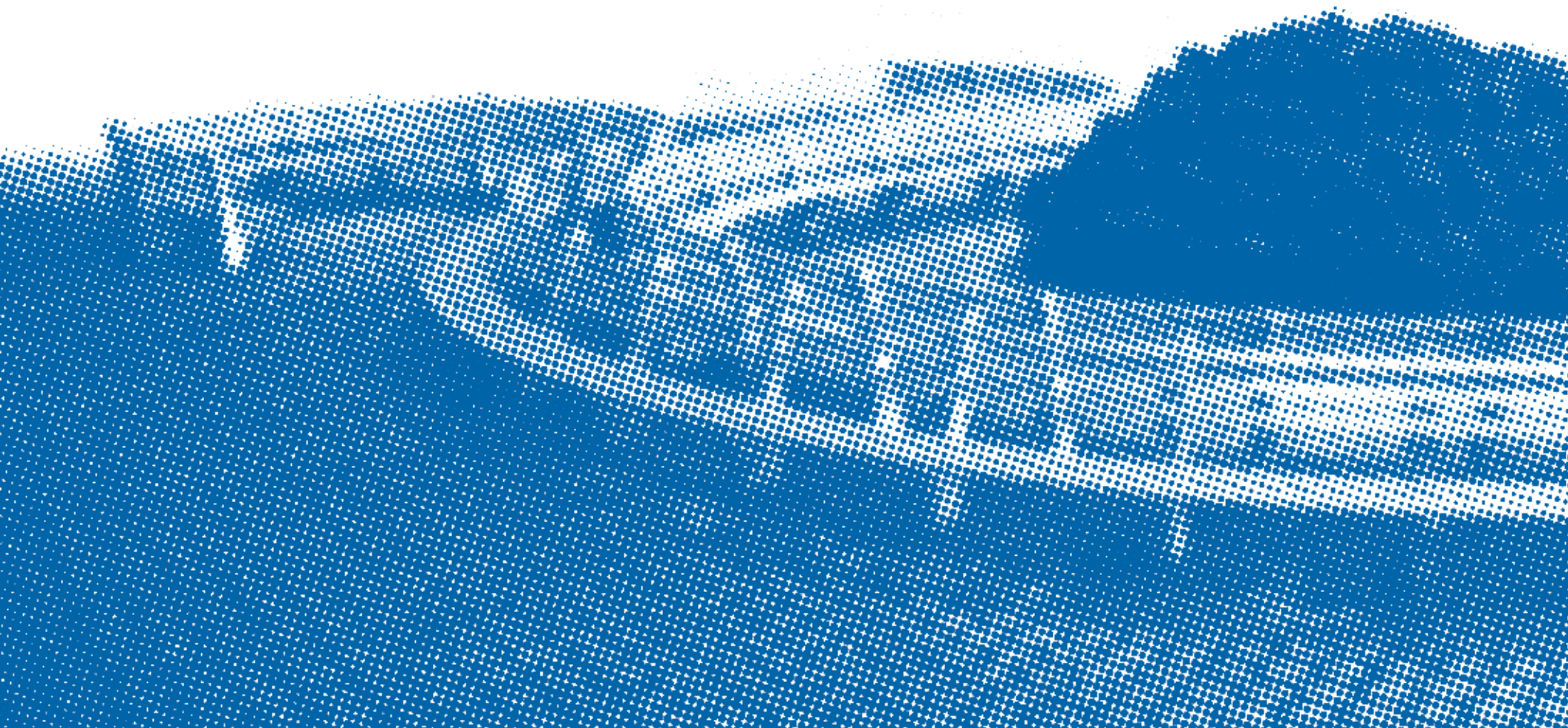


Chapter 1
Vision and Hallmarks

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Vision and Hallmarks

INTRODUCTION

GSA demands great projects for its clients, and great projects must accomplish multiple goals. Where site security is concerned, measures must be integral to the workplace and designed to reduce risk, while enhancing the overall, everyday use of public buildings and public space.

