U.S. Courts Design Guide

Best Practices Guide

June 2021

Administrative Office of the U.S. Courts

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D'Amato U.S. Courthouse | Central Islip, NY — Image: Richard Meier & Partners

01 INTRODUCTION

This chapter introduces the user to the main objectives of the *U.S. Courts Design Guide Best Practices Guide* (BPG), provides an understanding of how to use the information contained within the BPG, and explains how each chapter topic relates to the *U.S. Courts Design Guide*.

Chapter Sections:

Purpose and Objectives

In 2017, the Judicial Conference of the United States approved the undertaking of a comprehensive review and revision of the *2007 U.S. Courts Design Guide (Design Guide)*. Between 2018 and 2021, the Administrative Office of the U.S. Courts (AOUSC), in concert with the *Design Guide* Working Group and their consultants, recommended necessary changes to modernize and standardize the *Design Guide*. The *U.S. Courts Design Guide Best Practices Guide* (BPG) evolved from the process of updating the *Design Guide* to provide clarity on the requirements outlined in the revised guide.

The intent of the BPG is to establish a non-policy-driven document that serves as a companion to the *Design Guide*. The *Design Guide* provides policy guidance and technical requirements for federal judiciary projects, but the document does not provide examples, lessons learned, or case studies for how these requirements may be implemented. As a companion document, the BPG demonstrates the need for and applicability of the *Design Guide* by providing these missing components. This document captures industry best practices and lessons learned from courthouse planning, design, and construction projects throughout the federal judiciary.

Although many best practices are outlined in the BPG, this document cannot and does not capture every best practice for every design element. The information represented throughout this document has been compiled by a team of industry experts, building stakeholders, judiciary personnel, and AOUSC Space and Facilities Division staff. The content is representative of the thought leadership and experiences of this team and the opportunities and challenges they commonly encounter in implementing *Design Guide* requirements.

The BPG will continue to be updated as other new courthouses are funded, designed, and built. The relevancy of the BPG is dependent on stakeholders documenting and sharing their *Design Guide* implementation experiences. Users and project stakeholders should contact the AOUSC Space and Facilities Division for additional information and updated best practices regarding the planning, design, and construction of federal courthouses.

Guide Organization

The BPG is organized to mirror the *Design Guide* chapter for chapter. Each chapter of the BPG provides best practices for implementing the information contained within the respective *Design Guide* chapter. Some chapters have been combined for clarity and brevity. Combined chapters can be recognized by the slash contained in their chapter number. In these instances, users should refer to all referenced *Design Guide* chapters for information related to those topics.

A summary of each chapter contained in this document is provided below:

Chapter 1, "Introduction," introduces the user to the main objectives of the BPG, provides an understanding of how to use the information contained within the BPG, and explains how each chapter topic relates to the *Design Guide*.

Chapter 2/3, "Courthouse Planning and Programming," provides guidance to the planning and programming of federal courthouses. This chapter combines information from Chapter 2 and Chapter 3 of the *Design Guide*.

Chapter 4, "Courtrooms and Associated Spaces," relates to the planning, design, and construction of courtrooms and their associated spaces. Topics within this chapter range from overall courtroom planning and design practices to building systems integration within courtroom millwork.

Chapter 5, "Jury Facilities," relates to the planning, design, and construction of jury assembly spaces, trial jury deliberation suites, and grand jury hearing rooms.

Chapter 6, "Judges' Chambers Suites," relates to the planning, design, and construction of judicial chambers and their associated spaces. This chapter discusses traditional and collegial chambers layouts, flexible chamber suite designs, and value engineering considerations during construction.

Chapter 7, "Court Libraries," relates to the planning, design, and construction of court libraries. This chapter discusses planning and design strategies for alternative functions that may occur in court libraries, such as civic education or judicial gathering spaces.

Chapter 8, "Clerk's Office," relates to the planning, design, and construction of clerks' offices and their associated spaces. This chapter discusses planning for alternative workplace strategies (AWS) within a clerk's office and provides examples of successful AWS implementation throughout the federal judiciary. Additionally, the designs of clerk's office public counters are examined and planning for additional clerk's office functions is discussed.

Chapter 9, "Probation and Pretrial Services Offices," relates to the planning, design, and construction of probation and pretrial services offices. This chapter discusses unique spatial requirements, zones of security, and AWS in the context of probation and pretrial services offices.

Chapter 10/11, "Other Court Units and Shared Support Spaces," relates to the planning, design, and construction of the shared judges' conference rooms, fitness centers, alternate dispute resolution suites, and sensitive compartmentalized information facilities. This chapter combines information from Chapter 10 and Chapter 11 of the *Design Guide*.

Chapter 12/13, "Tenant Improvements, Finishes, and Signage," relates to tenant improvements, millwork, finishes, and signage. This chapter discusses millwork and finish selection, cost control strategies, and best practices for electronic signage. This chapter combines information from Chapter 12 and Chapter 13 of the *Design Guide*.

Chapter 14/15/16, "Acoustics, Building Systems, and Security," relates to courthouse acoustics; mechanical, electrical, and plumbing (MEP) systems; and security integration and coordination. Responsibilities for different agencies regarding MEP, audiovisual, and security coordination are outlined in this chapter. Best practices range from systems planning to agency coordination. This chapter combines information from Chapter 14, Chapter 15, and Chapter 16 of the *Design Guide*.

Chapter 17, "Renovations and Alterations," is regarding prospectus and non-prospectus renovations to existing courthouses or judiciary space. This chapter discusses best practices for working in an occupied building, unforeseen conditions, project phasing, swing space planning, and renovations in leased space.

Chapter 18, "Alternative Workplace Strategies," relates to the planning, design, and implementation of alternative workplaces. This chapter discusses internal and external stakeholder engagement through the lens of change management.

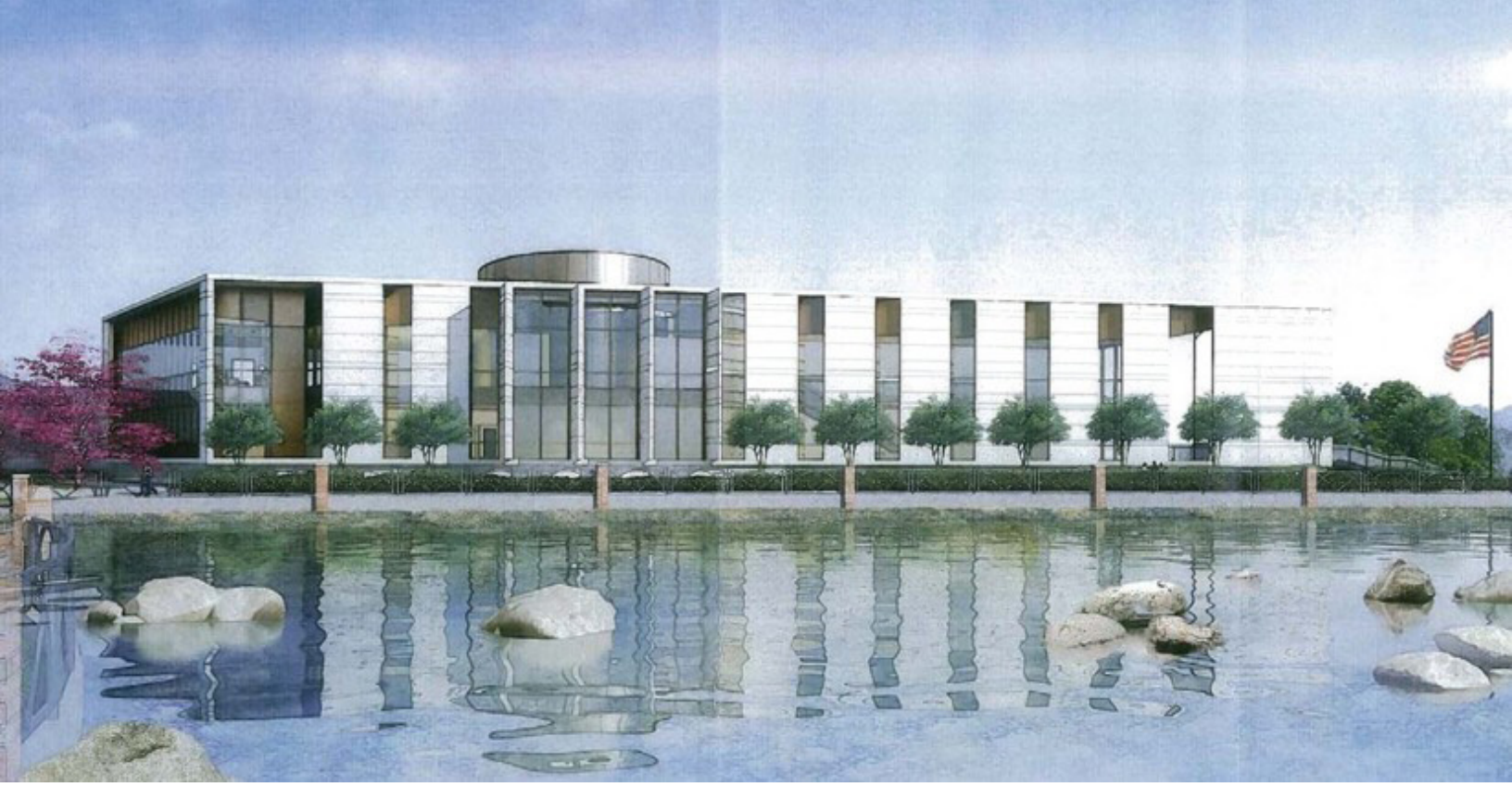
Chapter 19, "Construction and Post-Occupancy," is regarding issues that may arise during and after construction. This chapter is unique to the BPG and discusses the responsibilities and expectations of each project stakeholder during construction through a project management lens. Additional chapter topics include such construction activities as the punch list, substantial completion, warranties, maintenance, and post-occupancy building management.

Chapter Organization and Graphics

Chapters 2/3 through 19 each contain three major sections: Planning and Design Considerations, Best Practices, and Case Studies. A description of each section is provided below:

- The Planning and Design Considerations section provides a list of topics, questions, and key project aspects that should be considered during the planning and design phases of a courthouse project.
- The Best Practices section provides a list of industry best practices for the given chapter topic. This list may be broken out into more specific subsections.
- The Case Studies section provides a summary of a specific design or construction project and explains how best practices have been implemented.

Information presented within this guide is accompanied by conceptual images, technical drawings, and construction or post-occupancy photographs. These illustrations are included to graphically describe and demonstrate best practices and lessons learned to the guide users.



U.S. District Courthouse | Bakersfield, CA

Images: NBBJ

Top: Rendering of proposed design
Bottom: Photo after completion

02/ 03 COURTHOUSE PLANNING AND PROGRAMMING

This chapter provides best practices for the planning and programming of federal courthouses. It combines information from Chapter 2 and Chapter 3 of the *U.S. Courts Design Guide (Design Guide)*.

Chapter Sections:

Introduction

Before projects go into design and construction, considerable upfront planning is completed by the Judiciary and the General Services Administration (GSA). The federal judiciary assesses their space requirements through the asset management planning (AMP) process. This process includes the development of district and circuit long-range facilities plans, facility benefit assessments (FBAs), and an annual update of the *Urgency Evaluation Results List*. The AMP process methodology was adopted by the Judicial Conference in 2008.

Supporting Documents

The following reference documents provide additional information on the topics contained within this chapter:

- *United States Courts Design Guide*, Chapters 2 and 3, 2021
- *Capital Security Program Handbook,* Administrative Office of the U.S. Courts (AOUSC), 2018
- *The Site Selection Guide*, GSA, 2003
- *Asset Management Planning (AMP) Business Rules*, AOUSC, 2019
- *Justice for All: Designing Accessible Courthouses*

Planning and Design Considerations

Planning is a critical first step in the process to initiate a new federal courthouse construction project. This step lays the groundwork for project justification, requirements, funding, design, and construction by assessing a court's existing facilities and determining the district's or circuit's current and future space needs. For new courthouses and courthouse additions/annexes, the planning phase begins with an AMP process long-range facilities plan (LRFP) developed by the AOUSC.

The federal judiciary's planning process for a new courthouse or annex/addition is depicted in Figure 2/3.01. The process begins with the initiation of the AMP process and LRFP, and proceeds in four steps. The duration of each step varies based on the availability of funds and staff resources, national priorities, regional needs, and stakeholder engagement. The following sections provide additional information on major milestones within the planning process.

Asset Management Planning Process

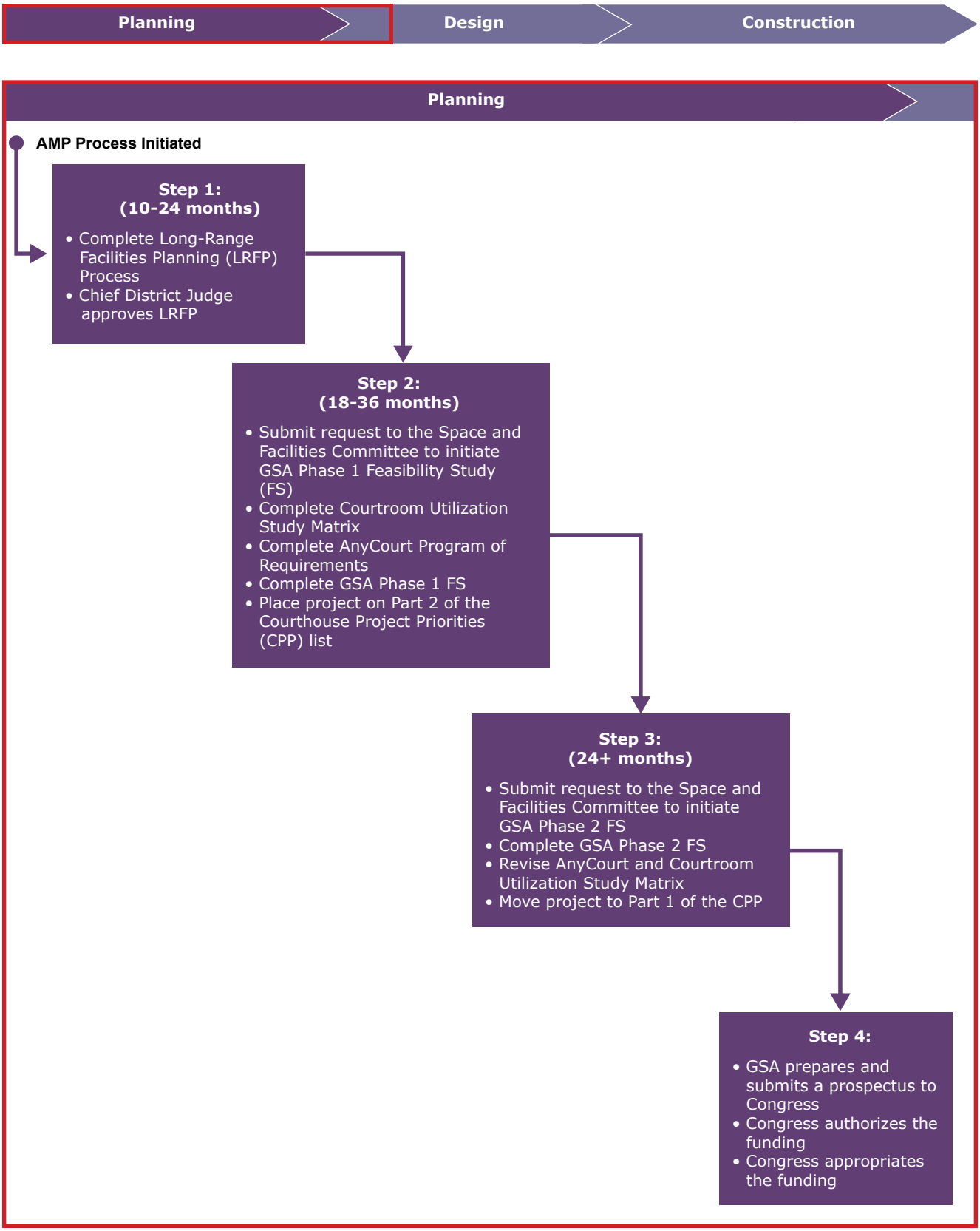
The AMP process is a comprehensive approach to strategic facilities planning that was developed to contain costs and capture lessons learned from past planning efforts. The goals of the AMP process are to objectively and consistently identify space needs, preliminary housing solutions, and relative urgency of need on a nationwide basis. This methodology considers multiple project alternatives, such as renovations and alterations, new construction, and additions. The recommendations resulting from the AMP process are captured in a district or circuit LRFP. The Judicial Conference Space and Facilities Committee uses these LRFPs to identify and prioritize potential new courthouse construction projects ready for a GSA Phase 1 Feasibility Study (FS).

The AMP Process is depicted in Figure 2/3.02.

Long-Range Facilities Planning

The LRFP is the major product of the AMP process, and contains caseload and personnel forecasts as well as recommended housing strategies to meet the Judiciary's current and future space needs. An LRFP exists for every district and circuit. Approximately 9–12 LRFPs are updated each year. These updates are prioritized based on the age of the current LRFP, the district's caseload and/or staffing growth or contraction, increases in judgeships, or the substantial completion of new courthouses, Capital Security Program projects, major renovation and alteration projects, and/or no-net-new projects. In addition to the LRFP, an FBA score is developed for every courthouse, and an Urgency Evaluation (UE) rating and ranking are calculated for each city as part of the planning process. These ratings measure how well each courthouse respectively meets operational requirements and urgency of space needs. Together, these three evaluations help each district and circuit evaluate their current operations and future space needs.

Figure 2/3.01 — Judiciary Planning Process
Chart depicting the overall planning and funding process for a new federal courthouse



Representatives from the following organizations participate in the LRFP process as applicable:

- AOUSC and their consultants
- District and Bankruptcy Courts and Courts of Appeals
- Probation and Pretrial Services Offices
- Federal Public Defender/Community Defender
- Bankruptcy Administrator
- U.S. Marshals Service, U.S. Attorney's Office, U.S. Trustee's Office, and GSA

During the LRFP process, the following personnel will have the listed roles and responsibilities:

Chief Circuit/District Judge

- During the site visit, the chief judge provides perspective on the needs of the circuit or district.
- The chief judge approves the circuit/district LRFP.

Clerk of Court

- The clerk of court is the LRFP program manager's main contact for the planning process. They will assist with the site visit scheduling and logistics, attend various planning sessions as well as the meeting with the chief judge, and coordinate the district's/circuit's review of the LRFP submittals.
- The clerk of court obtains the chief judge's approval of the LRFP.

AOUSC LRFP Program Manager

- The program manager is responsible for the overall scheduling, coordination, and development of circuit/district LRFPs.
- The program manager assists the AOUSC consultant with facilitating the site visit planning sessions.

AOUSC Consultant

- The consultant is responsible for developing the planning handbook and LRFP, as well as for facilitating the site visit planning sessions and conducting the courthouse facility benefit assessment tours.

AnyCourt

AnyCourt is a planning tool that generates an objective, benchmark-driven program of requirements (POR) for proposed courthouse construction projects based on *Design Guide* space allocations. The tool is used by the Long-Range Facilities Planning Branch (LRFPB) to determine a project's preliminary POR based on projected staffing and anticipated changes in courtroom and chambers needs. The AnyCourt program is developed after the LRFP and in coordination with the court, AOUSC LRFP program manager, AOUSC Space and Facilities Division (SFD) facilities program manager (FPM), and GSA. The process requires review and approval of the document by both the respective court and circuit. The Assistant Circuit Executive (ACE) for Space and Facilities should be included in the preparation of the AnyCourt program since the document requires circuit judicial council approval. It is the responsibility of the AOUSC FPM to review and facilitate the approval process with the court in coordination with the AOUSC LRFPB AnyCourt subject matter expert and LRFP program manager.

The AnyCourt program sets the usable square footage (USF) of the Judiciary's space envelope and contributes to the overall gross square footage of a new courthouse project. In addition, it provides the basis for the benchmark cost, and therefore must be accurate. It should be noted that the program is different than the POR developed during design by the selected architect. Although some of the listed spaces may change during the design phase, the USF listed in the AnyCourt program may not be exceeded without additional approval.

The AnyCourt program is first generated in preparation of the GSA Phase 1 FS It will typically be revised during the GSA Phase 2 FS. Depending on the length of time between the GSA Phase 2 FS and project funding, it may be updated and revised prior to funding and prospectus approval.

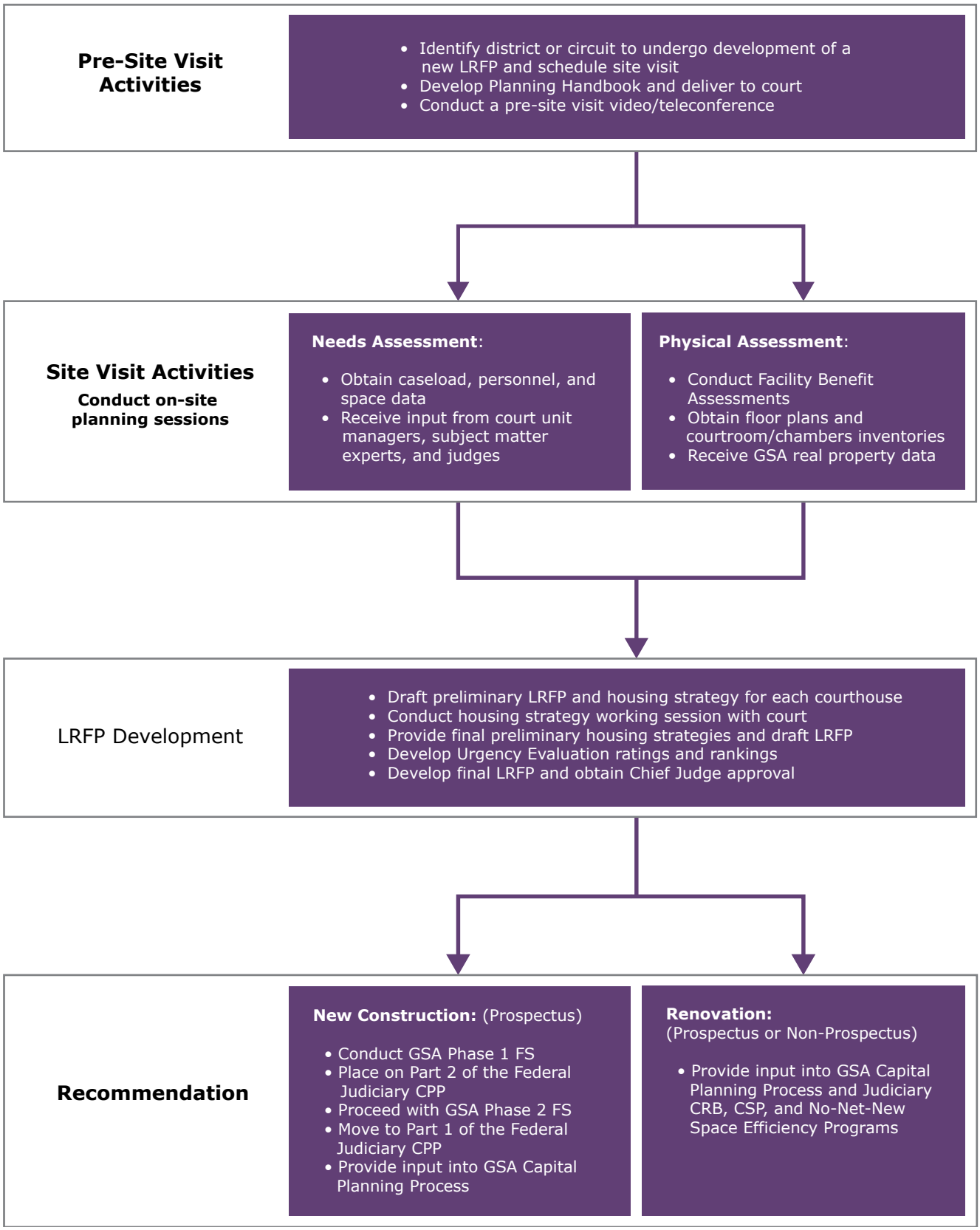
GSA Feasibility Studies

During the planning process for a new courthouse project, GSA will complete two feasibility studies: a Phase 1 FS and a Phase 2 FS.

GSA Phase 1 Feasibility Study

- The purpose of the first study is to develop appropriate housing strategies that meet the needs of the Judiciary.
- Completion of this study is a prerequisite for a location to be placed on Part 2 of the Courthouse Project Priorities (CPP) list and may take up to 12 months to complete.
- The study is developed by GSA utilizing in-house GSA staff.
- The GSA Phase 1 FS does not contain cost estimates or a preferred solution for the project.

Figure 2/3.02 — AMP Process and LRFP Development
Chart depicting LRFP process and activities as part of the AMP process



GSA Phase 2 Feasibility Study

- The purpose of the second study is to develop a preferred housing solution and preliminary cost estimate by validating the housing strategies developed in the GSA Phase 1 FS. This study establishes the project budget and provides a baseline for funding.
- Completion of this study is a prerequisite to a project moving from Part 2 of the CPP to Part 1.
- The GSA Phase 2 FS is managed by the regional GSA office and completed by a contracted third party. This management approach may present challenges to project communication since every GSA region operates differently.

