

WHITE PAPER

 **KPMG Consulting**

PUBLIC SERVICES

MEETING TRANSPORTATION SECURITY
CHALLENGES THROUGH EFFECTIVE
EMPLOYMENT AND PASSENGER SCREENING

ABSTRACT

This paper describes strategies for addressing the challenges faced by the federal government and the nation's transportation industry in effectively screening employees and passengers at transportation facilities throughout the United States. Topics include the capabilities, best practices, and technology required to meet these challenges.

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MEETING TRANSPORTATION SECURITY CHALLENGES THROUGH EFFECTIVE EMPLOYMENT AND PASSENGER SCREENING

BACKGROUND

President Bush's declared war on terrorism demonstrates the need to revamp the screening of airport and airline employees to help make air travel safer. Fortunately, organizations can reduce the risk of security breaches and terrorist acts by thoroughly investigating the suitability of workers for sensitive airport jobs. To achieve this goal, however, effective new screening procedures must be quickly implemented for hundreds of thousands of current employees as well as applicants for new positions.

The heightened risk associated with airport employees has also raised the possibility that other segments of the transportation industry—including ports, transit authorities, railroads, highway and bridge toll authorities, and trucking (particularly with respect to the transportation of hazardous materials)—could be vulnerable to similar security breaches. Given the volume of goods transported and the number of people who use the nation's public transportation system every day, the possibility of significant disruptions caused by terrorist acts has become a significant public concern. According to some

Approximately 750,000 employees at more than 400 airports were not effectively screened before they were hired.

security experts, in recent years approximately 750,000 employees at more than 400 airports did not undergo stringent background investigations before they were hired. Security experts have long been concerned that lax background-checking procedures could result in criminals, illegal aliens, or other "undesirables" working

in secure areas of an airport where they could compromise aircraft safety. In December 2000, the Federal Aviation Administration (FAA) changed its rules to require that all new employees who have access to airplanes undergo criminal background checks—employees hired before that time did not have to be checked. Since September 11th, however, this rule has also been changed.

This paper outlines the challenges facing the federal government and the nation's transportation industry in effectively screening employees at transportation facilities throughout the United States. Although air security is the most immediate concern, this paper also points out some of the risks in other segments of the transportation industry, both public and private, that should be considered as well. Furthermore, it describes solutions available today to meet this challenge. This paper posits that employment screening, as it is commonly practiced, is only the beginning; personality tests and predictive technology should be integrated into the hiring process to ensure that terrorists, terrorist sympathizers, and those susceptible to being influenced or bribed by terrorists are not hired in the airline industry and in other segments of the transportation industry.

OVERVIEW—EMPLOYMENT SCREENING

Hundreds of thousands of workers are employed in the transportation industry, and tens of thousands at US airports. Many of these workers are low-paid, and turnover is high. Employee background screening is one of the most cost-effective tools to ensure the security of the nation's airports. Today, however, there are insufficient standards for employee background checks because private companies, not the government, hire most employees. In October 2001, lawmakers in

Washington, DC, designed a plan for federal control of airport security. As a consequence, 28,000 new airport workers will become government employees and will be subject to intensive background checks. The vast majority of mandated screenings will be for current employees who were inadequately checked in the past.

**What is the price of security?
All 67 Salt Lake City Airport employees
who used fraudulent social security numbers
could have been checked online for less
than \$150 and in less than three minutes.**

The security risk posed by employees varies based upon their job description as well as the physical access it allows them. For instance, those employees who work within the confines of the airport terminal—at ticket counters and concession stands and in public restrooms—pose less of a risk than those who have access to the tarmac, hangars, fuel storage, airplanes, and flight-operations areas.

CAPABILITIES

The urgent requirement to perform background checks of both new hires and existing employees involved in the airline and transportation industries calls for comprehensive, scalable solutions backed by superior technology to deliver accurate results quickly. At KPMG Consulting, we offer a targeted package of screening services, Security PlusSM, to meet this challenge.

Security Plus has been instrumental in providing background screening for many prominent airlines and other companies in the transportation industry. Security Plus enables highly efficient security background checks to be conducted on all transportation industry workers, including airport and airline employees. A Web-based system with an easy-to-use interface automates the entire process, from order entry to result reporting to worker notification. Stringent controls ensure process consistency and limit access to sensitive data.

