U.S. Department of Health, Education, and Welfare SOCIAL SECURITY ADMINISTRATION

COMPUTING A SOCIAL SECURITY BENEFIT AFTER THE 1977 AMENDMENTS

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Introduction

The 1977 Amendments to the Social Security Act brought about many changes involving both financing and benefits. In particular, a new "decoupled" or wage-indexed method of computing benefits was added for new beneficiaries beginning in 1979, and two existing methods were changed. This Actuarial Note will explain how to use the wage-indexed method to compute a Primary Insurance Amount (PIA) and Maximum Family Benefit (MFB), as well as when to use that method and when to use one of the methods carried over from the previous law. Other changes brought about by the Amendments, though significant, will not be discussed here.

Since 1979, there have been five basic types of benefit computations:

- (1) the PIA table method, which has been in the law in substantially the same form since the 1950 Amendments;
- (2) the wage-indexed formula method, introduced in the 1977 Amendments;
- (3) the transitional guarantee method, also introduced in the 1977 Amendments;
- (4) the old-start method, which was first included in the 1939 Amendments and changed by the 1950, 1967, and 1977 Amendments;
- (5) the special minimum method, which was introduced in the 1972 Amendments and changed by the 1973 and 1977 Amendments.

A potential beneficiary receives the highest benefit yielded by any of the methods which apply in his case. (For people turning 62 in 1975 and later, and for disability and survivor cases where the worker is under age 62, benefit computations do not depend on the sex of the worker. To simplify the exposition, only the male gender will be used in the following discussion.)

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Determining Applicability of Each Method

One or more of the first three methods may apply to a new beneficiary depending on the type of benefit and year of eligibility. For purposes of computing benefits, "year of eligibility" means (1) for retirement benefits, the year of attaining age 62, (2) for disability benefits, the earlier of the year of onset of disability or the year attaining age 62, and (3) for survivor benefits, the earlier of the year of death or the year attaining age 62.

The applicability of each of the first three methods for retirement benefits will be discussed first. Each method's applicability depends on the year of the worker's attainment of age 62. The PIA table method applies to workers attaining age 62 before 1979, the wage-indexed formula applies to workers attaining age 62 in 1979 or later, and the transitional guarantee applies to workers attaining age 62 between the years 1979 and 1983, inclusive.

Next to be discussed is the applicability of each of the first three methods to the computation of disability benefits. The PIA table method applies if the year of eligibility is before 1979, and the wage-indexed formula applies if the year of eligibility is 1979 or later. In no case may the transitional guarantee be used.

Problems arise in certain cases when applying the above rules to determine the year of eligibility and the applicability of the transitional guarantee. Consider first the case where a worker attaining age 62 before 1979 is eligible for both a retirement benefit and a disability benefit. Such a worker would have his benefit calculated under the PIA table method, even if he becomes disabled in 1979 or later, because the year of eligibility (for disability) cannot be after the year of attainment of age 62. Next consider the more involved case of someone attaining age 62 in the years 1979 to 1983, inclusive, and becoming disabled in 1979 or later. Applying the above rules, he may use the wage-indexed formula, and not the transitional guarantee, for calculating his disability benefit. However, he may elect instead to apply for a retirement benefit, if he is eligible, in which case he may also use the transitional guarantee. The disadvantage in such a procedure is that the retirement benefit is subject to a reduction of 5/9 of one percent per month for retirement before age 65. For instance, for disability at age 62, the disability benefit would be 100 percent of the wageindexed formula PIA, whereas the retirement benefit would be 80 percent of the transitional guarantee PIA (or 80 percent of the wage-indexed formula PIA, if that were greater). Possible advantages in selecting the retirement benefit are that the transitional guarantee PIA may be significantly greater than the wage-indexed formula PIA, and the five-month waiting period which applies in disability cases does not apply in retirement cases.

Next to be considered is the applicability of each of the first three methods to the computation of survivor benefits. The PIA table method and wage-indexed formula method apply in a manner analogous to their application

to disability benefits, but the transitional guarantee, which cannot be applied to disability benefits, can be applied to the computation of survivor benefits in some cases. The transitional guarantee applies to the benefit computation of the survivors of workers attaining age 62 between the years 1979 and 1983, inclusive, but only if the worker survived to the month of attaining age 62.

Finally, the applicability of the last two methods will be discussed. The old-start method is not restricted to certain groups of beneficiaries based on year of eligibility alone; however, PIA's based on the old-start method will become rare beginning in the 1990's because the method requires that there be some earnings before 1951. The special minimum method has no restrictions at all as to who may use it, but in actual practice it yields PIA's higher than the other methods only for workers with many years of relatively low earnings.

Method 1 - The PIA Table

When using this method, a PIA is linked to its corresponding average monthly wage (AMW) and MFB by way of the PIA table. The table is updated every June if the Consumer Price index (CPI) has risen at least three percent since the measuring period ended for the last increase. If there is an increase in the earnings base (effective at the beginning of a calendar year), the PIA table is extended to a higher range of AMW's (up to an AMW of one-twelfth of the new base).

