

2000 EQUIPMENT INDEX FACTORS, PERCENT GOOD FACTORS, AND VALUATION FACTORS TABLES

(Use for Lien Date January 1, 2000)

INDEX FACTORS USED TO ESTIMATE REPLACEMENT COST NEW

Table 1: Commercial Equipment Index Factors

These factors are derived using data provided courtesy of the Marshall and Swift Publication Co., *Marshall Valuation Service*. Indexes are to be used for each appropriate class of equipment.

Table 2: Industrial Machinery and Equipment Index Factors

These indexes are derived from data in the Bureau of Labor and Statistics' *Producer Price Indexes*.

Table 3: Agricultural and Construction Equipment Index Factors

These indexes are derived from data in the Bureau of Labor Statistics' *Producer Price Indexes*.

PERCENT GOOD FACTORS USED TO ESTIMATE REPLACEMENT COST NEW LESS NORMAL DEPRECIATION

Table 4: Machinery and Equipment Percent Good Factors

These factors are derived from a system developed by the Iowa State University Engineering Research Center. The rate of return used to compute these factors is calculated annually and is shown on the table.

Table 5: Agricultural and Construction Mobile Equipment Percent Good Factors

These factors are derived from a detailed analysis of used equipment sales data.

VALUATION FACTOR TABLES

Table 6: Computer Valuation Factors

These factors are intended to be applied directly to historical costs of non-production computers and computers designed for general business purposes, including related equipment.

Table 7: Semiconductor Manufacturing Equipment Valuation Factors

These factors are intended to be applied directly to historical costs of semiconductor manufacturing equipment.

TABLE 1: COMMERCIAL EQUIPMENT INDEX FACTORS

1999 COST = 100

Year	Bank	Garage	Hospital	Hotel	Laundry & Dry Cleaning	Library	Office	Rest- aurant	Retail	Theater	Ware- house	Service	Year
1999	100	100	100	100	100	100	100	100	100	100	100	100	1999
1998	100	100	100	101	100	100	100	101	100	100	100	100	1998
1997	101	101	101	102	101	101	101	102	101	101	100	101	1997
1996	102	102	103	104	103	102	102	104	103	102	102	103	1996
1995	103	104	104	105	104	104	104	105	104	104	103	104	1995
1994	106	107	109	109	108	107	107	109	107	107	106	107	1994
1993	110	110	112	113	111	111	110	113	111	111	109	111	1993
1992	112	112	114	115	113	113	111	115	114	113	112	113	1992
1991	114	114	115	117	114	115	112	117	116	114	113	115	1991
1990	116	116	118	120	116	117	114	120	118	116	115	117	1990
1989	118	119	121	124	120	120	117	124	121	119	118	120	1989
1988	124	125	128	130	126	126	122	131	127	126	123	126	1988
1987	129	131	134	136	131	132	127	136	132	131	127	131	1987
1986	131	132	136	139	133	134	130	139	135	133	129	134	1986
1985	133	133	138	141	134	135	131	142	136	135	130	135	1985
1984	134	135	141	144	136	137	133	145	138	137	132	137	1984
1983	139	139	145	148	140	141	137	149	143	142	135	142	1983
1982	142	142	148	151	143	145	140	152	146	145	136	145	1982
1981	147	149	155	159	149	151	145	160	152	151	142	151	1981
1980	160	165	171	174	165	165	158	176	166	166	157	166	1980
1979	173	183	187	190	181	179	171	192	179	180	171	181	1979
1978	188	200	205	208	197	196	186	211	196	197	187	197	1978
1977	202	215	220	224	211	212	198	227	212	212	201	212	1977
1976	211	226	231	235	221	222	205	239	223	222	212	222	1976
1975	224	239	244	249	234	235	217	255	238	235	230	236	1975
1974	247	267	269	273	262	259	240	282	258	259	250	261	1974
1973	284	307	309	308	306	301	274	324	298	300	283	299	1973
1972	295	317	322	321	316	314	285	336	310	312	290	311	1972
1971	304	330	335	330	327	322	292	344	318	320	300	320	1971
1970	320	350	358	345	346	338	307	359	334	337	320	338	1970
1969	342	370	383	364	367	360	326	376	355	358	338	358	1969
1968	357	385	401	382	381	376	341	392	371	374	350	374	1968
1967	371	398	420	398	396	393	356	407	387	390	362	389	1967
1966	389	410	437	416	410	412	371	423	404	407	373	405	1966
1965	401	422	451	426	420	420	378	432	411	415	382	414	1965
1964	405	431	457	430	422	423	381	434	415	418	385	418	1964
1963	408	437	463	432	425	426	384	435	418	421	387	421	1963
1962	409	439	464	437	425	428	387	439	421	424	389	424	1962
1961	411	443	467	440	426	430	389	442	423	426	390	426	1961
1960	409	446	468	442	419	431	391	441	425	428	387	426	1960
1959	415	451	473	446	418	435	394	442	428	431	388	429	1959
1958	421	462	481	449	423	437	396	448	431	434	399	435	1958
1957	434	476	493	459	427	452	409	469	445	448	411	448	1957

