

**GENERAL PROCEDURES FOR TESTING
NEW COMPARABILITY
PROFIT SHARING PLANS**

PROCEDURE FOR CROSS TESTING A “CONTRIBUTION” PLAN ON A
“BENEFITS” BASIS UNDER THE 401(A)(4) REGULATIONS
TO PROVE NONDISCRIMINATION

1. Determine the Equivalent Benefit Accrual Rates (EBAR’s) for all employees. This is the projected annual benefit at age 65 as a percentage of current salary assuming the current year’s allocation for each employee is projected to retirement using acceptable IRS interest and mortality assumptions. (see chart on page 5 for EBAR calculations)
2. Determine if the *plan* passes the “*average benefits percentage*” test. This is done by finding the ratio of the average benefit (EBAR) of the Non-Highly Compensated Employees (NHCE’s) to the average benefit (EBAR) of the Highly Compensated Employees (HCE’s). This ratio must be equal to or greater than **70%** for the plan to pass this test. (see page 6 for HCE determination)

If the plan does not pass this test, redesign must be performed or the plan will be considered discriminatory. If the test is passed, then proceed with step 3 below.

3. Determine the concentration of NHCE’s for the *plan*. This is found by dividing the number of NHCE’s in the plan by the total number of employees in the plan. Once this concentration percentage is found, determine the midpoint of the safe and unsafe harbors per the chart in the 410(b) regulations. (see chart on page 5 for midpoint percentages)
4. Divide the plan into “rate groups”. The number of rate groups is equal to the number of HCE’s. A rate group exists for each HCE in the plan and consists of that HCE and all other employees (both HCE’s and NHCE’s) in the plan who have an EBAR equal to or greater than the HCE’s EBAR.
5. Determine if *each rate group* passes the “*ratio percentage*” test. The ratio percentage test compares the number of participants, rather than the amount of benefits. The test is performed by dividing the ratio of NHCE’s (number of NHCE’s in the rate group divided by the number of NHCE’s in the plan) by the ratio of HCE’s (number of HCE’s in the rate group divided by the number of HCE’s in the plan).

To pass the test, the ratio of NHCE’s to the ratio of HCE’s in each rate group must be a percentage equal to or exceeding the *midpoint* of the safe and unsafe harbor percentages found in step 3.

If **ALL** rate groups pass the ratio percentage test, the plan as a whole **PASSES the nondiscrimination testing of the 401(a)(4) regulations!!**

If one or more of the rate groups fails the ratio percentage test, the plan will be considered discriminatory and redesign of the plan will be necessary.

SUMMARY

The plan will pass the nondiscrimination testing if:

1. The plan passes the “average benefits percentage” test with a percentage of 70 or more,
- AND**
2. All rate groups pass the “ratio percentage” test with a percentage equal to or greater than the midpoint between the safe and unsafe harbor percentage.

EXAMPLE OF CALCULATIONS:

OBJECTIVE: Give the census below and the level of contributions shown, perform the mathematical testing under the 401(a)(4) regulations to prove the plan will be considered nondiscriminatory:

<u>AGE</u>	<u>SALARY</u>	<u>PROFIT SHARING ALLOCATIONS</u>	<u>ALLOC. AS % OF SALARY</u>	<u>CLASS (HCE OR NHCE)</u>
60	\$ 80,000	\$ 20,000	25%	Highly Compensated Employee (HCE)
33	\$ 33,000	\$ 990	3%	Non-Highly Compensated Employee(NHCE)
34	\$ 29,000	\$ 870	3%	Non-Highly Compensated Employee(NHCE)
47	\$ 31,000	\$ 930	3%	Non-Highly Compensated Employee(NHCE)
	\$173,000	\$ 22,790		

- Determine the Equivalent Benefit Accrual Rate (EBAR) at retirement from the chart on page 5 by multiplying the percentage of salary allocated above the EBAR listed for each 1% allocation.

<u>RETIREMENT</u>	<u>EMPLOYEE</u>	<u>AGE</u>	<u>ALLOC. AS % OF SALARY</u>	<u>FROM</u>	<u>EBAR AT CHART</u>
	HCE 1	60	25	x	.1892 = 4.730
	NHCE 1	33	3	x	1.7118 = 5.135
	NHCE 2	34	3	x	1.5777 = 4.733
	NHCE 3	47	3	x	.5463 = 1.638

- Determine if the plan passes the “average benefits percentage” test by finding the ratio of the average benefit (EBAR) of the NHCE’s to the average benefit (EBAR) of the HCE’s.

$$\text{Av. Ben. of NHCE's} = \frac{5.135 + 4.733 + 1.638}{3} = 3.835 \quad \text{Av. Ben. of HCE's} = 4.730 \quad \text{Ratio} = \frac{3.835}{4.730} = 81\%$$

To pass, the ratio must equal to or greater than 70%. The ratio is 81% so the plan *PASSES* this test.