To calculate a PIA under this method an AMW is first calculated as the monthly average of the highest "n" years of earnings after 1950, where "n" is determined by the year of birth of the individual (and by sex, for workers born before 1913). For retirees, "n" equals the number of years elapsed after 1955 (or year attaining age 26, if later) and before the year attaining age 62, although a slightly different rule applies for males attaining age 62 before 1975. For instance, a retiree reaching age 63 in 1979 has an "n" of 22 (the number of years between 1955 and 1978, exclusive).

Once the AMW is calculated, the corresponding PIA and MFB may be found in the applicable PIA table. Table 1 presents the January 1979 PIA table, which was effective through May 1979.1/ (The PIA table effective from June 1978 to December 1978 is the same as Table 1, except that it ends at an AMW of \$1,475. The June-December 1978 PIA table will be effective for a longer time in the transitional guarantee method, as discussed below.) Table 2 shows the PIA table method benefit calculation for an age 63 retiree in the first half of 1979, assuming he has maximum taxable earnings in every year.

Disability and survivor cases are handled similarly to retirement cases when using this method, with the modification that the AMW is based on an "n" calculated as if the worker turned 62 in the year of disablement or death.

^{1/} The amounts in the PIA table can be approximated by formulas for the PIA and the MFB. For a summary of all of the approximate formulas through 1979, see *History of the Provisions of Old-Age*, *Survivors*, *Disability*, and *Health Insurance*, 1935-1979, January 1980, Social Security Administration, Baltimore, Md.

Method 2 - The Wage-Indexed Formula

This method introduces a number of complexities into the benefit calculation. The same "n" that would have been used under prior law is used here to compute an average monthly wage, but the average is now of indexed earnings rather than actual dollar amounts of earnings. Indexing attempts to make earnings of different years comparable by adjusting earnings of earlier years for changes in average wages. Table 3 gives the set of average annual wages which is currently used for indexing.

For an example of indexing, consider an age 62 retiree in October of 1979, the first year an age 62 retiree could use the wage-indexed formula. Again assume the retiree has maximum earnings in every year. The year to which earnings are indexed (the base year for indexing) is 1977 in this case, since the year to which earnings are indexed is two years before eligibility in all cases. (The two-year lag is necessary to provide time to collect average earnings data.) Therefore, indexed 1976 earnings equal actual 1976 earnings of \$15,300 multiplied by average 1977 earnings (15300 x 9779.44, or 149,625,432.0000), divided by average 1976 earnings, (149,625,432.0000/9226.48), or \$16,216.96. Earnings after the base year for indexing are not indexed. Therefore, in this example, earnings in 1978 and later are not indexed. Table 4 completes the calculation of the Average Indexed Monthly Earnings (AIME).

After the AIME is calculated, the PIA is determined. Rather than using the PIA table as in prior law, a three-step formula is used to calculate a PIA based on the AIME (the result is called the AIME PIA). The two dollar amounts in the formula depend on the year of eligibility. For persons becoming eligible in 1979, such as the age 62 retiree in October 1979, the formula to compute the AIME PIA is

90% of the first \$180 of AIME, plus 32% of AIME in excess of \$180 but less than \$1085, plus 15% of AIME in excess of \$1085.

The result of the formula is rounded up to a multiple of \$.10, giving the AIME PIA.

The AIME MFB is calculated using a four-step formula based on the AIME PIA. Again, the dollar amounts in the formula depend on the year of eligibility, with the formula for persons becoming eligible in 1979 being

150% of the first \$230 of PIA, plus 272% of PIA in excess of \$230 but less than \$332, plus 134% of PIA in excess of \$332 but less than \$433, plus 175% of PIA in excess of \$433.

The PIA and MFB for the month of retirement are calculated from the AIME PIA and AIME MFB (which are determined for January of the year of eligibility) by applying in sequence all the intervening annual general

(CPI) benefit increases rounding up to the next multiple of \$.10 each time. Table 4 completes the calculation of the PIA and MFB for the example, applying the June 1979 benefit increase of 9.9 percent. Benefit increases occur in June, so that workers retiring in June or later receive the June general benefit increase in the year of retirement in the initial PIA calculation. Thus, everyone born in one particular calendar year becomes eligible for the same benefit increases, regardless of month of retirement, or month of birth, since a worker retiring before June receives the June general benefit increase by virtue of being a beneficiary on the rolls, and a worker retiring in June or later receives the June general benefit increase in the initial PIA calculation.

For persons becoming eligible for benefits in years after 1979, the PIA formula dollar amounts (\$180 and \$1085 in 1979) and MFB formula dollar amounts (\$230, \$332, and \$433 in 1979) are adjusted by the change in average earnings, with a two-year lag. For instance, the 1980 PIA formula dollar amounts (bend points) equal the \$180 and \$1085 amounts increased by the growth in average wages from 1977 to 1978 (\$10,556.03/9,779.44), resulting in \$194.29 and \$1,171.16. Those amounts are rounded to the nearest whole dollars, \$194 and \$1171. Similarly, the 1980 MFB formula bend points are calculated to be \$248, \$358, and \$467.

As a further example, Table 5 shows the PIA calculation for a retiree aged 62 (born in January 1918) and retiring in January of 1980 with maximum earnings in all previous years. The year of eligibility for benefits is 1980; therefore, the 1980 PIA and MFB formula bend points are used. The final result in this case is that the PIA and MFB are \$492.80 and \$862.50, respectively.