TABLE 2: INDUSTRIAL MACHINERY AND EQUIPMENT INDEX FACTORS

1999 COST = 100

YEAR	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
1999	100	100	100	100	100	100
1998	100	100	101	101	101	101
1997	101	101	102	102	103	102
1996	102	101	103	103	104	103
1995	104	103	105	105	107	106
1994	107	105	108	108	110	109
1993	113	108	112	112	115	114
1992	114	109	114	114	117	116
1991	114	112	116	116	120	119
1990	116	115	120	120	125	124
1989	120	119	124	125	129	129
1988	128	124	130	130	135	134
1987	132	126	133	133	139	137
1986	133	128	136	136	142	139
1985	134	130	138	139	146	142
1984	138	133	142	143	151	146
1983	139	136	145	146	155	148
1982	141	141	149	152	161	153
1981	153	153	162	165	176	168
1980	168	171	181	185	198	188
1979	185	188	199	204	218	209
1978	202	205	217	223	240	231
1977	215	219	234	241	261	251
1976	225	232	247	256	279	268
1975	237	249	266	277	304	290
1974	317	311	338	348	378	368
1973	336	327	359	370	407	391
1972	344	334	367	379	416	401
1971	358	342	378	389	428	412
1970	386	367	408	419	461	442
1969	399	379	424	435	482	459
1968	408	392	440	453	505	477
1967	416	405	454	470	525	496
1966	428	418	469	486	545	518
1965	435	423	476	495	556	531
1964	438	427	481	501	565	540
1963	438	428	485	506	574	543
1962	435	430	487	510	581	551
1961	428	429	485	510	581	554

**TABLE 3: AGRICULTURAL AND CONSTRUCTION EQUIPMENT INDEX
FACTORS**

1999 COST = 100

Year	Agricultural	Construction
1999	100	100
1998	102	101
1997	103	104
1996	102	104
1995	106	107
1994	109	110
1993	115	113
1992	118	116
1991	124	120
1990	127	124
1989	134	130
1988	139	134
1987	138	137
1986	139	139
1985	139	142
1984	143	143
1983	147	146
1982	155	153
1981	172	168
1980	193	189
1979	212	208
1978	229	229
1977	247	248
1976	269	263
1975	294	298
1974	364	378
1973	383	401
1972	397	411
1971	405	424
1970	434	459
1969	453	480
1968	471	507
1967	486	525
1966	501	542

TABLE 4: MACHINERY AND EQUIPMENT PERCENT GOOD FACTORS

INDIVIDUAL PROPERTIES--AVERAGE SERVICE LIFE
7.5% Rate of Return

Year	Acq'd	AGE	3	4	5	6	7	8	9	10	11	12	13	14	15	17	18	20	22	25	30	35	40	AGE	Year	Acq'd
1999	1	67	76	81	85	87	89	91	92	93	94	94	95	96	96	97	97	98	98	99	99	99	1	1999	1999	
1998	2	38	53	63	69	74	78	81	84	86	87	89	90	91	92	93	94	95	96	97	98	99	2	1998	1998	
1997	3	16	32	45	54	62	67	72	75	78	81	83	84	86	88	89	91	93	94	96	97	98	3	1997	1997	
1996	4	6	17	30	40	49	56	62	67	70	74	76	79	81	84	86	88	90	92	94	96	97	4	1996	1996	
1995	5		8	18	28	37	46	52	58	63	67	70	73	76	80	82	85	87	90	93	95	96	5	1995	1995	
1994	6		2	10	18	27	36	43	49	55	60	64	67	70	75	78	81	84	87	91	94	95	6	1994	1994	
1993	7			5	11	19	27	34	41	47	53	57	61	65	71	73	77	81	85	89	92	94	7	1993	1993	
1992	8				6	12	19	26	34	40	46	51	55	59	66	69	74	78	82	88	91	94	8	1992	1992	
1991	9				3	8	13	20	27	33	39	44	49	54	61	64	70	74	80	86	90	93	9	1991	1991	
1990	10					4	9	15	21	26	33	38	43	48	56	60	66	71	77	84	88	92	10	1990	1990	
1989	11					1	6	11	16	21	27	32	38	43	51	55	62	67	74	82	87	90	11	1989	1989	
1988	12						3	7	12	17	22	27	32	38	47	51	58	64	71	80	85	89	12	1988	1988	
1987	13							4	9	13	17	22	27	32	42	46	54	60	68	78	84	88	13	1987	1987	
1986	14								1	6	10	13	18	23	28	37	42	50	57	65	75	82	14	1986	1986	
1985	15									3	7	11	15	19	24	33	37	46	53	62	73	81	15	1985	1985	
1984	16									1	4	8	12	16	20	29	33	42	49	59	71	79	16	1984	1984	
1983	17										2	6	9	13	17	25	29	38	45	56	68	77	17	1983	1983	
1982	18											3	7	10	14	21	26	34	42	52	66	75	18	1982	1982	
1981	19											1	5	8	11	18	22	30	38	49	63	73	19	1981	1981	
1980	20												2	5	9	15	19	27	34	46	60	71	20	1980	1980	
1979	21													4	7	13	16	24	31	42	58	69	21	1979	1979	
1978	22													1	4	11	14	21	28	39	55	67	22	1978	1978	
1977	23														2	9	12	19	25	36	52	65	23	1977	1977	
1976	24														1	7	10	16	23	33	50	63	24	1976	1976	
1975	25															5	8	14	20	30	47	60	25	1975	1975	
1974	26															2	6	12	18	28	44	58	26	1974	1974	
1973	27																4	11	15	25	41	56	27	1973	1973	
1972	28																2	9	14	23	39	53	28	1972	1972	
1971	29																	7	12	21	36	51	29	1971	1971	
1970	30																	5	10	19	34	48	30	1970	1970	
1969	31																	3	8	17	31	46	31	1969	1969	
1968	32																	1	6	15	28	44	32	1968	1968	
1967	33																		5	14	27	41	33	1967	1967	
1966	34																		2	12	25	39	34	1966	1966	
1965	35																		1	10	22	37	35	1965	1965	
1964	36																			8	21	34	36	1964	1964	
1963	37																			6	19	32	37	1963	1963	
1962	38																			4	17	30	38	1962	1962	
1961	39																			3	16	28	39	1961	1961	
1960	40																			1	15	27	40	1960	1960	

