## GUIDE FOR COMPUTATION OF RECORDS VOLUME

(To compute totals, round off to the nearest cubic foot)
Group A: By filing cabinet drawer and by shelf filing (estimate to the nearest degree of fullness).
Cubic Feet

|  | Full | $3 / 4$ Full | $1 / 2$ Full | $1 / 4$ Full |
| :---: | :---: | :---: | :---: | :---: |
| Filing Cabinet drawer (24" deep) <br> Letter size |  |  |  |  |
| Legal size | 1.500 | 1.125 | .750 | .375 |
| Shelf File shelf (36" wide) | 2.000 | 1.500 | 1.000 | .500 |
| Letter size |  |  |  |  |
| Legal size | 2.250 | 1.688 | 1.125 | .563 |
| Card File drawer | 2.750 | 2.063 | 1.375 | .688 |
| For 5" x 3" cards |  |  |  |  |
| For 6" x 4" cards | .133 | .100 | .066 | .033 |
| For 8" x 5" cards | .213 | .166 | .106 | .054 |
| For 10" x 8" cards | .333 | .250 | .166 | .083 |
| Tabulating card drawer (27" deep) | .666 | .500 | .333 | .166 |
| Aperture cards (Tab cards with mounted microfilm) | .375 | .281 | .187 | .094 |
| (27" drawer) | .375 | .281 | .187 | .094 |

Group B: By unit count - Estimate to nearest $1 / 2$ unit.

Cards by size
As used in visible files(unit is 100 cards)
Plastic microfilm record card (microfilm inserted into channels in card) Unit is 100 cards

3-ring binders, standard, as used for directives, notices, etc. (Unit full binder)

| 1" thickness | .050 | Cubic ft. |
| :--- | :--- | :--- |
| $2 "$ thickness | .100 | Cubic ft. |

Maps, plans, drawings, etc. (maintained in map or plan cabinets, on hangers, or in rolls). Unit is 100

| $8 " \times 101 / 2 "$ | .025 | Cubic ft. |
| :--- | :--- | :--- |
| $11^{\prime \prime} \times 17 "$ | .050 | Cubic ft. |
| $17 " \times 22 "$ | .100 | Cubic ft. |
| $22^{\prime \prime} \times 34 "$ | .200 | Cubic ft. |
| $34 " \times 44 "$ | .400 | Cubic ft. |
| $28 " \times 40 "$ | .300 | Cubic ft. |
| $28 " \times 50 "$ | .350 | Cubic ft. |
| $34 " \times 50 "$ | .450 | Cubic ft. |
| $40 " \times 50 "$ | .500 | Cubic ft. |

Microfilm and Magnetic Tapes

$16 \mathrm{~mm}, 100$ "<br>35 mm , 100"<br>$16 \mathrm{~mm}, 1,000$<br>Magnetic Tapes<br>Microfiche/Jackets

items of each given size:
items of each given size:
11 " $\times 17$ "
$17 " \times 22 "$
22 " x 34 "
$28^{\prime \prime} \times 40 "$
34 " x 50 "
40 " x 50 "

$$
\begin{array}{rll}
100 \text { reels }= & 1 \mathrm{cu} . \mathrm{ft.} \\
50 \text { reels }= & 1 \mathrm{cu} . \mathrm{ft.} \\
15 \text { reels }= & 1 \mathrm{cu} . \mathrm{ft.} \\
15= & 1 \mathrm{cu} . \mathrm{ft.} \\
3,000 & =1 \mathrm{cu} . \mathrm{ft.} .
\end{array}
$$

| 5"x 3" | 6"x 4" | 8"x 5" | 10"x 8" |
| :---: | :---: | :---: | :---: |
| .0083 | .013 | .021 | .083 |

. 026 . 040 . 063 . 245

## FILING EQUIPMENT STORAGE CAPACITIES

Record Center Box ( 15 " x 12 " x 10 ") ( LxWxD ) is considered one (1) cubic foot.
Shelf file, letter size $=2.25$ cubic feet per shelf.
Shelf file, legal size $=2.75$ cubic feet per shelf.
Drawer file, letter size $=1.50$ cubic feet per drawer.
Drawer file, legal size $=2.0$ cubic feet per drawer.

Shelf file = 34 linear inches per shelf
Drawer file = 24 linear inches per drawer

| 2 shelf $=$ | 68 linear inches | 2 drawer $=$ |
| :--- | :--- | :--- |
| 3 shelf $=102$ linear inches | 48 linear inches |  |
| 4 shelf $=136$ linear inches | 3 drawer $=$ | 72 linear inches |
| 5 shelf $=170$ linear inches | 4 drawer $=$ | 96 linear inches |
| 6 shelf $=204$ linear inches | 5 drawer $=$ | 120 linear inches |
| 7 shelf $=238$ linear inches |  |  |