A final test in the wage-indexed method, in whatever year is being considered, is that if the calculated PIA is less than the minimum PIA of \$122, the PIA will be that minimum. (The \$122 minimum PIA applies only to the decoupled formula method. The PIA table method and transitional guarantee method have different minimums.) General benefit increases do not apply from the year attaining age 62 for the minimum benefit, but only since first receipt of benefits, or from the year attaining age 65 if the worker has not retired by that time.

Method 3 - The Transitional Guarantee

The transitional guarantee method may be used by persons turning 62 in the five-year period beginning in 1979 (born in the years 1917 to 1921, inclusive), regardless of the year of retirement. This method is a mixture of a method 1 and a method 2 calculation, in that the PIA is found from a PIA table after which the MFB is found from the wage-indexed method MFB formula.

When finding a PIA, the PIA table used is "frozen" in two ways. First, no earnings in the year of attainment of age 62 or later may be used to compute an AMW. Second, the June-December 1978 PIA table, with general benefit increases applied to the PIA so determined only for the year attaining age 62 and later, is used. (As noted earlier, the June-December 1978 PIA table is the same as the one for January-May 1979, Table 1, for AMW's up to \$1475.) By comparing the decoupled method with the transitional guarantee, one can see that the same benefit increases apply to the initially calculated PIA, whether it is the AIME PIA of the decoupled method or the December 1978 PIA of the transitional guarantee. In both cases, benefit increases apply in the year the worker attains age 62, whether or not he is retired, and regardless of the month of birth or the month of retirement, and in every year thereafter.

Table 6 represents the computation of a transitional guarantee PIA and MFB for the age 62 retiree in October 1979 (the same retiree as in Table 4).

After comparing the resulting PIA in Table 6 to that in Table 4, the age 62 retiree in October 1979 would receive the transitional guarantee PIA of \$534.30, since it is greater than the wage-indexed formula PIA of \$498.00. To further illustrate the transitional guarantee and wage-indexed formula methods, suppose that this same retiree continued to work in 1979, earned the maximum of \$22,900, and retired in January 1980. Then, after substituting \$22,900 in the AIME calculation in Table 4 for the lowest year of indexed earnings (\$11,180.15 in 1958), his AIME would be increased to \$1,138, and his January 1980 wage-indexed formula PIA and MFB would be \$505.20 and \$884.10, respectively. His transitional guarantee PIA and MFB in Table 6 would not change, since the \$22,900 was earned in the year of attaining age 62 and would therefore not be available for a transitional guarantee calculation. As a result, the retiree in January 1980 would still receive the transitional guarantee PIA of \$534.30.

Table 7 presents the computation of a transitional guarantee PIA and MFB for the age 62 retiree in January 1980 (the same retiree as in Table 5). Again this retiree gets the transitional guarantee PIA of \$503.40, since it is greater than the decoupled formula PIA of \$492.80.

One of the three methods discussed above (the PIA table, the wage-indexed formula, and the transitional guarantee) will be the applicable method (giving the largest PIA) for the large majority of future beneficiaries. However, for completeness, the last two methods will now be briefly described.

Method 4 - Old-Starts

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The old-start method has evolved from the original 1939 Act formula which related an AMW to a Primary Insurance Benefit (PIB). This method became "old-start" when the 1950 Act introduced the "new-start" formula

(the current PIA table method), which involved only earnings after 1950. At that time, the old-start method was allowed as an alternative for people with substantial earnings before 1951, and required the tabulation of year-by-year earnings from 1937-1950.

The 1967 Amendments simplified the procedure by requiring only the sum of an individual's pre-1951 earnings and an assumption as to their yearly distribution. The 1967 old-start formula was to be effective for people becoming eligible before 1978. Therefore, had there been no 1977 Amendments, it would have been necessary, beginning in 1978, to return to the pre-1967 old-start formula.

The 1977 Amendments avoided this complication by introducting a new simplified old-start formula for people becoming eligible in 1978 and later. The formula relates a calculated old-start AMW to a PIB (Primary Insurance Benefit), which in turn is linked via the PIA table to a PIA. For instance, a PIB of \$45.60 (the maximum possible) was linked to a PIA of \$251.80 and an MFB of \$384.90 in the June-December 1978 PIA table.

Since 1979, the old-start method has been similar to the transitional guarantee method in two ways. First, the PIB's are permanently related to corresponding PIA's by the June-December 1978 PIA table, whereas in the past the PIB's and PIA's were related by the latest updated PIA table. Second, for people becoming eligible in 1979 and later, earnings in and after the year of eligibility cannot be used in an old-start calculation. Such earnings can be used only under the wage-indexed formula. Unlike the transitional guarantee, however, there is no five-year limit on use of the old-start method; anyone with earnings prior to 1951, including those disabled, may use it if it results in a higher PIA than other applicable methods.

