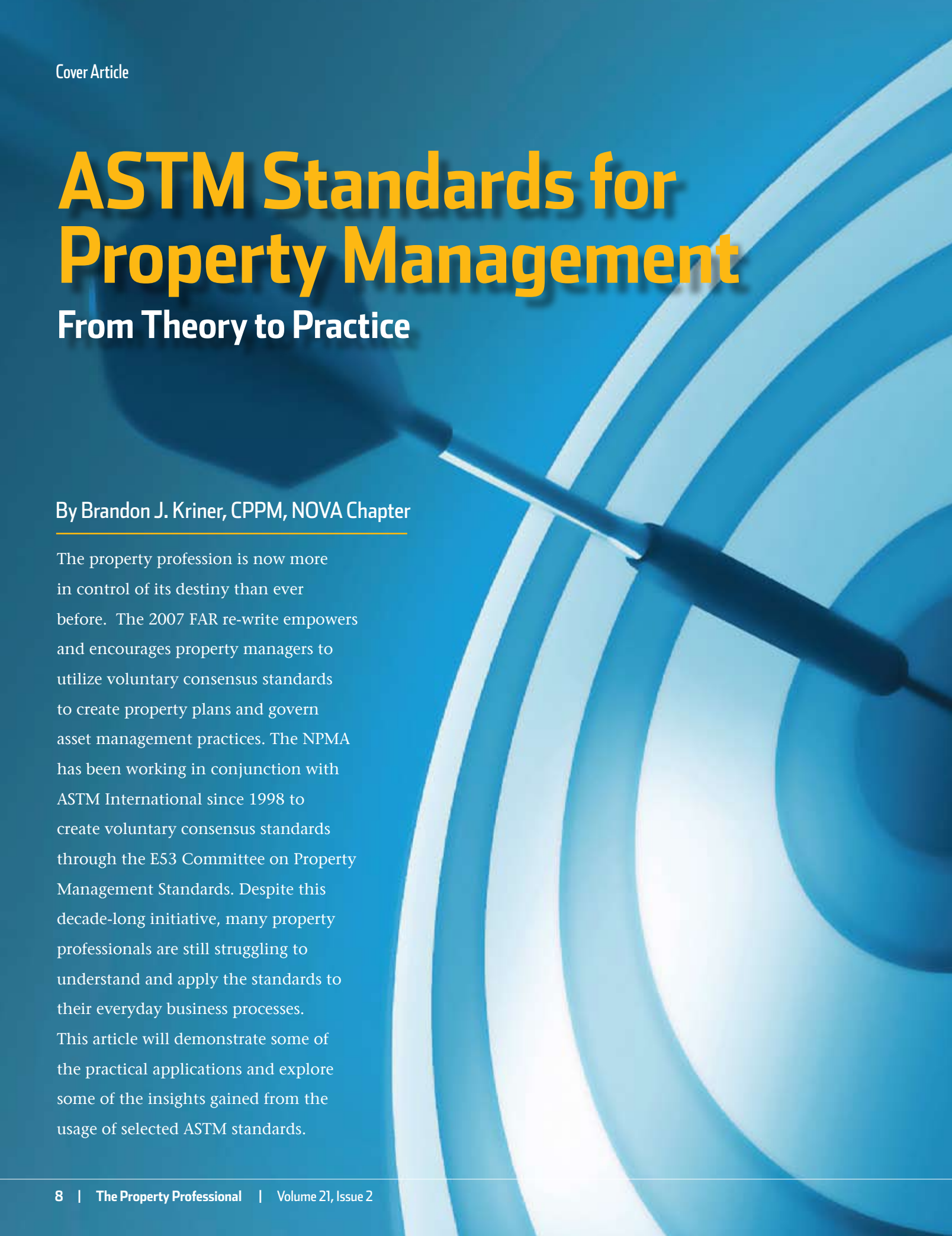
ASTM Standards for Property Management

From Theory to Practice



By Brandon J. Kriner, CPPM, NOVA Chapter

The property profession is now more in control of its destiny than ever before. The 2007 FAR re-write empowers and encourages property managers to utilize voluntary consensus standards to create property plans and govern asset management practices. The NPMA has been working in conjunction with ASTM International since 1998 to create voluntary consensus standards through the E53 Committee on Property Management Standards. Despite this decade-long initiative, many property professionals are still struggling to understand and apply the standards to their everyday business processes. This article will demonstrate some of the practical applications and explore some of the insights gained from the usage of selected ASTM standards.

