

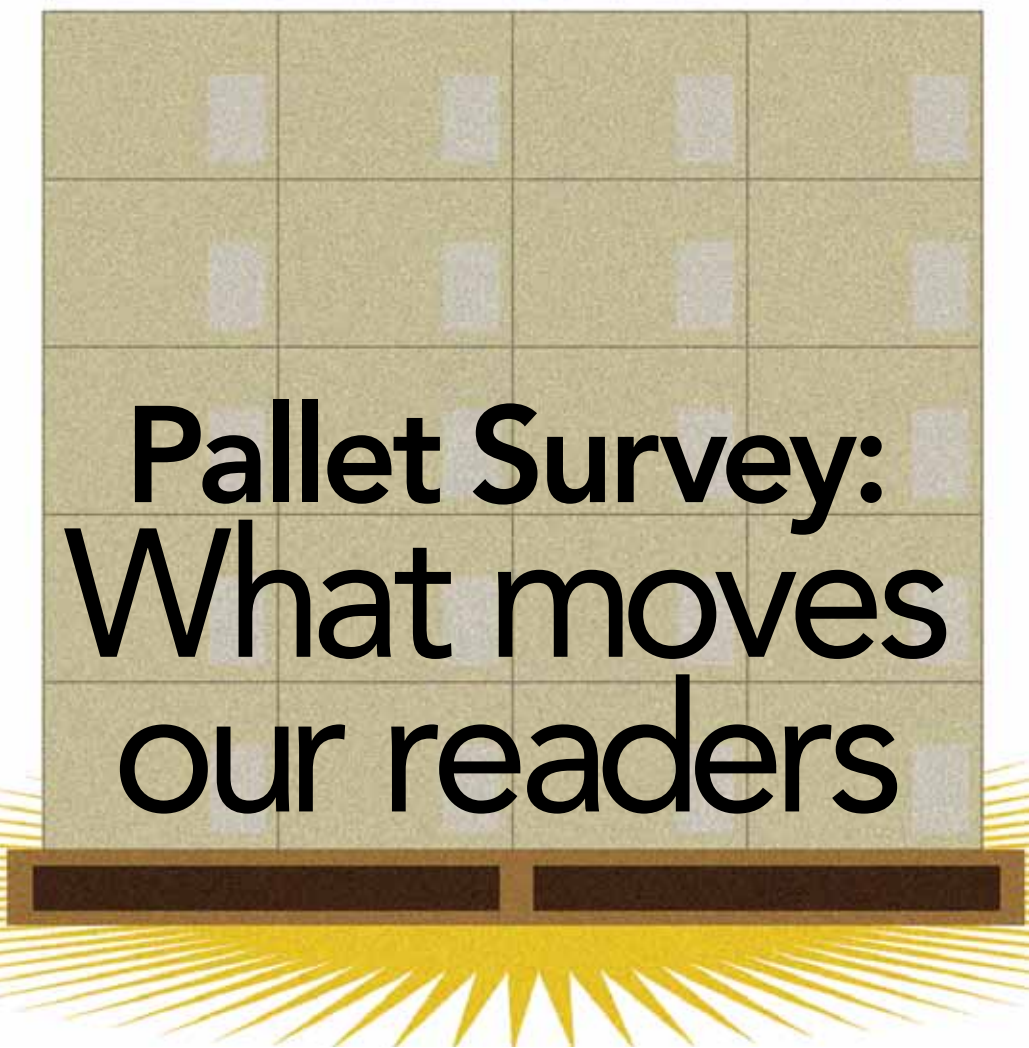
## 2010 Pallet Survey

**Plus: *Modern Materials Handling's* Pallet Webcast**

Results of the 2010 Pallet Usage and Trending Study

Thursday, October 28 @ 2:00 p.m. ET

**Register: [www.mmh.com/palletsurvey](http://www.mmh.com/palletsurvey)**



# Pallet Survey: What moves our readers

By **Bob Trebilcock**, Executive Editor

**From wood to plastic to pallet pools, our readers tell us what's important in pallets.**

**P**allets move the world. There's more than a little truth to the slogan of the National Wooden Pallet & Container Association (NWPCA, 703-519-6104, [www.palletcentral.com](http://www.palletcentral.com)), the Washington, D.C.-based trade association that represents the wooden pallet industry.