Method 5 - Special Minimum

This method is useful for workers with long periods of relatively low earnings. The benefit equals the number of years of coverage in excess of ten but not more than thirty (maximum twenty) times a dollar amount. A year of coverage for this purpose is a year in which earnings were at least one quarter of the earnings base, for years up to 1978. Because of the large ad hoc increases in the base in 1979, 1980, and 1981, years of coverage in 1979 and later are years in which earnings are at least one quarter of what the earnings base would have been without the ad hoc increases (\$18,900 in 1979 and \$20,400 in 1980). The dollar amount in the special minimum was \$8.50 in 1973 and \$9.00 from 1974 to 1978, but the 1977 Amendments increased the amount to \$11.50 effective in January 1979, and provided for automatic increases thereafter. Special minimum PIA's are increased each June by the same general benefit increase as are all other non-frozen PIA's. Because the minimum PIA under the decoupled method is frozen, and because the PIA's under the old-start method are frozen, the special minimum PIA could become the applicable PIA for an increasing proportion of beneficiaries.

When the dollar amount in the special minimum formula increased to \$11.50, the MFB's corresponding to the special minimum PIA's were determined by applying the then-current wage-indexed method MFB formula. Since the maximum PIA under the special minimum provision in 1979 was \$230, which equaled the first dollar amount in the MFB formula, all special minimum MFB's were 150 percent of the corresponding PIA's, rounded up to the next multiple of \$.10, in the first half of 1979.

Calculation of Benefit from PIA

The above illustrations have presented the calculation of PIA's and MFB's. The actual benefit payable to a beneficiary would be related to the PIA or MFB where the relationship could depend on the type of benefit, the age of the beneficiary, and the total number of beneficiaries. For instance, a retiree's benefit would be the PIA reduced by 5/9 percent for each month retirement preceded the month of attaining age 65. For the age 62 retiree in January 1980, whose PIA was calculated in Tables 5 and 7, the reduction would be 36 times 5/9 percent, or 20 percent, of his PIA of \$503.40. The reduction would therefore be \$100.68, rounded down to \$100.60, so the benefit payable would be \$402.80.

January 1979 PIA Table

	MFB	\$ 856.40	859,60	862,60	868,60	871,50	874,60	8//.60	883.80	886 70	889,90	892.70	895.40	897.80	900.40	905.40	907,90	910.40	912.90	915.40	918.00	920.50	925.60	928,00	930,60	933,10	935.70	938,10	943.00	945.70	948.10	950,70	955.70	958.20	960,80	963.20	966.00	968,30	970.90	975.30	978.30	981.00	983,40	985.90
	PIA	\$489.70	491,20	492.90	496,40	498.20	500.00	503 70	505.10	506.90	508,50	510.10	511.70	513.20	516.00	517,40	518,90	520.40	521.70	523, 10	526 20	527.50	529.00	530.40	531,90	533.30	536 10	537.60	538,90	540,50	541.90	5440	546.30	547.60	549.10	550.40	551.90	557.00	556.30	557.80	559,30	560,60	561.90	563,40
	AMW Interval	069 \$	695	705	710	715	720	730	735	740	745	750	755	09/	770	775	780	785	705	800	80.5	810	81.5	820	825	835	840	845	850	855	860 865	870	875	880	885	068	695	905	910	915	920	925	930	935
	AMM	\$ 686	691	701	907	711	/1b	726	1 731	736	741	746	751	761	992	771	176	781	791	767	801	806	811	816	821	831	836	841	846	851	856 861	866	871	876	881	000	89£	901	906	911	916	921	926	7.71
	MFB	\$ 701.60	708.40	712,10	715.80	733 80	726.70	729.50	733.40	737,10	740.20	744.10	751.60	753,90	756.90	759.30	762.30	767.50	769.90	772.80	775.20	778.20	780.50	783,50	788 90	791,10	794.00	796.50	799.50	802,50	807.90	810,70	814.70	818,50	822.40	830.10	833,70	836,10	838.40	841.50	844.50	847.40	853.50	,
	PIA	\$380,70	385.50	388.20	390.50	392.90	398,00	400,30	402,70	405.60	407.70	410.20	415.30	417.60	419.60	421.90	424.10	428.50	430.70	432.70	435.00	436.90	439.50	441.50	445.00	448,10	450.30	452.60	454.70	456.80	461.20	463.40			470.10							484.40		
	AMW Interval	\$ 487	96 5	501	506	515	520	524	529	534	538	5,43	553	556	560	563	570	574	577	581	584	588	591	598 898	602	909	609	612	616	623	627	630	634	64.1	749	648	652	656	099	565	675	680	685	
PIA Table	AMM	\$ 483	493	164	502	511	516	521	525	530	530	544	549	554	557	561	568	571	575	578	582	585	589	596	599	603	909	610	613	621	624	628	635 635	638	642	645	649	653	657	T 9 9 7	999	9/9	681	
January 1979 PIA Table	MFB	\$ 384.90	400.00	406.00	413.70	421.20	434.90	442.60	448.50	456.10	463.80	469.80	485.10	491.10	498.70	506.20	512.50	527.50	533.60	541.20	548.80	554.90	562.50	575	583.90	591.30	597,40	605.10	612.70	618.60	633.80	639.90	647.50	01.669	665.70	. 02.699	673.40	676,30	680.10	683.80	687.10	690,80	697.70	
	PIA	\$251.80	256,50	259,60	262.10	267.40	270.00	272.90	275.10	278.10	280.70	285.10	288.30	291.00	293.80	296.20	301.40	304.20	307,10	309,40	312,40	314.90	317.30	320.20	325.60	328.00	330.50	333,40	336.00	341.10	343,50	346.00	348.70	353 20	356.20	358.40	360.80	363,50	365.90	368,30	3/0.60	375 60	378.00	
	Interval	\$ 253	263	267	212	281	286	291	295	200	309	314	319	323	328	111 200	34.7	347	351	356	361	365	376	379	384	389	393	398	403	412	417	421	429	436	440	445	450	454	459	404	804	478	482	
	AMM	\$ 250	259	264	273	278	282	287	292	301	306	310	315	320	324	329	338	343	348	352	357	362	366 371	376	380	385	.390	394	966	408	413	418	774	432	437	441	944	451	455	400	694	474	479	
	MFB	\$ 182,70 185,60	189,90	193,50	201.00	204.80	207.90	212.10	215./0	222,30	227.00	230.60	235,10	238.50	246.90	251 00	254.80	258,80	262.40	266.50	270.60	279.20	282.10	286.20	290,40	293.90	298.10	302.00	310.10	313.70	318.00	321.70	329,90	333,60	338,00	342,00	345.20	349.50	357.80	361 70	366,10	371,10	378.80	
	VId	\$121.80 123.80	126.60	128.90	134.00	136,50	138.60	141.40	146.20	148.50	151,30	153.70	156.70	158.90	164 60	167.30	169.80	172.50	174.90	177.60	180.40	185 50	188.00	190.80	193.60	195.90	190.70	201.30	206.70	209.10	211.90	217.20	219.90	222,40	225.30	228.00	230.10	235.60	238.50	241.10	244.00	246.30	248.70	
	AMW Interval	\$ 76 78	. 08	81	85	87	88	90	76 6	96	76	66	101	102	106	107	109	113	118	122	127	136	141	146	150	155	364	169	174	178	183	193	197	202	207	717	216	225	230	235	239	244	249	
	AMM	77	79	87	84	86	88 6	2 5	93	95	16	86	100	103	105	107	108	110	114	11.9	128	133	137	142	147	151	2 2	165	170	175	6/1	189	194	198	203	202	777	22	256	31	36	04:	4.5	