Letter size: number of linear inches $\div 15=$ cubic feet

Legal size: number of linear inches $\div 12=$ cubic feet

## FILING EQUIPMENT MEASUREMENTS

Shelf file, letter size = 13-1/4" deep by 36 " wide (o.d.)
Shelf file, legal size $=16-1 / 4$ " deep by 36 " wide (o.d.)
Drawer file, letter size, 2 drawer = 30" deep by 17-7/7" wide (o.d.)
Drawer file, letter size, 3, 4, 5, drawer = 28-9/16" deep by 14-7/8" wide (o.d.)
Drawer file, legal size, 2 drawer = 30" deep by 17-7/8"wide (o.d.)
Drawer file, legal size, 3 , 4, 5 , drawer $=28-9 / 16$ " deep by 17-7/8" wide (o.d.)

| Height: 2 shelf | $=29 "$ | 2 drawer $=29-3 / 8 "$ |
| ---: | :--- | :--- | :--- |
| 3 shelf | $=40-5 / 8 "$ | 3 drawer $=41-1 / 4 "$ |
| 4 shelf | $=52-1 / 4 "$ | 4 drawer $=52-3 / 8 "$ |
| 5 shelf | $=63-7 / 8 "$ |  |
| 6 shelf | $=78 "$ |  |
| 7 shelf | $=87-1 / 8 "$ |  |

## TABLE OF MEASUREMENT REQUIREMENTS

Calculate or estimate cubic feet volume according to the following cubic foot equivalents:
$\begin{array}{ll}\text { Filing Cabinets: } & \text { One letter-size drawer }=16 / 12 \text { cubic feet } \\ & \text { One legal-size drawer }=2 \text { cubic feet }\end{array}$
Filing Cases:

Shelf Files:
One $3 \times 5$ inch case $=1 / 12$ cubic foot One $4 \times 6$ inch case $=3 / 12$ cubic foot One $5 \times 8$ inch case $=3 / 12$ cubic foot

Letter size, 1 linear foot = 10/12/ cubic foot Legal size, 1 linear foot = 1 cubic foot

Computer Printouts: $\quad 15 \times 11$ inches, 10 -inch thickness $=1$ cubic foot $86 / 12 \times 11$ inches, 18 -inch thickness $=1$ cubic foot $86 / 12 \times 56 / 12$ inches, 38 -inch thickness $=1$ cubic foot

Tabulating Cards: $\quad 10,000$ cards $=1$ cubic foot
Records in Outsize Equipment and Records not Filed in Containers: Multiply length x width x height (inches) then divide by 1.728 to get cubic footage.

Microform:
100
50
12
72
10,000

16 mm reels ( 100 feet) $=1$ cubic foot
35 mm reels ( 100 feet) $=1$ cubic foot
inches microfiche $=21 / 2$ cubic foot
inches microfiche $=1$ cubic foot microfiche $=1$ cubic foot

Magnetic Tapes: 7 reels = 1 cubic foot; or base measurement on following where applicable:

Reel Size $\quad 1 / 4$ inch $x 7$ inches $\times 1,800$ feet $1 / 4$ inch $x 7$ inches x 3,600 feet $1 / 2$ inch x $101 / 2$ inches x 3,600 feet $1 / 2$ inch x $101 / 2$ inches x 2,400 feet $1 / 2$ inch $x 14$ inches $x 9,200$ feet $1 / 2$ inch $x 1 / 2$ inch $x 4,600$ feet $1 / 4$ inch x $101 / 2$ inches x 3,600 feet $1 / 4$ inch $x 7$ inches x 1,200 feet 1 inch x 14 inches x 7,200 feet 1 inch x $121 / 2$ inches x 7,200 feet $1 / 2$ inch x 14 inches x 7,200 feet 1 inch x 10 inches x 5,000 feet 1 inch x 14 inches $\mathrm{x} 10,200$ feet

36 reels $=1$ cubic foot
36 reels $=1$ cubic foot
13 reels $=1$ cubic foot
13 reels $=1$ cubic foot
8 reels $=1$ cubic foot
13 reels $=1$ cubic foot
17 reels $=1$ cubic foot
36 reels $=1$ cubic foot
5 reels $=1$ cubic foot
6 reels $=1$ cubic foot
10 reels $=1$ cubic foot
11 reels $=1$ cubic foot
5 reels = 1 cubic foot
Magnetic Tape Selectric Typewriter Tapes:
4 inches x 4 inches x 1 inch

