

# Safety & Quality Audit of Elevators

## Elevator History

The convenience and ease of using an elevator in a building is often taken for granted. However, today's elevators are marvels of modern engineering, capable of carrying thousands of pounds skyward within seconds, seemingly defying gravity. The evolution of elevators originated from the need to transport raw materials across vertical spaces or steep terrains. During the Industrial Revolution, workers required efficient methods to move commodities such as coal and lumber down hillsides. This demand led to the creation of early steam-powered "elevators," primarily used for bulk material transport. These systems quickly became common in factories and mines.

As technology progressed, new methods of powering elevators emerged. Belt-driven mechanisms were introduced, and counterweights were added to provide additional lifting power. In 1852, Elisha Otis revolutionized the elevator industry with the introduction of the most innovative system to date. What set Otis' design apart was the installation of a safety mechanism—now known as a "safety governor"—to prevent free-fall in case of cable failure. This 1852 safety innovation remains the foundation of modern elevator safety, refined and perfected over time. Today, elevators are among the most widely used forms of transportation, serving millions of applications worldwide.

## Elevator Audits

An elevator audit, or vertical transportation audit, can range from simple inspections to complex evaluations. Examples include maintenance audits, condition assessments, performance and equipment evaluations, surveys, asset management reviews, equipment audits, and preventative service audits.

Our process begins by understanding the client's requirements and developing a tailored approach to meet them. After gathering the necessary information, we assess the equipment's condition, identify required repairs, and determine whether modernization, a new maintenance agreement, or additional preventative maintenance is needed. Throughout, we prioritize industry safety standards, current code requirements, elevator usage, building maintenance conditions, and equipment age, type, and reliability.

## Elevator Audit Results

An elevator audit evaluates how the system as a whole is serviced and maintained. This includes a comprehensive review of the building's current maintenance plan, existing service contracts, and elevator equipment. Audits consistently result in enhanced performance and service quality. In 100% of engagements with The Elevator Consultants, we identify areas for improvement, positively impacting operational efficiency, asset value, and safety.

## Technology and Methodology

The Elevator Consultants leverage advanced technology and proven methodologies to conduct onsite elevator audits. Following industry best practices—which we have often pioneered—we ensure a comprehensive review of the entire system.

Every building is unique, and an elevator audit, or vertical transportation condition assessment, may follow different paths. Our established approach involves analyzing current building needs and identifying opportunities for improvement. In some cases, clients seek confirmation of their management process or a status snapshot of their equipment. In other cases, we are asked to develop a clear understanding of elevator capital expenditures and assess whether existing service contracts are adequate.

Our focus is to combine technology and expertise to identify opportunities for improving elevator costs, performance, safety, and overall value.

## **Return on Investment Opportunities**

Building managers, owners, facility managers, malls, campuses, hotels, and investors understand that a safe, well-operated vertical transportation system is essential for both building safety and operational efficiency. At The Elevator Consultants, we share this understanding, placing your needs at the forefront of every audit. We recognize that asset value and tenant safety go hand in hand, and that intelligent businesses aim to maximize long-term ROI by making informed decisions regarding elevator management, maintenance, repairs, deferred maintenance, and modernization.

Even in relatively new elevator systems, The Elevator Consultants' audit process can identify opportunities to improve productivity and reduce operational costs. A vertical transportation maintenance audit may reveal imbalances between services and expenses, or uncover lapses in adherence to ASME A17.1 standards. Our goal is to identify areas of loss and transform them into opportunities for gain. Our reports have consistently guided clients toward more profitable outcomes, and we can achieve the same for your building.

## **Elevator Maintenance Consulting**

All buildings have maintenance contracts with elevator service providers, but these agreements are often vague and difficult to enforce. Common shortcomings include clauses that prohibit cancellation, fail to define covered equipment, overlook obsolescence, omit minimum onsite hours, or use ambiguous language such as “systemically,” “periodically,” or “at our sole discretion.”

The Elevator Consultants bring the expertise and industry knowledge to evaluate current contracts, identify deficiencies, create detailed project specifications, and manage competitive bids. By leveraging our services, clients can reduce costs by 20–60% annually, improve safety, and enhance accountability and transparency.

Building owners and property managers require contracts that protect their investment, control costs, maintain proper equipment life cycles, and avoid unnecessary repairs or replacements. We ensure contracts include fair labor rates, minimum monthly preventative maintenance hours, provisions for obsolescence, and other requirements tailored to your building's unique needs.

The Elevator Consultants are a leading elevator consulting firm dedicated to helping building owners, property managers, engineers, facility managers, and REITs optimize their vertical transportation assets for greater efficiency and profitability. Our service offerings include comprehensive audits, modernization planning, maintenance consulting, repair and upgrade guidance, and technology solutions. For those in the UK, we also provide services as a “lift consultant.”

## **Elevator Modernization**

Modernizing elevators is essential to protect your investment, enhance safety, reduce costs and repairs, and provide an exceptional tenant and visitor experience. Our approach begins with a realistic evaluation of the building's goals, followed by a plan that incorporates industry best practices, code compliance, feasibility analysis, and expert recommendations. Once approved, The Elevator Consultants provide hands-on project management, supervise the project team, and maintain open communication with stakeholders. The result is a safe, successful modernization delivered on time and within budget.

## **The Modernization Process**

- Conduct a detailed needs analysis to determine which equipment will be retained, improved, or replaced, keeping safety and budget in focus.
- Perform a comprehensive feasibility study and survey to evaluate building and operational conditions.
- Develop project specifications and scope of work that address current operational challenges and guarantee improvement.
- Initiate a bid process with all required documentation.
- Analyze bids thoroughly and provide professional recommendations to guide decision-making.

