



Samson Carts A Financial Analysis

Currently in the marketplace there are a variety of mobile material handling carts made of plywood or metal. These carts were created because of identified needs and have functioned very well for many years. These products include book and equipment carts.

Around the country these products vary slightly, producing 3-high, one and two sided carts and 4-high, one and two sided carts as well as variations in lengths, 36", 42" and 48" to name the most common.

These current products have their pros and cons like anything else but there are a few negative key points that warrant investigation. Most metal carts are welded and some are screwed together. The point being that if the metal cart gets damaged it's either repairable albeit not to 100% or it ends up in the recycling bin.

The wood carts are the same way with the added dilemma faced by all organic products-they deteriorate, splinter, and when not cared for properly after getting soaked on that last move may develop mold, rot, or de-lamination of the plywood. And how soon before any of this happens is anybody's guess. The approximate average life expectancy of a wood cart is 18-36 months in the moving industry.

There is no doubt that for movers and equipment leasing companies these carts are a necessity in their business. There are other issues now that require us to investigate alternatives. Among those issues are diminishing natural resources, worker compensation, rising real estate costs and labor rates. And to compound these issues our customers are demanding we work 'outside of the box' to drive down the costs.

It was this last issue that caused some Midwest movers to ask if there was a better way to do their job, increase their margins and save money. This was a call for new ideas and Samson Carts answered the call. After five years of design and testing, working with moving companies, we developed a product that addresses the issues.

During this process we developed CTQs, features that are Critical To Quality:

1. Collapsibility to reduce storage and transportation costs;
2. Replaceable parts;
3. Ability to carry as much or more weight;

4. Durability;
5. Recyclable;
6. Ergonomic features to reduce risk of injury to user;
7. Lightweight;
8. Facility/people friendly design;
9. Versatility;
10. Value-add to a business.

It's these ten CTQs that are embodied in our design philosophy to work with our customers to develop products with real direct and intrinsic value. Samson Carts, the first in a line of high-strength plastic book/utility carts is a 42" wide six-shelf cart that can be used as a single sided or double-sided cart.

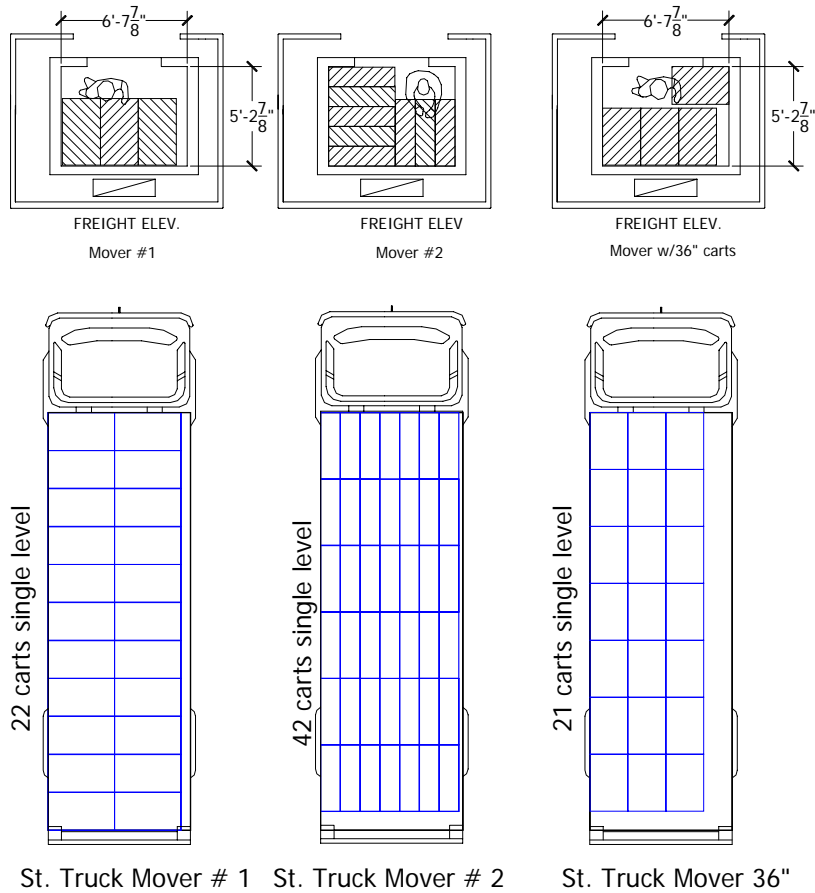
The following financial analysis illustrates the real hard and soft cost savings of the Samson Cart for the moving industry. Many of these CTQs translate to other industries as well, hotels, hospitals, package delivery, small parts handling, libraries, schools, warehousing, computer rooms and health clubs to name a few.