Based on next-generation information management software, Security Plus leverages secure Web-based technology and is operated as a highly cost-effective managed service through our network of dedicated Broadband Solution Centers across the United States. This technology enables employers to securely and efficiently place and track orders, as well as receive results from anywhere in the world, using any computer with Internet access. The solution provides e-mail notification to the employer if a problem surfaces in the background check and when the employee's search results are completed. It also provides a mechanism for notifying the worker of results and problems, tracking dispute resolution, and generating notification of a final decision.

**Employers can place and track orders, as well
as receive results from anywhere in the world,
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Even if an employee is evaluated as “no-security risk” when hired, however, that does not mean the employee's security profile will not change in the future. In fact, given the significant access that a number of employees have to sensitive information and to physical infrastructure, an ongoing monitoring process is essential for effective security. Employers need an infrastructure that continues to monitor non-employment-related behavior and activities after the position has been filled. Meeting this challenge, KPMG Consulting can continually update employee databases with new information related to potential security risks.

KPMG Consulting provides a comprehensive, modular suite of products that includes a social security number trace, criminal background check, previous employment verification, professional license verification, motor vehicle record report, and credit history check. Drug screening is also available.

KPMG CONSULTING'S SERVICE OFFERINGS MEET TRANSPORTATION INDUSTRY SCREENING NEEDS

PROBLEM	SERVICE	FEATURES
Identity Theft	Social Security Number (SSN) Trace	<ul style="list-style-type: none"> • Fast, basic screen • Match submitted name to SSN • Pinpoint suspicious applications
Undisclosed Criminal Record	Criminal Background Checks	<ul style="list-style-type: none"> • Easily search multiple courts and jurisdictions • Comprehensive reporting • Inexpensive
Résumé Fraud	Employment Verification	<ul style="list-style-type: none"> • Verify applicant-submitted work dates, title, etc. • Receive qualitative report • Uncover employment gaps
Incorrect Licensing	Professional License Verification	<ul style="list-style-type: none"> • Verify current license status • Discover suspensions, accidents, incidents
Driving-Related Convictions	Motor Vehicle Record Check	<ul style="list-style-type: none"> • Uncover restrictions, suspensions, DUIs, etc. • Inexpensive
Financial Distress	Credit History	<ul style="list-style-type: none"> • Discover worker solvency and fiscal responsibility • Includes tax liens, judgments, and civil suits
Drug Addiction	Drug Screening	<ul style="list-style-type: none"> • Uncover recent drug use • Comprehensive—screen for up to 10 categories of illegal and controlled substances • Highly accurate, with low false-positive rate • Fast—results returned within 24 to 48 hours • Convenient for worker—more than 5,000 collection sites

The following paragraphs describe a series of available, affordable service offerings:

Social Security Number (SSN) Trace

KPMG Consulting provides tools that reduce the likelihood of a transportation industry worker passing a background check by using a stolen identity. The SSN trace is the first line of defense for employment screening. A flag is raised when the worker's submitted name does not match the name associated with the SSN. Additional suspicious characteristics include more than one name associated with an SSN.

Our advanced online system provides immediate e-mail notification should the SSN trace reveal a problem. This capability often means that valuable time and resources no longer need to be spent on reviewing highly suspicious applicants. Efficiently reducing identity-theft hires greatly enhances the effectiveness of background screening.

Criminal Background Checks

Criminal background checks uncover previously undisclosed felony and misdemeanor convictions. Because federal law disqualifies individuals who have been convicted of any of several offenses from holding most airport jobs, comprehensive, accurate criminal records checks are essential. Thorough criminal background checks focus on jurisdictions in which the worker has previously lived, worked, or attended school. Component services such as employment verification and credit history checks help identify relevant jurisdictions and enable the review of all relevant federal, state, and local criminal records. Many searches are completed electronically. When necessary, manual searches at the courthouse are conducted to provide complete, highly accurate coverage.

KPMG Consulting's advanced online system provides immediate e-mail notification with detailed results should a criminal background check reveal an offense

that prohibits the hiring or continuing employment of a worker. Results are normally returned within three to five business days, meaning that valuable time and resources no longer need to be spent on reviewing excluded workers.

Initial results are returned in seconds, with full criminal background checks usually returned within three to five business days.

Employment Verification

Verification of previous employment is critical to uncovering fraud. Determining the truthfulness of the worker's self-reported employment history—including title, salary, attendance records, and reason for leaving—is essential. Misrepresentation and falsehoods may disqualify workers for job competency and/or ethical reasons. Qualitative assessments of work habits from previous employers may uncover unacceptable behavior.

Additionally, verification of employment dates may reveal gaps in a worker's employment history. In such cases, further inquiry is often warranted to account for what the worker's activities and travels were during the period(s) between jobs. Investigation of significant gaps via a KPMG Consulting criminal background check can uncover legal trouble, such as incarceration, that occurred during these time periods.