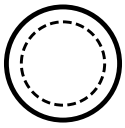
Site Selection

The site selection process is led by GSA and involves a variety of stakeholders, including the representatives from the local courts and the AOUSC. The project or chief judge from the local court is typically very involved in the process. Refer to Figure 2/3.03 for an overview of the site selection process.

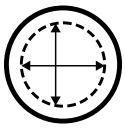
Site Selection Criteria

When evaluating a site for a new courthouse, project teams may consider the following criteria and site parameters:

- Proximity to various modes of public transportation and public parking.



- Ability to accommodate a setback.



- Site sized to 3–5 acres.

- Adjacent properties have compatible land uses and functions.
- Compatibility with local land use zoning.

- Location outside of a flood plain. There will be additional costs in providing a design solution that elevates occupied spaces and critical building systems out of a flood plain.
- The seismic zone is compatible with the vision for the project.

Courthouse design often begins by analyzing the spatial impacts of the courtroom module. Courtrooms are typically paired around a court floor holding area. Understanding the space implications of a pair of courtrooms as well as adjacent support spaces, staff, and public circulation helps define how much room the courtrooms will impose on a site and how many courtrooms can be accommodated per floor. Courtroom modules are rarely considered during site selection, but understanding this concept may help to make an informed decision about a specific site.

Figure 2/3.04 provides approximations for typical courtroom modules. The elements illustrated are district courtrooms, attorney conference rooms, and holding areas. Public circulation, restricted circulation, chambers, jury areas, and additional support spaces are not shown since their layouts will vary. Many variations in the number of courtrooms located per floor plate as well as their connection to support functions will influence the planning of the courthouse. These basic courtroom modules provide a basis for exploration in determining if a courthouse can be accommodated on a given site. Refer to GSA's CourtsWeb to explore different courthouses around the country and how this module has been adapted to fit on different sites.

Figure 2/3.03 — Site Selection Flow Chart
Chart depicting the site selection process as conducted by GSA

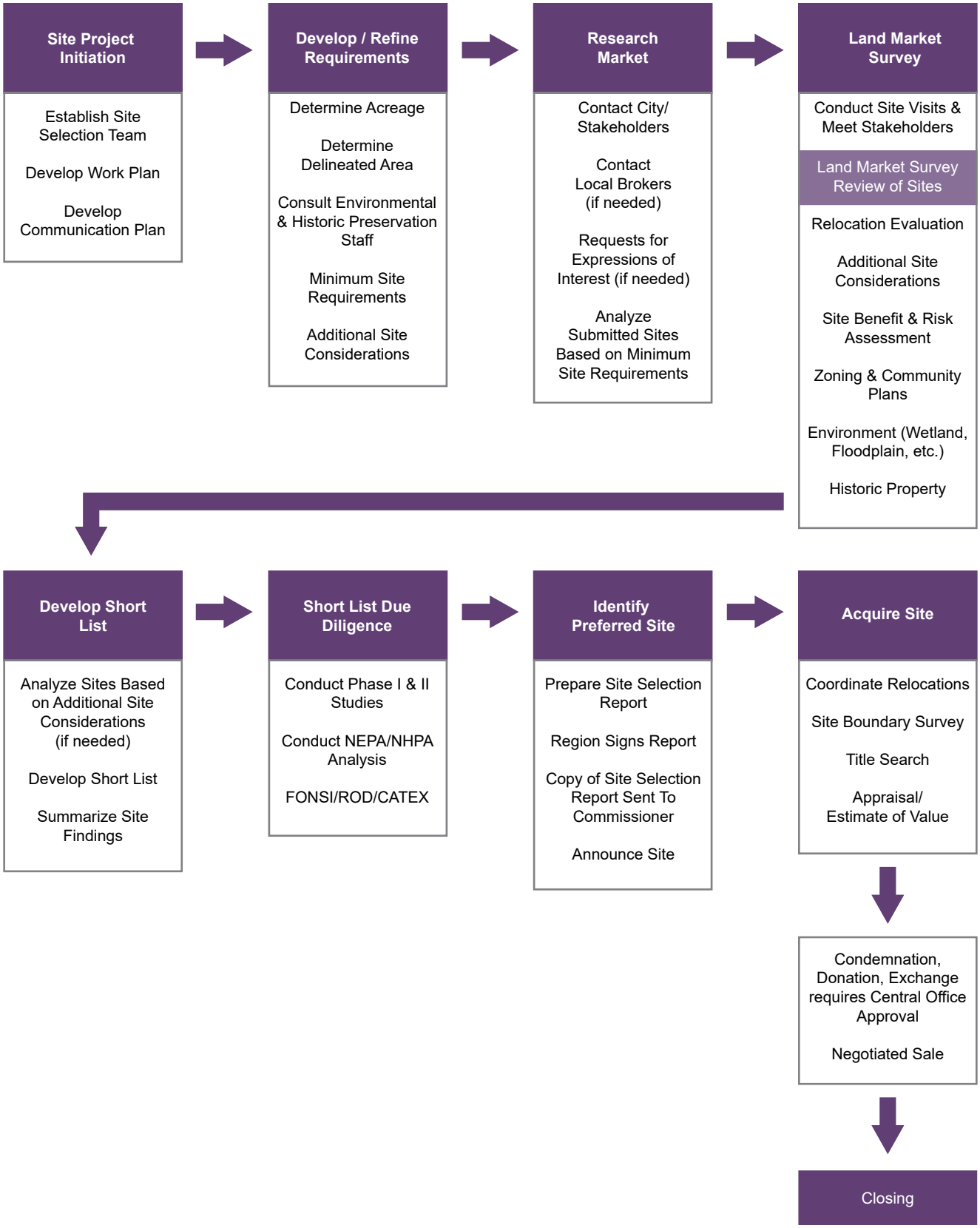


Figure 2/3.04 — Courtroom Modules
Typical courtroom module configurations are shown with approximate dimensions

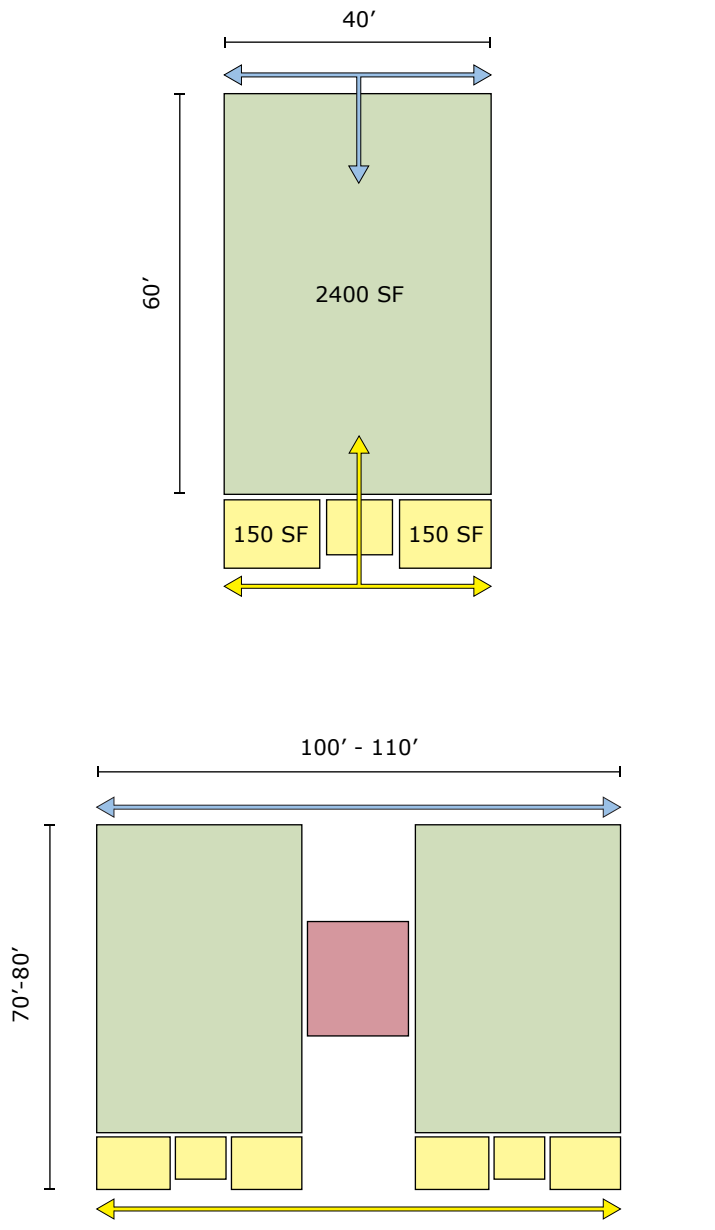
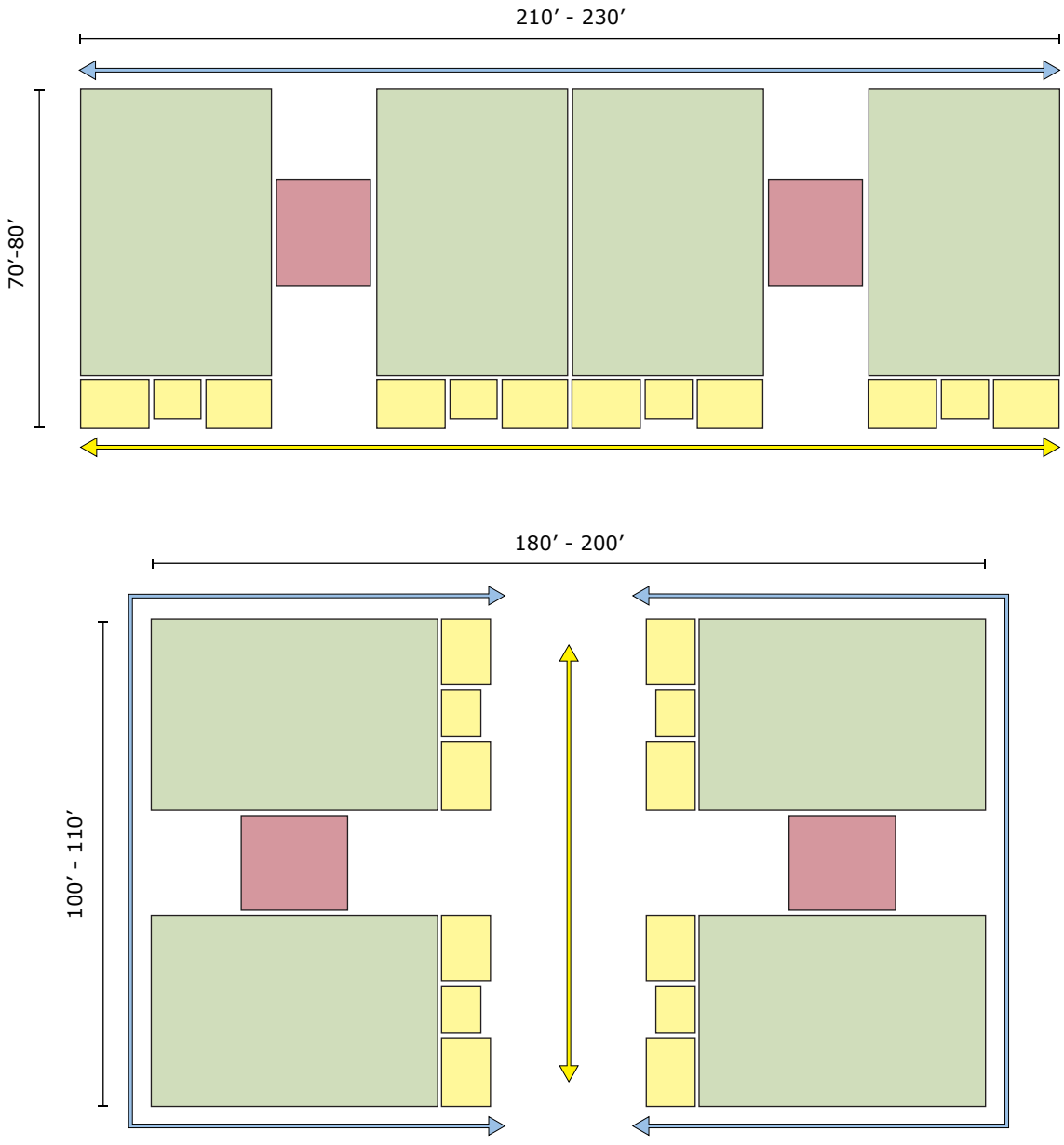


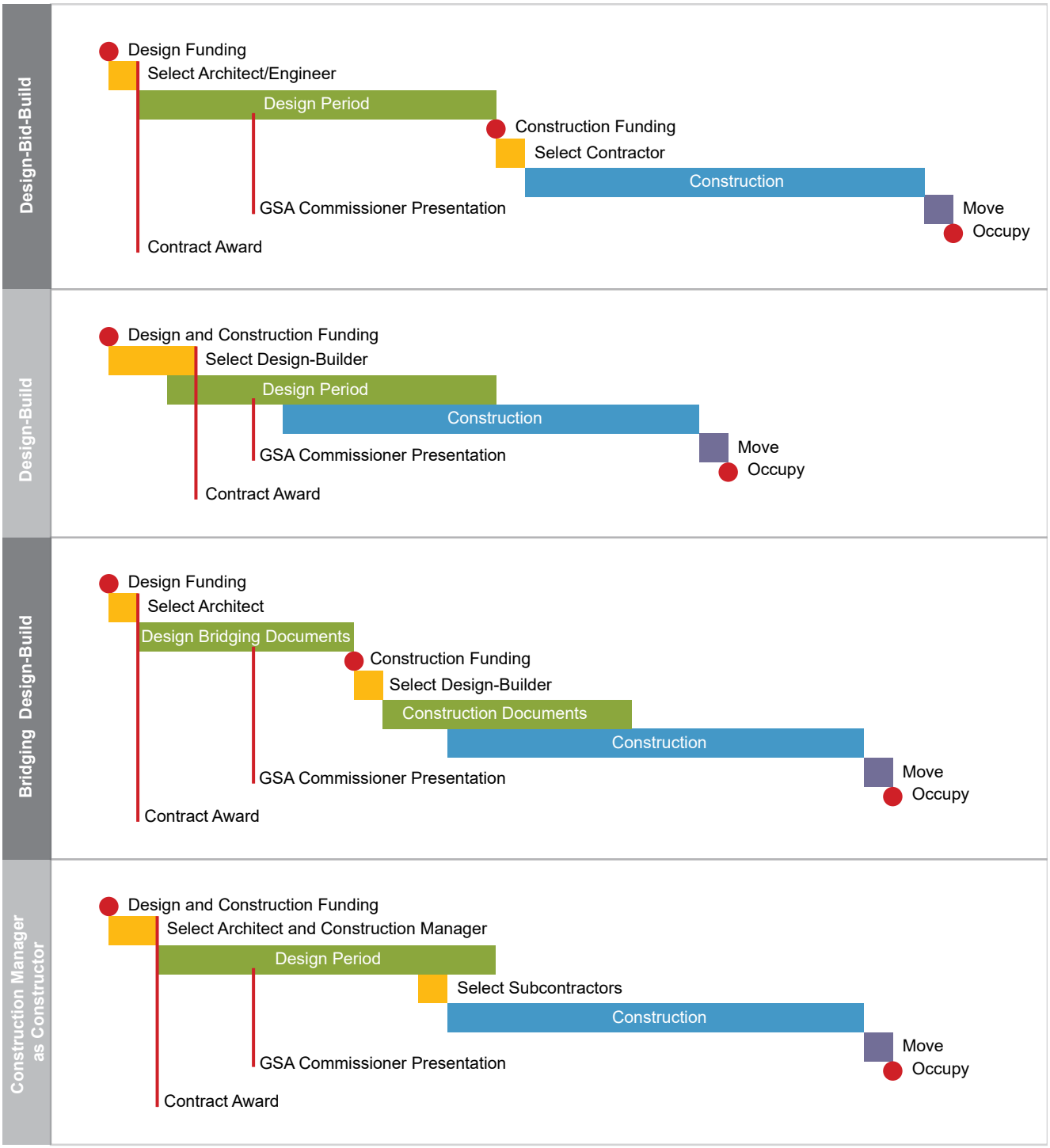
Figure 2/3.04 — Courtroom Modules (Continued)
Various courtroom module configurations are shown with approximate dimensions



Project Delivery Methods

The four main project delivery methods used by GSA to design and construct federal courthouses are design-bid-build (DBB), design-build (DB), bridging design-build (BDB), and construction manager as constructor (CMc). In this section, these delivery methods are described. Each delivery method is depicted in Figure 2/3.05.

Figure 2/3.05 — Project Delivery Methods Schedules
Graph depicting the phases of each delivery method



Design-Bid-Build

DBB is the traditional method of project procurement and delivery utilized by GSA. For DBB projects, GSA holds two separate contracts: one for design services from an architecture or engineering (A/E) firm and another for construction services from a general contractor (GC). The A/E and GC do not hold contracts with each other and are not liable for the services the other provides. Because of these contractual relationships, DBB projects proceed in three sequential phases: design phase, bidding phase, and construction phase. These phases do not overlap, and preceding phases must be completed before the project can progress.

Stakeholders can expect this delivery method to have the following attributes:

Time

- Longer schedule because phases do not overlap.
- Additional time and stakeholder control to make decisions.
- Two separate procurements for design and construction may result in schedule delays.

Cost

- The design and construction costs depend on the quality of the final bid documents.

Influence

- More GSA and judiciary control during design.
- Judiciary involved in every project phase.
- GSA outside consultants — such as telecommunications, data, audiovisual (AV), security, and furniture vendors — are more easily incorporated.
- Peer review process integrated into the conceptual design process.

Risk

- GSA is at increased risk for changes in scope, schedule, and budget.
- Limited input during design from the construction community regarding constructability, design, and market conditions.

Design-Build
DB is a method of project delivery where GSA contracts a single entity to provide both design and construction services. For DB projects, the selected GC holds the contract with the A/E, which streamlines the design and construction process. Alternatively, some GCs and DB firms can provide both design and construction services in-house. Contractually, this approach lessens GSA's liability because the GC is now responsible for both services. However, GSA and other stakeholders have less control over the design and limited ability to make design changes, so it is critical for GSA and the project team to scope the project correctly.

Stakeholders can expect this delivery method to have the following attributes:

Time

- Overlapping design and construction phases allow for shorter project schedule.
- Stakeholders must make decisions in a timely manner or the schedule and project costs may be affected.
- Single procurement saves time.

Cost

- Design and construction funds are required at the beginning of the project.
- Fixed design and construction cost.
- Contractor is liable for the design risks resulting in fewer change orders.

Influence

- GSA and Judiciary have limited input during design.
- Contractor participates in the design process advising on constructability, cost, and schedule risk.

Risk

- Conflicts in design intent and construction reality may occur due to overlapping design and construction phases.
- The contractor may incorporate material or system substitutions to control costs.
- Architect is contractually obligated to the contractor, making the process more challenging for the client to make changes and, in some instances, for the architect to respond directly to the Judiciary's needs.

Bridging Design-Build
BDB is a hybrid project delivery method that utilizes aspects of both the DBB and DB processes. This method is split into two phases: a design phase and a design-build phase. These phases must be completed sequentially. Both a design architect and a GC or DB firm are separately contracted by GSA to complete their respective phases. During the bridging process, the design architect will typically produce 35-percent design development drawings and specifications with elements that have a significant impact on the project developed to a higher degree. Afterward, the GC or DB firm is selected through a bidding process to complete the project. This process attempts to capitalize on the advantages of the DBB and DB processes while mitigating some of the risks associated with these methods.

Stakeholders can expect this delivery method to have the following attributes:

Time

- Shorter construction schedule and overlapping design and construction.
- Two separate procurements for design and construction may result in a longer schedule.

Cost

- GC defines the details, materials, and implementation of the design documents which drives the cost of the project.

Influence

- Allows the Judiciary to exercise design influence in the beginning of the project.
- Process is not as collaborative as DBB or CMc.
- Contractor leads the final design process advising on constructability, cost, and schedule risk.

Risk

- There is a lack of continuity between the design architect and the DB team.
- Design risk and liability are transferred to the DB firm upon selection, limiting change orders because their bid is based on documents that are more defined.
- When locked into early packages, choices are limited for the later portion of work.

Construction Manager as Constructor

CMc is another hybrid delivery method that utilizes a construction manager (CM) who acts as a consultant to the owner in the development and design phases. The CM assumes the risk of construction performance similar to a GC, holding all trade subcontracts during the construction phase. Similar to DBB, GSA contracts the design and construction separately; however, the contracts may be awarded concurrently. In some instances, the design may be contracted first, and after the conceptual design phase, the construction manager may be contracted. This practice allows the design and construction teams to more be integrated, which increases collaboration and streamlines the process. Some early construction packages may be awarded during the design phase, which helps to reduce the overall project schedule.

Stakeholders can expect this delivery method to have the following attributes:

Time

- Shorter schedule and reduced delivery time. Early packages for construction may be awarded to reduce the project schedule.
- The CMc contract may be awarded as late as 100-percent design development.

Cost

- Pricing is less competitive since estimates are often inflated to minimize risk to the contractor.
- An independent cost estimate may not occur during this procurement method. The process uses actual costs from the subcontractors.

Influence

- All project stakeholders — including GSA, CM, A/E, the Judiciary, and other major tenants — are involved in the design and construction process from start to finish.

Risk

- The contractor is ultimately responsible to provide project cost and quality control.
- The guaranteed maximum price (GMP) is set once the construction manager is contracted. As design proceeds, value engineering may become necessary due to higher costs.

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Best Practices

Judiciary Planning

Long-Range Facilities Planning

- Review the LRFP in a timely manner. Slow stakeholder response time will often delay the LRFP process, which may impact the prioritization of urgent projects.
- During a CUE transition, the incoming CUE should be briefed on the current LRFP and any current or pending projects.

AnyCourt

- Identify all potential *Design Guide* exceptions at the beginning of the AnyCourt development process. If exceptions are not identified up front, the exceptions will typically be more expensive to accommodate later and will require a reimbursable work authorization (RWA). *Design Guide* exceptions are required to be approved by the Judicial Conference and reported to Congress, which may cause schedule delays. Typical *Design Guide* exceptions are identified below:
    - Expanded jury assembly rooms
    - On-site urinalysis labs
    - Multi-party courtrooms
- Some programming decisions may result in larger space envelopes. For instance, if collegial chambers are included, robing rooms for judges will also be included in the AnyCourt program. If traditional chambers are included, robing rooms will not be included.

GSA Phase 1 Feasibility Study

- Representatives from the local court should be present and engaged in all of the study meetings.
- Ensure the appropriate court staff are involved and reviewing all FS submissions. Courts should consider reaching out to others within the circuit or district for assistance if the local courts do not have the appropriate in-house staff to review the FS submissions.
- The SFD FPM should be actively engaged with GSA and all FS deliverables. The FPM should advocate for the local court when problems arise and escalate issues appropriately.
- The ACE for Space and Facilities should review all FS deliverables.

GSA Phase 2 Feasibility Study

- The Judiciary should re-evaluate the need for *Design Guide* exceptions at this stage.

Site Selection

- Site selection and acquisition schedules can vary from project to project due to factors such as environmental and historic considerations and availability.
- GSA should involve some judiciary stakeholders, such as local judges, in the site selection process for input.
- Archaeological findings, historical, or condemned building sites may significantly extend the site selection process.

Project Delivery Methods

General

- It is recommended that project teams engage building operations and management subject matter experts regularly throughout the design phase. The design team should refer to the *GSA Design Guide for Operational Excellence.*

Design-Bid-Build

- Because design, bidding, and construction occur in separate sequential phases, it is possible the construction bids may be higher than the project funding. The potential higher bids is a serious risk for this procurement method and may result in the redesign of the project.
- The A/E has more time to fully design the project so the Judiciary may understand the design. Project stakeholders should be engaged in the design process.

Design-Build

- Involve all stakeholders in the decision-making process to reach a unanimous consensus. Once a decision is made, it may be costly to undo.
- Make decisions regarding large internal and external systems early in the process as they are unlikely to change. For instance, the construction price as submitted by the DB team might include specific assumptions regarding the design of the exterior of the building or placement of the courtrooms and circulation system. Reworking these features after decisions are set may carry large cost implications.
- Proposals must be thoroughly reviewed by the project team, so all stakeholders understand what will be provided by the DB team. If it is not stated in the proposal, it will not be provided.
- Increasing the costs in one area must be balanced by making cuts in another since tenant improvement costs are essentially fixed.

Bridging Design-Build

- Define project requirements early before the procurement of the BDB contract. Making changes to the 35-percent design documents after BDB award will be costly and cause major delays.
- Identify value engineering items early in 35-percent documents, so the project remains on budget when ready to make DB award.
- Identify options or add-alternates to avoid potential bid bust.
- Ascertain scope and costs for AV/IT requirements early, and negotiate this scope as part of DB award.

Construction Manager as Constructor

- Bring construction manager on board as early as possible.
- Make sure all scope items are covered for pricing and look out for exclusions in the construction contract proposal. Carefully review subcontractor exclusion documents.

Design-Bid-Build Case Study

Orrin G. Hatch U.S. Courthouse | Salt Lake City, Utah

Successes

The following list is a series of successes and lessons learned from the DBB procurement method used on the Orrin G. Hatch U.S. Courthouse project:

Procurement Method Swap

- Project stakeholders should be aware that project procurement strategies may occasionally change. This project began as a DBB project, but transitioned to be a CMc project during the design phase.