MFB	\$1292.20 1294.00 1295.70 1297.50 1299.20	1301.00 1302.70 1304.50 1306.20	1309.70 1311.50 1313.20 1315.00 1316.70	1320.20 1322.00 1323.70 1325.50 1327.20	1336.70 1334.20 1334.20 1336.00 1337.70 1339.50 1341.20 1344.70 1348.20 1348.20 1350.00 1350.00 1351.70 1351.70 1351.70 1351.70 1351.70 1352.20 1352.20 1352.20 1352.20 1353.20 1353.20 1353.20
PIA	\$738.40 739.40 740.40 741.40	743.40 744.40 745.40 746.40 747.40	748.40 749.40 750.40 751.40 752.40	754.40 755.40 756.40 757.40 758.40	760.40 761.40 761.40 762.40 764.40 765.40 765.40 770.40 771.40
AMW Interval	\$1690 1695 1700 1705 1705	1715 1720 1725 1730 1730	1740 1745 1750 1755 1760	1770 1770 1775 1780 1790 1795	1800 1800 1815 1815 1820 1830 1845 1845 1845 1845 1845 1845 1880 1870 1880 1890 1900 1900
AMM	\$1686 1691 1696 1701 1701	1711 1716 1721 1721 1731	1736 1741 1746 1751 1751 1756	1766 1771 1771 1776 1781 1781 1786	1796 1801 1806 1816 1816 1821 1831 1831 1846 1856 1856 1876 1871 1871 1881 1891 1901
MFB	\$1203.90 1205.70 1207.70 1209.50	1213.20 1215.00 1216.90 1218.70 1220.50	1222.20 1224.00 1225.70 1227.50 1229.20	1232.70 1234.50 1236.20 1238.00 1239.70 1241.50	1243.20 1246.70 1248.50 1255.20 1255.20 1255.20 1255.50 1265.70 1265.70 1266.00 1266.00 1267.70 1269.50 1274.70 1274.70 1274.70 1278.20 1281.70 1281.70 1281.70 1281.70 1281.70 1281.70 1281.70
PIA	\$687.90 689.00 690.10 691.10	693.30 694.30 695.40 696.40	698.40 699.40 700.40 701.40 702.40	704.40 705.40 706.40 707.40 708.40	710.40 711.40 711.40 712.40 714.40 716.40 717.40 717.40 723.40 725.40 724.40 725.40 726.40 727.40 72
AMW Interval	\$1440 1445 1450 1455	1465 1470 1475 1480 1485	1495 1495 1500 1505 1510	1520 1520 1530 1535 1540	1550 1555 1555 1556 1556 1570 1570 1580 1580 1680 1690 1610 1615 1620 1640 1640 1655 1650 1650 1655 1650 1650 1650 165
AMW I	\$1436 1441 1446 1446 1451	1461 1466 1471 1476 1476	1486 1491 1496 1501 1501 1511	1516 1521 1521 1531 1531 1536	1546 1551 1551 1556 1556 1556 1571 1571 1586 1601 1601 1616 1621 1631 1631 1631 1641 1641 1656 1656 1651 1651 1651 165
MFB	\$1104,30 1106,50 1108,60 1110,60 1112,90	1114,90 1117,00 1119,00 1121,20	1125,40 1127,50 1129,60 1131,60 1133,80	1138.00 1140.00 1142.20 1144.10 1146.10	1150.00 1155.90 1157.90 1157.90 1157.90 1161.90 1161.90 1165.80 1165.80 1173.70 1173.70 1173.70 1173.70 1173.70 1173.70 1173.70 1173.70 1173.70 1183.40 1183.40 1185.30 1185.30 1185.30 1185.10 1185.30 1185.10 1185.30 1185.10 1186.50
PIA	631.20 632.30 633.50 634.70 636.00	99999			
	8,000	637,10 638,30 639,50 640,80 641,90	643.10 644.40 645.50 646.70 647.90	650.30 651.50 652.70 653.70 654.90	657.10 658.30 659.40 661.70 661.70 662.80 664.00 665.00 667.40 667.40 671.90 672.90 672.90 672.90 672.90 673.30 673.30 673.30 674.10 674.10 675.20 677.30 678.30 67