Love them or hate them—and most pallet users have mixed emotions—there's a reason billions of pallets are floating around the supply chain. When it comes to getting a product from point A to point B, a pallet is probably involved. Build a better mousetrap and the world will probably shrug its shoulders; build a better pallet and we

guarantee that manufacturers will beat a path to your door.

It's been eight years since *Modern's* last pallet survey. Since then, used pallets and pallet recycling programs have surged in popularity; there has been an expansion of pallet rental and pooling programs from providers like Peco and CHEP; and iGPS entered the market with the first rental pool of plastic pallets.

Now seemed like a good time to revisit the subject to see what the pallet landscape looks like today. To find out, we surveyed subscribers of *Modern* as well as a sample of recipients of our e-newsletters. We received 673 qualified responses, defined as a reader who is employed at a location that actually uses pallets. The survey has a margin of error of  $\pm 3\%$ . So, what moves our readers when it comes to pallets? Here's what we learned.

### The who, what and how of pallets

Who is using pallets, what are they using, and how are they using them?

For starters, most respondents were involved in manufacturing, with a variety of industries represented. Food manufacturing (15%) and consumer packaged goods (10%) were the largest verticals, but we also had responses from automotive, medical and health care, building materials and construction, paper, chemicals, electronics, and aerospace, to name a few. Distributors represented less than 10% of the respondents.

The average reader is using an estimated 10,000 pallets at their location, or roughly 20 truckloads a year. However, 21% were using 30,000 or more pallets a year, or about five truckloads a month; another 16% were using 10,000 to 29,999 a year.

One surprise: Although the economy has tanked, pallet usage has remained relatively constant over the last two years with 37% of readers saying that

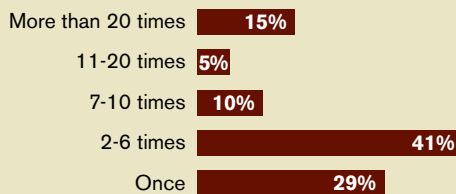
their usage has not changed and 39% saying that it has increased. Only 24% said their pallet usage went down.

Despite those numbers, pallets are still primarily purchased at the local level and not the divisional or national level. Fifty-two percent of purchases are made by someone at the local level for just that location, typically a purchasing manager; another 17% are purchased at the local level for that and other locations. Only 17% of respondents said that their pallets are purchased at the

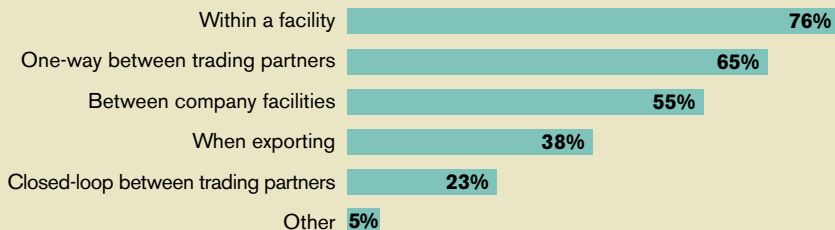
corporate level (12%) or by a division-level purchasing department (5%).

Our readers are also getting double and triple duty from their pallets, with most readers (83%) using their pallets for warehousing and shipping. Only 6% used them strictly for warehousing and only 11% solely for shipping. But when we looked deeper we learned they aren't just shipping those pallets to an end customer. Sixty-five percent of our readers said some of their pallets are shipped out to a trading partner, never to be seen

### In general, how many times do you use a pallet?



### How are you using pallets?



Source: Peerless Media Research Group, 2010

### What percentage of pallets bought are composed of each type material?

	% who purchased	20% or less	21%-50%	51%-70%	71%-90%	91%-100%
Wood	92%	2%	5%	3%	17%	66%
Plastic	33%	23%	4%	1%	1%	3%
Wood composite	15%	10%	3%	1%	0%	1%
Cardboard/corrugated	10%	8%	1%	*	0%	1%
Metal	6%	4%	*	*	*	1%
Other	3%	1%	0%	0%	0%	2%

Source: Peerless Media Research Group, 2010

# 2010 Pallet Survey

## No job too big for pallet provider

*Creative partnership replaces multiple vendors with a single service provider.*

Even after it made the switch to a pallet management service, Polar Beverages was so large that any single service provider was incapable of meeting its demand. The company partnered with a provider (IFCO Systems, 877-430-4326, [www.ifco-us.com](http://www.ifco-us.com)) that allowed it to exchange multiple pallet managers for a single, centralized service.

