



Our Safety Mindset

At the **Heart** of
Next-Gen Mobility

KEOLIS

Safety. Security. Reliability.

Safety Management Systems (SMS) are foundational to an organization’s safety regime and are internationally recognized best practices for managing safety and risk. The Keolis Safety Culture is driven by a best-in-class SMS. An organizational safety mindset together with investments that improve overall welfare for those on the job are core to the solution.

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Inside

In this paper, we will examine the impact safety has on transit systems, riders, and the larger communities. We will also offer solutions from Keolis’ own **Culture of Safety** and provide a wealth of knowledge and expertise in the field of safety, security, and emergency management.

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INTRODUCTION




The freedom to explore a city, commute to jobs, and maintain a sense of spontaneity is a major allure for passengers. Still, this very freedom can be constrained by barriers that discourage ridership. Perhaps, the most significant barrier that agencies aim to address is the perception that transit is unsafe—even when data often tells another story.



Essential to offering freedom to the community, safety is also a key component of a well-run transit system. Frontline workers that feel they are not safe cannot perform their duties effectively and guarantee reliable service and peace of mind for riders.

While the human element is essential to any safety strategy, agencies are increasingly needing to prepare for breaches in cybersecurity, pivot quickly for social and climate-related incidents, comply with federal and local regulations, and ensure

access to service for underserved communities. This paper aims to examine the impact safety has on transit systems, riders, and the larger communities while also offering solutions from the **Keolis Culture of Safety:**

-  Draw a bold line connecting holistic safety process and worker efficiency
-  Effectively respond to increased demand that addresses internal and external stakeholder groups (employees, riders, communities, federal funding)
-  Present argument that safety is imperative for building next-gen infrastructure

WHAT IS A SAFETY CULTURE?



Security is a process, not a product.

Bruce Schneier
American cryptographer

Safety Management Systems are foundational to an organization’s safety regime and are internationally recognized best practices for managing safety and risk. The Keolis Safety Culture is driven by a best-in-class SMS and the integration of safety and operations into the day-to-day service that agencies provide. An SMS should inform performance in operations, maintenance, human resources, risk management, legal, and every aspect of the service.



WHEN BUILDING ORGANIZATIONAL SMS PROCESSES AND PROCEDURES, SUCCESS IS DEPENDENT ON MEETING FIVE CRITERIA:

-  Holistic Approach to Safety
-  Enhanced Worker Efficiency
-  Pivoting to Address Changing Mindsets, Needs, and Consumer Demand
-  Incorporating Innovation Seamlessly and at Scale
-  Ensuring Compliance With Local and Federal Regulations

Holistic Approach to Safety

Bottomline, safety is a mindset that is built from training employees to operate buses or rail lines in a safe manner and making them situationally aware of outside forces such as other drivers, weather conditions, etc.

There are no silos—effective SMS should be utilized across the organization so that every tier has the resources and support required to foster a safety culture.



At Keolis, safety is at the root of everything we do, and it informs how we perform in operations, maintenance, human resources, risk management, legal, and every aspect of the service.

Tellis Chandler
Vice President of Safety and Risk, Keolis North America

While adaptable to internal and external factors, this iterative process works as a roadmap for holistic collaboration following an incident or the discovery of data showing a negative trend:

INVESTIGATION	Gather details and data to identify the root cause
RISK ASSESSMENT	Walk through issues and engineer out potential solutions
MITIGATION	Propose and implement strategies
COLLABORATION	Closely monitor initial roll-out and adapt in real time
VALIDATION	Measure impact through quantitative and qualitative data

Enhanced Worker Efficiency

While cross-function is imperative, the capabilities of SMS show potential to significantly enhance operations and ensure a safe working environment for operators. Here is a closer look at the Keolis safety, security, and emergency management procedures in action. Tellis Chandler describes the two-way, ongoing dialogue between employee and management: →

“We support employees by removing silos and creating ways to implement our procedures as they relate to the specific partner agency or client’s resources, staff size, and other factors. All operations employees get a report card that shows how they perform on the drive cam, handle customer service, and manage incidents. Additionally, managers have ongoing conversations with operators to help them improve those numbers. Proactive performance coaching helps employees learn and modify behavior so that Keolis can retain the talent rather than resorting to disciplinary action—this is a win for employees, partners, and passengers.”