Schedule

- Be aware that the DBB procurement method may be the most lengthy due to the three sequential procurement method phases.

Design Phase

- Utilize the design phase to thoroughly design the courthouse and rectify any design issues before the project goes to the bid phase. The thorough design investigation for this project produced three different conceptual designs and preliminary cost estimates which allowed the Judiciary to better understand the implications of each design. Without this investigation, judiciary stakeholders may not have realized the design benefits of collegial chambers. Collegial chambers were not planned for in the AnyCourt program, but ended up being preferred by the judiciary stakeholders.

Stakeholder Engagement

- Engage with additional stakeholders during the design phase. As the design evolved, the courthouse project team shared new design information with the State Historic Preservation Office and the public through public presentation meetings.

Figure 2/3.06 — Courtroom
A district judge courtroom as built in the Orrin G. Hatch U.S. Courthouse

Design-Build Case Study

U.S. District Courthouse | Los Angeles, California

Successes

The following list is a series of successes and lessons learned from the DB procurement method used on the Los Angeles U.S. District Courthouse project:

Project Priorities

- Clarify project priorities early in the DB procurement process. GSA and the project judge met with the shortlisted DB teams to discuss desired project goals and outcomes. This meeting provided helpful insight to the DB teams and clarified the need for a four courtroom per floor scheme.
- Provide judiciary and other stakeholder feedback to the DB teams. The teams require this feedback to accurately capture project goals and requirements.

Schedule

- This procurement method may provide for the shortest project schedule. This large courthouse contains 24 courtrooms and 32 chambers, and it was completed in three years from the award of the DB contract.

Design

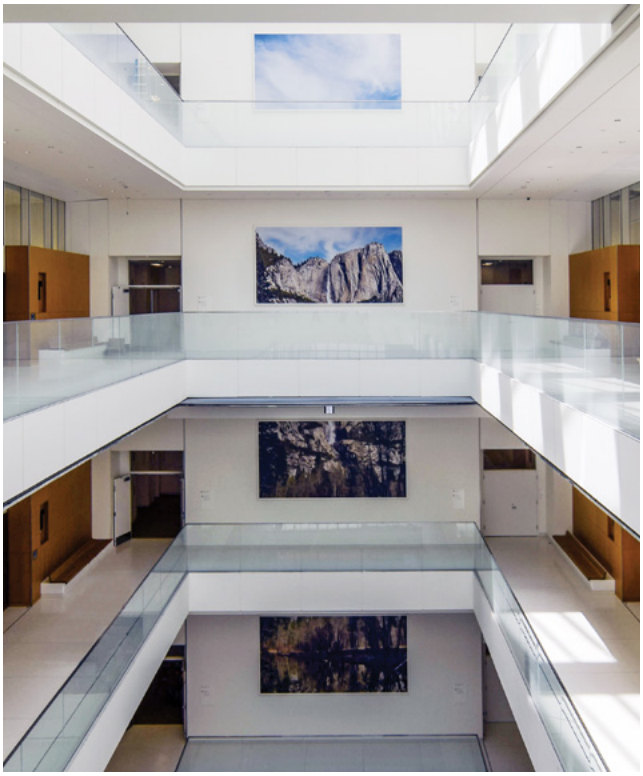
- Deferred to the A/E on design. The selected DB team's A/E considered different value engineering options, so the integrity of the detailing was not compromised as the project moved forward.

AV/IT Installation

- Consider incorporating the judiciary-funded AV and IT installation into the overall schedule to avoid coordination challenges. The AV installation contract was awarded by the AOUSC to a pre-qualified firm and GSA's CM helped coordinate the work with the GC. This approach saved the Judiciary millions of dollars compared to awarding the AV installation contract through DB GC.

Figure 2/3.07 — Exterior View
Exterior view of the Los Angeles U.S. District Courthouse

Figure 2/3.08 — Main Atrium
The multi-story atrium brings light into the building



Design-Build Case Study

U.S. District Courthouse | Mobile, Alabama

Successes

The following list is a series of successes and lessons learned from the DB procurement method used on the Mobile U.S. District Courthouse project:

Scope

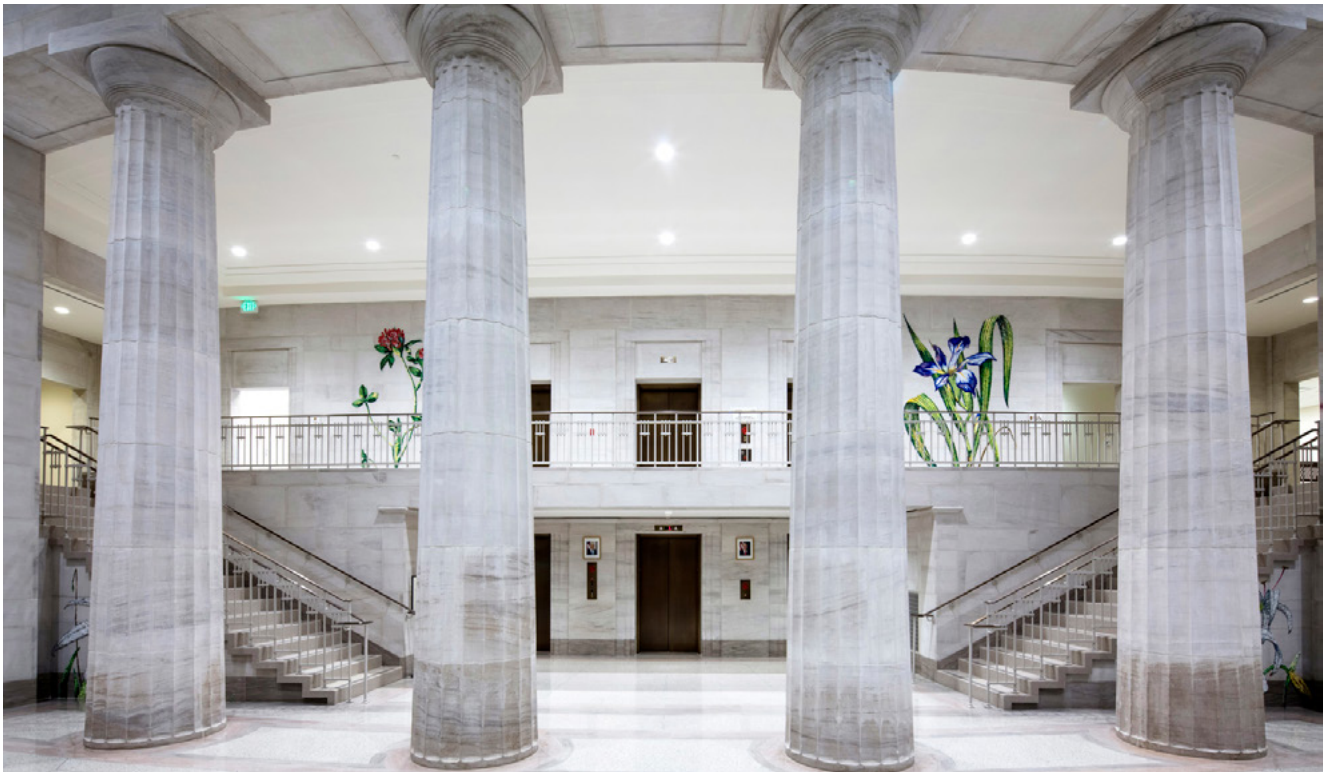
- Consider grouping like projects together into one contract. The contract award for this project contained both the construction of a new courthouse and the renovation of an existing historic courthouse. This combination resulted in construction overhead and material cost savings. Because the two facilities were designed consecutively and by the same DB team, the two buildings have a similar design aesthetic.
- Review the GSA scope of work and program of requirements prior to the contract being bid. This practice will allow project issues to be identified early and set expectations with the user group.

Stakeholder Engagement

- Meet with other stakeholders and user groups frequently so all stakeholders are apprised of project progress. Monthly town halls by GSA and the DB team eliminated the need for focused meetings with the tenants but kept lines of communication open among the project team and other stakeholders.
- Hold regular comment resolution meetings and workshops with the project team. The DB team, GSA, and the court architect held many in-depth design meetings to jointly comment on and review the plans in detail. These meetings allowed all stakeholders to work together to meet the functional needs of the Judiciary while operating within the budget and scope.

Figure 2/3.09 — Main Lobby

The Mobile U.S. District Courthouse features a classically-designed lobby space that complements the surrounding historic downtown area



Bridging Design-Build Case Study

Fred D. Thompson U.S. Courthouse and Federal Building | Nashville, Tennessee

Successes

The following list is a series of successes and lessons learned from the BDB procurement method used on the Fred D. Thompson U.S. Courthouse and Federal Building project:

Scope

- BDB helps to save design and construction time while still allowing the stakeholders to define the design intent during the bridging phase. Project stakeholders should be aware that some design elements are designed later and may be perceived by the contractor as additional items not in scope.
- A clearly defined scope for the DB team is critical to the success of the project. For this courthouse project, the low-voltage and AV scopes were not well defined which caused the need for negotiations between GSA and the DB team.

Design Changes

- Be aware that design changes may have cost implications after the DB contract is awarded. During the courtroom mock-up, the local court wanted to change several minor design items, such as adding a door on one side of the courtroom. This change resulted in an RWA for the court rather than coming out of the project budget.

Figure 2/3.10 — Exterior View

Rendering depicting the architectural intent for the exterior of the Fred D. Thompson U.S. Courthouse

Construction Manager as Constructor Case Study

U.S. Courthouse Annex & Charles R. Jonas Federal Building | Charlotte, North Carolina

Successes

The following list is a series of successes and lessons learned from the CMc procurement method used on the U.S. Courthouse Annex & Charles R. Jonas Federal Building project:

Scope and Risk

- A clearly defined scope is critical. Once the GMP is established, the government loses some control of the pricing and negotiating mechanisms.
- Identify all scope items as early as possible in the design process. The GMP is typically established prior to the completion of the construction documents. Once the GC and GSA agree to the GMP for the project, any additional scope items must either be offset by cuts elsewhere in the project or be funded by the courts through an RWA.
- *Design Guide* requirements should be documented during the design development phase in the project drawings and specifications to ensure all court requirements are accurately reflected in the GMP.
- The primary risk of this delivery method is the potential for missed scope in the documents or missed scope in the pricing.
- Several rounds of value engineering were required to keep this project within the GMP.
- Unforeseen conditions also presented a risk with the historic building. Discrepancies were discovered while working from a 1930s set of drawings. In an existing building, provide adequate time to ensure a through review of original drawings with existing conditions.

Stakeholder Engagement

- Bring the GC to the table as early as possible. This practice provides the project team with real-world cost models based on the most recent market pricing and insight into the cost impact of certain design choices. The GC is also able to act as a check against unrealistic designs.
- Insist that the AV/Information Technology infrastructure report be fully reviewed by team members prior to the GMP being set. It is critical that a detailed infrastructure report be provided early in the design process.

Figure 2/3.11 — Exterior View
The new annex rises above the existing federal building

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U.S. District Courthouse | Los Angeles, CA

Image: Skidmore, Owings & Merrill

04 COURTROOMS AND ASSOCIATED SPACES

This chapter provides best practices related to the planning, design, and construction of courtrooms and their associated spaces. Topics within this chapter range from overall courtroom design practices to building systems integration within courtroom millwork.

Chapter Sections:

Introduction

The United States Federal Court System utilizes a variety of courtroom types for different hearings and functions. These functions range from large multi-defendant trials to naturalization ceremonies. The layout of the courtrooms often determines the size of the courthouse's floor plate, so careful planning of these spaces is required. The size and design of each type of courtroom varies according to the activities the courtroom must accommodate. Each courtroom must be located near and work in conjunction with supporting spaces and other court units, such as jury facilities or judges' chambers suites.

Supporting Documents

The following reference documents provide additional information on the topics contained within this chapter:

- *United States Courts Design Guide*, Chapter 4, 2021
- *United States Courts Courtroom Mock-Up Evaluation and Assessment Report,* 2002
- *Courtroom Technology: Audiovisual Overview*, version 1.1 April 2016
- *Courtroom Technology: Audiovisual Infrastructure Standard*, version 1.1 April 2016
- *Courtroom Technology: Audiovisual Endpoint Baseline,* version 1.1 April 2016
- *AV/IT Infrastructure Guidelines for Courts*, AVIXA AIA, 2013
- *Justice for All: Designing Accessible Courthouses*

Planning and Design Considerations

Courtroom Planning

Courtrooms and their associated spaces are central to the court's mission, so their placement within the building and interactions with other spaces are critical to building planning. It is important to evaluate the following criteria when determining courtroom placement in a new or renovated facility:

Operations

- Will the courtrooms be shared between judges?
- Maintaining clear sight lines is critical to courtroom operations. Alterations and renovations of existing space into courtrooms may pose challenges due to existing obstructions within spaces. Consider spaces that offer unobstructed views. Table 4.01 describes view priorities to consider when developing courtroom spaces, such as columns.

Future Flexibility

- Will raised access flooring be installed in the courtroom well? It is beneficial to make this decision early, as it necessitates other planning considerations. Coordination is required to determine if the slab will be depressed in this area. Consideration should also be made for locations of future courtroom expansion areas. Funds allocated in new courthouse budgets for access flooring cannot be shifted for use elsewhere and will be removed from the budget if not incorporated.
- If raised access flooring is not utilized, locations of electrical and telecommunications outlets must be carefully coordinated with anticipated furniture locations.
- Use of broadloom carpet over raised access flooring should be avoided when possible; it adds cost and complexity to future efforts to configure in-floor power and audiovisual (AV) and data systems, limiting their utility.
- If broadloom carpet is desired, consider eliminating raised access flooring and use floor boxes.

Table 4.01 — Court Position Views
View priorities from different courtroom positions

Courtroom Position	View Priority Considerations
Judge	Views of all participants in the well
Clerk	Views of judge and attorney tables
Court Reporter	Views of witness, attorney tables, and judge
Witness/ Interpreter	Views to judge, jury box, and attorney tables
Jury Box	Views to witness, judge, and attorney tables
Attorney Tables	Views to all participants in the well
Spectators	Views to witness, jury, and judge

Acoustics and Light

- Consider locations of adjoining spaces vertically and horizontally within the building. Sound isolation of courtrooms is a critical aspect of the design. Locating courtrooms near fitness rooms and mechanical spaces will require additional acoustical considerations.
- Are natural light or views to the outdoors important to incorporate in all courtrooms? If natural light is desired, consider requirements for lighting controls to accommodate technology requirements.
- If exterior windows or clerestory windows are incorporated into courtrooms, careful attention should be paid to achieving required acoustical ratings as well as to possible glare on AV equipment.
- Curved walls and domed or sloped ceilings may be costly and require additional acoustical mitigation strategies.
- Proper audio design requires consideration of the architectural and acoustical elements in the space. Avoid finish materials such as metal panels which may introduce unwanted sound vibrations. Multi-zoned ceiling speaker systems are typically the preferred method of sound reinforcement in the courtroom.

Courtroom Layouts

There are many aspects to consider when developing a courtroom design. Courtroom design is often extremely subjective. The courtroom positions can be arranged in a variety of configurations and achieve the same operational efficiencies. Early determination of bench configuration is critical as it can affect the proportion of the courtroom and the location of connections to adjoining functions. Courtroom shape and early determination of how accessibility will be achieved can also impact courtroom configurations.

General

- The most common proportion for a district judge courtroom is 40 feet by 60 feet.
- The most common proportion for a magistrate judge or bankruptcy judge courtroom is 40 feet by 45 feet.

Center Bench Configuration

Figure 4.01 depicts a representative sample of a center bench configuration and courtroom. A center bench configuration has the following qualities:

- Most commonly used courtroom layout.
- Judge is centered in room or centered in the well, typically aligning the judge's bench to the entry door.
- Provides direct line of sight to attorney tables and spectators.
- Emphasis is placed on the judge being central to courtroom actions.
- Places prominence on balance and order.

Corner Bench Configuration

Figure 4.02 depicts a representative sample of a corner bench configuration and courtroom. A corner bench configuration has the following qualities:

- Predominantly used for smaller, square, or unusually-shaped spaces.
- This configuration is utilized more frequently in renovated courtrooms.
- May accommodate less width.
- May provide for additional space in the well area.
- Often places the witness in a more prominent sight line of counsel and jurors.

Jeffersonian Revival Courtroom Model

Figures 4.03 through 4.05 depict examples of Jeffersonian courtroom configurations.

- Rarely utilized, this configuration originated in colonial Virginia in the Tidewater area and adopted in western counties by Thomas Jefferson.
- Positions jury box in front of the judge and other court support staff. The intent is to:
  - Reflect the shared authority of judge and jury.
  - Create ideal interaction between witness and jury.
  - Remove judge from jury's view, allowing jurors to make their own assessment of witness credibility.
  - Eliminate the advantage of one set of counsel being positioned closer to the jury box by positioning counsel on the side.
- Witness is located centrally in the well with unobstructed sight lines to the judge and jury.
- Counsel tables are located on opposite sides of the well facing the center of the room and witness position.
- Spectators often do not have a direct view of the witness from the gallery area in this configuration.
- In this configuration, bench conferences must occur outside of the courtroom.
- Security assessment is as good or better than a traditional design for protective purposes.

Figure 4.01 — Center Bench
Courtroom layout with a center judge's bench configuration (Mobile, AL)

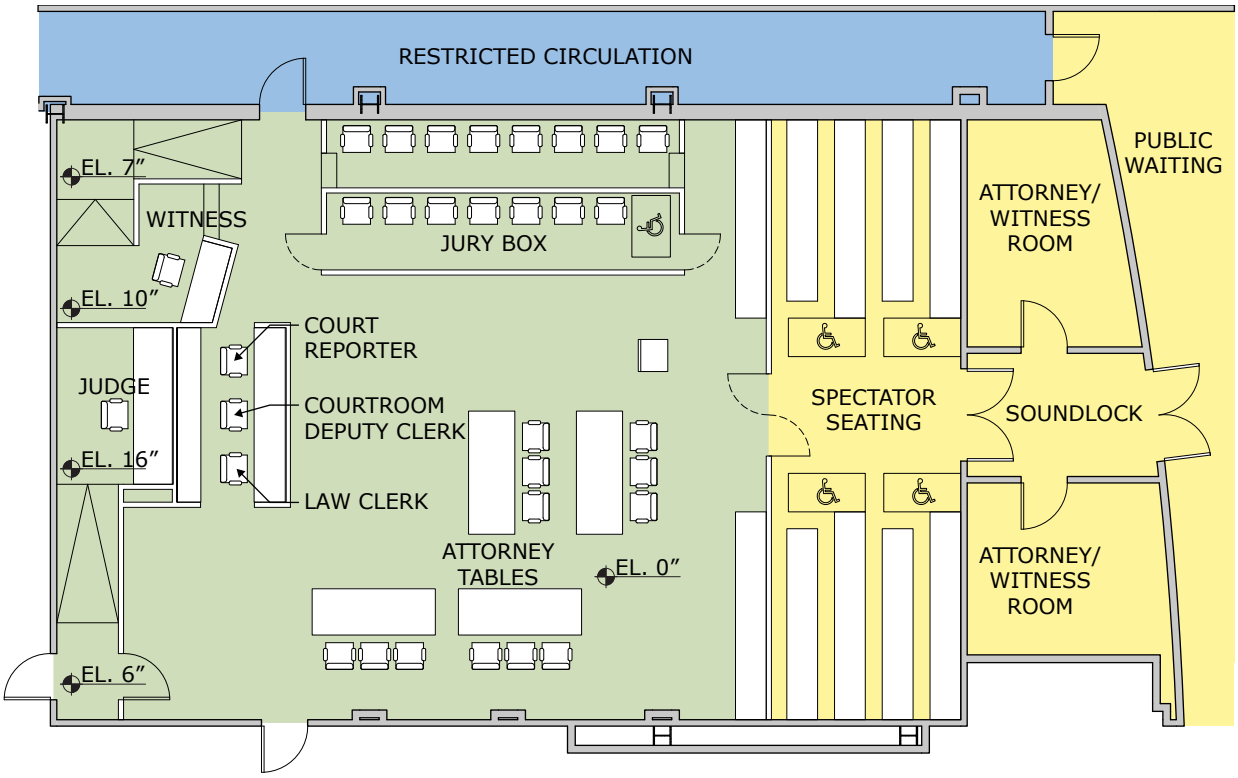

Figure 4.02 — Corner Bench
Courtroom layout with a corner judge's bench configuration (Richland, WA)

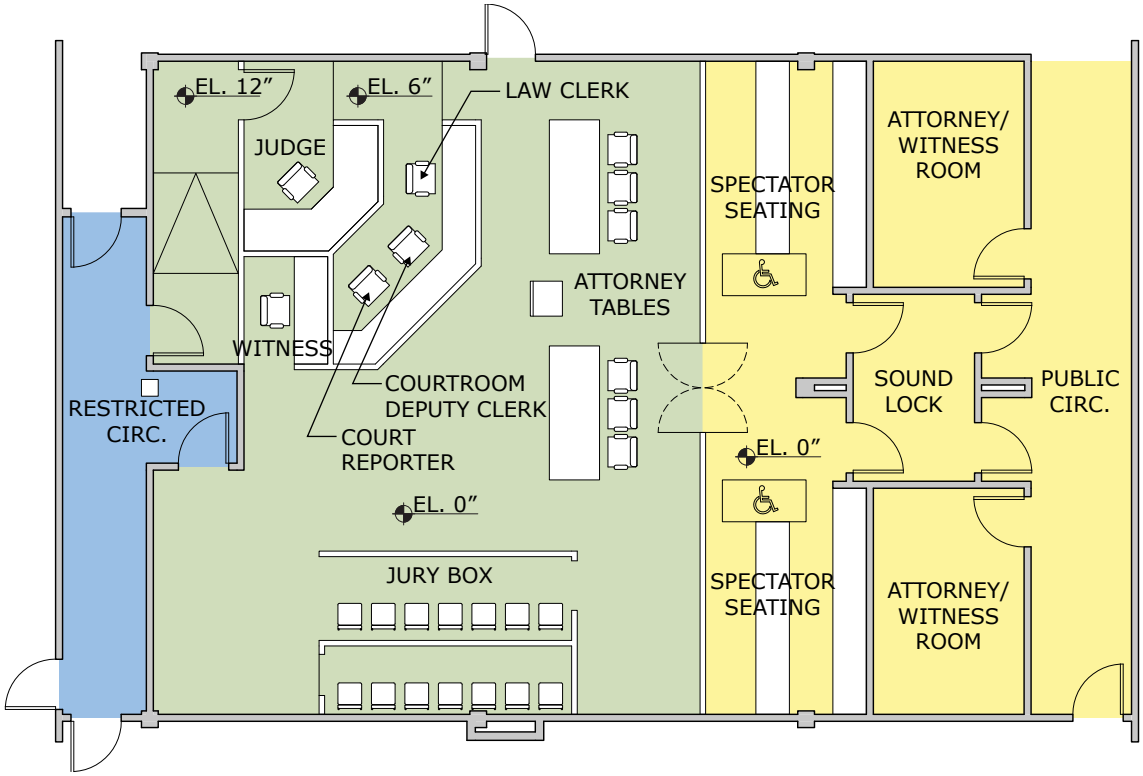

Figure 4.03 — Jeffersonian Courtroom
Floor plan depicting a Jeffersonian courtroom layout, which located the jury box near the judge's bench

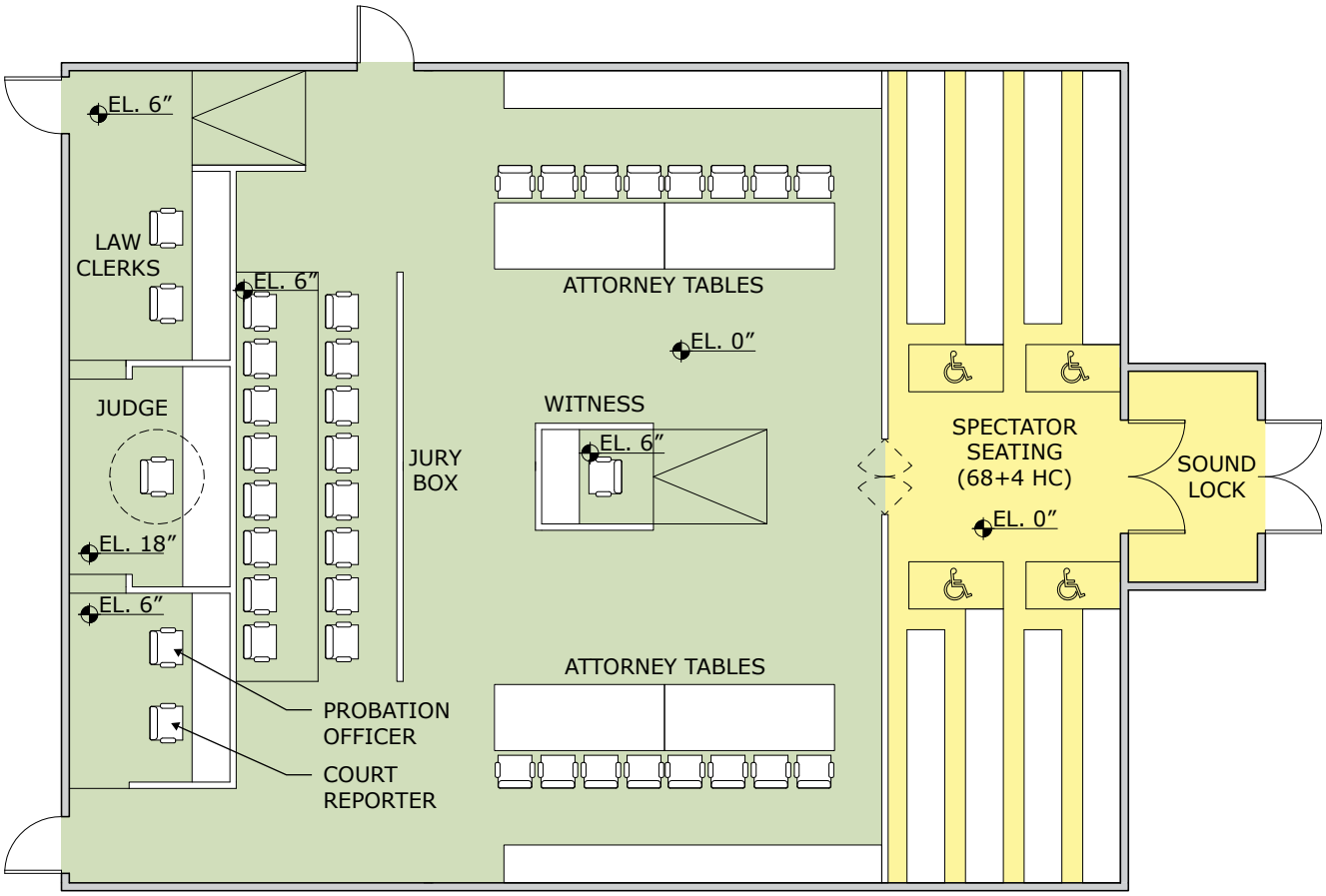

Figure 4.04 — View from the Judge's Bench
Jeffersonian courtroom constructed in Charlotte, NC

Figure 4.05 — View from the Spectator Seating
Jeffersonian courtroom constructed in Charlotte, NC

Accessibility

Courtrooms are required to meet accessibility requirements as outlined by the Architectural Barriers Act Accessibility Standard (ABAAS) and the jurisdiction building code. These standards and codes outline which positions within a courtroom are required to be accessible from the inception of use of the space and which positions are required to be adaptable for future accessibility. It is important to confirm accessibility requirements prior to beginning courtroom design as many jurisdictions will not allow for adaptable plans. For example, California requires all judges' benches to be accessible. Refer to *Justice for All: Designing Accessible Courthouses* for more courthouse-specific accessibility considerations.