The vast majority of these security countermeasures will never be called upon to thwart or mitigate an attack, thankfully; however, these same measures will have a profound impact, every single day, on the quality and attractiveness of the workplaces we provide for customers in our public buildings.

By carefully designing a site for its daily functions, incorporating security elements as seamlessly as possible, and allowing for adjustments in protection in response to varying levels of threat,

designers strike a successful balance, creating public buildings that attain both security and openness.

A successful process, allowing conscientious decision-making through collaboration and a thorough understanding of interrelated issues, is the foundation for achieving these goals. Any design project requires hundreds of decisions during planning, design, and construction. However, security issues can be especially complex and challenging to both designers and laypeople. At each stage, there are specific design and security challenges, such as the following:

- Determination of threats and vulnerabilities, which remain difficult to predict;
- Decisions about what to protect, which may be fraught with emotion; and
- Selection of countermeasures, which are often extremely expensive.

In light of this, some risks can be mitigated, whereas other risks must be accepted. In order to balance aesthetic goals with security requirements, consider both emotional and technical arguments, and address acute needs with available resources, successful site security design projects should adhere to four principles.

These are the hallmarks of a great project:

Few agencies have sufficient resources or justification to implement every possible security countermeasure for every conceivable scenario. Only by integrating security throughout the design process can the Project Team strike a responsible balance between consideration of risk, available resources, and appropriate mitigation measures.

Hallmarks of a Great Project

- | | |
|--|---|
| 1. Strategic Reduction of Risk | A strategic approach to reducing risk defines priorities; identifies correctable conditions; leverages resources to implement appropriate facility design, site design, and property management; and remains flexible to changing levels of threat. |
| 2. Comprehensive Site Design | A comprehensive design satisfies multifaceted site requirements to maximize functionality, aesthetics, and a total project value for its users and the community at large. |
| 3. Collaborative Participation | A collaborative, multidisciplinary team—comprising GSA and tenant agencies, security professionals, designers, and community representatives—can integrate diverse expertise to create innovative and effective solutions. |
| 4. Long-Term Development Strategy | A phased, incremental development strategy is invaluable for the successful implementation of security improvements over time, whether for a major project with multiyear execution or for multiple, small projects at one property. |

STRATEGIC REDUCTION OF RISK

“It is easy to say that no risk will be accepted, although this is impossible to deliver. Thinking strategically about risk reduction means reducing the most pressing and solvable risks, while accepting others. It means devoting scarce resources where they can do the most good and having the courage to avoid countermeasures that bring significant cost or design impacts without a realistic reduction in risk.”
—Supreme Court Justice Stephen Breyer, “The Importance of Openness in an Era of Security,” *Architectural Record*, January 2006

Got security envy? Security design elements have a way of popping up at buildings when neighboring properties install their own measures. However, countermeasures that are entirely appropriate based on the risk or potential loss identified for one property may not be appropriate for another. Project Teams must perform a careful, custom assessment to find the right countermeasures for their property.

A common understanding of risk reduction among Project Team members is as important to the success of a project as a responsible budget and demanding quality standards. GSA follows the *Inter-agency Security Committee (ISC) Design Criteria* to achieve a realistic approach to security risk assessment, based on analysis of potential threats—probability, vulnerability, and possible consequences.

Facility vulnerability should be addressed through a combination of the following approaches, to deter or mitigate loss from an attack while supporting everyday use of the site:

Facility design strategies, such as structural hardening, blast-resistant glazing, and space planning. Although not a focus of this *Guide*, facility modifications must be coordinated with and are dependent upon site design strategies.

Site design strategies, such as protecting standoff perimeters, controlling site access, and installing lighting for security and site surveillance. This approach is the focus of this *Guide*.

Operational measures, such as increasing surveillance with additional guards, cameras/closed-circuit television (CCTV), and recording devices. Operational measures apply to management of the facility, the site, and its surroundings.

