Indoors, school	919	149.7	441	144.0	462	142.2	895	149.7	684	585.6
Indoors, church	586	7.3	287	7.0	282	6.5	634	8.0	458	28.8
Indoors, shopping mall	1945	1.2	1578	0.9	1828	0.4	2059	1.3	1884	3.9
Indoors, auditorium	202	36.4	109	24.7	126	14.6	243	34.9	184	110.5
Indoors, health care facility	322	19.4	238	13.1	282	6.6	419	19.3	331	58.4
Indoors, public building	-1	0.0	406	12.9	411	26.5	-1	0.0	409	39.4
Indoors, other location	1824	46.0	1082	36.6	1079	29.5	1934	44.1	1541	156.2
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	882	0.1	-1	0.0	882	0.1
Outdoors, residential grounds	728	71.1	484	77.8	591	79.9	802	75.6	648	304.5
Outdoors, school grounds	955	16.7	738	13.1	848	9.3	993	16.7	897	55.8
Outdoors, sports arena	-1	0.0	303	4.3	348	8.7	-1	0.0	333	13.0
Outdoors, park/golf course	298	21.9	240	35.7	283	51.3	400	20.9	292	129.7
Outdoors, other location	-1	0.0	734	11.2	798	22.6	-1	0.0	777	33.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1728	57.7	945	67.2	1146	77.0	2036	59.1	1425	261.0
In transit, bus	3155	14.9	1732	10.6	2020	5.4	3367	15.3	2766	46.2
In transit, truck	1822	0.8	1095	1.6	1313	2.6	1897	0.8	1403	5.7
In transit, van	1975	9.7	1086	7.5	1241	5.9	2225	9.4	1708	32.5
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	914	5.6	522	7.3	651	8.9	1047	6.0	755	27.8
Outdoors, along a roadway	1231	72.5	771	101.6	984	133.7	1483	73.3	1070	381.1
In transit, motorcycle	1797	0.2	760	0.3	1004	0.4	2925	0.2	1466	1.1
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	-1	0.0	-1	0.1	-1	0.1	-1	0.0	0	0.2
Indoors, residential garage	1522	1.6	712	1.2	944	0.7	2023	1.7	1418	5.2
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	816	1575.1	457	1580.4	504	1586.9	936	1613.8	679	6356.1
Indoors, office	538	1.6	357	4.2	422	7.2	653	1.6	441	14.6
Indoors, store	564	22.5	338	23.0	426	24.1	672	22.8	499	92.4
Indoors, restaurant	1145	10.9	642	13.9	834	16.7	1444	11.3	978	52.8
Indoors, mfg. facility	627	0.4	353	0.3	498	0.1	1013	0.5	680	1.4
Indoors, school	901	273.1	468	198.0	520	114.1	903	277.0	752	862.2
Indoors, church	590	12.2	274	12.0	313	11.5	662	12.7	465	48.4
Indoors, shopping mall	2181	2.9	1638	2.6	2148	2.0	2553	3.1	2150	10.6
Indoors, auditorium	228	10.0	121	8.6	151	7.6	284	9.7	201	36.0
Indoors, health care facility	445	15.5	297	16.5	370	17.5	528	15.8	408	65.3
Indoors, public building	623	3.0	348	5.2	421	7.4	680	3.2	477	18.8
Indoors, other location	1564	7.8	830	10.4	941	13.4	1730	7.7	1190	39.3
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	699	33.2	517	59.6	657	87.4	876	34.0	659	214.2
Outdoors, school grounds	1230	17.6	804	12.6	978	6.9	1330	18.0	1134	55.1
Outdoors, sports arena	334	5.0	250	7.4	347	9.8	449	5.1	337	27.2
Outdoors, park/golf course	331	5.1	259	16.4	326	28.8	455	5.0	319	55.2
Outdoors, other location	878	0.5	556	15.3	693	31.5	898	0.5	653	47.9
Outdoors, not specified	1576	0.5	868	0.4	996	0.2	1523	0.5	1325	1.6
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1642	106.5	1113	121.7	1336	139.9	1885	109.8	1474	477.9
In transit, bus	4002	0.2	-1	0.0	-1	0.0	3343	0.2	3699	0.3
In transit, truck	1900	13.2	1141	32.9	1296	53.7	2395	14.0	1456	113.7
In transit, van	-1	0.0	1560	5.7	1510	10.9	-1	0.0	1527	16.7
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	870	16.7	620	20.7	696	23.6	928	16.7	763	77.6
Outdoors, along a roadway	1463	156.1	882	120.0	1000	76.1	1659	159.4	1319	511.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	2012	0.3	918	0.2	978	0.1	1917	0.3	1598	1.0
Outdoors, service station	0	0.2	0	0.2	0	0.2	0	0.2	0	0.9
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	816	1542.8	462	1439.7	504	1343.0	942	1575.4	692	5900.8
Indoors, office	666	75.6	380	51.9	423	26.7	675	77.1	577	231.3
Indoors, store	652	13.8	369	9.9	421	6.3	648	13.8	553	43.8
Indoors, restaurant	1356	14.0	790	10.1	833	6.3	1476	14.3	1192	44.7
Indoors, mfg. facility	-1	0.0	423	62.5	494	131.3	-1	0.0	471	193.8
Indoors, school	894	114.6	478	76.8	531	35.9	910	116.1	768	343.4
Indoors, church	665	4.7	253	7.9	293	10.1	954	4.8	460	27.5
Indoors, shopping mall	3852	2.4	1634	1.7	2416	0.8	6445	2.5	4061	7.5
Indoors, auditorium	-1	0.0	200	28.9	212	60.9	431	0.2	209	89.9
Indoors, health care facility	541	8.2	349	5.6	387	2.8	599	8.3	500	24.8
Indoors, public building	800	33.2	411	23.1	496	10.5	1031	34.1	757	100.9
Indoors, other location	2085	26.7	1121	20.8	1288	13.5	2417	28.7	1848	89.7
Indoors, not specified	1827	0.2	833	0.2	-1	0.1	1741	0.2	1469	0.7
Outdoors, construction	-1	0.0	-1	0.0	983	0.4	-1	0.0	983	0.4
Outdoors, residential grounds	638	13.0	567	20.2	682	25.7	691	13.3	644	72.2
Outdoors, school grounds	859	15.6	715	11.1	931	5.0	964	16.1	869	47.9
Outdoors, sports arena	-1	0.0	282	22.5	332	42.4	293	0.7	314	65.6
Outdoors, park/golf course	498	1.5	217	1.0	311	0.8	816	1.6	515	5.0
Outdoors, other location	543	0.1	486	89.0	625	181.0	-1	0.1	579	270.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	1753	0.1	-1	0.0	-1	0.0	-1	0.1	2225	0.2
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1684	140.1	973	136.4	1158	130.8	1920	143.4	1444	550.7
In transit, bus	2298	0.5	1958	0.6	2447	0.8	2297	0.5	2264	2.4
In transit, truck	2401	14.6	1164	13.7	1247	12.8	2673	14.8	1905	55.9
In transit, van	1891	7.4	1012	10.2	1171	12.5	2020	7.3	1436	37.5
Indoors, public garage	992	16.6	572	12.8	726	7.8	1092	17.0	886	54.1
Outdoors, in a parking lot	1077	14.3	562	14.9	654	14.6	1150	15.2	861	59.0
Outdoors, along a roadway	1323	70.6	803	73.3	991	75.9	1478	71.2	1144	291.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1398	11.8	780	8.7	900	5.4	1512	12.0	1221	37.8
Outdoors, service station	0	0.4	0	0.4	0	0.4	0	0.4	0	1.7
Indoors, residential garage	1241	7.4	703	5.0	870	3.0	1494	7.2	1153	22.6
Indoors, in a repair shop	2255	0.4	-1	0.0	-1	0.0	2265	0.5	2258	0.9
Indoors, home	834	1392.5	467	1359.2	506	1326.7	957	1425.3	696	5503.8
Indoors, office	719	215.4	378	227.6	423	240.7	731	218.6	557	902.4
Indoors, store	669	29.3	380	40.0	449	53.2	729	30.1	528	152.6
Indoors, restaurant	1168	27.5	662	22.9	789	18.2	1272	28.3	1008	97.0
Indoors, mfg. facility	849	45.9	496	50.4	553	54.1	897	47.0	689	197.3
Indoors, school	842	21.3	447	17.9	542	13.8	854	21.7	695	74.6
Indoors, church	672	15.8	300	12.6	333	9.6	708	15.9	536	53.9
Indoors, shopping mall	1957	1.6	1549	1.4	1986	1.1	2222	1.7	1940	5.8
Indoors, auditorium	257	0.7	130	3.2	165	6.0	281	1.1	172	11.1
Indoors, health care facility	638	20.8	309	21.7	338	21.7	664	21.2	485	85.5
Indoors, public building	578	4.0	329	16.4	388	29.8	593	4.2	400	54.4
Indoors, other location	1627	38.4	963	32.6	1164	27.7	1821	39.4	1433	138.1
Indoors, not specified	792	2.0	589	1.3	752	0.6	1020	2.3	829	6.3
Outdoors, construction	1431	11.1	845	7.9	995	3.8	1505	11.7	1275	34.5
Outdoors, residential grounds	794	11.6	544	37.5	685	63.7	948	11.9	678	124.7
Outdoors, school grounds	1595	1.3	856	1.0	1035	0.6	1570	1.3	1333	4.2
Outdoors, sports arena	255	0.7	226	3.1	288	5.7	274	0.8	266	10.4
Outdoors, park/golf course	327	8.7	220	14.5	282	20.4	364	8.7	286	52.3
Outdoors, other location	1108	26.7	619	31.7	750	36.6	1301	26.8	916	121.8
Outdoors, not specified	1370	0.2	732	0.2	-1	0.1	2236	0.3	1478	0.8
In transit, train	2446	0.2	-1	0.1	-1	0.1	2854	0.2	2172	0.6
In transit, airplane	-1	0.0	0	4.7	0	9.7	-1	0.0	0	14.4

Phoenix: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1671	100.0	931	106.8	1108	112.3	1928	103.3	1397	422.5
In transit, bus	1855	1.3	1272	1.5	1618	1.9	2317	1.3	1733	5.8
In transit, truck	1564	0.3	-1	0.0	-1	0.0	1983	0.6	1851	0.9
In transit, van	2139	0.5	801	1.2	961	1.7	2031	0.5	1210	3.9
Indoors, public garage	1151	0.6	602	0.4	720	0.2	1354	0.7	1050	1.9
Outdoors, in a parking lot	826	6.7	583	9.1	731	11.3	899	7.0	745	34.1
Outdoors, along a roadway	1335	43.5	861	57.0	1073	69.9	1483	44.7	1155	215.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.1	840	0.2	-1	0.0	796	0.3
Outdoors, service station	-1	0.0	-1	0.1	0	0.1	-1	0.0	0	0.2
Indoors, residential garage	1520	0.2	917	0.1	-1	0.1	1561	0.3	1371	0.7
Indoors, in a repair shop	1704	0.5	1104	0.3	1287	0.2	1701	0.5	1520	1.5
Indoors, home	808	1770.7	457	1744.8	498	1722.5	917	1809.8	673	7047.8
Indoors, office	507	2.5	298	1.8	386	1.9	656	2.3	476	8.6
Indoors, store	576	34.9	360	54.2	437	75.6	624	35.5	474	200.2
Indoors, restaurant	1228	22.0	736	19.4	909	16.1	1485	23.1	1119	80.6
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	938	65.3	457	50.1	510	32.3	1001	65.8	780	213.6
Indoors, church	575	15.7	275	13.8	324	11.9	652	15.6	471	57.1
Indoors, shopping mall	-1	0.1	1899	0.8	2156	1.6	2287	0.3	2124	2.8
Indoors, auditorium	233	16.7	122	16.6	152	17.2	272	17.1	195	67.7
Indoors, health care facility	525	10.0	282	9.3	349	8.3	611	10.3	450	37.9
Indoors, public building	657	4.7	343	5.2	424	5.6	779	4.7	540	20.2
Indoors, other location	1392	33.7	785	27.3	986	20.8	1573	33.5	1227	115.3
Indoors, not specified	-1	0.0	798	0.5	1103	1.1	-1	0.0	1005	1.6
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	640	21.4	514	27.2	681	31.6	763	22.0	646	102.2
Outdoors, school grounds	1996	3.3	939	3.1	1287	2.7	2530	3.4	1725	12.5
Outdoors, sports arena	-1	0.0	248	3.5	328	6.9	399	0.4	305	10.8
Outdoors, park/golf course	262	3.8	238	18.3	305	32.5	315	3.6	282	58.2
Outdoors, other location	527	1.6	506	11.4	643	21.6	608	1.6	593	36.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1721	112.0	955	113.6	1143	115.6	1989	114.5	1451	455.7
In transit, bus	2783	5.0	1681	4.7	2036	4.2	3097	5.2	2432	19.1
In transit, truck	2813	5.7	1365	5.8	1525	5.7	3173	5.9	2224	23.2
In transit, van	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
Indoors, public garage	755	1.7	487	1.1	618	0.5	882	1.7	727	5.0
Outdoors, in a parking lot	1111	8.0	567	10.4	644	12.8	1282	8.1	850	39.3
Outdoors, along a roadway	1379	37.9	802	47.0	974	56.9	1564	38.6	1141	180.4
In transit, motorcycle	-1	0.0	816	5.6	1039	11.5	-1	0.0	967	17.1
Indoors, service station	1443	0.3	780	0.2	895	0.1	1424	0.3	1211	0.8
Outdoors, service station	0	0.3	0	0.6	0	0.9	0	0.3	0	2.2
Indoors, residential garage	2798	0.1	-1	0.1	-1	0.0	2806	0.1	2293	0.4
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	832	1447.2	463	1456.0	502	1469.2	949	1478.9	687	5851.4
Indoors, office	679	249.3	372	224.4	424	196.3	689	254.7	553	924.6
Indoors, store	575	74.4	350	66.8	434	57.1	669	76.3	517	274.5
Indoors, restaurant	1284	31.5	667	35.2	750	39.5	1481	33.3	1024	139.6
Indoors, mfg. facility	1026	19.7	534	13.4	575	6.5	1022	19.9	864	59.5
Indoors, school	847	55.0	445	38.3	512	19.2	852	56.2	719	168.7
Indoors, church	563	18.2	267	16.3	310	14.3	624	18.4	454	67.3
Indoors, shopping mall	2812	3.7	1730	2.8	2198	1.9	3521	3.9	2692	12.3
Indoors, auditorium	220	6.7	113	9.1	129	11.9	270	6.8	170	34.5
Indoors, health care facility	647	35.2	336	29.7	353	24.8	727	35.7	538	125.5
Indoors, public building	577	6.0	396	9.9	456	14.1	570	6.2	479	36.2
Indoors, other location	1734	28.9	933	26.3	980	24.6	1967	29.6	1435	109.4
Indoors, not specified	880	0.5	607	0.4	779	0.2	1020	0.6	856	1.6
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	736	7.4	593	27.7	730	47.7	813	7.5	695	90.3
Outdoors, school grounds	1315	1.0	824	0.9	1215	0.7	2047	1.1	1390	3.7
Outdoors, sports arena	499	0.5	217	4.2	277	7.5	825	0.5	286	12.6
Outdoors, park/golf course	502	2.2	331	14.4	372	27.1	699	2.3	382	46.1
Outdoors, other location	663	0.6	634	18.5	765	36.7	763	0.6	721	56.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	2171	0.9	1012	0.6	1167	0.3	2446	0.9	1891	2.7
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1644	97.5	932	96.9	1089	93.3	1793	101.9	1373	389.6
In transit, bus	-1	0.1	-1	0.0	1729	0.8	5515	0.3	2620	1.2
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1725	3.8	912	2.6	1021	1.5	1677	3.6	1435	11.4
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	741	15.4	482	12.8	568	9.9	780	15.7	659	53.8
Outdoors, along a roadway	1064	42.7	743	34.4	995	26.5	1322	42.6	1051	146.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	706	17.3	594	11.9	754	6.3	774	17.1	708	52.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	816	1754.2	465	1653.8	511	1551.7	934	1793.5	691	6753.1
Indoors, office	373	2.7	288	5.0	363	7.0	379	3.0	346	17.7
Indoors, store	407	29.8	330	48.6	415	67.7	432	30.6	393	176.8
Indoors, restaurant	1070	2.4	534	7.1	687	12.0	1458	2.2	751	23.6
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	762	49.1	440	34.3	554	17.3	881	49.4	704	150.1
Indoors, church	318	20.8	226	14.4	273	7.2	333	20.8	297	63.2
Indoors, shopping mall	-1	0.1	-1	0.0	-1	0.0	3792	0.7	3698	0.8
Indoors, auditorium	127	0.3	-1	0.0	160	0.4	132	0.2	143	0.9
Indoors, health care facility	750	67.2	367	47.2	393	21.5	754	69.1	626	205.1
Indoors, public building	535	0.1	286	9.6	339	20.2	-1	0.1	323	30.0
Indoors, other location	1257	29.2	759	23.2	937	18.5	1421	30.4	1134	101.3
Indoors, not specified	714	0.1	-1	0.0	-1	0.0	-1	0.1	765	0.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	710	27.1	542	161.0	635	301.1	721	26.3	614	515.5
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	449	0.5	-1	0.0	449	0.5
Outdoors, park/golf course	-1	0.0	225	17.7	309	37.0	539	0.4	284	55.1
Outdoors, other location	-1	0.0	451	3.5	606	7.8	-1	0.0	559	11.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1807	151.3	989	144.3	1149	137.7	2071	153.8	1521	587.1
In transit, bus	3205	5.4	1623	3.4	1917	1.6	3812	5.4	2938	15.9
In transit, truck	2106	33.4	1140	26.8	1285	17.5	2131	34.8	1756	112.4
In transit, van	1369	4.7	836	3.3	1034	1.9	1591	4.9	1279	14.8
Indoors, public garage	1215	7.5	648	5.3	716	2.4	1292	7.7	1058	22.8
Outdoors, in a parking lot	1146	10.8	574	11.2	641	10.9	1314	11.2	919	44.1
Outdoors, along a roadway	1261	46.0	844	54.6	1082	64.3	1435	46.9	1138	211.8
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1555	3.3	791	2.0	892	1.1	1488	3.2	1294	9.7
Outdoors, service station	0	0.3	0	0.6	0	0.8	0	0.3	0	2.1
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	824	1357.9	466	1338.5	506	1310.4	943	1394.5	689	5401.3
Indoors, office	694	232.2	376	294.4	423	368.1	708	235.0	526	1129.7
Indoors, store	804	62.7	411	45.9	463	28.5	863	63.3	684	200.4
Indoors, restaurant	1153	34.5	643	34.9	763	35.7	1404	34.9	989	140.0
Indoors, mfg. facility	781	60.5	445	71.6	503	86.3	872	60.0	628	278.3
Indoors, school	974	28.6	481	20.2	532	10.0	999	29.5	819	88.2
Indoors, church	545	17.6	289	14.2	317	11.6	593	17.2	455	60.5
Indoors, shopping mall	4043	0.2	1871	0.1	-1	0.1	4526	0.5	3828	0.9
Indoors, auditorium	165	0.2	-1	0.0	-1	0.0	306	0.3	256	0.4
Indoors, health care facility	455	2.8	242	1.2	305	0.6	463	2.5	409	7.1
Indoors, public building	876	10.2	421	8.5	454	7.5	1065	10.0	734	36.2
Indoors, other location	1656	64.5	876	45.2	921	23.4	1698	65.6	1406	198.6
Indoors, not specified	1072	1.2	650	0.6	766	0.3	1077	1.2	972	3.3
Outdoors, construction	-1	0.0	789	4.1	956	7.8	-1	0.0	898	11.9
Outdoors, residential grounds	1134	4.8	519	29.4	612	51.9	1278	4.9	645	90.9
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	302	11.8	222	14.2	296	16.7	316	11.6	282	54.3
Outdoors, other location	741	7.7	584	9.6	808	10.8	998	8.9	782	37.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, airplane	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1

Phoenix: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1338	63.9	881	63.8	1098	66.3	1548	64.4	1216	258.5
In transit, bus	1584	1.3	1239	0.8	1589	0.4	1647	1.3	1530	3.8
In transit, truck	1450	0.1	-1	0.0	-1	0.0	1338	0.4	1362	0.6
In transit, van	1521	5.7	790	3.9	1036	2.2	2108	5.5	1483	17.3
Indoors, public garage	919	0.2	527	0.1	-1	0.1	916	0.2	809	0.7
Outdoors, in a parking lot	940	4.9	532	8.1	683	11.2	1018	5.0	742	29.2
Outdoors, along a roadway	1329	25.0	802	34.0	992	44.2	1544	25.3	1116	128.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	798	1908.9	449	1877.5	490	1838.5	897	1953.8	662	7578.7
Indoors, office	457	8.9	306	8.0	365	6.9	484	9.1	408	32.9
Indoors, store	624	31.8	371	27.9	448	25.1	686	32.4	543	117.1
Indoors, restaurant	1198	19.3	689	27.9	819	36.4	1419	19.8	970	103.4
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	1057	6.3	484	4.2	611	2.5	1360	6.2	970	19.1
Indoors, church	467	27.8	258	22.3	295	16.3	513	27.9	401	94.4
Indoors, shopping mall	3563	2.5	1702	4.0	2189	5.3	4569	2.5	2720	14.3
Indoors, auditorium	324	0.1	-1	0.0	-1	0.0	291	0.1	276	0.3
Indoors, health care facility	452	8.2	295	11.0	367	14.4	446	8.3	380	41.9
Indoors, public building	645	7.3	320	6.4	374	5.2	860	7.4	573	26.4
Indoors, other location	1269	17.4	685	18.0	812	18.8	1574	18.1	1081	72.3
Indoors, not specified	885	0.1	-1	0.0	-1	0.0	-1	0.1	983	0.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	854	19.0	501	46.5	610	74.8	1005	19.1	654	159.3
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	365	0.2	-1	0.0	365	0.2
Outdoors, park/golf course	-1	0.0	270	12.4	302	25.5	-1	0.0	291	37.9
Outdoors, other location	670	1.0	658	7.1	800	13.7	687	1.0	745	22.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1736	92.8	970	94.5	1139	96.7	2007	95.3	1461	379.3
In transit, bus	3091	4.3	1551	4.1	1689	4.0	3695	4.2	2528	16.6
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1944	1.6	869	1.0	1055	0.5	2242	1.6	1723	4.7
Indoors, public garage	1375	0.6	731	0.4	783	0.2	1448	0.6	1193	1.9
Outdoors, in a parking lot	992	7.4	653	15.5	785	24.0	1024	7.9	811	54.9
Outdoors, along a roadway	1371	33.5	832	43.0	1011	53.2	1590	33.8	1158	163.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	3012	0.1	1123	0.1	-1	0.0	2857	0.1	2324	0.4
Outdoors, service station	0	1.3	0	1.2	0	1.0	0	1.3	0	4.8
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	809	1474.6	455	1516.4	492	1562.7	924	1509.2	667	6062.8
Indoors, office	733	247.2	379	198.2	414	143.5	733	250.9	595	839.8
Indoors, store	575	57.5	350	58.5	421	60.6	659	59.0	500	235.6
Indoors, restaurant	1414	58.3	741	51.3	807	42.9	1657	59.1	1196	211.6
Indoors, mfg. facility	-1	0.0	547	28.5	633	60.4	-1	0.0	605	88.9
Indoors, school	834	41.8	449	38.3	506	33.8	828	42.8	667	156.7
Indoors, church	611	13.1	263	22.5	300	31.2	661	13.8	402	80.6
Indoors, shopping mall	2294	8.1	1654	5.7	2003	2.8	2377	8.2	2143	24.9
Indoors, auditorium	130	4.6	92	3.1	118	1.7	168	4.5	132	13.9
Indoors, health care facility	624	62.0	353	42.7	376	20.7	654	63.0	546	188.4
Indoors, public building	473	0.8	351	3.0	399	5.0	447	0.8	395	9.6
Indoors, other location	1918	37.9	961	27.1	1076	17.1	2229	39.3	1686	121.4
Indoors, not specified	2163	0.3	744	2.7	990	5.3	2289	0.3	994	8.5
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1360	9.1	512	16.0	574	23.1	1311	9.0	797	57.2
Outdoors, school grounds	1182	1.6	776	1.1	958	0.5	1203	1.6	1071	4.9
Outdoors, sports arena	-1	0.0	365	5.6	434	11.2	274	0.1	410	17.0
Outdoors, park/golf course	-1	0.1	-1	0.0	-1	0.0	-1	0.1	606	0.2
Outdoors, other location	896	1.4	704	3.5	803	5.7	995	1.4	807	11.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1642	165.8	920	152.3	1088	138.4	1796	168.0	1384	624.5
In transit, bus	3003	8.8	1654	6.2	1900	2.8	3108	9.0	2610	26.8
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	719	0.2	940	0.4	-1	0.0	869	0.6
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1020	11.9	689	18.8	815	26.2	1062	12.1	859	68.9
Outdoors, along a roadway	1389	46.9	831	92.6	1007	140.8	1601	46.7	1097	327.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	700	0.5	888	1.0	-1	0.0	824	1.6
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	1115	0.2	790	0.1	-1	0.1	1329	0.2	1091	0.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	810	1607.0	462	1615.1	507	1620.5	923	1652.3	676	6494.9
Indoors, office	580	85.4	362	56.8	415	30.2	618	83.7	525	256.1
Indoors, store	791	11.6	351	20.8	420	31.9	1014	11.3	547	75.5
Indoors, restaurant	1604	36.2	765	42.3	801	49.4	1741	36.1	1176	164.0
Indoors, mfg. facility	927	19.7	477	13.5	535	6.1	911	20.1	779	59.4
Indoors, school	562	0.7	-1	0.0	-1	0.0	565	0.4	563	1.1
Indoors, church	502	32.0	288	24.9	359	18.4	534	31.9	437	107.2
Indoors, shopping mall	2548	0.4	1632	5.2	2046	11.0	2581	0.3	1938	16.9
Indoors, auditorium	290	46.7	138	32.0	173	17.9	360	46.1	264	142.7
Indoors, health care facility	374	8.7	301	17.8	349	27.6	378	8.9	343	63.0
Indoors, public building	573	1.6	294	2.0	349	2.8	549	1.6	420	8.0
Indoors, other location	1752	27.1	947	19.9	1092	10.5	2027	27.9	1573	85.4
Indoors, not specified	-1	0.0	-1	0.0	767	0.2	-1	0.0	767	0.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	621	19.4	548	37.4	673	52.9	705	20.8	635	130.5
Outdoors, school grounds	2126	4.4	857	3.1	1236	1.4	3161	4.6	2087	13.6
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	368	24.1	237	16.6	281	7.5	367	24.6	329	72.9
Outdoors, other location	-1	0.0	731	4.8	922	9.5	-1	0.0	858	14.3
Outdoors, not specified	1050	1.4	780	1.0	937	0.4	1088	1.4	989	4.2
In transit, train	1744	0.2	-1	0.0	-1	0.0	1947	0.1	1825	0.3
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1389	68.8	875	88.0	1117	108.2	1512	70.7	1193	335.8
In transit, bus	2448	2.6	1376	3.1	1731	3.5	2382	2.7	1942	11.8
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.1	-1	0.0	-1	0.0	-1	0.0	884	0.1
Indoors, public garage	685	0.2	962	1.2	1059	2.4	1271	0.2	1024	4.0
Outdoors, in a parking lot	830	2.3	466	4.4	588	6.7	925	2.4	642	15.8
Outdoors, along a roadway	1214	21.2	899	35.9	1128	51.4	1366	21.6	1118	130.2
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	0	0.3	0	0.5	-1	0.0	0	0.7
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	798	1931.4	452	1881.0	502	1826.7	904	1971.4	669	7610.5
Indoors, office	779	2.0	398	0.6	432	0.4	765	1.6	694	4.7
Indoors, store	475	10.2	355	50.2	441	94.5	580	10.4	426	165.4
Indoors, restaurant	790	22.8	560	27.6	712	31.0	812	24.0	712	105.5
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, church	538	37.8	283	28.4	352	17.5	576	40.4	466	124.2
Indoors, shopping mall	3126	13.7	1849	9.7	2150	4.5	3059	14.0	2704	41.9
Indoors, auditorium	125	7.0	95	5.0	117	2.3	130	7.3	119	21.6
Indoors, health care facility	577	9.6	297	6.3	335	3.0	563	10.2	487	29.1
Indoors, public building	499	7.7	302	5.6	358	2.9	490	8.0	433	24.2
Indoors, other location	1220	13.7	631	20.3	785	26.3	1597	14.4	980	74.7
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1994	1.5	508	9.9	607	19.7	2028	1.5	709	32.7
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	413	7.2	244	4.9	288	2.9	401	6.9	355	21.9
Outdoors, park/golf course	-1	0.0	230	0.6	293	1.4	-1	0.0	273	2.0
Outdoors, other location	-1	0.0	459	1.0	674	2.2	-1	0.0	607	3.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1724	68.1	1012	84.0	1201	101.4	1984	71.2	1433	324.7
In transit, bus	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
In transit, truck	2766	51.7	1210	60.9	1258	72.4	3159	51.3	1988	236.3
In transit, van	1665	0.5	-1	0.0	-1	0.0	1711	0.3	1683	0.8
Indoors, public garage	1140	40.3	611	27.7	733	12.6	1404	41.1	1067	121.7
Outdoors, in a parking lot	1194	34.6	616	31.4	719	25.4	1250	36.1	973	127.5
Outdoors, along a roadway	1377	192.1	854	227.4	1098	265.9	1502	193.9	1185	879.4
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1805	5.1	1231	1.3	1138	0.8	1898	4.1	1726	11.3
Outdoors, service station	0	0.8	0	1.7	0	2.5	0	0.8	0	5.8
Indoors, residential garage	2021	0.8	769	0.6	1085	0.3	2697	1.8	2099	3.5
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
Indoors, home	859	1290.8	482	1209.6	527	1125.3	995	1315.3	727	4940.9
Indoors, office	737	18.3	424	10.5	444	5.4	748	18.1	648	52.2
Indoors, store	711	8.3	370	5.7	469	2.9	775	9.6	635	26.6
Indoors, restaurant	752	21.4	663	18.5	895	18.6	997	20.1	828	78.6
Indoors, mfg. facility	857	56.8	510	127.3	566	200.6	882	58.7	629	443.4
Indoors, school	857	24.0	452	17.1	509	7.8	855	24.8	726	73.7
Indoors, church	578	16.2	262	11.2	322	6.0	692	18.8	522	52.1
Indoors, shopping mall	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, auditorium	-1	0.0	142	17.5	182	36.7	407	0.8	172	54.9
Indoors, health care facility	-1	0.0	232	6.8	318	12.9	-1	0.0	288	19.6
Indoors, public building	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, other location	1385	11.8	791	6.8	879	3.4	1428	12.3	1232	34.4
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	1424	75.3	831	77.8	987	73.4	1512	80.9	1193	307.3
Outdoors, residential grounds	778	31.8	497	25.4	683	15.9	872	33.1	726	106.2
Outdoors, school grounds	1061	1.4	751	1.0	953	0.4	1123	1.4	999	4.2
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	427	23.2	249	16.3	288	8.1	424	23.5	369	71.1
Outdoors, other location	1100	186.7	566	197.6	650	209.2	1309	190.0	896	783.5
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1804	64.0	968	77.5	1162	91.4	2119	65.1	1458	298.0
In transit, bus	3427	20.0	1784	14.2	2069	7.4	3643	20.5	2962	62.0
In transit, truck	1655	1.2	996	1.2	1303	1.4	1616	1.1	1383	4.8
In transit, van	1111	1.5	825	1.5	1067	1.7	1266	1.4	1065	6.1
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	867	7.8	505	8.7	631	9.3	1013	8.5	747	34.3
Outdoors, along a roadway	1249	109.2	770	139.9	981	176.2	1513	109.6	1089	534.8
In transit, motorcycle	1794	0.7	765	0.4	1155	0.2	2905	0.6	1926	1.8
Indoors, service station	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
Outdoors, service station	-1	0.1	-1	0.1	-1	0.1	0	0.1	0	0.3
Indoors, residential garage	885	0.5	581	0.5	837	0.4	1410	0.6	943	2.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	830	1394.1	463	1415.9	506	1440.4	955	1430.1	688	5680.4
Indoors, office	624	0.8	363	6.0	417	12.0	797	0.7	423	19.5
Indoors, store	528	19.6	337	23.3	428	28.6	686	20.1	483	91.7
Indoors, restaurant	1449	15.3	721	18.3	863	20.8	1700	15.7	1142	70.1
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	931	360.8	472	251.9	525	130.4	928	365.6	778	1108.6
Indoors, church	567	14.0	273	15.3	307	16.2	623	14.6	436	60.1
Indoors, shopping mall	1852	3.3	1527	2.6	2002	1.5	2051	3.8	1864	11.2
Indoors, auditorium	255	10.3	125	10.3	155	10.3	326	10.2	215	41.0
Indoors, health care facility	434	18.7	274	14.5	368	9.9	529	18.8	414	62.0
Indoors, public building	628	8.9	329	9.1	415	8.9	666	9.5	511	36.4
Indoors, other location	1100	10.5	710	11.4	914	12.4	1229	10.9	982	45.2
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
Outdoors, residential grounds	704	37.8	521	69.4	657	103.7	904	38.6	664	249.5
Outdoors, school grounds	1148	39.6	773	27.5	958	13.5	1268	40.5	1082	121.1
Outdoors, sports arena	334	13.9	236	17.4	327	20.5	447	14.4	331	66.3
Outdoors, park/golf course	316	5.9	252	24.6	314	45.3	435	5.6	304	81.4
Outdoors, other location	900	1.4	582	22.5	712	45.5	915	1.4	679	70.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1623	52.5	937	61.5	1138	69.9	1811	54.9	1348	238.8
In transit, bus	2571	11.7	1492	8.8	1767	4.9	2887	12.1	2315	37.5
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1410	7.7	748	5.2	1015	3.1	2048	7.4	1411	23.3
Indoors, public garage	-1	0.0	1016	0.3	1056	0.7	-1	0.0	1043	1.0
Outdoors, in a parking lot	1067	4.6	538	5.8	624	7.0	1176	4.8	813	22.3
Outdoors, along a roadway	1504	26.0	886	42.5	1088	60.7	1784	26.7	1222	155.9
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	0	0.1	0	0.2	-1	0.0	0	0.4
Indoors, residential garage	740	1.2	603	0.8	772	0.4	833	1.2	744	3.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	809	1726.1	454	1749.7	498	1781.6	922	1761.8	670	7019.1
Indoors, office	695	84.9	368	74.6	415	60.8	693	87.1	560	307.4
Indoors, store	472	17.7	349	22.7	439	28.4	588	18.5	454	87.2
Indoors, restaurant	947	21.9	586	31.5	714	40.4	1175	23.4	815	117.2
Indoors, mfg. facility	893	29.0	479	20.4	535	10.1	886	30.0	756	89.5
Indoors, school	948	86.1	483	59.8	530	27.8	935	89.3	794	263.0
Indoors, church	411	39.5	240	26.9	293	15.1	464	39.1	375	120.5
Indoors, shopping mall	3515	3.2	1917	4.9	2181	5.9	3401	3.3	2585	17.3
Indoors, auditorium	304	3.2	132	2.3	171	1.0	403	3.3	284	9.9
Indoors, health care facility	729	9.9	329	11.7	357	13.7	725	10.4	514	45.7
Indoors, public building	533	1.3	363	6.9	407	13.1	518	1.3	407	22.6
Indoors, other location	1439	2.7	713	5.4	809	7.5	1659	2.8	1003	18.4
Indoors, not specified	-1	0.0	695	1.8	994	3.9	-1	0.1	898	5.8
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	595	20.1	464	30.2	606	42.1	746	19.5	590	111.9
Outdoors, school grounds	1123	9.0	740	6.4	984	2.9	1412	9.4	1118	27.6
Outdoors, sports arena	726	0.3	279	0.2	-1	0.1	977	0.3	672	0.9
Outdoors, park/golf course	379	0.5	315	2.4	337	4.8	456	0.3	338	8.0
Outdoors, other location	616	0.9	462	1.3	642	1.8	645	0.9	592	4.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Phoenix: City-wide, Demographic Group=All persons