108 reels $=1$ cubic foot

## TABLE OF MEASUREMENT REQUIREMENTS (Continued)

Still Pictures:

| Negatives | 2300 | 35 mm six exposure strips $=1$ cubic foot |
| :---: | :---: | :---: |
|  | 8640 | $2 \times 2$ inch mounted slides $=1$ cubic foot |
|  | 2184 | $4 \times 5$ inch film sheets $=1$ cubic foot |
|  | 5960 | $211 / 4 \times 31 / 4$ inch film sheets = 1 cubic foot |
| Prints: | 2350 <br> cubic foot | $8 \times 10$ inch glossies or contact sheets $=1$ |
|  | 9400 | $4 \times 5$ inch glossies $=1$ cubic foot |
| Motion Pictures: | 6 | 35 mm reels ( 1000 feet) $=1$ cubic foot |
|  | 11 | 16 mm reels ( 1200 feet) $=1$ cubic foot |
|  | 15 | 16 mm reels ( 800 feet) $=1$ cubic foot |
|  | 32 | 16 mm reels ( 400 fee) $=1$ cubic foot |
| Sound Recordings: | 76 | 16-inch disc recordings $=1$ cubic foot |
|  | 144 | 12 -inch disc recordings $=1$ cubic foot |
|  | 48 | 7 -inch audio-tape reels $=1$ cubic foot |
|  | 16 | 10 -inch audio-tape reels $=1$ cubic foot |
| Video Recordings: | 10 | $3 / 4$ - inch cassettes $=1$ cubic foot |
|  | 3 | 2 - inch reels = 1 cubic foot |
|  | 9 | 1 -inch reels = 1 cubic foot |
|  | 43 | $1 / 2$-inch reels $=1$ cubic foot |
|  | 192 | 8 mm cassettes $=1$ cubic foot |
|  | 24 | $1 / 2$-inch Beta/VHS cassettes $=1$ cubic foot |

Electronic Recordkeeping:
Cassettes (4 inches x $21 / 2$ inches x $5 / 16$ inch):

| 1 | $4 \times 2.5 \times 3.125$ |
| :--- | :--- |
| 100 | $4 \times 2.5 \times 31.25$ |
| 300 | $4 \times 2.5 \times 93.75$ |
| 500 | $4 \times 2.5 \times 156.25$ |
| 600 | $4 \times 2.5 \times 187$ |

Floppy Discs: 8-inch disc:

| 10 | $8 \times 8 \times 13 / 4$ inches |
| :--- | :---: |
| 100 | $4 \times 2.5 \times 31.25$ |
| 300 | $4 \times 2.5 \times 93.75$ |
| 500 | $4 \times 2.5 \times 156.25$ |
| Floppy Discs: $51 / 2$ inch disc: |  |
| 10 | $51 / 2 \times 51 / 2 \times 13 / 4$ inches |
| 100 | $51 / 2 \times 51 / 2 \times 11 / 2$ inches |
| 150 | $51 / 2 \times 51 / 2 \times 261 / 4$ inches |
| 300 | $51 / 2 \times 51 / 2 \times 521 / 2$ inches |
| 330 | $51 / 2 \times 51 / 2 \times 573 / 4$ inches |

## METHODS FOR COMPUTING STATEWIDE SAVINGS OR COST AVOIDANCE

- Reduction in records retention periods

Multiply the cubic feet of records involved times the years not retained. Multiply the result of that computation by the cost of records storage to the agency. Show the computation used and identify all components of the computation.

- Reduction in number of forms to improve processing or reduce costs.

Multiply the cost of printing on obsolete form by five (5) (maintaining a form usually costs at least five times the printing costs).

- Filing equipment and floor space released or new equipment not required as a result of destroying records or using less costly storage space.
Use appropriate cost avoidance figures below, or compute your agency's specific costs. In either case, explain the computation used.
- Cost avoidance by using a less costly storage facility (space and equipment only).

Calculate by subtracting the cost of one type of storage from the other and multiplying the result by the number of cubic feet of records.

| Storing in Records Center Instead of Office | Storing in Departmental Storage Instead of Office |
| :---: | :---: |
| Cost of one cubic foot in office if stored in drawer file: \$22.05* | Cost of one cubic foot in office if stored in drawer file: \$22.05* |
| Cost of one cubic foot in Records Center - 0.98* | Cost of one cubic foot in departmental storage: - 2.38* |
| Cost avoided for each cubic foot: \$21.07 | Cost avoided for each cubic foot: \$ 19.67 |

- Cost avoidance by destruction of records (space and equipment only).

Multiply the number of cubic feet destroyed by the appropriate cost avoidance figure as follows: (our computations are attached; these are used for statewide cost avoidance).

Cost Avoidance per cubic foot

| From Records Centers | $\$ 0.98$ |
| :--- | :---: |
| From Office space, six-shelf cabinet | $\$ 13.06$ |
| From Office space, five-drawer cabinet | $\$ 20.69$ |
| From Departmental storage | $\$ 2.38$ |

*For comparison purposes these calculations do not include staff time.

## METHODS FOR COMPUTING STATEWIDE SAVINGS OR COST AVOIDANCE (Continued)

- Elimination of unneeded reports.

Compute the amount of paper saved and multiply by the cost per sheet (. 001 cent), ream (\$3.63), based on cost of $8-1 / 2 \times 11,20 \mathrm{lb}$., bond paper). Add the cost of storing the reports.

- Streamlining of workflow.

Include a description of improvements with cost avoidance or savings or an explanation of other benefits.

- Implementation of a vital records retention program.
- Completion of a major study done during the report period that should show results during the next fiscal year.
- Savings from imaging systems.