The company has grown tremendously during its 128-year history, now distributing 60 million cases annually from its two bottling plants and six DCs. For years, Polar was forced to manage five separate pallet suppliers for just two of those locations.

Beginning in June 2008, it entered into a partnership with a different sort of pallet management provider. In six months, Polar's management felt ready to reduce the number of pallet suppliers to two, and finally in October of 2009, it began sourcing the majority of pallets through one provider.

"In the past, the idea of a single pallet vendor doing more than 90% of our volume seemed ludicrous," says Jim Doyle, vice president of operations for Polar Beverages. "We had resigned ourselves to managing a handful of vendors and dealing with all the issues that came with it."

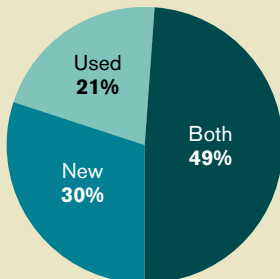
The collaborative supply partnership resulted in consistently high quality, lower costs, and minimal program management by Polar. Almost immediately, the partnership reduced costs by nearly eliminating program administration and minimizing downtime due to pallet failures. Because delivery modifications are made in less than 24 hours, the company now avoids pallet inventory buildup and shortages.

Management from the company and the provider meets regularly to brainstorm creative ways to drive costs out and add value to Polar's supply chain. The two have developed models for vendor return programs, on-site operations, and pallet repair programs. This partnership and exchange of ideas is the basis for the continued success and growth of the relationship.

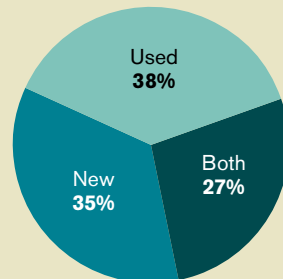
—Josh Bond, contributing editor

## If wood pallets are in use...

Are the pallets you purchase new or used?



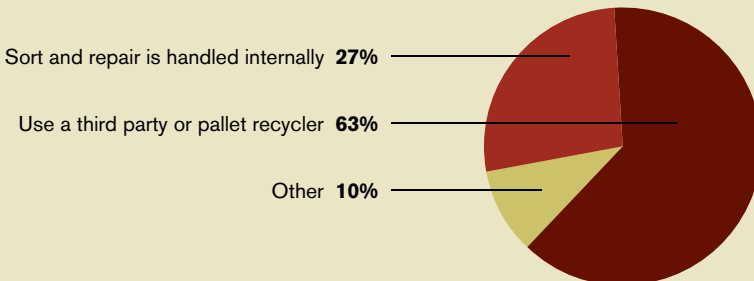
Which type of pallet do you primarily buy?



Source: Peerless Media Research Group, 2010

## If wood pallets are in use...

Which best describes how they are primarily maintained?



And, why do you use this resource?

### Handled internally

Least expensive/  
Most cost effective

Have the resources/Personnel  
to handle the maintenance

Easy to repair, handle

Quicker to fix

### Use third party/recycler

More cost effective/Less costly  
than handling in-house

Don't have the resources/Personnel  
to handle the maintenance

Convenient

Damaged pallets are removed/Recycled

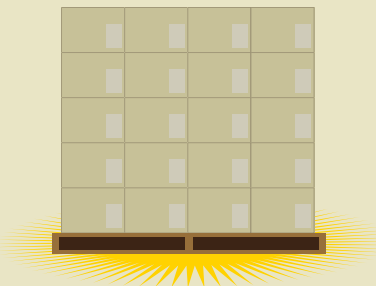
Not in the pallet business. Just a user

Don't have the space/Saves space

Quick/Readily available

Cleaner/Sanitary

Safer



Source: Peerless Media Research Group, 2010

again, but other pallets are used to ship product between facilities (55%), as part of a closed loop between trading partners (23%), and for export purposes (38%). Seventy-six percent are using them within their facility for processes like warehousing or work-in-process.