Professional License Verification

For jobs that can be held only by accredited personnel, verifying certification is a must. KPMG Consulting conducts license verification with the appropriate regulatory bodies. Validity and currency of the claimed license are substantiated. Any pending actions, disciplinary or otherwise, are reported.

Our advanced online system provides immediate e-mail notification with detailed results should a professional license verification reveal a discrepancy or action that prohibits hiring or continuing employment. Results are normally returned within three to five business days, meaning that valuable time and resources no longer need to be spent on reviewing excluded workers.

Motor Vehicle Record Check

Vetting a worker's motor vehicle record (driving record) is essential for many transportation positions. Checking the driving history and validity of special licenses and identifying any driving-related convictions such as DUIs can uncover and possibly prevent potential disasters and lawsuits. This check is often a critical element of a thorough employee-screening package.

Credit History Check

A credit history check can determine whether the employee has a fiscally responsible nature, is prone to indebtedness, or has/had a bankruptcy, tax lien, or judgment. This is particularly critical information when employees have access to money, credit-card numbers, and other sensitive financial information. Additionally, workers in financial distress may be susceptible to erratic behavior and even bribery, thereby compromising transportation security. Credit history checks can also turn up previous address information that may trigger additional criminal record searches.

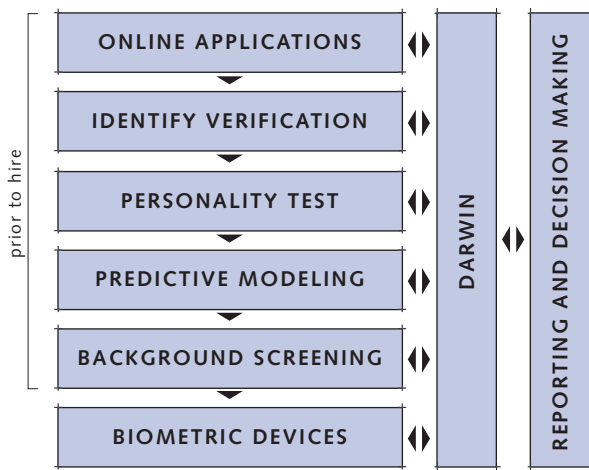
Drug Screening

Employing drug offenders for sensitive airport jobs is prohibited. Drug screening to uncover the use of illegal and controlled substances can be integrated into the Security Plus suite of background checks. With more than 5,000 collection sites available, KPMG Consulting offers this important service via a contracted national provider in a cost-effective and convenient manner. Comprehensive results of screening for 10 categories of illegal drugs and controlled substances are returned quickly: negative (clean) results within 24 hours; positive results, with details, within two business days.

BEST PRACTICES

Background screening is extremely effective in identifying anomalies in an applicant's past, but it does not predict how an employee will react in the workplace. Nor does it predict whether an individual has tendencies to join, collaborate with, or be coerced into helping a terrorist organization. The following figure presents the KPMG Consulting best-practices approach to providing additional security protection.

SUGGESTED NEW BEST PRACTICES



Online Applications

Increased efficiencies of Web-based human resources (HR) applications will mean that a large percentage of applicants will be encouraged to apply for jobs online. Online job applications provide numerous benefits, including the matching of skill requirements with an applicant's job history. Online information gathered

More than 75 percent of companies plan to implement self-service Web job applications by 2003. Internet Week, March 2001

from applicants can be immediately and automatically processed against job openings. In addition, candidates can be automatically rank-ordered before an interview takes place.

Identity Verification

Although online applications provide numerous efficiencies, those applying online cannot have their identities physically verified by traditional methods. Consequently, a new set of fraud and identity-theft hurdles must be combated when using these technologies. To overcome potential problems and reap online efficiencies, an applicant's identity should be instantly verified.

KPMG Consulting's TrustIdentity™ Service

TrustIdentity™ instantly cross-references up to 100 databases to verify the identity information supplied by an applicant online. Key identity information such as name, aliases, current address, social security number, telephone number, and previous addresses is verified within a few seconds to confirm with a high degree of accuracy that online applicants are who they say they are.

TrustIdentity™ Plus

TrustIdentity™ Plus poses questions that only the online applicant is likely to answer correctly. These "out-of-wallet" questions are drawn from data sets such as real estate records, driver records, social security databases, previous addresses, internal corporate information, and other sources.

