

# Insight into the Armored Car Industry

Jim McGuffey, CPP



This article is intended as a basic over view of the cash-in-transit industry for customers, investors, security managers and others interested in the products and services provided by the cash-in-transit industry as well as some of the risks and challenges facing the industry.

The cash-in-transit industry which has been known for decades as the armored car business is now often referred to as a cash management business. The exact number of carriers operating in the U.S. constantly changes but it is estimated to be 55 to 65 carriers, with several large carriers dominating the majority of US markets, transporting, storing, processing and managing billions of dollars.

The U.S. economy and markets depend on the global distribution and management of these funds. Most carriers in the armored car industry provide a total cash management solution for their customers. Customers consist largely of financial and retail businesses but also include government agencies and any business requiring the protection, storage, distribution and management of valuables.

As recently as 15 years ago, upon entering an armored car facility you would have observed a garage area that consumed a substantial amount of space utilized for parking trucks. The next largest space utilized was for administrative and vaulting functions, with the smallest amount of space being used for currency and coin processing operations. Space allocation would also vary depending on the climate as more space was allocated in colder climates for inside parking.

Space allocation became better utilized as carriers began to realize the value in managing cash for their customers. Upon entering carrier locations today, you will observe that while the garage still consumes substantial space, many facilities have been renovated or newly constructed to support cash management systems and numerous teller stations. A few carriers maintain a large centrally located cash center with their Armored/ATM Branches located in a somewhat circular fashion surrounding this main cash center where cash is pick-up and dropped off daily.

When I started my career in the cash-in-transit industry nearly 30 years ago on the armored side of the business, armored car managers were responsible for starting basic cash processing operations consisting of a single pocket currency counter and a fax machine used to receive orders from financial institutions and send daily balance reports. With the evolution of technology and high speed processing equipment, this is no longer the case and now managers with banking or other types of money processing backgrounds are often recruited to manage this product line.

Many financial and retail institutions outsource their currency and coin operations to carriers. This is a logical choice since carriers are transporting and storing these funds. Processing and managing currency has grown tremendously with numerous carriers dedicating state-of-the art facilities entirely for currency processing and management of this profitable product line. Even those facilities offering mostly traditional transport services allocate substantially more space for currency and coin services.

The growth in this product line has created a significant ROI, resulting in the traditional armored product line in some cases, being sold as a loss leader to obtain the more lucrative cash management business. I do not recommend this practice since the armored businesses still encompass the bulk of carrier revenue and diluting the traditional and larger pieces of the business can result in lack of proper evaluation of risk issues experienced on the street.

Within a few years, some predict that the cash management product line will surpass the traditional armored businesses. I concur with this assessment but I do not see it happening in the next few years. Change and growth in cash management will be mostly driven by retailers who must find a more efficient method to handle cash from both a risk and service prospective. These two drivers along with improved profits for both customers and carriers when cash handling is expedited, will continue be the main industry focus.

### **Industry Products and Services:**

Carriers use different terms to describe their products and services. One carrier may refer to the processing of currency as currency processing while another may refer to it as cash management. Transporting valuables in a truck may be referred to as cash-in-transit services, armored services, transport services, or by other descriptive terms.

**Transportation or Cash-in-Transit** involves picking up valuables and taking these valuables to designated points. This basic service still remains the largest revenue producer for most carriers even though cash management is closing the gap. Carriers utilize armored vans or trucks to transport valuables. Some carriers use vans when servicing ATM's or carrying lighter loads but a van chassis does not support the weight of coin or heavy currency loads. The cardinal rule in the cash-in-transit business is to always get and give a receipt.

**Cash Management/Currency Processing** is the fastest growing and most sought after service provided by carriers. Cash management consists of verifying, reconciling, processing, forecasting, storing, and total management of customer cash and coin in a seamless and transparent manner for the customer.

Carriers experience the largest return on investment from this product for several reasons. Risk issues are better managed since supervisors are able to work closely with their tellers and CCTV systems are engaged in monitoring processes to ensure compliance. Unlike crews working on the trucks who must deal with traffic, accidents, robberies and other variables that substantially impact profits in a negative fashion, processing currency is done in a controlled environment under close supervision.

**Coin Processing** is out sourced by some carriers to other firms that specialize in processing coin. Coin service consists of storing, processing, packaging, distributing and managing coin contained and shipped in box, bag or other sealed containers.

This laxity and complacency of handing coin has resulted in the theft of substantial funds. In some cases coin is not discovered missing or reported as quickly as currency. As with any loss, the sooner it is reported and the investigation begins, the better the chance for recovery and resolution.