An effective SMS can allow for roll-out of procedures that address risk analysis, accident investigation, and incident notification, as well as drug and alcohol compliance, and increase awareness of the dangers of fatigue. These are measured through key performance indicators (KPIs) to ensure federal compliance.

Keolis measures against federal standards such as days lost to injury in real time.

A leading example of this is **Keolis Rail Services (KRSV) in Virginia**. KRSV takes safety very seriously, embedding a safety mindset at every stage and experience for employees and riders. As of late August 2023, KRSV is currently in its eighth year of reporting days without injury.



A BENEFIT OF ADDRESSING UNDERLYING ISSUES THROUGH SMS WHICH IMPACTS EMPLOYEES DIRECTLY, IS PROCESSING CLAIMS.

This includes liaising with the risk department to develop policies for workers’ compensation so that when an incident does occur, a roadmap is available to ensure workers have access to medical help and support required to enable them to get back to work. Keolis is implementing a process which covers light duty, transitional work, medical provider oversight, and employee feedback.

Another area of SMS that measures and decreases risk is video-based technology. These procedures utilize tools that examine potentially risky behaviors by employees to prevent accidents.



On-board drive cameras and a G-force unit measure inertia, hard braking, and speed.



Industry leading technology developed and implemented in the market by Keolis can even tell if employees are wearing seat belts.



Equally, if not more important than managing overall compliance from an organizational level, each site is empowered with **access to the data** offering front-line opportunities to coach employees to avoid repeat incidences.



Everywhere it has operations, Keolis implements a **visualization room** that allows each employee, at every level of the organization, the opportunity to **review performance metrics** across every aspect of the business: from on-time performance and equipment availability to customer satisfaction and, of course, safety metrics like accident frequency ratios and reportable incidents.

Industry leaders predict a future goal is to use drive cameras as a means of pushing out positive reinforcement. In essence, leaders like Tellis Chandler, envision technology that enables the safety-side to coordinate with the operations side, ensuring top performance and compliance of policies and procedures in the field.

Pivoting to Address Changing Mindsets, Needs, and Consumer Demand



If you’re prepared and you know what it takes, it’s not a risk. You just have to figure out how to get there. There is always a way to get there.

Mark Cuban

American businessman, investor, producer and TV personality

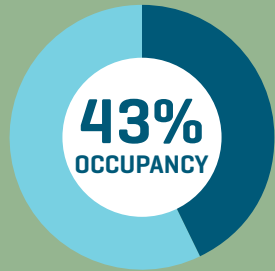
Virtually overnight, the COVID-19 pandemic altered how communities work, move, and connect. More than three years later, the white collar

shift to remote work continues with more than two-thirds of companies reporting that they have implemented a hybrid work model

of some kind—with many more anticipating more strident measures in 2024.

ACCORDING TO OFFICE SECURITY PROVIDER KASTLE SYSTEMS:

As of June 2022 office buildings in the **10 LARGEST U.S. CITIES** averaged just



Meanwhile, public transit ridership remains well-below pre-pandemic levels.

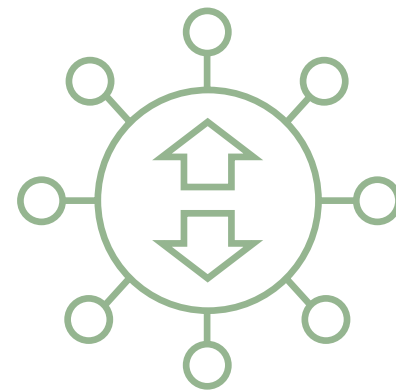
Agencies were on the front lines of COVID-19 disruptions and the emergence of new travel patterns. The pandemic's impact, however, has been distributed unevenly across different sectors and demographic groups. Inequalities embedded in our national infrastructure have taken center stage for the first time in decades, as has the important stabilizing role played by public transit agencies within themes of safety and access to secure, reliable transportation.