TrustIdentity™ Phone

TrustIdentity™ Phone synchronizes a Web session with an automated, outbound telephone call. The telephone call is launched once the end user's number has been verified through the standard TrustIdentity process of cross-referencing user-supplied identity data against multiple databases. During the telephone session, the end user is asked to enter the randomly generated confirmation code the end user received during his or her Web session. Successful completion of this process

corroborates the identity of the end user with an extremely high degree of certainty. In addition, end users may be prompted to respond to customizable questions, with their answers recorded and made available for examination later. This process creates a secure, real-time method to reduce fraud and repudiation. Furthermore, the voice recording can be used to integrate biometric safeguards into an overall airport security program. Tying a hired applicant's access privileges to his or her voice ensures that only the actual employee is able to enter sensitive areas.

Personality Test

Once online applicants are authenticated, they should be required to pass rigorously crafted online personality tests that recognize high-risk characteristics, pinpointing, for example, a worker's propensity to act violently or irrationally or be open to bribes. Tests can identify extremist attitudes and help determine the likelihood that an employee will participate in subversive or illegal activities. This process helps make certain that the organization follows the law and that the applicant's civil liberties are not violated.

More conventional personality-test questions should also be included to determine the applicant's suitability for the job's requirements, such as attitude, work ethic, and nature.

Predictive Modeling

The information gathered during the personality test should be combined with logistic regression models to predict:

- Job fit
- Job performance
- Length of tenure
- Propensity for violence
- Criminal or subversive activity
- Susceptibility to bribes

To accomplish this goal, key characteristics of actual terrorists need to be compared with those exhibited by model employees to identify the traits that can predict good versus potentially dangerous employees.

The scores returned from predictive models allow for automated rank-ordering of candidates. The candidates who rate the highest can be interviewed before background screening is conducted.

Background Screening

As discussed above, background screening is a critical and cost-effective component of employer best practices. Background screening should be considered only if the applicant has scored well both in his or her interview and on personality tests. Employers may also use predictive modeling techniques to analyze background-screening results that fall into the gray area between definite risk and completely clean to rank-order candidates before the organization makes a final hiring decision.

Biometric Devices

Once the interview and background checks are successfully completed and the applicant is hired, it is important that no one assume the authenticated person's identity. To accomplish this goal, all employees who work in secure areas at an airport should be allowed to access those areas only after their identities have been verified via a biometric device. Biometrics use intrinsic, unique characteristics of employees to validate on an ongoing basis who they are. Suitable characteristics include fingerprints, handprints, retinal scans, or a person's voice. Numerous devices available today provide fast, efficient, and secure access based on a biometric. Biometrics provide an effective audit trail and powerfully deter identity thieves.

TECHNOLOGY

Darwin and Data Aggregation

For automated background searches of both employees and passengers, KPMG Consulting uses a patent-pending data aggregation and assimilation technology called Darwin. Developed by First Advantage, Darwin uniquely allows organizations to convert raw data into useful intelligence. This technology allows data to be retrieved, assimilated, and analyzed from almost any data source, while providing rich process management (workflow) capabilities that manage the tasks associated with many HR processes, including those for hiring, reviewing, and terminating employees.

The combination of a data retrieval engine with process management capabilities provides HR departments with a unique ability to retrieve raw data from various sources and assimilate these data into an intelligent and consistent analytical tool. Organizations can use this tool to manage the entire HR process or simply to facilitate the retrieval, assimilation, and rich processing of data.

Darwin allows the aggregation of information from numerous government agencies, including law-enforcement organizations, national security agencies, and the Immigration and Naturalization Service (INS). The system can cross-reference this information with employment information to identify individuals who have even the most remote link to terrorist groups. The more data available for integration and analysis of workers, the easier it is to root out those who are unqualified or demonstrate high risk.

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Darwin's Dictionary Services

Most electronic data providers will return result sets on searches only where there is an exact match with the search criteria. A material impediment to conducting successful searches is the misspelling or variant spelling of search criteria and underlying data. Even when search criteria are entered correctly, the underlying data being searched may be entered incorrectly. The Darwin technology on which KPMG Consulting bases our background service features numerous mechanisms that dramatically improve the hit rate (probability of finding a record) based on a user's input.

The system supports not only traditional techniques of suggesting aliases (e.g., if a user enters "Tom" the system can suggest variations such as "Thomas," "Tommy," "Thom," etc.) or Soundex searches (e.g., "Smit," "Smythe," "Schmidt" for the entered name "Smith"), but also supports the use of patented technologies that dramatically improve the suggestion capabilities to improve the quality of the result.