Audits similar to those recommended for currency should also be conducted periodically for coin. A walk through of a carrier's facility can often reveal a carrier's attitude regarding coin. If coin is left in areas unprotected by CCTV and other controls, a loss is certain to occur.

CCTV video should be maintained for a minimum of 90 days. Under most contracts, carriers are not responsible for losses reported after a certain period of time. However, customers have requested manifests for items that were delivered by a carrier more than a year earlier. Thanks to enhancements in digital video, storing and retrieving data is much easier today than in past years.

**Storage of valuables** normally goes hand-in-hand with transportation services. However, some customers store gold, silver, computer disks, nurse and other professional examinations, and other valuables. These valuable are stored for long periods of time without requiring transport services. To properly protect these valuables, a daily audit is required as well as other stringent controls.

Responsibility for vendor management of carriers should be rotated every few years. In my opinion, vendor managers tend to become too close to their carrier contacts which can create credibility issues on both sides. This closeness can also result in a lack of objectivity during review of a response to a Request for Proposal for services.

The downside of changing vendor managers is that new managers may lack the experience gained by the former manager. However, in my opinion there are more upsides to be gained by changing managers and newer managers can spend sufficient

time with the former manager prior to exchanging roles to gain adequate insight.

**ATM Services** are often provided in conjunction with traditional cash-in-transit service. Some carriers provide a full ATM service package to include the actual purchase and installation of the ATM, full maintenance service, cash replenishment, cash processing and total management of all ATM funds.

**Electronic Safes** are known by various brand names. These safes are primarily used by retail customers experiencing high turn-over and internal theft issues as well as spending significant time at the end of each shift reconciling receipts and cash. Even without theft issues, these safes can substantially reduce management downtime which can be better used for growing and managing the business.

Most carriers partner with different safe manufacturers to offer a wide scope of services using these electronic safes which come in various sizes. The store clerk places bills into a bill validator located on the safe which verifies the bill by denomination. Coin is placed into a separate storage compartment as are checks.

These units provide shift reports and daily audit reports for the cash which can also be reviewed electronically via a web based system by an owner or manager to evaluate funds available, shrinkage issues, and other useful business purposes. These safes also dispense coin and provide some degree of currency counterfeit detection.

Properly managed and used in conjunction with a well managed CCTV system, the use of these safes can substantially reduce internal theft. A few managers reported that currency shrinkage was entirely eliminated. However, as with any countermeasure, complacency can occur unless processes and systems are properly managed.

These safes are also used to provide provisional credit which means that customer's assets can now earn interest at the time funds are deposited into the safe, depending on banking relationships and regulations.

**Stationary Vaults** are mostly located inside a mall that lacks a bank. These vaults are then used by store owners inside the mall. The vault provides customer change orders that are available during normal course of mall hours. Carriers can sell this service to retailers at a substantially less rate since the armored crew makes only one stop at the vault to gather the deposits and replenish expended coin and currency. Customers benefit with reduced rates in addition to having the ability to withdraw change and make deposit drops without waiting on their carrier to arrive. This service has proven to be more in demand at locations without a nearby bank.

**Virtual Vault Service** utilizes a web based system. For banking locations with numerous branches, this service can help reduce cross-shipping charges from the Federal Reserve Bank. An example of cross shipping occurs when a bank ships to the Federal Reserve Bank \$100,000 in tens while ordering 100,000 in tens at the same time. This web based system provides faster and more accurate processing and

reporting as well as allowing customers to review historical data to forecast cash needs which results in better management of funds.

This service also allows customers to capture new business wherever carrier trucks operate. An example of a need for this service occurs when a bank headquartered in California which provides service for a retailer located in numerous states, seeks to use a single carrier. Both the retailer and bank want to expand their relationship, however the bank is unable to add locations fast enough or does not have sufficient expansion capital. An agreement is reached with a carrier, usually within the same footprint as the retailer to provide cash management services and a solution for this logistical concern.

Funds are then picked up by the carrier and returned to the carrier's facility for processing. Data is electronically transmitted to the banking relationship with seamless transparency for the customer.

### **Bar Encoding:**

Substantial investments are required in bar encoding technology to reduce carrier risk and add value for customers. While bar encoding has been utilized by logistical companies for many years, this technology continues to be rolled out by some U.S. carriers. A few regional carriers had pioneered this technology several years ahead of some larger carriers, realizing the value it added for their customers.