Those multiple uses explain why readers said they are using their pallets an average of 7.5 times each. Only 29% said they get just one use out of a pallet. Forty-one percent, on the other hand, get between two and six uses from each pallet and 15% are getting more than 20 uses from each pallet.

### Wood or plastic, new or used

The question at the checkout line at the grocery store is paper or plastic? When it comes to pallets, there are two questions: Are your pallets still made from wood or another material, and are you using new pallets or used pallets?

Wood still dominates the pallet market: 92% of the respondents purchase wood pallets and on average 84% of the pallets being used are made from wood. That comes as no surprise. What did catch our attention is that for many users, it's not an either/or question. Instead, a good number are using wood plus other types of pallets.

For instance, 33% of respondents are using some plastic pallets, 15% are using some type of wood composite pallet, and 10% are using corrugated/cardboard pallets for some applications.

Still, these are niche products, with plastic pallets accounting for about 8% of the pallet usage by our readers, virtually unchanged from 2002. Wood composite (3%), cardboard/corrugated (2%) and metal pallets (1%) combined accounted for just 6% of the pallet usage.

While wood and plastic pallet users look for the same characteristics in their pallets, there are some differences: more than 90% of users of both wood and plastic pallets put a premium on the strength and the price of the pallet, but nearly 85% of plastic pallet users value reusability compared to 71% of wood pallet users. That reflects the higher cost associated with plastic pallets.

What's driving the decision to use one material over another? When it comes to wood, it's a matter of availability and price. "Wood is available and probably the most economical," said one respondent. "It is difficult getting our pallets back once they go out with our product (which makes plastic uneconomical)."

But users who can control their pallet assets and can afford to take a long-term view of the asset are taking a harder look at plastic. "We use plastic because it lasts longer and is more durable," said a respondent. "Fewer repairs are needed to keep them in service."

The good news for manufacturers of alternative pallets is that readers would

### Pallet partnership cuts headaches for national manufacturer

*On-line portal leads to greater visibility of available inventory and fewer new pallet purchases.*

**Managing pallets is a difficult** chore for any company, especially one with 11 manufacturing plants across the country. For a leading container manufacturer, outsourcing its pallet recovery and repair operations (Millwood, 330-393-4400, [www.millwoodinc.com](http://www.millwoodinc.com)) produced substantial savings and significantly improved customer relations.

Prior to outsourcing the operations, the manufacturer handled the receipt, sortation, repair and re-distribution of more than one million pallets per year with its own personnel. When one of the manufacturer's plants needed a load of pallets, personnel would check pallet reserves before ordering new pallets. However, since the plants only took a physical inventory once a month, the information was often out of date and inaccurate, leading to billing disputes and unnecessary purchases.

A key feature of the pallet management program is an on-line portal that tracks the status and location of pallets. The information in the system is updated daily, or whenever pallets are repaired or shipped out, giving the manufacturer a much more accurate view of its inventory. In addition, the pallet management company handles all of the pallet repair operations at the manufacturer's plant locations.

The manufacturer now has visibility into its pallet inventory across its network on a daily basis. The availability of timely data has reduced billing disputes and unnecessary purchases.

—Josh Bond, contributing editor

### Modern Materials Handling's Pallet Webcast

Results of the 2010 Pallet Usage and Trending Study

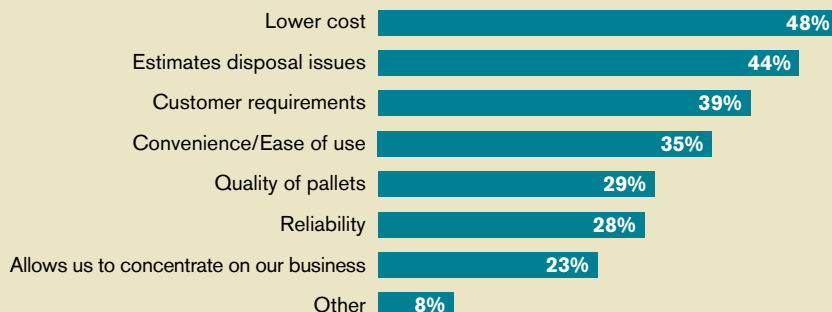
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### Which best describes your reasons for using a pallet rental or pallet retrieval/recovery system?