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1688	99.9	953	101.0	1139	102.0	1943	102.3	1431	405.3
In transit, bus	3030	6.0	1675	4.7	1949	3.1	3296	6.2	2628	20.0
In transit, truck	2275	6.9	1185	6.2	1331	5.4	2461	7.1	1865	25.5
In transit, van	1861	4.9	1031	4.6	1198	4.4	2098	4.8	1559	18.7
Indoors, public garage	994	4.0	577	2.9	727	1.7	1085	4.0	891	12.6
Outdoors, in a parking lot	1010	8.6	573	10.9	690	12.9	1117	9.0	818	41.4
Outdoors, along a roadway	1308	55.1	806	71.4	1002	88.8	1511	55.8	1117	271.1
In transit, motorcycle	-1	0.1	816	0.9	1044	1.8	-1	0.1	1023	2.8
Indoors, service station	1401	2.4	782	1.7	911	1.0	1486	2.4	1225	7.4
Outdoors, service station	0	0.3	0	0.3	0	0.4	0	0.3	0	1.2
Indoors, residential garage	1274	1.7	702	1.2	883	0.7	1569	1.7	1189	5.3
Indoors, in a repair shop	2068	0.1	-1	0.0	-1	0.0	2085	0.1	1958	0.3
Indoors, home	820	1544.0	460	1552.0	502	1562.7	937	1579.9	680	6238.6
Indoors, office	687	126.1	374	107.0	424	87.3	696	127.9	564	448.4
Indoors, store	606	39.8	357	42.6	436	46.1	683	40.7	516	169.3
Indoors, restaurant	1230	25.3	676	25.6	799	25.8	1429	26.2	1035	103.0
Indoors, mfg. facility	856	16.8	486	16.6	558	16.4	903	17.0	703	66.8
Indoors, school	894	97.8	462	73.9	515	45.5	900	99.8	741	317.0
Indoors, church	568	16.4	276	14.8	317	13.1	626	16.6	459	60.9
Indoors, shopping mall	2576	3.0	1692	2.7	2120	2.3	2987	3.1	2383	11.1
Indoors, auditorium	223	7.1	122	7.4	151	8.1	271	7.2	190	29.8
Indoors, health care facility	582	21.8	321	19.7	362	17.5	637	22.1	486	81.1
Indoors, public building	665	5.5	358	7.7	416	10.1	760	5.6	514	28.9
Indoors, other location	1621	28.3	875	24.3	989	20.4	1819	29.0	1373	102.0
Indoors, not specified	910	0.6	672	0.6	969	0.7	1082	0.6	912	2.6
Outdoors, construction	1410	1.9	831	1.6	982	1.1	1472	2.0	1221	6.7
Outdoors, residential grounds	752	17.2	535	40.8	662	64.7	894	17.5	665	140.3
Outdoors, school grounds	1271	5.9	809	4.4	1024	2.7	1424	6.0	1177	18.9
Outdoors, sports arena	351	1.8	258	4.7	337	7.5	451	1.9	329	15.8
Outdoors, park/golf course	341	5.0	260	14.4	322	24.2	413	5.0	315	48.7
Outdoors, other location	1006	5.4	582	16.6	714	28.4	1175	5.5	749	55.9
Outdoors, not specified	1436	0.2	820	0.2	-1	0.1	1567	0.2	1284	0.7
In transit, train	2177	0.2	1018	0.1	-1	0.1	2476	0.2	1927	0.6
In transit, airplane	-1	0.0	0	0.5	0	1.0	-1	0.0	0	1.4

San Francisco: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990

Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1700	86.5	1116	94.5	1258	100.5	2215	89.5	1556	371.0
In transit, bus	3087	7.2	2042	5.7	2269	4.6	3813	7.2	2905	24.7
In transit, truck	2086	5.8	1377	8.0	1542	8.7	2703	6.8	1873	29.3
In transit, van	1655	5.0	1093	5.1	1250	5.0	2207	5.1	1552	20.2
Indoors, public garage	983	2.4	685	1.5	793	1.2	1275	2.1	977	7.2
Outdoors, in a parking lot	981	11.7	660	12.6	749	14.1	1264	12.0	903	50.5
Outdoors, along a roadway	1445	54.0	979	69.7	1108	82.8	1822	56.4	1296	262.8
In transit, motorcycle	1974	0.1	1157	0.8	1308	1.4	-1	0.1	1337	2.4
Indoors, service station	1468	2.2	1019	1.7	1169	1.2	1823	2.2	1422	7.3
Outdoors, service station	0	0.1	0	0.5	0	1.0	0	0.1	0	1.7
Indoors, residential garage	1363	1.1	903	1.1	1042	0.8	1765	1.3	1306	4.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.1	1877	0.2
Indoors, home	642	1553.3	401	1533.9	447	1527.2	904	1581.2	601	6195.5
Indoors, office	649	79.7	454	83.8	513	88.1	810	82.3	604	333.9
Indoors, store	668	45.4	472	47.2	543	52.5	835	45.4	625	190.4
Indoors, restaurant	1230	27.8	816	28.8	927	31.0	1604	28.1	1136	115.6
Indoors, mfg. facility	806	24.5	556	26.5	629	30.7	1023	24.7	743	106.4
Indoors, school	800	132.8	545	103.2	616	70.6	1024	135.2	779	441.9
Indoors, church	519	15.0	332	13.8	376	12.0	700	15.6	493	56.4
Indoors, shopping mall	3266	3.2	2402	2.9	2772	2.4	3994	3.5	3175	12.1
Indoors, auditorium	215	7.3	136	7.8	156	6.5	288	7.8	200	29.4
Indoors, health care facility	536	23.2	362	20.5	413	17.0	701	24.2	516	84.9
Indoors, public building	604	6.9	399	8.3	456	9.4	811	7.4	555	32.0
Indoors, other location	1401	24.4	872	30.1	982	34.7	1930	26.1	1257	115.3
Indoors, not specified	1117	0.2	874	0.4	989	0.6	1325	0.2	1030	1.4
Outdoors, construction	1556	2.5	1121	3.1	1286	3.5	1910	3.0	1453	12.2
Outdoors, residential grounds	886	20.0	628	33.9	716	43.6	1093	21.6	788	119.1
Outdoors, school grounds	1507	7.6	1112	7.7	1275	7.3	1826	8.1	1437	30.7
Outdoors, sports arena	458	1.1	315	4.7	359	8.5	570	1.2	369	15.5
Outdoors, park/golf course	438	5.7	319	13.5	366	19.5	539	6.2	385	45.0
Outdoors, other location	1044	2.9	668	12.1	751	20.6	1355	3.2	798	38.9
Outdoors, not specified	1415	0.2	1226	0.3	1348	0.4	1823	0.2	1412	1.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	0.3	0	0.5	-1	0.0	0	0.8

San Francisco: City-wide, Demographic Group=African americans

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1639	62.5	1177	61.5	1222	74.4	2041	59.1	1500	257.5
In transit, bus	3066	17.3	2162	18.6	2181	15.1	3771	20.2	2842	71.2
In transit, truck	-1	0.0	1419	3.4	1482	8.4	-1	0.0	1464	11.8
In transit, van	-1	0.0	1278	0.2	1319	0.5	-1	0.0	1307	0.7
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	964	6.6	659	8.1	692	12.0	1262	5.7	839	32.4
Outdoors, along a roadway	1409	32.6	1040	59.9	1081	86.4	1651	36.1	1215	215.0
In transit, motorcycle	1966	1.0	1342	1.1	1384	0.7	2525	1.3	1871	4.1
Indoors, service station	-1	0.0	1061	0.6	1078	1.5	-1	0.0	1073	2.2
Outdoors, service station	-1	0.0	0	0.4	0	0.9	-1	0.0	0	1.2
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	1713	0.2	1743	0.5	-1	0.0	1734	0.6
Indoors, home	602	1710.7	404	1671.7	414	1647.3	818	1738.4	563	6768.0
Indoors, office	745	7.2	472	37.3	490	70.8	978	8.0	531	123.3
Indoors, store	670	14.6	508	18.2	530	20.1	795	15.1	613	68.1
Indoors, restaurant	1232	8.5	874	2.7	884	2.7	1677	6.8	1287	20.8
Indoors, mfg. facility	747	16.2	563	12.5	582	27.8	862	7.7	654	64.2
Indoors, school	774	136.0	563	127.5	579	71.6	952	159.9	749	495.0
Indoors, church	466	42.8	344	29.2	360	20.7	574	43.5	458	136.2
Indoors, shopping mall	2936	2.6	2595	2.6	2757	1.8	3048	2.9	2846	9.8
Indoors, auditorium	207	4.2	157	4.0	163	2.3	234	4.7	195	15.2
Indoors, health care facility	438	37.9	288	47.2	289	34.9	652	44.5	421	164.5
Indoors, public building	488	1.8	437	3.4	458	3.0	502	2.2	466	10.4
Indoors, other location	1244	26.3	935	12.6	975	21.7	1692	15.2	1206	75.7
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	991	10.6	690	29.4	715	46.1	1201	13.1	801	99.2
Outdoors, school grounds	1418	9.1	1193	9.1	1256	5.0	1566	11.2	1383	34.5
Outdoors, sports arena	444	11.2	356	10.6	371	6.2	498	12.4	426	40.4
Outdoors, park/golf course	-1	0.0	346	4.9	364	9.5	-1	0.0	358	14.4
Outdoors, other location	-1	0.0	697	4.1	728	8.4	-1	0.0	722	12.6
Outdoors, not specified	-1	0.1	-1	0.1	-1	0.0	-1	0.1	1383	0.2
In transit, train	-1	0.0	814	3.1	826	7.7	-1	0.0	822	10.8
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1722	62.2	1189	65.3	1292	76.5	2333	61.2	1608	265.2
In transit, bus	3302	12.6	2204	14.0	2320	12.6	4358	14.6	3071	53.8
In transit, truck	-1	0.0	1392	3.1	1540	7.8	-1	0.0	1498	11.0
In transit, van	1604	5.5	1199	5.7	1322	4.1	2028	6.3	1568	21.6
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	964	8.4	680	10.2	736	12.4	1292	8.3	888	39.3
Outdoors, along a roadway	1409	81.3	999	107.5	1113	107.7	1932	96.9	1344	393.4
In transit, motorcycle	2075	0.7	1299	0.8	1441	0.6	3023	0.9	2032	3.0
Indoors, service station	-1	0.0	1098	0.6	1163	1.4	-1	0.0	1144	2.0
Outdoors, service station	-1	0.0	0	0.4	0	0.9	-1	0.0	0	1.2
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	1741	0.2	1867	0.4	-1	0.0	1831	0.6
Indoors, home	663	1702.0	427	1650.4	457	1639.8	966	1720.2	632	6712.4
Indoors, office	758	10.1	477	40.6	515	74.0	1014	11.7	565	136.4
Indoors, store	690	14.2	504	21.6	556	26.8	885	15.0	629	77.7
Indoors, restaurant	1268	9.4	870	4.2	952	3.2	1769	8.1	1323	24.9
Indoors, mfg. facility	768	14.2	567	11.4	615	25.6	966	6.7	684	58.0
Indoors, school	814	102.5	566	92.7	609	54.9	1075	116.7	804	366.8
Indoors, church	473	42.5	345	32.0	375	22.3	622	43.9	475	140.7
Indoors, shopping mall	2928	2.3	2510	2.4	2844	1.6	3336	2.6	2921	8.9
Indoors, auditorium	209	3.8	157	3.6	172	2.1	263	4.2	206	13.8
Indoors, health care facility	491	32.5	324	41.1	340	31.0	750	38.1	479	142.7
Indoors, public building	484	1.6	424	3.1	473	2.8	550	2.0	475	9.5
Indoors, other location	1393	25.5	936	14.4	1028	22.0	2122	16.5	1360	78.4
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1061	10.7	676	29.2	741	42.6	1505	13.1	862	95.6
Outdoors, school grounds	1431	6.5	1163	6.6	1321	3.8	1756	8.0	1448	25.0
Outdoors, sports arena	452	10.2	347	10.1	380	6.9	564	11.3	444	38.5
Outdoors, park/golf course	-1	0.0	336	4.4	375	8.5	-1	0.0	362	13.0
Outdoors, other location	872	1.2	707	5.5	768	8.3	1039	1.5	780	16.6
Outdoors, not specified	-1	0.1	-1	0.1	-1	0.0	-1	0.1	1440	0.2
In transit, train	-1	0.0	918	2.9	978	7.2	-1	0.0	961	10.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1655	43.1	1194	50.7	1285	55.6	1954	45.1	1499	194.6
In transit, bus	2918	7.7	2119	6.0	2301	4.3	3282	7.9	2741	25.9
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	1116	0.3	-1	0.0	-1	0.0	1116	0.3
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1021	11.8	707	20.0	787	25.3	1286	12.6	894	69.7
Outdoors, along a roadway	1529	55.0	1074	66.2	1165	70.3	1818	60.5	1377	252.1
In transit, motorcycle	-1	0.0	1363	0.4	1508	0.7	-1	0.0	1457	1.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	0	0.1	0	0.2	-1	0.0	0	0.3
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	654	1823.8	426	1823.1	456	1840.2	875	1854.9	604	7342.0
Indoors, office	804	2.6	498	1.2	531	1.6	1096	1.7	758	7.1
Indoors, store	667	30.0	514	35.2	566	43.5	754	30.7	616	139.3
Indoors, restaurant	1308	14.4	891	6.0	986	6.1	1609	10.9	1277	37.5
Indoors, mfg. facility	842	8.7	588	24.3	642	50.6	1019	4.2	665	88.0
Indoors, school	794	102.1	576	79.5	621	36.4	961	111.9	779	329.9
Indoors, church	505	9.8	345	8.1	380	4.1	649	10.8	497	32.8
Indoors, shopping mall	3250	3.6	2664	3.5	2951	1.6	3397	4.5	3110	13.2
Indoors, auditorium	177	10.5	148	10.5	165	5.8	182	11.7	169	38.5
Indoors, health care facility	491	9.4	384	9.4	423	4.1	574	11.7	482	34.7
Indoors, public building	520	6.0	432	3.0	484	1.9	565	6.2	517	17.1
Indoors, other location	1335	7.7	948	12.4	1015	18.7	1577	8.5	1151	47.2
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	982	10.0	684	15.6	750	23.5	1265	10.4	862	59.6
Outdoors, school grounds	1443	2.0	1192	1.9	1307	0.9	1521	2.5	1387	7.4
Outdoors, sports arena	-1	0.0	320	3.7	356	9.3	-1	0.0	346	13.0
Outdoors, park/golf course	408	1.2	380	0.6	410	1.5	419	1.1	408	4.5
Outdoors, other location	939	0.2	762	2.1	842	1.8	1159	0.2	823	4.4
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1683	77.9	1160	83.1	1284	84.3	2125	81.7	1557	327.0
In transit, bus	3532	4.5	2218	5.1	2277	5.0	4530	5.2	3137	19.7
In transit, truck	2056	4.2	1424	12.8	1582	21.7	2688	5.0	1709	43.7
In transit, van	1710	1.1	1190	1.5	1309	1.7	2114	1.2	1538	5.6
Indoors, public garage	-1	0.0	-1	0.1	748	0.1	-1	0.0	747	0.2
Outdoors, in a parking lot	968	16.6	681	13.6	765	13.0	1181	16.4	917	59.6
Outdoors, along a roadway	1478	55.3	1031	77.9	1130	100.0	1789	56.7	1299	289.9
In transit, motorcycle	-1	0.0	1229	5.1	1347	8.1	-1	0.0	1301	13.2
Indoors, service station	-1	0.0	1076	0.4	1161	0.6	-1	0.1	1196	1.1
Outdoors, service station	0	0.4	0	0.7	0	0.8	0	0.4	0	2.3
Indoors, residential garage	1148	1.9	942	1.6	1065	0.9	1214	2.0	1106	6.3
Indoors, in a repair shop	-1	0.0	-1	0.1	1905	0.2	-1	0.0	1867	0.3
Indoors, home	653	1596.4	418	1586.4	452	1592.4	897	1622.7	607	6397.8
Indoors, office	629	57.1	472	58.2	519	55.8	745	59.8	593	230.9
Indoors, store	711	36.7	503	45.9	558	53.9	888	38.6	649	175.0
Indoors, restaurant	1268	50.5	848	37.4	933	23.4	1631	52.5	1241	163.8
Indoors, mfg. facility	827	37.6	573	33.4	625	32.2	1036	37.7	777	140.9
Indoors, school	818	103.7	571	81.4	625	65.9	1016	103.0	783	353.9
Indoors, church	507	16.6	350	15.5	385	11.8	643	18.2	485	62.0
Indoors, shopping mall	3217	3.9	2522	2.6	2840	2.2	3876	4.2	3228	12.9
Indoors, auditorium	209	3.8	142	3.8	159	1.8	265	4.6	202	14.1
Indoors, health care facility	547	33.7	360	25.1	403	14.5	727	34.1	541	107.5
Indoors, public building	549	3.6	427	2.2	472	2.7	649	2.9	532	11.4
Indoors, other location	1443	28.7	896	37.4	1012	38.7	2023	33.1	1313	138.0
Indoors, not specified	-1	0.1	858	0.4	960	1.0	-1	0.1	952	1.6
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	985	15.3	680	26.3	748	36.2	1199	15.7	843	93.6
Outdoors, school grounds	1592	7.7	1173	8.5	1311	8.8	1961	8.7	1508	33.7
Outdoors, sports arena	-1	0.0	339	4.2	376	10.5	-1	0.0	365	14.7
Outdoors, park/golf course	530	2.5	338	8.1	384	7.4	665	3.1	425	21.0
Outdoors, other location	-1	0.0	723	5.2	802	12.4	-1	0.0	779	17.7
Outdoors, not specified	1381	0.4	-1	0.0	-1	0.0	1504	0.2	1409	0.6
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1732	87.7	1151	93.6	1273	97.1	2239	90.0	1587	368.5
In transit, bus	3191	6.6	2114	5.2	2312	5.0	3983	6.2	2973	23.0
In transit, truck	2107	4.1	1406	6.3	1540	7.5	2627	4.9	1838	22.7
In transit, van	1656	9.6	1116	9.3	1263	9.6	2181	9.5	1555	38.1
Indoors, public garage	996	5.2	699	2.7	789	1.3	1277	4.6	1012	13.8
Outdoors, in a parking lot	991	10.5	683	11.6	758	12.6	1258	11.0	913	45.7
Outdoors, along a roadway	1432	63.1	999	81.1	1123	90.2	1796	69.0	1307	303.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.1	-1	0.0	1271	0.1
Indoors, service station	1371	0.5	1031	0.4	1171	0.4	1764	0.5	1353	1.7
Outdoors, service station	-1	0.1	0	0.2	0	0.2	0	0.1	0	0.5
Indoors, residential garage	1557	1.3	926	1.1	1043	0.8	2163	1.5	1520	4.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	651	1564.9	409	1539.3	447	1534.8	911	1590.6	607	6229.6
Indoors, office	667	84.3	466	87.2	516	80.6	829	90.1	623	342.1
Indoors, store	673	37.5	485	43.7	549	54.0	826	36.4	618	171.6
Indoors, restaurant	1233	20.3	841	20.9	935	20.0	1565	21.3	1147	82.5
Indoors, mfg. facility	792	27.5	569	30.0	633	34.2	984	27.6	734	119.2
Indoors, school	806	101.9	553	82.9	617	70.2	1023	101.2	771	356.2
Indoors, church	523	23.0	339	17.9	377	13.3	698	23.5	508	77.6
Indoors, shopping mall	3307	2.8	2483	2.0	2824	1.3	3901	3.0	3258	9.1
Indoors, auditorium	225	7.7	140	7.5	158	5.6	303	8.5	213	29.3
Indoors, health care facility	528	21.7	361	20.7	411	18.0	693	23.1	507	83.6
Indoors, public building	628	7.5	411	10.9	466	13.9	844	7.9	555	40.2
Indoors, other location	1435	26.4	904	27.9	1019	30.8	1998	26.5	1322	111.6
Indoors, not specified	1125	0.3	892	0.4	1007	0.9	1273	0.1	1017	1.7
Outdoors, construction	1581	5.5	1155	6.3	1304	6.4	1920	6.5	1490	24.8
Outdoors, residential grounds	887	22.5	646	40.9	726	52.2	1068	25.5	790	141.2
Outdoors, school grounds	1532	6.4	1138	6.7	1294	7.0	1842	6.7	1448	26.7
Outdoors, sports arena	478	0.4	319	3.0	356	5.2	612	0.5	362	9.1
Outdoors, park/golf course	447	5.3	329	11.3	370	17.4	536	5.9	393	39.9
Outdoors, other location	1078	5.3	686	12.5	756	16.1	1400	6.0	873	39.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	-1	0.0	886	0.5	970	1.3	-1	0.0	946	1.8
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990

Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1729	111.3	1129	118.1	1256	122.4	2260	115.7	1585	467.5
In transit, bus	2968	9.5	2019	8.0	2253	4.6	3648	10.7	2858	32.8
In transit, truck	2142	2.2	1351	3.3	1487	3.3	2830	2.7	1884	11.5
In transit, van	-1	0.1	1112	1.1	1269	2.0	-1	0.1	1260	3.2
Indoors, public garage	1003	0.4	694	0.4	775	0.3	1289	0.4	970	1.5
Outdoors, in a parking lot	1017	10.7	664	11.5	739	12.7	1358	11.2	935	46.1
Outdoors, along a roadway	1478	51.0	987	65.3	1102	75.7	1896	52.9	1321	244.9
In transit, motorcycle	2050	0.5	-1	0.0	-1	0.0	2840	0.3	2304	0.8
Indoors, service station	-1	0.0	1132	0.2	1223	0.4	-1	0.0	1197	0.6
Outdoors, service station	-1	0.1	0	0.7	0	1.6	-1	0.1	0	2.5
Indoors, residential garage	1361	0.3	949	0.9	1068	1.5	1670	0.3	1127	3.0
Indoors, in a repair shop	1848	0.2	1477	0.2	-1	0.1	2300	0.3	1889	0.8
Indoors, home	645	1500.0	402	1468.6	444	1463.5	918	1522.1	606	5954.3
Indoors, office	654	120.9	457	119.9	509	126.1	823	121.0	610	487.9
Indoors, store	674	44.0	478	46.6	541	54.1	847	44.6	629	189.3
Indoors, restaurant	1230	26.3	830	31.1	937	35.0	1626	27.5	1132	119.9
Indoors, mfg. facility	831	29.0	554	28.6	617	32.1	1085	28.9	768	118.6
Indoors, school	795	146.6	548	112.4	612	60.3	1023	155.9	788	475.3
Indoors, church	522	9.4	336	12.3	375	13.9	712	9.9	468	45.4
Indoors, shopping mall	3480	3.8	2430	5.7	2771	6.6	4502	4.3	3175	20.4
Indoors, auditorium	206	4.4	137	8.7	155	11.3	266	4.6	175	29.0
Indoors, health care facility	563	19.5	377	18.9	418	17.7	725	20.0	526	76.1
Indoors, public building	659	5.4	393	7.4	431	9.3	924	6.0	571	28.1
Indoors, other location	1411	25.6	892	23.8	967	24.3	1900	26.4	1308	100.0
Indoors, not specified	1145	0.5	911	0.5	1036	0.4	1385	0.6	1141	1.9
Outdoors, construction	-1	0.0	1085	0.6	1260	1.6	-1	0.0	1210	2.2
Outdoors, residential grounds	884	17.5	626	34.8	712	46.7	1104	17.8	772	116.7
Outdoors, school grounds	1511	7.6	1130	7.0	1266	4.8	1801	8.7	1464	28.1
Outdoors, sports arena	480	2.5	324	8.6	364	13.9	596	3.1	388	28.2
Outdoors, park/golf course	430	9.3	321	16.0	367	16.1	533	10.4	397	51.8
Outdoors, other location	843	1.3	665	21.9	737	44.1	966	1.5	721	68.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	0.9	0	1.6	-1	0.0	0	2.5

San Francisco: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1838	57.9	1132	82.1	1262	105.9	2413	60.6	1564	306.5
In transit, bus	4476	1.5	1835	0.1	-1	0.0	5876	0.7	4758	2.3
In transit, truck	2138	18.2	1447	11.5	1590	8.4	3037	16.5	2179	54.5
In transit, van	1554	11.0	1079	10.9	1243	6.9	2024	12.6	1520	41.4
Indoors, public garage	-1	0.0	742	0.6	818	1.5	-1	0.0	796	2.1
Outdoors, in a parking lot	1121	3.5	665	8.5	748	14.3	1515	3.5	859	29.8
Outdoors, along a roadway	1567	50.7	993	60.1	1103	75.2	2075	48.6	1377	234.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1790	6.6	-1	0.0	-1	0.0	2415	3.1	1991	9.7
Outdoors, service station	-1	0.0	0	1.3	0	3.2	-1	0.0	0	4.5
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	637	1549.4	402	1527.5	444	1488.0	906	1600.5	602	6165.4
Indoors, office	628	68.8	453	97.8	516	148.8	774	65.7	565	381.0
Indoors, store	807	2.6	478	15.7	541	30.7	1032	3.1	564	52.1
Indoors, restaurant	1319	32.1	841	44.3	933	61.3	1735	31.0	1130	168.7
Indoors, mfg. facility	-1	0.0	538	1.8	605	4.5	-1	0.0	586	6.4
Indoors, school	801	176.8	547	108.7	611	56.0	1040	161.4	802	502.9
Indoors, church	583	8.1	348	9.3	375	11.4	732	8.6	495	37.4
Indoors, shopping mall	2808	0.9	2347	0.9	2775	0.4	3141	1.1	2796	3.3
Indoors, auditorium	203	26.9	136	26.2	154	18.3	270	29.4	196	100.7
Indoors, health care facility	504	17.7	365	14.5	415	9.4	608	18.3	488	59.9
Indoors, public building	-1	0.0	362	2.1	471	1.7	-1	0.0	411	3.8
Indoors, other location	1332	33.1	817	39.0	916	33.5	1964	36.8	1256	142.4
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	1102	2.7	1272	6.7	-1	0.0	1223	9.4
Outdoors, residential grounds	858	64.2	633	62.5	718	45.9	1064	73.7	836	246.2
Outdoors, school grounds	1322	12.4	1084	12.1	1245	6.6	1496	14.5	1303	45.6
Outdoors, sports arena	-1	0.0	302	0.4	-1	0.0	-1	0.0	302	0.4
Outdoors, park/golf course	436	17.7	322	36.0	368	54.7	535	18.3	388	126.7
Outdoors, other location	-1	0.0	674	7.5	752	14.6	-1	0.0	726	22.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1696	56.9	1122	64.8	1234	71.3	2244	58.7	1545	251.7
In transit, bus	3086	14.0	2082	11.4	2248	7.6	3863	14.9	2954	47.9
In transit, truck	1878	1.1	1335	1.2	1487	1.6	2404	0.9	1715	4.8
In transit, van	1654	7.8	1070	7.4	1179	5.4	2272	8.3	1593	28.8
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, in a parking lot	951	5.8	671	7.3	741	9.1	1217	6.1	868	28.3
Outdoors, along a roadway	1436	69.7	996	98.8	1099	126.3	1816	71.6	1276	366.4
In transit, motorcycle	1970	0.5	1219	0.2	1334	0.2	2772	0.3	1963	1.2
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	-1	0.1	-1	0.0	-1	0.0	-1	0.1	0	0.1
Indoors, residential garage	1433	1.2	912	1.4	1031	1.1	1977	1.5	1371	5.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	638	1588.5	402	1576.6	437	1579.0	917	1621.1	601	6365.2
Indoors, office	644	1.5	422	5.1	454	9.5	809	1.6	492	17.7
Indoors, store	663	22.6	478	24.5	535	28.9	837	22.8	620	98.8
Indoors, restaurant	1256	10.4	841	15.6	928	20.0	1656	11.1	1105	57.0
Indoors, mfg. facility	900	0.3	582	0.3	636	0.1	1203	0.4	888	1.2
Indoors, school	792	276.1	548	212.3	603	149.7	1024	278.3	775	916.4
Indoors, church	504	12.4	331	11.2	367	10.4	691	12.8	484	46.9
Indoors, shopping mall	3115	2.7	2444	2.9	2739	2.8	3639	3.1	2992	11.5
Indoors, auditorium	213	7.9	137	8.0	154	6.0	291	8.5	203	30.4
Indoors, health care facility	501	14.2	368	12.2	411	7.1	633	15.2	496	48.7
Indoors, public building	579	2.7	410	3.8	452	4.0	762	3.0	535	13.6
Indoors, other location	1323	7.2	870	7.2	984	7.1	1806	7.3	1248	28.8
Indoors, not specified	-1	0.0	833	0.3	922	0.8	-1	0.0	896	1.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	886	30.7	639	53.2	710	71.0	1109	32.9	789	187.8
Outdoors, school grounds	1463	16.4	1129	17.5	1264	18.1	1767	17.4	1403	69.4
Outdoors, sports arena	453	4.2	325	6.9	358	9.5	566	4.7	403	25.3
Outdoors, park/golf course	462	4.2	322	20.1	360	34.6	584	4.5	371	63.5
Outdoors, other location	947	0.4	673	13.1	741	26.7	1177	0.4	726	40.6
Outdoors, not specified	1442	0.4	1089	0.4	1236	0.2	1900	0.4	1461	1.4
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1675	123.0	1165	107.5	1287	107.5	2110	117.8	1575	455.8
In transit, bus	3086	1.3	-1	0.0	-1	0.0	3916	0.6	3366	1.9
In transit, truck	2022	10.9	1425	18.2	1582	17.3	2559	13.1	1829	59.5
In transit, van	-1	0.0	1173	1.4	1303	3.5	-1	0.0	1266	4.9
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	915	13.6	687	14.3	763	11.9	1105	15.1	875	54.9
Outdoors, along a roadway	1392	137.2	980	131.0	1104	103.2	1807	150.8	1351	522.2
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1603	0.2	1115	0.3	1239	0.4	2107	0.3	1476	1.2
Outdoors, service station	0	0.2	0	3.0	0	7.2	0	0.2	0	10.7
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	657	1551.6	421	1500.9	448	1477.4	897	1577.9	611	6107.8
Indoors, office	642	70.2	476	123.2	523	192.9	781	74.8	570	461.1
Indoors, store	666	12.1	503	14.2	561	16.8	805	12.9	625	56.0
Indoors, restaurant	1266	16.3	854	15.9	966	19.2	1597	15.4	1158	66.8
Indoors, mfg. facility	-1	0.0	579	24.1	630	33.1	-1	0.0	609	57.2
Indoors, school	808	121.0	567	78.9	615	39.9	998	118.9	796	358.6
Indoors, church	571	3.5	342	10.8	376	15.6	787	4.3	437	34.0
Indoors, shopping mall	4319	1.8	2673	1.7	2888	0.8	5769	2.2	4209	6.6
Indoors, auditorium	243	0.8	142	17.3	160	28.8	347	0.6	158	47.4
Indoors, health care facility	535	7.4	373	7.4	430	6.8	670	7.8	506	29.3
Indoors, public building	680	28.1	414	23.2	456	10.7	932	31.8	674	93.8
Indoors, other location	1379	32.3	860	29.5	934	32.0	2010	31.9	1304	125.6
Indoors, not specified	1456	0.2	998	0.2	-1	0.1	1913	0.2	1448	0.6
Outdoors, construction	-1	0.0	1174	6.4	1306	16.1	-1	0.0	1268	22.5
Outdoors, residential grounds	829	10.8	665	19.9	743	30.2	930	12.3	766	73.1
Outdoors, school grounds	1477	11.6	1197	11.1	1329	5.0	1588	14.4	1423	42.1
Outdoors, sports arena	428	2.3	370	1.2	402	2.2	464	2.0	421	7.6
Outdoors, park/golf course	500	2.2	350	9.8	385	20.9	695	1.9	400	34.7
Outdoors, other location	852	0.9	738	12.7	777	8.7	903	0.4	760	22.6
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	1965	0.9	-1	0.0	-1	0.0	2625	0.4	2177	1.3
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1718	136.6	1145	136.4	1274	131.7	2196	141.9	1592	546.6
In transit, bus	2917	0.8	2110	1.9	2325	4.1	3390	0.6	2422	7.4
In transit, truck	2141	16.2	1385	20.9	1548	29.0	2818	15.6	1867	81.7
In transit, van	1716	7.0	1159	6.3	1291	5.7	2255	7.1	1636	26.1
Indoors, public garage	989	15.6	690	12.2	798	7.3	1270	16.5	981	51.6
Outdoors, in a parking lot	996	13.6	674	16.8	760	19.5	1291	15.1	910	65.0
Outdoors, along a roadway	1423	61.8	996	74.0	1122	77.5	1786	66.7	1313	280.0
In transit, motorcycle	-1	0.0	1077	0.9	1178	1.7	-1	0.0	1145	2.6
Indoors, service station	1418	13.0	1005	9.0	1163	5.7	1802	12.6	1410	40.3
Outdoors, service station	0	0.4	0	0.5	0	0.6	0	0.4	0	2.0
Indoors, residential garage	1330	6.0	899	5.1	1037	3.1	1725	6.4	1301	20.7
Indoors, in a repair shop	2152	3.3	-1	0.1	1888	0.2	2758	1.9	2348	5.5
Indoors, home	651	1396.7	400	1375.4	442	1361.7	927	1427.3	609	5561.1
Indoors, office	651	223.0	452	192.5	516	156.2	838	222.1	629	793.7
Indoors, store	676	33.8	475	44.9	546	63.1	860	32.2	611	173.9
Indoors, restaurant	1180	31.3	831	32.6	930	39.8	1515	30.2	1096	134.0
Indoors, mfg. facility	772	42.2	542	57.1	623	72.7	994	45.4	708	217.4
Indoors, school	774	20.9	542	16.3	612	10.0	984	21.5	761	68.7
Indoors, church	539	13.6	341	12.6	382	9.8	729	14.7	515	50.7
Indoors, shopping mall	3276	1.5	2475	1.1	2852	0.5	3634	1.7	3177	4.9
Indoors, auditorium	225	3.5	140	0.8	166	0.6	302	2.5	238	7.4
Indoors, health care facility	552	18.9	370	20.3	420	19.6	720	20.3	516	79.0
Indoors, public building	563	5.0	403	10.0	448	15.1	733	4.7	490	34.8
Indoors, other location	1396	40.9	893	50.4	1016	69.9	1894	40.6	1239	201.8
Indoors, not specified	1279	3.5	926	1.3	1069	0.6	1552	3.1	1310	8.6
Outdoors, construction	1529	9.2	1111	11.6	1290	13.0	1917	11.0	1447	44.8
Outdoors, residential grounds	916	9.7	639	17.5	724	19.0	1155	11.0	814	57.2
Outdoors, school grounds	1599	1.0	1135	1.1	1254	0.8	1975	1.2	1518	4.2
Outdoors, sports arena	389	0.9	318	6.0	361	10.9	428	0.9	352	18.7
Outdoors, park/golf course	436	6.6	332	10.9	376	12.3	517	7.6	402	37.4
Outdoors, other location	1043	22.4	683	34.4	766	40.2	1394	24.6	921	121.5
Outdoors, not specified	1887	0.2	1323	0.9	1360	1.4	2499	0.2	1478	2.8
In transit, train	2079	0.6	859	1.2	955	2.7	2787	0.4	1219	4.9
In transit, airplane	-1	0.0	0	1.3	0	1.8	-1	0.0	0	3.1