Still, the pandemic was a spotlight revealing an already growing issue—as communities adapt to account for new consumer habits, incorporate technology and ensure cybersecurity, and anticipate and plan for impact of more frequent extreme weather incidents, the need for a strong and resilient public transportation system will increase exponentially.

Incorporating Innovation Seamlessly and at Scale

Perhaps one of the most daunting tasks facing any organization today is digital literacy in an age of rapid digital infrastructure. Technology not only enhances the day to day for operations but requires preparation for potential cybersecurity threats.

For agencies, this means not only identifying the most effective next-gen technology to invest in but also the implementation, scalability, and analysis to ensure accuracy at all levels of the organization.



Digital [is] no longer a 'nice to have' for transportation agencies but an imperative. This digital acceleration also means that transportation agencies can tap into the most compelling features of digital transformation: its ability to serve constituents efficiently, scale cheaply, and adapt quickly.

Deloitte, 2023

Ensuring Compliance with Local and Federal Regulations

In addition to traditional compliance needs, a spotlight on equity within the industry has emerged recently. Arguably, there's a business case to be made for prioritizing equity in transportation and reaching new passengers. A 2015 Harvard study found that low-income communities with greater access to jobs within a 15-minute commute have higher upward economic mobility.

RECENT REGULATION TOPICS TO CONSIDER AND REMARK ON INCLUDE:

- The federal government's **Justice40** initiative directs federal agencies, including the U.S. Department of Transportation (DOT), to collaborate with states and local communities to deliver at least **40% of the overall benefits** from federal investments in climate and clean energy to disadvantaged communities
- **Inflation Reduction Act (IRA)** includes **\$3.2 BILLION** for the **Neighborhood Access and Equity Program** to improve walkability, safety, and affordable transportation projects

- **DOT's Reconnecting Communities Pilot Program** will provide **\$1 BILLION** over five years to reconnect communities that were previously cut off from economic opportunities by transportation infrastructure
- **DOT's Areas of Persistent Poverty and Historically Disadvantaged Communities Map** offers community leaders and industries that serve the public an ongoing tool to monitor the range of situations and needs and weigh larger impacts over time

This renewed mass focus, when combined with new funding opportunities, makes the case for pursuing inclusive mobility innovations more compelling and more urgent. Paired with overcoming lingering public perceptions and safety concerns of vulnerable groups, the need for safety management is underscored. In addition, there is Corporate Social Responsibility (CSR) value for agencies, a way to give back and to garner local public support for future projects.

Within these larger societal conversations, there is room for enhancing what the industry already does right.

Building and implementing SMS within an organization offers an opportunity to review internal Occupational Safety and Health Administration (OSHA) processes and revisit the basics—moving beyond standard compliance to exceed OSHA parameters by training employees to have a different mindset. In addition to improving performance numbers, proactive performance coaching shows operators what a hazard is, how to recognize it, and how to communicate internally so it can be immediately addressed through corrective action processes.

PROPOSED SOLUTION

THE KEOLIS APPROACH TO DESIGNING, BUILDING, AND IMPLEMENTING SMS IN THE MARKETS IT SERVES IS MEASURED BY FOUR KEY VALUE PILLARS:

Proven and Innovative



Scalable



Equitable and Inclusive



Adaptable



PROVEN AND INNOVATIVE

The cornerstone of SMS is leveraging safety measures to support worker efficiency and improve the rider's experience. This is not simply installing nice-to-haves or novelty features but choosing to invest, implement, and train on the tools that will have the greatest impact on overall safety KPIs.