NO MINIMUM PERCENT GOOD INTENDED

**TABLE 5: AGRICULTURAL AND CONSTRUCTION MOBILE EQUIPMENT
PERCENT GOOD FACTORS**

Year Acquired	Age	CONSTRUCTION MOBILE EQUIPMENT		AGRICULTURAL MOBILE EQUIPMENT				Age
		New	Used	EXCEPT HARVESTERS		HARVESTERS		
				New	Used	New	Used	
1999	1	74	91	78	92	74	90	1
1998	2	66	81	70	82	64	78	2
1997	3	60	74	64	75	57	69	3
1996	4	55	68	58	68	50	60	4
1995	5	51	62	52	62	43	53	5
1994	6	47	58	47	56	38	46	6
1993	7	42	52	42	50	33	40	7
1992	8	38	47	38	45	29	35	8
1991	9	35	43	34	40	25	30	9
1990	10	31	38	30	36	21	26	10
1989	11	28	34	27	32	19	23	11
1988	12	26	32	25	30	17	21	12
1987	13	24	29	23	28	15	18	13
1986	14	22	27	22	26		16	14
1985	15	20	25	20	23		14	15
1984	16	19	23	18	21		14	16
1983	17	16	20		19			17
1982	18	13	17		17			18
1981	19	12	13					19
1980	20	11	11					20
1979	21		9					21

NO MINIMUM PERCENT GOOD INTENDED

USE OF TABLE 5

The percent good table is designed to assist the appraiser in determining total loss of value once replacement cost new (RCN) has been determined for the captioned equipment.

The table, derived from used equipment sales data, identifies a pattern of depreciation for three groups of equipment. Within each group two columns of percent good figures, "New" and "Used," are listed. The column labeled "New" should be used to measure depreciation if the subject property was acquired new; conversely, the column labeled "Used" should be applied when the equipment was purchased used.

TABLE 6: COMPUTER VALUATION FACTORS

Year Acquired	Age	PERSONAL COMPUTERS (\$25,000 or less)	MID-RANGE COMPUTERS (\$25,000.01 to \$500,000)	MAINFRAME COMPUTERS (\$500,000.01 or more)
1999	1	66	73	79
1998	2	39	47	54
1997	3	24	30	35
1996	4	15	19	22
1995	5	10	12	14
1994	6	6	8	9
1993	7	4	5	6
1992	8	2	3	4
1991	9	2	2	2

USE OF TABLE 6

Computer valuation tables were originally developed by the Board in 1995, and amended in 1997, by analyzing resale values of personal, mid-range, and mainframe computers as compared to original costs.¹ These factors are intended to be applied directly to historical costs of non-production computers and computers designed for general business purposes, including related equipment. Non-production computers do not include computers embedded in machinery and do not include equipment or computers specifically designed for use in any other application directly related to manufacturing. (No estimates of economic lives are stated or implied, since the tables were not derived by analyzing price indexes and economic life patterns.)

¹ Prior to January 2000, computer valuation tables were distributed via Letter to Assessor (LTA). For more information regarding the original study and development of these factors, please refer to LTA's 97/18, 96/27, and 96/19.

TABLE 7: SEMICONDUCTOR MANUFACTURING EQUIPMENT VALUATION FACTORS

Year Acquired	Age	SEMICONDUCTOR MANUFACTURING EQUIPMENT
1999	1	80
1998	2	62
1997	3	47
1996	4	34
1995	5	24
1994	6	16
1993	7	10

USE OF TABLE 7

The Board recommends the above table for use when valuing semiconductor manufacturing equipment. The table is based on a 6.5 year economic life. These factors are intended to be applied directly to historical costs.²

² For more information regarding the original study and development of these factors, please refer to LTA's 90/36, 92/34, and 94/24.