San Francisco: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1693	98.7	1155	97.2	1271	91.6	2157	103.2	1583	390.8
In transit, bus	2864	2.2	2048	1.2	2315	1.2	3387	1.6	2737	6.2
In transit, truck	1835	3.4	-1	0.0	-1	0.0	2319	2.2	2025	5.5
In transit, van	1712	0.4	1178	0.4	1319	0.3	2273	0.4	1657	1.5
Indoors, public garage	1094	0.6	759	0.4	819	0.2	1380	0.6	1079	1.8
Outdoors, in a parking lot	938	6.0	670	9.3	737	12.1	1131	6.8	832	34.2
Outdoors, along a roadway	1430	39.5	1009	54.1	1119	63.1	1762	43.0	1289	199.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1113	0.1	1180	0.3	-1	0.0	1158	0.4
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, residential garage	1317	0.5	1001	0.1	-1	0.1	1597	0.5	1377	1.2
Indoors, in a repair shop	1895	0.4	1528	0.3	1747	0.2	2278	0.4	1911	1.3
Indoors, home	650	1795.2	417	1764.0	455	1768.2	895	1821.2	607	7148.6
Indoors, office	688	5.9	478	6.0	527	12.1	861	3.8	597	27.9
Indoors, store	659	35.2	493	53.5	553	69.5	791	35.5	599	193.7
Indoors, restaurant	1272	21.8	844	23.6	948	26.2	1650	23.3	1169	94.9
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	828	51.4	554	48.9	613	29.6	1077	59.0	801	188.9
Indoors, church	523	13.3	346	11.7	381	7.7	684	14.3	505	47.0
Indoors, shopping mall	3024	1.4	2459	1.9	2838	4.1	3371	1.0	2848	8.4
Indoors, auditorium	217	14.7	142	13.1	156	8.6	282	16.1	208	52.4
Indoors, health care facility	537	8.6	378	10.1	423	10.2	676	9.6	500	38.4
Indoors, public building	589	5.5	411	3.4	464	2.0	778	5.1	595	16.0
Indoors, other location	1392	30.9	941	33.1	1035	31.3	1776	31.8	1283	127.1
Indoors, not specified	-1	0.0	934	0.2	1069	0.2	-1	0.0	1009	0.3
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	856	16.2	648	27.4	725	31.7	1000	19.7	782	95.0
Outdoors, school grounds	1771	2.4	1146	3.0	1305	2.5	2390	3.0	1663	11.0
Outdoors, sports arena	450	1.5	325	1.6	366	3.3	527	1.3	401	7.7
Outdoors, park/golf course	435	2.7	339	10.9	381	18.2	489	3.0	381	34.8
Outdoors, other location	902	1.4	677	8.4	740	13.6	1001	1.5	743	24.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	1748	0.1	-1	0.0	-1	0.0	-1	0.1	1866	0.2
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1735	116.6	1151	113.1	1280	115.6	2229	116.7	1603	462.0
In transit, bus	3013	4.9	2053	4.6	2281	4.0	3700	5.1	2807	18.7
In transit, truck	2207	5.4	1332	4.9	1497	4.1	3032	5.8	2087	20.2
In transit, van	-1	0.0	1146	2.1	1296	4.6	-1	0.0	1251	6.7
Indoors, public garage	1021	2.3	721	1.6	805	1.8	1233	2.0	962	7.8
Outdoors, in a parking lot	1029	7.2	676	9.8	757	12.3	1360	7.7	914	37.0
Outdoors, along a roadway	1452	35.8	996	47.5	1111	57.5	1822	37.5	1298	178.2
In transit, motorcycle	-1	0.0	1220	5.0	1387	8.1	-1	0.0	1323	13.1
Indoors, service station	1426	0.2	1057	0.2	1205	0.2	1790	0.2	1392	0.8
Outdoors, service station	0	0.3	0	0.8	0	1.2	0	0.3	0	2.5
Indoors, residential garage	1873	0.1	-1	0.1	-1	0.0	2538	0.1	1861	0.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	649	1449.3	404	1450.8	444	1453.9	917	1479.1	605	5833.2
Indoors, office	637	249.0	448	247.2	512	253.1	809	255.1	603	1004.4
Indoors, store	657	70.2	476	73.8	547	74.1	815	74.4	623	292.4
Indoors, restaurant	1235	36.4	823	36.8	937	41.7	1625	36.0	1145	150.9
Indoors, mfg. facility	842	17.9	563	18.5	632	17.1	1088	19.0	786	72.4
Indoors, school	774	54.2	540	42.3	614	29.1	985	55.9	759	181.4
Indoors, church	504	16.4	332	14.5	375	11.2	672	17.3	487	59.3
Indoors, shopping mall	3329	3.8	2471	2.7	2831	1.5	4139	3.9	3340	11.8
Indoors, auditorium	211	6.0	137	5.6	157	3.5	278	6.5	203	21.6
Indoors, health care facility	534	35.3	349	30.9	406	27.9	733	35.7	517	129.9
Indoors, public building	575	6.1	406	6.1	480	4.9	712	6.2	547	23.3
Indoors, other location	1393	32.2	853	34.8	952	38.5	1933	31.2	1255	136.7
Indoors, not specified	1322	0.5	959	0.4	1076	0.2	1489	0.6	1270	1.6
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	841	5.8	628	12.8	707	16.9	1018	6.7	751	42.3
Outdoors, school grounds	1806	0.8	1134	1.9	1281	3.2	2321	1.0	1451	6.9
Outdoors, sports arena	563	0.3	324	6.1	368	12.2	769	0.4	366	19.0
Outdoors, park/golf course	506	1.8	313	4.2	366	3.7	674	2.1	423	11.8
Outdoors, other location	955	0.6	676	4.2	745	5.5	1099	0.6	750	11.0
Outdoors, not specified	-1	0.0	-1	0.1	1281	0.1	-1	0.0	1220	0.2
In transit, train	2097	0.7	1267	0.6	1385	0.3	2771	0.8	2030	2.5
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1680	94.1	1196	106.7	1314	116.7	2041	101.3	1542	418.9
In transit, bus	3637	1.3	2090	15.0	2299	37.5	4902	0.9	2315	54.7
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1613	2.7	1188	2.6	1331	1.5	1964	3.0	1567	9.8
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	899	13.3	706	42.4	789	68.4	1028	14.7	800	138.8
Outdoors, along a roadway	1444	36.8	1043	49.3	1146	61.5	1682	39.4	1291	186.9
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	1159	13.1	953	11.9	1066	6.3	1222	14.9	1113	46.2
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	662	1795.1	428	1674.6	459	1593.8	891	1812.5	618	6876.0
Indoors, office	569	5.2	455	1.7	518	0.8	614	4.2	566	11.8
Indoors, store	608	29.6	497	34.8	561	32.0	646	30.6	575	127.0
Indoors, restaurant	1387	6.7	940	1.1	1023	0.6	1772	4.1	1457	12.5
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	773	36.1	538	34.3	596	17.3	942	43.0	744	130.6
Indoors, church	451	16.6	340	14.4	381	7.2	489	18.8	427	57.0
Indoors, shopping mall	3456	2.9	-1	0.0	-1	0.0	4386	2.3	3866	5.2
Indoors, auditorium	174	2.0	166	7.5	176	18.8	187	1.0	174	29.2
Indoors, health care facility	624	53.3	420	47.2	445	21.5	790	63.1	608	185.1
Indoors, public building	555	0.8	420	1.4	-1	0.0	661	0.4	496	2.5
Indoors, other location	1292	27.2	871	61.5	910	107.8	1550	29.6	1029	226.1
Indoors, not specified	1289	0.8	-1	0.0	-1	0.0	1404	0.4	1326	1.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	847	21.0	668	44.4	740	39.6	947	22.7	769	127.6
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	318	8.3	352	20.6	-1	0.0	343	28.9
Outdoors, park/golf course	555	1.4	351	2.5	-1	0.0	682	1.2	484	5.1
Outdoors, other location	-1	0.0	708	22.5	785	56.3	-1	0.0	763	78.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1754	149.2	1156	150.4	1275	148.9	2264	152.5	1615	601.0
In transit, bus	3206	7.3	2084	4.4	2301	4.0	4103	6.2	3070	22.0
In transit, truck	1954	28.6	1357	27.4	1523	19.9	2472	32.9	1881	108.8
In transit, van	1631	4.0	1159	11.6	1296	21.8	1999	4.5	1366	41.8
Indoors, public garage	1098	5.8	725	5.4	803	2.8	1402	7.0	1064	21.0
Outdoors, in a parking lot	1012	10.2	667	10.6	754	10.3	1331	11.1	946	42.2
Outdoors, along a roadway	1424	44.7	990	58.9	1113	75.8	1775	46.2	1278	225.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1436	4.6	1014	2.2	1170	1.5	1828	3.6	1443	12.0
Outdoors, service station	0	0.2	0	0.6	0	0.8	0	0.3	0	2.0
Indoors, residential garage	-1	0.1	894	0.4	1024	0.8	-1	0.0	1045	1.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	645	1354.9	397	1316.4	436	1261.8	916	1395.2	605	5328.3
Indoors, office	640	255.5	451	242.3	515	235.7	814	245.3	607	978.8
Indoors, store	706	64.2	480	53.9	546	44.7	918	63.7	680	226.5
Indoors, restaurant	1215	33.7	826	35.8	922	36.3	1575	34.3	1128	140.1
Indoors, mfg. facility	781	47.6	550	75.0	628	94.5	1010	53.2	708	270.3
Indoors, school	818	21.7	542	34.4	615	44.8	1081	26.5	727	127.3
Indoors, church	518	16.6	350	18.4	381	20.5	668	16.3	470	71.9
Indoors, shopping mall	3736	1.4	2478	0.8	2850	1.8	4913	1.1	3485	5.2
Indoors, auditorium	214	1.6	134	2.1	150	3.9	291	1.0	175	8.6
Indoors, health care facility	533	8.3	381	2.3	443	3.3	665	5.0	534	18.9
Indoors, public building	677	8.1	399	21.3	464	39.5	959	8.9	525	77.8
Indoors, other location	1390	65.3	911	54.3	972	45.3	1816	66.0	1317	231.0
Indoors, not specified	1259	3.3	900	0.8	1041	0.8	1488	2.2	1264	7.0
Outdoors, construction	-1	0.0	1106	1.4	1280	2.9	-1	0.0	1222	4.3
Outdoors, residential grounds	977	4.0	633	26.1	713	50.7	1340	4.5	734	85.3
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	397	9.5	325	14.8	370	19.2	456	10.2	379	53.7
Outdoors, other location	995	9.3	699	10.8	777	13.1	1245	10.1	914	43.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	1739	0.2	-1	0.0	-1	0.0	2127	0.1	1863	0.3
In transit, airplane	-1	0.0	0	1.0	0	2.5	-1	0.0	0	3.5

San Francisco: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1566	70.4	1143	76.4	1278	95.9	1900	67.0	1445	309.8
In transit, bus	2475	1.5	1898	1.4	2141	1.8	2647	1.4	2281	6.1
In transit, truck	1742	2.0	-1	0.0	-1	0.0	1976	1.4	1839	3.5
In transit, van	1673	4.2	1143	3.9	1274	2.2	2115	4.7	1615	15.0
Indoors, public garage	901	0.4	676	0.1	-1	0.1	1125	0.3	935	1.0
Outdoors, in a parking lot	968	4.5	684	8.2	766	12.5	1192	4.8	842	29.9
Outdoors, along a roadway	1426	28.9	1006	34.3	1124	47.3	1771	26.9	1285	137.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.1	1069	0.1	1188	0.2	-1	0.0	1199	0.4
Outdoors, service station	-1	0.0	0	0.7	0	1.8	-1	0.0	0	2.6
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	653	1906.4	423	1860.5	459	1801.0	885	1953.8	610	7521.7
Indoors, office	583	8.7	452	7.7	514	6.1	674	9.0	563	31.4
Indoors, store	665	32.5	490	36.8	548	44.3	807	32.7	617	146.3
Indoors, restaurant	1255	17.7	844	20.1	949	19.1	1599	19.1	1156	75.9
Indoors, mfg. facility	-1	0.0	558	0.4	630	1.0	-1	0.0	609	1.4
Indoors, school	863	5.6	525	5.9	590	6.5	1188	5.7	783	23.7
Indoors, church	479	23.2	340	22.8	380	17.7	592	25.5	456	89.2
Indoors, shopping mall	3463	3.1	2508	2.3	2751	2.6	4513	2.8	3354	10.7
Indoors, auditorium	223	0.9	141	0.8	159	2.0	295	0.6	187	4.3
Indoors, health care facility	512	8.7	376	19.3	422	32.5	594	8.5	442	69.0
Indoors, public building	648	5.5	415	6.1	466	4.5	857	6.6	609	22.7
Indoors, other location	1381	18.0	884	28.9	926	39.5	1738	18.4	1135	104.8
Indoors, not specified	1354	0.9	-1	0.0	-1	0.0	1594	0.4	1431	1.3
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	923	15.7	659	27.9	731	33.4	1151	17.4	819	94.4
Outdoors, school grounds	1335	0.1	-1	0.0	-1	0.0	-1	0.1	1367	0.2
Outdoors, sports arena	-1	0.0	319	5.0	355	11.4	-1	0.0	344	16.3
Outdoors, park/golf course	-1	0.0	342	11.8	380	21.9	-1	0.0	366	33.8
Outdoors, other location	853	0.7	698	2.5	802	2.8	961	0.9	790	6.9
Outdoors, not specified	1354	0.3	-1	0.0	-1	0.0	1452	0.1	1385	0.5
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1712	99.0	1173	107.2	1298	123.0	2189	98.3	1567	427.4
In transit, bus	3093	5.0	2047	3.9	2184	3.7	3898	4.5	2868	17.2
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1860	2.1	1148	1.0	1297	0.5	2414	1.8	1864	5.5
Indoors, public garage	1141	0.6	781	0.4	830	0.2	1448	0.6	1131	1.9
Outdoors, in a parking lot	946	7.5	671	10.2	758	11.1	1193	8.1	867	37.0
Outdoors, along a roadway	1457	34.3	1010	37.5	1124	42.8	1815	34.0	1330	148.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	2156	0.1	1177	0.1	1160	0.2	2974	0.1	1800	0.5
Outdoors, service station	0	1.0	0	3.3	0	6.3	0	1.2	0	11.8
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	645	1486.2	404	1447.4	443	1413.1	902	1514.8	603	5861.5
Indoors, office	651	246.3	458	219.0	519	191.0	829	250.4	625	906.7
Indoors, store	643	53.0	475	65.1	546	75.9	796	56.9	605	250.9
Indoors, restaurant	1242	50.9	803	53.0	918	43.2	1681	55.4	1178	202.5
Indoors, mfg. facility	-1	0.0	559	47.7	630	112.2	-1	0.0	609	159.9
Indoors, school	763	42.9	537	29.7	610	12.9	967	43.4	764	128.9
Indoors, church	507	14.4	339	14.1	385	14.7	678	14.5	478	57.6
Indoors, shopping mall	2973	6.4	2422	6.4	2798	4.7	3372	7.4	2917	24.9
Indoors, auditorium	198	3.3	143	3.1	163	1.7	238	3.8	191	11.9
Indoors, health care facility	510	53.8	325	60.6	348	55.9	684	59.1	466	229.4
Indoors, public building	638	1.7	404	0.9	466	1.2	734	1.2	577	5.0
Indoors, other location	1431	41.3	909	52.5	1058	66.2	2061	41.0	1300	201.0
Indoors, not specified	1525	0.2	961	0.5	-1	0.1	1938	0.3	1294	1.1
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1094	7.0	669	16.7	730	24.9	1401	7.9	852	56.5
Outdoors, school grounds	1355	1.2	1067	1.5	1210	1.3	1640	1.5	1320	5.4
Outdoors, sports arena	386	0.5	307	0.4	-1	0.0	421	0.4	372	1.3
Outdoors, park/golf course	588	0.3	-1	0.0	-1	0.0	816	0.2	662	0.5
Outdoors, other location	984	1.0	686	1.5	782	1.3	1237	1.2	898	5.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1651	154.5	1182	150.0	1314	130.9	1999	162.1	1554	597.5
In transit, bus	3054	6.5	2143	6.2	2345	2.8	3673	8.1	2941	23.6
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, public garage	764	0.1	-1	0.0	-1	0.0	-1	0.1	846	0.2
Outdoors, in a parking lot	964	10.0	676	21.3	758	29.5	1197	11.2	831	71.9
Outdoors, along a roadway	1493	40.2	1034	59.5	1146	68.7	1839	43.1	1322	211.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1294	0.5	1333	1.3	-1	0.0	1322	1.8
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	1358	0.2	1050	0.2	1153	0.3	1560	0.2	1260	0.8
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.1	-1	0.0	1740	0.1
Indoors, home	657	1654.6	426	1642.6	463	1680.9	879	1678.4	607	6656.5
Indoors, office	667	81.4	480	62.8	529	44.7	766	80.2	630	269.1
Indoors, store	761	13.7	508	17.6	561	24.0	993	12.1	665	67.5
Indoors, restaurant	1399	31.8	917	31.9	988	23.6	1736	33.6	1285	120.8
Indoors, mfg. facility	862	18.6	601	13.5	665	6.1	1039	19.6	840	57.8
Indoors, school	672	4.2	504	3.9	566	7.4	753	2.0	599	17.4
Indoors, church	461	26.6	334	22.6	372	13.6	572	29.0	452	91.8
Indoors, shopping mall	3125	2.4	2522	3.0	2886	5.7	3458	1.1	2896	12.3
Indoors, auditorium	231	36.6	139	32.0	156	17.9	308	40.5	222	127.0
Indoors, health care facility	462	7.1	380	11.7	431	12.7	513	8.2	438	39.7
Indoors, public building	534	1.8	418	7.2	475	15.2	652	1.7	475	26.0
Indoors, other location	1448	21.9	924	19.2	1032	8.8	1915	25.6	1424	75.6
Indoors, not specified	-1	0.0	946	2.7	1082	6.8	-1	0.0	1044	9.6
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	894	20.3	673	53.7	754	95.6	1006	21.6	775	191.2
Outdoors, school grounds	1980	3.3	1170	3.1	1290	1.4	2648	4.1	1912	11.9
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	420	22.0	336	16.6	382	7.5	477	23.7	415	69.9
Outdoors, other location	-1	0.0	673	1.1	746	2.0	-1	0.0	720	3.0
Outdoors, not specified	1417	1.0	1161	1.0	1304	0.4	1489	1.3	1361	3.7
In transit, train	1744	1.0	-1	0.0	-1	0.0	2060	0.5	1846	1.5
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1575	71.6	1169	78.1	1310	80.2	1841	72.2	1463	302.2
In transit, bus	2546	1.9	2002	2.0	2249	0.8	2980	2.4	2502	7.1
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1438	0.4	-1	0.0	-1	0.0	1499	0.2	1458	0.6
Indoors, public garage	1194	0.3	707	0.3	-1	0.1	1524	0.3	1117	0.9
Outdoors, in a parking lot	907	2.2	686	5.3	776	8.5	1060	2.4	803	18.4
Outdoors, along a roadway	1399	24.5	1029	31.5	1140	45.4	1653	23.1	1258	124.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	1179	0.1	-1	0.0	1136	0.2
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	-1	0.0	1111	0.3	1178	0.5	-1	0.0	1155	0.8
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	661	1915.2	432	1914.2	468	1904.5	875	1962.6	611	7696.5
Indoors, office	676	8.0	481	3.1	535	6.5	828	4.3	636	21.9
Indoors, store	660	12.9	498	30.6	563	42.8	753	11.7	578	97.9
Indoors, restaurant	1051	20.9	853	21.4	969	17.6	1134	23.5	1006	83.4
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	-1	0.0	558	0.9	626	2.2	-1	0.0	606	3.0
Indoors, church	502	36.2	347	30.0	391	19.9	631	40.3	489	126.4
Indoors, shopping mall	3275	10.1	2547	9.7	2881	4.5	3819	12.4	3219	36.8
Indoors, auditorium	174	5.2	144	5.0	164	2.3	184	6.5	168	19.0
Indoors, health care facility	510	13.3	382	8.2	428	7.5	630	12.1	505	41.1
Indoors, public building	539	6.3	421	8.2	469	9.0	619	7.3	506	30.8
Indoors, other location	1412	24.0	958	8.6	1072	4.3	1710	19.4	1419	56.3
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1337	1.8	705	15.1	768	31.8	1782	1.7	804	50.4
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	428	5.2	333	6.3	372	6.3	505	5.7	406	23.5
Outdoors, park/golf course	-1	0.0	330	3.1	365	7.8	-1	0.0	355	10.9
Outdoors, other location	-1	0.0	743	2.2	825	5.2	-1	0.0	800	7.4
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1720	72.5	1156	58.7	1284	42.3	2241	73.8	1667	247.3
In transit, bus	-1	0.0	2524	1.8	2529	4.4	-1	0.0	2527	6.2
In transit, truck	2284	59.1	1375	87.9	1534	131.8	3134	54.2	1886	332.9
In transit, van	1495	3.2	-1	0.0	-1	0.0	1981	1.5	1651	4.8
Indoors, public garage	1091	37.5	689	27.7	788	12.6	1476	39.9	1095	117.6
Outdoors, in a parking lot	1027	26.9	679	29.9	778	20.8	1357	32.9	984	110.5
Outdoors, along a roadway	1394	177.6	994	205.6	1135	215.3	1791	186.4	1313	785.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1543	22.0	932	4.5	1117	8.5	1990	11.5	1517	46.4
Outdoors, service station	0	0.6	0	3.9	0	7.6	0	0.8	0	12.9
Indoors, residential garage	1566	4.1	879	0.6	983	0.3	2299	3.8	1818	8.7
Indoors, in a repair shop	-1	0.0	1659	0.9	1882	2.3	-1	0.0	1818	3.3
Indoors, home	642	1276.0	389	1226.9	421	1183.3	940	1306.3	605	4992.5
Indoors, office	651	34.7	425	69.6	500	123.3	837	25.4	534	253.0
Indoors, store	648	11.5	460	7.0	530	6.1	815	11.6	645	36.2
Indoors, restaurant	1134	26.9	869	14.9	969	9.9	1412	21.9	1141	73.6
Indoors, mfg. facility	788	42.2	553	53.6	629	20.5	1011	52.3	763	168.5
Indoors, school	780	17.8	547	17.1	611	7.8	997	22.1	772	64.7
Indoors, church	513	21.8	327	11.2	368	6.0	719	22.2	540	61.1
Indoors, shopping mall	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, auditorium	241	2.7	133	29.5	149	51.0	352	2.3	152	85.6
Indoors, health care facility	-1	0.0	446	2.6	464	6.4	-1	0.0	459	8.9
Indoors, public building	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, other location	1385	24.0	860	9.7	1017	10.4	1766	18.0	1352	62.1
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	1522	70.7	1101	113.9	1285	166.9	1926	80.5	1395	432.0
Outdoors, residential grounds	867	24.7	621	28.3	699	24.6	1099	30.2	829	107.8
Outdoors, school grounds	1438	1.0	1145	1.0	1281	0.4	1653	1.3	1416	3.7
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	425	17.1	325	17.3	369	10.7	537	20.5	424	65.6
Outdoors, other location	1038	185.4	691	160.2	799	134.9	1403	188.7	1010	669.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1739	57.6	1138	67.2	1246	68.3	2307	62.0	1587	255.0
In transit, bus	3178	19.8	2112	14.8	2273	9.1	4062	20.4	3085	64.0
In transit, truck	1642	0.8	1365	1.5	1550	2.2	2085	0.9	1602	5.5
In transit, van	1518	2.0	1097	1.9	1220	2.7	1761	1.6	1369	8.2
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, in a parking lot	952	8.3	677	8.5	740	9.5	1193	8.9	889	35.2
Outdoors, along a roadway	1441	113.7	1003	138.0	1102	170.3	1838	110.8	1302	532.8
In transit, motorcycle	1971	1.5	1226	0.4	1313	0.3	2766	1.0	2046	3.2
Indoors, service station	-1	0.0	-1	0.1	1088	0.1	-1	0.0	1076	0.2
Outdoors, service station	0	0.2	0	0.5	0	1.2	0	0.2	0	2.1
Indoors, residential garage	1476	0.4	972	0.7	1060	0.8	1921	0.5	1286	2.4
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	636	1403.2	398	1432.8	433	1477.6	926	1435.8	597	5749.4
Indoors, office	841	1.8	455	2.7	501	3.9	1088	1.2	625	9.6
Indoors, store	680	21.8	483	22.9	537	26.7	859	21.1	630	92.5
Indoors, restaurant	1307	12.1	823	14.5	915	12.0	1812	14.2	1221	52.7
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	800	366.8	551	265.7	604	165.0	1041	368.0	792	1165.4
Indoors, church	499	14.9	337	12.6	371	11.4	669	15.1	482	53.9
Indoors, shopping mall	2953	3.6	2457	3.4	2748	3.0	3324	4.0	2895	14.1
Indoors, auditorium	224	7.5	137	7.6	152	3.9	315	8.8	219	27.8
Indoors, health care facility	493	15.2	361	13.1	401	6.7	621	17.0	490	52.0
Indoors, public building	565	8.5	414	7.8	467	6.6	745	9.4	561	32.2
Indoors, other location	1279	9.9	917	8.6	1039	7.0	1584	10.7	1237	36.2
Indoors, not specified	-1	0.0	838	0.4	929	0.9	-1	0.0	903	1.3
Outdoors, construction	-1	0.0	1117	1.1	1253	2.9	-1	0.0	1214	4.0
Outdoors, residential grounds	914	36.7	640	63.6	707	87.5	1148	38.1	796	225.9
Outdoors, school grounds	1460	35.7	1132	33.1	1259	25.7	1742	38.7	1422	133.1
Outdoors, sports arena	453	12.2	331	14.7	365	16.6	565	13.7	423	57.3
Outdoors, park/golf course	460	4.8	323	23.3	360	40.6	567	4.9	369	73.6
Outdoors, other location	954	1.0	672	22.3	737	45.5	1191	1.2	727	70.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1696	52.4	1169	72.3	1293	92.4	2102	55.3	1502	272.4
In transit, bus	2932	9.7	2057	8.3	2279	3.7	3511	11.2	2836	32.9
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1691	5.6	1160	5.3	1289	3.3	2115	6.2	1615	20.4
Indoors, public garage	-1	0.0	-1	0.1	-1	0.0	-1	0.0	-1	0.1
Outdoors, in a parking lot	1025	4.6	695	6.9	768	9.3	1290	4.9	894	25.7
Outdoors, along a roadway	1497	27.6	1017	43.8	1139	65.3	1891	27.5	1293	164.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1200	0.4	1272	1.0	-1	0.0	1252	1.4
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	1208	1.2	983	1.1	1115	0.9	1300	1.2	1160	4.4
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, home	652	1749.8	416	1712.5	453	1696.9	896	1771.3	607	6930.6
Indoors, office	656	83.0	469	76.2	521	68.0	807	86.6	623	313.7
Indoors, store	655	19.7	491	28.9	552	42.3	770	19.6	593	110.6
Indoors, restaurant	1213	24.0	856	20.9	960	17.1	1473	24.9	1151	86.9
Indoors, mfg. facility	828	25.1	585	32.6	647	40.2	1021	28.5	751	126.4
Indoors, school	821	78.9	570	68.4	627	48.8	1034	86.7	792	282.8
Indoors, church	469	32.7	334	29.8	376	20.8	569	35.3	448	118.7
Indoors, shopping mall	3343	2.4	2509	2.3	2846	1.0	4145	2.9	3337	8.6
Indoors, auditorium	243	2.4	137	2.3	154	1.0	343	3.0	238	8.7
Indoors, health care facility	617	10.9	395	10.2	421	9.9	782	10.9	560	41.9
Indoors, public building	526	1.1	428	2.0	477	0.9	651	1.2	510	5.2
Indoors, other location	1329	2.1	878	7.7	977	12.2	1706	2.5	1052	24.6
Indoors, not specified	1309	0.2	926	1.6	1059	3.3	1484	0.2	1043	5.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	889	16.1	663	33.4	740	45.6	1043	17.2	785	112.3
Outdoors, school grounds	1556	6.9	1153	6.4	1292	2.9	1812	8.5	1509	24.7
Outdoors, sports arena	567	0.2	338	3.4	382	6.1	798	0.3	383	10.0
Outdoors, park/golf course	398	2.5	350	0.7	375	0.9	453	1.2	401	5.3
Outdoors, other location	843	0.7	732	6.6	821	14.0	926	0.8	799	22.0
Outdoors, not specified	-1	0.0	-1	0.1	1287	0.2	-1	0.0	1228	0.3
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

San Francisco: City-wide, Demographic Group=All persons

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1708	102.7	1154	101.5	1273	103.0	2177	103.7	1580	410.9
In transit, bus	3082	5.8	2097	5.3	2285	4.7	3791	6.1	2870	21.8
In transit, truck	2066	7.4	1402	7.7	1546	8.7	2654	7.4	1898	31.1
In transit, van	1687	4.1	1134	4.5	1267	4.6	2209	4.3	1565	17.5
Indoors, public garage	1025	4.0	725	2.9	805	1.8	1278	4.0	1006	12.7
Outdoors, in a parking lot	986	8.1	679	10.9	756	13.3	1251	8.8	887	41.1
Outdoors, along a roadway	1442	50.7	1007	68.2	1120	82.3	1795	53.5	1296	254.8
In transit, motorcycle	-1	0.1	1198	0.8	1326	1.3	-1	0.1	1348	2.3
Indoors, service station	1449	2.8	1042	1.8	1173	1.3	1794	2.6	1425	8.6
Outdoors, service station	0	0.2	0	0.6	0	1.0	0	0.3	0	2.1
Indoors, residential garage	1353	1.4	926	1.3	1050	1.0	1732	1.6	1302	5.3
Indoors, in a repair shop	2174	0.8	-1	0.0	-1	0.0	2683	0.4	2318	1.3
Indoors, home	649	1550.2	409	1540.7	447	1535.1	908	1583.0	605	6209.0
Indoors, office	656	134.9	466	113.6	516	102.5	815	132.0	625	483.0
Indoors, store	673	40.6	488	44.9	549	50.8	826	41.0	626	177.4
Indoors, restaurant	1238	27.0	844	27.3	939	29.1	1595	27.2	1149	110.6
Indoors, mfg. facility	810	15.3	570	21.5	631	28.4	1016	16.3	725	81.5
Indoors, school	801	89.1	556	79.3	617	58.8	1014	95.8	771	323.1
Indoors, church	509	14.9	339	14.3	378	12.4	669	15.8	482	57.5
Indoors, shopping mall	3247	3.0	2476	2.7	2808	2.3	3859	3.2	3147	11.2
Indoors, auditorium	214	6.7	140	6.5	158	5.7	280	6.9	201	25.8
Indoors, health care facility	535	21.2	366	19.5	408	16.8	691	21.8	510	79.3
Indoors, public building	606	5.4	410	6.9	460	8.4	797	5.5	548	26.2
Indoors, other location	1396	30.5	904	30.8	994	34.5	1867	30.0	1277	125.8
Indoors, not specified	1291	1.1	920	0.6	1010	0.7	1540	0.9	1231	3.3
Outdoors, construction	1567	1.6	1155	2.4	1298	3.0	1901	1.9	1439	9.0
Outdoors, residential grounds	905	14.3	648	30.4	725	41.9	1104	16.2	787	102.7
Outdoors, school grounds	1525	4.8	1149	6.0	1294	6.3	1817	5.5	1433	22.7
Outdoors, sports arena	452	1.7	326	4.8	364	8.2	549	1.9	383	16.6
Outdoors, park/golf course	446	4.0	330	11.9	371	18.2	537	4.5	386	38.7
Outdoors, other location	1043	4.9	693	13.3	761	20.6	1329	5.3	840	44.0
Outdoors, not specified	1511	0.2	1240	0.3	1334	0.4	1911	0.2	1445	1.1
In transit, train	2029	0.3	1045	0.3	1012	0.5	2695	0.3	1555	1.5
In transit, airplane	-1	0.0	0	0.2	0	0.5	-1	0.0	0	0.7

Spokane: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3349	82.4	2483	93.4	2699	100.5	3341	84.9	2942	361.1
In transit, bus	5594	7.5	4272	5.9	4457	3.8	5868	7.6	5190	24.9
In transit, truck	4045	2.7	2874	7.3	2993	7.1	4072	3.2	3259	20.3
In transit, van	3109	3.7	2294	4.8	2503	5.1	3243	3.9	2740	17.7
Indoors, public garage	1973	3.3	1554	1.8	1701	1.2	2024	3.2	1879	9.5
Outdoors, in a parking lot	1887	12.5	1482	13.0	1591	14.0	1969	12.7	1727	52.1
Outdoors, along a roadway	3107	45.7	2244	67.8	2435	86.1	3112	47.8	2638	247.4
In transit, motorcycle	4190	0.4	2727	0.8	2886	1.5	3841	0.4	3148	3.2
Indoors, service station	2825	2.4	2306	1.7	2347	1.0	3036	2.4	2710	7.6
Outdoors, service station	0	0.1	0	0.5	0	0.7	0	0.1	0	1.4
Indoors, residential garage	2972	0.8	2071	1.0	2245	0.7	2750	0.8	2495	3.2
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, home	1011	1587.7	741	1541.7	859	1539.6	985	1618.7	901	6287.7
Indoors, office	1161	76.7	961	83.3	962	82.9	1259	78.6	1082	321.5
Indoors, store	1388	51.1	1091	48.4	1110	49.7	1440	51.6	1261	201.0
Indoors, restaurant	2472	30.9	1849	29.4	1974	28.8	2488	31.2	2204	120.3
Indoors, mfg. facility	1375	24.4	1138	26.7	1193	25.5	1488	24.8	1294	101.4
Indoors, school	1313	130.2	1107	102.8	1132	64.0	1447	132.6	1278	429.6
Indoors, church	906	13.5	666	13.5	717	11.9	921	14.1	807	53.1
Indoors, shopping mall	7154	3.2	5723	2.9	5623	2.5	7286	3.4	6526	12.0
Indoors, auditorium	450	4.3	310	6.8	354	7.7	408	4.8	370	23.6
Indoors, health care facility	1000	21.2	759	20.0	800	15.8	997	21.9	898	79.0
Indoors, public building	1134	5.8	882	8.1	901	10.1	1160	6.1	993	30.2
Indoors, other location	2501	20.2	1830	28.8	2130	26.7	2365	21.4	2170	97.2
Indoors, not specified	2637	0.5	2120	0.4	2408	0.6	2790	0.5	2492	2.0
Outdoors, construction	2971	1.6	2566	3.0	2532	2.5	3275	1.8	2772	8.9
Outdoors, residential grounds	2043	14.3	1462	32.7	1552	56.0	2069	15.4	1654	118.3
Outdoors, school grounds	3354	5.8	2627	7.3	2666	5.4	3532	6.2	3033	24.8
Outdoors, sports arena	1112	0.7	743	4.7	834	8.2	1134	0.8	836	14.5
Outdoors, park/golf course	983	3.2	754	12.7	777	22.9	1033	3.6	807	42.4
Outdoors, other location	2145	2.8	1494	12.0	1738	24.2	2144	2.9	1724	42.0
Outdoors, not specified	3245	0.2	2112	0.3	2186	0.2	3322	0.2	2692	1.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	0.3	0	0.8	-1	0.0	0	1.1