- Determine the concentration of NHCE’s in the plan and the midpoint percentage from the chart on page 5.

The concentration of NHCE is $\frac{3}{4} = 75\%$. The corresponding midpoint percentage from the chart is 33.75%

- Divide the plan into rate groups. Only one rate group exists in this plan since there is only one HCE. The rate group consists of the HCE and all others with an EBAR equal to or greater than that of the HCE. Therefore, the rate group is composed of: HCE 1 and NHCE 1 and 2.

- Determine if each rate group passes the “ratio percentage” test by dividing the ratio of NHCE’s in the rate group (NHCE’s in the rate group divided by the NHCE’s in the plan) by the ratio of HCE’s in the rate group (HCE’s in the rate group divided by the HCE’s in the plan).

$$\text{Ratio of NHCE's} = \frac{2}{3} = .667, \text{ ratio of HCE's} = \frac{1}{1} = 100. \quad \frac{.667}{1.000} = 67\%$$

To pass, the ratio must be equal to or greater than the midpoint percentage, 33.75%, found in step 3. The ratio here is 67% so the plan *PASSES* this test also.

The plan *PASSES* the “average benefits percentage” test **and** each rate group *PASSES* the “Ratio percentage” test so THE PLAN PASSES THE NONDISCRIMINATION TESTING
Of the 401(a)(4) regulations!!!!

EBAR PRODUCED BY A CONTRIBUTION OF 1% SALARY

<u>AGE</u>	<u>EBAR</u>	<u>AGE</u>	<u>EBAR</u>	<u>AGE</u>	<u>EBAR</u>
64	.1365	49	.4641	34	1.5777
63	.1481	48	.5035	33	1.7118
62	.1607	47	.5463	32	1.8573
61	.1744	46	.5928	31	2.0152
60	.1892	45	.6431	30	2.1865
59	.2053	44	.6978	29	2.3724
58	.2227	43	.7571	28	2.5740
57	.2416	42	.8215	27	2.7928
56	.2622	41	.8913	26	3.0302
55	.2845	40	.9671	25	3.2878
54	.3086	39	1.0493	24	3.5672
53	.3349	38	1.1384	23	3.8704
52	.3633	37	1.2352	22	4.1994
51	.3942	36	1.3402	21	4.5564
50	.4277	35	1.4541	20	4.9437

“EBAR” is the Equivalent Benefit Accrual Rate. This is the projected benefit at the normal retirement date – as a percentage of current salary. The benefit is derived by assuming the contribution for this year only is accumulated until retirement and then used to purchase a lifetime annuity.

Assumptions used to develop the above chart: 8.5% pre-retirement interest and an annuity purchase rate of \$95.38 per \$1 of monthly benefit (1984 unisex mortality, 8.5% post-retirement interest, “life only” annuity, and normal retirement age of 65.)

MIDPOINT OF THE SAFE AND UNSAFE HARBOR PERCENTAGES

<u>% of NHCE</u>	<u>Mid-Point</u>	<u>% of NHCE</u>	<u>Mid-Point</u>	<u>% of NCHE</u>	<u>Mid-Point</u>	<u>% of NHCE</u>	<u>Mid-Point</u>
60	44.00	70	37.50	80	30.00	90	23.75
61	44.25	71	36.75	81	29.25	91	23.38
62	43.50	72	36.00	82	28.50	92	23.00
63	42.75	73	35.25	83	27.75	93	22.63
64	42.00	74	34.50	84	27.00	94	22.25
65	41.25	75	33.75	85	26.25	95	21.88
66	40.50	76	33.00	86	25.50	96	21.50
67	39.75	77	32.25	87	24.88	97	21.13
68	39.00	78	31.50	88	24.50	98	20.75
69	38.35	79	30.75	89	24.13	99	20.38

The mid-point percentage above is the midpoint between the safe and unsafe harbor percentages as outlined in the 401(b) regulations. The concentration of NHCE’s is the number of NHCE’s in the plan divided by the total number of employees in the plan.