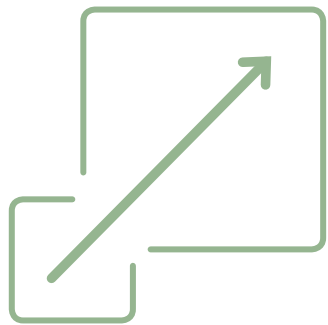
Before rolling out SMS enhancements in-market, Keolis reviews case studies from its global network, conducts research to understand changing mindsets and needs, and closely tracks impact on ridership and revenues in real time.



Take digital payment offerings as an example.

Much of the technology was already available prior to 2020 but due to Covid-19, Keolis was able to track a significant spike in consumer demand for contact-less offerings. This insight led to rapid roll-out throughout its networks in France and was essential to encouraging riders back to public transit. Moving forward, these offerings will be a refreshing upgrade for returning riders and new commuters entering the workforce.

SCALABLE



Within its 2022-2023 trends report on transportation, global consulting firm, Deloitte references the often ubiquitous task of **scaling solutions across large networks and systematic compliance across internal functions** to

ensure success and return on any investment in digital infrastructure. Scalability of SMS threads together all five of the required criteria from holistic approach to enhancing operations and keeping in step for local and federal regulations.

EQUITABLE AND INCLUSIVE

While this area of expertise has grown to the highest echelons of the business world, the transportation industry has the rare opportunity to explicitly influence the map of cities and communities across the country. While traditional barriers to using public transit (e.g., unreliable service, unattainable fares, perception it's unsafe) have influenced overall public perception for generations,

previously underserved areas and vulnerable populations have borne the brunt of the politics and policies based on the **Broken Windows philosophies of the 1980s and 1990s.**

While there are now in-market cases to showcase the positive impact of humane services and a reduced reliance on policing, reaching out to these populations and investing in their access to public transportation

is essential to growing ridership and recruiting talent today. Changing mindsets have increased demand from communities, consumers, and more recently federal regulatory branches to not only reach these populations but also to place a greater emphasis on a holistic and impactful approach to safety.



ADAPTABLE

Change is in the air and, over the last 25 years, an ongoing adoption and reliance on technology has fueled a population that is increasingly native, not just proficient.



This constant churning out of new technology combined with environmental factors and consumer beliefs demands a nimble approach to operational safety **CENTERED AROUND THE HUMAN.**

How adaptability differs from scalability has much to do with changing market needs and real-time measurement and analysis. An SMS can not remain static—new solutions will present themselves as frequently as speed bumps and issues may arise. Building ongoing review into your safety management and anticipating change is future

proofing for what comes next, ensuring a resilient ridership base, enhanced worker efficiency, and bolstered revenue through record-breaking heat waves, heavy rainfall, cybersecurity breaches, and the like.

Introduction of enhancements to SMS within the networks it manages, has led to Keolis adding talent such as directors

of human factors to its leadership. Additional initiatives inspired by learnings from SMS include: retraining staff to fix alternate fueling buses as well as empowering cross-functional teams invested in proactive risk management that reduces injury incidents for both employees and passengers.

CONCLUSION

KEOLIS BRINGS A WEALTH OF KNOWLEDGE AND EXPERTISE IN THE FIELD OF SAFETY, SECURITY, AND EMERGENCY MANAGEMENT.

Some agencies may not have the full resources or the funds allocated to support a full-time staff position that concentrates on transportation safety, OSHA compliance, claims avoidance, or other issues.

Partnering with Keolis gives the agency a transportation provider and a safety consultant together in a single source. Safety, security, and emergency management will continue to be issues that are vital to the traveling public,

especially for those using public transportation. Establishing an SMS with policies and procedures that protect passengers—and can also be implemented and integrated into diverse operations within agencies—creates a safety culture that helps build confidence, trust, and reliability.

Contact Media@KeolisNA.com, to discuss specific needs and Keolis solutions.

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