Spokane: City-wide, Demographic Group=African americans

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3379	86.1	2698	68.0	2980	70.1	3510	84.7	3175	308.9
In transit, bus	5527	7.7	4653	16.5	4871	14.7	5872	9.3	5094	48.2
In transit, truck	-1	0.0	3282	3.6	3228	4.5	-1	0.0	3252	8.0
In transit, van	-1	0.0	3301	0.2	3327	0.4	-1	0.0	3317	0.6
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1913	12.7	1574	9.4	1927	12.9	1979	12.1	1866	47.2
Outdoors, along a roadway	3348	24.4	2446	59.0	2703	90.0	3179	26.3	2769	199.7
In transit, motorcycle	4652	0.2	2704	0.9	3208	0.6	4136	0.3	3256	2.0
Indoors, service station	-1	0.0	2230	0.6	2254	0.8	-1	0.0	2243	1.5
Outdoors, service station	-1	0.0	0	0.4	0	0.5	-1	0.0	0	0.8
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	3232	0.2	3400	0.2	-1	0.0	3326	0.4
Indoors, home	1100	1743.0	824	1679.4	938	1674.6	1093	1776.4	991	6873.4
Indoors, office	1129	1.2	1028	35.0	1095	39.6	1280	2.0	1070	77.8
Indoors, store	1381	12.7	1175	17.7	1207	27.8	1450	13.2	1275	71.5
Indoors, restaurant	2444	19.6	1807	5.6	2101	2.9	2357	18.6	2311	46.7
Indoors, mfg. facility	1687	48.7	1263	19.9	1185	13.6	1824	44.4	1614	126.7
Indoors, school	1354	55.7	1191	108.3	1231	68.7	1526	69.0	1307	301.8
Indoors, church	967	51.3	756	32.8	806	32.3	1019	52.1	911	168.5
Indoors, shopping mall	7166	0.4	6576	2.0	6381	1.6	7784	0.7	6743	4.8
Indoors, auditorium	597	0.7	407	3.0	417	2.3	611	1.2	461	7.2
Indoors, health care facility	844	17.6	538	40.1	722	54.9	850	21.2	703	133.8
Indoors, public building	1277	0.3	1101	2.8	1112	7.2	1350	0.5	1126	10.9
Indoors, other location	2358	72.2	2004	23.1	2399	19.3	2230	66.6	2270	181.3
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	2652	1.8	1627	28.0	1746	39.1	2570	3.2	1759	72.2
Outdoors, school grounds	3399	1.6	2803	7.4	2749	4.5	3547	2.8	2972	16.2
Outdoors, sports arena	1172	1.9	864	8.1	886	6.2	1192	3.1	954	19.3
Outdoors, park/golf course	-1	0.0	863	4.4	840	4.0	-1	0.0	852	8.5
Outdoors, other location	2159	0.1	1492	4.1	1704	10.3	1811	0.1	1650	14.7
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	2666	0.1
In transit, train	-1	0.0	1425	3.2	1824	4.1	-1	0.0	1648	7.3
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3170	73.4	2498	68.8	2738	70.9	3255	73.5	2924	286.6
In transit, bus	5118	6.3	4324	12.8	4488	12.2	5426	7.4	4715	38.6
In transit, truck	-1	0.0	3046	3.3	2952	4.2	-1	0.0	2993	7.5
In transit, van	3768	1.3	2705	4.7	2746	3.5	3666	1.9	3003	11.4
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1795	10.9	1473	10.6	1779	13.2	1846	10.8	1727	45.5
Outdoors, along a roadway	2931	29.5	2127	96.2	2410	112.8	2757	38.1	2415	276.5
In transit, motorcycle	4408	0.1	2527	0.7	2942	0.5	3870	0.2	3022	1.5
Indoors, service station	-1	0.0	2072	0.6	2067	0.8	-1	0.0	2069	1.4
Outdoors, service station	-1	0.0	0	0.4	0	0.5	-1	0.0	0	0.8
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	3026	0.2	3153	0.2	-1	0.0	3097	0.4
Indoors, home	1047	1784.6	772	1670.7	875	1658.9	1033	1812.2	936	6926.4
Indoors, office	1102	1.7	955	38.0	1000	41.9	1233	2.9	990	84.5
Indoors, store	1306	10.9	1122	20.5	1115	29.5	1358	11.6	1185	72.5
Indoors, restaurant	2375	17.5	1751	6.4	1941	3.5	2262	16.8	2208	44.1
Indoors, mfg. facility	1576	42.6	1171	18.0	1089	12.5	1689	38.9	1496	112.1
Indoors, school	1297	55.7	1112	81.5	1136	51.9	1439	63.8	1240	252.9
Indoors, church	925	40.5	723	32.8	743	34.1	959	42.1	849	149.5
Indoors, shopping mall	6704	0.4	6079	1.8	5815	1.5	7210	0.7	6214	4.4
Indoors, auditorium	553	0.6	374	2.8	375	2.1	557	1.1	421	6.6
Indoors, health care facility	817	14.8	543	34.9	680	48.3	832	17.9	680	115.9
Indoors, public building	1182	0.3	1016	2.6	1005	6.4	1237	0.5	1024	9.8
Indoors, other location	2236	62.7	1868	23.0	2213	19.1	2098	58.1	2132	162.9
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	2084	3.1	1497	27.6	1580	48.8	2002	4.4	1593	83.8
Outdoors, school grounds	3179	1.1	2587	5.4	2508	3.4	3289	2.0	2738	11.8
Outdoors, sports arena	1091	1.7	788	7.9	815	6.3	1098	2.8	871	18.7
Outdoors, park/golf course	-1	0.0	798	4.0	764	3.6	-1	0.0	782	7.6
Outdoors, other location	1920	0.3	1462	5.1	1602	13.5	1961	0.5	1579	19.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	-1	0.0	1368	3.0	1741	3.8	-1	0.0	1577	6.8
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3394	41.6	2512	50.6	2675	67.9	3376	43.0	2930	203.2
In transit, bus	5173	7.6	4360	6.0	4438	3.4	5615	7.7	5012	24.8
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	2644	0.5	3012	4.7	-1	0.0	2979	5.2
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1938	6.4	1516	17.7	1663	16.9	1960	7.2	1690	48.3
Outdoors, along a roadway	3241	37.4	2322	62.0	2515	60.5	3294	40.8	2749	200.7
In transit, motorcycle	-1	0.0	3162	0.4	2847	1.4	-1	0.0	2914	1.8
Indoors, service station	-1	0.0	-1	0.0	2345	0.2	-1	0.0	2350	0.2
Outdoors, service station	-1	0.0	0	0.1	0	0.4	-1	0.0	0	0.6
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1033	1846.0	768	1826.8	878	1823.8	1015	1883.0	925	7379.6
Indoors, office	1089	6.2	941	2.1	1000	1.9	1204	5.7	1101	15.9
Indoors, store	1417	43.3	1089	39.4	1064	67.4	1471	43.2	1239	193.3
Indoors, restaurant	2725	31.3	1914	10.3	2084	6.5	2518	29.4	2485	77.5
Indoors, mfg. facility	1309	25.8	1146	27.0	1145	23.3	1433	23.5	1256	99.6
Indoors, school	1298	71.7	1097	72.3	1104	36.3	1433	77.5	1255	257.8
Indoors, church	857	5.3	712	7.0	843	4.1	921	6.0	827	22.4
Indoors, shopping mall	7656	0.6	6170	2.8	5979	1.6	8067	1.1	6620	6.1
Indoors, auditorium	391	1.8	337	8.0	344	10.1	413	2.9	354	22.8
Indoors, health care facility	887	1.6	781	7.5	820	7.1	985	2.9	835	19.1
Indoors, public building	1026	10.6	927	4.3	902	1.7	1131	10.5	1044	27.0
Indoors, other location	2581	9.0	2083	12.7	2422	12.4	2715	9.3	2418	43.4
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1827	9.4	1412	16.3	1463	22.9	1833	9.7	1569	58.4
Outdoors, school grounds	3065	0.4	2660	1.5	2600	0.9	3321	0.6	2807	3.4
Outdoors, sports arena	-1	0.0	691	4.2	956	7.9	-1	0.0	864	12.1
Outdoors, park/golf course	876	3.9	832	1.7	862	4.6	935	3.7	882	13.9
Outdoors, other location	-1	0.0	1713	2.7	1734	20.1	-1	0.1	1732	22.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3303	68.7	2446	81.2	2650	85.8	3318	71.6	2898	307.3
In transit, bus	5375	2.3	3854	4.6	4370	3.6	5486	2.7	4594	13.3
In transit, truck	3819	2.2	2864	12.0	2964	11.4	3754	2.6	3059	28.2
In transit, van	3603	0.3	2362	1.3	2640	1.3	3303	0.4	2701	3.3
Indoors, public garage	-1	0.0	1271	0.2	1866	1.2	-1	0.0	1790	1.3
Outdoors, in a parking lot	1695	23.7	1430	15.4	1665	17.8	1837	23.5	1679	80.5
Outdoors, along a roadway	3072	50.5	2163	76.7	2382	101.8	3028	52.1	2566	281.1
In transit, motorcycle	-1	0.0	2714	4.4	2836	10.4	-1	0.0	2799	14.8
Indoors, service station	-1	0.0	2066	0.4	2187	1.1	-1	0.0	2160	1.5
Outdoors, service station	0	0.3	0	0.6	0	0.9	0	0.3	0	2.1
Indoors, residential garage	3060	0.9	2213	1.3	2073	0.9	3128	1.0	2592	4.1
Indoors, in a repair shop	-1	0.0	-1	0.1	-1	0.1	-1	0.0	3007	0.2
Indoors, home	1009	1628.0	742	1593.8	857	1604.8	984	1659.4	899	6486.0
Indoors, office	1142	51.0	951	56.4	990	47.2	1210	52.9	1073	207.5
Indoors, store	1388	31.8	1066	44.6	1094	53.4	1447	33.3	1216	163.0
Indoors, restaurant	2188	53.6	1747	38.4	1907	26.4	2288	54.7	2079	173.1
Indoors, mfg. facility	1287	38.3	1002	34.1	1032	24.3	1398	38.8	1201	135.5
Indoors, school	1275	112.2	1078	84.2	1097	49.4	1411	112.6	1247	358.5
Indoors, church	798	10.9	670	14.2	706	13.3	881	12.1	758	50.4
Indoors, shopping mall	6614	5.6	5351	3.2	5215	1.6	7027	5.6	6368	15.9
Indoors, auditorium	430	0.7	332	3.0	339	3.7	413	1.1	354	8.5
Indoors, health care facility	978	38.5	703	25.7	742	27.9	948	38.9	865	131.0
Indoors, public building	1012	6.8	876	3.1	958	2.1	1117	6.5	1021	18.5
Indoors, other location	2617	14.9	1876	33.3	2180	25.9	2360	17.5	2175	91.6
Indoors, not specified	2430	0.3	2029	0.5	2801	0.5	2597	0.3	2464	1.5
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	2123	11.9	1431	25.9	1511	42.3	2063	12.5	1642	92.6
Outdoors, school grounds	3105	5.3	2446	8.1	2634	6.0	3306	5.8	2828	25.2
Outdoors, sports arena	-1	0.0	693	4.7	773	8.3	-1	0.0	744	13.0
Outdoors, park/golf course	1217	0.4	708	6.8	701	25.7	1158	0.8	719	33.7
Outdoors, other location	-1	0.0	1530	5.6	1745	9.0	-1	0.0	1662	14.6
Outdoors, not specified	3202	1.1	2660	0.2	-1	0.0	3323	1.0	3204	2.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3324	85.3	2480	92.6	2704	98.2	3336	87.5	2944	363.6
In transit, bus	5922	8.4	4339	5.7	4502	4.0	6085	8.3	5416	26.4
In transit, truck	4383	1.6	2938	5.7	3053	4.8	4260	2.0	3333	14.1
In transit, van	3104	8.2	2323	9.1	2534	8.9	3258	8.5	2790	34.8
Indoors, public garage	1972	8.1	1573	3.3	1683	1.3	2021	7.8	1908	20.4
Outdoors, in a parking lot	1989	10.7	1497	11.7	1616	12.8	2035	11.0	1772	46.2
Outdoors, along a roadway	3074	41.2	2235	76.3	2422	95.4	3080	45.3	2586	258.2
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, service station	2670	0.5	2100	0.4	2096	0.3	2890	0.5	2496	1.8
Outdoors, service station	-1	0.0	0	0.1	0	0.2	-1	0.0	0	0.4
Indoors, residential garage	2925	1.3	1949	1.1	2356	0.7	2568	1.3	2486	4.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1016	1612.1	744	1550.7	861	1542.1	991	1641.9	905	6346.8
Indoors, office	1146	69.6	958	83.6	958	85.6	1249	73.2	1068	312.0
Indoors, store	1359	46.0	1094	45.1	1109	49.0	1438	45.9	1248	186.0
Indoors, restaurant	2580	20.2	1887	20.7	1972	21.8	2593	20.8	2253	83.4
Indoors, mfg. facility	1404	26.6	1152	30.0	1218	29.5	1525	27.1	1318	113.2
Indoors, school	1328	108.8	1115	85.2	1145	55.8	1460	109.4	1289	359.2
Indoors, church	968	23.9	674	18.3	727	14.9	945	24.5	851	81.5
Indoors, shopping mall	7394	3.3	5885	2.2	5555	1.8	7417	3.4	6783	10.8
Indoors, auditorium	433	4.2	305	6.6	366	5.6	419	4.9	373	21.2
Indoors, health care facility	1020	17.4	749	19.7	790	14.9	1018	18.4	895	70.5
Indoors, public building	1179	5.6	912	10.5	934	14.7	1230	5.9	1013	36.7
Indoors, other location	2390	28.7	1832	28.1	2150	25.1	2216	29.0	2149	110.9
Indoors, not specified	2677	0.8	2172	0.6	2352	1.0	2851	0.7	2520	3.0
Outdoors, construction	2977	3.5	2578	6.0	2560	4.9	3280	4.0	2802	18.4
Outdoors, residential grounds	2035	10.9	1478	37.9	1579	58.9	2074	12.8	1641	120.6
Outdoors, school grounds	3348	5.3	2605	6.5	2651	5.0	3479	5.5	3009	22.3
Outdoors, sports arena	-1	0.1	720	2.9	856	6.1	1006	0.1	817	9.1
Outdoors, park/golf course	1069	2.6	768	11.0	823	16.1	1100	3.1	850	32.8
Outdoors, other location	2019	4.9	1562	12.0	1773	28.1	2056	5.2	1775	50.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	1364	0.6	1742	0.7	-1	0.0	1575	1.2
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3382	103.8	2508	116.2	2699	119.7	3376	107.4	2970	447.2
In transit, bus	5456	6.3	4469	7.3	4571	4.3	5919	6.9	5141	24.9
In transit, truck	4107	0.7	2874	3.2	3061	7.7	3993	1.0	3145	12.6
In transit, van	-1	0.0	2504	1.2	2191	2.9	-1	0.0	2288	4.1
Indoors, public garage	2086	0.4	1533	0.4	1902	0.4	2218	0.4	1942	1.5
Outdoors, in a parking lot	1985	9.9	1485	11.6	1518	11.8	2027	10.2	1735	43.6
Outdoors, along a roadway	3089	47.1	2249	63.8	2452	85.5	3094	48.8	2649	245.2
In transit, motorcycle	4515	1.6	2474	0.3	-1	0.0	4004	1.5	4134	3.3
Indoors, service station	-1	0.0	2179	0.2	2361	0.2	-1	0.0	2282	0.4
Outdoors, service station	-1	0.1	0	0.8	0	1.0	-1	0.1	0	1.9
Indoors, residential garage	-1	0.1	1980	0.8	2028	0.7	2665	0.1	2072	1.8
Indoors, in a repair shop	-1	0.0	3457	0.2	-1	0.1	-1	0.1	3582	0.3
Indoors, home	1011	1549.2	737	1480.8	856	1458.0	981	1576.9	899	6064.8
Indoors, office	1175	130.2	972	122.4	967	121.1	1288	131.1	1105	504.9
Indoors, store	1394	49.0	1094	48.1	1119	48.6	1434	49.7	1262	195.4
Indoors, restaurant	2626	22.5	1865	30.2	1965	33.3	2607	23.5	2211	109.5
Indoors, mfg. facility	1477	31.7	1197	29.7	1238	25.4	1565	31.9	1379	118.7
Indoors, school	1318	120.6	1123	106.3	1128	55.4	1463	126.6	1286	408.9
Indoors, church	853	7.2	677	11.4	724	10.9	932	7.7	777	37.1
Indoors, shopping mall	7040	1.9	5784	5.2	5728	5.3	7572	2.3	6206	14.7
Indoors, auditorium	463	3.3	328	7.9	359	12.3	395	3.5	367	27.0
Indoors, health care facility	1117	17.7	795	18.6	787	21.5	1132	18.3	949	76.2
Indoors, public building	1353	3.4	833	7.0	901	6.7	1236	3.8	1012	21.0
Indoors, other location	2521	27.1	1887	24.8	2184	21.2	2483	27.6	2283	100.6
Indoors, not specified	2624	0.5	2122	0.5	2102	0.3	2717	0.5	2427	1.7
Outdoors, construction	-1	0.0	2694	0.7	2545	0.8	-1	0.0	2611	1.5
Outdoors, residential grounds	2134	16.8	1475	34.2	1503	74.8	2161	17.3	1650	143.1
Outdoors, school grounds	3440	4.8	2721	6.4	2705	4.2	3642	5.3	3121	20.7
Outdoors, sports arena	1230	0.4	783	8.0	805	10.6	1222	0.8	822	19.8
Outdoors, park/golf course	961	3.1	760	13.8	744	30.1	1007	4.0	782	50.9
Outdoors, other location	2088	0.6	1366	21.2	1615	29.7	2200	0.7	1527	52.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	0.9	0	3.6	-1	0.0	0	4.5

Spokane: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3931	48.6	2790	80.1	2986	96.5	3741	50.8	3234	276.0
In transit, bus	5221	4.5	4103	0.8	4990	0.9	5756	4.1	5328	10.3
In transit, truck	4679	24.7	3177	13.1	3165	6.7	4975	24.0	4348	68.5
In transit, van	3653	1.9	2804	8.6	2955	6.4	3624	3.1	3060	19.9
Indoors, public garage	-1	0.0	1683	0.6	1685	0.8	-1	0.0	1684	1.4
Outdoors, in a parking lot	2661	3.5	1654	8.9	1720	15.6	2479	3.6	1892	31.6
Outdoors, along a roadway	3800	52.2	2507	60.9	2688	77.9	3766	52.5	3114	243.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	2632	19.8	2207	3.1	-1	0.0	3016	18.1	2769	41.0
Outdoors, service station	-1	0.0	0	1.4	0	1.8	-1	0.0	0	3.2
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1087	1549.1	806	1527.7	917	1483.6	1063	1588.4	970	6148.9
Indoors, office	1286	84.1	1100	102.6	1072	112.9	1437	83.0	1206	382.6
Indoors, store	1491	0.4	1241	15.6	1231	24.0	1584	0.8	1245	40.8
Indoors, restaurant	2889	35.6	2073	45.0	2231	50.2	2893	35.5	2470	166.3
Indoors, mfg. facility	-1	0.0	1207	1.9	1188	2.4	-1	0.0	1196	4.3
Indoors, school	1450	241.6	1249	122.0	1257	97.2	1629	235.2	1448	696.0
Indoors, church	746	9.7	744	9.7	809	8.8	821	9.9	780	38.1
Indoors, shopping mall	7473	0.2	6903	0.7	6352	0.4	8201	0.3	7043	1.6
Indoors, auditorium	539	6.7	347	20.8	374	16.5	505	9.4	407	53.5
Indoors, health care facility	1414	14.1	1014	13.4	993	7.9	1417	14.8	1242	50.1
Indoors, public building	-1	0.0	882	2.0	861	14.2	-1	0.0	863	16.2
Indoors, other location	1638	5.5	1473	31.3	1955	30.9	1595	9.2	1693	76.9
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	2774	2.8	2673	3.6	-1	0.0	2718	6.4
Outdoors, residential grounds	1982	45.8	1672	58.8	1749	63.5	2140	50.6	1868	218.8
Outdoors, school grounds	3524	2.7	3067	9.6	2844	7.9	3849	4.1	3179	24.3
Outdoors, sports arena	-1	0.0	832	0.4	981	4.5	-1	0.0	968	5.0
Outdoors, park/golf course	1130	9.3	860	34.4	860	54.1	1208	10.4	917	108.2
Outdoors, other location	-1	0.0	1579	7.6	1980	18.9	-1	0.0	1865	26.5
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3422	55.1	2491	64.2	2726	74.0	3386	56.8	2969	250.2
In transit, bus	5311	11.8	4263	11.0	4434	6.6	5700	12.3	5010	41.7
In transit, truck	4568	1.9	2927	1.3	2974	2.1	4649	1.8	3817	7.1
In transit, van	3592	3.8	2149	6.3	2445	5.5	3395	4.4	2779	20.0
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	2210	0.1
Outdoors, in a parking lot	2004	6.0	1512	7.5	1606	9.1	2061	6.2	1763	28.7
Outdoors, along a roadway	3193	63.7	2275	96.9	2446	129.6	3189	65.8	2671	356.0
In transit, motorcycle	4175	1.1	2481	0.3	2847	0.3	3828	1.0	3690	2.8
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	0	0.1	-1	0.0	-1	0.1	0	0.1	0	0.4
Indoors, residential garage	3003	0.2	2060	1.2	2363	0.9	2739	0.4	2344	2.7
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1015	1617.8	742	1584.4	860	1583.3	984	1651.1	902	6436.6
Indoors, office	1686	1.3	858	5.1	903	8.4	1580	1.4	1009	16.2
Indoors, store	1508	23.3	1098	25.0	1117	27.0	1490	23.7	1293	99.0
Indoors, restaurant	2655	9.3	1908	15.1	2015	18.0	2646	9.7	2215	52.1
Indoors, mfg. facility	-1	0.1	1352	0.3	1422	0.1	2097	0.1	1600	0.6
Indoors, school	1296	283.4	1102	215.0	1119	132.9	1436	286.7	1269	917.9
Indoors, church	877	12.8	675	11.5	720	11.2	913	13.2	803	48.8
Indoors, shopping mall	7401	2.2	5974	2.9	5707	2.4	7655	2.4	6632	9.9
Indoors, auditorium	476	3.4	315	6.7	359	6.7	418	4.0	375	20.9
Indoors, health care facility	1079	11.3	823	11.3	790	12.0	1114	12.0	952	46.6
Indoors, public building	1123	2.0	893	3.5	938	5.7	1201	2.2	997	13.4
Indoors, other location	2549	6.0	1798	7.1	2114	10.6	2517	6.3	2210	30.0
Indoors, not specified	-1	0.0	2045	0.4	2822	0.4	-1	0.0	2479	0.8
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	2118	25.1	1479	51.2	1526	78.5	2133	26.5	1683	181.3
Outdoors, school grounds	3335	13.5	2625	16.8	2606	12.4	3519	14.2	3012	56.9
Outdoors, sports arena	1108	2.3	749	6.7	833	9.9	1127	2.7	873	21.5
Outdoors, park/golf course	1073	2.4	750	18.8	787	30.6	1109	2.7	803	54.5
Outdoors, other location	-1	0.1	1473	13.1	1701	29.2	2151	0.1	1632	42.5
Outdoors, not specified	3031	0.1	2252	0.3	2229	0.2	2992	0.1	2503	0.7
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3283	160.8	2417	116.7	2733	123.8	3259	159.0	2974	560.3
In transit, bus	4524	3.8	3789	0.6	-1	0.0	5100	3.5	4722	7.9
In transit, truck	3887	5.0	2784	15.9	2785	34.4	3879	6.1	2983	61.4
In transit, van	-1	0.0	2390	2.1	2179	8.3	-1	0.0	2222	10.4
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	1762	6.8	1395	13.4	1109	18.9	1868	7.9	1412	46.9
Outdoors, along a roadway	2489	92.8	2011	121.0	2263	90.3	2508	101.2	2301	405.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	2216	0.3	2343	0.3	-1	0.1	2312	0.6
Outdoors, service station	-1	0.0	0	3.2	0	3.9	-1	0.1	0	7.1
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1008	1574.7	737	1504.6	837	1407.5	986	1606.7	895	6093.5
Indoors, office	1186	57.3	972	121.7	990	110.5	1278	60.2	1065	349.6
Indoors, store	1261	8.4	1052	13.5	1096	11.8	1324	9.2	1164	42.8
Indoors, restaurant	2604	21.8	1889	17.2	1962	12.5	2392	21.4	2263	73.0
Indoors, mfg. facility	-1	0.0	1227	20.7	1241	78.3	-1	0.0	1238	99.0
Indoors, school	1302	136.1	1093	82.2	1142	37.6	1421	136.1	1284	392.1
Indoors, church	1115	0.6	660	9.8	747	12.4	948	1.1	729	23.8
Indoors, shopping mall	8927	0.3	4872	1.4	5736	0.8	7868	0.6	6062	3.0
Indoors, auditorium	455	2.4	321	15.9	397	42.7	369	2.3	379	63.2
Indoors, health care facility	1237	5.5	776	6.9	829	4.7	1083	5.8	975	22.9
Indoors, public building	1503	15.9	920	20.3	1130	10.6	1418	18.0	1236	64.8
Indoors, other location	2363	44.1	1824	32.3	2393	22.1	2447	43.7	2271	142.2
Indoors, not specified	-1	0.0	1749	0.1	-1	0.1	-1	0.1	1897	0.3
Outdoors, construction	-1	0.0	2432	6.8	2393	8.6	-1	0.0	2410	15.3
Outdoors, residential grounds	1795	5.5	1466	20.2	1368	30.1	1884	6.4	1491	62.2
Outdoors, school grounds	3602	2.0	2838	8.8	2790	5.0	3814	3.5	3082	19.4
Outdoors, sports arena	1021	7.3	791	4.8	822	25.9	1070	6.9	889	44.9
Outdoors, park/golf course	784	3.6	742	10.2	811	10.8	879	3.5	791	28.0
Outdoors, other location	1949	2.6	1612	13.1	1730	96.3	2016	2.4	1727	114.5
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	4062	2.6	2217	0.4	-1	0.0	3580	2.4	3709	5.4
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3323	128.2	2496	134.7	2697	131.7	3352	132.3	2962	526.9
In transit, bus	6254	1.4	4357	2.2	4652	2.5	6279	1.3	5157	7.3
In transit, truck	3831	20.2	2989	21.8	3203	20.8	3984	19.9	3488	82.6
In transit, van	2870	6.4	2434	6.7	2557	10.0	3176	6.5	2734	29.6
Indoors, public garage	1950	13.1	1603	11.8	1744	7.8	2076	13.7	1864	46.4
Outdoors, in a parking lot	1799	11.5	1477	16.6	1608	17.3	1926	12.3	1676	57.7
Outdoors, along a roadway	2811	41.9	2245	68.9	2437	76.7	2920	45.6	2542	233.1
In transit, motorcycle	-1	0.0	2407	0.8	3214	0.8	-1	0.0	2809	1.6
Indoors, service station	2705	16.0	2289	9.6	2384	5.5	2926	15.8	2657	46.8
Outdoors, service station	0	0.3	0	0.5	0	0.5	0	0.3	0	1.6
Indoors, residential garage	2875	3.2	2125	4.3	2348	3.0	2709	3.6	2490	14.2
Indoors, in a repair shop	4003	10.2	3415	1.7	-1	0.1	4445	9.4	4147	21.3
Indoors, home	1002	1406.7	725	1377.3	848	1343.3	963	1438.4	886	5565.8
Indoors, office	1187	240.8	990	195.2	1048	197.0	1288	241.9	1140	875.0
Indoors, store	1337	44.1	1103	47.1	1158	57.6	1409	43.7	1243	192.5
Indoors, restaurant	2293	40.0	1804	34.7	1921	28.7	2385	39.6	2125	142.9
Indoors, mfg. facility	1443	33.4	1165	56.1	1240	64.7	1536	35.3	1309	189.5
Indoors, school	1448	20.1	1135	16.0	1237	11.8	1548	20.5	1368	68.4
Indoors, church	870	8.8	665	11.4	721	9.8	906	9.7	784	39.7
Indoors, shopping mall	7392	1.4	6092	1.1	5863	0.9	7410	1.5	6831	4.9
Indoors, auditorium	448	9.9	308	2.4	375	3.4	414	9.3	412	25.1
Indoors, health care facility	1045	14.2	789	19.5	836	21.1	1094	15.2	921	70.0
Indoors, public building	1160	7.3	855	10.5	875	22.5	1194	7.2	963	47.4
Indoors, other location	2602	46.4	1950	52.4	2241	49.2	2633	46.7	2343	194.7
Indoors, not specified	2065	6.8	1942	2.2	2242	0.6	2220	6.6	2118	16.2
Outdoors, construction	3042	4.6	2668	10.8	2749	8.6	3371	5.5	2881	29.4
Outdoors, residential grounds	2032	5.1	1471	16.5	1637	41.9	2036	5.9	1661	69.5
Outdoors, school grounds	3107	0.5	2485	1.0	2753	0.7	3342	0.6	2843	2.7
Outdoors, sports arena	917	1.4	753	5.7	802	7.7	981	1.4	810	16.1
Outdoors, park/golf course	983	1.7	785	9.7	806	16.5	1051	2.5	829	30.4
Outdoors, other location	2074	12.7	1534	31.2	1756	37.4	2132	14.4	1782	95.7
Outdoors, not specified	-1	0.0	1998	0.8	2243	0.6	-1	0.1	2244	1.5
In transit, train	3716	1.7	1637	1.5	1826	1.5	3802	1.6	2797	6.2
In transit, airplane	-1	0.0	0	1.2	0	5.8	-1	0.0	0	7.0

Spokane: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3231	95.0	2526	96.9	2714	102.6	3281	98.1	2935	392.6
In transit, bus	5529	4.2	4515	1.7	4627	1.5	5869	4.0	5379	11.4
In transit, truck	3721	10.3	2985	1.7	-1	0.0	3930	9.6	3754	21.7
In transit, van	-1	0.1	2391	0.4	2802	1.1	2897	0.1	2703	1.7
Indoors, public garage	2283	0.4	1545	0.4	1647	0.2	2350	0.4	1995	1.4
Outdoors, in a parking lot	2013	4.3	1502	9.0	1651	11.8	2099	4.7	1728	29.7
Outdoors, along a roadway	2968	30.1	2245	51.8	2469	66.4	3035	32.2	2589	180.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1847	0.1	2220	0.2	-1	0.0	2086	0.3
Outdoors, service station	0	0.1	-1	0.0	-1	0.1	-1	0.1	0	0.3
Indoors, residential garage	2559	1.3	1993	0.3	-1	0.1	2706	1.2	2547	2.9
Indoors, in a repair shop	-1	0.1	3402	0.3	3309	0.2	4142	0.1	3539	0.6
Indoors, home	1034	1852.4	766	1778.6	870	1745.9	1021	1884.6	925	7261.5
Indoors, office	1199	14.1	962	8.1	956	7.2	1301	13.0	1144	42.4
Indoors, store	1310	36.0	1090	52.3	1113	70.8	1409	36.6	1199	195.6
Indoors, restaurant	2569	21.1	1868	23.7	2050	21.4	2488	21.8	2234	88.0
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	1468	19.6	1110	41.0	1165	30.9	1499	24.6	1268	116.1
Indoors, church	822	8.0	685	10.5	731	10.1	912	8.9	781	37.6
Indoors, shopping mall	6415	4.4	5877	2.7	5444	2.9	6983	4.1	6282	14.1
Indoors, auditorium	399	10.1	302	11.8	352	12.7	420	11.1	366	45.6
Indoors, health care facility	948	5.1	765	9.3	786	9.3	1035	5.7	856	29.4
Indoors, public building	1193	7.5	864	4.0	967	4.0	1230	7.3	1107	22.8
Indoors, other location	2857	25.2	2066	30.7	2296	24.8	2675	26.4	2456	107.1
Indoors, not specified	-1	0.0	2137	0.1	2466	0.6	-1	0.0	2410	0.8
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1872	3.9	1510	24.4	1601	31.5	1957	5.9	1615	65.6
Outdoors, school grounds	3354	0.4	2386	2.5	2867	2.6	3154	0.7	2740	6.3
Outdoors, sports arena	1063	4.7	781	2.6	885	5.4	1081	4.5	968	17.2
Outdoors, park/golf course	1092	0.5	792	11.0	818	26.5	1133	0.8	820	38.8
Outdoors, other location	1691	1.0	1535	7.9	1775	17.2	1945	1.1	1708	27.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	4581	0.4	-1	0.1	-1	0.0	4548	0.4	4447	0.8
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3403	127.3	2523	116.0	2727	116.0	3463	128.4	3049	487.7
In transit, bus	5691	4.5	4301	4.5	4361	4.1	5932	4.7	5096	17.9
In transit, truck	4211	4.5	2897	4.9	3254	5.2	4134	4.8	3604	19.3
In transit, van	-1	0.1	2570	2.1	2737	2.2	-1	0.1	2715	4.4
Indoors, public garage	1890	3.9	1629	2.0	1683	1.2	2068	3.7	1880	10.8
Outdoors, in a parking lot	1943	5.3	1487	9.6	1598	12.9	1980	5.7	1686	33.7
Outdoors, along a roadway	3014	31.0	2235	46.1	2456	57.0	3074	32.4	2619	166.5
In transit, motorcycle	-1	0.0	2894	4.4	2867	9.0	-1	0.0	2876	13.3
Indoors, service station	-1	0.1	2044	0.2	2077	0.1	-1	0.1	2285	0.5
Outdoors, service station	0	0.2	0	0.7	0	1.0	0	0.2	0	2.1
Indoors, residential garage	-1	0.1	-1	0.1	-1	0.0	-1	0.1	2142	0.3
Indoors, in a repair shop	-1	0.1	-1	0.0	-1	0.0	-1	0.0	3929	0.1
Indoors, home	996	1455.6	727	1450.9	857	1460.2	961	1487.6	886	5854.3
Indoors, office	1196	247.3	993	248.6	1019	226.4	1303	252.1	1131	974.3
Indoors, store	1455	60.3	1140	71.7	1178	65.9	1509	63.3	1312	261.2
Indoors, restaurant	2413	46.9	1902	39.2	2055	40.1	2424	46.8	2217	173.0
Indoors, mfg. facility	1372	13.8	1156	17.2	1211	11.4	1499	14.6	1307	56.9
Indoors, school	1361	52.0	1150	42.1	1204	24.5	1490	53.3	1327	171.9
Indoors, church	939	12.3	688	13.7	711	13.2	934	13.2	814	52.3
Indoors, shopping mall	6910	3.8	5679	2.7	5659	1.7	7368	3.9	6614	12.1
Indoors, auditorium	392	4.5	315	5.1	339	7.5	383	4.9	354	22.0
Indoors, health care facility	969	35.9	749	31.1	851	26.5	972	36.6	893	130.1
Indoors, public building	1069	6.1	875	5.9	789	9.3	1176	6.2	957	27.5
Indoors, other location	2650	40.0	1890	35.1	2285	29.2	2595	39.8	2375	144.1
Indoors, not specified	2628	0.4	2311	0.4	2337	0.2	2839	0.4	2579	1.4
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1791	2.2	1364	12.8	1649	33.7	1802	2.8	1593	51.5
Outdoors, school grounds	4083	0.3	2704	1.8	2969	2.0	3847	0.4	2998	4.5
Outdoors, sports arena	-1	0.1	734	6.1	784	9.9	1068	0.1	769	16.2
Outdoors, park/golf course	1059	0.6	688	3.9	683	15.5	1043	0.8	709	20.8
Outdoors, other location	2224	0.7	1525	4.6	1823	21.8	2246	0.7	1796	27.8
Outdoors, not specified	-1	0.0	-1	0.1	-1	0.0	-1	0.0	2723	0.1
In transit, train	3865	0.2	2656	0.5	2806	0.3	3936	0.3	3196	1.4
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3123	84.5	2540	105.3	2641	105.3	3296	88.5	2871	383.6
In transit, bus	4911	3.9	4503	16.5	4588	20.0	5384	3.7	4651	44.1
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	2686	0.5	2337	2.0	2272	1.5	2986	0.8	2454	4.7
Indoors, public garage	-1	0.1	-1	0.0	-1	0.0	-1	0.1	2808	0.2
Outdoors, in a parking lot	1860	8.4	1571	38.7	1560	35.3	1958	9.3	1633	91.7
Outdoors, along a roadway	3042	23.9	2295	46.3	2422	44.3	3123	26.0	2615	140.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	2892	3.7	2229	9.5	2107	6.3	2982	5.0	2452	24.5
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1038	1890.4	750	1696.2	851	1570.3	1017	1917.9	922	7074.8
Indoors, office	1093	10.8	1015	3.4	987	4.4	1208	10.2	1108	28.9
Indoors, store	1195	29.0	1126	33.4	1119	48.3	1322	29.7	1179	140.3
Indoors, restaurant	2038	17.1	1852	4.2	1993	7.3	2278	15.8	2099	44.4
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	1598	6.2	1201	26.9	1348	17.3	1558	10.6	1345	61.0
Indoors, church	843	7.3	756	12.0	756	7.2	940	8.7	820	35.2
Indoors, shopping mall	5548	9.0	4852	1.6	-1	0.0	6388	8.5	5864	19.1
Indoors, auditorium	366	6.0	273	8.9	283	10.0	395	5.5	317	30.4
Indoors, health care facility	991	20.4	744	39.4	777	21.5	1064	25.8	875	107.1
Indoors, public building	1012	2.3	924	1.3	910	9.6	1107	2.1	953	15.2
Indoors, other location	2324	22.0	1640	61.2	1730	63.6	2513	23.6	1883	170.5
Indoors, not specified	3202	2.5	2370	0.4	-1	0.0	3405	2.3	3228	5.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1668	7.9	1431	41.4	1510	173.4	1791	9.7	1513	232.4
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	685	8.7	957	11.0	-1	0.0	837	19.7
Outdoors, park/golf course	1375	4.3	779	2.5	800	17.7	1301	4.1	958	28.6
Outdoors, other location	-1	0.0	1556	24.1	1784	33.8	-1	0.0	1689	58.0
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3316	144.9	2471	148.4	2700	142.1	3372	148.5	2966	583.8
In transit, bus	6093	11.9	4267	5.5	4522	2.9	6180	11.4	5663	31.7
In transit, truck	3956	16.9	2924	25.1	2990	19.1	4091	19.3	3437	80.4
In transit, van	2939	2.2	2511	11.5	2684	12.2	3277	2.5	2686	28.4
Indoors, public garage	1940	2.0	1520	4.5	1629	2.6	2080	2.6	1742	11.8
Outdoors, in a parking lot	1969	8.7	1468	10.5	1577	10.9	2045	9.2	1744	39.3
Outdoors, along a roadway	2865	41.7	2228	58.7	2506	70.7	2986	43.1	2596	214.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	2667	7.8	2139	2.9	2067	1.3	2902	7.4	2636	19.4
Outdoors, service station	-1	0.0	0	0.6	0	0.8	-1	0.1	0	1.5
Indoors, residential garage	2490	0.2	1803	0.4	1780	0.4	2673	0.2	2025	1.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	983	1344.5	711	1315.2	841	1287.1	941	1379.1	870	5325.9
Indoors, office	1189	310.5	988	251.0	1034	297.0	1292	307.3	1133	1165.8
Indoors, store	1317	68.2	1053	54.2	1117	35.7	1399	68.8	1247	227.0
Indoors, restaurant	2524	32.0	1867	34.9	2017	35.4	2522	32.9	2221	135.1
Indoors, mfg. facility	1617	19.0	1210	67.9	1266	90.6	1712	23.3	1332	200.8
Indoors, school	1478	5.4	1139	31.4	1201	28.2	1556	8.0	1234	72.8
Indoors, church	967	15.1	690	17.7	722	15.6	971	15.5	832	64.0
Indoors, shopping mall	7524	4.0	5054	1.6	4746	1.0	6682	3.8	6580	10.4
Indoors, auditorium	460	5.0	296	2.7	393	1.6	422	4.6	408	13.9
Indoors, health care facility	1071	21.4	814	5.5	834	2.0	1076	19.8	1034	48.7
Indoors, public building	1261	3.7	946	21.1	1028	24.5	1112	4.4	1019	53.7
Indoors, other location	2472	67.1	1788	55.2	1939	34.7	2490	67.9	2227	224.9
Indoors, not specified	2509	8.2	2104	2.0	2160	0.5	2717	7.6	2541	18.4
Outdoors, construction	-1	0.0	2682	1.8	2811	5.8	-1	0.0	2781	7.6
Outdoors, residential grounds	1781	2.1	1416	27.5	1586	53.8	1808	2.4	1542	85.8
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	907	4.4	734	13.8	795	18.4	975	5.2	809	41.7
Outdoors, other location	2019	12.3	1582	11.6	1884	11.7	2070	12.5	1894	48.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	3924	0.7	2817	0.1	-1	0.0	4126	0.6	3929	1.4
In transit, airplane	-1	0.0	0	1.1	0	1.3	-1	0.0	0	2.4