Source: Peerless Media Research Group, 2010

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consider them in the future: 23% said they would consider plastic, 12% would consider wood composite pallets, 11% would consider cardboard/corrugated, and 7% would consider metal.

While *Modern* wasn't surprised to see that wood is still the most popular choice of materials, we were surprised at how used pallets have come to dominate the

market in recent years. While no one has hard data, Bruce Scholnick, president of the NWPCA, estimates that used pallets now account for about 70% of the wood pallet market. In our survey, only 30% of our readers said they only purchase new pallets; 49% said they purchase both new and used, and 21% said they only purchase used pallets. As Scholnick points

**What do you believe will be the primary reasons for future changes regarding your pallet usage?**

Reason	%	What the materials handling pros say
Business activity level	31%	Business growth, demand, economy, increased sales, increase in production, etc.
Cost	21%	Cost, savings and price. Cost savings. "Disposal costs are too high."
Customer requirements	15%	"Track and trace requirements of some customers may require us to use pallets with RFID tags embedded."
Regulations	9%	"Industry no longer allows the use of chemically treated pallets. All pallets must be heat treated as of September 2010."  "Restrictions on wood in many countries will force the use of more plastic pallets."
Composition of pallet (i.e. plastic, wood, composite, etc.)	9%	"I foresee that due to customer requests, (big box retailers) we will continue to use more pooled pallets than we do today. I expect wooden pooled pallet usage to be replaced more and more with pooled plastic pallets. Reasons: improved product-safety, load efficiency and reduced costing."
Green	5%	"Reusable pallets for environmental reasons."
Durability	5%	"Better design for multi-use and reusable."  "Long-term durability improvements with skids used for warehousing functions. Move to plastic skids if they came into pricing alignments with wood."
Availability	3%	"Other options may become a better supply from an availability or cost standpoint in the future."
Recycling	3%	"New materials and reuse potential."
Sanitary issues	3%	Food safety. "Sanitary risks of wood in meat industry, ergonomics."
Design of pallets	3%	"Change in type of products made and the size of the pallet needed to match the equipment that is being shipped on them."  "Renovations or changes in pallet racking design."
Heat-treated pallets	1%	"The need for more heat-treated pallets for international shipping."
Miscellaneous	8%	"Better management through system, national purchasing program and coordination throughout our internal supply chain network."

Source: Peerless Media Research Group, 2010

out, in the not so distant past, most users would not have even considered used pallets.

Expect the trend toward used pallets to continue: 80% of respondents said they are using the same number or more used pallets than they were two years ago, and 84% expect to use the same or more used pallets in the next two years. Eighty-nine percent expect their use of all pallets to remain the same or increase.

### Get into the pool

One of the selling points of used pallets is sustainability: 57% of readers said their company's overall "green strategy" was a consideration when it came to acquiring pallets. Keeping those used pallets in service calls for a pallet management and pallet repair program.

Most of our readers are turning to a third party to handle pallet management for them. Only 27% said they are sorting and repairing their pallets in house; the others are using a pallet management or pallet recycling com-

pany to collect, sort, repair and redistribute a pool of pallets for a company. The reason: As with any other 3PL service, readers say they don't have the resources or personnel to get the job done in house, and it's more economical to use a 3PL.

For those who don't want to manage their own pool of pallets, the alternative is to participate in one of the pallet pools operated by CHEP and Peco or plastic pallet pools managed by iGPS. In this model, users rent the pallet on a per-trip basis,

while the pool operator collects, sorts and repairs the pallets.

Pallet pooling is still a niche in the market, but one with room to grow: Only 33% of our readers said they were currently participating in some kind of pallet pool, and of those, only 34% were renting their pallets from one of the pallet pool providers. The remainder are managing their own pools.

Still, nearly 60% of the respondents said they would consider participating in a pallet retrieval or third party pallet rental system in the future. While the lower cost and convenience are driving factors, 39% also said that customer requirements were a deciding factor. As one reader put it: "Because of requests from our big box customers, we will continue to use more pooled pallets than we do today. And, I expect wooden pooled pallet usage to be replaced more and more with pooled plastic pallets." □

