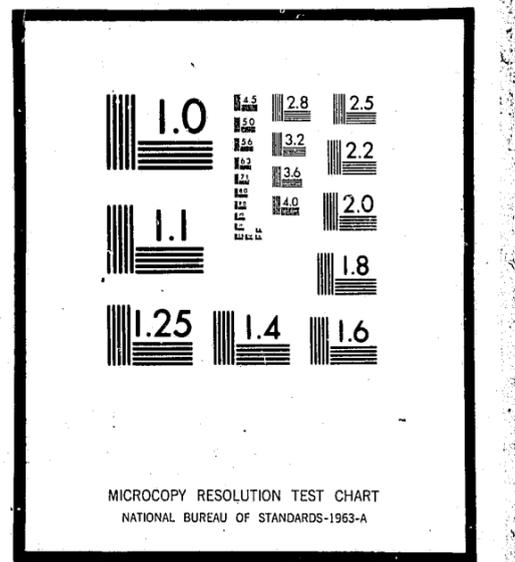


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## "COMPARISON OF ALTERNATIVE LAUNDRY SERVICE COSTS"

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COMPARISON OF ALTERNATIVE LAUNDRY SERVICE COSTS

FOR 150-MAN INSTITUTIONS

Alternative Laundry Services

1. Prison - this particular type of laundry service is provided in the institution utilizing inmate labor and using large commercial laundry machines.

The initial first year cost was derived from determining the yearly inmate cost for laundry service in five of our existing major institutions, F.C.I., U.C.I., F.S.P., A.P.C.I., and S.C.I., and using the average cost/man figure times 150 (number of inmates in the institution) to obtain a first year inmate laundry cost figure. In order to obtain a total first year cost figure, the cost of a new laundry building (figured at \$25.00/sq. foot) and new commercial laundry equipment are combined into a replacement cost which is then divided by the number of years in the cost stream. The first year inmate laundry cost added to the first year replacement cost gives the total first year cost in the ten year cost stream. A simple ten percent (10%) increase is used for each succeeding year in the cost stream. The computations for this laundry service are as follows:

a. Costs of Prison Laundry Service

	FCI	FSP & UCI	SCI	APCI
Yearly Laundry Service Costs	\$51,757.	\$102,890.	\$24,050.	\$43,310.
Prison Population	555.	3,331.	770.	686.
Yearly Cost/Man	93.00	30.00	31.00	63.00

Average cost/man = \$54.00/year

- b. average cost/man X Institution Population = inmate laundry cost

$$\$54.00 \times 150 = \$8100.$$

c. 
$$\frac{\text{Facility Replacement Cost} + \text{Equipment Cost}}{\text{number of years in cost stream}} = \text{yearly replacement costs}$$

$$\frac{40,000 + 20,000}{10} = \$6,000.$$

d. Inmate laundry cost + yearly replacement cost = total first  
year laundry  
cost

$$8100 + 6000 = \$14,100.$$

2. Commercial - the particular type of laundry service is a combination of the following:

- Laundry machines (one washer and one dryer), provided for each 16 man cottage in which inmates wash their personal items.
- Contracted commercial laundry service is provided for bedding, towels, and face cloths for all inmates in the institution.

The commercial laundry service eliminates the large laundry facility from the 150 man institution and in its place provides commercial laundry service for linens, towels, etc., and small machines in each sixteen-man cottage. It is felt that placing the responsibility on the inmate for washing his own personal clothing will help develop desirable living habits.

The commercial laundry service is comprised on two separate cost components; contracted laundry service and self-service. The contracted service is provided for the inmate's bedding, towels and face cloths. The bedding is figured to be changed twice a week while the towels and face cloths are changed three times a week. The commercial laundry provides the sheets, towels and face cloths as well as the cleaning of these items thus relieving the burden on the Division of Corrections of purchasing and replacing these items.

The self-service component of the commercial laundry service pro-

vides one washer and one dryer in each sixteen-man cottage. The inmates are able to wash their own personal clothing within their own cottage area.

In each 150 man institution there are ten washing machines and ten dryers. These washing machines and dryers are estimated to last three years with new machines provided every three years. The first year estimated cost of these machines is derived by taking the total cost of the machines and dividing by their life expectancy and then adding the operations and repair costs to this figure.

To obtain the total commercial cost for the first year the first year cost of the machines is combined with first year cost of the contracted service. A simple ten percent (10%) increase is used for each subsequent year in the cost stream. The computations for this type of laundry service are as follows:

a. Contracted laundry cost

$$\begin{aligned} 1) & \text{ (Cost of bedding, towels, face cloths) X 12 = contracted} \\ & \text{service} \\ & \text{cost} \\ & (480 + 180 + 72) \times 12 = \$8,784. \end{aligned}$$

b. Self-service costs

$$\begin{aligned} 1) & \frac{\text{(cost of one machine) X 20}}{\text{machine life expectancy}} + \text{operational cost} = \text{self-service cost} \\ & \frac{(400) \times 20}{3} + 534 = \$3200. \end{aligned}$$

c. Contracted Service Cost + Self-service Cost = total commercial laundry cost

$$8,784 + 3200 = \$11,984.$$

150 - MAN INSTITUTION

LAUNDRY SERVICE COST STREAM

LAUNDRY SERVICE  
LOCATION

	1	2	3	4	5	6	7	8	9	10	TEN YEAR TOTAL COST	AVERAGE YEARLY COST
Prison <sup>1</sup>	14,100	15,510	17,060	18,766	20,642	22,706	24,970	27,473	30,330	33,220	224,695	22,469
Commercial <sup>2</sup>	11,984	12,862	13,828	15,210	16,379	17,664	19,430	20,985	22,696	24,965	176,003	17,600