Sample Project Summary:

This analysis examines the cost benefit of Samson Carts for a moving company. The client project requires a company to pack 1,000 linear feet of files, books and binders in a corporate library. The contents must remain accessible in their original stack order so carts will be used. 'Snaking' is acceptable. The carts will be needed for two weeks while renovations to the library are completed. While unloading the truck a cart falls off the dock. The Mover using wood will have to take the cart back to the warehouse and retrieve another while the Mover using Samson has a Samson road kit in the storage compartment, allowing him to repair any possible damage (if any) on the dock.

Project Analysis Assumptions:

- Mover has an inventory of 50 carts.
- Movers uses a standard straight truck whose inside dimensions are: 90"w x 22'l x 11'-6"h.
- Freight Elevator at both sites is an average size of 5'2" x 6'7" (34 s.f.).
- Annual cost of warehouse space \$16 RSF
- Two-man truck per hour rate of \$95
- Mover rate of \$39.50/hr.
- Mover #1 uses a wooden cart, 3-high, two-sided. (Dims: 42"l x 24"w x 52"h) 243 lin. Inches shelf space.
- Mover #2 uses a Samson cart, 3-high, two-sided. (Dims: 42"l x 25"w x 50.5"h) 240 lin. Inches shelf space.
- Mover #3 uses a wood cart, 4-high, two-sided. (Dims: 38"l x 24"w x 58.5"h) 288 lin. Inches shelf space.
- Average wait time for the elevator is 10 min. per load.
- Travel time to jobsite = 1 hr. (each way).
- The time it takes the movers to fill each type of cart is assumed equal and therefore omitted from analysis.
- It is assumed that all trucks would have their own bay. If the trucks had to use one bay the wood carts would require more time to swap trucks at the dock, increasing labor expense.



Project Financial Summary:

	<u>Mover #1</u>	<u>Mover #2</u>	<u>Mover #3</u>
Delivery to Jobsite	\$285.00	\$ 95.00	\$190.00
Stage Job	\$438.89	\$164.58	\$276.50
Broken Cart Repair	\$252.52	\$ 62.92	\$252.52
Remove From Jobsite	\$438.89	\$164.58	\$276.50
Delivery to Warehouse	\$285.00	\$ 95.00	\$190.00
<u>Total Project Costs:</u>	\$1,700.30	\$582.08	\$1,185.52
Cost % <u>over</u> Samson	192%		104%
<u>Warehouse Storage Costs</u>			
Storage Space (sq. footage)	350	182.50	300
Real Estate Costs (\$16 RSF)	\$5,600	\$2,920	\$4,800
Cost % <u>over</u> Samson*	92%		64%

*The storage savings using Samson Carts would increase further if stacked while stored. At 98 lbs. Samson Carts can be stacked by one person.



MOVER 3-YEAR
BENEFIT-TO-COST/PRESENT VALUE ANALYSIS
SAMSON CARTS vs. WOOD CARTS

SAMSON				
YEAR	DESCRIPTION	<u>COST</u>	<u>INFLATED COST</u>	<u>PRESENT VALUE</u>
2003	PURCHASE	\$ 237.00	\$ 237.00	\$ 237.00
2004	OPERATING COST	\$ 347.15	\$ 358.78	\$ 324.06
2005	OPERATING COST	\$ 347.15	\$ 369.19	\$ 305.53
2005	REMAINING VALUE	(\$158.79)	(\$158.79)	(\$421.83)
TOTAL PRESENT VALUE				\$ 444.77

WOOD				
YEAR	DESCRIPTION	<u>COST</u>	<u>INFLATED COST</u>	<u>PRESENT VALUE</u>
2003	PURCHASE	\$ 180.00	\$ 180.00	\$ 180.00
2004	OPERATING COST	\$ 835.66	\$ 863.65	\$ 780.09
2005	OPERATING COST	\$ 835.66	\$ 888.72	\$ 735.47
2005	REMAINING VALUE			(\$1,515.56)
TOTAL PRESENT VALUE				\$ 180.00

Benefit/Cost RATIO 4.13 Samson over Wood!

To further demonstrate, a simple payback analysis would be:

Samson	\$236 (purchase)	\$347.15 (annual OPEX)	\$488.51
Wood	<u>-\$180</u> (purchase)	<u>-\$835.66</u> (annual OPEX)	<u>\$- 56.00</u>
	\$ 56	(\$488.51)	\$432.51 net

Diff first Cost/Diff OPEX = 56.00/432.51 = .13 years (1-1/2 Mon) payback on Samson Carts. If annual Revenue is added: 432.51+249.6=56/682.11= .08 years or 1 month!