Spokane: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3261	86.4	2552	80.4	2643	81.3	3376	85.7	2969	333.8
In transit, bus	4946	2.1	4331	1.6	4456	1.1	5428	2.0	4862	6.8
In transit, truck	4066	6.3	3252	1.1	-1	0.0	4275	5.9	4093	13.3
In transit, van	3528	0.8	2411	3.0	2628	2.2	3301	1.3	2752	7.3
Indoors, public garage	1544	0.9	1365	0.3	-1	0.1	1800	0.9	1622	2.1
Outdoors, in a parking lot	1860	3.5	1479	8.3	1597	12.3	1877	3.7	1633	27.9
Outdoors, along a roadway	2866	38.1	2219	37.2	2444	46.7	3018	37.4	2627	159.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	2349	0.2	2167	0.1	2197	0.1	2692	0.2	2381	0.6
Outdoors, service station	-1	0.0	0	0.8	0	1.0	-1	0.0	0	1.7
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1036	1898.3	771	1859.4	874	1820.4	1024	1942.2	928	7520.4
Indoors, office	1129	8.1	994	7.5	970	6.5	1252	8.3	1095	30.4
Indoors, store	1237	34.5	1050	37.0	1040	34.2	1345	35.0	1167	140.7
Indoors, restaurant	2789	13.9	1877	19.3	2054	28.0	2585	14.9	2248	76.1
Indoors, mfg. facility	-1	0.0	1355	0.4	1278	0.5	-1	0.0	1312	1.0
Indoors, school	1583	4.3	1066	5.6	1313	4.6	1467	4.5	1338	19.0
Indoors, church	879	12.9	696	20.3	734	17.1	911	14.7	791	64.9
Indoors, shopping mall	6666	4.3	5119	2.9	5816	4.4	7249	4.2	6301	15.8
Indoors, auditorium	411	2.9	310	1.3	311	1.1	369	2.6	367	7.9
Indoors, health care facility	937	10.0	786	19.3	785	23.0	1023	9.9	848	62.2
Indoors, public building	1323	1.2	926	5.1	1000	4.9	1256	1.9	1038	13.0
Indoors, other location	2496	19.0	1754	28.0	1949	27.3	2515	19.4	2119	93.7
Indoors, not specified	3296	2.6	2347	0.4	-1	0.0	3367	2.4	3255	5.4
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1941	8.4	1422	26.2	1509	54.7	1986	9.6	1569	98.8
Outdoors, school grounds	3182	0.4	-1	0.1	-1	0.0	3270	0.4	3185	0.8
Outdoors, sports arena	-1	0.0	723	5.0	869	5.7	-1	0.0	801	10.6
Outdoors, park/golf course	-1	0.0	749	11.2	719	22.8	-1	0.0	729	34.0
Outdoors, other location	1800	0.1	1560	2.2	1697	8.1	1967	0.2	1675	10.6
Outdoors, not specified	3252	0.9	2741	0.1	-1	0.0	3387	0.8	3272	1.9
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3301	113.0	2478	109.9	2707	108.6	3394	113.5	2976	445.1
In transit, bus	5854	6.7	4062	4.3	4269	3.9	6040	6.5	5263	21.5
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	2690	3.3	2276	1.3	2510	0.5	3049	3.2	2752	8.3
Indoors, public garage	2180	0.6	1444	0.4	1507	0.2	2190	0.6	1939	1.8
Outdoors, in a parking lot	2055	7.5	1486	10.0	1695	17.2	2103	7.8	1785	42.6
Outdoors, along a roadway	2833	36.4	2133	38.5	2365	48.8	2919	36.8	2542	160.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1728	0.1	1817	0.1	-1	0.0	1944	0.3
Outdoors, service station	0	0.2	0	3.3	0	3.8	0	0.3	0	7.5
Indoors, residential garage	-1	0.1	-1	0.0	-1	0.0	-1	0.1	2028	0.2
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1017	1512.7	737	1455.9	858	1491.8	982	1543.6	901	6003.9
Indoors, office	1154	244.3	969	218.6	1025	167.0	1261	248.5	1114	878.5
Indoors, store	1353	42.7	1135	62.7	1160	68.2	1447	45.5	1250	219.1
Indoors, restaurant	2298	34.0	1797	47.7	1960	41.6	2395	37.1	2083	160.3
Indoors, mfg. facility	-1	0.0	1156	50.2	1324	89.3	-1	0.0	1263	139.6
Indoors, school	1348	45.2	1144	29.9	1118	22.9	1477	45.7	1310	143.7
Indoors, church	947	17.3	653	15.6	689	24.2	945	17.5	802	74.6
Indoors, shopping mall	6578	2.4	5812	5.5	5523	3.8	7133	3.1	6139	14.8
Indoors, auditorium	491	0.6	355	2.4	361	1.7	507	0.9	396	5.7
Indoors, health care facility	926	34.9	633	54.4	683	35.8	980	38.4	788	163.6
Indoors, public building	997	3.9	908	1.7	883	3.5	1126	3.6	990	12.7
Indoors, other location	2485	49.1	1912	52.0	2109	37.9	2462	49.3	2245	188.3
Indoors, not specified	-1	0.0	1555	0.4	2267	2.6	-1	0.1	2155	3.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1675	2.3	1411	15.6	1550	24.1	1797	3.0	1525	45.0
Outdoors, school grounds	3070	0.2	2539	1.2	2963	0.9	3332	0.4	2828	2.7
Outdoors, sports arena	919	1.6	715	0.9	949	5.9	972	1.5	927	9.8
Outdoors, park/golf course	843	0.8	671	0.1	-1	0.0	927	0.7	863	1.6
Outdoors, other location	2044	0.2	1564	1.3	1779	3.5	2120	0.3	1752	5.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3109	129.1	2504	142.9	2641	133.8	3323	135.3	2887	541.1
In transit, bus	5537	1.1	4318	4.9	4432	2.8	6076	2.0	4794	10.9
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	-1	0.0	2786	0.2	-1	0.0	2792	0.2
Indoors, public garage	711	0.3	-1	0.1	-1	0.0	725	0.3	703	0.7
Outdoors, in a parking lot	1611	5.6	1488	19.5	1710	26.9	1825	6.3	1639	58.3
Outdoors, along a roadway	2871	25.5	2243	56.5	2407	106.4	2969	28.0	2492	216.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1990	0.6	2277	1.3	-1	0.0	2185	1.9
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	-1	0.1	1878	0.2	1986	0.2	-1	0.1	1981	0.5
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, home	1041	1758.7	754	1669.2	865	1649.4	1019	1785.0	923	6862.3
Indoors, office	1159	74.9	987	60.7	1002	37.8	1218	76.4	1111	249.8
Indoors, store	1279	19.2	1072	18.6	1075	27.8	1403	18.5	1193	84.1
Indoors, restaurant	2224	22.1	1824	28.7	1913	35.8	2413	23.8	2060	110.3
Indoors, mfg. facility	1341	16.0	1164	12.9	1170	6.1	1509	16.7	1331	51.7
Indoors, school	1327	12.6	1151	5.4	1577	3.1	1468	11.5	1371	32.6
Indoors, church	816	15.0	677	19.7	714	16.1	891	17.0	771	67.8
Indoors, shopping mall	6252	7.2	5818	4.1	5604	8.3	6927	6.6	6151	26.2
Indoors, auditorium	433	14.6	293	26.2	381	17.9	384	18.0	362	76.6
Indoors, health care facility	844	3.4	806	10.5	746	19.8	980	4.0	797	37.7
Indoors, public building	1066	2.5	911	7.6	959	9.2	1159	2.4	977	21.6
Indoors, other location	2467	9.7	1995	16.3	2316	9.6	2541	11.7	2292	47.3
Indoors, not specified	-1	0.0	2235	2.9	2104	3.6	-1	0.0	2162	6.5
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1935	21.6	1467	55.9	1504	76.3	2072	22.2	1616	176.0
Outdoors, school grounds	3915	0.6	2195	2.5	2807	1.4	3355	1.0	2743	5.5
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	891	17.1	736	15.4	701	7.5	956	18.1	845	58.2
Outdoors, other location	-1	0.0	1499	1.3	2018	6.1	-1	0.0	1926	7.5
Outdoors, not specified	3002	0.2	2677	0.8	2582	0.4	3263	0.3	2793	1.7
In transit, train	3083	3.1	2214	0.5	-1	0.0	3231	2.8	3082	6.5
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3158	77.8	2568	78.0	2705	92.1	3337	78.7	2932	326.6
In transit, bus	4638	0.3	4245	1.6	4789	2.1	5268	0.6	4652	4.6
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	3462	1.3	2838	0.2	-1	0.0	3736	1.2	3535	2.7
Indoors, public garage	2340	0.4	1644	0.3	2190	1.2	2009	0.4	2117	2.3
Outdoors, in a parking lot	1774	1.9	1547	5.2	1583	7.5	1912	2.0	1635	16.6
Outdoors, along a roadway	3100	32.3	2250	34.6	2501	50.1	3184	31.8	2719	148.7
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.1	-1	0.0	2209	0.1
Outdoors, service station	-1	0.0	-1	0.0	0	0.3	-1	0.0	0	0.3
Indoors, residential garage	-1	0.0	1783	0.3	1915	0.2	-1	0.0	1844	0.5
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1047	1879.4	781	1905.8	883	1866.1	1035	1925.6	937	7576.9
Indoors, office	1169	22.2	936	6.6	898	3.6	1292	20.3	1169	52.7
Indoors, store	1217	19.1	1108	29.9	1086	66.1	1355	18.5	1147	133.6
Indoors, restaurant	2317	16.0	1955	20.6	2009	24.8	2483	17.4	2162	78.7
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	-1	0.0	1018	0.9	1012	1.2	-1	0.0	1015	2.1
Indoors, church	781	31.2	665	28.8	693	18.2	884	33.4	767	111.6
Indoors, shopping mall	5978	1.8	5383	7.7	5244	4.5	6752	3.1	5654	17.0
Indoors, auditorium	376	0.9	337	4.0	319	2.3	407	1.6	349	8.8
Indoors, health care facility	1133	21.7	800	10.4	781	5.3	1178	21.0	1058	58.4
Indoors, public building	1265	2.8	883	7.4	978	6.0	1318	3.3	1041	19.5
Indoors, other location	2525	47.6	2033	15.7	2117	17.3	2618	45.1	2441	125.7
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1651	2.6	1420	15.4	1514	25.8	1830	2.5	1507	46.3
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	774	0.9	686	5.2	765	4.7	887	1.4	746	12.2
Outdoors, park/golf course	-1	0.0	709	3.4	890	4.9	-1	0.0	816	8.2
Outdoors, other location	-1	0.0	1683	2.3	1792	3.8	-1	0.0	1751	6.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3194	81.8	2410	60.7	2689	71.5	3218	82.9	2919	296.9
In transit, bus	-1	0.0	3568	1.9	4182	2.4	-1	0.0	3911	4.2
In transit, truck	3624	77.2	2858	91.5	3070	101.0	3715	75.4	3279	345.1
In transit, van	2642	9.7	2299	1.5	-1	0.0	2874	8.8	2718	20.0
Indoors, public garage	2527	30.6	1629	26.0	1839	12.6	2318	32.1	2145	101.4
Outdoors, in a parking lot	2145	8.4	1446	25.3	1586	22.6	2036	11.6	1680	68.0
Outdoors, along a roadway	2705	145.3	2247	197.0	2502	240.5	2931	152.3	2563	735.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	2608	62.1	2054	14.1	2048	4.8	2865	56.8	2638	137.8
Outdoors, service station	0	0.1	0	3.8	0	5.0	0	0.2	0	9.2
Indoors, residential garage	3016	11.1	1810	2.5	2446	0.3	2489	10.7	2659	24.5
Indoors, in a repair shop	-1	0.0	3063	1.0	3298	1.3	-1	0.0	3194	2.2
Indoors, home	973	1245.1	684	1224.1	808	1161.6	929	1276.7	850	4907.4
Indoors, office	1104	73.2	1056	74.1	1112	57.0	1189	68.6	1114	273.0
Indoors, store	1378	18.1	1063	8.9	1180	4.6	1403	18.0	1312	49.6
Indoors, restaurant	2608	41.0	2051	17.8	2024	14.1	2735	39.2	2491	112.1
Indoors, mfg. facility	1472	7.3	1207	41.3	1236	106.5	1583	12.8	1266	168.0
Indoors, school	1300	3.1	1108	13.6	1113	7.8	1432	5.4	1188	29.9
Indoors, church	866	33.4	647	14.4	691	6.0	845	33.4	810	87.1
Indoors, shopping mall	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, auditorium	468	8.6	286	27.2	395	38.5	390	8.2	366	82.5
Indoors, health care facility	-1	0.0	745	3.4	915	10.9	-1	0.0	874	14.3
Indoors, public building	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, other location	2581	52.3	1975	16.7	1976	7.1	2535	49.2	2448	125.4
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	2982	57.2	2663	115.0	2775	124.3	3312	61.9	2865	358.4
Outdoors, residential grounds	2047	7.8	1472	25.0	1733	21.1	2013	10.7	1716	64.5
Outdoors, school grounds	3309	0.2	2699	0.8	2666	0.4	3585	0.3	2915	1.7
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	785	2.9	694	13.9	699	9.4	876	5.1	734	31.4
Outdoors, other location	1971	183.3	1624	162.5	1729	176.9	2084	187.7	1862	710.4
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3487	43.0	2503	63.7	2725	80.1	3414	46.2	2942	233.0
In transit, bus	5308	19.1	4198	14.7	4384	8.4	5644	19.6	5025	61.8
In transit, truck	3154	0.1	2808	1.4	2968	1.8	3591	0.2	2954	3.5
In transit, van	3993	3.2	2616	2.2	2678	2.2	3869	3.0	3402	10.6
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	2121	9.0	1521	9.0	1584	9.7	2181	9.3	1850	37.0
Outdoors, along a roadway	3170	125.9	2290	140.0	2443	172.6	3172	126.2	2730	564.8
In transit, motorcycle	4160	3.4	2409	0.9	2956	0.3	3821	3.1	3777	7.6
Indoors, service station	-1	0.0	-1	0.1	-1	0.1	-1	0.0	2066	0.1
Outdoors, service station	0	0.4	0	0.6	0	0.7	0	0.3	0	2.0
Indoors, residential garage	-1	0.1	2411	0.6	2370	0.7	3739	0.1	2577	1.5
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	986	1421.6	718	1437.7	846	1458.2	940	1452.9	872	5770.4
Indoors, office	1274	4.4	972	3.1	951	7.8	1304	4.0	1101	19.3
Indoors, store	1637	27.1	1091	23.9	1096	27.3	1557	27.0	1352	105.3
Indoors, restaurant	2537	4.6	1861	12.6	2084	16.4	2282	5.9	2096	39.5
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	1295	381.5	1096	270.1	1117	148.8	1436	385.1	1273	1185.4
Indoors, church	873	16.9	673	13.5	706	14.4	908	17.2	801	61.9
Indoors, shopping mall	6853	3.9	6083	3.5	5794	2.1	7323	4.1	6634	13.6
Indoors, auditorium	474	1.3	308	6.0	370	7.0	421	2.2	362	16.4
Indoors, health care facility	1055	7.1	856	11.1	899	8.4	1099	8.4	965	35.1
Indoors, public building	1099	7.2	882	7.7	913	8.0	1181	7.7	1016	30.6
Indoors, other location	2421	8.6	2105	8.6	2228	10.1	2634	9.1	2346	36.3
Indoors, not specified	-1	0.0	2034	0.4	2826	0.5	-1	0.0	2476	0.9
Outdoors, construction	-1	0.0	2448	1.2	2388	1.5	-1	0.0	2414	2.7
Outdoors, residential grounds	2217	34.4	1481	62.1	1514	94.4	2196	35.6	1718	226.4
Outdoors, school grounds	3490	26.3	2657	30.7	2615	19.3	3669	28.2	3132	104.5
Outdoors, sports arena	1108	8.2	762	14.4	817	19.4	1130	9.2	905	51.2
Outdoors, park/golf course	1253	2.4	744	22.2	764	42.3	1232	2.7	793	69.6
Outdoors, other location	1914	0.2	1442	22.3	1682	45.7	2100	0.3	1606	68.4
Outdoors, not specified	3723	0.1	-1	0.0	-1	0.0	3108	0.1	3334	0.3
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3178	51.3	2490	71.7	2691	80.2	3292	53.0	2857	256.2
In transit, bus	5595	4.9	4445	7.1	4553	4.3	6011	5.7	5127	22.0
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	3630	1.1	2447	4.1	2614	3.2	3413	1.7	2793	10.2
Indoors, public garage	-1	0.0	-1	0.0	2188	0.3	-1	0.0	2124	0.4
Outdoors, in a parking lot	1858	4.6	1471	6.9	1581	8.0	1955	4.7	1675	24.2
Outdoors, along a roadway	3072	31.3	2220	45.3	2489	63.6	3064	31.5	2630	171.7
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	2111	0.4	2294	0.5	-1	0.0	2213	0.9
Outdoors, service station	-1	0.0	-1	0.0	0	0.1	-1	0.0	0	0.2
Indoors, residential garage	3245	1.2	2182	1.1	2127	0.6	3413	1.2	2854	4.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	1045	1807.8	763	1725.6	878	1739.6	1024	1838.7	930	7111.7
Indoors, office	1113	77.8	961	76.2	985	65.8	1226	80.1	1077	300.0
Indoors, store	1310	24.2	1100	30.0	1079	35.1	1423	24.2	1207	113.6
Indoors, restaurant	2389	28.2	1904	22.3	1883	29.2	2454	28.5	2170	108.3
Indoors, mfg. facility	1327	15.5	1160	31.1	1166	25.9	1495	17.3	1255	89.9
Indoors, school	1298	60.9	1096	64.9	1113	38.8	1440	65.2	1250	229.7
Indoors, church	819	18.2	723	25.7	763	17.5	920	20.7	802	82.1
Indoors, shopping mall	5842	0.4	5195	2.1	5059	3.9	6619	0.7	5301	7.1
Indoors, auditorium	471	0.4	282	1.8	382	1.0	390	0.7	347	4.0
Indoors, health care facility	961	13.0	774	10.6	863	11.7	994	13.0	905	48.4
Indoors, public building	1135	0.8	866	1.6	864	6.8	1173	0.9	913	10.1
Indoors, other location	2432	0.7	2060	7.2	2420	9.7	2555	0.9	2288	18.6
Indoors, not specified	3459	0.7	2209	1.7	2215	3.6	3667	0.6	2478	6.5
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	1989	7.5	1517	29.9	1560	42.3	2108	8.7	1636	88.4
Outdoors, school grounds	4149	1.9	2720	5.2	2781	2.9	3976	2.8	3222	12.9
Outdoors, sports arena	-1	0.0	827	3.0	822	2.6	-1	0.1	827	5.7
Outdoors, park/golf course	885	7.4	743	1.8	689	2.8	946	6.7	864	18.8
Outdoors, other location	1850	0.1	1633	6.5	1637	7.9	2005	0.2	1642	14.7
Outdoors, not specified	-1	0.0	-1	0.1	-1	0.1	-1	0.0	2636	0.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Spokane: City-wide, Demographic Group=All persons

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	3317	108.9	2500	103.0	2698	102.5	3368	110.4	2983	424.8
In transit, bus	5623	5.2	4293	5.2	4474	3.9	5881	5.4	5115	19.8
In transit, truck	3889	8.4	2899	7.9	3020	7.0	4013	8.5	3484	31.8
In transit, van	3008	2.6	2324	4.2	2527	4.7	3171	2.9	2684	14.3
Indoors, public garage	1900	4.0	1543	3.0	1636	1.8	2027	4.1	1821	12.9
Outdoors, in a parking lot	1891	6.8	1482	10.7	1603	13.2	1972	7.2	1690	37.9
Outdoors, along a roadway	2947	40.9	2235	66.0	2437	85.9	3012	43.1	2574	235.9
In transit, motorcycle	4191	0.2	2738	0.7	2891	1.4	3840	0.1	2985	2.5
Indoors, service station	2631	4.0	2208	2.1	2262	1.1	2851	3.9	2592	11.1
Outdoors, service station	0	0.1	0	0.6	0	0.7	0	0.2	0	1.5
Indoors, residential garage	2801	0.9	2071	1.2	2248	0.8	2688	1.0	2433	3.9
Indoors, in a repair shop	3922	2.2	3341	0.4	-1	0.0	4345	2.0	4053	4.6
Indoors, home	1013	1564.3	742	1543.6	861	1548.3	983	1598.1	901	6254.4
Indoors, office	1154	155.7	958	118.7	963	95.0	1257	155.2	1106	524.6
Indoors, store	1359	42.5	1092	45.2	1108	48.2	1425	43.2	1240	179.1
Indoors, restaurant	2377	30.8	1836	28.1	1966	27.2	2405	31.0	2159	117.0
Indoors, mfg. facility	1398	12.0	1141	20.9	1193	22.7	1508	12.6	1271	68.2
Indoors, school	1324	68.5	1110	74.7	1133	52.5	1454	72.8	1262	268.5
Indoors, church	897	11.7	678	13.6	720	12.9	922	12.5	799	50.8
Indoors, shopping mall	6851	3.1	5728	2.7	5608	2.3	7201	3.2	6422	11.3
Indoors, auditorium	428	5.8	312	6.2	354	6.7	407	6.1	374	24.8
Indoors, health care facility	981	19.9	745	19.1	779	17.0	1009	20.5	885	76.5
Indoors, public building	1143	5.1	884	6.9	901	9.4	1192	5.2	1000	26.5
Indoors, other location	2560	35.5	1881	31.8	2143	27.0	2547	35.6	2303	129.9
Indoors, not specified	2331	2.3	2029	0.9	2376	0.7	2487	2.2	2347	6.1
Outdoors, construction	2944	0.9	2563	2.3	2531	2.1	3265	1.0	2719	6.3
Outdoors, residential grounds	2015	7.5	1459	28.9	1554	53.8	2043	8.7	1604	98.9
Outdoors, school grounds	3342	2.5	2623	5.4	2668	4.5	3505	2.9	2917	15.2
Outdoors, sports arena	1028	1.5	744	4.9	833	8.0	1065	1.6	847	15.9
Outdoors, park/golf course	984	1.8	752	11.2	777	21.1	1035	2.2	795	36.3
Outdoors, other location	2008	3.7	1498	12.9	1728	24.4	2066	4.0	1715	45.1
Outdoors, not specified	3205	0.1	2150	0.3	2252	0.2	3312	0.1	2530	0.7
In transit, train	3703	0.6	1938	0.4	1919	0.3	3756	0.6	3054	1.9
In transit, airplane	-1	0.0	0	0.2	0	0.7	-1	0.0	0	1.0

St. Louis: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	975	84.7	813	93.7	790	100.7	1054	87.9	902	367.1
In transit, bus	1770	7.4	1417	5.4	1346	3.5	1814	7.3	1639	23.6
In transit, truck	1186	4.7	965	6.5	924	6.7	1237	5.3	1060	23.2
In transit, van	955	4.0	821	5.2	801	4.9	1013	5.3	896	19.4
Indoors, public garage	562	2.7	484	1.7	500	1.1	610	2.6	552	8.1
Outdoors, in a parking lot	557	12.4	475	12.7	464	13.7	594	11.8	520	50.7
Outdoors, along a roadway	845	49.5	700	70.7	688	86.9	893	54.6	764	261.6
In transit, motorcycle	1172	0.3	816	0.8	772	1.8	1351	0.2	855	3.1
Indoors, service station	852	2.3	698	1.6	657	1.0	875	2.3	797	7.2
Outdoors, service station	0	0.1	0	0.3	0	0.5	0	0.1	0	1.1
Indoors, residential garage	812	1.0	633	0.9	608	0.6	879	1.1	753	3.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	1042	0.1
Indoors, home	371	1568.5	337	1546.1	326	1545.1	415	1593.1	363	6252.8
Indoors, office	368	79.1	315	80.3	300	80.8	374	80.2	339	320.5
Indoors, store	388	48.0	325	46.3	310	49.2	407	47.2	357	190.7
Indoors, restaurant	710	29.5	587	27.7	562	28.7	768	28.6	658	114.5
Indoors, mfg. facility	461	24.1	397	23.9	384	23.1	474	25.2	430	96.3
Indoors, school	449	131.1	381	99.5	368	61.1	459	135.0	424	426.7
Indoors, church	296	14.2	235	13.6	232	11.9	320	15.3	274	55.0
Indoors, shopping mall	1856	3.5	1623	2.9	1527	2.4	2011	3.1	1775	11.9
Indoors, auditorium	127	5.5	101	7.8	102	8.4	141	7.3	116	29.1
Indoors, health care facility	306	22.3	260	19.5	251	15.3	329	23.5	291	80.6
Indoors, public building	339	6.5	294	8.6	288	10.2	376	6.8	319	32.1
Indoors, other location	800	22.8	704	24.4	694	24.7	887	24.4	771	96.3
Indoors, not specified	639	0.4	644	0.4	683	0.6	641	0.3	657	1.7
Outdoors, construction	894	2.4	764	2.4	716	2.1	908	2.3	823	9.2
Outdoors, residential grounds	520	17.4	452	40.3	450	59.5	546	19.7	473	136.9
Outdoors, school grounds	878	6.9	757	6.3	720	4.7	896	7.4	823	25.3
Outdoors, sports arena	269	1.0	231	4.6	234	7.9	286	1.0	239	14.5
Outdoors, park/golf course	252	4.3	226	15.0	221	24.2	267	5.7	231	49.3
Outdoors, other location	606	3.1	506	14.0	500	25.6	662	2.9	519	45.6
Outdoors, not specified	803	0.2	794	0.2	850	0.2	838	0.3	822	0.9
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	0.4	0	0.9	-1	0.0	0	1.3

St. Louis: City-wide, Demographic Group=African americans

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1018	73.1	910	63.7	948	67.4	1419	67.1	1074	271.3
In transit, bus	1911	13.8	1636	16.8	1651	13.9	2475	15.9	1923	60.4
In transit, truck	-1	0.0	1001	1.3	1040	2.8	-1	0.0	1028	4.1
In transit, van	-1	0.0	825	0.1	827	0.3	-1	0.0	826	0.4
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	581	9.5	593	9.4	657	13.7	816	7.5	654	40.2
Outdoors, along a roadway	888	30.3	792	61.4	847	89.1	1240	31.5	895	212.3
In transit, motorcycle	1232	0.7	895	0.9	940	0.5	1889	0.9	1277	3.0
Indoors, service station	-1	0.0	795	0.2	800	0.5	-1	0.0	799	0.8
Outdoors, service station	-1	0.0	0	0.1	0	0.3	-1	0.0	0	0.4
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.1	1479	0.2	-1	0.0	1455	0.2
Indoors, home	388	1719.9	379	1694.6	388	1682.5	569	1756.4	432	6853.4
Indoors, office	483	3.6	362	17.6	371	31.1	600	7.2	403	59.5
Indoors, store	421	13.5	360	22.5	370	30.3	575	14.9	413	81.1
Indoors, restaurant	771	13.9	659	4.8	689	2.7	1137	10.1	865	31.4
Indoors, mfg. facility	462	28.2	418	9.9	442	9.5	619	22.2	503	69.8
Indoors, school	498	106.5	422	110.8	435	68.1	633	124.0	508	409.3
Indoors, church	292	47.8	248	38.7	259	33.0	407	44.8	307	164.3
Indoors, shopping mall	1770	1.3	1705	2.2	1759	1.6	2407	2.6	1964	7.6
Indoors, auditorium	122	2.1	105	3.5	105	2.3	175	4.2	132	12.1
Indoors, health care facility	288	31.0	307	52.1	304	66.6	438	34.7	327	184.4
Indoors, public building	294	1.2	291	5.3	294	9.1	406	1.5	303	17.1
Indoors, other location	793	44.3	744	18.9	738	19.6	1210	34.2	898	117.0
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	599	7.4	511	24.6	531	35.4	892	9.2	574	76.5
Outdoors, school grounds	870	6.3	801	7.5	848	4.3	1209	7.9	949	26.0
Outdoors, sports arena	268	5.6	237	9.3	241	6.2	385	11.2	295	32.3
Outdoors, park/golf course	-1	0.0	230	1.2	236	3.4	-1	0.0	234	4.6
Outdoors, other location	692	0.1	568	5.2	617	11.0	-1	0.1	603	16.4
Outdoors, not specified	-1	0.0	-1	0.1	-1	0.0	-1	0.1	963	0.2
In transit, train	-1	0.0	1033	1.2	1025	2.6	-1	0.0	1028	3.8
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	970	67.2	820	64.8	796	67.6	1072	65.0	914	264.7
In transit, bus	1790	10.3	1493	12.9	1396	11.5	1913	11.7	1641	46.4
In transit, truck	-1	0.0	907	1.2	856	2.6	-1	0.0	873	3.8
In transit, van	937	3.4	748	4.7	687	3.2	1051	5.1	870	16.5
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	538	9.8	514	10.8	550	13.8	580	8.8	544	43.2
Outdoors, along a roadway	806	62.4	725	101.9	713	112.5	899	73.4	772	350.2
In transit, motorcycle	1219	0.5	807	0.6	783	0.4	1500	0.6	1101	2.2
Indoors, service station	-1	0.0	742	0.2	678	0.5	-1	0.0	698	0.7
Outdoors, service station	-1	0.0	0	0.1	0	0.3	-1	0.0	0	0.4
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.1	1243	0.1	-1	0.0	1243	0.2
Indoors, home	374	1735.0	338	1676.6	326	1664.2	432	1753.6	368	6829.4
Indoors, office	411	5.8	327	20.1	311	32.6	441	9.7	343	68.1
Indoors, store	395	12.4	325	22.4	303	31.0	429	14.4	346	80.1
Indoors, restaurant	722	13.2	580	5.8	560	3.3	839	10.6	718	33.0
Indoors, mfg. facility	438	24.7	383	8.9	369	8.7	460	19.4	427	61.7
Indoors, school	457	85.2	383	82.3	362	51.2	476	95.8	428	314.5
Indoors, church	273	41.0	225	40.4	212	34.9	298	44.1	255	160.3
Indoors, shopping mall	1671	1.2	1563	2.0	1439	1.4	1694	2.3	1600	6.9
Indoors, auditorium	124	1.9	96	3.2	87	2.1	135	3.8	113	11.0
Indoors, health care facility	275	26.3	271	45.4	253	58.6	317	29.7	274	160.0
Indoors, public building	277	1.1	266	4.7	242	8.1	288	1.4	256	15.3
Indoors, other location	777	40.0	680	19.0	626	19.0	932	32.0	779	110.1
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	602	8.1	461	31.6	435	50.2	718	9.5	484	99.3
Outdoors, school grounds	821	4.5	734	5.4	707	3.2	882	5.6	795	18.7
Outdoors, sports arena	263	5.1	216	8.7	204	6.1	288	10.2	246	30.0
Outdoors, park/golf course	-1	0.0	211	1.1	193	3.1	-1	0.0	198	4.1
Outdoors, other location	504	0.9	483	8.1	477	15.5	514	1.1	481	25.6
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.1	785	0.2
In transit, train	-1	0.0	898	1.1	852	2.4	-1	0.0	867	3.5
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	945	43.3	839	57.6	836	71.3	1230	43.5	938	215.8
In transit, bus	1738	7.7	1445	5.5	1368	3.0	2063	7.8	1730	24.0
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	837	3.2	870	5.8	-1	0.0	858	9.1
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	569	8.5	505	13.5	506	16.0	798	12.0	586	49.9
Outdoors, along a roadway	869	48.3	751	57.4	790	57.3	1128	53.0	880	216.0
In transit, motorcycle	-1	0.0	803	0.8	773	1.6	-1	0.0	783	2.5
Indoors, service station	-1	0.0	695	0.1	669	0.3	-1	0.0	677	0.4
Outdoors, service station	-1	0.0	0	0.3	0	0.5	-1	0.0	0	0.7
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	384	1826.7	362	1817.7	357	1820.7	519	1872.0	406	7337.1
Indoors, office	454	3.9	344	2.0	300	2.0	547	3.3	433	11.3
Indoors, store	383	39.3	336	51.1	334	74.1	484	30.7	368	195.2
Indoors, restaurant	749	21.6	629	9.3	614	6.2	1030	17.2	802	54.3
Indoors, mfg. facility	500	15.0	414	10.0	402	17.5	596	11.9	474	54.4
Indoors, school	461	90.9	399	73.9	399	36.2	554	98.3	469	299.2
Indoors, church	284	7.6	242	7.4	248	4.1	388	9.6	303	28.6
Indoors, shopping mall	1832	2.5	1688	2.9	1610	1.6	2288	3.2	1898	10.2
Indoors, auditorium	100	5.3	97	11.6	103	11.9	123	10.5	106	39.3
Indoors, health care facility	286	6.6	254	9.6	249	8.4	349	8.2	283	32.7
Indoors, public building	300	9.2	281	3.3	288	1.6	364	6.2	316	20.3
Indoors, other location	718	9.4	707	8.6	762	10.7	968	7.5	780	36.1
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	542	9.9	495	16.2	487	20.8	728	10.1	541	57.0
Outdoors, school grounds	819	1.4	771	1.6	742	0.9	1000	1.8	849	5.7
Outdoors, sports arena	-1	0.0	292	3.5	314	6.3	-1	0.0	306	9.9
Outdoors, park/golf course	230	2.8	233	3.2	226	4.6	281	1.4	235	12.1
Outdoors, other location	554	0.1	491	13.5	480	24.5	681	0.2	485	38.3
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	961	73.9	818	82.8	799	85.7	1113	78.3	918	320.8
In transit, bus	2025	3.7	1591	3.9	1503	3.0	2248	4.1	1865	14.8
In transit, truck	1190	3.7	980	6.0	958	8.6	1415	3.8	1081	22.1
In transit, van	993	0.6	780	1.2	799	1.1	1189	1.2	935	4.0
Indoors, public garage	-1	0.0	552	0.8	592	1.2	-1	0.0	577	2.0
Outdoors, in a parking lot	560	20.9	506	17.2	535	19.5	615	17.4	554	75.0
Outdoors, along a roadway	859	52.2	717	78.4	719	102.2	972	56.4	793	289.2
In transit, motorcycle	-1	0.0	832	5.6	803	12.6	-1	0.0	812	18.2
Indoors, service station	-1	0.0	694	0.6	658	1.2	-1	0.0	681	1.9
Outdoors, service station	0	0.3	0	0.7	0	1.0	0	0.4	0	2.4
Indoors, residential garage	673	1.3	592	1.5	550	0.9	714	1.9	645	5.5
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
Indoors, home	377	1606.3	346	1600.0	339	1608.4	454	1639.1	379	6453.8
Indoors, office	358	55.1	314	51.6	309	45.4	393	56.9	346	208.9
Indoors, store	397	34.4	338	44.7	329	53.4	458	37.0	373	169.5
Indoors, restaurant	719	53.9	621	39.1	594	27.4	830	50.8	710	171.3
Indoors, mfg. facility	480	37.5	414	29.7	404	20.5	524	38.6	465	126.2
Indoors, school	466	106.8	391	74.4	384	42.3	503	106.8	450	330.3
Indoors, church	287	13.9	241	15.6	240	13.4	320	16.4	273	59.4
Indoors, shopping mall	1775	5.3	1645	2.5	1605	1.4	2014	3.8	1803	13.0
Indoors, auditorium	117	2.4	103	4.4	95	4.3	139	3.5	111	14.6
Indoors, health care facility	312	36.6	274	32.7	267	33.7	375	34.7	308	137.7
Indoors, public building	308	5.0	282	2.5	283	1.9	338	4.1	309	13.5
Indoors, other location	812	23.7	751	26.4	731	23.6	1002	26.9	828	100.6
Indoors, not specified	624	0.2	797	0.2	900	0.3	-1	0.1	784	0.8
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	568	12.9	465	30.1	464	43.1	648	15.7	506	101.8
Outdoors, school grounds	900	7.1	781	6.5	776	4.8	1023	7.3	881	25.7
Outdoors, sports arena	-1	0.0	229	3.6	229	6.6	-1	0.0	229	10.2
Outdoors, park/golf course	308	1.7	244	17.4	241	33.2	371	2.2	249	54.5
Outdoors, other location	-1	0.0	525	3.7	538	7.1	-1	0.0	534	10.8
Outdoors, not specified	775	0.6	727	0.1	-1	0.0	857	0.5	801	1.3
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	984	86.4	827	93.4	819	99.4	1087	89.5	925	368.8
In transit, bus	1820	7.3	1446	5.1	1421	3.6	1939	7.0	1712	23.0
In transit, truck	1221	3.2	972	4.2	936	4.1	1292	3.7	1093	15.2
In transit, van	949	8.1	825	9.2	815	8.2	1036	10.2	911	35.7
Indoors, public garage	564	6.3	479	3.1	473	1.2	629	5.8	564	16.5
Outdoors, in a parking lot	555	11.0	480	11.7	476	12.9	607	10.5	526	46.1
Outdoors, along a roadway	830	53.2	706	81.2	702	95.7	899	61.8	768	291.9
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	796	0.5	700	0.4	706	0.3	804	0.5	760	1.6
Outdoors, service station	-1	0.1	0	0.1	0	0.2	-1	0.1	0	0.5
Indoors, residential garage	885	1.4	668	1.0	672	0.6	1075	1.3	860	4.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	373	1586.1	341	1551.1	335	1545.1	428	1606.6	370	6288.9
Indoors, office	377	79.3	321	87.1	309	87.6	392	82.9	348	336.9
Indoors, store	386	40.9	329	41.5	319	48.9	414	39.9	359	171.1
Indoors, restaurant	712	20.8	581	21.4	568	22.8	782	20.4	657	85.5
Indoors, mfg. facility	450	26.3	396	27.6	394	27.5	470	28.3	427	109.8
Indoors, school	453	103.8	385	76.8	382	49.3	475	105.1	434	335.2
Indoors, church	300	23.3	236	19.1	237	15.0	337	23.8	284	81.3
Indoors, shopping mall	1867	3.3	1638	2.4	1612	1.9	2086	2.8	1828	10.4
Indoors, auditorium	131	5.9	103	6.9	110	5.7	150	7.6	124	26.1
Indoors, health care facility	301	19.9	262	18.2	257	13.8	330	21.5	292	73.5
Indoors, public building	350	6.4	298	11.2	295	14.6	398	7.5	324	39.7
Indoors, other location	815	27.4	711	24.6	702	23.9	936	27.4	796	103.3
Indoors, not specified	645	0.5	646	0.6	680	1.0	662	0.3	662	2.3
Outdoors, construction	901	5.2	773	5.1	741	4.2	941	5.0	844	19.5
Outdoors, residential grounds	514	17.6	451	42.6	455	61.6	554	21.2	476	143.0
Outdoors, school grounds	889	5.8	759	5.4	751	4.3	941	6.4	845	21.9
Outdoors, sports arena	288	0.2	244	3.4	257	6.5	312	0.4	256	10.5
Outdoors, park/golf course	257	4.0	226	10.6	225	14.8	276	5.2	236	34.6
Outdoors, other location	612	5.7	511	18.7	511	32.8	692	5.0	535	62.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	894	0.2	866	0.4	-1	0.0	875	0.6
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	988	108.1	819	115.2	800	118.8	1072	112.9	917	455.1
In transit, bus	1689	8.5	1385	7.3	1311	4.2	1745	9.0	1576	29.0
In transit, truck	1209	1.7	961	5.9	946	8.5	1296	2.0	1014	18.0
In transit, van	-1	0.0	872	1.7	816	3.1	-1	0.0	844	4.9
Indoors, public garage	577	0.4	533	0.4	592	0.4	619	0.4	580	1.7
Outdoors, in a parking lot	567	10.5	479	11.2	466	10.9	631	10.7	535	43.4
Outdoors, along a roadway	854	49.1	709	69.8	705	89.8	919	51.9	777	260.5
In transit, motorcycle	1224	0.9	818	0.2	-1	0.0	1424	0.7	1260	1.9
Indoors, service station	-1	0.0	-1	0.1	783	0.2	-1	0.0	786	0.2
Outdoors, service station	-1	0.1	0	0.4	0	0.7	-1	0.1	0	1.2
Indoors, residential garage	793	0.2	658	0.4	644	0.6	827	0.3	702	1.5
Indoors, in a repair shop	1104	0.1	1008	0.2	-1	0.1	1096	0.2	1054	0.6
Indoors, home	370	1519.7	339	1474.5	331	1455.4	418	1542.0	365	5991.6
Indoors, office	368	125.1	319	118.8	309	118.9	377	124.1	344	486.9
Indoors, store	391	46.8	328	44.3	315	46.6	411	45.5	362	183.2
Indoors, restaurant	709	24.3	583	29.7	566	32.6	778	26.6	651	113.1
Indoors, mfg. facility	469	30.2	403	25.7	389	22.3	500	29.9	446	108.0
Indoors, school	443	136.8	383	105.0	373	53.6	455	144.6	424	440.0
Indoors, church	285	8.0	240	9.9	242	10.6	309	9.7	268	38.2
Indoors, shopping mall	1977	3.1	1641	4.5	1527	5.1	2157	3.5	1782	16.2
Indoors, auditorium	123	3.6	105	8.5	106	13.8	136	4.6	112	30.6
Indoors, health care facility	315	18.3	266	21.1	260	22.3	337	19.9	293	81.6
Indoors, public building	371	4.7	299	5.7	299	5.6	441	5.2	350	21.1
Indoors, other location	792	26.9	714	22.8	729	18.9	868	25.9	781	94.5
Indoors, not specified	641	0.6	617	0.4	592	0.2	668	0.5	636	1.6
Outdoors, construction	-1	0.0	729	0.2	682	0.5	-1	0.0	697	0.8
Outdoors, residential grounds	519	16.8	466	50.6	461	84.7	547	18.1	477	170.2
Outdoors, school grounds	878	6.8	763	6.1	718	3.8	906	7.2	831	23.9
Outdoors, sports arena	285	1.7	221	6.2	212	9.7	308	2.2	232	19.8
Outdoors, park/golf course	249	5.9	226	22.4	221	35.9	263	9.1	230	73.4
Outdoors, other location	487	1.1	510	12.7	508	26.4	496	1.2	508	41.4
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	2.1	0	4.1	-1	0.0	0	6.2