Establishing realistic security strategies for a project involves recognizing the emotional nature of the subject and the fear that the threat of terrorism often can bring to the discussion. It is important to remember that a specific project cannot eliminate all risk, but may only mitigate it or shift it from one place to another.

A strategic approach to risk reduction involves the following factors:

Assessment of risk: What threats and vulnerabilities are most applicable to the specific property under discussion, rather than to the entire federal inventory?

Prioritization of risk: What risks represent the greatest vulnerability and can be reduced with countermeasures?

Acceptance of risk: What risks cannot be realistically reduced?

What risks are too remote to call for significant countermeasures?

Adoption of efficient and sensitive risk-reduction strategies:

What is the proper balance between reduction of risk and the everyday use of the site? What is the cost and benefit of each risk-reduction strategy?

This strategic approach lays the groundwork for any successful project. It directs the focus of scarce resources, addresses timing of implementation, and enables flexibility.

The ability to reduce risk varies with each project. Each team must develop an effective and realistic strategy for its unique project requirements, resources, and location. In some cases, construction of site security elements will be the best approach. In other cases, where there are few options for site security, hardening the building may be the only option. Some locations have limited opportunities for physical improvement, and a focus on operational changes may be the best strategy.

On most projects, mitigation of every known risk is not practical. Taking a strategic approach means identifying the most acute risks and devoting scarce resources accordingly. Team members must consider strategies that offer the most benefits, prioritize them, and develop implementation plans based on available resources.

COMPREHENSIVE SITE DESIGN

A comprehensive site design plan treats the site, the building, and the surrounding neighborhood as a single, integrated place. This ensures a consistent approach, whether the plan is implemented in one or many stages. The result is a thoughtful, holistic solution. Design and security team members must collaborate to develop and evaluate a number of plans and concepts before determining the combination of solutions that represents the best comprehensive site design.

Comprehensive design meets these objectives:

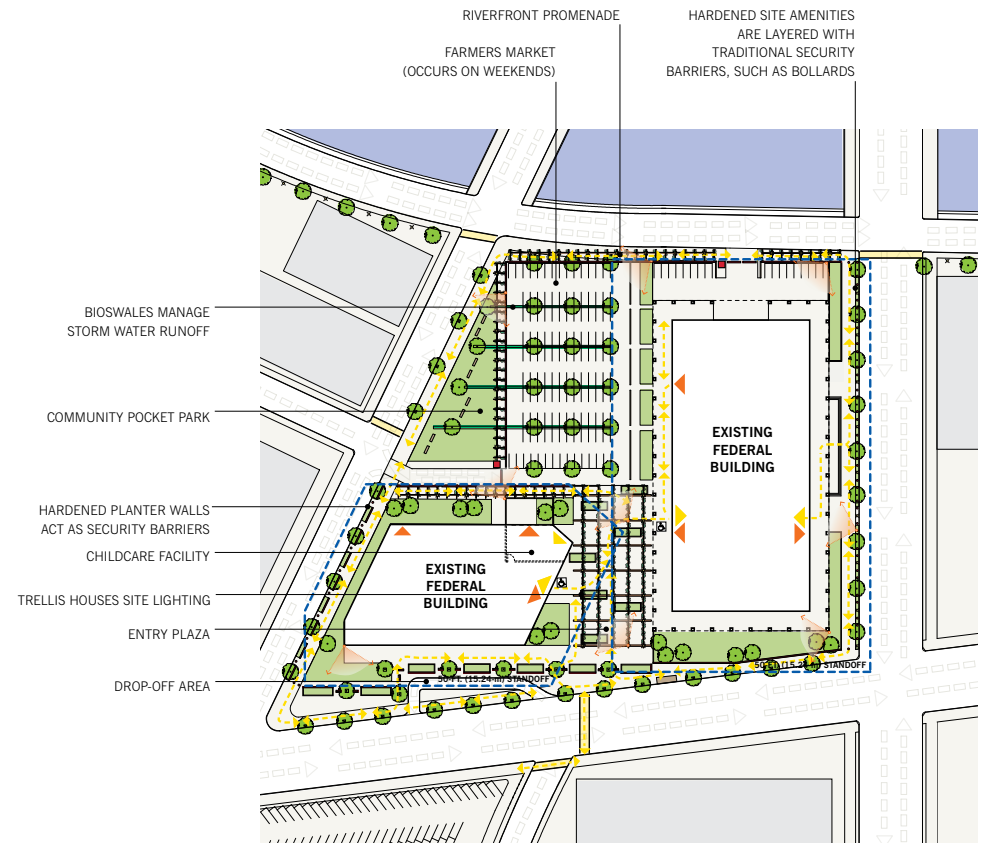
- **Develops an approach** for the entire property that enhances both security and daily use, creating a unified sense of place;
- **Creates a design palette and program** of security and site elements that are in harmony with the existing context and are appropriate to the site and its neighborhood;
- **Maximizes multipurpose features** that accomplish a security purpose and provide a visual and use amenity;
- **Offers windows of opportunity** to coordinate with public works, neighboring projects, and future GSA investment; and
- **Achieves wider goals for the property**, such as improving the quality of the workplace or enhancing wayfinding.