Interval	67	1215 637,1 1220 638,5 1225 639,5 1230 640,6 1235 641,9			1300 657 20 1305 658.30 1315 660.60 1325 661.70 1325 662.80 1336 664.00 1345 665.00 1345 667.40 1356 667.40 1356 667.40 1356 67.40 136 67.40 136 67.40 136 67.40 136 67.40 136 67.40 136 67.70 137 67.10 138 67.20 139 67.30 140 67.30 140 67.30 140 67.30 1410 681.50 1410 681.50 1415 682.60 1415 682.60
AMW Interval	\$1190 1195 1200 1205 1210	1215 1220 1225 1230 1235		1270 1275 1280 1285 1290	1300 1305 1315 1315 1325 1325 1340 1345 1346 1345 1346 1345 1346 1346 1346 1346 1347 1390 1390 1400 1420 1420 1430
NFB AMW Interval	\$1186 \$1190 \$ 1191 1195 1196 1200 1201 1205 1206 1210	1215 1220 1225 1230 1235	1236 1240 1241 1245 1246 1250 1251 1255 1256 1260	1266 1270 1271 1275 1276 1280 1281 1285 1286 1290 1291 1295	1296 1300 1301 1305 1306 1310 1311 1315 1316 1320 1321 1325 1326 1330 1331 1345 1346 1350 1346 1350 1351 1365 1361 1365 1361 1365 1371 1375 1376 1370 1371 1385 1386 1370 1381 1385 1396 1400 1401 1405 1401 1405 1401 1405 1410 1426 1421 1425 1431 1431
ı	\$ 988.50 \$1186 \$1190 \$ 991.00 1191 1195 993.50 1196 1200 996.10 1201 1205 998.60 1206	1001,00 1211 1215 1003,60 1216 1220 1006,20 1221 1225 1008,50 1226 1230 1011,10 1231 1235	1013.60 1236 1240 1016.20 1241 1245 1018.60 1246 1250 1020.70 1251 1255 1023.20 1256 1260	1022,80 1266 1270 1029,90 1271 1275 1032,20 1276 1280 1034,50 1281 1285 1036,70 1286 1290 1039,10 1291 1295	1041.30 1296 1300 1043.40 1301 1048.00 1311 1315 1050.50 1301 1305 1052.60 1321 1325 1054.90 1321 1325 1055.10 1331 1335 1059.40 1336 1340 1061.70 1341 1345 1064.00 1351 1355 1064.00 1351 1355 1064.00 1351 1355 1068.50 1356 1360 1070.70 1311 1385 1073.10 1386 1370 1077.60 1376 1385 1077.60 1386 1390 1082.20 1386 1390 1088.40 1391 1385 1088.40 1391 1405 1093.40 1401 1405 1093.40 1411 1415 1095.80 1420 11092.20 1431 1435
NFB	\$564.90 \$ 988.50 \$1186 \$1190 \$ 566.30 991.00 1191 1195 567.70 993.50 1196 1200 569.30 996.10 1201 1205 570.80 998.60 1210	572.30 1001.00 1211 1215 573.40 1003.60 1216 1220 574.90 1006.20 1221 1225 576.40 1008.50 1226 1230 577.90 1011.10 1231 1235	1013.60 1236 1240 1016.20 1241 1245 1018.60 1246 1250 1020.70 1251 1255 1023.20 1256 1260	587.40 1027.80 1266 1270 588.60 1029.90 1271 1275 589.80 1032.20 1276 1280 591.20 1034.50 1281 1285 592.40 1036.70 1286 1290 593.80 1039.10 1291 1295	595.20 1041.30 1296 1300 596.20 1043.40 1301 1305 596.20 1043.40 1301 1305 597.60 1048.00 1311 1315 600.30 1050.50 1311 1315 601.60 1052.60 1321 1325 602.80 1054.90 1326 1310 605.40 1059.40 1331 1345 605.40 1059.40 1331 1345 606.80 1061.70 1331 1345 608.20 1064.00 1341 1345 608.20 1064.00 1341 1345 609.20 1066.10 1351 1356 610.60 1064.00 1351 1355 610.60 1064.00 1351 1355 610.60 1068.50 1356 1360 612.00 1070.70 1361 1376 613.80 1077.60 1361 1396 614.60<