Ramps and lifts are two different methods for handling accessible elevation changes within a courtroom. Both methods require coordination with accessibility standards and building code requirements.

Ramps

Ramps are the preferred method of navigating level changes within the courtroom. Although ramps take up valuable space within the courtroom, they are more economical to construct and can be used independently.

Customization

- Ramps should be designed to integrate into the millwork design within a courtroom.
- Ramps may be located in the restricted corridor, behind millwork walls within the courtroom space, or visibly integrated into the millwork profiles.

Cost

- Ramps are economical and efficient to construct. They are typically accommodated as part of the millwork trades.

Reliability

- Ramps are reliable and low maintenance.

Operability

- Ramps are easily and intuitively navigated by individual users.

Lifts

Lifts provide space savings within the courtroom. They may be considered in applications where it is not possible to achieve ramping or for future adaptable situations. Lifts should be designed to accommodate more than one bench position. For example, a single lift could be designed to accommodate a three-stop configuration at the ground or courtroom well level, the witness position, and the judge's position. Lifts should be designed to accommodate the weight of an electric wheelchair, its occupant, and an attendant if required.

Customization

- Platform lifts are typically a custom design application. They require coordination with millwork design to be thoughtfully integrated into the bench, and lifts can be supported by a variety of drive systems.
- Due to their custom design, lifts often require special waivers to comply with elevator code. Only a few manufacturers are able to provide lifts for a courtroom lift application. Solutions and competition are limited.
- Where lifts are planned for access to the judge's bench, considerations should be given for the lift to be placed outside the courtroom, allowing the judge to enter at bench level and not draw attention to their disability.

Cost

- Initial costs are often steep, and these costs are the responsibility of the court.

Reliability

- These specialty products are infrequently used, often operated by individuals with little knowledge of how they work, and require regular maintenance to ensure reliable operation.

Operability

- Lifts may require assisted operation for witnesses and others unfamiliar with their functions.

Courtroom Mock-Ups

Implementing requirements for mock-ups of repetitive spaces is a proven technique for building consensus on design, sight lines, ergonomics, usability, and construction methodologies. The timing for realizing mock-ups is critical to allow for design, construction, and user group input prior to design and construction completion. Courtroom mock-ups are full-scale working models which are constructed from inexpensive materials. The review should include, but not be limited to, the review of locations of courtroom components relative to one another, furniture and millwork sizes, work surface heights and widths, bench cap heights and locations, sight lines, and accommodation

of technology, security, and other courtroom elements. A well-executed and documented courtroom mock-up should become the basis for design decisions and execution during construction documents and construction administration.

Planning

- Locate a warehouse or other high-ceiling, wide-bay location in close proximity to the existing courthouse to construct and house the mock-up for the duration of the review period.
- Design mock-ups are most beneficial when completed prior to the end of the design development phase. Allow time in the design schedule for development of a mock-up package, procurement, installation, stakeholder review, and documentation of mock-up decisions.
- Schedule review times where all critical stakeholders can participate together.
- Coordinate with the mock-up constructor for real-time, on-site modifications as required during mock-up reviews.

Execution

- Construct the mock-up installation in a manner that provides flexibility to easily manipulate heights and components of the millwork during review.
- Utilize incremental modules to allow for pieces to be removed or added during the review process to accommodate changes in height for usability and sight lines.
- Consider using inexpensive materials such as plywood, gypsum wall board, and oriented strand board (OSB). Figures 4.06 through 4.09 depict a mock-up constructed of drywall and plywood.
- Document incremental changes and comments as they occur during the mock-up review through photographs, drawings, and meeting minutes.
- Develop as-built drawings and memorialize the decisions in a mock-up report to document the final approved design direction.
- Design interior finishes suited to the local climate and designed mechanical systems.

Millwork

Millwork design is unique to each project and should take into account preferences of the Judiciary and stakeholders. Visualization software or BIM technologies may be useful in evaluating sight lines for positions within the courtroom prior to constructing a formal courtroom mock-up. Architecture/engineering design teams are encouraged to collaborate with the Administrative Office of the U.S. Courts (AOUSC) and the General Services Administration (GSA) to discuss lessons learned in courtroom millwork design.

Judge's Bench

- Ballistic-resistant material should be incorporated at the front and side panels that enclose the bench and support the work surface.
- The raised bench cap should consider sight lines between the judge and the witness. It should also be able to accommodate outlets, devices, or other environmental controls that may be mounted to the vertical surface as opposed to located on the work surface.
- The duress button should be located in an area that is easily accessible in case of an emergency but not prone to being engaged accidentally.
- A raised cap, located above the work surface, should not be located between the judge and the witness.

Figure 4.06 — Spectator Bench Mock-Up
Custom spectator bench mock-ups made of plywood

Figure 4.07 — Jury Box Mock-Up
Jury mock-up made of plywood, OSB, and movable chairs

Figure 4.08 — Mock-Up Sight Lines
Sight lines from the judge's bench

Figure 4.09 — Judge's Bench Mock-Up
Mock-up of the judge's bench viewed from the courtroom well

Clerk's Bench

- Ballistic-resistant material should be incorporated at the front and side panels that enclose the bench and support the work surface.
- Evaluate the bench cap height to conceal the back of computer monitors but still provide adequate line of sight.
- Provide for convenient and ergonomic transfer of documents and verbal interaction with the judge position.
- The raised bench cap should be able to accommodate outlets, devices, or other environmental controls that may be mounted to the vertical surface rather than locating them on the horizontal work surface.
- The cap should be at a height that will allow for judges of various heights to have good sight lines.

Jury Box

- Locate foot rail to accommodate a comfortable resting position. Allow clearance for accessible seating requirement.
- Locate chairs so that swivel and tilt capabilities are not obstructed by walls, jury box, or other chairs. Ideally, the chairs that will ultimately be installed should be used in the mock-up.
- Locate monitors on fixed stands or directly on rail. Consider installing articulating mounts. Provide access panels for monitor installation and replacement in jury box rail.

Common Pitfalls in Millwork Design

- The bench depth should not be constructed in excess of 3 feet wide. Coordinate with stakeholders to understand the type of courtroom technology to be utilized at bench positions when proposing counter depths.
- Bench caps should not be constructed too high. Coordinate with stakeholders to understand technology and placement of devices at bench positions. Bench caps should be high enough to obscure visual access to items on the desktop while maintaining optimal sight lines and accommodating devices that may be located on the vertical face of the bench cap.
- Sight lines may be obscured if bench caps are constructed between the judge and witness positions.
- Design bench work surfaces to accommodate ABAAS requirements as well as ergonomics and material thicknesses.
- Jury box depths and widths must take into account ABAAS requirements, clear width for walking, fixed seating positions, and flexibility of furniture to accommodate swivel, tilt, and sight lines.
- When utilizing adjustable-height benches, consider how the height of the work surface interacts with the bench cap height.

Technology Integration

Courtroom technology is essential to the operations of the contemporary court. When integrating technology, the goals should be to facilitate court operations, maintain the court's aesthetic dignity, and plan for future systems and equipment upgrades or replacement. Technology and security systems may not be designed and specified at the same time that building systems and space planning occur. It is important to consider what systems may be integrated and how they will be utilized within a space such as environmental controls for temperature and lighting. Chapter 14/15/16, "Acoustics, Building Systems, and Security," addresses additional information on how technology, security, and acoustical considerations may be considered in courtroom spaces.

While planning and designing for the incorporation of technology into the courtroom, project teams should consider the following:

Courtroom Well

- If a raised access floor is implemented in the well, it will provide access to all cabling and floor locations for future upgrades. It is recommended to use carpet tile over raised flooring for easy access and flexibility. If broadloom carpet is used, verify if the court wants conduit placed under the raised floor.
- If raised access flooring is not implemented in the well, coordinate locations for all required power and data connections for initial use and plan for future infrastructure expansion. Provide flexibility in floor box locations to accommodate a variety of furniture configurations.
- Large floor boxes generally support a minimum of three 1.25-inch conduits. Large capacity floor boxes able to accommodate AV connections, power, and telecommunications/data are preferred over the use of poke-throughs.

Millwork

- Incorporate removable internal access panels to gain access to technology cabling.
- Provide opportunities for internal horizontal pathways for technology cabling.
- Consider integrating wire management systems under work surfaces.
- Provide work surface grommets.

Walls

- Incorporate blocking to support large-format displays and other devices in walls and ceilings.
- Coordinate locations for power and data as required for large-format displays and other devices.
- Locate back boxes for assistive listening system infrared emitters and video-conferencing cameras.

Furniture

- Consider fixed furniture pieces that incorporate removable panels for internal pathways and access.
- Specify furniture to include integral wire management systems.
- Coordinate work surface and tabletop grommet locations.

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Best Practices

Courtroom Planning

- When identifying courtroom space in existing facilities, consider spaces that offer unobstructed views with a preferred width of 40 feet to accommodate bench configurations.

Accessibility

- Consider locating the first level of the jury box at ground level.
- Consider locating the courtroom deputy/court reporter at ground level.
- Consider limiting the witness position to a single step above ground level.
- Refrain from providing a swinging gate or other barrier at the spectator rail (entry to the well from the spectator gallery).
- Provide accessible seating in the jury box with adequate floor space to navigate to the space and maneuver to the appropriate position. Consider providing a removable chair at this location to accommodate a juror in a wheelchair.

Courtroom Mock-Ups

Planning

- Incorporate mock-ups into the project schedule at procurement phase. Be cognizant of how mock-ups will be implemented based on different project delivery methods, e.g., design-bid-build versus design-build.
- Coordinate with GSA to reserve design contingency for changes that result from the mock-up process during design-build or bridging design-build delivery methods since the mock-up is constructed following the award of the fixed price construction contract.
- Consider including technology as part of the mock-up to visualize where large screens, laptops, and other technology might be placed.

Location

- Large, open, column-free areas with high ceilings and concrete or wood floors, which are convenient to parking or transportation for judicial and stakeholder access, are preferred.
- Rental terms for the space should be flexible and reasonable.
- Warehouses and gymnasiums are often ideal for mock-up locations.
- In design-build and other similar scenarios, mock-ups may possibly be coordinated to occur in shelled future courtroom space.

Construction

- Standard, modular construction techniques for providing movable components including walls and millwork are desired.
- Consider preliminary reviews of mock-up spatial relationships to validate locations prior to completion of the mock-up.
- Consider incorporating lighting samples in the mock-up or provide fixtures delivering the expected level of illumination within the courtroom.
- If not utilizing prospective lighting samples, provide adequate lighting in the mock-up to facilitate review and photography.
- Consider constructing walls to be mobile for ease of reconfiguration for different courtroom types.

Materials

- Courtroom millwork: caster-mounted, lightweight, wood-framed platforms with lightweight wood or metal stud framing clad in plywood or gypsum wall board.
- Courtroom walls: metal or wood framing clad in plywood, gypsum wall board, or plastic sheathing.
- Ceiling plane: Indicate completely or partially the ceiling plane. Consider the use of suspended tee bar ceiling track to define ceiling plane.
- Floor: use existing floor surfaces whenever possible. Provide lightweight wood-framed platforms for raised areas of the courtroom (jury box, etc.).
- Consider the impact on finishes based on the operational schedule of the HVAC systems.

Review

It is important that all stakeholders participate in the courtroom design and construction mock-up process. Unnecessary reimbursable work authorizations may be avoided if all appropriate parties provide their review and approval of the mock-up. In addition, it is also important to develop a format for facilitating the review process:

- Introduce the project and provide a clear agenda and objectives to accomplish through review.
- Facilitate discussion through deliberate review of bench positions and features. For example, walk the attendees through the proposed features of the bench and have them occupy places throughout the courtroom to validate sight lines, ergonomics, and usability of the bench and well configurations.

- Convene the group to summarize the comments and decision points made during the review.
- Discuss schedule and expectations for further review.
- Document and obtain approval on all final comments as this documentation becomes the working basis for design.

Millwork

- Provide adequate reinforcing in bench components to withstand individuals leaning, sitting, and standing on components.
- Provide for discreet access panels on bench interiors. Access panels should be easy to remove and replace.
- Provide punch-outs through interior bracing to facilitate wire transfer.
- Coordinate device locations to provide blocking and grommets where required.

Technology Integration

- Engage experienced court technology and acoustical designers into the design process as early as possible to help inform room form, construction, materials selection, and infrastructure requirements.
- It may be necessary for unruly defendants to receive audio and video of the court proceedings after they have been removed from the courtroom. To provide this service, run an audiovisual link to two isolation cells or one accessible isolation cell.

Acoustics

Location and the Shape of Courtrooms

- Do not locate the courtroom directly over, under, or near a parking deck, mechanical room, fitness area, or electrical generator room. Doing so will result in costly sound isolation measures. Courtrooms located immediately adjacent to another courtroom may require higher levels of sound isolation, which may be more challenging to achieve.
- Shapes should be carefully considered with an acoustical consultant. Limit the use of domed ceilings and curved walls as they can focus sound and cause undesirable audio effects if not properly designed.

Walls, Doors, and Glazing

- The courtroom perimeter wall assemblies must be coordinated with the acoustical consultant based on the project-specific needs. The minimum acoustic goal stated in the *U.S. Courts Design Guide (Design Guide)* is typically achieved with an insulated double stud construction with multiple layers of drywall.
- Do not use standard resilient channels unless specifically recommended and selected by the acoustical consultant. Resilient channels are prone to construction and coordination issues which can compromise their performance.
- Glazing and doors at courtrooms should be sound transmission class (STC) 50-rated assemblies at minimum. Coordinate specific rating and location of sound control doors and windows with the acoustical consultant.

Acoustical Finishes

- Fully acoustically reflective ceilings, such as a hard metal ceiling, are not recommended.
- The specific amount and location of acoustical treatment depends on the design and should be coordinated with the acoustical consultant.
- Consider durability and maintenance when determining location, core materials, and facing materials of acoustical finishes.

Floor/Ceiling Assemblies

The floor/ceiling assemblies above and below the courtroom must achieve an impact isolation class (IIC) of 50 as per the *Design Guide* to limit impact noise. This IIC can be achieved several ways including:

- Use of carpet or carpet tile
- A combination of the finish floor and the suspended ceiling below the structure. With the appropriate structural slab, IIC 50 could be achieved using a solid, five-eighths-inch gypsum ceiling suspended from a 12-gauge wire. The cavity created would be 12 inches deep at a minimum and filled with batt insulation. Exact floor/ceiling will be dependent on the tenant adjacent to the courtroom and design requirements of that space. Coordinate with the design team and acoustical consultant.

Sound Masking

- Sound-masking systems can be used in the courtroom sound lock and adjacent corridors to enhance speech privacy.
- Sound-masking systems shall be coordinated with the design team and GSA project manager as recommended by the acoustical consultant to increase or maintain speech privacy as needed.

Courtroom Sight Obstructions Case Study

U.S. District Courthouse | Burlington, Vermont

Background

This project located a new district courtroom on the first floor of the Burlington U.S. District Courthouse in space that was originally part of the U.S. Probation Office. In the new space, there are six existing columns that posed sight line challenges for the spectators, jury box, and witness positions. By constructing a mock-up on site, the judges, court staff, and architects were able to analyze and adjust the design to allow for views from all locations in the courtroom. Following the completion of this project, the circuit court architects recommended constructing courtroom mock-ups for all new courtroom projects. This practice allows for design adjustments to be made prior to construction.

Successes

Mock-Up Review

- Based on the courtroom mock-up, the judge's bench, courtroom deputy bench, attorney tables, and jury box seating were adjusted to allow for proper sight line views for all locations.
- Floor boxes and building systems serving the courtroom were adjusted based on the mock-up review.
- The contractor and millworker constructed the mock-up in situ and were highly engaged during the mock-up process.

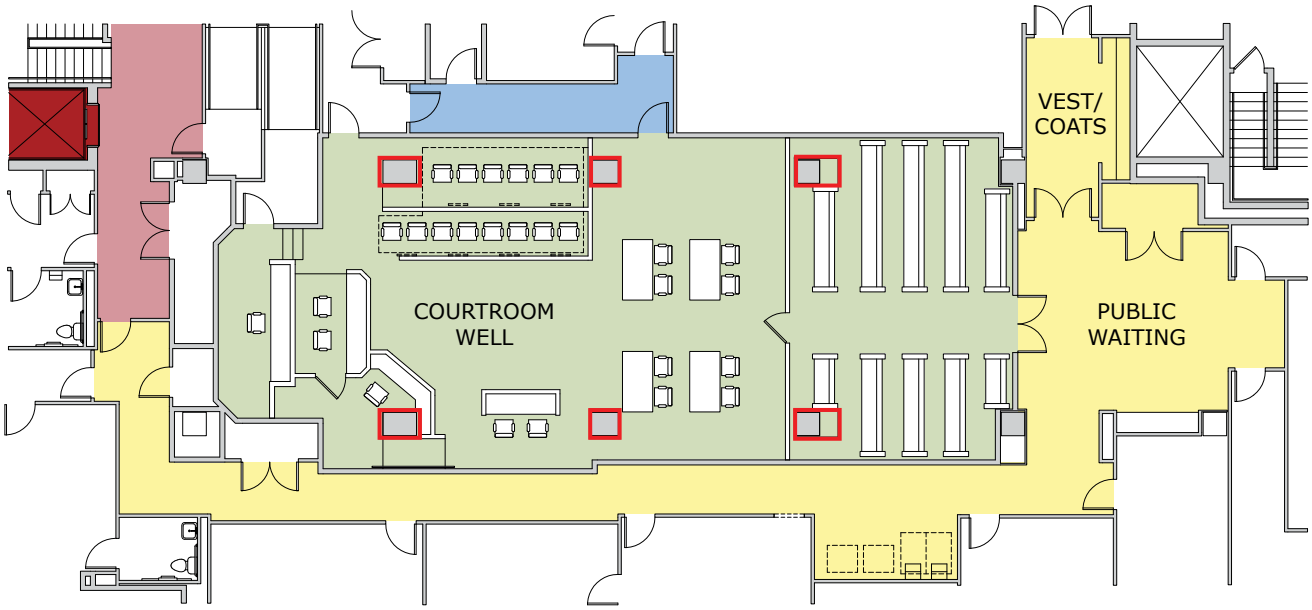
Mock-Up Timing and Expense

- Although mock-ups may add cost and time to the overall project, this particular mock-up prevented more significant changes that may have otherwise occurred during actual construction.

Project Relationships

- The GSA project manager (PM) had a strong relationship with the Assistant Circuit Executive (ACE) for Space and Facilities and circuit court architects, which ensured that the project progressed correctly and expediently.
- The GSA PM and team ensured that the mock-up was appropriately planned for and funded.
- The GSA PM invited the architect, contractor, millworkers, judges, and court staff to be a part of the mock-up review process.

Figure 4.10 — New Courtroom Floor Plan
Floor plan depicting the new district courtroom design with intrusive columns highlighted



COLOR LEGEND:

- NEW COURTROOM
- PUBLIC SPACE AND CIRCULATION
- RESTRICTED SPACE AND CIRCULATION
- SECURE SPACE AND CIRCULATION

SYMBOLS LEGEND:

- OBSTRUCTIVE COLUMN

Figure 4.11 — Courtroom Mock-Up
The courtroom mock-up was constructed in situ by the contractor

Figure 4.12 — Finished Courtroom
The finished courtroom avoided column obstruction

Courtroom Natural Light Case Study

Robert H. Jackson U.S. Courthouse | Buffalo, New York

Background

During the design of the Robert H. Jackson U.S. Courthouse, judges and court staff stated a preference for the courtroom design at the existing Michael J. Dillon District Courthouse. At the existing courthouse, judges preferred the natural light provided in its historic courtrooms compared to the courtrooms without windows. At the request of judges, designers for the new Jackson U.S. Courthouse included natural light in all courtrooms and associated spaces. Based on the Jackson Courthouse's schematic drawing, the only way to provide natural light in the courtrooms was to utilize clerestory windows above the secure corridor.

Successes

Natural light is often desired in courtrooms, but security risks and a propensity for glare present design challenges. In this project, judges desired natural light in the courtrooms but could not afford any sacrifice in privacy or security of the space. The project team ultimately decided to utilize clerestory windows to bring natural light into the courtrooms. Figures 4.14 and 4.15 depict the courtroom and location of the clerestory windows. When utilizing clerestory windows, project stakeholders should always consider how designs will affect the lighting, acoustics, building systems, and operations and maintenance.

Design

- Utilizing clerestory windows was an effective solution to bring in diffuse natural light while maintaining the privacy and security of the courtrooms.
- The clerestory windows are above the restricted circulation path behind the jury box. This approach allows light into the room and minimizes the views out of or into the space. Figure 4.13 depicts the building section through the restricted circulation path.
- Wood louvers were used to diffuse the light into a soft glow.