Many property professionals are aware of the standards development effort but relatively few are reaping the benefits of this important initiative. The standards present more than just an opportunity to align your property system with consensus-driven industry best practices. Several standards provide a quantitative means of assessing property systems and procedures, enabling you to convert your property records from a cumbersome data repository into a source of strategic analysis for your organization. Applied properly, the standards allow you to shift your focus from simply "tracking stuff" to understanding operational risks associated to certain types of property, determining the extent to which classes of property should be controlled, and evaluating the cost/benefit tradeoffs of performing exhaustive physical inventories. These metrics provide the opportunities for property management to transition from a tactical cost center to a source of strategic operational intelligence and, ultimately, cost savings.

These goals may seem lofty, but the promise that they hold is well within reach. The standards have been created and vetted by over 150 property professionals on the E53 committee using ASTM's world-renowned consensus process. The data you need is already captured in the property records that you've been keeping in the course of your day-to-day activities. Let's examine the insight we can get from this data by applying three of the ASTM property standards: Equipment Movement Velocity[1], Loss, Damage and Destruction[2] and Physical Inventory.[3]

An organization's Equipment Movement Velocity (EMV) provides a measure of how frequently assets are moving in, around and out of an organization's control over a given period of time. The EMV is calculated as the sum of all movement transactions (acquisitions, location changes and dispositions) during a given year divided by the number of active assets under control at the time of the calculation. The EMV applies to equipment only, as material is inherently understood to move quickly through an organization. The results of the EMV calculation must be understood in the context of the physical location level[4] to which items are tracked. Assets tracked to the room level will probably have a higher EMV than assets tracked to the building level.

Let's look at two comparative examples. Speedy, Inc. has 4,000 line items tracked to the room level. A single property manager is responsible for recording all property transactions. In 2007, Speedy recorded 1,957 acquisitions, 8,746 location changes and disposed of 1,732 pieces of property; a total of 12,435 movement transactions. Speedy's EMV for 2007 was 3.11.

Tortoise Industries has 50 capital assets tracked to the site level. Tortoise employs three full-time property managers to manage these items. In 2007, Tortoise recorded two acquisitions, no location changes and disposed of one piece of property, a total of three movement transactions. Tortoise's EMV for 2007 was 0.06.

The large difference in EMV between Speedy and Tortoise allows us to draw several conclusions about the property challenges at each organization. Speedy has a lone property person managing 4,000 line items that move an average of three times each per year. Speedy can probably justify adding additional property managers to its staff or risk loss of control due to high EMV. Tortoise, on the other hand, almost certainly has too many staff members dedicated to the control of a few infrequently moved items.

We can also conclude that Speedy is justified in tracking its assets to the room level. Speedy has a large number of assets that move frequently, so it is important for the property manager to exert a greater focus of control. Tortoise, on the other hand, has only a few assets that move infrequently. Tracking the assets to the building level is sufficient as there would be little additional benefit to tracking the assets to the room level.

Finally, the differences in EMV between the two companies might lead us to conclude that Speedy needs to conduct physical inventory more frequently than Tortoise does. Speedy should probably perform an annual inventory while Tortoise can probably conduct biennial

or even triennial inventories. Tortoise's assets move so infrequently that the cost of performing an annual inventory would outweigh the benefits. Speedy, on the other hand, would probably find that the benefits of performing an annual inventory would outweigh the significant costs of reconciling hundreds of potentially lost assets.

Fortunately another standard exists to help organizations like Speedy and Tortoise establish a more precise benchmark for the cost/benefit analysis of physical inventory frequency and reconciliation of loss. The Loss, Damage and Destruction (LDD) standard establishes thresholds of acceptability below a 2% loss ratio for non high risk property and 0% for high risk property. The loss ratio for a category of property is calculated by dividing annual losses in that category by the average amount of like property on hand during the year. The ratio can be calculated for the number of assets or the dollar value of the assets.