Table 2

PIA Table Example
Age 63 Retiree in 1979. n = 22.

Average Annual Earnings ,for Use in Indexing Earnings Records

Table 3

Year	Earnings	High n Years of Earnings			<u>Year</u>	Average Annual Earnings
1951	\$3,600				1951	\$2,799.16
1952	3,600				1952	2,973.32
1953	3,600				1953	3,139.44
1954	3,600				1954	3,155.64
1955	4,200				1955	3,301.44
1956	4,200				1956	3,532.36
1957	4,200	\$4,200			1957	3,641.72
1958	4,200	4,200			1958	3,673.80
1959	4,800	4,800			1959	3,855.80
1960	4,800	4,800			1960	4,007.12
1961	4,800	4,800			1961	4,086.76
1962	4,800	4,800			1962	4,291.40
1963	4,800	4,800			1963	4,396.64
1964	4,800	4,800			1964	4,576.32
1965	4,800	4,800			1965	4,658.72
1966	6,600	6,600			1966	4,938.36
1967	6,600	6,600			1967	5,213.44
1968	7,800	7,800	,		1968	5,571.76
1969	7,800	7,800			1969	5,893.76
1970	7,800	7,800			1970	6,186.24
1971	7,800	7,800			1971	6,497.08
1972	9,000	9,000			1972	7,133.80
1973	10,800	10,800			1973	7,580.16
1974	13,200	13,200			1974	8,030.76
1975	14,100	14,100			1975	8,630.92
1976	15,300	15,300			1976	9,226.48
1977	16,500	16,500			1977	9,779.44
1978	17,700	17,700			1978	10,556.03
Total		183,000		•		

AMW = 183,000/(22x12) = \$693.18, rounded down to \$693.

From June-December 1978
PIA table (Table 1):

January 1979 PIA = \$491.20

January 1979 MFB = \$859.60

Table 4

First Wage-Indexed Formula Example
Age 62 Retiree in October 1979. n = 23.

<u>Year</u>	Earnings	Earnings x \$9779.44	Indexed Earnings	High n Years of Indexed Earnings
1951	\$ 3,600	\$ 35,205,984.0000	\$12,577.34	\$ 12,577.34
1952	3,600	35,205,984.0000	11,840.63	11,840.63
1953	3,600	35,205,984.0000	11,214.10	11,214.10
1954	3,600	35,205,984.0000	11,156.53	
1955	4,200	41,073,648.0000	12,441.13	12,441.13
1956	4,200	41,073,648.0000	11,627.82	11,627.82
1957	4,200	41,073,648.0000	11,278.64	11,278.64
1958	4,200	41,073,648.0000	11,180.15	11,180.15
1959	4,800	46,941,312.0000	12,174.21	12,174.21
1960	4,800	46,941,312.0000	11,714.48	11,714.48
1961	4,800	46,941,312.0000	11,486.19	11,486.19
1962	4,800	46,941,312.0000	10,938.46	
1963	4,800	46,941,312.0000	10,676.63	
1964	4,800	46,941,312.0000	10,257.44	
1965	4,800	46,941,312.0000	10,076.01	
1966	6,600	64,544,304.0000	13,069.99	13,069.99
1967	6,600	64,544,304.0000	12,380.37	12,380.37
1968	7,800	76,279,632.0000	13,690.40	13,690.40
1969	7,800	76,279,632.0000	12,942.44	12,942.44
1970	7,800	76,279,632.0000	12,330.53	12,330.53
1971	7,800	76,279,632.0000	11,740.62	11,740.62
1972	9,000	88,014,960.0000	12,337.74	12,337.74
1973	10,800	105,617,952.0000	13,933.47	13,933.47
1974	13,200	129,088,608.0000	16,074.27	16,074.27
1975	14,100	137,890,104.0000	15,976.29	15,976.29
1976	15,300	149,625,432.0000	16,216.96	16,216.96
1977	16,500	161,360,760.0000	16,500.00	16,500.00
1978	17,700		17,700.00	17,700.00
Total				302,427.77

AIME = 302,427.77/(23x12) = \$1,095.75 rounded down to \$1,095.

AIME PIA = 90% of \$180 + 32% of \$905 + 15% of (\$1,095-\$1,085) = \$453.10.

AIME MFB = 150% of \$230 + 272% of \$102 + 134% of \$101 + 175% of (\$453.10-\$433) = \$792.955, rounded up to \$793.00.

Increase (June 1979): PIA = $$459.60 \times 1.099 = 497.9569 , rounded up to \$498.00. MFB = \$793.00 x 1.099 = \$871.5070, rounded up to \$871.60.

October 1979 PIA = \$498.00October 1979 MFB = \$871.60

Table 5

Second Wage-Indexed Formula Example
Age 62 Retiree in January 1980. n = 24.