Figure 4.13 — Building Section
Section through the restricted corridor and clerestory windows

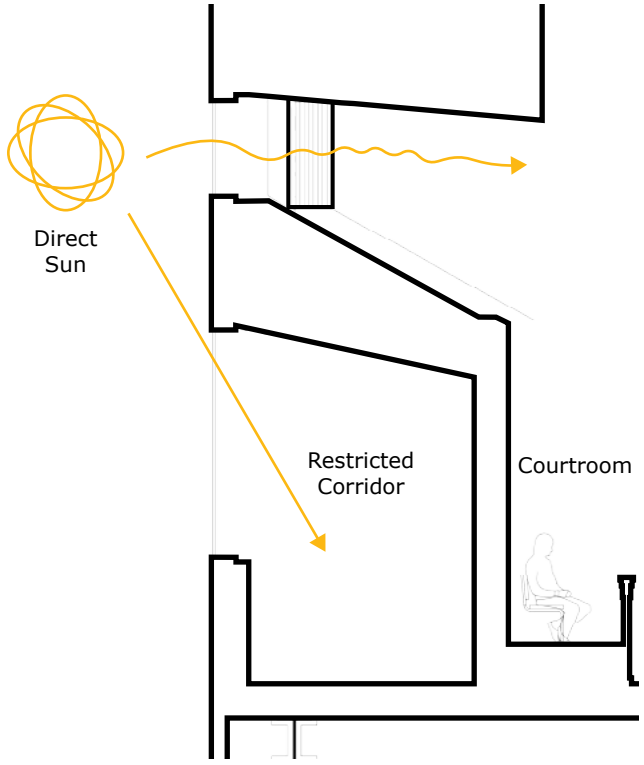
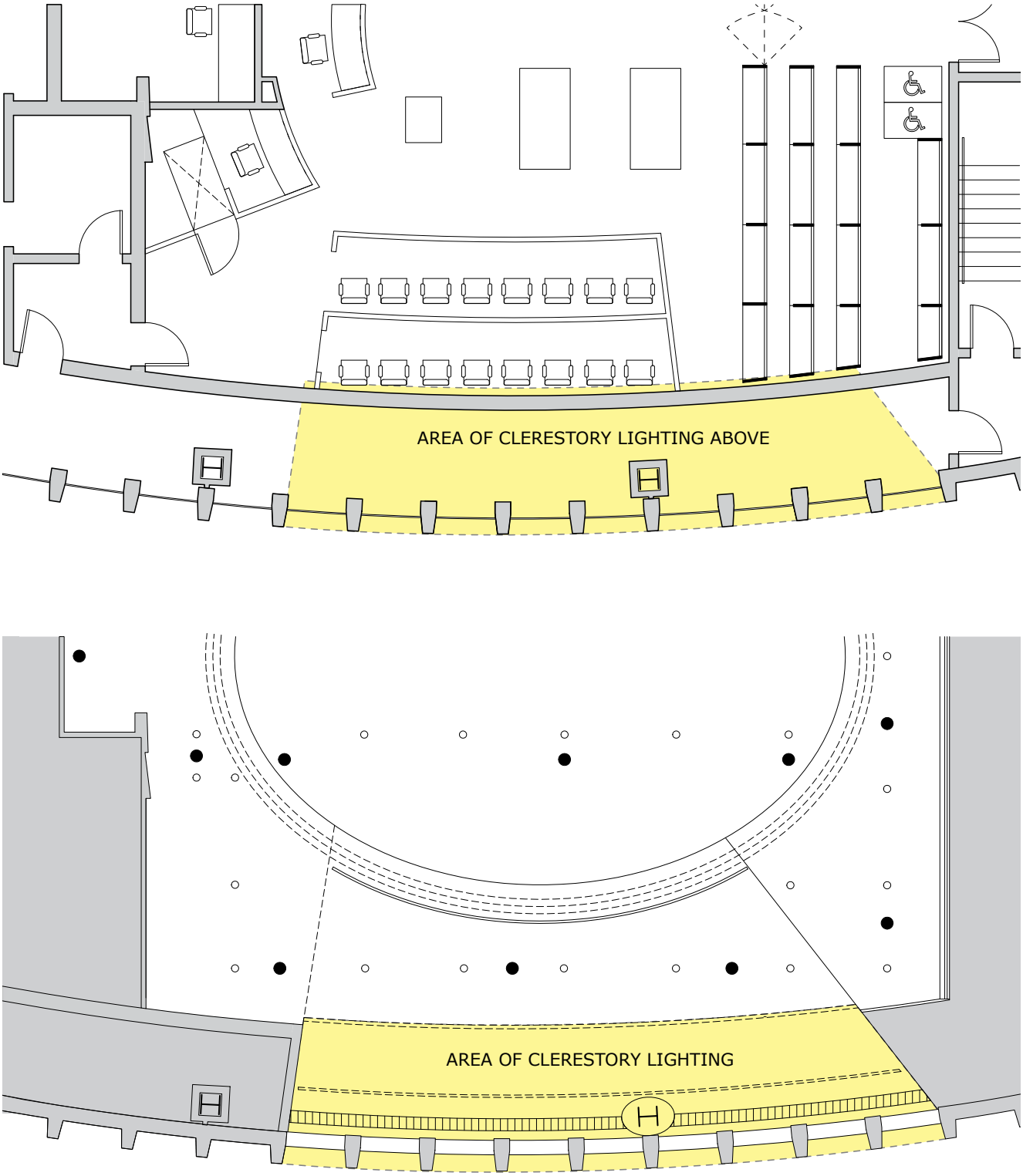


Figure 4.14 — Finished Courtroom
Photo depicting the clerestory windows, baffles, and jury box

Figure 4.15 — Courtroom Floor Plan and Reflected Ceiling Plan
Partial floor plan (above) and reflected ceiling plan (below) depicting the location of the clerestory lighting



U.S. District Courthouse | Mobile, AL

Image: Hartman-Cox Architects, AECOM

05 JURY FACILITIES

This chapter provides best practices related to the planning, design, and construction of jury assembly spaces, trial jury deliberation suites, and grand jury hearing rooms.

Chapter Sections:

Introduction

The Sixth Amendment to the United States Constitution guarantees the right to a speedy and public trial by an impartial jury. Although the judge decides the law in the case and instructs the jury on the law, it is the jury's role to decide the facts in the case and apply the law on which the judge has instructed it to reach a verdict. Jury assembly spaces often provide the first impression of the jury process and importance of the juror's role and responsibility within the judicial system.

Jury facilities are utilized to accommodate the jury selection process as well as jury deliberation. The requirements of each type of jury facility vary according to the activities they must accommodate. This chapter will discuss best practices related to planning, designing, and constructing jury facilities.

Supporting Documents

The following reference documents provide additional information on the topics contained within this chapter:

- *United States Courts Design Guide*, Chapter 5, 2021
- *United States Courts Courthouse Design Reference Manual, 2007*
- *Justice for All: Designing Accessible Courthouses*

Planning and Design Considerations

Jury Assembly

Jury assembly suites are large congregational spaces and require careful consideration to accommodate desired functions and adjacencies. They should be located near the public entry in the building. Hundreds of people may be called to jury duty several days a week. Most jurors will be unfamiliar with the courthouse, security procedures, and where to go within the building.

Jury spaces are an important aspect of the judicial process. The hours of use vary from facility to facility depending on when and how frequently jury calls and trials occur. If designed with flexibility in mind, these larger spaces may also be utilized for other staff and public functions.

Consideration should be given to the following when determining where jury assembly is located and how it relates to other spaces within the courthouse:

- What is the average number of prospective jurors that will need to be accommodated each day? How many days per week? What is the minimum or maximum number of prospective jurors?
- What is the desired relationship to the public lobby?
- What is the desired relationship to the clerk's office?
- Will prospective jurors be escorted to courtrooms via public corridors or restricted circulation routes?
- Is the space intended to be multi-functional? Should the room have the ability to be partitioned into multiple meeting spaces?
- Is flexible seating or lounge seating desired?
- Is there a preference for one large assembly space or dedicated focus spaces such as assembly, quiet area, lounge area, and work area?
- What policies will be employed regarding juror and public use of telephones and electronic devices within the building?
- Will food and beverage amenities be located on site and accessible to prospective jurors?

Trial Jury Suites

Trial jury suites are utilized for confidential deliberation of juries during trials. Trial jury suites may vary in size due to the anticipated quantity of jurors participating in a deliberation process. Trial jury suites should be located along a restricted corridor and are typically located in close proximity to the courtrooms. Consideration should be given to the following when discussing and planning trial jury suites:

- Should the trial jury suite be located directly adjacent to the courtroom or accessed via the restricted corridor?
- Where is the optimal location for the sworn jury custodian?
- What amenities should be provided to jurors?
- Are the suites intended to be utilized as conference or meeting spaces when not in use?
- Should the suite have exterior windows? If so, should the sill height be higher to obscure visual contact? Alternatively, a privacy film or window treatment could be used to obscure vision.
- What privacy and acoustic conditions do jurors need in the suites?

Grand Jury Suites

Although the rent is paid for by the Judiciary, grand jury suites are controlled by the U.S. Attorney's Office. A grand jury is a group of citizens who listen to evidence of criminal activity presented by the government in order to determine whether there is enough evidence to justify issuing an indictment, in which they charge the defendant with a crime. Federal grand juries have 16–23 members. Unlike petit jurors, who are selected to serve on one trial only, grand jurors serve 1–3 years, sitting one or two days a week, and may hear evidence in many different cases. Consideration should be given to the following when planning for a grand jury suite:

- Will the grand jury suite be used for multiple functions? Are there any specific components needed to accommodate other uses?
- What is the relationship of the grand jury suite to public circulation?
- How will the U.S. Marshals Service (USMS) and secure circulation engage with the suite? The USMS requires the ability to bring people directly into the room from secure circulation.
- Is fixed, tiered seating preferred or is movable seating preferred?
- Should the U.S. attorney and witness stand be on raised platforms?
- What privacy and acoustic conditions do jurors need in the suite? To help maintain security and privacy, grand jury suites should not have windows; however, if windows are provided, opaque shades must be installed. Additionally, if windows are provided, caution must be exercised to avoid interference with infrared signals.

Best Practices

Jury Assembly

Location

- Consider locating jury assembly adjacent to the public lobby for ease of access to the space.
- Locating the jury assembly space on the ground floor may allow for the opportunity to incorporate a higher ceiling height that takes advantage of the typically higher slab-to-slab heights of lower floor levels.

Flexibility

- Provide loose furnishings instead of fixed seating so the space can be used for ceremonies, trainings, and other meetings.
- Consider the use of operable partitions, sliding doors, and other architectural elements that allow the space to be reconfigured for multi-purpose use and still meet the intent of the jury assembly area. The cost of operable partitions will be borne by the court unit.

Acoustics

- Noise isolation class (NRC) 35 requirement is typically met with a full-height single-stud wall with insulation and a single layer of five-eighths-inch gypsum board on each side. Acoustical ceiling tile with an NRC of 0.70 or better will typically achieve the reverberation time requirements of 0.60–0.80 seconds.
- The control of reverberation is important in this space so that potential jurors understand announcements. The acoustical consultant will coordinate with the audiovisual (AV) consultant as needed on the placement of speakers for voice lift systems.

Trial Jury Suites

Location and Layout

- Jury deliberation rooms should not be located immediately adjacent to one another. If possible, provide a buffer between adjacent suites by collocating plumbing chases, sound lock vestibules, or buffering with other spaces such as storage, AV, or security closets to enhance sound isolation.
- Toilet rooms are optimally located off of the sound lock entering the trial jury suite or located in an alcove discreetly out of visual and audible range of the trial jury room. An idealized trial jury suite layout is depicted in Figure 5.01.

Technology

- Consider electronic signage or other devices that indicate when a trial jury suite is in use.
- Provide infrastructure for flexible future use of electronic evidence review and teleconferencing capabilities.

Mechanical Systems

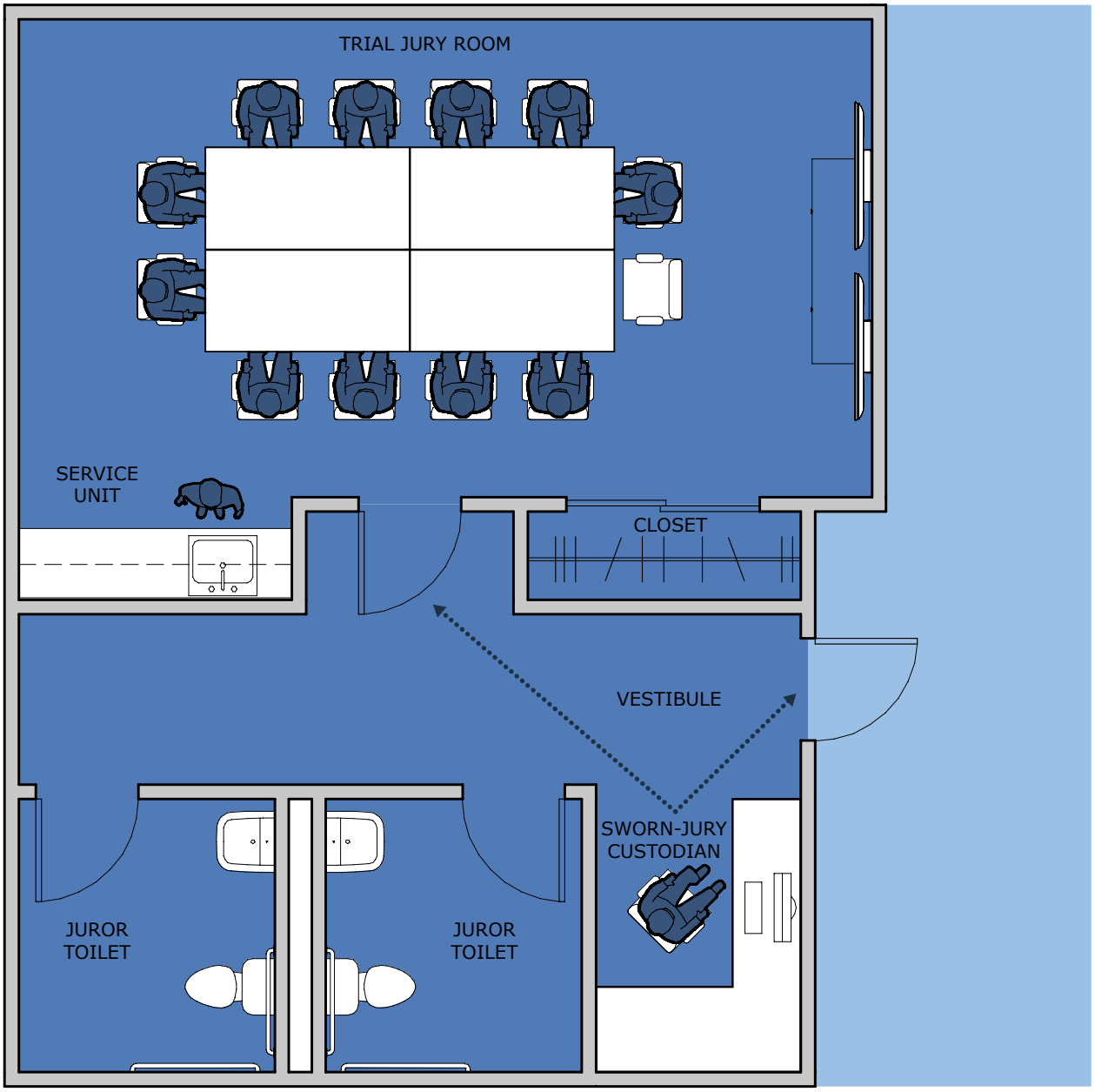
- HVAC items such as terminal units should not be located directly over the deliberation space. These are preferred to be located in the adjacent corridor or vestibule when required. Terminal units should be selected for the lowest possible sound power rating with the assistance of the acoustical consultant.
- Limit wall penetrations and specify that penetrations for service unit systems are resilient and sealed air-tight.

Grand Jury Suites

Flexibility

- Consider utilizing non-fixed seating in grand jury suites, so the space may be reconfigured for other functions or proceedings. Project stakeholders should be aware that fixed seating is paid for by the General Services Administration while non-fixed seating is a judiciary cost.

Figure 5.01 — Trial Jury Suite Layout
Example trial jury suite with juror toilets opening onto the vestibule



COLOR LEGEND:

RESTRICTED CIRCULATION

TRIAL JURY SPACE

SYMBOLS LEGEND:

VISUAL ACCESS

Tiered Grand Jury Room Case Study

Edward J. Schwartz U.S. Courthouse | San Diego, California

Background

Because of the breadth and frequency of grand jury cases adjudicated, the Southern District of California required additional grand jury hearing rooms. The District Court undertook a prospectus renovation and alteration project to create these hearing rooms on the first floor of the courthouse. The grand jury hearing rooms were previously located in a nearby federal building. This space in the courthouse became available because of a previously completed probation office renovation.

Successes

This project moved the grand jury function into the Schwartz U.S. Courthouse and collocated the grand jury hearing rooms with its support functions and court units. The reconfigured grand jury hearing rooms are depicted in Figure 5.02 through Figure 5.04.

Adjacency

- The grand jury hearing rooms are located immediately adjacent to the public screening area off a limited-use public corridor. This location allows for easy wayfinding for all hearing room participants including prospective grand jurors.
- The connection to the USMS space and main cell block located in the basement was maintained. This connection allows USMS to deliver in-custody witnesses to the grand jury room from secure circulation behind the suite.

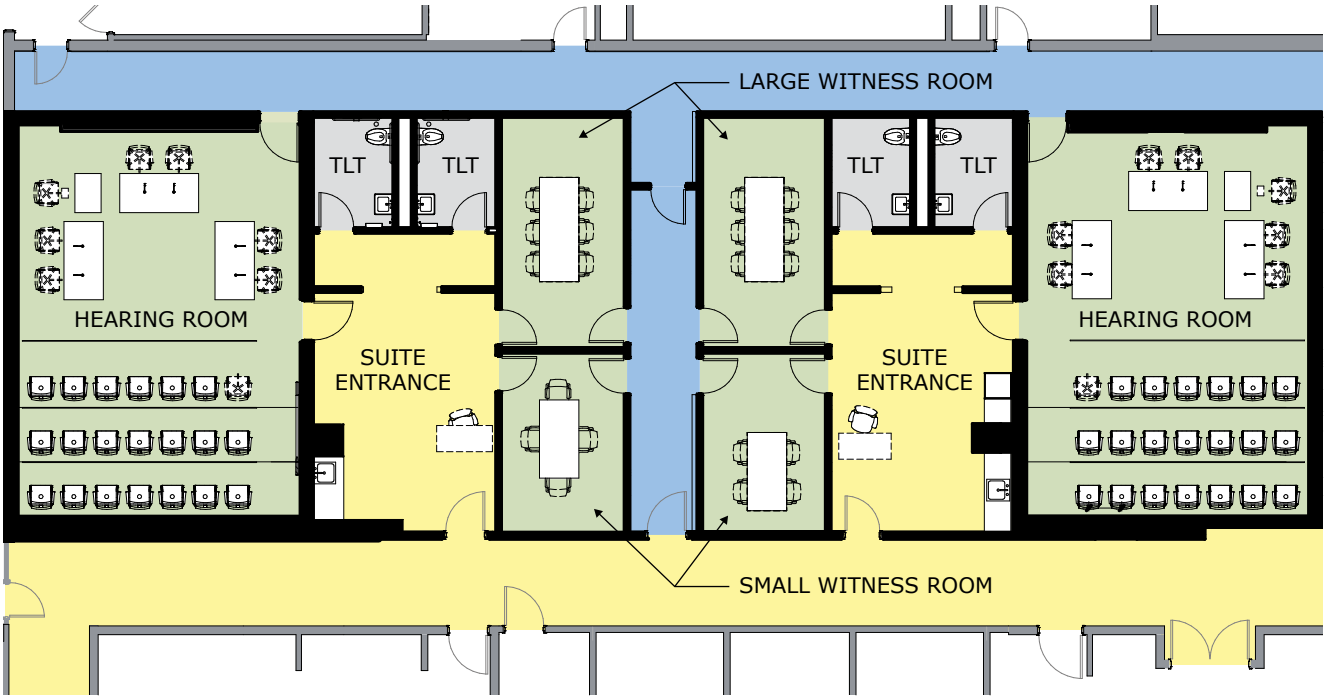
Design

- The Judiciary programmed two larger and two smaller witness rooms. These rooms were achieved by deducting space from the smaller witness rooms to stay within the AnyCourt program of requirements. This space shift gives greater flexibility to the court for various types of meetings.
- The service unit, which is adjacent to the reception area, may be closed off from view when desired.
- The design of the grand jury hearing rooms utilizes full-height wood paneling in the front of the room and other materials typically found in the courtrooms.
- Other materials are incorporated throughout the hearing room to make the room feel larger. The use of glass at the top of the walls is similar to a clerestory window and the lighting application gives the appearance of natural light.
- The first row of tiered seating is not elevated, which places the wheelchair-accessible grand jury seat at ground level and does not require additional ramping. A removable chair is provided for this space.

Acoustics/Technology Upgrades

- A sound reinforcement system was provided in the hearing room, which allows for clear speech by witnesses and those presiding. Funding for this system was provided by the Administrative Office of the U.S. Courts.
- Infrastructure was provided for a future video application. Video is currently not included in the funding formula for grand jury hearing rooms, so this technology will be funded separately by the local court at a later date.

Figure 5.02 — Grand Jury Hearing Room Layout
Floor plan depicting the new grand jury suites, which are accessible from both public and restricted circulation



COLOR LEGEND:

- GRAND JURY SPACE
- PUBLIC SPACE/ CIRCULATION
- SHARED SECURE AND RESTRICTED CIRCULATION
- SERVICE SPACE

Figure 5.03 — Grand Jury Hearing Room Bench
View of the bench from the tiered, fixed seating

Figure 5.04 — Tiered Fixed Seating
View of the tiered fixed seating and modesty panels

Non-Tiered, Fixed Seating Jury Room Case Study

U.S. District Courthouse | Abingdon, Virginia

Background

The Abingdon U.S. District Courthouse and Federal Building was constructed in the late 1950s, and the courthouse is located in a historic district in Abingdon, Va. Over the years, the aging courthouse has been expanded and renovated. In 2013, the need for a new grand jury suite became evident. This project accommodated the new grand jury suite by renovating an existing bankruptcy courtroom and other office space.

Because this project was a renovation of an existing courthouse, windows are included in the grand jury hearing room and associated holding cell and sound lock. Typically, these spaces should not contain windows; however, *Design Guide* and USMS exceptions were granted.

Successes

The new grand jury suite is organized to separate the witnesses from grand jury members and in-custody defendants; the suite is depicted in Figure 5.05 through Figure 5.07. The grand jury suite accommodates office space for the U.S. Attorney staff, witness waiting, temporary holding, and a grand jury hearing room. This suite is discreetly located at the end of a corridor on the second level of the building.

Non-Tiered Flexibility

- The suite was designed using a flexible bench arrangement and fixed seating with tablet arms that are configured on a level floor plane. This approach was implemented because of the low floor-to-floor heights within this area of the building.
- Utilizing a flexible, mobile bench arrangement allows the millwork to be moved out of the way and the space to be utilized for trainings and other functions when not in use by the U.S. Attorney.

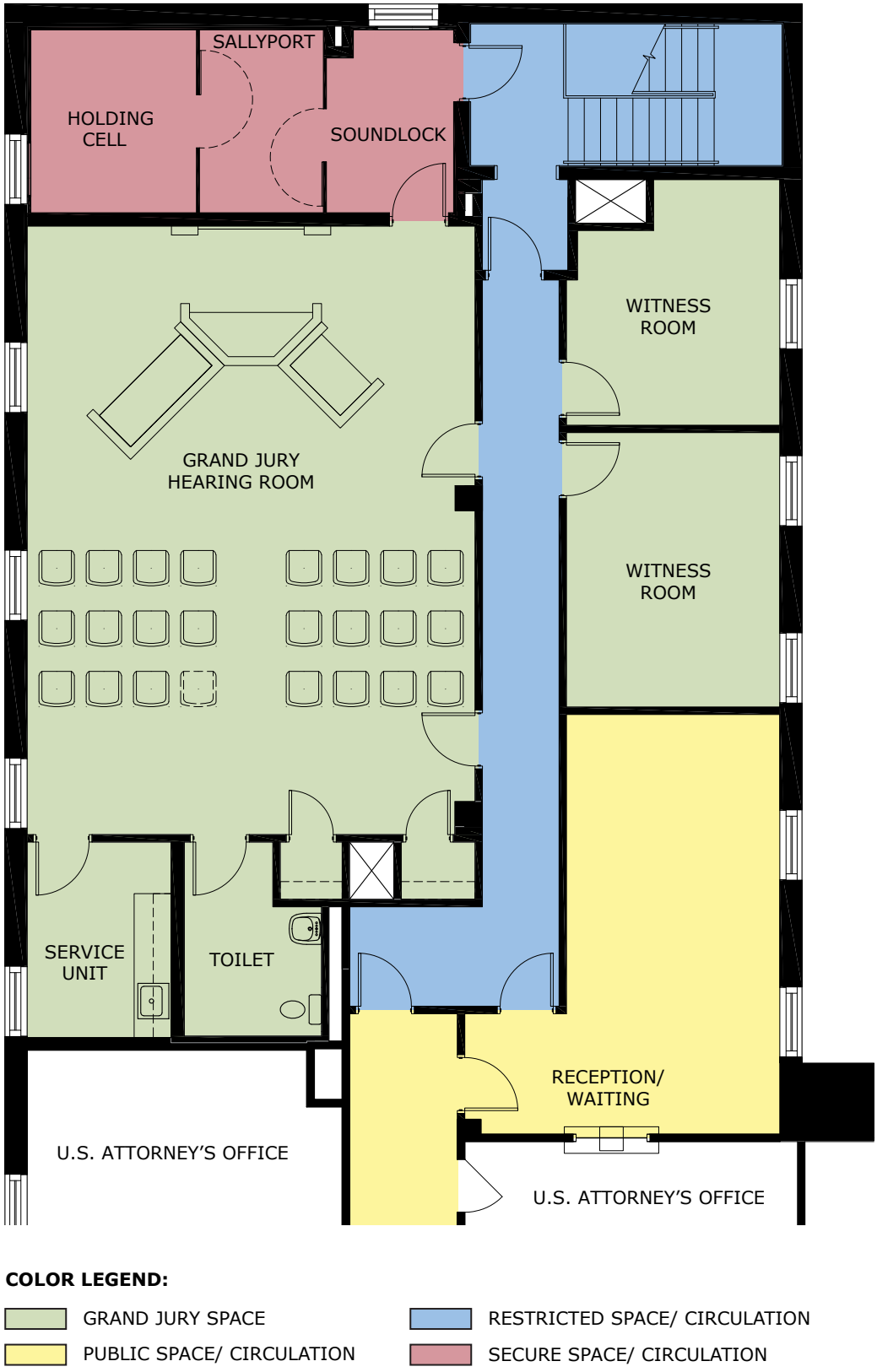
Mobile Millwork

- The bench accommodates four positions: two U.S. attorneys, one court reporter, and one witness. All bench positions are mobile and easily reconfigured in the space. An additional chair may be added to the witness position to accommodate an interpreter should a witness require that service.
- The millwork pieces include modesty panels, plastic laminate countertops, and heavy-duty locking castors. The millwork is designed to remain inside the space, but it may be partially disassembled to be removed from the suite. The castors allow for the millwork to be reconfigured as required to accommodate different functions, sight lines, etc.