Let's look at two examples to illustrate the LDD standard in action. The Careful Corporation had an average of 154 capital assets valued at $3,843,980 during 2007. None of these assets are considered high risk. Losses for the year totaled 3 items at $60,874. Careful Corporation had a 1.9% line item LDD ratio and a 1.6% dollar value LDD ratio for 2007. Both of these ratios fall within the 2% acceptability threshold established in the standard, so the costs of investigating these losses would probably outweigh the benefits of recovering some of this low-risk property.

The Clumsy Company, on the other hand, had an average of 12,345 pieces of non-high risk equipment valued at $1,923,180 and one piece of high risk equipment valued at $500 during the same year. Losses of non-high risk equipment for the year totaled 3,000 items at $30,874 and the single piece of high risk equipment is missing. Clumsy has a 2.4% line item LDD ratio but only a 1.6% dollar value LDD ratio for low-risk property. Clumsy's property managers will have to decide whether the benefits of further investigation will outweigh the costs for these relatively low-dollar items. However, Clumsy should absolutely investigate the missing piece of high risk property even though it is worth only $500. Loss of the high risk item could jeopardize the company's reputation and the safety of its customers, so recovery at any cost is worth the price.

The Physical Inventory standard can provide further insight into the causes and impacts of missing assets. Excessive losses can indicate possible weaknesses in record keeping and property control. Excessive overages, i.e. assets found in use during an inventory for which no record has been established, can indicate possible weaknesses in an organization's receiving and identification processes. The loss rate is calculated as the number or dollar value of missing assets divided by the number or dollar value of the total asset population, divided by the time in years since the last physical inventory. Similarly, the overage rate is calculated as the number or dollar value of overages divided by the number or dollar value of the total asset population, divided by the time in years since the last physical inventory. Unlike

the LDD standard, the Physical Inventory standard does not prescribe acceptable overage or loss rates. The overage and loss rates must be interpreted in the context of business or contract requirements and the nature of the assets under control.

For example, Asset Counters, Inc. had 189,087 assets at the end of its 2007 annual inventory. At the end of the inventory there were 12,987 missing assets and 19,923 overages. The inventory was the company's first since 2004. Asset Counters' annual loss rate was 2.3% and the annual overage rate was 3.5%. Neither of these results is particularly good, but we can clearly see that Asset Counters has greater internal control challenges with overages than with shortages. The overage rate suggests that there may be weaknesses in creating asset records at the time assets are received. The property manager can meet with the appropriate personnel and take action to strengthen these processes. The property manager should also consider performing a physical inventory more frequently, perhaps on an annual basis, until the loss and overage rates diminish significantly.

These examples demonstrate some of the ways that the Equipment Movement Velocity, Loss, Damage and Destruction and Physical Inventory standards can provide a deeper understanding of common property management challenges. No longer must the property manager rely on gut instincts alone to evaluate the health of the property system. The application of these standards can present a compelling case for corrective action or demonstrate sound business practices to the audit community, subcontractors, management and other stakeholders. The standards challenge property managers to reach beyond the basic requirements of property control and into a future of strategic property management. ■

Biography

Brandon Kriner, CPPM is a Solutions Director for Sunflower Systems, Inc. Brandon has over eight years of property management experience in the public and private sectors and has worked extensively with federal Agencies and government contractors as a consultant. Brandon currently serves as the President of the NOVA Chapter.

Endnotes

1 ASTM Standard E2497-06, "Standard Practice for Calculation of Equipment Movement Velocity (EMV)," ASTM International, West Conshohocken, PA.

2 ASTM Standard E2131-01, "Standard Practice for Assessing Loss, Damage or Destruction of Property," ASTM International, West Conshohocken, PA.

3 ASTM Standard E2132-01(2007), "Standard Practice for Physical Inventory of Durable, Moveable Property," ASTM International, West Conshohocken, PA.

4 ASTM Standard E2499-06, "Standard Practice for Classification of Equipment Physical Location Information," ASTM International, West Conshohocken, PA.