St. Louis: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1052	53.2	818	75.6	782	92.6	1104	58.2	910	279.6
In transit, bus	2284	2.6	1475	1.1	1064	1.3	2240	2.1	1921	7.1
In transit, truck	1122	20.2	988	11.9	977	6.0	1169	19.9	1096	58.0
In transit, van	892	6.2	738	9.2	692	6.1	916	10.5	817	32.0
Indoors, public garage	-1	0.0	511	0.2	473	0.5	-1	0.0	485	0.7
Outdoors, in a parking lot	631	3.5	479	9.8	449	15.0	665	3.6	502	31.8
Outdoors, along a roadway	893	47.4	716	63.9	679	76.8	916	54.5	784	242.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	970	11.5	794	2.4	-1	0.0	951	9.0	944	22.9
Outdoors, service station	-1	0.0	0	0.6	0	1.2	-1	0.0	0	1.8
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	364	1569.8	333	1517.6	320	1487.5	392	1572.5	353	6147.4
Indoors, office	353	74.4	310	81.2	288	98.8	340	72.5	320	327.0
Indoors, store	439	1.7	324	11.9	290	20.9	432	2.3	316	36.8
Indoors, restaurant	743	32.4	593	38.7	562	46.5	771	33.9	655	151.6
Indoors, mfg. facility	-1	0.0	380	0.7	345	1.5	-1	0.0	356	2.2
Indoors, school	437	199.8	381	142.4	358	114.8	428	191.6	408	648.6
Indoors, church	334	9.5	246	7.8	217	8.1	302	8.2	278	33.6
Indoors, shopping mall	1575	0.6	1527	0.8	1369	0.4	1488	0.8	1501	2.6
Indoors, auditorium	117	14.4	96	22.6	93	15.8	123	27.2	109	80.0
Indoors, health care facility	301	15.5	242	13.0	217	7.5	301	17.9	275	53.9
Indoors, public building	-1	0.0	305	9.2	296	18.4	-1	0.0	299	27.6
Indoors, other location	766	16.6	736	33.3	730	31.0	819	33.1	763	114.0
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	760	1.0	699	2.2	-1	0.0	719	3.3
Outdoors, residential grounds	486	61.4	439	68.7	426	68.7	489	60.1	458	258.8
Outdoors, school grounds	750	7.7	727	11.2	661	8.4	709	11.7	712	39.0
Outdoors, sports arena	-1	0.0	237	3.1	241	5.8	-1	0.0	239	8.9
Outdoors, park/golf course	243	11.6	222	35.7	210	52.0	254	18.6	224	118.0
Outdoors, other location	-1	0.0	538	10.1	547	19.9	-1	0.0	544	30.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	985	56.1	827	66.0	827	75.1	1151	58.1	935	255.4
In transit, bus	1782	13.2	1464	10.5	1422	6.1	1925	13.8	1700	43.7
In transit, truck	1156	1.4	957	1.6	962	2.3	1240	1.3	1057	6.5
In transit, van	984	5.3	852	6.9	852	5.7	1129	7.9	964	25.9
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, in a parking lot	550	6.2	474	7.4	470	8.9	628	5.8	521	28.3
Outdoors, along a roadway	854	65.7	707	99.6	708	131.4	971	71.3	785	368.1
In transit, motorcycle	1170	0.7	808	0.4	761	0.3	1453	0.6	1119	2.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	0	0.1	-1	0.1	-1	0.1	-1	0.1	0	0.3
Indoors, residential garage	832	0.9	649	1.1	653	0.8	1046	1.1	801	3.8
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	372	1604.8	345	1583.5	340	1584.2	450	1626.7	377	6399.2
Indoors, office	393	1.4	320	4.5	319	7.9	452	1.5	339	15.4
Indoors, store	398	22.4	327	24.1	318	25.5	451	23.7	372	95.7
Indoors, restaurant	726	10.1	592	14.0	586	17.9	859	10.5	669	52.4
Indoors, mfg. facility	540	0.2	379	0.3	367	0.1	649	0.3	501	0.9
Indoors, school	455	278.5	388	205.1	383	125.4	493	282.0	442	890.9
Indoors, church	290	12.7	237	12.0	235	11.1	337	12.8	277	48.6
Indoors, shopping mall	1817	2.8	1644	2.6	1587	2.3	2081	2.5	1787	10.2
Indoors, auditorium	126	5.2	103	7.8	105	7.1	154	7.9	122	28.0
Indoors, health care facility	292	12.9	257	14.3	261	14.2	337	14.2	286	55.6
Indoors, public building	325	2.5	300	4.5	311	6.3	383	2.7	322	16.0
Indoors, other location	795	6.2	688	9.5	675	11.2	907	7.5	751	34.4
Indoors, not specified	-1	0.0	829	0.1	895	0.3	-1	0.0	874	0.4
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	528	28.5	458	55.9	460	82.3	605	30.6	492	197.2
Outdoors, school grounds	869	15.2	765	13.7	740	10.6	946	16.2	842	55.7
Outdoors, sports arena	268	3.4	233	7.1	246	9.6	309	4.0	256	24.1
Outdoors, park/golf course	268	3.2	232	16.6	231	31.0	317	4.3	240	55.0
Outdoors, other location	571	0.2	510	14.6	508	29.9	600	0.4	510	45.1
Outdoors, not specified	877	0.2	765	0.3	762	0.2	958	0.4	853	1.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	962	139.7	876	123.2	904	129.3	1150	130.9	975	523.1
In transit, bus	1758	2.3	1470	0.5	-1	0.0	1994	1.7	1819	4.4
In transit, truck	1178	9.2	990	25.8	1010	42.2	1423	9.7	1068	86.9
In transit, van	-1	0.0	984	5.0	945	8.2	-1	0.0	960	13.2
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	524	10.1	484	18.3	471	19.4	596	13.3	511	61.2
Outdoors, along a roadway	797	119.8	746	116.3	727	84.7	972	132.3	822	453.2
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	925	0.1	761	0.2	753	0.2	1042	0.2	867	0.8
Outdoors, service station	0	0.1	0	1.3	0	2.5	0	0.2	0	4.0
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	380	1555.4	350	1464.2	344	1387.5	471	1594.7	389	6001.8
Indoors, office	361	65.5	322	74.8	316	80.6	407	69.0	349	289.7
Indoors, store	386	10.0	335	11.0	332	9.7	431	12.3	374	43.0
Indoors, restaurant	731	18.6	632	12.9	595	10.6	893	17.5	733	59.6
Indoors, mfg. facility	-1	0.0	389	46.2	379	100.6	-1	0.0	382	146.8
Indoors, school	462	126.4	396	80.1	391	37.3	519	125.9	460	369.7
Indoors, church	326	2.4	236	8.0	246	12.1	443	3.0	274	25.4
Indoors, shopping mall	2519	1.3	1707	1.5	1712	0.8	3290	1.6	2400	5.1
Indoors, auditorium	136	1.7	127	23.5	133	51.1	190	0.9	132	77.1
Indoors, health care facility	318	6.4	282	5.9	286	4.1	380	7.3	323	23.7
Indoors, public building	379	23.6	324	20.9	341	10.6	493	26.4	397	81.4
Indoors, other location	731	39.4	785	24.9	863	19.7	947	33.5	826	117.4
Indoors, not specified	840	0.1	698	0.1	-1	0.1	947	0.2	813	0.5
Outdoors, construction	-1	0.0	780	2.5	765	5.4	-1	0.0	769	7.8
Outdoors, residential grounds	464	8.7	471	20.7	463	26.5	533	10.1	477	66.1
Outdoors, school grounds	841	8.1	760	9.3	705	5.0	949	10.1	830	32.5
Outdoors, sports arena	242	5.3	241	18.4	241	28.2	276	2.6	243	54.5
Outdoors, park/golf course	276	2.8	226	4.2	223	7.3	338	2.4	249	16.8
Outdoors, other location	476	1.5	488	63.9	466	124.5	546	1.2	474	191.1
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	1146	1.5	776	0.3	-1	0.0	1497	1.2	1245	3.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1001	133.6	840	135.1	815	131.0	1088	138.0	937	537.7
In transit, bus	1809	1.0	1544	1.2	1542	1.8	1884	0.9	1658	5.0
In transit, truck	1238	17.8	1011	16.8	932	18.1	1330	17.1	1127	69.9
In transit, van	995	6.5	846	9.5	821	10.0	1045	7.3	911	33.2
Indoors, public garage	598	14.7	516	12.3	506	7.5	628	15.3	573	49.9
Outdoors, in a parking lot	584	13.6	494	15.2	475	16.1	618	13.1	538	58.0
Outdoors, along a roadway	851	52.1	726	70.4	710	76.5	895	61.1	786	259.9
In transit, motorcycle	-1	0.0	1156	0.2	1169	0.6	-1	0.0	1166	0.8
Indoors, service station	865	14.3	737	9.2	677	5.5	893	13.7	822	42.7
Outdoors, service station	0	0.3	0	0.4	0	0.5	0	0.4	0	1.6
Indoors, residential garage	807	4.2	659	4.7	638	3.0	893	6.2	770	18.1
Indoors, in a repair shop	1295	6.2	1131	1.2	-1	0.1	1309	4.4	1284	11.9
Indoors, home	377	1400.6	346	1365.9	338	1338.4	440	1431.4	376	5536.4
Indoors, office	394	230.0	338	217.6	313	213.6	399	229.4	362	890.6
Indoors, store	403	38.1	349	43.1	327	56.6	428	36.1	370	174.0
Indoors, restaurant	700	35.4	609	27.5	586	25.3	741	33.0	667	121.1
Indoors, mfg. facility	479	39.2	422	52.0	402	59.7	488	41.2	442	192.1
Indoors, school	458	20.7	388	17.1	383	12.6	471	21.0	432	71.4
Indoors, church	304	10.9	248	12.0	246	9.6	336	13.8	287	46.3
Indoors, shopping mall	2012	1.6	1650	1.3	1471	0.9	2075	1.5	1851	5.3
Indoors, auditorium	130	6.7	105	3.5	112	4.2	152	4.3	126	18.7
Indoors, health care facility	327	17.0	273	20.7	252	20.9	342	18.4	296	77.0
Indoors, public building	335	6.1	296	14.5	282	25.0	348	5.4	299	51.1
Indoors, other location	808	43.4	736	40.1	749	41.3	901	42.5	800	167.2
Indoors, not specified	765	5.3	643	1.8	562	0.6	803	3.9	747	11.6
Outdoors, construction	940	7.9	813	8.4	745	6.7	953	8.4	868	31.4
Outdoors, residential grounds	546	7.9	470	30.2	483	49.0	594	9.1	495	96.2
Outdoors, school grounds	937	0.8	800	0.9	806	0.7	964	0.9	881	3.4
Outdoors, sports arena	226	1.2	228	3.7	227	7.6	232	1.0	228	13.5
Outdoors, park/golf course	254	4.2	223	12.6	212	17.7	266	6.3	228	40.7
Outdoors, other location	634	17.6	537	30.4	528	38.1	685	21.9	580	108.0
Outdoors, not specified	1117	0.1	905	0.3	946	0.6	1303	0.2	1006	1.2
In transit, train	1191	1.0	927	0.7	888	0.9	1285	0.8	1081	3.5
In transit, airplane	-1	0.0	0	3.5	0	7.2	-1	0.0	0	10.7

St. Louis: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	957	99.0	821	102.9	804	105.4	1119	99.3	922	406.7
In transit, bus	1669	3.0	1348	1.7	1270	1.6	1867	2.6	1589	8.9
In transit, truck	1057	6.7	937	1.1	-1	0.0	1190	4.3	1093	12.1
In transit, van	985	0.2	790	1.0	736	1.2	1087	0.4	821	2.7
Indoors, public garage	605	0.5	513	0.4	504	0.2	696	0.5	599	1.6
Outdoors, in a parking lot	534	5.5	494	8.9	510	11.5	605	5.8	527	31.7
Outdoors, along a roadway	814	36.1	727	54.2	744	67.7	928	38.6	789	196.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.1	698	0.2	-1	0.0	706	0.3
Outdoors, service station	-1	0.1	-1	0.0	-1	0.1	-1	0.0	0	0.2
Indoors, residential garage	747	0.9	676	0.2	-1	0.1	837	0.6	766	1.9
Indoors, in a repair shop	1123	0.2	1016	0.3	998	0.2	1192	0.3	1094	1.0
Indoors, home	376	1818.6	345	1761.9	338	1737.2	450	1843.6	378	7161.4
Indoors, office	393	8.9	322	4.9	316	5.2	437	7.5	377	26.5
Indoors, store	380	35.2	333	52.8	325	74.2	423	36.3	355	198.5
Indoors, restaurant	736	22.5	615	20.7	615	19.3	869	21.7	713	84.1
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	468	37.1	389	44.3	382	31.5	534	48.4	449	161.3
Indoors, church	294	10.4	240	12.6	240	10.5	339	13.3	280	46.7
Indoors, shopping mall	1724	2.9	1627	1.7	1558	2.4	1891	1.8	1694	8.8
Indoors, auditorium	126	12.5	103	14.5	107	14.4	145	14.6	120	56.1
Indoors, health care facility	306	7.2	258	9.0	260	8.9	355	8.2	293	33.2
Indoors, public building	335	6.2	291	5.1	302	4.3	395	5.9	334	21.6
Indoors, other location	800	27.0	681	27.7	694	24.6	938	31.7	786	111.1
Indoors, not specified	-1	0.0	670	0.4	732	0.8	-1	0.0	712	1.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	493	11.5	456	25.0	472	31.6	557	14.4	485	82.5
Outdoors, school grounds	1015	1.7	805	2.7	855	2.6	1260	2.1	964	9.1
Outdoors, sports arena	260	3.4	233	3.5	240	5.7	296	1.7	250	14.2
Outdoors, park/golf course	251	1.4	227	16.3	219	27.5	280	2.7	226	47.9
Outdoors, other location	554	1.2	496	10.0	499	19.1	568	1.4	503	31.7
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	1022	0.2	-1	0.0	-1	0.0	1186	0.2	1062	0.4
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1009	121.1	841	115.6	826	115.4	1118	120.7	951	472.8
In transit, bus	1799	4.9	1468	4.6	1424	4.2	1917	4.9	1663	18.5
In transit, truck	1234	5.1	1062	5.5	1063	5.1	1467	5.3	1206	21.1
In transit, van	-1	0.1	821	0.6	784	1.6	-1	0.0	801	2.3
Indoors, public garage	605	2.9	514	1.6	478	0.9	640	2.6	584	8.1
Outdoors, in a parking lot	588	6.4	497	10.2	477	12.5	672	7.1	541	36.2
Outdoors, along a roadway	852	33.4	731	46.2	719	57.2	931	36.2	792	173.0
In transit, motorcycle	-1	0.0	820	4.7	774	10.7	-1	0.0	788	15.4
Indoors, service station	884	0.1	730	0.2	732	0.1	868	0.2	807	0.6
Outdoors, service station	0	0.2	0	0.6	0	1.0	0	0.3	0	2.1
Indoors, residential garage	978	0.1	-1	0.1	-1	0.0	1084	0.1	967	0.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, home	381	1449.0	349	1454.9	341	1464.7	447	1485.4	380	5854.1
Indoors, office	387	250.4	335	232.8	313	214.3	392	251.6	359	949.0
Indoors, store	399	66.3	340	67.7	324	62.5	428	70.3	374	266.7
Indoors, restaurant	744	42.3	612	36.9	573	40.4	815	37.9	686	157.5
Indoors, mfg. facility	508	15.9	436	14.2	401	10.1	516	17.7	474	57.9
Indoors, school	464	53.7	395	39.5	379	22.3	474	54.5	440	170.0
Indoors, church	295	14.0	237	15.5	233	13.2	328	16.6	275	59.2
Indoors, shopping mall	1919	3.8	1673	2.8	1653	1.8	2119	3.9	1888	12.2
Indoors, auditorium	126	5.4	103	7.5	97	9.2	142	6.0	113	28.1
Indoors, health care facility	327	35.1	282	30.5	260	25.8	356	36.5	311	127.9
Indoors, public building	335	6.1	313	8.4	309	11.2	353	6.2	324	31.8
Indoors, other location	818	35.4	739	28.9	742	29.8	939	34.2	815	128.3
Indoors, not specified	786	0.5	646	0.3	586	0.2	826	0.5	744	1.5
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	498	4.3	489	23.0	510	37.3	534	5.4	504	69.9
Outdoors, school grounds	1086	0.6	811	1.2	792	1.5	1266	0.7	928	4.1
Outdoors, sports arena	341	0.2	225	4.8	215	9.0	414	0.3	225	14.4
Outdoors, park/golf course	297	1.4	253	10.7	253	19.5	356	1.6	259	33.1
Outdoors, other location	587	0.7	536	14.1	546	26.3	616	0.7	545	41.7
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	1219	0.5	901	0.5	871	0.3	1321	0.6	1114	2.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	933	93.9	807	98.0	783	100.8	1082	92.5	898	385.2
In transit, bus	2071	2.6	1372	6.2	1314	12.5	2135	1.5	1471	22.9
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	906	1.4	789	2.3	797	1.5	1020	2.7	891	7.8
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, in a parking lot	511	11.3	447	19.3	429	30.1	572	12.8	471	73.6
Outdoors, along a roadway	790	29.8	694	37.9	702	37.8	958	36.7	784	142.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	651	8.3	595	10.5	557	6.3	726	12.5	645	37.5
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	374	1834.4	348	1675.8	346	1566.1	463	1849.5	385	6925.8
Indoors, office	320	7.8	287	5.2	268	4.8	364	6.0	314	23.7
Indoors, store	345	29.8	322	42.5	313	56.6	381	29.9	334	158.6
Indoors, restaurant	776	10.6	574	7.6	511	8.0	861	8.7	693	34.9
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	420	22.5	382	29.4	393	17.3	538	33.1	443	102.2
Indoors, church	273	12.2	223	12.8	210	7.2	288	15.9	255	48.2
Indoors, shopping mall	1977	6.3	1730	0.9	-1	0.0	2206	3.4	2031	10.6
Indoors, auditorium	96	3.5	113	3.7	120	6.3	108	2.8	111	16.1
Indoors, health care facility	343	41.2	289	41.2	287	21.5	382	48.3	333	152.2
Indoors, public building	310	1.3	269	6.7	260	13.8	355	1.0	270	22.8
Indoors, other location	715	25.7	681	35.9	677	47.4	851	26.7	720	135.7
Indoors, not specified	719	1.5	637	0.3	-1	0.0	824	1.1	752	2.9
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	474	12.8	464	121.1	469	215.1	528	21.3	471	370.3
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	271	3.2	299	6.9	-1	0.0	290	10.1
Outdoors, park/golf course	314	3.2	224	12.2	222	25.3	383	1.6	236	42.2
Outdoors, other location	-1	0.0	508	11.4	519	23.0	-1	0.0	515	34.4
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	999	146.2	839	145.0	820	141.7	1095	152.5	941	585.4
In transit, bus	1837	9.0	1449	4.6	1386	2.4	1969	8.3	1763	24.3
In transit, truck	1160	25.0	996	25.0	934	18.1	1189	26.7	1082	94.9
In transit, van	921	3.3	821	6.1	796	8.3	983	3.7	855	21.4
Indoors, public garage	658	4.4	543	4.6	503	2.5	677	5.3	609	16.8
Outdoors, in a parking lot	569	10.0	485	10.8	478	10.6	647	10.0	542	41.4
Outdoors, along a roadway	840	43.1	729	56.2	747	67.8	888	45.5	791	212.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	879	5.5	725	2.7	684	1.3	874	5.4	832	14.9
Outdoors, service station	0	0.2	0	0.6	0	0.8	0	0.2	0	1.7
Indoors, residential garage	966	0.1	646	0.1	597	0.3	-1	0.1	721	0.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	370	1358.5	342	1328.0	336	1294.3	431	1380.4	371	5361.2
Indoors, office	385	276.2	334	282.7	314	326.6	389	269.3	353	1154.8
Indoors, store	416	64.6	356	49.0	334	34.0	439	66.9	397	214.6
Indoors, restaurant	708	32.3	591	34.6	570	36.1	775	34.6	659	137.6
Indoors, mfg. facility	479	32.8	412	68.6	383	88.9	497	46.2	427	236.5
Indoors, school	481	15.7	407	22.7	387	21.0	501	19.1	439	78.6
Indoors, church	291	14.5	242	15.5	235	14.6	315	17.8	273	62.3
Indoors, shopping mall	2078	2.9	1764	0.8	1726	0.6	2541	1.6	2128	5.9
Indoors, auditorium	122	3.2	104	1.0	118	1.4	143	2.1	125	7.6
Indoors, health care facility	328	13.3	268	4.0	257	1.5	351	10.7	325	29.4
Indoors, public building	376	5.7	309	13.1	295	17.6	468	8.0	341	44.4
Indoors, other location	826	66.2	711	48.9	676	30.4	870	66.5	792	212.0
Indoors, not specified	751	5.3	657	1.5	592	0.4	758	4.1	735	11.4
Outdoors, construction	-1	0.0	795	3.6	725	6.0	-1	0.0	751	9.6
Outdoors, residential grounds	541	3.2	464	29.8	454	50.7	623	3.7	468	87.5
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	231	6.5	221	14.0	221	17.4	238	9.5	226	47.4
Outdoors, other location	622	12.1	527	10.0	565	11.6	652	9.2	591	42.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	1024	0.4	-1	0.1	-1	0.0	1067	0.3	1021	0.8
In transit, airplane	-1	0.0	0	0.4	0	0.8	-1	0.0	0	1.2

St. Louis: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	883	75.3	785	71.5	782	75.9	1009	75.6	866	298.2
In transit, bus	1429	1.7	1278	1.2	1312	0.9	1544	1.6	1413	5.3
In transit, truck	984	4.2	886	0.6	-1	0.0	1095	2.5	1013	7.4
In transit, van	953	2.3	753	3.4	743	2.2	1139	4.1	920	12.0
Indoors, public garage	515	0.6	468	0.2	-1	0.1	570	0.5	526	1.5
Outdoors, in a parking lot	554	4.0	467	8.4	473	11.4	639	4.5	509	28.3
Outdoors, along a roadway	799	32.0	704	36.6	706	44.9	911	31.3	770	144.8
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	738	0.1	-1	0.1	-1	0.1	-1	0.1	740	0.3
Outdoors, service station	-1	0.0	0	0.3	0	0.6	-1	0.0	0	0.9
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	371	1907.7	340	1869.7	335	1826.1	443	1944.4	373	7547.8
Indoors, office	333	8.5	295	7.8	283	6.6	363	8.7	322	31.6
Indoors, store	371	33.1	329	31.1	323	31.5	417	33.8	361	129.4
Indoors, restaurant	724	16.2	592	24.7	587	30.7	845	17.6	664	89.1
Indoors, mfg. facility	-1	0.0	353	0.2	326	0.3	-1	0.0	335	0.5
Indoors, school	468	4.6	387	4.7	406	3.8	621	5.9	483	18.9
Indoors, church	280	17.9	230	21.0	224	16.7	306	22.9	262	78.5
Indoors, shopping mall	1855	3.5	1645	4.0	1630	4.3	2233	3.4	1821	15.1
Indoors, auditorium	122	1.8	99	0.6	88	0.7	160	1.2	124	4.3
Indoors, health care facility	297	9.2	258	13.7	256	20.5	318	9.1	274	52.4
Indoors, public building	366	3.7	285	5.6	272	5.0	444	5.0	338	19.2
Indoors, other location	785	18.8	660	20.5	671	26.1	909	18.3	746	83.7
Indoors, not specified	768	1.5	634	0.3	-1	0.0	873	1.2	795	3.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	521	12.2	449	39.3	445	61.2	593	15.2	471	127.9
Outdoors, school grounds	737	0.2	-1	0.0	-1	0.0	835	0.2	773	0.5
Outdoors, sports arena	-1	0.0	255	1.6	262	3.9	-1	0.0	260	5.5
Outdoors, park/golf course	-1	0.0	230	11.6	229	24.6	-1	0.0	229	36.2
Outdoors, other location	477	0.5	516	5.3	555	10.2	521	0.6	539	16.6
Outdoors, not specified	753	0.5	716	0.1	-1	0.0	841	0.4	784	1.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	971	105.4	833	100.3	827	105.7	1077	102.9	927	414.2
In transit, bus	1792	5.6	1394	4.3	1267	3.9	1943	5.4	1637	19.3
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1080	2.6	836	1.3	791	0.5	1146	2.4	1037	6.7
Indoors, public garage	633	0.6	540	0.4	530	0.2	683	0.6	617	1.8
Outdoors, in a parking lot	544	8.0	511	13.3	532	19.9	587	7.5	537	48.7
Outdoors, along a roadway	851	34.3	724	42.3	730	49.5	923	35.9	797	162.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.1	881	0.1	-1	0.1	-1	0.1	1029	0.4
Outdoors, service station	0	0.7	0	1.9	0	2.7	0	0.8	0	6.1
Indoors, residential garage	-1	0.1	-1	0.0	-1	0.0	-1	0.0	681	0.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	374	1498.1	343	1499.8	336	1512.8	438	1523.7	373	6034.4
Indoors, office	393	245.0	338	205.0	314	159.0	396	250.3	366	859.3
Indoors, store	381	48.7	335	59.0	315	65.6	409	53.0	357	226.3
Indoors, restaurant	745	43.2	629	47.9	584	43.5	820	49.8	697	184.4
Indoors, mfg. facility	-1	0.0	436	37.4	417	76.3	-1	0.0	424	113.7
Indoors, school	457	44.3	393	35.3	386	27.2	464	43.6	431	150.4
Indoors, church	288	15.9	234	20.9	232	25.5	329	15.2	263	77.5
Indoors, shopping mall	1705	4.7	1601	5.3	1501	3.4	1784	6.0	1666	19.4
Indoors, auditorium	117	1.8	97	2.7	90	1.7	128	3.2	110	9.5
Indoors, health care facility	313	45.7	284	43.9	268	32.9	325	52.2	301	174.7
Indoors, public building	399	2.5	309	2.9	301	3.7	393	2.1	342	11.3
Indoors, other location	825	44.9	728	34.4	698	34.2	967	43.5	815	157.0
Indoors, not specified	922	0.1	663	1.8	683	3.6	946	0.2	691	5.7
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	576	4.6	467	15.6	443	23.7	648	6.7	490	50.6
Outdoors, school grounds	831	0.8	794	1.1	820	0.8	845	1.0	822	3.7
Outdoors, sports arena	219	1.1	261	4.2	291	7.5	234	0.6	273	13.3
Outdoors, park/golf course	335	0.5	-1	0.1	-1	0.0	335	0.3	325	1.0
Outdoors, other location	572	0.6	561	2.7	549	4.3	601	1.0	560	8.5
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	904	141.7	799	147.0	787	136.2	1032	155.4	884	580.3
In transit, bus	1698	4.5	1435	5.2	1375	2.8	1853	5.7	1621	18.2
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	734	0.1	672	0.3	-1	0.0	692	0.4
Indoors, public garage	502	0.2	-1	0.0	-1	0.0	576	0.1	528	0.4
Outdoors, in a parking lot	521	8.1	514	18.2	535	27.5	603	9.5	537	63.4
Outdoors, along a roadway	823	32.2	719	80.2	709	116.9	960	40.0	763	269.3
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	761	0.6	752	1.1	-1	0.0	756	1.7
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	798	0.1	688	0.2	707	0.1	868	0.1	766	0.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	374	1712.5	344	1638.6	337	1640.6	448	1698.4	376	6690.1
Indoors, office	386	72.8	317	59.3	294	34.8	411	85.7	366	252.7
Indoors, store	402	15.1	327	20.7	304	29.4	474	15.3	360	80.5
Indoors, restaurant	760	26.3	623	36.8	573	41.2	871	31.9	692	136.2
Indoors, mfg. facility	483	17.7	403	13.0	391	6.1	518	18.4	466	55.2
Indoors, school	370	7.3	381	2.4	492	2.6	401	5.7	399	18.0
Indoors, church	254	20.2	233	22.5	243	16.8	289	26.7	257	86.2
Indoors, shopping mall	1717	4.2	1569	5.2	1468	9.3	1852	3.3	1597	22.1
Indoors, auditorium	126	24.4	106	28.8	115	17.9	166	36.3	132	107.4
Indoors, health care facility	259	5.8	255	14.8	261	22.8	278	6.6	261	49.9
Indoors, public building	290	2.1	271	4.1	264	6.8	319	2.0	277	14.9
Indoors, other location	791	17.4	720	17.4	748	10.0	964	20.1	819	64.9
Indoors, not specified	-1	0.0	589	1.1	550	2.3	-1	0.0	563	3.3
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	488	22.4	462	44.4	458	66.1	544	20.0	475	153.0
Outdoors, school grounds	1115	2.3	787	2.6	827	1.4	1459	2.9	1083	9.2
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	229	20.2	215	15.7	208	7.5	250	21.5	230	64.9
Outdoors, other location	-1	0.0	553	3.8	610	6.9	-1	0.0	590	10.7
Outdoors, not specified	767	0.7	738	0.8	689	0.4	826	0.9	765	2.9
In transit, train	1024	1.8	877	0.4	-1	0.0	1116	1.4	1045	3.6
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	882	74.9	782	83.9	779	99.8	981	73.6	847	332.2
In transit, bus	1428	1.3	1314	2.4	1266	2.6	1552	1.7	1367	8.0
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	796	0.8	731	0.2	-1	0.0	862	0.6	815	1.5
Indoors, public garage	673	0.4	619	0.9	677	1.6	867	0.3	677	3.2
Outdoors, in a parking lot	499	2.2	449	4.5	429	7.3	566	2.2	462	16.2
Outdoors, along a roadway	792	27.5	737	37.1	759	49.0	897	26.3	786	139.9
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	-1	0.0	0	0.2	0	0.3	-1	0.0	0	0.5
Indoors, residential garage	-1	0.0	-1	0.1	806	0.2	-1	0.0	804	0.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	375	1895.8	344	1887.7	338	1851.9	452	1955.0	378	7590.3
Indoors, office	375	13.2	324	4.2	326	2.4	411	10.6	377	30.4
Indoors, store	377	15.4	326	42.5	317	78.5	404	14.1	334	150.5
Indoors, restaurant	586	20.1	549	24.7	523	26.5	637	20.0	569	91.2
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	-1	0.0	378	0.3	380	0.7	-1	0.0	379	1.1
Indoors, church	292	36.5	239	27.2	247	18.5	318	35.1	280	117.3
Indoors, shopping mall	1842	6.9	1668	8.2	1620	4.5	1989	8.9	1803	28.5
Indoors, auditorium	95	3.6	90	4.2	85	2.3	103	4.5	95	14.7
Indoors, health care facility	282	17.4	251	8.3	247	4.4	318	14.5	284	44.7
Indoors, public building	303	5.0	280	5.9	289	4.9	329	5.7	301	21.5
Indoors, other location	803	34.4	624	21.7	570	18.5	915	27.6	753	102.2
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	708	2.1	471	11.9	447	23.6	775	2.0	484	39.6
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	241	2.6	223	4.8	230	4.0	262	5.2	239	16.6
Outdoors, park/golf course	-1	0.0	245	1.7	257	3.4	-1	0.0	253	5.1
Outdoors, other location	-1	0.0	489	1.5	479	3.1	-1	0.0	482	4.6
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1027	78.6	857	76.1	842	82.3	1131	74.4	962	311.4
In transit, bus	-1	0.0	1874	0.7	1827	1.5	-1	0.0	1842	2.2
In transit, truck	1327	64.5	1023	73.0	933	92.1	1459	64.0	1156	293.6
In transit, van	872	5.6	823	1.2	-1	0.0	956	4.4	900	11.2
Indoors, public garage	699	34.9	541	26.4	517	12.6	780	36.8	668	110.7
Outdoors, in a parking lot	617	20.7	519	27.1	509	24.0	651	23.8	571	95.6
Outdoors, along a roadway	844	161.4	748	214.8	759	249.5	882	177.8	800	803.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	952	36.8	798	9.9	704	3.2	960	29.4	926	79.3
Outdoors, service station	0	0.4	0	2.4	0	4.1	0	0.5	0	7.5
Indoors, residential garage	897	8.4	689	1.5	740	0.3	1175	4.5	959	14.7
Indoors, in a repair shop	-1	0.0	1316	0.4	1307	0.8	-1	0.0	1310	1.1
Indoors, home	372	1255.4	350	1217.4	343	1141.9	450	1305.1	381	4919.7
Indoors, office	404	49.7	326	32.4	278	46.0	412	41.6	357	169.8
Indoors, store	375	15.9	336	7.0	337	3.9	435	11.9	382	38.7
Indoors, restaurant	658	29.7	603	20.2	625	15.9	740	31.4	668	97.2
Indoors, mfg. facility	483	29.3	433	92.3	420	143.3	492	36.7	439	301.6
Indoors, school	447	12.4	383	14.3	377	7.8	476	15.5	427	50.0
Indoors, church	301	29.6	241	12.5	238	6.0	344	22.6	299	70.7
Indoors, shopping mall	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, auditorium	139	6.2	110	18.4	122	43.0	181	3.1	123	70.8
Indoors, health care facility	-1	0.0	267	6.2	258	10.4	-1	0.0	262	16.6
Indoors, public building	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, other location	864	35.9	699	12.8	591	5.7	947	28.7	848	83.1
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	942	71.7	812	89.6	747	102.5	960	66.5	850	330.3
Outdoors, residential grounds	545	19.1	472	23.7	498	18.5	571	21.8	521	83.1
Outdoors, school grounds	863	0.7	758	0.8	715	0.4	897	0.9	820	2.8
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	252	10.9	223	14.3	220	8.9	265	15.5	242	49.6
Outdoors, other location	635	182.3	528	188.4	485	183.5	680	191.0	582	745.2
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1005	50.9	836	71.8	834	83.8	1178	57.2	942	263.7
In transit, bus	1805	19.7	1486	14.3	1456	7.9	1972	19.9	1740	61.8
In transit, truck	974	0.4	936	1.2	972	1.6	1064	0.8	980	4.1
In transit, van	953	2.3	775	1.9	783	2.0	1048	2.4	900	8.5
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	546	9.3	471	8.8	467	9.3	629	8.2	526	35.6
Outdoors, along a roadway	846	115.4	707	141.7	706	174.4	972	120.1	794	551.6
In transit, motorcycle	1167	2.2	826	0.7	863	0.2	1447	1.8	1206	5.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.1	-1	0.0	731	0.1
Outdoors, service station	0	0.3	0	0.3	0	0.4	0	0.2	0	1.2
Indoors, residential garage	882	0.3	632	0.5	606	0.6	1037	0.4	748	1.7
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	371	1416.4	347	1423.2	342	1452.7	454	1435.2	378	5727.5
Indoors, office	484	2.8	322	5.2	315	9.5	543	2.3	367	19.7
Indoors, store	414	23.7	327	23.9	322	28.1	474	23.5	381	99.2
Indoors, restaurant	753	9.0	623	15.7	614	17.9	905	11.3	701	53.9
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	457	371.4	391	260.4	388	141.3	496	375.7	446	1148.7
Indoors, church	289	15.9	236	15.1	234	14.4	330	15.6	273	61.0
Indoors, shopping mall	1710	4.3	1620	2.7	1512	2.0	1908	3.4	1713	12.4
Indoors, auditorium	129	4.5	105	8.3	109	8.2	164	7.0	125	28.0
Indoors, health care facility	279	11.3	254	12.8	261	8.9	337	14.6	287	47.6
Indoors, public building	317	8.4	291	8.5	301	8.1	372	8.2	320	33.3
Indoors, other location	779	9.4	657	10.5	659	10.5	836	10.1	730	40.5
Indoors, not specified	-1	0.0	816	0.1	888	0.3	-1	0.0	865	0.5
Outdoors, construction	-1	0.0	770	0.4	757	1.0	-1	0.0	761	1.4
Outdoors, residential grounds	545	35.6	461	66.1	461	98.8	630	37.4	500	237.9
Outdoors, school grounds	867	31.9	763	27.6	732	17.6	947	34.8	845	111.9
Outdoors, sports arena	266	10.8	229	16.3	235	19.0	308	11.9	254	58.0
Outdoors, park/golf course	278	3.1	229	23.4	227	43.9	318	5.0	235	75.4
Outdoors, other location	573	0.6	519	22.5	521	45.5	603	1.0	522	69.5
Outdoors, not specified	-1	0.1	-1	0.0	-1	0.0	-1	0.1	1203	0.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	980	53.8	817	63.9	810	77.5	1077	52.4	905	247.6
In transit, bus	1701	8.0	1375	7.7	1295	4.6	1841	8.9	1595	29.2
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	976	2.9	755	4.7	730	3.2	1159	5.6	928	16.3
Indoors, public garage	-1	0.0	643	0.2	683	0.5	-1	0.0	670	0.7
Outdoors, in a parking lot	570	4.8	481	6.1	470	7.8	637	4.6	527	23.3
Outdoors, along a roadway	856	29.4	731	44.1	741	62.0	982	28.7	801	164.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	844	0.2	836	0.3	-1	0.0	838	0.5
Outdoors, service station	-1	0.0	-1	0.1	0	0.2	-1	0.0	0	0.3
Indoors, residential garage	713	1.2	629	0.9	640	0.6	759	1.2	698	3.8
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	374	1768.1	344	1748.4	337	1753.9	446	1801.5	376	7071.9
Indoors, office	369	82.2	319	75.0	305	62.7	398	82.8	352	302.6
Indoors, store	373	22.2	327	25.3	319	33.0	412	20.5	352	101.0
Indoors, restaurant	703	27.4	566	28.5	539	32.7	787	24.2	639	112.8
Indoors, mfg. facility	470	22.0	402	23.3	391	19.7	503	23.5	443	88.5
Indoors, school	458	74.2	394	59.4	387	34.5	495	76.0	444	244.1
Indoors, church	282	24.3	227	25.6	219	17.1	299	33.0	263	100.0
Indoors, shopping mall	1922	1.6	1701	3.9	1681	4.2	2064	2.1	1788	11.8
Indoors, auditorium	137	1.7	106	1.9	115	1.0	180	2.1	138	6.7
Indoors, health care facility	347	12.2	274	11.4	256	12.5	384	11.2	314	47.2
Indoors, public building	293	1.0	302	4.9	301	9.3	326	1.1	302	16.3
Indoors, other location	738	1.6	669	5.8	705	9.1	895	1.9	716	18.4
Indoors, not specified	759	0.5	634	1.8	645	3.7	845	0.2	659	6.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	499	10.7	444	29.0	438	43.8	566	16.3	467	99.7
Outdoors, school grounds	910	5.2	757	5.4	717	2.9	1017	6.1	872	19.6
Outdoors, sports arena	319	0.2	223	0.9	205	2.2	427	0.2	228	3.4
Outdoors, park/golf course	222	4.3	239	2.7	256	3.6	241	3.4	238	14.0
Outdoors, other location	476	0.5	489	3.0	479	5.8	508	0.6	484	9.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.1	-1	0.0	-1	0.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

