## Dealing with Data Suppression

|  |  |  | First Iteration: Use Midpoint | First Iteration x Adjustment Factor | Second Iteration (Proportional Distribution) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 48-49 | Transportation \& warehousing | 49,814 |  |  |  |
| 481 | Air transportation | g | 1,750 | -73.53 | 1,676.47 |
| 483 | Water transportation | e | 375 | -15.76 | 359.24 |
| 484 | Truck transportation | 13,906 | 13,906 |  | 13,906.00 |
| 485 | Transit \& ground passenger transportation | g | 1,750 | -73.53 | 1,676.47 |
| 486 | Pipeline transportation | b | 60 | -2.52 | 57.48 |
| 487 | Scenic \& sightseeing transportation | c | 175 | -7.35 | 167.65 |
| 488 | Support activities for transportation | 3,693 | 3,693 |  | 3,693.00 |
| 492 | Couriers \& messengers | j | 17,500 | -735.31 | 16,764.69 |
| 493 | Warehousing \& storage | 11,513 | 11,513 |  | 11,513.00 |
|  |  | Total: | 50,722 |  | 49,814 |
| Amount Iteration is Off By (Actual Total - Iteration Total): |  |  | (908) |  |  |
| Sum of Midpoints: |  |  | 21,610 |  |  |
| Adjustment Factor (Amount Iteration is Off by / Sum of Midpoints): |  |  | (0.04) |  |  |

## First Iteration:

Enter the midpoints of the ranges for the suppressed sub-sectors

Sum to get the iteration total
Subtract the iteration total from the actual total to find out how far off the estimate is

$$
49,814-50,722=-908
$$

You might have a positive number [too few employees in the iteration] instead. Just be sure to retain the sign throughout the remaining calculations

## Second Iteration:

Find the sum of the midpoint estimates you used in the first iteration

$$
1,750+375+1,750+1,750+60+175+17,500=21,610
$$

Divide as follows: Amount iteration is off by / Sum of midpoints

$$
-908 / 21,610=-0.04
$$

Multiply each midpoint by the result to find the amount to adjust by

$$
1,750 *-0.04=-73.53
$$

Adjust each midpoint by the result

$$
1,750-73.53=1,676.47
$$

Sum the sector again and round the new estimates

## Suppressed Data Ranges and Midpoints:

| a: 0-19 employees | 10 |
| :--- | :--- |
| b: 20-99 employees | 60 |
| c: 100-249 employees | 175 |
| e: $250-499$ employees | 375 |
| f: 500-999 employees | 750 |
| g: 1,000-2,499 employees | 1,750 |
| h: 2,500-4,999 employees | 3,750 |
| i: 5,000-9,999 employees | 7,500 |
| j: 10,000-24,999 employees | 17,500 |
| k: 25,000-49,999 employees | 37,500 |
| l: 50,000-99,999 employees | 75,000 |
| m: 100,000 or more employees |  |