When bar encoding is fully implemented, the system improves accuracy and eliminates hours of hand writing information onto manifests and rewriting those same items that are returned to the carrier's branch. The system captures information which is used for billing, saving substantial hours within the billing department and again improving accuracy while making information more readily available to the carrier and customers.

Bar encoding provides many enhancements for the carrier and customers. In addition to increasing vault productivity and security enhancements another value added is referred to as proof of delivery (POD). Customers often call their carrier looking for proof of delivery for items.

Prior to bar encoding, the carrier had to search through boxes of files looking for a manifest containing a customer's signature for the item in question. While most requests are resolved by locating the manifest reflecting proof of delivery the search can take time, depending on the number of requests and the length of time that passed since the item was scheduled for delivery.

### **Carrier Due Diligence:**

Regardless of upgrades in systems and technology, the three basic components that have always protected customers and carriers are integrity, financial strength and a solid cargo insurance policy. Reference to these basic protection factors can be found in

Security Management Magazine (ASIS Publication) in articles that I wrote in 1993 and 2009.

Conducting due diligence when reviewing carriers financial capabilities and a having a thorough understanding of the carrier's insurance policy are imperative in the selection process. Insurance must be adequate for the size and scope of the carrier's operation. A carrier must maintain the financial strength to repay a large loss should for whatever reason the cargo policy fail to pay a claim.

A thorough due diligence process should apply to all carriers regardless of carrier size or reported financial strength. Customers should verify prompt repayment for loss situations with other customers of like size. Financial strength and a solid insurance policy may mean little to a customer, if the carrier has a history of failing to reimburse for losses. If a loss is clearly the responsibility of the carrier, most carriers will reimburse within 30 days.

In order to reduce insurance costs, carriers self insure for a certain dollar amount. This means that should the loss occur and it is less than the self insured amount, the carrier pays the loss. The same process applies to truck insurance in states where allowed. Carriers are banking on their ability to manage risk and if they are successful in this objective, their insurance premiums are reduced substantially.

Training is essential to a carrier's success and it is an area in which most carriers have made considerable strides towards improving. Many carriers require mandatory completion of classroom training followed by OJT training and on-going certification. Most carriers use training as a selling point to customers. The best way to ascertain that training is occurring is to ask the crews. Due diligence is especially important during economic downturns to ensure that crucial areas such as training are not curtailed.

Training is an important management function. Professional, on-going training programs implemented with qualified and quality instructors can improve employee retention, customer service, risk metrics and bottom-line profits.

When conducting a carrier facility tour, it pays to be observant. Pay attention to the equipment being used. Has the carrier invested in proper equipment to move coin or cash throughout the facility and for storage? Are employees in uniform and well groomed? Is horseplay occurring? Is there a dual alarm system? Are cameras properly placed? If trucks are remaining in the garage, how do they look?

Some customers entrust substantial funds with carriers and these funds must be adequately protected. A prior check-list should be developed to ensure that contractual requirements are reviewed and are in full compliance.

## **Managing Risk:**

Managing money, trucks and guns is all about managing risk. It requires the ability to balance risk with profit. Managers must make safety and security equal to productivity. While some events are difficult to prevent, there are many actions that can be taken to reduce risk.

During my industry tenure I participated in numerous security audits and I strongly endorse unannounced and random security and cash audits. During a cash and coin audit, inventories are counted to make certain that all cash is present. These audits should occur in conjunction with other customers who maintain on site inventories at carrier locations.

This collective effort will help to ensure that an inventory is not moved from one side of the storage room to the other side just prior to an audit occurring. Failing to properly audit funds stored at carrier locations have resulted in large losses with some of these losses remaining unpaid.

During audits, a review of policies is also conducted to ensure contractual compliance. While many facilities and cash rooms are monitored with new digital CCTV systems, some are not. Should customers request to review video during an investigation or incident, it is important that the system produce a clear viewing of the process involving the items in question. Customers who assume that carriers storing substantial amounts of money have state-of-art security systems in place may be in for a rude awakening if funds are missing.

Facilities should have back-up generators to support operations during power failures. A review of carrier back-up systems is an action that all customers should require as part of their Business Continuity Plan since a simple power outage can adversely impact customers if the carrier is unable to process and distribute cash.

Ascertain the type and condition of the back-up generator in place to ensure that it provides sufficient power to support the size and scope of operation occurring at the facility. I would also ask to review records reflecting the testing of the generator. I would also inquire about back-up systems for computer data. Is computer data backed up nightly and if so where is it stored and what are the protective measures? What is the contingency plan should a major disruptive event occur?