St. Louis: City-wide, Demographic Group=All persons

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	977	105.5	827	102.2	816	102.4	1109	105.7	934	415.8
In transit, bus	1774	5.6	1447	4.8	1398	3.6	1921	5.8	1669	19.8
In transit, truck	1165	8.0	990	6.8	963	6.5	1311	7.5	1117	28.8
In transit, van	974	3.2	839	4.5	827	4.4	1094	4.2	928	16.3
Indoors, public garage	583	4.0	502	3.0	506	1.7	644	4.0	573	12.7
Outdoors, in a parking lot	559	7.8	487	10.7	487	13.0	633	7.9	531	39.5
Outdoors, along a roadway	835	45.8	716	69.0	716	86.6	936	50.8	782	252.3
In transit, motorcycle	1186	0.1	833	0.8	803	1.7	-1	0.1	851	2.7
Indoors, service station	837	3.3	717	1.9	687	1.1	910	3.1	819	9.4
Outdoors, service station	0	0.2	0	0.4	0	0.6	0	0.2	0	1.4
Indoors, residential garage	792	1.1	647	1.1	637	0.8	916	1.4	768	4.5
Indoors, in a repair shop	1246	1.4	1087	0.3	-1	0.0	1337	1.0	1262	2.6
Indoors, home	375	1556.9	346	1549.9	339	1553.9	448	1587.3	377	6248.0
Indoors, office	373	143.2	322	113.0	312	92.3	402	140.5	358	489.0
Indoors, store	387	41.2	332	43.6	322	47.7	431	42.0	366	174.5
Indoors, restaurant	710	29.1	598	26.5	583	27.0	810	27.9	678	110.5
Indoors, mfg. facility	466	13.8	405	17.9	398	20.2	508	15.2	439	67.1
Indoors, school	454	81.1	388	72.3	381	49.7	491	87.1	436	290.3
Indoors, church	292	13.2	238	14.3	237	12.8	329	15.1	276	55.5
Indoors, shopping mall	1867	3.2	1645	2.7	1578	2.3	2078	3.0	1812	11.2
Indoors, auditorium	124	6.1	103	6.9	106	7.4	147	6.9	120	27.2
Indoors, health care facility	307	20.5	267	19.3	260	17.3	346	21.5	297	78.7
Indoors, public building	341	5.2	299	7.5	296	9.6	396	5.4	325	27.7
Indoors, other location	796	32.5	705	27.1	710	25.2	926	31.9	792	116.7
Indoors, not specified	758	1.7	657	0.8	684	0.7	822	1.3	746	4.5
Outdoors, construction	900	1.4	777	1.8	744	1.7	972	1.5	841	6.4
Outdoors, residential grounds	524	11.4	464	36.4	467	57.2	589	13.7	485	118.6
Outdoors, school grounds	882	3.9	770	4.5	751	3.8	962	4.5	844	16.8
Outdoors, sports arena	258	1.7	234	4.8	241	7.7	294	1.7	246	15.8
Outdoors, park/golf course	257	2.9	231	13.1	229	22.3	287	3.9	237	42.2
Outdoors, other location	596	4.4	515	15.3	517	25.8	676	4.8	539	50.3
Outdoors, not specified	865	0.1	810	0.2	871	0.2	964	0.2	880	0.7
In transit, train	1145	0.4	890	0.3	876	0.2	1282	0.4	1090	1.3
In transit, airplane	-1	0.0	0	0.4	0	0.8	-1	0.0	0	1.2

Washington DC: City-wide, Demographic Group=Caucasians

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1239	84.6	936	94.0	910	100.6	1306	88.4	1087	367.7
In transit, bus	2160	7.4	1627	5.5	1571	3.4	2230	7.3	1972	23.5
In transit, truck	1487	4.5	1132	7.0	1098	6.3	1540	5.6	1289	23.5
In transit, van	1221	4.0	938	5.2	917	5.0	1243	5.5	1075	19.8
Indoors, public garage	723	2.8	564	1.6	576	1.1	762	2.5	682	8.0
Outdoors, in a parking lot	703	12.3	549	12.6	533	13.8	735	11.7	626	50.4
Outdoors, along a roadway	1060	49.4	806	70.7	791	87.8	1096	55.6	910	263.4
In transit, motorcycle	1545	0.3	955	0.8	900	1.7	1785	0.2	1023	3.0
Indoors, service station	1069	2.3	824	1.6	789	1.0	1078	2.3	978	7.2
Outdoors, service station	0	0.1	0	0.4	0	0.5	0	0.1	0	1.1
Indoors, residential garage	1069	1.0	730	1.0	703	0.6	1088	1.1	928	3.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	1242	0.1
Indoors, home	488	1569.8	371	1541.8	356	1547.4	497	1589.2	429	6248.1
Indoors, office	461	78.9	368	81.3	356	79.8	455	80.5	410	320.5
Indoors, store	489	48.2	378	46.4	367	48.4	499	46.6	433	189.6
Indoors, restaurant	904	29.6	678	28.0	654	28.0	952	28.2	799	113.7
Indoors, mfg. facility	578	24.2	458	24.6	450	22.2	575	25.3	517	96.2
Indoors, school	569	131.2	449	100.6	442	59.9	567	135.3	522	426.9
Indoors, church	393	14.2	285	13.7	281	11.9	410	15.5	347	55.3
Indoors, shopping mall	2328	3.5	1890	2.9	1827	2.4	2458	3.1	2153	11.8
Indoors, auditorium	171	5.5	116	7.9	116	8.5	178	7.7	143	29.6
Indoors, health care facility	393	22.2	302	19.9	297	15.1	404	23.8	356	80.9
Indoors, public building	444	6.5	342	8.6	334	10.4	473	6.9	388	32.3
Indoors, other location	1062	22.6	798	26.1	772	22.7	1075	24.8	926	96.2
Indoors, not specified	762	0.4	756	0.4	772	0.6	731	0.2	760	1.6
Outdoors, construction	1110	2.3	896	2.6	861	1.9	1102	2.4	995	9.2
Outdoors, residential grounds	643	17.2	519	38.7	514	62.5	665	20.3	553	138.7
Outdoors, school grounds	1080	6.8	869	6.8	849	4.3	1076	7.6	984	25.5
Outdoors, sports arena	323	1.0	268	4.6	264	7.9	355	1.1	276	14.6
Outdoors, park/golf course	307	4.3	260	14.7	254	24.9	324	6.1	269	49.9
Outdoors, other location	770	3.0	582	13.5	561	26.3	827	2.9	598	45.7
Outdoors, not specified	1017	0.2	976	0.2	963	0.1	1025	0.3	999	0.8
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	0.4	0	0.9	-1	0.0	0	1.3

Washington DC: City-wide, Demographic Group=African americans

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1415	73.9	1143	62.4	1102	66.9	1475	64.3	1288	267.5
In transit, bus	2298	13.3	1940	17.6	1907	14.0	2497	16.9	2162	61.7
In transit, truck	-1	0.0	1298	1.9	1287	2.1	-1	0.0	1292	3.9
In transit, van	-1	0.0	1117	0.2	1041	0.3	-1	0.0	1069	0.4
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	817	9.7	709	8.9	696	13.8	818	6.8	750	39.2
Outdoors, along a roadway	1258	29.7	1001	61.2	986	90.6	1268	32.2	1071	213.7
In transit, motorcycle	1810	0.7	1254	0.9	1191	0.5	2182	1.0	1655	3.1
Indoors, service station	-1	0.0	930	0.3	872	0.4	-1	0.0	900	0.7
Outdoors, service station	-1	0.0	0	0.2	0	0.2	-1	0.0	0	0.4
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	1749	0.1	1874	0.1	-1	0.0	1814	0.2
Indoors, home	551	1722.2	438	1687.3	409	1689.0	551	1753.4	488	6851.9
Indoors, office	602	3.6	461	23.3	446	23.6	642	8.0	489	58.4
Indoors, store	606	13.5	477	21.3	459	32.1	612	15.1	516	82.0
Indoors, restaurant	1140	14.2	855	3.9	801	2.8	1232	8.8	1098	29.6
Indoors, mfg. facility	634	29.9	541	9.7	533	6.1	636	18.8	611	64.6
Indoors, school	655	102.2	541	117.7	533	67.3	655	132.4	603	419.6
Indoors, church	419	47.9	332	35.7	319	36.6	439	43.7	383	163.9
Indoors, shopping mall	2549	1.3	2217	2.4	2136	1.5	2263	2.9	2272	8.1
Indoors, auditorium	165	2.1	138	3.7	133	2.3	190	4.7	160	12.8
Indoors, health care facility	432	29.8	351	51.4	336	69.3	393	36.8	367	187.3
Indoors, public building	408	1.2	376	4.8	361	9.8	382	1.7	370	17.5
Indoors, other location	1164	46.5	919	15.9	878	18.7	1170	29.3	1082	110.3
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	842	6.9	651	26.1	626	34.3	989	10.1	701	77.5
Outdoors, school grounds	1242	5.9	1061	8.1	1037	4.2	1208	8.7	1144	27.0
Outdoors, sports arena	378	5.6	310	9.9	294	6.2	402	12.4	351	34.2
Outdoors, park/golf course	-1	0.0	302	2.2	293	1.8	-1	0.0	298	4.0
Outdoors, other location	1060	0.1	742	4.9	740	11.4	-1	0.0	743	16.5
Outdoors, not specified	-1	0.0	-1	0.1	-1	0.0	-1	0.1	1202	0.2
In transit, train	-1	0.0	1081	1.7	956	1.9	-1	0.0	1015	3.6
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=Hispanics

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1308	67.6	1031	64.6	985	66.8	1361	63.7	1171	262.8
In transit, bus	2183	10.0	1801	13.4	1720	11.6	2356	12.4	2007	47.3
In transit, truck	-1	0.0	1159	1.7	1129	1.9	-1	0.0	1143	3.7
In transit, van	1249	3.3	949	5.1	896	3.1	1351	5.6	1130	17.2
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	725	9.8	627	10.5	630	13.9	710	8.5	667	42.7
Outdoors, along a roadway	1110	59.6	890	104.9	872	114.3	1095	78.8	966	357.6
In transit, motorcycle	1708	0.5	1095	0.7	1047	0.4	2037	0.7	1509	2.2
Indoors, service station	-1	0.0	866	0.3	803	0.4	-1	0.0	833	0.7
Outdoors, service station	-1	0.0	0	0.2	0	0.2	-1	0.0	0	0.4
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.1	1689	0.1	-1	0.0	1666	0.2
Indoors, home	512	1738.8	398	1666.9	377	1668.8	521	1744.6	454	6819.1
Indoors, office	540	5.6	417	26.1	397	25.0	564	10.7	443	67.3
Indoors, store	549	12.3	420	22.3	398	31.4	551	14.8	455	80.8
Indoors, restaurant	1025	13.4	729	5.1	696	3.5	1081	9.7	958	31.7
Indoors, mfg. facility	577	26.2	486	8.8	476	5.6	579	16.5	554	57.1
Indoors, school	602	82.8	490	86.5	471	50.5	602	100.7	551	320.4
Indoors, church	377	41.0	288	38.0	276	38.6	383	44.4	334	162.0
Indoors, shopping mall	2210	1.2	1939	2.2	1849	1.4	2012	2.6	1991	7.3
Indoors, auditorium	154	1.9	122	3.4	115	2.1	175	4.2	145	11.7
Indoors, health care facility	392	25.3	321	44.8	307	60.9	372	31.6	337	162.6
Indoors, public building	355	1.1	332	4.3	313	8.7	338	1.6	324	15.7
Indoors, other location	1086	41.8	837	16.7	777	18.1	1136	28.0	1006	104.6
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	818	7.6	580	31.1	551	51.8	933	10.2	619	100.7
Outdoors, school grounds	1099	4.2	936	5.9	912	3.1	1084	6.2	1015	19.4
Outdoors, sports arena	344	5.1	275	9.3	259	6.0	366	11.3	316	31.7
Outdoors, park/golf course	-1	0.0	265	2.0	254	1.6	-1	0.0	260	3.7
Outdoors, other location	703	0.9	622	7.4	607	16.5	629	1.2	615	25.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.1	1054	0.2
In transit, train	-1	0.0	985	1.6	905	1.8	-1	0.0	943	3.3
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=Household income lt \$10K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1343	43.1	1098	55.7	1058	74.3	1383	43.5	1190	216.6
In transit, bus	2248	7.7	1810	5.7	1719	2.9	2223	7.8	2074	24.0
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	1107	2.4	1055	7.0	-1	0.0	1068	9.4
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	833	8.5	663	15.5	643	13.5	932	12.7	754	50.2
Outdoors, along a roadway	1201	47.4	982	60.3	968	55.1	1315	54.9	1110	217.7
In transit, motorcycle	-1	0.0	1098	0.7	1017	1.8	-1	0.0	1040	2.5
Indoors, service station	-1	0.0	-1	0.1	906	0.3	-1	0.0	909	0.4
Outdoors, service station	-1	0.0	0	0.2	0	0.5	-1	0.0	0	0.7
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	549	1829.1	434	1818.7	407	1816.3	552	1870.3	486	7334.4
Indoors, office	587	4.1	446	1.7	385	2.1	645	2.9	541	10.8
Indoors, store	552	39.0	460	46.3	448	79.8	549	28.8	487	193.9
Indoors, restaurant	1111	22.3	837	7.9	816	6.4	1203	15.3	1060	51.9
Indoors, mfg. facility	658	15.9	541	13.6	534	10.3	653	10.1	600	49.9
Indoors, school	633	89.3	530	76.3	528	36.2	627	101.5	593	303.2
Indoors, church	428	7.5	324	7.7	304	4.1	462	10.1	395	29.4
Indoors, shopping mall	2500	2.4	2214	3.2	2078	1.6	2475	3.5	2344	10.6
Indoors, auditorium	141	5.3	129	11.6	130	12.7	130	11.7	131	41.2
Indoors, health care facility	421	6.2	357	9.8	339	8.9	400	9.0	375	33.9
Indoors, public building	448	9.1	382	3.1	386	1.5	399	5.5	418	19.2
Indoors, other location	1014	9.2	915	9.6	887	9.2	1121	7.2	976	35.1
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	776	9.9	644	16.0	598	21.3	843	10.1	685	57.3
Outdoors, school grounds	1199	1.3	1026	1.8	997	0.9	1092	1.9	1082	5.9
Outdoors, sports arena	-1	0.0	358	3.5	342	6.4	-1	0.0	348	10.0
Outdoors, park/golf course	330	2.8	317	2.4	304	5.6	294	1.1	312	11.9
Outdoors, other location	875	0.1	665	10.3	633	29.1	816	0.2	643	39.7
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=Household income \$10K-\$25K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1326	73.6	1054	83.2	1003	86.3	1387	79.4	1184	322.4
In transit, bus	2450	3.6	1891	4.3	1818	2.8	2726	4.3	2253	15.0
In transit, truck	1724	3.5	1277	8.0	1248	6.1	1808	4.0	1440	21.6
In transit, van	1430	0.6	1048	1.3	1021	1.0	1536	1.3	1247	4.2
Indoors, public garage	-1	0.0	703	0.6	677	1.5	-1	0.0	684	2.1
Outdoors, in a parking lot	766	20.9	635	16.0	634	20.5	753	16.4	698	73.9
Outdoors, along a roadway	1175	52.2	933	78.4	908	102.6	1208	57.1	1022	290.4
In transit, motorcycle	-1	0.0	1106	5.5	1050	12.6	-1	0.0	1067	18.2
Indoors, service station	-1	0.0	901	0.6	864	1.3	-1	0.1	894	1.9
Outdoors, service station	0	0.3	0	0.7	0	1.0	0	0.4	0	2.4
Indoors, residential garage	886	1.3	765	1.5	718	0.9	837	2.0	810	5.7
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, home	532	1608.4	415	1595.4	391	1611.3	535	1636.0	469	6451.1
Indoors, office	491	54.7	411	53.6	398	43.1	478	57.5	448	208.9
Indoors, store	548	34.2	448	45.2	433	53.2	584	37.6	494	170.3
Indoors, restaurant	981	53.5	790	38.6	745	28.1	1022	50.2	911	170.4
Indoors, mfg. facility	632	37.6	510	30.7	501	19.1	625	38.5	580	125.9
Indoors, school	625	107.3	509	76.0	507	39.2	624	105.9	584	328.4
Indoors, church	404	13.7	322	15.7	319	13.9	406	17.1	364	60.4
Indoors, shopping mall	2515	5.2	2290	2.5	2208	1.3	2564	3.6	2454	12.5
Indoors, auditorium	164	2.3	130	4.3	121	4.7	169	3.9	142	15.2
Indoors, health care facility	439	36.6	341	30.5	329	36.2	460	34.1	393	137.4
Indoors, public building	440	5.1	381	2.3	357	1.8	425	3.7	414	12.9
Indoors, other location	1190	22.9	926	29.9	873	20.1	1203	28.3	1053	101.3
Indoors, not specified	857	0.2	982	0.2	956	0.2	-1	0.1	922	0.7
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	770	13.0	604	29.1	595	44.8	815	16.2	654	103.2
Outdoors, school grounds	1266	6.9	1045	7.1	1016	4.2	1290	7.5	1171	25.8
Outdoors, sports arena	-1	0.0	311	3.7	292	6.5	-1	0.0	299	10.2
Outdoors, park/golf course	417	1.6	303	14.9	286	36.8	487	2.4	303	55.7
Outdoors, other location	-1	0.0	676	4.1	645	6.6	-1	0.0	657	10.7
Outdoors, not specified	1038	0.7	-1	0.1	-1	0.0	1002	0.4	1019	1.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=Household income \$25K-\$50K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1283	86.4	994	93.6	968	99.4	1356	89.8	1143	369.1
In transit, bus	2257	7.4	1722	5.0	1704	3.4	2414	6.8	2102	22.7
In transit, truck	1537	3.1	1175	4.9	1138	3.4	1601	4.0	1350	15.3
In transit, van	1250	8.3	985	9.2	965	8.2	1278	10.5	1126	36.2
Indoors, public garage	755	6.4	591	2.9	573	1.2	794	5.5	725	16.1
Outdoors, in a parking lot	717	10.9	581	11.7	563	12.9	752	10.5	647	46.0
Outdoors, along a roadway	1078	52.5	849	81.7	830	97.3	1101	64.3	938	295.8
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1058	0.5	905	0.4	905	0.3	1004	0.5	979	1.6
Outdoors, service station	-1	0.1	0	0.1	0	0.2	-1	0.1	0	0.5
Indoors, residential garage	1243	1.4	816	1.0	791	0.6	1408	1.2	1126	4.2
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	504	1587.7	389	1546.5	370	1546.6	510	1601.1	444	6281.9
Indoors, office	482	78.5	389	87.5	376	88.6	480	84.4	430	339.0
Indoors, store	502	41.3	401	41.9	389	47.2	512	38.9	448	169.4
Indoors, restaurant	931	20.7	711	21.3	686	23.1	981	20.4	822	85.4
Indoors, mfg. facility	578	26.5	478	28.3	470	26.7	572	28.5	525	109.9
Indoors, school	589	104.3	472	78.3	468	46.7	591	104.5	545	333.8
Indoors, church	408	23.4	298	18.7	295	15.5	436	23.7	369	81.3
Indoors, shopping mall	2433	3.3	2005	2.2	2040	2.0	2544	2.7	2292	10.2
Indoors, auditorium	178	5.8	126	7.2	126	5.7	193	8.1	157	26.7
Indoors, health care facility	401	19.7	316	19.0	313	13.1	406	22.0	365	73.9
Indoors, public building	465	6.4	364	11.2	355	14.9	507	7.8	404	40.2
Indoors, other location	1116	27.4	837	25.4	804	22.4	1136	27.2	984	102.5
Indoors, not specified	805	0.5	797	0.5	796	1.0	753	0.3	793	2.3
Outdoors, construction	1157	5.0	953	5.5	922	3.9	1154	5.2	1052	19.6
Outdoors, residential grounds	659	17.1	545	42.5	538	62.9	677	22.5	576	145.1
Outdoors, school grounds	1151	5.8	923	5.8	911	3.8	1148	6.5	1047	22.0
Outdoors, sports arena	377	0.2	295	3.3	292	6.6	390	0.4	299	10.6
Outdoors, park/golf course	325	3.9	274	10.8	267	14.8	338	5.5	287	35.1
Outdoors, other location	805	5.5	615	17.0	587	35.2	873	5.0	637	62.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	965	0.3	895	0.3	-1	0.0	928	0.6
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=Household income \$50K-\$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1269	107.8	952	116.2	927	118.2	1339	113.8	1117	456.0
In transit, bus	2079	8.3	1613	7.6	1562	4.1	2137	9.3	1904	29.3
In transit, truck	1555	1.6	1139	5.2	1119	9.6	1652	2.1	1223	18.5
In transit, van	-1	0.0	946	1.5	919	3.3	-1	0.1	943	5.0
Indoors, public garage	716	0.4	607	0.4	647	0.5	776	0.4	685	1.7
Outdoors, in a parking lot	728	10.4	558	11.3	531	11.0	796	10.8	651	43.5
Outdoors, along a roadway	1093	49.0	827	68.7	811	91.6	1143	52.4	934	261.6
In transit, motorcycle	1609	1.0	1002	0.1	-1	0.0	1902	0.6	1675	1.7
Indoors, service station	-1	0.0	-1	0.1	931	0.1	-1	0.0	934	0.2
Outdoors, service station	-1	0.1	0	0.5	0	0.6	-1	0.1	0	1.2
Indoors, residential garage	971	0.2	792	0.6	782	0.4	994	0.3	854	1.4
Indoors, in a repair shop	1430	0.1	1182	0.2	-1	0.1	1292	0.2	1271	0.6
Indoors, home	494	1521.9	376	1471.5	360	1454.4	499	1536.6	434	5984.5
Indoors, office	465	125.4	377	118.8	370	117.9	462	123.1	420	485.2
Indoors, store	501	46.9	387	44.8	376	45.5	506	44.8	443	182.0
Indoors, restaurant	920	24.2	687	30.2	667	32.2	978	27.1	800	113.7
Indoors, mfg. facility	599	30.3	468	26.4	454	21.1	617	29.5	543	107.3
Indoors, school	566	135.5	456	107.8	451	52.6	563	147.4	524	443.2
Indoors, church	373	8.0	294	10.7	290	9.7	397	10.0	336	38.3
Indoors, shopping mall	2513	3.0	1936	4.9	1812	4.7	2727	3.7	2187	16.3
Indoors, auditorium	170	3.7	120	8.6	121	13.6	166	4.7	133	30.7
Indoors, health care facility	401	18.4	315	20.5	314	23.3	421	20.2	360	82.3
Indoors, public building	505	4.6	350	6.2	344	5.1	575	5.4	439	21.3
Indoors, other location	1051	26.8	823	23.0	808	18.6	1060	25.7	950	94.1
Indoors, not specified	793	0.5	717	0.4	711	0.2	777	0.5	758	1.6
Outdoors, construction	-1	0.0	839	0.3	809	0.4	-1	0.0	824	0.7
Outdoors, residential grounds	646	16.8	532	46.3	521	90.7	667	18.2	552	172.1
Outdoors, school grounds	1088	6.6	875	6.4	841	3.8	1087	7.4	993	24.2
Outdoors, sports arena	347	1.6	260	6.9	249	8.9	388	2.4	278	19.8
Outdoors, park/golf course	315	5.8	260	20.9	254	38.6	319	9.9	269	75.2
Outdoors, other location	595	1.0	586	15.4	572	22.7	568	1.3	578	40.4
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	0	1.8	0	4.6	-1	0.0	0	6.3

Washington DC: City-wide, Demographic Group=Household income gt \$75K

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1390	53.0	949	77.7	929	90.8	1463	59.3	1134	280.7
In transit, bus	2853	2.8	1632	0.8	1270	1.4	3007	1.7	2412	6.7
In transit, truck	1396	20.6	1193	11.6	1211	5.7	1585	19.2	1400	57.2
In transit, van	1231	6.0	855	10.0	834	6.0	1219	11.6	1045	33.6
Indoors, public garage	-1	0.0	580	0.3	568	0.4	-1	0.0	573	0.7
Outdoors, in a parking lot	822	3.5	565	9.4	543	15.6	877	3.6	617	32.1
Outdoors, along a roadway	1145	48.4	834	62.8	808	78.1	1209	54.9	972	244.1
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1268	12.2	962	1.4	-1	0.0	1282	7.6	1253	21.2
Outdoors, service station	-1	0.0	0	0.8	0	0.9	-1	0.0	0	1.7
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	488	1565.1	371	1520.3	354	1484.8	496	1570.0	429	6140.3
Indoors, office	451	75.2	364	85.4	355	91.6	438	70.9	398	323.0
Indoors, store	559	1.6	375	13.0	348	19.7	570	2.5	382	36.8
Indoors, restaurant	961	32.8	689	40.2	675	44.1	1031	33.6	821	150.7
Indoors, mfg. facility	-1	0.0	432	1.0	407	1.1	-1	0.0	419	2.1
Indoors, school	565	203.4	451	131.4	444	122.6	563	184.8	518	642.3
Indoors, church	416	9.4	283	8.2	265	7.5	390	7.9	343	33.0
Indoors, shopping mall	1959	0.6	1734	0.8	1640	0.4	1796	0.9	1788	2.7
Indoors, auditorium	157	14.5	114	24.2	112	15.4	166	29.9	139	84.1
Indoors, health care facility	383	15.5	278	13.5	265	7.1	391	18.4	344	54.6
Indoors, public building	-1	0.0	340	7.3	327	21.2	-1	0.0	330	28.4
Indoors, other location	1019	16.6	801	35.8	791	30.1	993	36.8	888	119.2
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	898	1.5	876	1.6	-1	0.0	887	3.1
Outdoors, residential grounds	635	59.5	512	67.4	512	72.8	638	61.5	570	261.2
Outdoors, school grounds	934	7.4	821	11.7	814	8.7	873	12.9	857	40.7
Outdoors, sports arena	-1	0.0	277	2.3	274	6.9	-1	0.0	275	9.2
Outdoors, park/golf course	299	11.9	258	36.0	256	52.5	331	19.8	273	120.2
Outdoors, other location	-1	0.0	628	9.4	621	21.0	-1	0.0	623	30.4
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=Children, 0 to 17

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1283	56.1	970	65.7	943	75.7	1361	58.3	1120	255.8
In transit, bus	2169	13.1	1687	10.8	1644	5.9	2223	14.1	1996	43.9
In transit, truck	1424	1.4	1160	1.4	1161	2.4	1435	1.2	1271	6.4
In transit, van	1272	5.3	969	7.2	949	5.7	1283	8.5	1125	26.7
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, in a parking lot	695	6.1	557	7.3	543	9.0	728	5.7	617	28.2
Outdoors, along a roadway	1086	65.8	831	99.6	814	131.9	1135	72.1	930	369.5
In transit, motorcycle	1580	0.8	991	0.3	886	0.4	1846	0.5	1432	2.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	0	0.1	-1	0.0	-1	0.1	-1	0.1	0	0.3
Indoors, residential garage	1147	0.8	776	1.2	756	0.8	1288	1.2	999	3.9
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	499	1605.1	382	1580.7	365	1585.3	504	1623.0	438	6394.1
Indoors, office	503	1.4	378	4.7	379	7.7	537	1.5	406	15.4
Indoors, store	520	22.6	388	24.2	374	25.4	525	23.6	449	95.8
Indoors, restaurant	934	10.0	704	14.5	688	17.3	1039	10.6	810	52.4
Indoors, mfg. facility	683	0.2	468	0.3	455	0.1	816	0.3	628	1.0
Indoors, school	579	278.9	464	206.9	458	122.3	575	281.2	534	889.3
Indoors, church	390	12.7	291	11.7	286	11.4	411	12.7	347	48.6
Indoors, shopping mall	2245	2.7	1919	2.7	1894	2.2	2331	2.6	2104	10.1
Indoors, auditorium	175	5.2	120	8.0	119	7.2	185	8.5	149	28.9
Indoors, health care facility	373	12.8	303	13.8	303	15.1	394	14.5	342	56.3
Indoors, public building	423	2.5	363	4.3	363	6.7	460	2.7	388	16.2
Indoors, other location	1039	6.3	791	8.9	766	12.2	1011	7.7	875	35.1
Indoors, not specified	-1	0.0	931	0.2	917	0.2	-1	0.0	924	0.4
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	668	28.2	533	55.3	522	83.5	706	31.2	575	198.2
Outdoors, school grounds	1090	15.1	897	14.8	876	9.3	1059	16.5	994	55.8
Outdoors, sports arena	332	3.3	277	7.1	277	9.8	364	4.2	300	24.5
Outdoors, park/golf course	332	3.2	270	17.7	261	29.5	377	4.5	278	54.8
Outdoors, other location	719	0.2	597	14.2	572	30.5	696	0.4	582	45.3
Outdoors, not specified	1233	0.2	967	0.3	949	0.2	1135	0.4	1073	1.2
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=Nonworking men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1328	141.0	1074	117.8	1062	132.9	1358	126.6	1209	518.4
In transit, bus	2419	2.4	2039	0.3	-1	0.0	2564	1.4	2446	4.1
In transit, truck	1688	8.8	1316	23.9	1347	45.3	1769	10.3	1422	88.3
In transit, van	-1	0.0	1083	4.0	1068	9.8	-1	0.0	1072	13.8
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	726	10.0	584	17.4	510	21.6	686	14.2	604	63.1
Outdoors, along a roadway	1139	117.7	919	121.6	875	82.3	1112	137.1	1025	458.7
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1299	0.1	1066	0.3	1057	0.2	1358	0.3	1190	0.8
Outdoors, service station	0	0.1	0	1.7	0	1.8	0	0.2	0	3.9
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	531	1557.7	411	1473.8	386	1370.9	535	1592.8	469	5995.2
Indoors, office	489	64.8	414	88.5	406	63.1	483	70.3	446	286.6
Indoors, store	540	10.0	446	12.0	428	8.7	519	12.7	485	43.4
Indoors, restaurant	1033	18.9	791	13.6	743	9.0	1044	16.9	935	58.3
Indoors, mfg. facility	-1	0.0	504	40.3	485	108.2	-1	0.0	490	148.5
Indoors, school	614	127.2	502	79.3	494	36.7	617	124.3	579	367.5
Indoors, church	493	2.3	320	8.9	304	11.1	578	3.3	362	25.5
Indoors, shopping mall	3579	1.2	2368	1.6	2257	0.8	4292	1.7	3254	5.3
Indoors, auditorium	211	1.7	147	21.8	146	52.9	240	0.6	148	77.1
Indoors, health care facility	454	6.4	348	6.4	345	3.6	434	7.5	403	23.9
Indoors, public building	530	23.0	408	21.9	394	10.6	614	27.6	509	83.0
Indoors, other location	1054	39.4	954	25.8	931	17.2	1123	31.9	1032	114.3
Indoors, not specified	1179	0.1	988	0.2	-1	0.1	1234	0.2	1113	0.5
Outdoors, construction	-1	0.0	1040	3.6	1017	3.9	-1	0.0	1028	7.5
Outdoors, residential grounds	636	8.5	572	20.5	538	27.7	607	10.7	572	67.3
Outdoors, school grounds	1095	7.6	956	10.1	893	5.0	1099	11.1	1025	33.8
Outdoors, sports arena	319	5.3	306	13.3	295	35.3	317	2.0	301	55.9
Outdoors, park/golf course	393	2.9	301	5.7	285	5.1	438	2.2	331	15.9
Outdoors, other location	638	1.6	627	49.6	593	144.3	597	1.0	602	196.6
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	1628	1.6	1077	0.2	-1	0.0	1953	1.0	1709	2.8
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=Working men, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1268	133.2	978	135.7	952	131.2	1319	138.8	1131	538.9
In transit, bus	2256	1.0	1789	1.4	1826	1.5	2280	0.8	1987	4.8
In transit, truck	1523	18.0	1176	17.8	1102	16.3	1629	16.7	1360	68.8
In transit, van	1238	6.5	994	8.6	961	11.5	1292	7.4	1094	33.9
Indoors, public garage	743	14.5	601	12.3	597	7.8	764	15.6	692	50.3
Outdoors, in a parking lot	737	13.3	581	15.7	557	15.7	755	13.2	650	58.0
Outdoors, along a roadway	1072	51.6	848	71.9	833	76.3	1075	63.4	942	263.2
In transit, motorcycle	-1	0.0	1261	0.4	1235	0.3	-1	0.0	1249	0.8
Indoors, service station	1066	14.4	862	9.1	822	5.4	1075	13.4	994	42.2
Outdoors, service station	0	0.3	0	0.5	0	0.5	0	0.4	0	1.6
Indoors, residential garage	1078	4.2	779	4.9	751	3.0	1098	6.6	955	18.7
Indoors, in a repair shop	1640	6.5	1358	0.7	-1	0.0	1597	3.6	1608	10.9
Indoors, home	507	1401.1	386	1368.3	365	1333.9	514	1430.4	445	5533.7
Indoors, office	483	230.9	391	210.2	378	221.7	482	227.5	435	890.2
Indoors, store	509	38.5	407	43.4	393	55.1	519	35.0	448	172.0
Indoors, restaurant	893	35.6	714	28.7	696	22.7	900	32.0	814	119.0
Indoors, mfg. facility	588	38.7	480	53.6	480	58.7	579	42.1	523	193.1
Indoors, school	576	20.6	462	16.9	456	12.9	572	21.1	526	71.6
Indoors, church	399	10.9	305	12.3	302	9.7	423	14.4	362	47.2
Indoors, shopping mall	2481	1.6	1905	1.2	1759	1.0	2370	1.5	2180	5.3
Indoors, auditorium	175	6.8	125	2.5	123	4.9	192	3.6	157	17.8
Indoors, health care facility	407	16.8	319	20.7	304	21.5	419	18.9	358	77.9
Indoors, public building	429	6.2	349	13.2	336	26.7	418	5.1	359	51.2
Indoors, other location	1040	43.6	840	42.7	837	37.0	1087	41.8	955	165.2
Indoors, not specified	972	5.3	731	1.6	671	0.6	922	3.5	904	11.0
Outdoors, construction	1160	7.6	951	9.4	916	5.9	1152	8.8	1050	31.7
Outdoors, residential grounds	695	7.6	560	26.8	559	54.3	723	9.6	586	98.3
Outdoors, school grounds	1212	0.8	984	1.0	961	0.7	1187	1.0	1092	3.4
Outdoors, sports arena	280	1.2	277	4.4	269	6.6	257	0.9	272	13.0
Outdoors, park/golf course	315	4.1	267	12.3	256	18.7	317	6.8	275	41.8
Outdoors, other location	796	17.4	621	31.8	604	36.9	841	23.1	689	109.2
Outdoors, not specified	1412	0.1	1072	0.5	1049	0.3	1687	0.2	1205	1.1
In transit, train	1436	1.1	991	0.8	908	0.7	1610	0.7	1257	3.3
In transit, airplane	-1	0.0	0	2.9	0	8.0	-1	0.0	0	10.9