Site security measures differ from most building or structural security measures because they occur adjacent to or within areas that are highly visible and frequently used by the public. Poorly designed and executed projects diminish the quality of federal buildings and their public open space, impeding movement of pedestrians and vehicles and detracting from a neighborhood's character, commerce, and vitality.



Diagram 1: Comprehensive Site Design

Security solutions should incorporate multipurpose elements that complement the neighborhood context, create a unified vision, and establish a comprehensive design approach for the site. For example, in Diagram 1, planted drainage channels (“bioswales”) help reduce storm water runoff, prevent vehicle entry, and support a pocket park.



Site security elements must complement both one another and their existing context. A design palette, or “family” of elements, creates unity across the site as well as over time, should projects occur incrementally.

New thinking about security leads to unobtrusive solutions, such as signs and natural boulders that double as barriers and seating, or an Art in Architecture installation that animates a landscaped security wall.



With careful planning and design, it is possible to create significant improvements that enhance both form and function. These go beyond just solving security issues; they also upgrade the everyday activities and vitality of the site.

Design elements can serve double duty, satisfying security requirements and offering site amenities.



A project, therefore, should include design and security elements that are in harmony with the surrounding architectural and landscape context. A successful project commits to a common palette, or “family,” of design elements and materials to achieve its goals, even if it is implemented over a number of years.

A telling failure of early site security design efforts is the use of security elements that are completely out of character with the building, site, and neighborhood, or elements that significantly impede the ability of the public to find and reach the building.

Designers are now finding ways to employ multipurpose features that minimize the most risk for the least amount of money, while accomplishing multiple goals. Many site elements, for example, can be reinforced structurally to perform as part of a perimeter barrier that establishes standoff distances. These include benches, bus stops, streetlights, lampposts, retaining walls, fountains, planters, and plinth walls.

Lighting for security purposes can also creatively illuminate sidewalks, signage, entry paths, and entryways. In addition, plants selected and positioned to help screen hard security elements can provide shade, beauty, and seasonal color.

Beyond mastery of the specific elements, a comprehensive approach to the entire site provides a better understanding of opportunities for broader improvements afforded at each part of the site, such as new public spaces, public works improvements, and future facility expansion. These must be planned and addressed with partners both on and outside the design team.

COLLABORATIVE PARTICIPATION

Seasoned, multidisciplinary expertise is critical for fostering innovation. Well-informed Project Team members develop design strategies that successfully integrate security with architectural and site design and work well with ongoing operations and maintenance programs. Team members who are aware of the latest techniques can take advantage of opportunities to innovate and explore new concepts. Collaborative partnerships among these experienced professionals and project stakeholders are essential for success. Project Teams that achieve stated goals draw from many resources:

GSA, represented by the building manager and staff, building tenants, regional Project Teams, and national advisors, impacts all aspects of the project, from property to portfolio management; **Consultants and contractors**, such as architects, blast experts, and landscape architects, augment GSA teams with specialized expertise; and **Local stakeholders**, such as city planners, public works staff, and representatives of civic organizations, offer fresh insights on local conditions, current and future, and may also bring additional physical or operational resources to the solution.