Throughout the modernization process, professional project management ensures continuous updates and transparency. We utilize advanced elevator technologies to track project progress and verify compliance with specifications, including state-of-the-art tools that allow stakeholders to monitor the project with a single click.

Not sure when to modernize your elevators? Contact us for an initial consultation. Every modernization project is unique, and by analyzing the details, we can develop a plan that maximizes ROI.

### **Elevator Repair & Upgrades**

Repairs and upgrades can be costly. When equipment fails, reactive maintenance often incurs high expenses. Many repairs, however, are already covered under maintenance contracts, eliminating additional costs.

Our experts review repair quotes, cross-reference them with your maintenance contract, and recommend the most cost-effective solution. This approach saves money, restores control, and ensures the service provider is held accountable for their work.

### **Technology**

The elevator industry is continuously evolving, with new engineering methods and design innovations. Keeping pace with these advancements can be challenging. The Elevator Consultants provide cutting-edge technology solutions to offer complete transparency of your building's equipment and the services performed. This empowers you to hold service providers fully accountable to contract terms and ensures optimal performance of your elevator system.

### **Obsolete Elevator Parts**

Claims of obsolete elevator and escalator parts are becoming increasingly common. If you have been informed that a part is obsolete or unavailable, The Elevator Consultants can help. With extensive industry expertise, we know which parts are truly obsolete, which can be repaired, and can provide practical solutions.



The Elevator Consultants work with clients nationwide and maintain a comprehensive database of available parts for all types of equipment. Our team can quickly determine whether a part is genuinely obsolete or if alternatives exist. If you suspect you have an obsolete elevator or escalator part, contact us for an initial consultation. The elevator industry is constantly evolving, and we stay ahead of these changes for our clients.

### **Certified Inspections**

The Elevator Consultants' Certified Inspectors perform inspections on all forms of vertical transportation, including elevators, escalators, moving walkways, dumbwaiters, and man lifts. Many contracts specify that third-party inspections are required and should be conducted as needed. We are qualified to inspect both new and modernized equipment and perform specialized tests such as escalator step and skirt index testing. Routine and periodic inspections are conducted in accordance with current code requirements, taking into account the time elapsed since the building's last inspection.

Our expertise allows us to perform Third-Party Inspections, Safety Inspections, and Performance Inspections. These services enable clients to evaluate the quality of work performed by their elevator contractor and verify that equipment functions flawlessly. In cases where elevators or escalators are malfunctioning, we provide clear recommendations for necessary repairs or improvements.

For buildings in the City of Chicago business district, the Annual Inspection Certification (AIC) is required. The Elevator Consultants are qualified to perform the AIC for your location, ensuring compliance with local regulations and safety standards.



## Effective Vendor Management for Elevator Services

Managing elevator service providers can be complex, particularly when ensuring proper maintenance, regulatory compliance, and service monitoring. At The Elevator Consultants, we specialize in vendor management for elevator services, working closely with clients to oversee service providers, manage contracts, and ensure that elevator systems remain safe, reliable, and operational.

## What Is Elevator Vendor Management?

Elevator vendor management involves overseeing all interactions with service providers responsible for maintaining and repairing elevators. This includes vendor coordination, contract negotiation, performance tracking, and ensuring adherence to service agreements. Effective vendor management is crucial in the elevator industry to minimize unnecessary costs, ensure proper maintenance, and comply with safety standards such as ASME A17.1 and local authority regulations.

## Our Approach to Elevator Vendor Management

With extensive industry experience, The Elevator Consultants has developed a streamlined vendor management approach focused on transparency, performance monitoring, and cost efficiency. Our goal is to assist building owners, managers, facility engineers, and operations managers in navigating the complexities of elevator management, ensuring optimal service. Vendor management solutions are tailored to each client's operational requirements, ranging from full-service oversight to cost management and performance monitoring.

## The Importance of Vendor Management in the Elevator Industry

Effective vendor management ensures that elevators, escalators, and lifts remain operational and compliant with industry standards. Without proper oversight, building owners may incur higher costs due to unnecessary repairs, missed maintenance, or regulatory non-compliance. Proactive vendor management mitigates these risks by ensuring service providers fulfill their commitments, reducing downtime, and maintaining equipment performance to the highest standards.

## Why Choose The Elevator Consultants for Vendor Management?

At The Elevator Consultants, we provide a structured and efficient approach to vendor management for elevators, escalators, and lifts, emphasizing:

- **Transparency:** Clients gain full visibility into services provided, associated costs, and vendor performance.
- **Expertise:** Our team brings extensive knowledge and industry data to manage vendor relationships and ensure compliance with maintenance and building standards.
- **Performance Tracking:** Through the ElevatorApp, clients can monitor service visits, track maintenance schedules, and receive real-time updates on elevator conditions.

## Benefits of Our Vendor Management Approach

- **Cost Control:** Ensures services are delivered as agreed, preventing unnecessary expenses.
- **Improved Service Quality:** Vendors are held accountable to performance standards, ensuring maintenance and repairs are performed efficiently and correctly.
- **Compliance and Safety:** Oversight guarantees that all work meets industry and regulatory standards, reducing compliance risks and improving elevator operations.
- **Peace of Mind:** Clients can focus on other operational priorities, confident that their elevators, escalators, and lifts are expertly managed.

## Getting Started with Vendor Management

If you want to simplify the management of your elevator service providers, The Elevator Consultants can help. Our vendor management services ensure your elevators receive the necessary care while controlling costs and maintaining compliance with safety standards.

For more information on how our vendor management services can benefit your building, hotel, hospital system, campus, or portfolio, contact us for a consultation.

*Best Regards and Thanks*



*Space international merchant*

☎ **+91 8433794073**

✉ **[info@spaceinternationalmerchants.com](mailto:info@spaceinternationalmerchants.com)**