Figure 5.05 — View to Bench
The mobile bench contains four positions

Figure 5.06 — View to Fixed Seating
The fixed seating is located on ground level

Figure 5.07 — Grand Jury Room Layout
The grand jury room is located on restricted circulation; a holding cell and secure circulation path are adjacent



Orrin G. Hatch U.S. Courthouse
Salt Lake City, UT

Image:
Thomas Phifer and Partners

06 JUDGES' CHAMBERS SUITES

This chapter provides best practices related to the planning, design, and construction of judges' chambers suites and their associated spaces.

Chapter Sections:

Introduction

The judge's chambers suite is a group of private offices provided for a judge and their staff. This group of spaces may also be referred to as a judge's chambers or a judicial suite. They are intended to accommodate meetings and conferences with staff and attorneys, as well as to prepare for and review case files and opinions.

Supporting Documents

The following reference documents provide additional information on the topics contained within this chapter:

- *United States Courts Design Guide*, Chapter 6, 2021
- *United States Courts Courthouse Design Reference Manual, 2007*
- *Justice for All: Designing Accessible Courthouses*

Planning and Design Considerations

Chambers Configurations

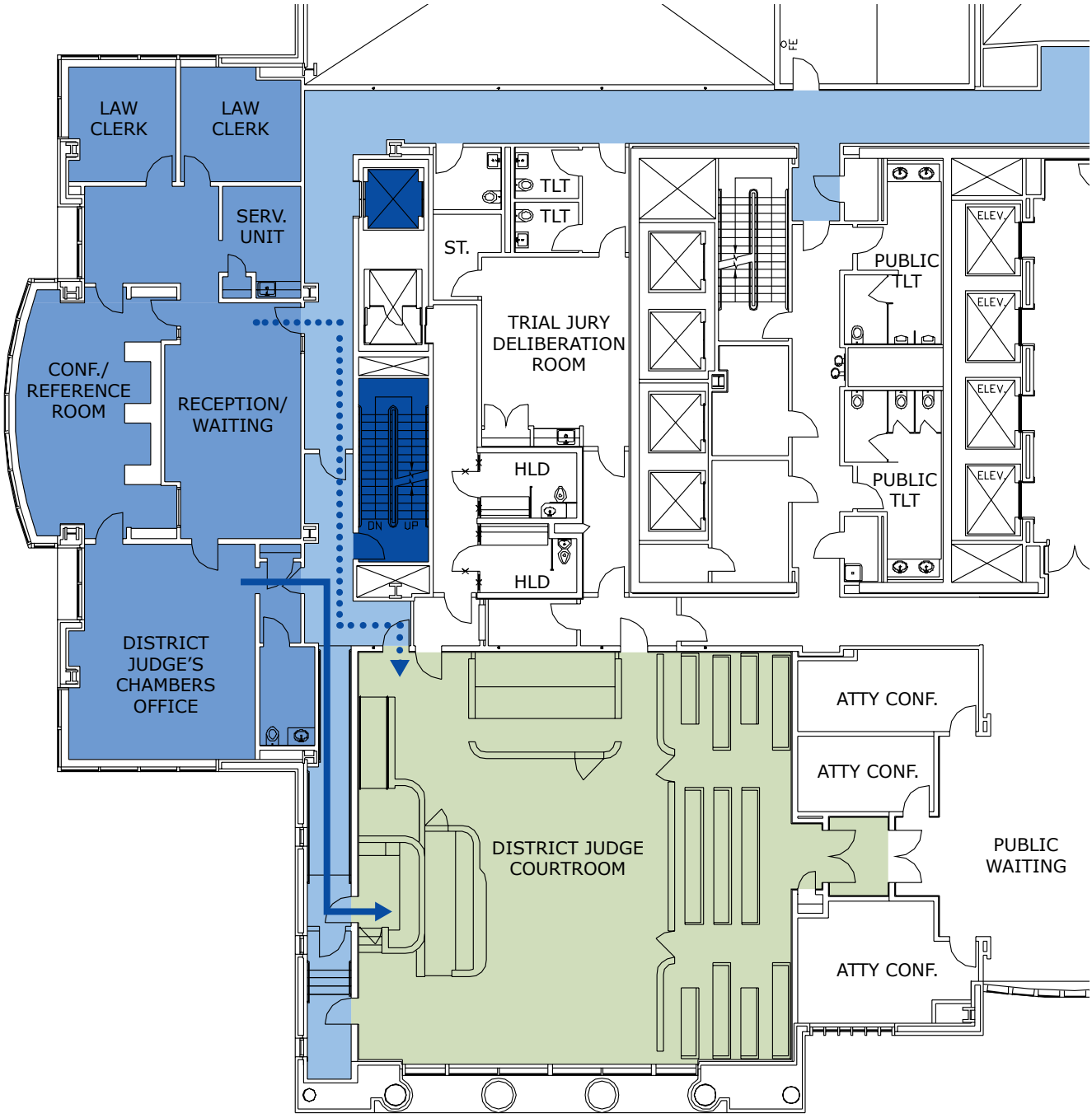
Judges' chambers suites can be configured and located in a variety of different ways. For example, they may be located directly across the restricted corridor from a courtroom, or are sometimes configured in a collegial setting and located on a floor that does not contain courtrooms. Collegial chambers configurations have been widely used in appellate courts. This arrangement serves to provide shared resources for a group of judges and staff that are collocated. Shared resources in a collegial arrangement may include, but are not limited to, restroom facilities, file storage and copy areas, law library and conference amenities, service units and break areas, visitor waiting, and reception spaces.

Figures 6.01 and 6.02 respectively depict a traditional chambers layout and different collegial space configurations. Collegial configurations vary in terms of how many judicial amenities are shared among the judges, and as a result, Figure 6.02 depicts three different options for a collegial chambers configuration. Following the figures are three case studies to demonstrate the three options. It is important to note that there are several advantages and disadvantages to each of the different configurations. Tables 6.01 and 6.02 highlight these opportunities and challenges.

Table 6.01 — Traditional Chambers Opportunities and Challenges
Traditional judge's chambers suite configuration pros and cons to consider when planning for new chambers space

Opportunities	Challenges
No learning curve for judges or staff. This configuration is the tried-and-true method for configuring judicial chambers space.	Traditional layouts are a one-to-one assignment, meaning one active district judge is assigned to one courtroom.
Shorter or no circulation from the judge's chambers to their respective courtroom since the chambers are adjacent to the courtroom.	Discourages sharing amenity space.
Robing rooms are not required.	

Figure 6.01 — Traditional Chambers Layout Example
Traditional judges' chambers configurations at the Thomas F. Eagleton U.S. Courthouse in St. Louis, MO



COLOR LEGEND:

- JUDICIAL SPACE
- JUDICIAL CIRCULATION
- JUDICIAL VERT. CIRCULATION
- COURTROOMS & ASSOCIATED SPACES

SYMBOLS LEGEND:

- CLERK/STAFF'S PATH TO COURTROOM
- JUDGE'S PATH TO COURTROOM

Table 6.02 — Collegial Chambers Opportunities and Challenges
Collegial judge's chambers suite configuration pros and cons to consider when planning for new chambers space

Opportunities	Challenges
Promotes concept of collegiality and courtroom sharing.	May require additional space for conference/robing rooms on courtroom floors.
Reduces floor-to-floor height requirements for chambers floor.	May require additional space for circulation.
Provides flexible expansion for judicial staff and inactive, U.S. Court of Appeals non-resident, and visiting judges.	May require amenity scheduling management for areas like conference rooms.
Promotes equitable distribution of space and amenities.	

The location of chambers is an important decision to make early in the planning process. Space allocations for traditional chambers and collegial chambers will vary due to their arrangement, opportunities for shared spaces, and circulation required for access to the courtrooms. Consider the following when determining if a collegial or traditional chambers layout is appropriate for your project:

Determining Traditional or Collegial Layout
- Is the building a high-rise or low-rise structure? A high-rise structure is usually a factor of a tighter site, which may only accommodate collegial chambers. Low-rise structures may allow for greater distances between chambers and courtrooms.
- Is the site constrained, making it difficult to accommodate chambers, courtrooms, and jury suites on the same floor?
- Should judges' chambers be collocated on a floor with courtrooms (traditional layout)?
- Should judges' chambers be clustered on the same floor(s) with remote, restricted access to courtrooms located elsewhere in the building (collegial layout)?
- When planning for new chambers, consider judicial access to an unassigned courtroom.
- Where will visiting judges' chambers be located?

Collegial Layout
- What amenities can be shared between chambers and judicial staff (e.g., restrooms, copy and supply areas, breakrooms, service units, conference rooms, libraries, reception and waiting, file rooms, storage, open workspace for law clerks and interns, etc.)?
- If a collegial layout is utilized, will robing and conferencing spaces be required on courtroom floors? What is an acceptable ratio of robing rooms per courtroom (e.g., one conference/robing room per pair of courtrooms)?
- If shared conferencing is preferred, all judges must agree to share the space and it cannot exceed the *Design Guide* space allowances.

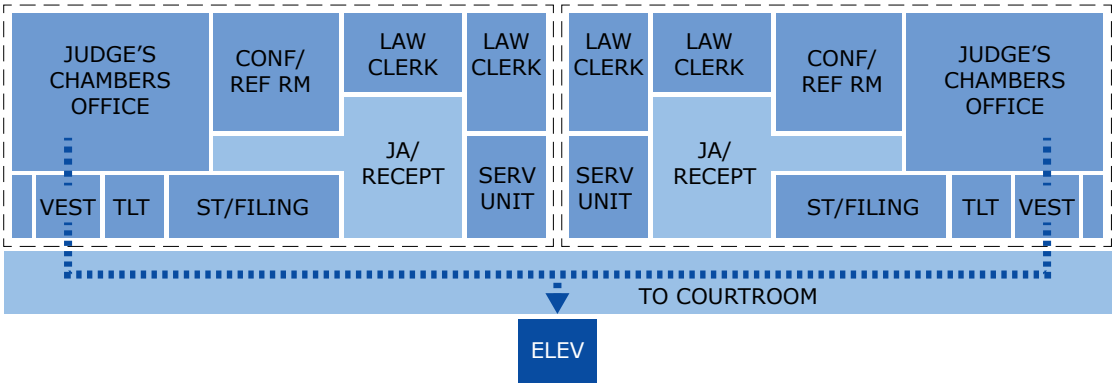
Technology
- Will judges be conducting virtual meetings in their chambers or courtrooms?
- Which rooms require infrastructure for audiovisual systems (e.g., conference room, library, private chambers, etc.)?
- Lighting controls such as dimming or scene lighting, shades, and blinds should be considered for spaces intended to employ audiovisual or other display equipment.

Security
- Will chambers be located lower in the building stack?
- What is the proximity of this building to other adjacent buildings?
- Depending on the location of chambers and conference or library amenities, additional security measures such as ballistic glazing or elevated window sill heights may be required. Locating chambers space on the first floor will automatically trigger the incorporation of ballistic glazing, which will increase the cost of the project and will require a reimbursable work authorization.

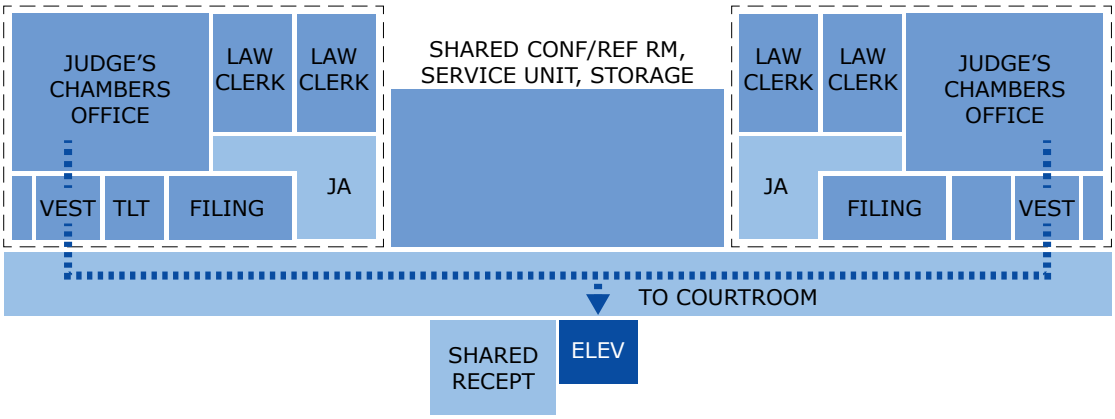
Acoustics
- Judicial privacy is a big concern in open office environments. Law clerks, judges, and U.S. attorneys often meet in chambers and their conversations cannot be overheard.
- To ensure adequate privacy for judges and law clerks, walls should span from deck to deck, and doors and penetrations should be properly sealed.

Figure 6.02 — Collegial Chambers Options
Range of collegial judge's chambers suite configuration options

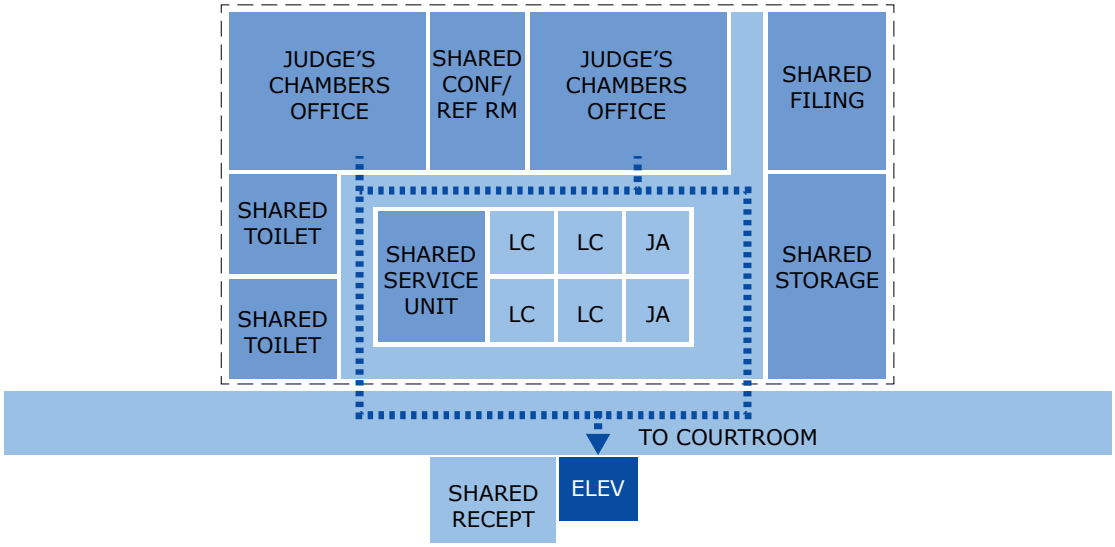
OPTION 1: JUDGES' CHAMBERS SUITES COLLOCATED; JUDGES DO NOT SHARE AMENITIES



OPTION 2: JUDGES' CHAMBERS SUITES SHARING SOME AMENITIES



OPTION 3: JUDGES' CHAMBERS OCCUPYING THE SAME OFFICE SUITE; ALL AMENITIES SHARED



Best Practices

Chambers Configuration

- The decision to include traditional or collegial chambers should be discussed early in the planning process and documented in the AnyCourt program.
- Collegial chambers enhance the collegial nature of the courthouse.
- Collegial models may provide the Judiciary with the most flexibility because many amenities and spaces can be shared among the judges. In collegial configurations:
  - Law clerks may occupy open workstations, rather than enclosed offices, which provides more flexibility for how judges staff their chambers.
  - A shared, centralized copy or print room reduces the amount of individual printers and equipment needed in chambers, which provides cost savings to the Judiciary.
  - A shared, centralized pantry will reduce the amount of sinks, refrigerators, and other appliances needed within the chambers.

Leased Space

- Judges' chambers suites that are constructed in leased space may have different circulation, security, and technology requirements. For example, a security screening station or dedicated IT closet may be required, increasing the overall space envelope.

Equitable Chambers and Flexibility

Equitable Chambers

- Each chambers type should utilize consistent finishes that work within the building palette. By utilizing consistent finishes, materials may be purchased in bulk — which is less costly — and maintenance costs may decrease.
- Greatly varying the chambers finishes will result in extra storage requirements for attic stock.
- If a variety of color palettes are used and a judge decides to move to a different chambers, replacement of finishes may be an additional judiciary cost.

Flexibility

- Where appropriate and with consideration to the project budget, utilize demountable partitions for law clerk offices and judicial assistants. If the court must reconfigure a judge's chambers, demountable partitions may make it easier and less costly to accommodate the change. However, these wall systems may not have the same acoustic qualities, which may compromise privacy. Refer to Figure 6.03 for an image of demountable partitions in judicial chambers.

Value Engineering

The following items represent possible value engineering strategies for the judges' chambers suites. The following list is not meant to be all inclusive, but rather to serve as a guide for teams as they work through a project:

Built-In Bookshelves

- Eliminate individual bookshelves located in each chambers and construct a shared law library for judges, law clerks, and other staff.
- If a higher degree of finish is required, eliminate built-in bookshelves from the chambers suite or replace built-in bookshelves with movable furniture.

Finishes

- Eliminate wood paneling from the judge's chambers in favor of painted gypsum board partitions.

Figure 6.03 — Demountable Partitions
Demountable walls in a judge's chambers

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Collegial Chambers Case Study

U.S. Courthouse Annex & Charles R. Jonas Federal Building | Charlotte, North Carolina

Background

Originally built in 1918 and initially renovated in 1933, the historic Jonas Courthouse required major upgrades due to its age and continued operation. The resulting Charlotte U.S. Courthouse Annex and Modernization project nearly doubled the usable space occupied by the Judiciary on an undersized site. Because of the narrow site, a traditional layout for the courtrooms and chambers was not feasible, and instead a collegial layout scheme was adopted. The eight district judge collegial chambers are located on two vertically-adjacent floors of the new annex.

Successes

Though this arrangement was chosen out of necessity, the collegial environment was a cultural shift for the judges. It was determined early in the design process that judges would be collocated but few amenities would be shared.

Site Limitations

- Without the challenging site, an elegant collegial configuration may not have been desired. Limitations may result in more creative solutions and every project offers an opportunity to innovate.

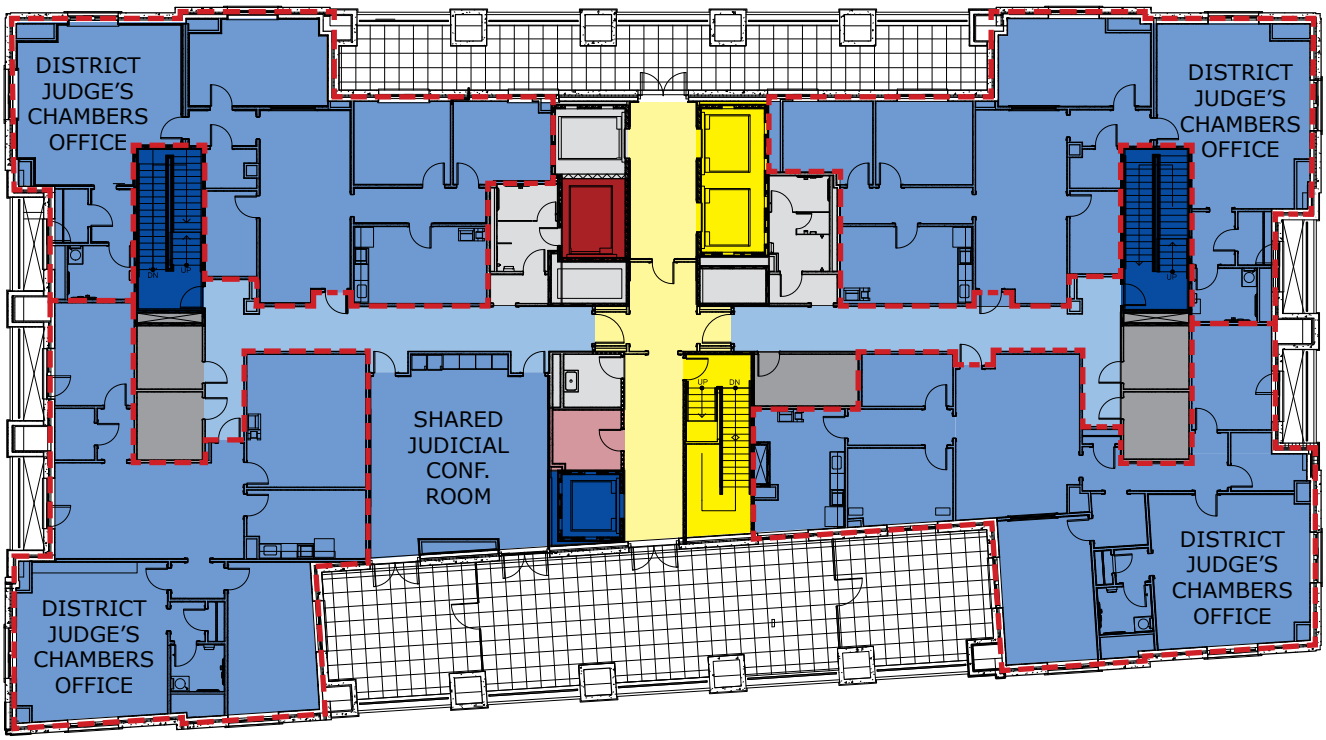
Building Stack

- When judicial chambers are located separately from the courtrooms, the overall floor-to-floor height of the chambers floor may be reduced. A hybrid solution, where some chambers are configured in a traditional manner and others are not, was possible on this site. This solution would have created disparities among the judges, so it was decided that all judges should receive the same accommodations.

Amenities

- Each collegial chambers floor contains a large, shared conference room for the judges and staff.
- A robing room is included on each courtroom floor for the judges. With collegial layouts, it is imperative to plan and budget for robing rooms and associated restrooms on the courtroom floors.

Figure 6.06 — Collegial Chambers Layout
Level 6 collegial chambers layout located in the U.S. District Courthouse (Charlotte, NC)



COLOR LEGEND:

- JUDICIAL SPACE
- JUDICIAL CIRCULATION
- JUDICIAL VERT. CIRCULATION
- USMS SPACE
- SECURE VERT. CIRCULATION
- PUBLIC CIRCULATION
- PUBLIC VERT. CIRCULATION
- SERVICE SPACE
- MECHANICAL SPACE

SYMBOLS LEGEND:

- CHAMBERS BOUNDARY

Collegial Chambers Case Study

U.S. District Courthouse | Salt Lake City, Utah

Background

The U.S. District Courthouse, completed in 2014, houses the district and magistrate courts of the District of Utah. In a 10-story structure of roughly 400,000 gross square feet, the courthouse contains seven district courtrooms, three magistrate courtrooms, the Clerk of the District Court, U.S. Marshals Service (USMS) of Utah, U.S. Probation Office, 10th Judicial Circuit Library, and other federal agencies. A main feature of the U.S. District Courthouse is the collegially-grouped chambers located on Levels 9 and 10.

The program components are stacked within the building based on their varying degrees of public interface, and the judicial chambers occupy the highest levels within the courthouse. Chambers levels are stacked directly above the courtrooms to allow each chambers a vertical adjacency to the courtroom levels. The overall building program stack and highlighted chambers levels are shown in the building section depicted in Figure 6.07.

Successes

For the judges presiding at this courthouse, the collegial chambers layout provides several key advantages over a traditional chambers layout. In addition to the successes listed below, refer to Figure 6.08, which depicts the collegial floor plan on Level 10 of the U.S. District Courthouse.

Courtroom Sharing and Collegiality

- Courtrooms are easily shared among judges since the chambers are detached and located on a separate floor. Judges feel less ownership over specific courtrooms, contributing to the collegial atmosphere.
- As part of the collegial layout, a robing room was provided adjacent to each courtroom to allow judges on recess to use the room for work rather than returning to chambers.
- The collegial chambers afford the judges more contact with each other, improving the overall work environment.

Security

- Public visitors are not able to come to the chambers floors unless they have specific business with a judge or chambers staff, which provides the greatest level of security to the chambers.

Amenities

- The top floors of the building allow for the best exterior views from the chambers.

Flexibility and Future Expansion

- The collegial layout allowed bookshelves to be removed from each individual chambers in favor of a limited, centrally-located, shared law library.
- Additional chambers expansion space was easily provided on Level 10. If even more additional chambers are required, the clerk's office and USMS office located on Level 9 will be relocated to preserve the collegial environment.