There are many actions both carriers and vendors can take to protect their valuables. One of the most overlooked actions is ensuring the quality of the disposable plastic bags used to store and transport funds. Not too many years ago, the industry switched from using cloth bags and lead seals to disposable plastic bags which are referred to as evident tamper resistant plastic bags. This was a great improvement, provided quality bags are used.

There are plastic bags in existence that can be easily compromised without leaving indications of such compromise. I knew this was occurring when these bags were first introduced but I was disappointed to learn that these bags are just as easily compromised without leaving a marking when I recently tested several.

One issue occurs when the bag is compromised using cold or heat and then resealed without reflecting a marking such as "VOID" in the area where penetration or attempted penetration occurred. In this case, money is easily removed and the bag resealed without indication of being compromised.

Another issue occurs when a bag reflects a marking indicating that it has been compromised simply through the normal handling process of the bag without the bag actually being compromised. This is referred to as a false positive reading which can lead to complacency by tellers if not corrected.

There are other concerns such as the quality and thickness of the plastic which can cause the bag to burst if the plastic is lacking in quality and thickness. As with any change in security practices, there should be a risk assessment conducted prior to a change. Please refer to my paper on The Security Risk Assessment.

Financial institutions entrust highly confidential information to carriers. This information must be protected and additional protection must be required for lap-tops that can be easily stolen or compromised if left unattended.

This paper is not intended to discuss all areas that need to be reviewed but hopefully it provides insight into the importance of a thorough review process.

### **Industry Concerns:**

The industry requires leadership who understands the importance of balancing risk with profit. Leadership must be confident enough with their organization to sell the business at rates that support wage increases for their front-line people, improvements in technology and upgrades in security systems.

The industry cannot continue to increase responsibility of front-line crews while in many cases paying low wages that are not commensurate with level of risk and responsibility.

Customers have leveraged their size in markets, driving down already low transportation rates to the point that in my opinion will not support quality growth and sustain quality programs needed to manage a high risk business. Should this occur with cash management services, the industry will struggle even more to remain viable.

Handling cash is very costly, time consuming and presents significant risk for carriers and customers. The objective for carriers and manufacturers of industry equipment is to reduce cash handling and expedite credit for cash in transit so that it becomes a performing asset. The retail environment is the primary target for cash recycling

equipment and applications to improve handling efficiencies and reduce risk. Some carriers are testing cash recycling units which are not much larger than an ATM via a pilot program in select retail stores but there are still concerns to be worked out in the reconciliation process.

Those carriers implementing technology to improve internal efficiencies and reduce handling fees while providing faster credit to customers will continue to gain an immense competitive advantage. The key to success has and will continue to be the investment in people, technology and equipment while balancing risk with profit.

*Disclaimer: This article is written for general information purposes only and is not intended to be and should not be used as a primary source for making security or financial investment decisions.*

### **ABOUT THE AUTHOR:**

Jim McGuffey, CPP has 38 years of security management experience. He conducts security risk assessments for companies and also serves as an expert witness retained by defense and plaintiff law firms regarding various security incidents such as, theft, truck crashes and injury cases. Jim is also called upon by investment brokerage firms to provide insight for clients investing in cash-in-transit businesses.

Jim earned numerous national awards while working in the cash-in-transit industry for consistently improving safety, security and profit. He held positions of supervisor, branch manager, area general manager, district manager and regional vice president with full P & L responsibility of numerous profit centers over a 26 year span.

Jim earned a B.A. in Criminal Justice from Aurora University and an M.A. in Management from Webster University. He currently teaches Criminal Justice Courses at a college near his home. Jim has been an active member of A.S.I.S. since 1981 and is also a member of the prestigious International Association of Professional Security Consultants, (IAPSC).

Jim earned the Certified Protection Professional certification which is valid through December 31, 2012. Throughout the world, the Certified Protection Professional (CPP®) designation is acknowledged as the security profession's highest recognition of practitioners. It is evidence that an individual is "Board Certified in Security Management." The CPP® is awarded based upon experience, education, and of an examination that provides an objective measure of an individual's broad-based knowledge and competency in security management. Ongoing professional development is required in order to maintain the credential. The CPP® is administered by ASIS International, the preeminent international organization for security professionals, with more than 35,000 members worldwide.

Please contact Jim at [jimmcguffey@verizon.net](mailto:jimmcguffey@verizon.net) or 215-460-7370 to learn more about our services.