

# PECO Pallet Case Study: Block Pallet Utilization and Potential Cost Savings

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## ► INTRODUCTION & BACKGROUND

PECO Pallet is a North American leader in pooled pallet services that provides wood block pallets to grocery and CPG manufacturers throughout the U.S., Canada, and Mexico. Sobeys is Canada's second largest food retailer, operating over 1,500 stores under a variety of banners and thousands of wholesale accounts, including retail stores and convenience stores coast to coast.

In April and May 2016, PECO Pallet and Sobeys collaborated with The Poirier Group (TPG), a business consulting firm specializing in cross-functional performance improvement. TPG conducted a five-week independent study on block pallet utilization in a selected Sobeys distribution center. The goal was to identify, validate, and verify the potential cost savings opportunities of using block pallets as compared to stringer pallets.

PECO Pallet funded the study and collaborated on the overall approach and timeline, but otherwise had no involvement during the evaluation process.

## ► EXECUTIVE SUMMARY

This independent third-party study found significant savings opportunities from using block pallets compared to pooled stringer pallets. Total annual savings for a single distribution center warehouse location were estimated at **\$497,500**, which included \$56,400 in Operational Efficiency and \$441,100 in Transportation Efficiency. Participants in the study felt these estimates were conservative, and that potential savings could be even higher.

## ► METHODOLOGY

1. TPG consultants worked with representatives from PECO Pallet and Sobeys to establish process improvement hypotheses and identify areas of potential cost savings due to block pallet usage. One Sobeys distribution center location was selected for the study.
2. TPG conducted exploratory and fact-finding interviews with shift managers and pallet managers at the Sobeys warehouse, collected data, and recorded their observations over a period of five weeks.
3. TPG then analyzed the data and modeled potential annualized benefits in both time and cost savings.

## ► FINDINGS

### 1. Operational Efficiency

At the Sobeys warehouse, it was observed that loaders prefer to work around stringer pallets by stacking them on a block pallet or loading them straight. This causes issues and delays during loading. It was also observed that the true four-way entry of a block pallet enabled easy access and the ability to pinwheel with a standard pallet jack. Stringer pallets require the use of dock stockers, which leads to additional capital and equipment maintenance costs.

Potential annual savings were estimated as follows:

Extra time required to handle stringer pallets	\$16,600
Reduction in maintenance cost from reorganizing fleet	\$39,800
<b>Total Operational Efficiency Savings</b>	<b>\$56,400</b>

### 2. Transportation Efficiency

The average weight of a Canadian pooled stringer pallet is 90 pounds, versus 65 pounds for a PECO or similar block pallet. TPG calculated the additional fuel costs that are incurred for transporting the additional weight of pooled stringer pallets. Even more significant potential transportation savings were identified due to the increased cube utilization possible with four-way block pallets. With stringer pallets, the average number of pallets per load is between 24 and 28. Block pallets allow for up to 30 pallets to be loaded on the floor of the trailer. Increasing the cube utilization per trip reduces the total number of trips per year.

Potential annual savings were estimated as follows:

Reduction in trip costs from increasing cube	\$437,000
Reduction in pallet weight on outbound loads	\$4,100
<b>Total Transportation Efficiency Savings</b>	<b>\$441,100</b>

## ► CONCLUSION

This study only focused on one particular Sobeys warehouse, but other distributors and manufacturers stand to realize similar benefits from utilizing block pallets instead of stringer pallets. Based on this quantitative data, it is clear that the potential for improved operational, transportation, and pallet management efficiencies can lead to significant savings throughout the supply chain.