Figure 6.07 — Building Section

Section locating the judges' chambers in the building stack

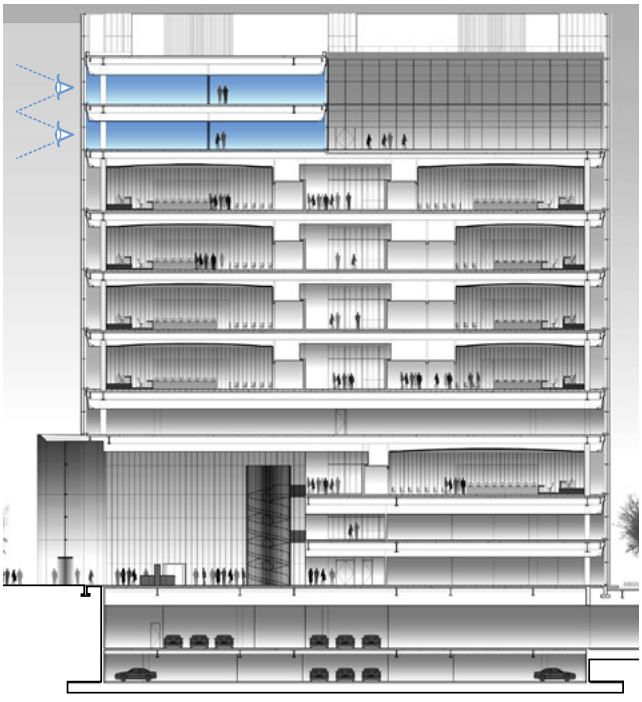
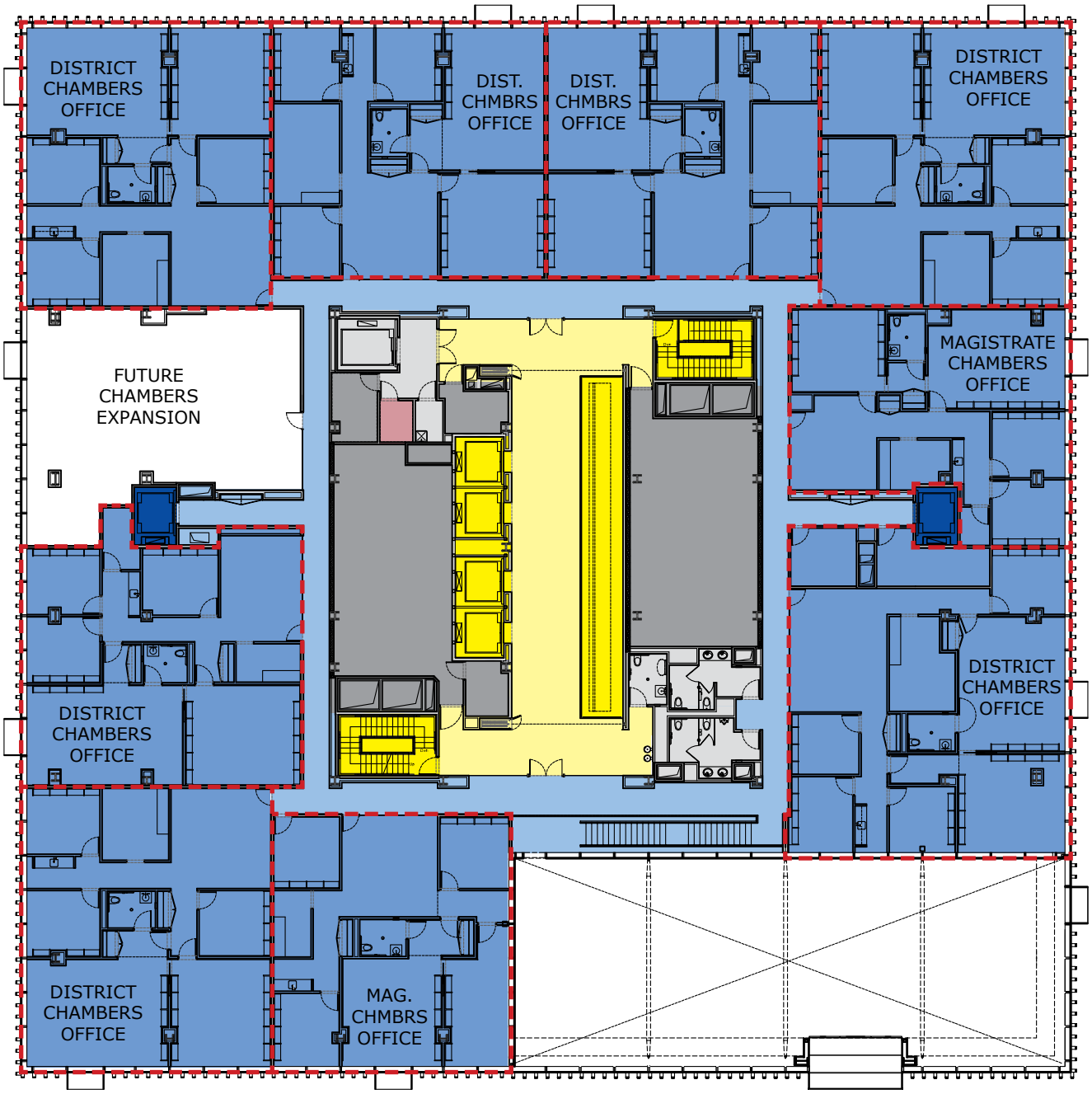


Figure 6.08 — Collegial Chambers Configuration
Collegial chambers layout located in the U.S. District Courthouse in Salt Lake City, UT



COLOR LEGEND:

- JUDICIAL SPACE
- JUDICIAL CIRCULATION
- JUDICIAL VERT. CIRCULATION
- USMS SPACE
- PUBLIC CIRCULATION
- PUBLIC VERT. CIRCULATION
- SERVICE SPACE
- MECHANICAL SPACE

SYMBOLS LEGEND:

- CHAMBERS BOUNDARY

Non-Resident Collegial Chambers Case Study

James A. Byrne U.S. Courthouse | Philadelphia, Pennsylvania

Background

In 2009, the long-range facilities planning process identified the Third Circuit's need for four additional resident judges' chambers to house new active judges. The chambers shortage moved this courthouse to the top of the Urgency Evaluation list, and in 2010 the General Services Administration (GSA) completed the feasibility studies for the project. The studies revealed that the project would result in a costly renovation and some Court of Appeals functions would need to be relocated to an adjacent building. Due to budgetary constraints, all congressional funding requests to build out the new judges' chambers were not approved.

Successes

The project was a high priority for the Judiciary, so the circuit re-evaluated their existing operations and space. To gain the additional resident chambers, the circuit renovated nine existing non-resident chambers into a collegial configuration. Four of the non-resident chambers were reconfigured into resident chambers, three were reconfigured into collegial suites of non-resident judicial offices with open work areas for interns and law clerks, and two were repurposed for non-resident senior judges. No new space was acquired and a smaller footprint of existing space was reconfigured to meet the court's need.

Project Cost

- The renovation cost for the nine non-resident chambers was just under $1.5 million. Because the collegial chambers were built-out as office space, the cost was lower than anticipated.
- In the feasibility studies, GSA estimated that it would cost $1.5 million to build one new resident chambers. In addition, the Judiciary would need to acquire new space, which would increase the circuit's rent.

Design

- Each collegial suite contains four judicial offices, 12 workstations for law clerks or interns, a conference room, a kitchenette, a toilet room, and a storage room.
- Each private, non-resident judicial office is 180 square feet.
- Each office utilizes glass demountable partitions to allow ample light into the open workstation area from the exterior windows.

Figure 6.09 — New Open Office Area
Shared law clerk and intern workstation in an open office setting

Figure 6.10 — New Judicial Offices
New non-resident judge's office with visitor seating

Figure 6.11 — Before Renovation
Non-resident chambers layout prior to the renovation

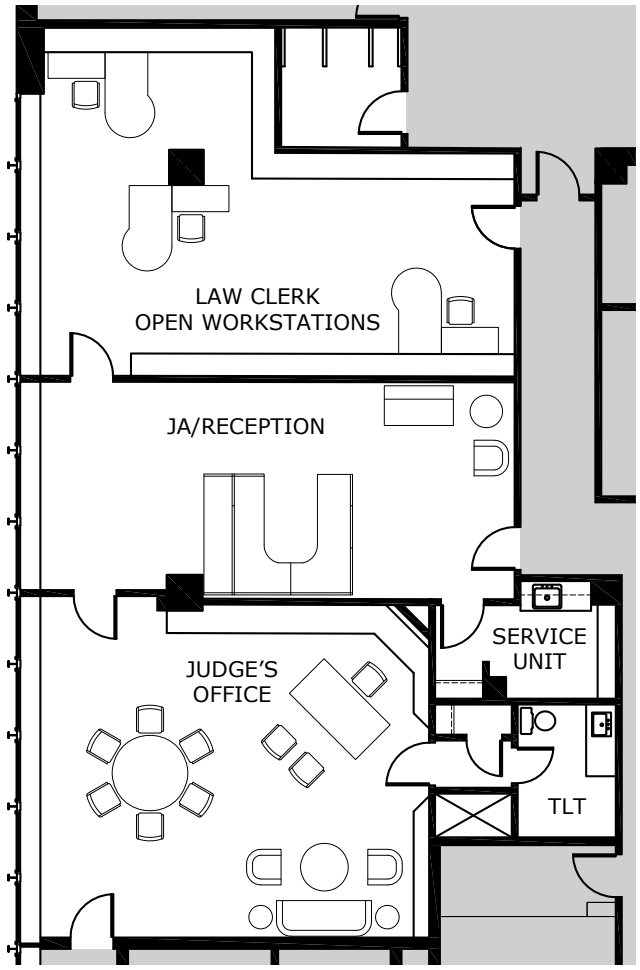


Figure 6.12 — After Renovation
Reconfigured collegial judicial chambers with open workstations

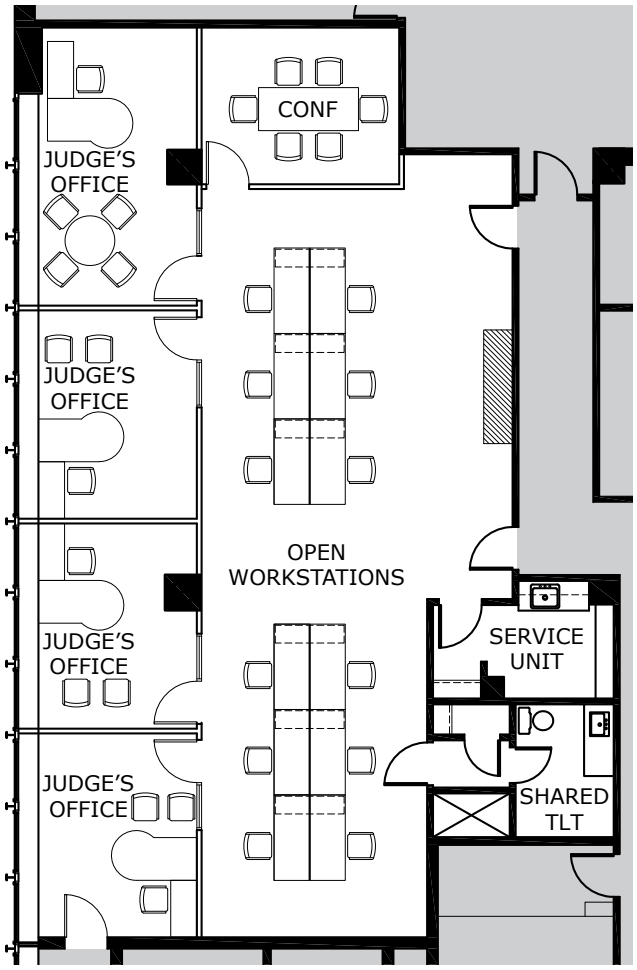


Figure 6.13 – Axonometric Rendering of the Reconfigured Chambers
3D visualization of the collegial non-resident chambers configuration

Mark O. Hatfield U.S. Courthouse
Portland, OR

Image:
Kohn Pedersen Fox Associates

07 COURT LIBRARIES

This chapter provides best practices related to the planning, design, and construction of court libraries and their associated spaces.

Chapter Sections:

Introduction

With the world's information doubling every two years, court libraries fill a special need in the federal judiciary. The traditional role of the court library is to provide judges and other court staff with research assistance and support. Nowadays, court libraries provide a wide variety of services to the courts, including training judges, clerks, and court staff to use research tools effectively, assisting in publication and communication functions, and maintaining digital law collections. Since court library functions are in flux, it is important that these spaces are flexible and have the ability to adapt to new technology.

Supporting Documents

The following reference documents provide additional information on the topics contained within this chapter:

- *United States Courts Design Guide (Design Guide)*, Chapter 7, 2021
- *U.S. Courts Courthouse Design Reference Manual, 2007*

Planning and Design Considerations

The *Design Guide* outlines requirements for three types of court libraries: the circuit headquarters library, satellite library, and unstaffed library. Each circuit requires a circuit headquarters with satellite and unstaffed libraries provided elsewhere in the circuit. Unlike other court units, circuit libraries operate independently of each other.

Circuit Headquarters Library
- Operates as the central administrative hub for each circuit's library services.
- Serves the public, court staff, and other organizations.

Satellite Library
- Varies in level of service and collection size and are staffed according to each courthouse's need.
- Serves the public, court staff, attorneys, and other organizations.
- Located in district courthouses.

Unstaffed Library
- Not staffed by library staff and may be created as a shared law library for the judges' collections.
- Serves judges, court staff, and attorneys.
- Located in smaller courthouses.

Determining the type of library that will be included in the courthouse, and how it is intended to be used by the staff and public, is an important decision to make early in the planning process. Work closely with the circuit court librarian to inform how the library will be used initially and how flexibility may be incorporated to adapt to changing needs. Consider the following when planning for or designing a court library:

- Will this library be designated a headquarters, satellite library, or an unstaffed library?
- Will the library be open to the public, or will it be only open to attorneys, judges, and court staff?
- If the library will be open to the public, how can you differentiate this space as open to the public, and where does it belong in the building stack?
- What library services are most essential at this location?
- Are any activities limited by your current space allocation and functional layout?
- Are there any mandatory repositories?
- What type of collection storage is preferred: high-density rolling shelves, static bookshelves, or a combination of both?
- Does this library intend to store or repair books for other branch libraries?
- Will the library be reducing its book storage and collections capacity in the future in favor of digital alternatives?
- What can be done to make the space as multi-purpose as possible?
- What role does technology have in the new space?

Multipurpose Library Space

In recent years, court libraries across all circuits have worked to optimize their operations and accommodate new functions and technologies in their space. As these court units become more digital, vast law book collections will no longer be required, and space can instead be allocated to such other functions as conferencing, training, alternative dispute resolution, other mediation, and civic education functions. Libraries that have a public engagement function often lend themselves to providing multipurpose spaces.

When planning court libraries with a desire to accommodate multipurpose spaces, you may consider the following:

- Locate the library in a prominent location adjacent to public circulation.
- Consider locating the library near jury assembly or adjacent to the courthouse lobby.
- Set clear boundaries of separation within the library to delineate spaces for the public and staff.
- Provide infrastructure for technology integration and consider electronic scheduling systems to manage use of the multipurpose spaces.
- Utilize furniture that is low maintenance and can be quickly configured for multiple room configurations, such as conferencing or training.
- Provide adequate furniture storage.

Flexibility

Libraries, as with most spaces in a courthouse, need to be planned to be flexible and adaptive to future changes in operations. This planning may mean changes in how the library serves the public or staff, technology changes, or changes in the size of collections.

Materials and Furnishings

- Utilize demountable or movable wall systems to allow for future spatial flexibility. Movable wall systems should be easy for one person to open or close.
- Utilize reconfigurable, mobile, or movable stack shelving to maximize the library's flexibility.
- Utilize flexible, modular workstations and smaller, lightweight furniture to create a more versatile space.
- Limit the amount of built-in seating and counters and maximize the amount of loose furnishings. Loose, lightweight furnishings should be easy to move by one person.

Building Systems and Technology

- Provide a standardized lighting and ceiling layout to optimize reconfigurability.
- Utilize variable air volume (VAV) or variable refrigerant flow (VRF) units to create more flexible HVAC zones.
- Provide power and data receptacles at regular internals and incorporate infrastructure for technology expansion.
- Coordinate with the U.S. Marshals Service to provide flexible security systems.

Existing Library Space Challenges

As newer libraries are designed with multiple purposes and flexibility to accommodate future uses, older library spaces may become outdated. Aging libraries may have the following challenges:

- Space may be compartmentalized with immovable structural elements, making the space difficult to reprogram and less flexible.
- Windows may be small, letting in little to no natural light.
- Empty shelves may take up valuable space.
- The library may lack wayfinding signage, making navigation of the space very difficult for patrons.
- Seating options for staff and the public may be limited when using the collection.

Archival Storage

Only a few circuit libraries across the country house archival storage. Physical space is often at a premium in an archive. Considering the amount of currently available space and the needs of incoming material will mitigate storage issues. Storing material safely in a manner that promotes preservation as well as access should be a priority.

Best Practices

Planning

Stakeholder Interaction

- Librarians should speak with their Assistant Circuit Executive (ACE) for Space and Facilities regarding any potential construction project.
- As project planning begins, seek input from the library users (judges, clerks, etc.).
- Lead with a vision to gain buy-in from different stakeholder groups. Utilize project descriptions and sample projects to articulate ideas.
- While soliciting feedback, be open to new ideas.
- Emphasize the importance of multipurpose space to library stakeholders and advocate for a technology-forward space.
- Communicate often with the project team and anticipate issues that may arise during design and construction.

Location Within the Courthouse

- If the court library is located on a floor with an increased floor-to-floor height, consider configuring the library so that it can easily be a future expansion space for a courtroom.
- If there are an odd number of courtrooms planned, consider locating the court library adjacent to a courtroom. This adjacency will allow the library to function as an expansion space for a future courtroom.

Access

- Depending on library type, court libraries should be accessible from both the public and restricted corridors and adjacent to the service elevator for deliveries.
- A work area for opening packages and larger deliveries may be provided within the allowable space envelope of the court library. Space is not currently allocated within the *Design Guide* for this function.

Library Spaces

Staff and Public Spaces

- Design the court library to be a welcoming and inviting space.
- If the library has a front reception desk, a security control package should be provided.
- Consider providing individual work spaces for staff and the public.
- Where public computers are provided, locate them separate from staff computers; however, both should be centrally located and accessible from the circulation desk. Public computers should not be on the court network. Separate Wi-Fi should be provided for these computers.
- Consider creating separate pro se and staff areas.

Librarian's Office

- Consider locating the office of the librarian in charge of that particular library so that they have visual access to the library's collection, user seating, and entrance.
- The librarian's office should be outfitted with a security control package.

Stack Area and Law Library Collections

- Consider low shelving to preserve window views and allow natural light to reach the back of the space. Low shelving will also preserve the sight lines throughout the space.

Training Spaces

- Depending on the court's need, a flexible training space may be incorporated into the court library's allowable space envelope. Space is not currently allocated within the *Design Guide* for this function.

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Multi-Purpose Library Case Study

Thurgood Marshall U.S. Courthouse | New York City, New York

Background

In 2006, the Thurgood Marshall U.S. District Courthouse underwent a major renovation which included dedicated space for a pro se library. Use of the pro se library declined after several years, and in 2013, the need for a multipurpose civic education and pro se space was required. Under the leadership of the chief judge, the Second Circuit expanded their civic engagement and this project gave a permanent space for this function. This multipurpose library reimagines the traditional satellite library through the lens of public engagement; the project is highly regarded as a successful modern intervention in a historic courthouse. Refer to Figure 7.01 through Figure 7.10 for a floor plan and existing and post-construction photography depicting the reconfigured space.

Successes

The goal of the project was to create a flexible multipurpose library to support public outreach and education. The space is designed with three zones to support this goal: the classroom zone, gallery zone, and create zone. Each zone supports different functions, which allows users to experience the justice system in different ways. The classroom zone is reconfigurable to support a training function or a classroom function, the gallery zone features interactive exhibitions, and the create zone allows users to participate in a mock trial or develop podcasts. The zones may be used separately or the library may be used as one large space.

Civic Education and Pro Se Engagement

- On average, the library is utilized as a public classroom 3–4 times a week. The library operates as a public learning center with dedicated public hours one day a week.
- Pro se clerks and litigants may still use this library to request and examine law material from the restricted court library located within the building.

Design and Flexibility

- The space utilizes two different movable wall systems: the DIRTT wall system and the NanaWall System. The DIRTT wall system is a demountable wall system that allows the court to easily manage, replace, and upgrade the interactive technology in the classroom and gallery zones. Demountable walls are considered furniture and will need to be included in the furniture, fixtures, and equipment budget. The sliding-glass NanaWall system allows each zone to open or close as needed.
- Glass NanaWalls provide light, views, and transparency into the library and allow it to open up onto the public corridor.
- To mitigate the poor acoustics of the hard wall systems, a cork floor and high acoustic-rated ceiling was utilized. This approach mitigates the noise in the space caused by the different wall systems.
- All demolished historic marble was retained and reused to wrap the new columns. No new marble was purchased for this project.

Project Stakeholder Engagement

- Focus groups, including the project judge and librarian, were conducted to understand the needs of the court and how the space should best be utilized.
- The State Historic Preservation Office (SHPO) officer was engaged at the conception of the project by the ACE for Space and Facilities and the circuit courts architect. When working in a historic courthouse, it is necessary to engage and gain early buy-in from the applicable SHPO.

Figure 7.01 — Reconfigured Library Floor Plan
New learning center library floor plan depicting its flexibility and inclusion of various functions

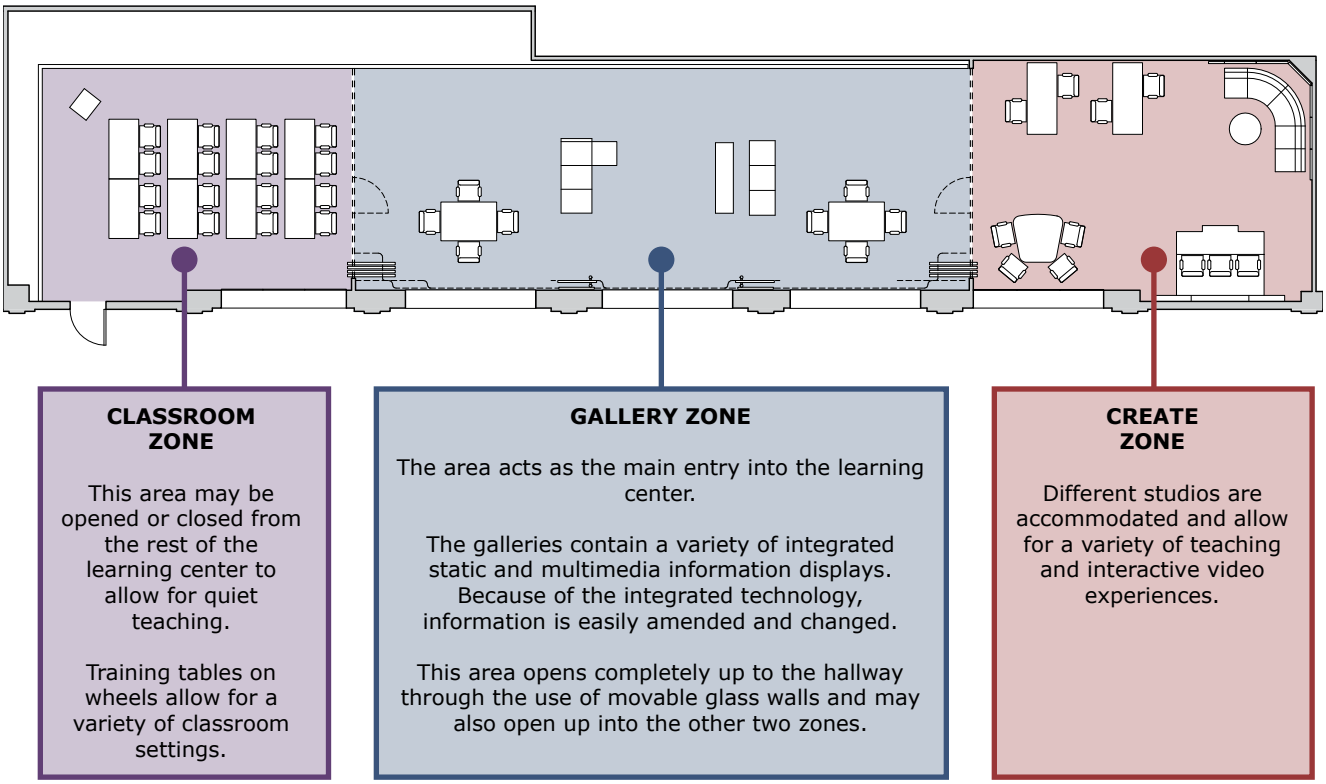


Figure 7.02 — Library Before Construction
Pro se library layout before construction in 2013

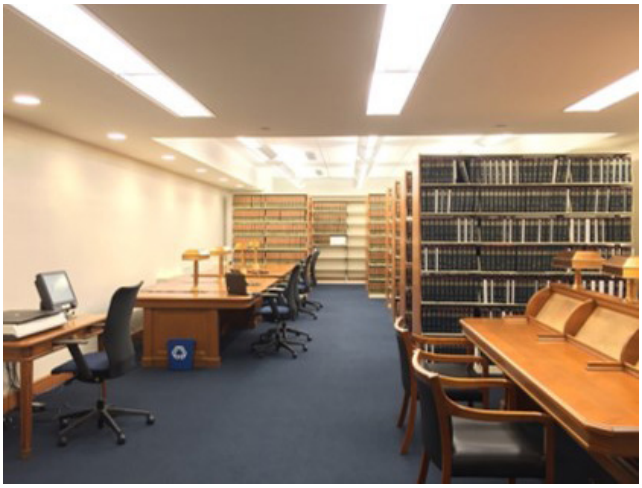


Figure 7.03 — Library After Construction
New learning center layout after construction

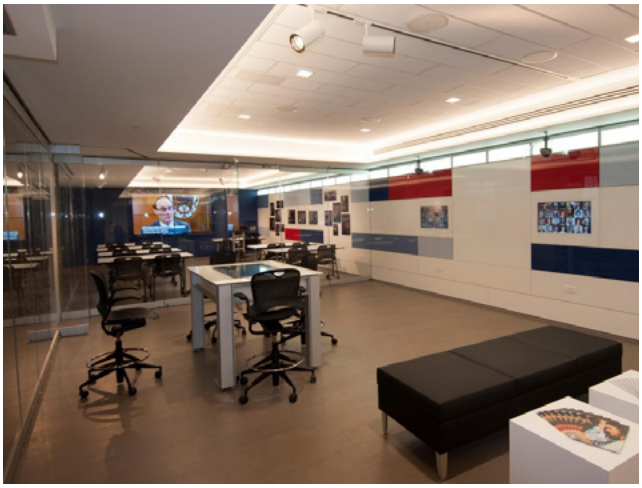


Figure 7.04 — Existing Entrance
Library entrance prior to construction

Figure 7.05 — New Library Entrance
Learning center entrance after construction

Figure 7.06 — Lecture Arrangement
Reconfigured classroom zone to hold a lecture

Figure 7.07 — School Field Trip
The classroom zone with walls open to the gallery zone

Figure 7.08 — Mock Courtroom
The create zone allows users to hold a mock court session

Figure 7.09 — Podcast Studio
The create zone allows users to host their own podcasts

Figure 7.10 — Gallery Zone
The interactive gallery zone integrates touch screens into the DIRTT walls

Library Space Reduction and Flexibility Case Study

Alfonse M. D'Amato U.S. Courthouse | Central Islip, New York

Background

As part of the Second Circuit's space reduction program, the satellite library in the D'Amato U.S. District Courthouse was designated as a candidate to release underutilized space. The original library was spread across two stories, and the majority of the library was dedicated to bookshelves. Overall, the library was underutilized by judges, staff, and the public, making this court unit a prime candidate to release space. Prior to the project, much of the library's collection was digitized, which only required the library to maintain a small amount of physical books. Figure 7.11 through Figure 7.13 depict the existing library layout prior to the renovation and reconfiguration.

