

Thus the total potential value (market value of materials and avoided disposal costs) added to the Delaware economy annually can be between \$62 million at the 50% level (\$37 million + \$25 million) and \$93 million at 75% level (\$55.5 million + \$37.5 million), justifies source separation of materials as opposed to disposal of mixed materials.

**Table 4: Potential Value in Delaware Resource Management**

	50%	75%
<b>Market Value</b>	\$37 million	\$5.5 million
<b>Avoided Cost Value</b>	\$25 million	\$37.5 million
<b>Total Annual Value</b>	\$62 million	\$93 million
<b>Total Program Value (6 years)</b>	\$372 million	\$558 million

These economic values are not ‘net’ values, as the public and private sector must invest in infrastructure to achieve high recovery rates. It is ILSR’s contention that the investment of \$20 million over 6 years, plus the normal business investments to maintain company efficiencies, will allow the State’s economy to realize the values estimated for the 50%, 75% and higher recovery rates.

The best approach for the state assumes the following:

- A public education program;
- Training for managers of public and private facilities;
- Provision of opportunities to recycle at all areas where materials are discarded;
- An industrial product redesign program; and
- A phased-in requirement for source separation for both residential and commercial generators.

### C. Employment Potential

Materials recovery is an economic development tool as well as an environmental tool. Reuse, recycling, composting, and waste reduction offer direct development opportunities for communities. Discarded materials are a local resource that can contribute to local revenue, job creation, business expansion, and the local economic base. On a per-ton basis, sorting and processing recyclables alone sustain 11 times more jobs than landfilling or incineration. However, making new products out of the old offers the largest economic pay-off in the recycling loop. New recycling-based manufacturers employ even more people and at higher wages than does sorting recyclables.

ILSR’s report, “Salvaging the Future: Waste-Based Production,” looked at how many recycling-based manufacturing plants a city of 1 million people could sustain on its waste stream. It found that 6 paper mills, 1 glass container manufacturing plant, 51 plastics

processing and manufacturing plants, and 2 aluminum smelters could operate. These plants would create 1,500 jobs and add more than \$250 million to the local economy.

In order to compare jobs created through recycling with disposal, a decade ago ILSR developed job-to-ton ratios for specific material streams based on direct interviews with operating facilities. These factors are shown in the table below.

**Table 5: Job Creation: Reuse and Recycling vs. Disposal**

Categories	Jobs per 10,000 TPY
Product Reuse:	
Computer Reuse	296
Textile Reclamation	85
Misc. Durables Reuse	62
Wooden Pallet Repair	28
Recycling-Based Manufacturers:	25
Paper Mills	17.5
Glass Product Manufacturers	26
Plastic Product Manufacturers	93
Processing Facilities:	
Conventional Material Recovery Facilities	10
Plastics Processing Facilities	30
Metal Reclaimers	6
C&D Processors	2.5
Composting	4
Landfill and Incineration	1

*TPY = Tons Per Year*

*C&D = Construction & Demolition*

*Note: Figures are based on ILSR interviews with 114 facilities around the country.*

Applying these job-to-ton ratios to Delaware’s discards, indicate that 1,574 jobs could potentially be created if half the state’s discarded materials were recovered. See table shown below. If the recovery rate reached 75%, the number of jobs sustained could jump to 2,360. Furthermore, thousands of indirect jobs could be created as well.