Year	Earnings	Earnings x \$10,556.03	Indexed Earnings	High n Years of Indexed Earnings
1951 1952 1953 1954	\$ 3,600 3,600 3,600 3,600	\$ 38,001,708.0000 38,001,708.0000 38,001,708.0000 38,001,708.0000	\$13,576.11 12,780.90 12,104.61 12,042.47	\$ 13,576.11 12,780.90 12,104.61
1955	4,200	44,335,326.0000	13,429.09	13,429.09
1956 1957 1958 1959 1960	4,200 4,200 4,200 4,800 4,800	44,335,326.0000 44,335,326.0000 44,335,326.0000 50,668,944.0000 50,668,944.0000	12,551.19 12,174.28 12,067.97 13,140.97 12,644.73	12,551.19 12,174.28 12,067.97 13,140.97 12,644.73
1961 1962 1963 1964 1965	4,800 4,800 4,800 4,800 4,800	50,668,944.0000 50,668,944.0000 50,668,944.0000 50,668,944.0000	12,398.32 11,807.09 11,524.47 11,071.98 10,876.15	12,398.32
1966 1967 1968 1969 1970	6,600 6,600 7,800 7,800 7,800	69,669,798.0000 69,669,798.0000 82,337,034.0000 82,337,034.0000 82,337,034.0000	14,107.88 13,363.50 14,777.56 13,970.20 13,309.71	14,107.88 13,363.50 14,777.56 13,970.20 13,309.71
1971 1972 1973 1974 1975	7,800 9,000 10,800 13,200 14,100	82,337,034.0000 95,004,270.0000 114,005,124.0000 139,339,596.0000 148,840,023.0000	12,672.93 13,317.48 15,039.94 17,350.74 17,244.98	12,672.93 13,317.48 15,039.94 17,350.74 17,244.98
1976 1977 1978 1979	15,300 16,500 17,700 22,900	161,507,259.0000 174,174,495.0000 186,841,731.0000	17,504.75 17,810.27 17,700.00 22,900.00	17,504.75 17,810.27 17,700.00 22,900.00
Total				347,938.11

AIME = 347,938.11/(24x12) = \$1,208.12, rounded down to \$1,208.

January 1980 PIA = \$492.80

January 1980 MFB = \$862.50

AIME PIA = 90% of \$194 + 32% of \$977 + 15% of (\$1,208-\$1,171) = \$492.79, rounded up to \$492.80.

AIME MFB = 150% of \$248 + 272% of \$110 + 134% of \$109 + 175% of (\$492.80-\$467) = \$862.41, rounded up to \$862.50.

First Transitional Guarantee Example Age 62 Retiree in October 1979. n = 23.

Table 6

Year	<i>1.</i> 9	Earnings		High n Years Earnings Before Ag	
1951	1 1 · · · · · · · · · · · · · · · · · ·	\$ 3,600			
1952		3,600			
1953		3,600	•		
1954		3,600			
1955		4,200	-		
1956		4,200	•	\$ 4,200	
1957		4,200		4,200	
1958		4,200	•	4,200	
1959		4,800		4,800	
1960		4,800		4,800	
1961		4,800	.*	4,800	
1962		4,800		4,800	
1963		4,800		4,800	
1964		4,800		4,800	
1965		4,800	**************************************	4,800	
1966		6,600		6,600	
1967		6,600		6,600	
1968		7,800		7,800	
1969		7,800		7,800	23
1970		7,800		7,800	
	•		-		
1971		7,800		7,800	,
1972		9,000		9,000	:
1973		10,800		10,800	
1974 ·		13,200		13,200	
1975		14,100		. 14,100	
1976		15,300		15,300	
1977		16,500		16,500	
1978		17,700		17,700	
Total			÷	187,200	

 $\Delta MW = \$187,200/(23x12) = \678.26 , rounded down to \\$678.

December 1978 PIA = \$486.10 from Table 1.

December 1978 MFB = 150% of \$230 + 272% of \$102 + 134% of \$101 + 175% of (\$486.10-\$433) = \$850.705, rounded up to \$850.80.

Increase (June 1979): PIA = \$486.10 x 1.099 = \$534.2239, rounded up to \$534.30. MFB = \$850.80 x 1.099 = \$935.0292, rounded up to \$935.10.

October 1979 PIA = \$534.30 October 1979 MFB = \$935.10

Table 7

Second Transitional Guarantee Example
Age 62 Retiree in January 1980. n = 24.

•			
	•	•	High n Years of
Years		Earnings	Earnings Before Age 62
1951		\$ 3,600	
1952		3,600	
1953		3,600	
1954		3,600	
1955		4,200	
2755		4,200	
1956	• `	4,200	\$ 4,200
1957		4,200	4,200
1958		4,200	4,200
1959		4,800	4,800
1960		4,800	4,800
1961		4 000	4 000
		4,800	4,800
1962	•	4,800	4,800
1963		4,800	4,800
1964		4,800	4,800
1965	V 1	4,800	4,800
1966	•	6,600	6,600
1967		6,600	6,600
1968		7,800	7,800
1969		7,800	7,800
1970	•	7,800	7,800
•	•	,,000	7,000
1971		7,800	7,800
1972	•	9,000	9,000
1973		10,800	10,800
1974		13,200	13,200
1975		14,100	14,100
1976		15 200	15 200
1977		15,300	15,300
1978		16,500	16,500
1979	•	17,700	17,700
4717		22,900	22,900
Total	•		210,100

AMW = \$210,100/(24x12) = \$729.51, rounded down to \$729.

December 1978 PIA = 1980 PIA = \$503.40 from Table 1. December 1978 MFB = 150% of \$248 + 272% of \$110 + 134% of \$109 + 175%

of (\$503.40-\$467) + \$880.96, rounded up to \$881.00.

January 1980 PIA = \$503.40 January 1980 MFB = \$881.00