YEARLY COST

1. Prison laundry service provided by utilizing inmate labor using lar commercial machines. Costs for this laundry service are shown on the supplementary pages.
2. Commercial is a combination of the following:
  - a. Laundry machines (one washer and one dryer) are provided for each sixteen-man,cottage.
  - b. Commercial laundry service provided for bedding, towels and face clothes.

Costs for this type of service is shown on the supplementary pages.

COMPARISON OF ALTERNATIVE LAUNDRY SERVICE  
COSTS FOR 400-MAN INSTITUTIONS

Alternative Laundry Services

1. Prison Laundry Service - this is the traditional laundry service provided in a facility within the institution and utilizing inmate labor. The same estimated yearly laundry cost of \$54.00 per year per inmate which was used in the 150-man institution, will be used for the 400-man institutions.

The cost of the laundry facility was determined by using 3000 square feet of floor space times the current \$25.00 per square foot building cost. The building cost and the new commercial laundry equipment cost are combined into replacement cost and then amortized over ten years or the length of the cost stream.

To obtain the total first year prison laundry cost, the inmate laundry cost is combined with the facility replacement cost and divided by the length of the cost stream. A simple ten percent (10%) increase is used for each succeeding year in the cost stream. The computations for the prison laundry service are as follows:

- a. average cost of laundry service per inmate  
per year = \$54.00  
average cost/man X Institute population = inmate laundry cost

$$54.00 \times 400 = \$21,600.$$

Alternative Laundry Services

Page Two

b. Facility Sq. feet X cost per sq. feet = <sup>cost</sup> of <sub>facility</sub>

$$3000 \times 25 = \$75,000.$$

c. Cost of new facility + cost of new equipment = <sup>facility</sup> replace-<sub>ment cost</sub>

$$75000 + 20000 = \$95,000.$$

d. Inmate laundry cost +  $\frac{\text{facility replacement cost}}{\text{number of years in cost stream}}$  = <sup>total</sup> first <sub>year</sub> laundr <sub>cost</sub>

$$21,600 + \frac{95,000}{10} = \$31,100.$$

2. Commercial Laundry Service - within the 400-man institution, this particular type of laundry service will be provided in the following manner:

- Two fully equiped laundromats are provided, one for each 200-man housing complex.
- Contracted commercial laundry service is provided for bedding, towels and face cloths for all inmates in the institution.

The contracted commercial laundry service is comprised of two separate cost components; contracted laundry service and self-service.

The contracted service provides each inmate with clean bedding twice a week and clean towels and face cloths three times a week.

The contracted commercial laundry, in addition to the cleaning service, provides the sheets, towels and face cloths.

Two fully equiped laundromats will be provided in the 400-man institution, one for each 200-man housing complex. Each laundromat will be housed in a separate facility with each providing eight

heavy-duty washing machines and eight large dryers. These washing machines and dryers are felt to have at least a ten year life span so the cost of these machines was amortized along with the building cost for the ten year length of the cost-stream. To obtain the total first year cost for the commercial laundry service the cost of the two buildings plus the equipment cost was divided by the number of years in the cost-stream and this figure is added to the total contracted first year laundry service cost. A simple ten percent (10%) increase is used for each subsequent year in the cost stream. The computations for this type of laundry service are as follows:

a. Contracted Laundry Service

- 1) (bedding, towels and facecloth service costs per month) X 12 = first year contract service cost  
 $(640 + 480 + 192) \times 12 = \$15,744.$

b. Laundramat Service Cost

- 1)  $\frac{\text{cost of facilities} + \text{equipment cost}}{\text{length of cost stream}} = \text{first year laundry facility cost}$

$$\frac{30,000 + 20,000}{10} = \$5,000$$

c. Total Commercial Cost

First year laundramat + first year contractd service cost = total first year commercial cost

$$5,000 + 23,424 = \$28,424.$$

400 MAN INSTITUTION

LAUNDRY SERVICE COST STREAM

LAUNDRY SERVICE  
LOCATION

	1	2	3	4	5	6	7	8	9	10	Total Ten Year Cost
Prison	31,100	34,210	37,631	41,394	45,533	50,086	55,094	60,603	66,663	77,329	\$495,643.
Commercial	28,424	31,266	34,392	37,831	41,614	45,775	50,352	55,387	60,925	67,017	\$452,983.

YEARLY COST

1. Prison laundry service provided by utilizing inmate labor using large commercial machines.  
Costs for this laundry service are shown on the supplementary pages.
2. Commercial is a combination of the following:
  - a. Two laundromats are provided, one for each 200 man housing complex
  - b. Commercial laundry service provided for bedding, towels and face cloths.
 Costs for this type of service is shown on the supplementary pages.

**END**