GSA's Office of the Chief Architect (OCA), the Interagency Security Committee (ISC), the Federal Protective Service (FPS), and customer agency security professionals, including the U.S. Marshals Service (USMS), have broad expertise to contribute to the discussion. They also have access to the security and design tools and techniques that can help Project Teams collect the right information, analyze it appropriately, and make informed decisions for their projects.

GSA and customer agency associates, designers, and security professionals collaborate in order to

- Identify and determine which security risks and vulnerabilities should be addressed;
- Develop strategies to manage those risks and vulnerabilities; and
- Craft an efficient design solution that will balance the effectiveness of the solution, the budget, the physical characteristics of each location, and the needs of the tenants.

Large Project Teams representing specialized expertise from different disciplines and roles are typical. Few team members will be familiar with all aspects of the project. Therefore, a collaborative working environment is key, allowing team members to share expertise and work together to craft creative design solutions to technical requirements.

Every project is complex, requiring teams that can navigate federal processes and requirements, as well as satisfy the special needs of customer agencies and local communities—within tight budgets and time frames. Incorporating security requirements may add challenges to the project assignment, demanding specialized expertise and, often, incurring additional costs. Project managers should expect and require that specialty consultants and stakeholders actively contribute to planning and design meetings from the earliest project stages.

Savvy teams should make sure that they consider integrated security and design strategies early in the capital program delivery process, when budgets are set, and before finalizing design and construction funding requests. Indeed, collaboration beginning as early as the Feasibility Study and site selection phases will set the context for a successful project. GSA's *Site Selection Guide* and the ISC Security Design Criteria Implementation Checklist (see Chapter 3 for more information) can help with these tasks.

LONG-TERM DEVELOPMENT STRATEGY

A long-term development strategy is the result of a strategic approach to risk reduction, a comprehensive approach to the site, and a collaborative process. It is the framework that unifies all of these elements over time.

A long-term development strategy provides guidance throughout the life of the facility. Such a plan allows for quick, but confident, incremental actions over time and as resources become available, supporting the overall vision for the property, while remaining flexible enough to accommodate new facility needs or improved security technologies.

The best collaboration occurs early in the project, when security professionals, designers, and those with other relevant expertise sit down together to look at the problem.

If provisions for an integrated design and security strategy and a realistic budget are not in place early in the project, then the opportunities for creativity and innovation are severely restricted, if not lost entirely.

