

Executive Summary

To design an optimum package system, a packaging professional needs a good understanding of the hazards that the package will face as it travels from the manufacturer to the end user. This understanding comes from analyzing the environment through which it is likely to travel. The packaging professional can then design the package system to withstand the identified hazards.

Past and present environmental data collection techniques and reports, while useful for their own purpose, do not provide enough information to justify existing or to develop new package performance standards. Only by properly collecting (using an agreed-upon guideline), analyzing, and sharing data (in a public form) will there be enough information to fully characterize the distribution environment. The Measurement and Analysis of the Distribution Environment (MADE) task group, under the Institute of Packaging Professionals (IoPP), has conducted a three-year study, which is now at an end, to undertake this challenge.

This report comments on several methods commonly used to analyze the distribution environment. Previous and current studies are discussed, along with the alpha and beta phases of the MADE study. The results of this experiment are included at the end of the document. The report reveals many of the issues discovered by the MADE team and provides suggestions for improvement in the data collection, analysis, and presentation processes.

The distribution environment is complex and highly variable, so it is therefore very difficult to measure. This report merely attempts to bring to light some of the concerns related to the analysis. It should serve only as a reference to guide any future research studies.