Washington DC: City-wide, Demographic Group=Nonworking women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1284	98.4	1019	101.4	978	108.1	1358	99.5	1155	407.5
In transit, bus	2194	3.1	1682	1.5	1588	1.7	2264	2.3	2002	8.6
In transit, truck	1458	6.9	1180	0.6	-1	0.0	1429	3.4	1433	10.9
In transit, van	1383	0.2	1033	0.8	931	1.5	1415	0.4	1060	2.9
Indoors, public garage	771	0.5	625	0.4	606	0.2	850	0.6	740	1.7
Outdoors, in a parking lot	706	5.4	606	9.0	602	11.5	722	5.9	643	31.9
Outdoors, along a roadway	1089	35.6	898	54.4	889	68.4	1111	39.6	972	198.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	908	0.1	854	0.2	-1	0.0	872	0.3
Outdoors, service station	-1	0.1	-1	0.0	-1	0.1	-1	0.0	0	0.2
Indoors, residential garage	961	1.0	812	0.2	-1	0.1	996	0.5	950	1.7
Indoors, in a repair shop	1572	0.2	1301	0.3	1272	0.2	1397	0.3	1389	1.0
Indoors, home	516	1821.1	401	1760.9	380	1732.7	519	1837.3	455	7152.0
Indoors, office	513	9.4	411	5.0	401	4.2	538	6.6	480	25.2
Indoors, store	512	35.3	421	53.0	410	73.5	508	36.3	449	198.0
Indoors, restaurant	1018	22.2	760	21.5	746	18.4	1062	21.7	903	83.7
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	630	36.0	496	46.5	484	31.7	659	52.1	574	166.3
Indoors, church	403	10.3	310	12.5	307	11.1	426	13.9	363	47.9
Indoors, shopping mall	2348	3.0	2050	1.6	2056	2.1	2201	1.4	2187	8.2
Indoors, auditorium	170	12.4	130	14.3	126	15.2	180	15.2	151	57.1
Indoors, health care facility	418	7.0	335	9.4	334	8.8	445	8.5	380	33.7
Indoors, public building	470	6.3	378	4.6	376	4.9	499	5.7	437	21.6
Indoors, other location	1103	27.1	849	29.5	835	22.5	1141	32.5	993	111.6
Indoors, not specified	-1	0.0	853	0.3	850	0.9	-1	0.0	851	1.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	658	10.9	563	26.0	562	31.5	660	15.7	593	84.1
Outdoors, school grounds	1479	1.6	1040	2.8	1029	2.7	1612	2.3	1253	9.4
Outdoors, sports arena	341	3.4	295	2.8	282	6.3	356	1.3	306	13.8
Outdoors, park/golf course	318	1.4	282	14.8	272	29.9	329	3.0	280	49.1
Outdoors, other location	748	1.2	625	9.6	580	19.7	656	1.5	603	31.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	1273	0.2	-1	0.0	-1	0.0	1483	0.1	1330	0.4
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=Working women, 18 to 44

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1273	121.5	992	114.6	971	115.8	1354	119.6	1151	471.4
In transit, bus	2209	4.8	1699	4.6	1672	4.2	2309	4.9	1987	18.5
In transit, truck	1585	5.1	1243	5.4	1207	5.5	1813	5.4	1459	21.3
In transit, van	-1	0.1	966	1.1	951	1.0	-1	0.0	965	2.1
Indoors, public garage	739	3.0	588	1.5	562	0.8	762	2.5	698	7.8
Outdoors, in a parking lot	751	6.3	587	10.1	561	12.9	817	7.3	652	36.6
Outdoors, along a roadway	1080	33.3	861	46.7	837	56.9	1114	36.8	949	173.7
In transit, motorcycle	-1	0.0	983	4.8	951	10.4	-1	0.0	961	15.2
Indoors, service station	1156	0.1	909	0.2	895	0.1	1050	0.2	1004	0.7
Outdoors, service station	0	0.2	0	0.7	0	1.0	0	0.3	0	2.1
Indoors, residential garage	1198	0.1	-1	0.1	-1	0.0	1341	0.1	1157	0.3
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Indoors, home	509	1450.0	389	1453.7	370	1465.3	515	1485.1	446	5854.0
Indoors, office	475	249.8	388	236.7	373	209.4	472	251.5	430	947.4
Indoors, store	499	65.8	402	69.6	390	60.9	515	71.4	453	267.7
Indoors, restaurant	950	42.4	722	36.6	687	39.7	987	36.6	838	155.3
Indoors, mfg. facility	614	15.8	494	15.5	481	8.6	618	18.2	564	58.1
Indoors, school	581	53.5	466	40.3	459	21.5	572	54.7	535	170.0
Indoors, church	396	14.0	296	15.3	295	13.8	410	17.1	351	60.3
Indoors, shopping mall	2477	3.8	2040	2.7	2066	1.8	2548	3.9	2341	12.2
Indoors, auditorium	168	5.3	121	7.1	117	10.0	173	6.2	139	28.5
Indoors, health care facility	412	35.2	319	30.6	304	25.6	423	36.5	371	127.9
Indoors, public building	428	6.1	355	7.8	334	12.0	426	6.2	375	32.0
Indoors, other location	1067	35.7	847	30.4	810	26.5	1118	33.3	973	126.0
Indoors, not specified	942	0.5	756	0.4	710	0.2	977	0.5	883	1.5
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	650	4.1	571	20.2	568	41.7	616	5.8	577	71.8
Outdoors, school grounds	1380	0.6	963	1.4	946	1.3	1595	0.8	1140	4.1
Outdoors, sports arena	450	0.2	270	5.2	258	8.6	537	0.3	271	14.3
Outdoors, park/golf course	394	1.3	286	8.9	276	22.1	452	1.7	292	34.0
Outdoors, other location	747	0.7	629	11.3	613	30.2	726	0.7	621	42.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	1448	0.5	1076	0.6	1080	0.3	1639	0.7	1355	2.1
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=Nonworking men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1279	92.7	1030	100.7	988	98.5	1304	93.1	1146	384.9
In transit, bus	2498	2.7	1751	8.5	1710	9.2	2450	1.2	1865	21.6
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1266	1.4	1074	2.4	1059	1.5	1262	3.0	1171	8.3
Indoors, public garage	-1	0.1	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, in a parking lot	708	11.1	582	26.0	553	20.8	672	13.3	610	71.3
Outdoors, along a roadway	1083	29.6	889	41.4	863	34.2	1166	38.3	997	143.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	865	8.1	752	11.2	701	6.3	817	13.6	790	39.2
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	528	1838.5	410	1672.9	385	1559.7	532	1838.9	468	6910.0
Indoors, office	455	7.9	368	4.0	338	5.9	424	5.4	403	23.2
Indoors, store	486	29.6	412	40.4	409	59.2	428	29.9	428	159.2
Indoors, restaurant	1023	11.1	729	5.5	649	10.0	1052	7.6	873	34.2
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	602	21.5	482	31.6	465	17.3	654	36.5	562	106.9
Indoors, church	366	11.9	282	13.5	268	7.2	332	17.0	317	49.7
Indoors, shopping mall	2903	6.4	2387	0.4	-1	0.0	2762	2.6	2839	9.4
Indoors, auditorium	135	3.7	147	4.6	155	4.6	121	2.3	143	15.2
Indoors, health care facility	440	39.4	358	43.8	358	21.5	461	51.8	413	156.5
Indoors, public building	441	1.4	344	5.2	333	15.6	429	0.9	346	23.1
Indoors, other location	1020	25.3	816	43.1	765	38.0	999	27.2	877	133.7
Indoors, not specified	933	1.5	793	0.2	-1	0.0	978	1.0	940	2.7
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	660	12.9	594	100.1	589	245.8	609	23.1	594	381.8
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	335	4.6	325	5.0	-1	0.0	330	9.6
Outdoors, park/golf course	410	3.2	299	9.5	287	28.6	495	1.2	305	42.4
Outdoors, other location	-1	0.0	647	14.4	604	19.1	-1	0.0	622	33.5
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=Working men, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1281	146.3	985	146.7	972	139.6	1362	153.2	1155	585.7
In transit, bus	2282	9.3	1710	4.5	1690	2.2	2470	7.8	2182	23.7
In transit, truck	1435	24.2	1161	26.0	1135	18.2	1441	27.8	1306	96.2
In transit, van	1163	3.2	961	7.6	939	6.4	1203	3.9	1030	21.2
Indoors, public garage	796	4.2	616	4.9	589	2.5	824	5.7	724	17.3
Outdoors, in a parking lot	743	9.8	580	10.8	567	10.9	815	10.1	672	41.6
Outdoors, along a roadway	1075	43.1	856	57.0	854	67.1	1080	45.9	948	213.0
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1098	5.7	895	2.5	880	1.2	1069	5.1	1035	14.6
Outdoors, service station	0	0.2	0	0.6	0	0.8	0	0.2	0	1.8
Indoors, residential garage	1188	0.1	781	0.2	738	0.2	-1	0.1	904	0.5
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	504	1356.3	381	1324.9	361	1300.3	508	1380.6	440	5362.2
Indoors, office	473	279.0	388	270.2	379	337.2	469	263.4	425	1149.8
Indoors, store	522	65.0	415	50.3	400	31.6	540	66.7	484	213.6
Indoors, restaurant	924	32.4	696	35.0	672	35.5	964	34.9	811	137.8
Indoors, mfg. facility	590	32.2	476	71.2	460	88.2	600	49.8	511	241.4
Indoors, school	603	14.8	477	26.4	468	17.9	620	20.9	536	80.0
Indoors, church	380	14.8	292	16.4	289	13.3	394	18.2	341	62.6
Indoors, shopping mall	2953	2.9	2212	0.7	2230	0.5	3197	1.3	2850	5.4
Indoors, auditorium	166	3.3	126	1.2	129	0.7	180	1.7	159	6.9
Indoors, health care facility	419	13.9	313	3.2	309	1.2	429	9.3	406	27.6
Indoors, public building	536	5.7	361	15.5	354	14.9	600	8.6	427	44.6
Indoors, other location	1045	66.2	809	50.3	768	28.3	1046	66.3	952	211.1
Indoors, not specified	928	5.5	752	1.2	726	0.4	889	3.6	887	10.7
Outdoors, construction	-1	0.0	940	3.0	892	7.0	-1	0.0	907	9.9
Outdoors, residential grounds	727	3.1	555	28.7	534	52.8	761	3.9	558	88.6
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	291	6.5	266	14.4	259	17.4	276	10.2	269	48.5
Outdoors, other location	774	11.9	612	10.1	614	11.2	782	8.6	694	41.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	1210	0.4	-1	0.0	-1	0.0	1305	0.3	1228	0.7
In transit, airplane	-1	0.0	0	0.6	0	0.6	-1	0.0	0	1.2

Washington DC: City-wide, Demographic Group=Nonworking women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1203	76.3	978	72.4	954	72.8	1219	74.0	1090	295.6
In transit, bus	1925	1.7	1587	1.2	1550	0.7	1750	1.6	1742	5.2
In transit, truck	1299	4.3	1096	0.3	-1	0.0	1287	2.0	1285	6.6
In transit, van	1370	2.2	957	3.7	924	2.2	1437	4.5	1196	12.6
Indoors, public garage	758	0.7	607	0.2	-1	0.1	706	0.5	711	1.4
Outdoors, in a parking lot	783	4.0	590	8.3	569	11.7	791	4.6	641	28.6
Outdoors, along a roadway	1075	32.5	872	35.7	844	45.3	1104	30.4	958	143.9
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1066	0.1	-1	0.1	-1	0.0	-1	0.1	988	0.3
Outdoors, service station	-1	0.0	0	0.4	0	0.4	-1	0.0	0	0.9
Indoors, residential garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	514	1906.3	397	1867.3	377	1830.7	517	1944.7	453	7549.0
Indoors, office	455	8.4	373	7.8	352	6.7	430	8.8	406	31.7
Indoors, store	512	33.2	415	32.6	407	29.0	506	33.6	462	128.4
Indoors, restaurant	1018	16.0	741	23.5	714	32.8	1041	18.0	840	90.3
Indoors, mfg. facility	-1	0.0	435	0.2	406	0.2	-1	0.0	420	0.5
Indoors, school	694	4.6	491	5.1	482	3.4	808	6.1	639	19.2
Indoors, church	386	17.7	290	21.8	278	16.7	372	24.1	333	80.3
Indoors, shopping mall	2573	3.6	2151	3.5	1985	4.9	2870	3.2	2351	15.1
Indoors, auditorium	186	1.9	119	0.6	111	0.5	207	1.0	171	4.0
Indoors, health care facility	396	9.2	323	15.2	326	18.1	380	8.9	347	51.6
Indoors, public building	516	3.5	358	5.8	331	5.1	563	5.4	435	19.9
Indoors, other location	1085	18.7	825	22.9	777	22.5	1124	18.2	937	82.2
Indoors, not specified	988	1.6	790	0.2	-1	0.0	1075	1.0	1006	2.8
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	708	12.0	567	36.3	542	66.1	731	16.1	588	130.5
Outdoors, school grounds	957	0.2	-1	0.0	-1	0.0	911	0.2	936	0.4
Outdoors, sports arena	-1	0.0	307	2.6	296	2.6	-1	0.0	301	5.1
Outdoors, park/golf course	-1	0.0	296	11.7	298	24.3	-1	0.0	297	36.0
Outdoors, other location	654	0.5	652	4.5	665	11.3	599	0.7	658	17.0
Outdoors, not specified	977	0.6	-1	0.1	-1	0.0	934	0.4	955	1.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=Working women, 45 to 64

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1238	105.8	989	101.8	960	101.9	1318	101.3	1127	410.8
In transit, bus	2267	5.7	1638	4.2	1475	4.0	2397	5.2	2000	19.1
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1401	2.6	1020	1.2	988	0.5	1451	2.2	1321	6.5
Indoors, public garage	788	0.6	623	0.4	601	0.2	832	0.6	745	1.8
Outdoors, in a parking lot	690	7.9	598	12.5	601	21.1	712	7.4	631	48.8
Outdoors, along a roadway	1097	34.6	858	40.9	846	51.3	1114	35.8	961	162.6
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.1	1036	0.1	-1	0.1	1544	0.1	1251	0.4
Outdoors, service station	0	0.6	0	2.3	0	2.2	0	0.9	0	6.1
Indoors, residential garage	-1	0.1	-1	0.0	-1	0.0	-1	0.0	866	0.1
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	507	1499.0	385	1484.3	366	1532.0	512	1520.7	443	6036.0
Indoors, office	481	245.0	392	208.9	378	153.7	477	250.5	440	858.2
Indoors, store	486	48.3	396	61.0	381	63.9	494	54.1	434	227.3
Indoors, restaurant	945	42.6	725	49.9	686	42.3	997	51.8	842	186.6
Indoors, mfg. facility	-1	0.0	492	40.1	480	73.0	-1	0.0	484	113.2
Indoors, school	576	44.3	469	33.7	487	29.1	561	43.3	531	150.4
Indoors, church	393	16.0	297	18.9	289	28.2	422	14.8	338	77.9
Indoors, shopping mall	2209	4.5	1907	5.7	1820	3.2	2031	6.5	2002	19.9
Indoors, auditorium	145	1.8	115	2.9	110	1.7	157	3.5	135	10.0
Indoors, health care facility	390	45.0	313	49.2	296	27.2	382	54.3	351	175.7
Indoors, public building	491	2.6	368	2.3	381	4.4	470	1.9	419	11.3
Indoors, other location	1104	45.2	845	39.4	821	26.0	1196	42.5	1015	153.1
Indoors, not specified	1094	0.1	816	1.5	802	4.1	1085	0.2	821	5.9
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	739	4.5	561	16.0	528	23.5	797	7.3	595	51.4
Outdoors, school grounds	1066	0.8	941	1.2	924	0.7	1015	1.1	985	3.8
Outdoors, sports arena	274	1.1	308	3.1	308	8.9	258	0.4	304	13.6
Outdoors, park/golf course	407	0.5	-1	0.1	-1	0.0	403	0.3	395	0.9
Outdoors, other location	732	0.5	623	2.4	594	4.8	702	1.1	623	8.8
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=Men, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1265	141.1	1052	148.6	1011	136.4	1309	158.5	1163	584.6
In transit, bus	2271	4.2	1834	5.7	1789	2.8	2324	6.2	2086	18.9
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	-1	0.0	952	0.1	882	0.3	-1	0.0	899	0.4
Indoors, public garage	635	0.2	-1	0.0	-1	0.0	577	0.1	605	0.3
Outdoors, in a parking lot	762	7.9	656	19.2	644	26.4	762	10.0	681	63.6
Outdoors, along a roadway	1149	32.0	939	74.8	901	125.9	1208	41.9	987	274.7
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1007	0.6	938	1.2	-1	0.0	961	1.7
Outdoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, residential garage	1011	0.1	850	0.2	847	0.1	1044	0.2	939	0.6
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	534	1713.6	414	1636.7	388	1633.0	536	1685.1	469	6668.4
Indoors, office	519	73.8	402	60.5	381	33.5	499	87.2	466	255.0
Indoors, store	554	15.6	435	19.7	408	30.1	623	14.8	483	80.1
Indoors, restaurant	1006	26.2	783	35.8	728	43.5	1085	33.1	880	138.6
Indoors, mfg. facility	661	17.5	527	13.2	521	6.1	649	18.7	610	55.6
Indoors, school	544	7.7	522	2.6	535	1.3	496	4.9	526	16.5
Indoors, church	381	20.0	312	22.9	306	17.4	377	28.2	347	88.6
Indoors, shopping mall	2527	4.4	2055	4.5	1918	9.8	2277	2.8	2119	21.6
Indoors, auditorium	195	24.1	138	30.3	134	17.9	219	39.1	178	111.5
Indoors, health care facility	387	5.6	348	14.0	366	24.2	344	7.0	360	50.8
Indoors, public building	433	2.1	367	4.9	338	5.6	412	1.9	371	14.5
Indoors, other location	1159	16.8	915	18.2	910	10.1	1222	21.4	1075	66.6
Indoors, not specified	-1	0.0	767	1.5	726	1.7	-1	0.0	745	3.2
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	667	22.1	600	46.9	595	63.1	676	19.6	617	151.7
Outdoors, school grounds	1696	2.1	1091	2.9	1051	1.4	2001	3.1	1519	9.6
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	332	19.9	292	16.1	282	7.5	310	22.0	309	65.6
Outdoors, other location	-1	0.0	713	3.0	689	8.0	-1	0.0	696	11.1
Outdoors, not specified	1114	0.7	947	0.9	926	0.4	993	1.0	996	3.0
In transit, train	1263	1.9	1016	0.2	-1	0.0	1324	1.2	1269	3.3
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=Women, 65+

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1248	75.0	1036	82.2	1008	101.2	1226	72.8	1117	331.2
In transit, bus	2149	1.3	1809	2.3	1787	2.9	1979	1.8	1891	8.3
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1084	0.8	-1	0.1	-1	0.0	1054	0.5	1065	1.4
Indoors, public garage	1032	0.4	756	0.7	741	1.8	1156	0.2	812	3.2
Outdoors, in a parking lot	713	2.1	600	4.8	570	7.0	703	2.2	616	16.1
Outdoors, along a roadway	1117	27.9	949	35.2	941	50.9	1107	25.5	1009	139.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
Outdoors, service station	-1	0.0	0	0.1	0	0.4	-1	0.0	0	0.5
Indoors, residential garage	-1	0.0	1007	0.1	-1	0.1	-1	0.0	1036	0.2
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	535	1895.3	418	1896.0	394	1843.8	543	1959.5	474	7594.7
Indoors, office	514	14.0	443	3.5	453	1.8	519	9.1	503	28.4
Indoors, store	533	15.7	436	39.2	425	82.1	499	13.5	446	150.4
Indoors, restaurant	847	19.6	725	23.9	705	28.3	769	20.4	754	92.1
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	-1	0.0	548	0.5	540	0.5	-1	0.0	544	1.0
Indoors, church	417	35.8	323	28.1	322	17.8	413	35.4	379	117.1
Indoors, shopping mall	2737	6.5	2278	8.8	2221	4.5	2519	9.8	2449	29.7
Indoors, auditorium	136	3.4	118	4.5	112	2.3	122	5.0	123	15.2
Indoors, health care facility	397	17.6	357	8.0	348	4.0	412	13.5	390	43.2
Indoors, public building	442	4.8	381	6.6	372	4.3	415	6.1	402	21.8
Indoors, other location	1117	35.2	825	17.3	753	22.4	1163	24.9	996	99.9
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	853	2.1	621	12.8	600	22.3	943	1.9	638	39.2
Outdoors, school grounds	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, sports arena	367	2.6	308	5.4	300	3.7	335	5.7	324	17.4
Outdoors, park/golf course	-1	0.0	326	2.1	307	2.9	-1	0.0	315	5.0
Outdoors, other location	-1	0.0	662	1.7	631	2.9	-1	0.0	642	4.6
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=Outdoor workers

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1290	78.5	998	71.0	978	88.5	1335	73.1	1145	311.1
In transit, bus	-1	0.0	2078	1.0	2066	1.1	-1	0.0	2072	2.1
In transit, truck	1623	65.7	1191	76.7	1114	84.8	1753	62.3	1388	289.5
In transit, van	1175	5.9	983	0.7	-1	0.0	1117	3.7	1141	10.4
Indoors, public garage	869	34.6	619	27.0	597	12.6	952	37.5	806	111.6
Outdoors, in a parking lot	772	19.6	606	28.4	593	24.2	785	25.7	683	97.8
Outdoors, along a roadway	1044	160.7	873	213.2	872	254.9	1055	181.7	947	810.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	1155	38.9	874	7.3	745	2.5	1147	25.2	1111	73.8
Outdoors, service station	0	0.4	0	2.8	0	3.6	0	0.6	0	7.4
Indoors, residential garage	1299	8.4	828	1.0	820	0.3	1495	3.6	1306	13.3
Indoors, in a repair shop	-1	0.0	1603	0.5	1648	0.6	-1	0.0	1626	1.1
Indoors, home	506	1255.8	387	1220.6	361	1141.2	512	1309.4	445	4927.1
Indoors, office	492	51.5	364	41.9	337	27.6	490	37.5	431	158.5
Indoors, store	483	15.8	400	6.8	396	3.6	530	11.0	473	37.2
Indoors, restaurant	805	31.0	707	18.4	731	16.6	884	30.2	798	96.3
Indoors, mfg. facility	587	27.5	501	82.7	512	159.7	585	40.3	525	310.3
Indoors, school	572	11.6	466	15.5	462	7.8	564	17.1	521	52.0
Indoors, church	405	29.4	303	11.8	299	6.0	427	20.9	385	68.1
Indoors, shopping mall	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, auditorium	201	6.2	131	21.6	130	37.3	231	2.3	140	67.5
Indoors, health care facility	-1	0.0	330	5.2	309	12.1	-1	0.0	316	17.2
Indoors, public building	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, other location	1119	37.1	772	11.2	685	5.0	1129	25.6	1045	78.8
Indoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, construction	1163	69.6	957	96.5	916	95.6	1152	67.2	1028	328.8
Outdoors, residential grounds	694	18.0	555	25.4	559	18.2	686	23.5	621	85.2
Outdoors, school grounds	1061	0.7	914	0.9	863	0.4	1047	1.0	983	2.9
Outdoors, sports arena	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, park/golf course	334	10.4	276	15.5	272	8.7	312	17.1	299	51.7
Outdoors, other location	780	182.7	616	180.4	582	195.3	825	191.5	700	749.9
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=Outdoor children

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1309	50.4	977	70.9	952	86.5	1399	58.9	1125	266.7
In transit, bus	2210	19.6	1716	14.5	1684	7.8	2298	20.0	2057	61.9
In transit, truck	1326	0.4	1145	1.3	1142	1.6	1226	0.9	1179	4.2
In transit, van	1218	2.4	902	1.9	906	1.9	1196	2.3	1071	8.4
Indoors, public garage	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, in a parking lot	678	9.2	555	8.7	540	9.5	734	8.0	623	35.3
Outdoors, along a roadway	1076	116.7	829	140.3	811	174.6	1139	119.1	943	550.8
In transit, motorcycle	1577	2.3	1030	0.6	1013	0.2	1841	1.6	1574	4.7
Indoors, service station	-1	0.0	-1	0.0	-1	0.1	-1	0.0	834	0.1
Outdoors, service station	0	0.3	0	0.3	0	0.3	0	0.2	0	1.1
Indoors, residential garage	1078	0.3	766	0.6	738	0.5	1296	0.4	921	1.8
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	501	1415.9	382	1425.3	365	1448.1	505	1432.5	438	5721.8
Indoors, office	610	2.9	386	4.4	384	10.2	670	2.0	448	19.6
Indoors, store	547	24.0	389	23.5	381	28.1	556	22.9	464	98.5
Indoors, restaurant	1019	8.7	730	15.5	701	18.9	1075	12.1	841	55.2
Indoors, mfg. facility	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, school	583	372.3	467	261.4	463	138.4	581	374.2	541	1146.4
Indoors, church	387	15.9	289	14.3	283	15.4	398	15.4	341	61.0
Indoors, shopping mall	2086	4.2	1864	2.9	1751	1.7	2058	3.3	1977	12.1
Indoors, auditorium	180	4.3	123	8.3	120	8.9	201	7.7	151	29.2
Indoors, health care facility	354	11.1	295	13.1	300	9.3	393	15.6	340	49.0
Indoors, public building	417	8.3	356	8.3	356	8.5	447	8.3	394	33.5
Indoors, other location	980	9.4	769	10.0	759	11.4	943	10.2	858	40.9
Indoors, not specified	-1	0.0	919	0.2	909	0.2	-1	0.0	914	0.4
Outdoors, construction	-1	0.0	935	0.6	919	0.7	-1	0.0	927	1.3
Outdoors, residential grounds	695	35.5	533	65.6	519	99.6	744	37.7	585	238.4
Outdoors, school grounds	1079	31.5	889	29.4	861	16.0	1060	35.8	992	112.7
Outdoors, sports arena	329	10.5	271	16.0	270	20.1	363	12.3	300	58.9
Outdoors, park/golf course	342	3.1	267	23.5	256	44.0	374	5.3	271	75.9
Outdoors, other location	726	0.6	604	22.5	582	45.6	701	1.1	592	69.7
Outdoors, not specified	-1	0.1	-1	0.0	-1	0.0	-1	0.1	1676	0.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=Heart and respiratory

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990
 Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1285	53.4	999	66.3	971	74.3	1299	52.3	1116	246.2
In transit, bus	2178	7.8	1677	8.0	1614	4.7	2209	9.4	1966	29.8
In transit, truck	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, van	1344	2.9	953	5.0	924	3.1	1455	6.2	1194	17.2
Indoors, public garage	-1	0.0	742	0.2	718	0.5	-1	0.0	724	0.7
Outdoors, in a parking lot	741	4.8	594	6.3	564	7.5	770	4.6	650	23.1
Outdoors, along a roadway	1143	29.5	889	43.9	876	61.9	1194	28.2	983	163.5
In transit, motorcycle	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, service station	-1	0.0	1021	0.2	1034	0.2	-1	0.0	1028	0.5
Outdoors, service station	-1	0.0	-1	0.1	0	0.2	-1	0.0	0	0.3
Indoors, residential garage	884	1.2	767	0.9	749	0.5	887	1.2	839	3.8
Indoors, in a repair shop	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Indoors, home	512	1771.8	396	1736.9	376	1763.4	519	1795.8	451	7067.9
Indoors, office	481	81.6	394	75.4	379	63.0	476	83.2	437	303.3
Indoors, store	492	22.3	407	26.2	402	31.3	493	19.9	442	99.7
Indoors, restaurant	945	27.2	708	26.3	682	35.5	956	23.5	809	112.6
Indoors, mfg. facility	620	21.4	494	26.1	484	17.0	605	24.4	553	88.9
Indoors, school	598	72.8	487	62.4	483	32.6	600	77.7	555	245.4
Indoors, church	380	24.3	284	27.2	273	16.1	363	34.9	332	102.5
Indoors, shopping mall	2665	1.5	2215	3.5	2189	5.1	2543	2.3	2320	12.4
Indoors, auditorium	203	1.6	131	2.1	129	1.0	233	2.3	180	7.0
Indoors, health care facility	460	12.2	332	11.0	313	12.8	471	10.9	392	46.9
Indoors, public building	397	1.0	377	4.1	379	10.4	393	1.1	381	16.6
Indoors, other location	1037	1.5	837	6.3	770	8.5	1075	2.1	849	18.4
Indoors, not specified	926	0.5	788	1.7	793	3.8	1007	0.2	808	6.1
Outdoors, construction	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
Outdoors, residential grounds	633	10.8	552	30.5	537	42.1	682	17.5	577	100.9
Outdoors, school grounds	1184	4.9	926	5.8	874	2.9	1228	6.6	1080	20.3
Outdoors, sports arena	490	0.1	271	1.6	255	1.2	567	0.2	296	3.1
Outdoors, park/golf course	292	4.6	305	2.0	331	4.0	270	2.9	301	13.4
Outdoors, other location	629	0.4	609	4.0	595	4.4	570	0.6	601	9.5
Outdoors, not specified	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.1
In transit, train	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0
In transit, airplane	-1	0.0	-1	0.0	-1	0.0	-1	0.0	-1	0.0

Washington DC: City-wide, Demographic Group=All persons

HAPEM-MS3 Microenvironmental Concentration and Duration by Calendar Quarter and Annually for 1990

Concentration in $\mu\text{g}/\text{m}^3$, Duration in Hours

Microenvironment	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Annual	
	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours	Conc	Hours
In transit, car	1269	105.7	992	101.8	964	102.2	1335	105.0	1143	414.7
In transit, bus	2211	5.6	1714	5.0	1663	3.5	2291	5.8	2015	19.9
In transit, truck	1499	8.0	1198	7.0	1167	6.1	1584	7.4	1376	28.5
In transit, van	1267	3.2	992	4.5	967	4.5	1303	4.4	1120	16.7
Indoors, public garage	751	4.0	607	2.9	603	1.7	773	4.0	705	12.7
Outdoors, in a parking lot	731	7.7	587	10.8	571	13.1	761	8.1	645	39.6
Outdoors, along a roadway	1087	45.6	862	69.1	843	87.6	1115	52.0	948	254.2
In transit, motorcycle	1617	0.1	1025	0.8	969	1.6	-1	0.1	1046	2.6
Indoors, service station	1077	3.3	877	1.9	847	1.0	1081	3.0	1012	9.2
Outdoors, service station	0	0.2	0	0.5	0	0.5	0	0.2	0	1.4
Indoors, residential garage	1077	1.1	787	1.2	759	0.7	1115	1.5	962	4.6
Indoors, in a repair shop	1645	1.4	1349	0.2	-1	0.0	1597	0.8	1606	2.4
Indoors, home	510	1557.3	391	1547.0	371	1556.5	515	1585.7	447	6246.4
Indoors, office	480	144.2	391	112.6	381	90.6	477	138.2	440	485.6
Indoors, store	507	41.3	406	43.9	393	47.0	516	41.8	453	174.0
Indoors, restaurant	941	29.1	725	26.6	699	26.4	977	27.5	839	109.6
Indoors, mfg. facility	599	13.7	484	19.0	478	19.1	598	15.6	532	67.4
Indoors, school	590	80.1	475	74.8	469	48.5	589	89.3	540	292.8
Indoors, church	395	13.2	299	14.4	295	13.0	408	15.5	351	56.1
Indoors, shopping mall	2465	3.2	2013	2.7	1949	2.3	2445	3.0	2244	11.2
Indoors, auditorium	171	6.1	124	6.8	122	7.5	180	7.0	148	27.4
Indoors, health care facility	403	20.5	319	19.4	313	17.3	410	21.7	364	78.9
Indoors, public building	457	5.2	362	7.3	349	9.8	486	5.5	400	27.8
Indoors, other location	1063	32.8	836	28.0	808	23.3	1102	31.4	967	115.4
Indoors, not specified	970	1.7	784	0.7	792	0.7	944	1.1	902	4.3
Outdoors, construction	1164	1.4	958	1.9	926	1.5	1155	1.6	1042	6.4
Outdoors, residential grounds	681	11.2	557	34.9	546	60.0	703	14.4	580	120.4
Outdoors, school grounds	1141	3.8	934	5.0	915	3.4	1130	4.8	1031	17.0
Outdoors, sports arena	328	1.7	285	4.8	280	7.7	356	1.7	295	15.9
Outdoors, park/golf course	331	2.9	278	12.9	270	22.8	343	4.2	284	42.8
Outdoors, other location	784	4.4	619	14.7	595	26.6	815	5.0	640	50.7
Outdoors, not specified	1158	0.1	1018	0.2	1003	0.1	1177	0.2	1089	0.7
In transit, train	1406	0.5	1030	0.3	963	0.2	1589	0.4	1316	1.3
In transit, airplane	-1	0.0	0	0.4	0	0.9	-1	0.0	0	1.2