Project Team Roles and Responsibilities

ROLES

RESPONSIBILITIES

<p>Project Manager</p>		<ul style="list-style-type: none"> ■ Selects A/E and security professionals with sufficient expertise. ■ Sets realistic budgets and schedules. ■ Is practical about managing risk. ■ Supports collaboration. ■ Understands the opportunities and orchestrates the team to achieve a holistic vision. ■ Leads the team to innovative and successful solutions.
<p>Property Managers</p>		<ul style="list-style-type: none"> ■ Support a long-term development strategy and comprehensive site design. ■ Support long-term management and maintenance. ■ Advocate realistic and innovative solutions that serve the property and the neighborhood. ■ Share expertise on the detailed operation and everyday functionality of the building and site. ■ Keep an open relationship with community stakeholders.
<p>Other GSA Resources</p>	<ul style="list-style-type: none"> ■ Regional Historic Preservation Officers ■ Asset managers ■ Office of the Chief Architect (including Urban Development/Good Neighbor, First Impressions, and Art in Architecture programs) 	<ul style="list-style-type: none"> ■ Plan for adequate project budget and schedule. ■ Provide advice and best practices. ■ Support multifaceted, holistic strategies.
<p>Building Security Committee, Representing Tenant Agencies</p>		<ul style="list-style-type: none"> ■ Is well informed and realistic about risk management. ■ Prioritizes countermeasures. ■ Is practical, balances cost, and understands ability to reduce risk.
<p>Community Stakeholders</p>	<ul style="list-style-type: none"> ■ City planners, first responders, Department of Transportation (DOT), and Department of Public Works (DPW) ■ Downtown management organizations (including Business Improvement Districts), community organizations, and others ■ Regulatory Agencies ■ Neighboring property owners ■ State Historic Preservation Officer 	<ul style="list-style-type: none"> ■ Seek early and ongoing involvement. ■ Share knowledge of local plans and programs. ■ Leverage and identify local resources. ■ Are well informed and realistic about risk and possible/practical mitigation.
<p>Security Professionals</p>	<ul style="list-style-type: none"> ■ U.S. Marshals Service (USMS) ■ Federal Protective Service (FPS) ■ Security consultants on design teams ■ Security contractors on-site ■ Other security professionals 	<ul style="list-style-type: none"> ■ Assess vulnerabilities and prioritize countermeasures. ■ Support development of multifaceted and innovative solutions. ■ Collaborate with other stakeholders during analysis. ■ Balance impact with costs. ■ Seek and implement creative and flexible countermeasures.
<p>Designers and Planners (Architect, Landscape Architect, Planner, Urban Designer), Engineers (Civil, Structural, Geotechnical, Environmental), Archaeologist, Historic Preservationist</p>	<ul style="list-style-type: none"> ■ Design professionals at GSA (e.g., OCA, Regional experts) ■ Indefinite Delivery Indefinite Quantity (IDIQ) architecture/engineering (A/E) firms ■ Design Excellence selected firms 	<ul style="list-style-type: none"> ■ Work within a long-term development strategy. ■ Develop a strategic, multidimensional, and holistic site design. ■ Work closely with security professionals to create flexible alternatives and innovative solutions. ■ Support collaborative teamwork early in analysis. ■ Recommend sufficient, responsible budgets.

Successful capital projects with these long-term development strategies allow GSA to leverage the value of its assets across many years. Since federal properties are expected to have a long life of service, development actions must maximize federal resources, whether invested in the past, present, or future.

A long-term strategy helps to ensure that

The project stays on track over years of planning, construction, and maintenance actions;

Each team member understands and supports the long-term goals for the project; and

The federal investment is leveraged to make the most of opportunities and to achieve the team's holistic vision.

Every project, whether a major capital project or a minor renovation, should support the long-term development strategy. At the inception of each project, the long-term development strategy makes the team aware of the development history of the property and its location to ensure that their actions contribute to the ongoing success of the property and the surrounding neighborhood.

The team should call upon existing GSA master plans, other previous plans and studies, as well as local plans and programs, to ensure that a project satisfies security concerns, while offering broader, more holistic improvements for the site. Where no clear vision for improvement exists, the design team should help to fashion one, based on comprehensive site analysis.

CONCLUSION

By promoting thoughtful and thorough analysis, in concert with creative and collaborative design and responsible budgeting and planning, a project can achieve a successful balance between potential risk and available mitigation measures.

Done right, security projects can also bring positive changes beyond effective risk reduction. They can increase customer satisfaction and enhance their surroundings with broader improvements and amenities, such as new public space, a heightened sense of

ownership, and a more unified streetscape. **Security projects have a higher responsibility than just being unobtrusive. They should strive to improve the quality of their environment.**

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These security documents are updated frequently, and new standards are released regularly. **GSA's security Web site has the most up-to-date information (www.oca.gsa.gov)**. Because some of these materials are not available to the general public, Project Team members should contact OCA staff for access.

Project Teams must be aware of which of these criteria are pertinent to their particular design problem. Since all of the applicable references accommodate balanced, flexible decision-making, they should be used in conjunction with this *Site Security Design Guide* to develop custom solutions.

A comprehensive site approach achieves security goals, while creating welcoming, productive work environments. Although the specific context will change from one project to the next, the need to consider and support it does not.