By deploying these algorithms, which address the material inhibitors to success in searching such as misspellings, typographical errors, swapped letters, inaccurate separation, and inaccurate joining of words, the service significantly improves the user's ability to successfully complete a search for a given entity. These techniques are especially effective when searching for uncommon or foreign names and/or addresses, which are frequently used or stored incorrectly and would otherwise result in a non-hit in the underlying datasets.

**RECOMMENDATIONS—
AIR TRANSPORTATION INDUSTRY**

- Airports should confirm that all employees, including private contractors, who have access to secure areas are still working at the airport and have proper identification. Many airports, including Dallas/Fort Worth International, began that process soon after the September 11th attacks.
- Biometric devices should be installed to ensure that only the actual employee is able to use his or her credentials to access secure areas.
- Criminal background checks must be performed on all existing airport employees irrespective of their roles, positions, or lengths of tenure.
- Additional measures should be adopted to ensure hiring best practices. Technological advances make the administration of personality tests and implementation of predictive modeling possible on a wide-scale, real-time basis.

Web Services

Web Services simplify and accelerate connectivity and collaboration between customers and their employment-screening suppliers. Web services are functions that allow organizations to share proprietary processes—in this case, employment screening—over the Internet, eliminating the need for costly and fragile one-to-one integrations. An example of Web services is ExchangeDirect, a technology that allows for the seamless exchange of data between KPMG Consulting and our partners using an XML-based messaging framework. Benefits include the complete omission of data-entry tasks and faxing. Data related to the background verification process are also easily relayed back to the client's tracking system of choice in real time. Items such as ordered date, completed date, and pass/fail status may be of great benefit to employers when included within the applicant tracking system and made immediately available to all relevant staffing personnel. It should also be noted that ExchangeDirect will support the Staffing Exchange Protocol (SEP) proposed by the HR-XML Consortium.

Decision Making and Reporting

Data aggregation is useless unless results are delivered in a timely and useful fashion, because employees' lives do not remain static after hiring. At KPMG Consulting, we can provide updated information on employees as each underlying data source changes. Reports may be delivered on screen, delivered via e-mail or wireless device, or printed in a report to enable real-time decision making to take place.

CONCLUSION

A safe, efficient, and secure civil aviation system is critical to the nation's overall security and economic well-being. The events of September 11th revealed an urgent need for new measures to protect the nation's transportation infrastructure. Effective employment screening is an important element in achieving the

highest level of security at our nation's airports as well as other transportation facilities. KPMG Consulting meets this need with a scalable, easy-to-integrate suite of secure managed services that can be implemented today and that are backed by years of experience in serving the transportation industry.

We also have the foresight and vision required to answer the employment-screening needs of tomorrow. These needs include hiring the most desirable applicants in an automated and cost-effective manner. Technology that enables ongoing, automated checks on employees will be necessary to ensure that security is not compromised. Through technological innovation, predictive modeling, and best-in-class screening techniques, US transportation facilities can become much safer places.

THE BENEFITS OF WORKING WITH US ARE CLEAR

KPMG Consulting is one of the world's most respected business advisors and systems integrators. We build enduring relationships with our clients by helping them create new business models and innovative solutions, enabling organizations to leverage technology for stronger return on investment and enhanced service to their customers, vendors, and employees.

From business systems strategy to implementation, we combine our industry knowledge with technology experience to deliver results-focused solutions quickly. By partnering with technology leaders, we provide clients ranging from small and medium-sized businesses to Global 2000 companies and government organizations with best-in-class solutions across every industry segment.

THE NEXT STEPS ARE EQUALLY CLEAR

If you would like to learn more about how we can help your organization, please contact us at 1-866-FOR-KCIN (703-747-6748 from outside the US and Canada) or visit our Managed Services Web site at www.KPMGConsulting.NET.

RECOMMENDATIONS— OTHER TRANSPORTATION INDUSTRY SECTORS

- **Transportation-infrastructure providers including ports, trucking, bridge operators, railroads, etc., should identify risk areas and confirm that employees, including private contractors, who have access to secure areas have proper identification.**
- **Biometric devices should be installed to ensure that only the actual employee is able to use his or her credentials to access secure areas.**
- **Criminal background checks must be performed on existing transportation employees.**
- **Additional measures should be adopted to ensure hiring best practices. Technological advances make the administration of personality tests and implementation of predictive modeling possible on a wide-scale, real-time basis.**

At KPMG Consulting, we are committed to providing technical solutions, managed services, and consulting resources that make these improvements a reality.



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