Successes

The goals of the project were to reduce the library's overall footprint, retain and expand its core services, and incorporate additional conferencing and gathering spaces needed in the courthouse. Because of these additional functions, flexibility was key to the success of this project. Figure 7.14 through Figure 7.17 depict the new layout and additional spaces imbued into the design, such as an expanded public gathering space.

Space Reduction and Function Addition

- The library was reduced from 17,690 gross square feet to 7,050 gross square feet, and all library functions were consolidated onto one floor.
- The stacks area was significantly reduced to allocate space for additional functions such as training and conferencing.
- The Second Circuit contains a large microfiche collection which is now housed at this location.

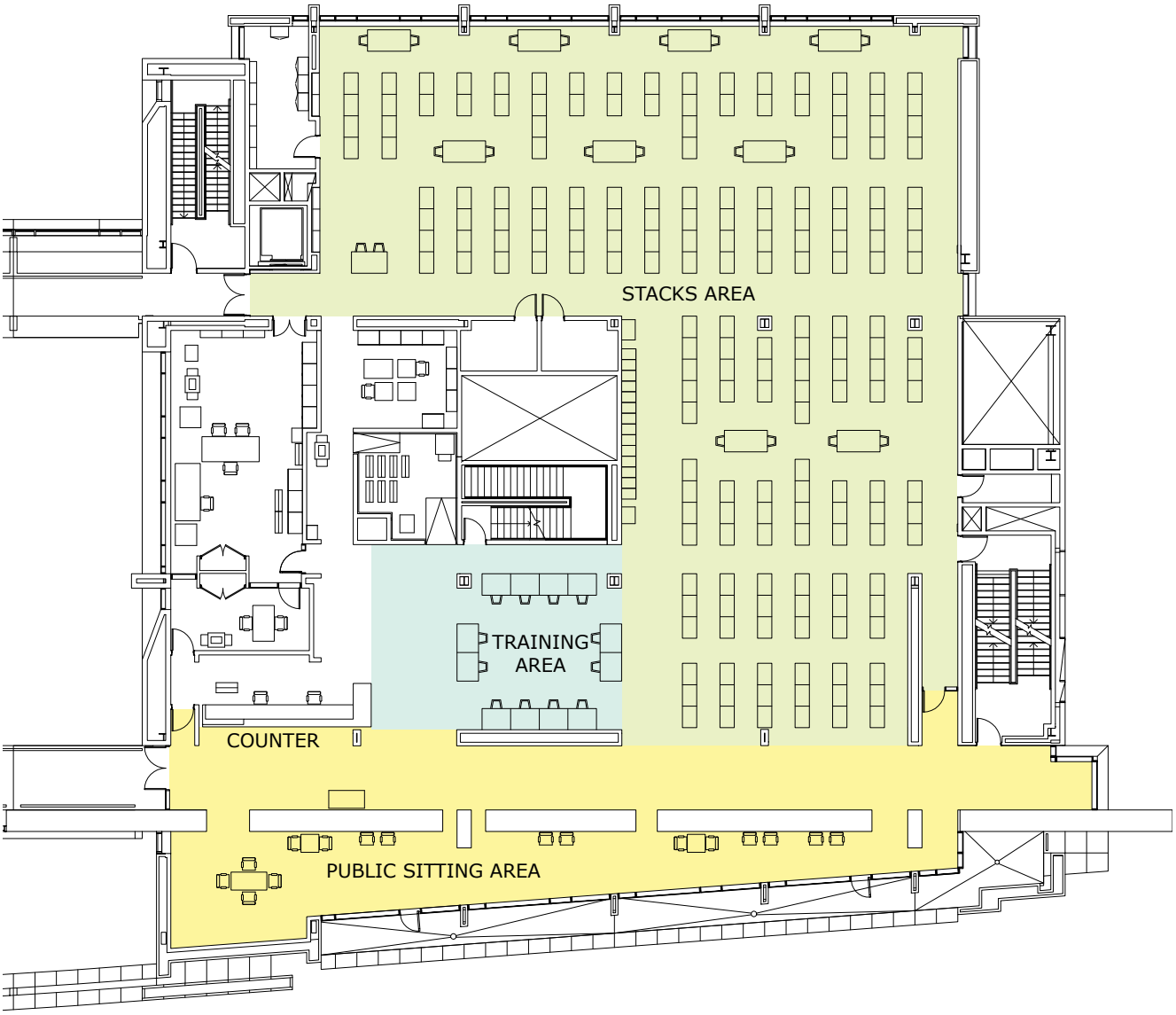
Flexible Public Space

- The entrance to the library was expanded to create a space that invites the public and court staff alike to utilize the library.
- The space dedicated to public seating was expanded, giving the courthouse a large, flexible area for large-scale gatherings and events.
- All furnishings are lightweight and easily moved by the librarian.
- Large, sliding acrylic doors separate the library space and flexible public space. This approach allows the library space to close while the public space may be utilized after hours. The acrylic doors are easily operated by one person.
- The flexible public space takes advantage of the very tall windows on the 10th floor which offer picturesque vistas.

Figure 7.11 — Existing Training Space
Existing library computer training space before construction

Figure 7.12 — Existing Stack Area
Existing conference table in the stack area before construction

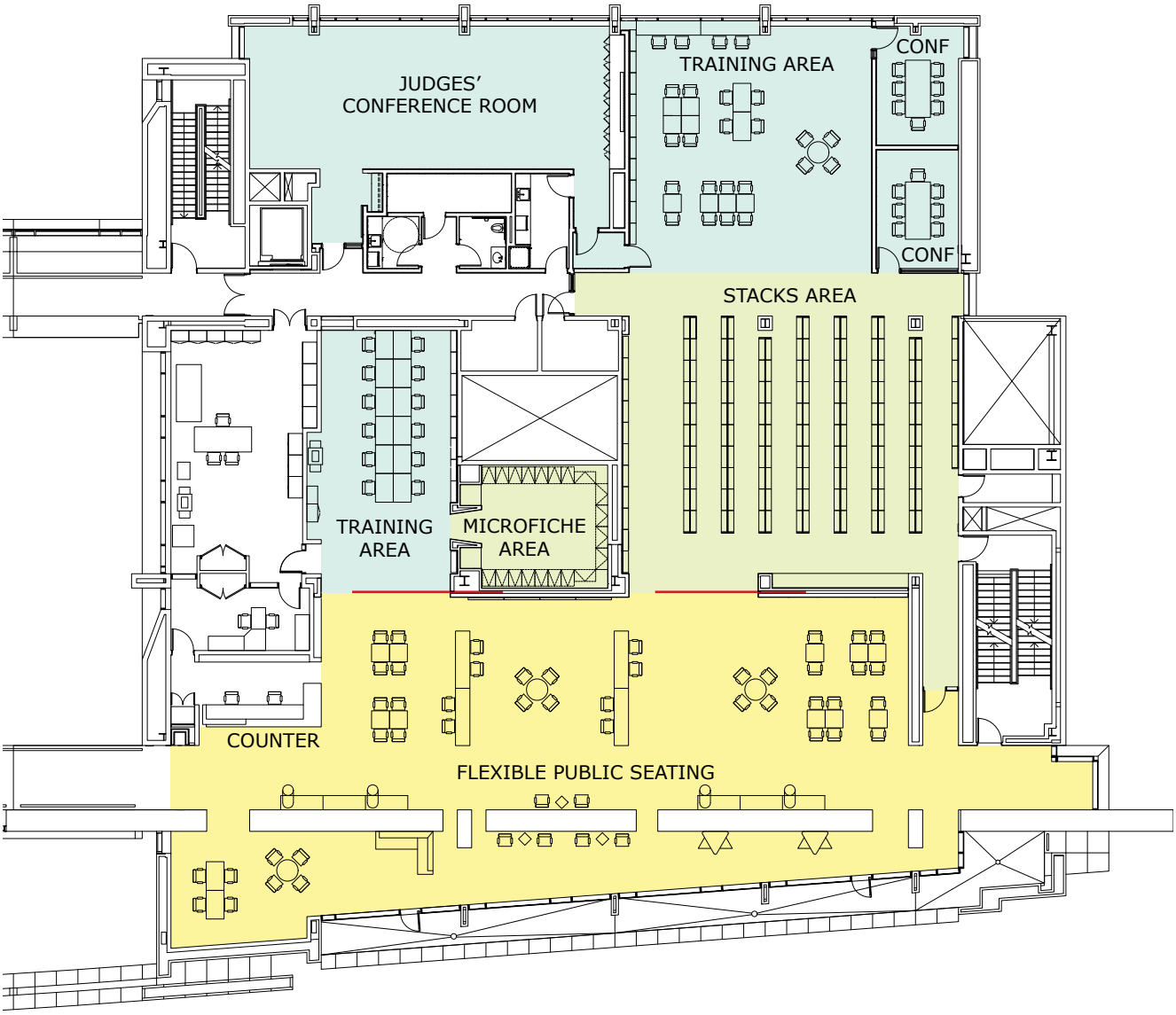
Figure 7.13 — Existing Library Floor Plan
Floor plan depicting the main library space prior to any renovation or reconfiguration



COLOR LEGEND:

- PUBLIC ZONES
- STACKS AND READING FUNCTIONS
- COLLABORATION FUNCTIONS

Figure 7.14 — Reconfigured Library Floor Plan
Floor plan depicting the reconfigured library to include an expanded public gathering area and additional conferencing spaces



COLOR LEGEND:

- PUBLIC ZONES
- STACKS AND OTHER SUPPORT FUNCTIONS
- COLLABORATION FUNCTIONS

SYMBOLS LEGEND:

- MOVABLE ACRYLIC WALL

Figure 7.15 — Expanded Public Space
Renovated public circulation desk and flexible seating

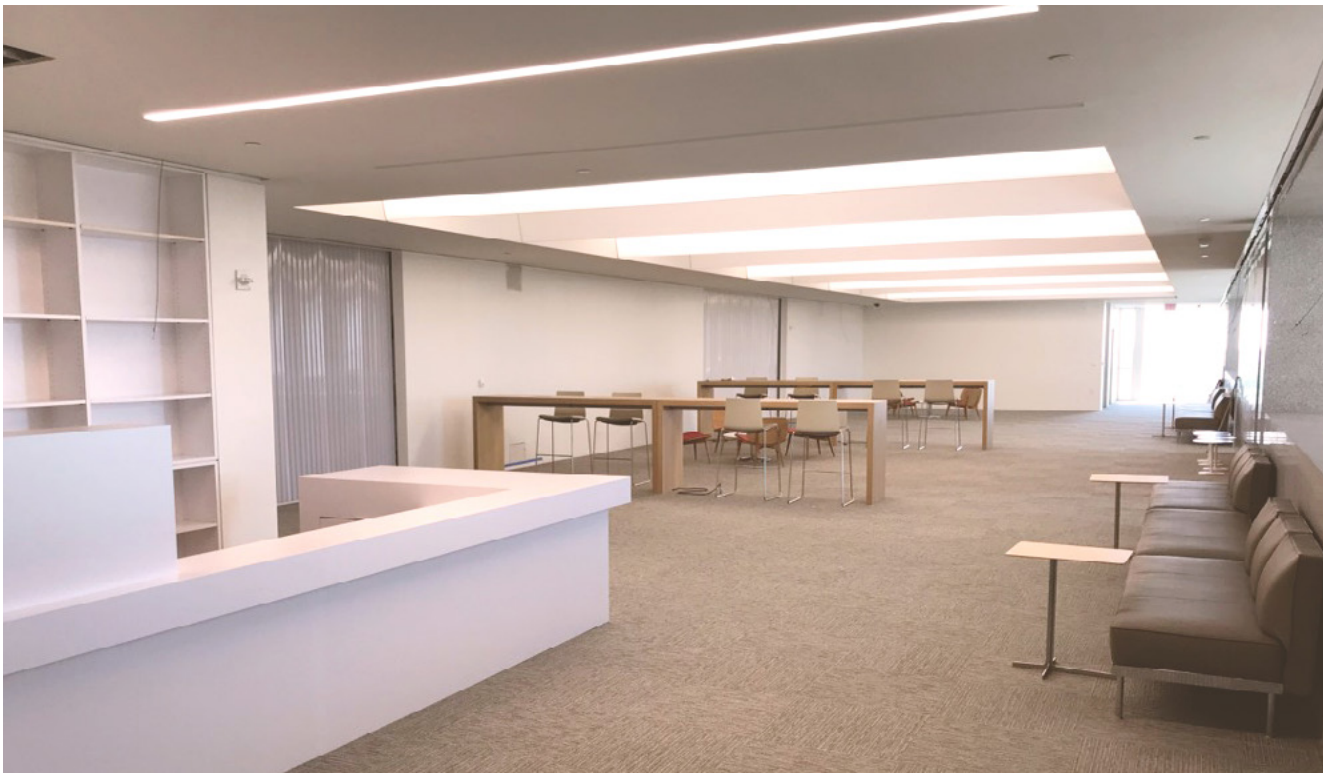


Figure 7.16 — New Public Seating
Movable public seating may be reconfigured

Figure 7.17 — Large Judicial Conference Room
A new judicial conference room was incorporated into the layout

Circuit Library Research Area Case Study

Thurgood Marshall U.S. Courthouse | New York, New York

Background

Given the growing prevalence of digital court filings, space in the circuit clerk's public intake area was mostly unused. To better utilize the space, a library research room was added by sectioning off a portion of the existing intake area on the first floor of the courthouse. The construction was limited to electrical and data outlet relocations, installation of new demountable partition, and painting. The reallocated space now allows visitors to submit files at the intake counter, research the status of their case filings through the publicly accessible computers, and speak to a circuit librarian to conduct legal research all in one location.

Successes

The goal of this project was to create a publicly accessible library research room within the existing clerk's office intake area for the Second Circuit Court of Appeals. Court units and circuit librarians created a multi-functional space and provided the public a central location for their case-related needs. Refer to Figure 7.18 through Figure 7.20 for renderings and floor plans depicting the reconfigured space.

Design and Flexibility

- Isolating the two programs was accomplished by installing a demountable partition system. The system allows the library research room to remain locked when it is unstaffed.
- By reallocating existing public space within the courthouse, minimal cost and intervention was necessary to accommodate the new program.

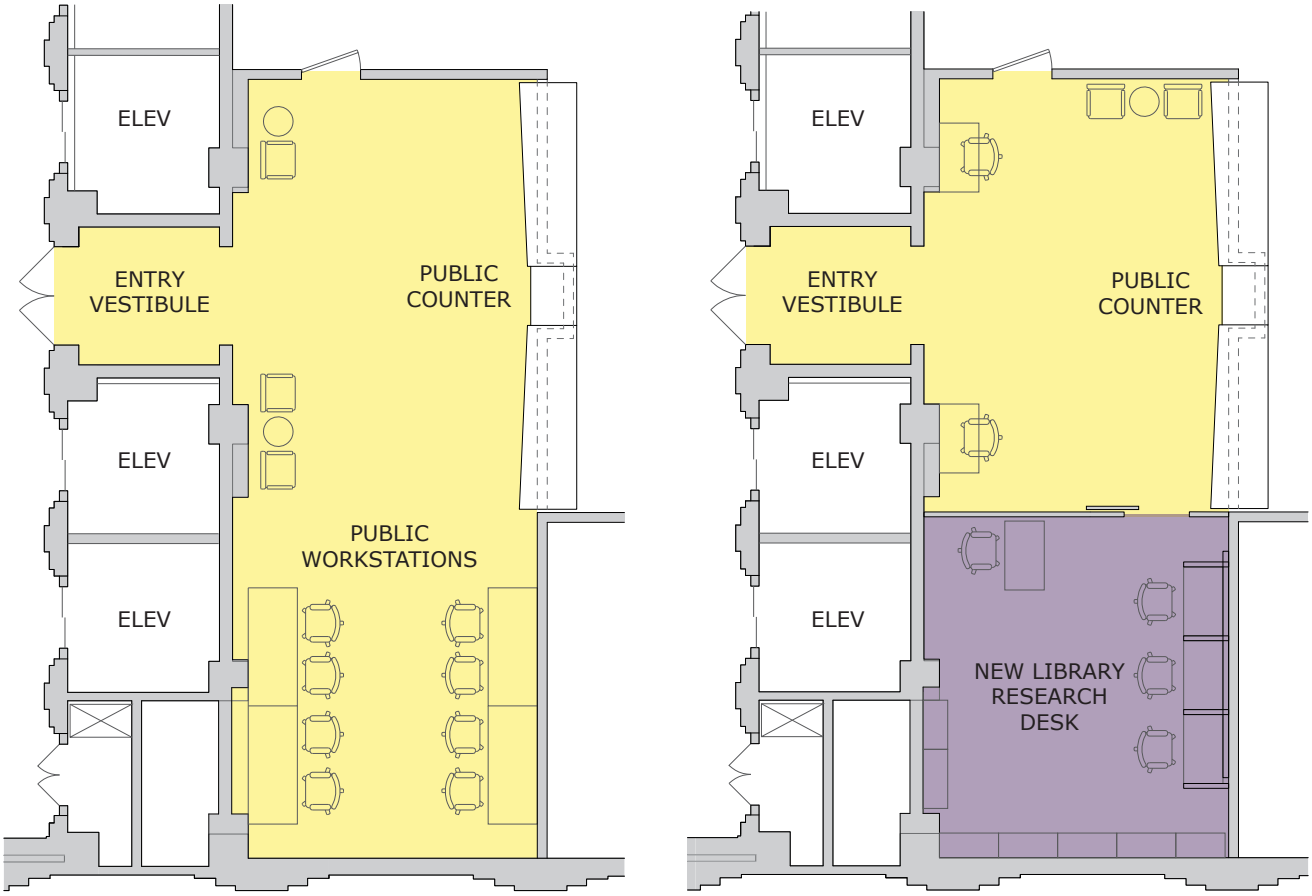
Project Stakeholder Engagement

- The circuit clerk's office and the circuit library were involved early in the decision-making process.
- For this project, the circuit clerk took the lead because the space was within the clerk's office intake area.

Figure 7.18 — New Public Resources
Publicly-available computers and law library stacks are provided

Figure 7.19 — Isolation of Program Spaces
A demountable partition separates intake and research space

Figure 7.20 — Clerk's Public Intake Area Before and After Construction
A portion of the existing intake area was reallocated to create a new library research desk



U.S. District Courthouse | Mobile, AL

Image: Hartman-Cox Architects, AECOM

08 CLERK'S OFFICE

This chapter provides best practices related to the planning, design, and construction of clerks' offices and their associated spaces.

Chapter Sections:

Introduction

Clerks' offices provide a wide range of services which vary from office to office. The clerk's office typically serves as the central source for public information, distributes court directives, maintains case dockets and court calendars, and provides other public services. In addition, clerks' offices often house subdivisions for a variety of functions that support the public and the Judiciary, including information technology (IT), human resources (HR), finance, procurement, and pro se.

Supporting Documents

The following reference documents provide additional information on the topics contained within this chapter:

- *United States Courts Design Guide*, Chapter 8, 2021
- *United States Courts Courthouse Design Reference Manual, 2007*

Planning and Design Considerations

It is important to consider the following when planning for or designing clerks' offices:

General Planning Considerations

- Identify all staff and departments that will be located within the clerk's office. Will the clerk's office house pro se functions, IT, or shared services staff?
- What is the desired relationship with the main entry lobby? Is it preferred for the clerk's office to be located on a lower or upper level of the building?
- Is there a desire to collocate the clerk's office with jury assembly? If so, can the counter functions be shared?
- Is the counter area intended to be serviced by multiple staff, or will the counter area be utilized as a dedicated work area for one staff member?
- Is the court in the process of transitioning to electronic filing? How are files being staged and transitioned to archive?
- Will the breakrooms also be utilized for staff meetings? If so, consider providing audiovisual and other technology infrastructure.
- Does the clerk's office handle inter-agency mail? Consider incorporating a small mail room for clerk's office use only.

Alternative Workplace Strategies (AWS)

- Have you considered implementing AWS in your work areas?
- If you are considering AWS, have you discussed how these physical changes may impact work flow?
- If AWS is desired, will your work space require white noise to mitigate or mask other noises?
- Have you taken your staff to tour examples of clerks' offices or other court units that employ AWS?

When planning for or designing clerk's office subdivisions, such as IT, HR, and finance, consider the following:

Public Counters

- Study counter traffic and use to determine the appropriate allocation of counter stations and space.
- Utilize durable materials for counter surfaces.
- Should a safe be provided instead of a vault? Consider integrating cashier functions and support equipment into counter space.
- The public terminals may require a secure connection. In this case, conduit may need to be provided behind the terminal.

Information Technology

- Does the IT group provide help desk and training services for the whole facility?
- Does the IT group require their own suite and separation from other court units? If so, consider providing card readers at the entrance of the suite. Other court units should not have access to the server room and IT equipment storage areas.
- Should the IT group be located on a path easily accessible to staff or easily accessed by loading and service elevators?
- How is equipment staged for deployment, return, or recycling? Consider providing a separate IT staging and storage area near the loading dock and service elevators.
- Consider providing IT a dedicated conference room and training room.

Procurement and Finance

- Does procurement or finance meet often with external vendors? Consider allowing this function to occur in a conference room that is accessible from both public space and the staff restricted space.
- Will procurement be responsible for buying, storing, and dispersing office supplies?
- Is there a need for a centralized supply or bulk storage space?

HR

- How often do individual HR staff members deal with confidential information or participate in private phone calls?
- Do HR staff members require their own office suite for privacy and confidentiality purposes? Or may they be co-mingled with other departments?
- Do HR staff members require their own closed offices? Or may they be allocated a workstation and utilize an adjacent conference or getaway space to participate in confidential conversations or phone calls?
- Is HR required to retain physical files? If so, do these files need to be stored in a centralized location? Or are they able to be stored in lockable filing cabinets?

Pro se offices often provide free public pro se clinics. Although the scope of pro se clinics varies, some services may include explaining federal court procedures, brief legal counseling, and reviewing draft pleadings and correspondence with the court. When planning for or designing pro se offices, consider the following:

Pro Se Offices and Clinics

- How frequently will U.S. Bankruptcy Office be held?
- Does the clerk's office require a dedicated space to hold pro se clinics? If so, consider locating this space near the public counters and accessible from public space and restricted staff space.
- When not in use, could this space serve another need as well?
- Consider allowing the pro se offices and the public counters the ability to share a common waiting area.

Zones of Security

There are three separate security zones in clerks' offices: the public zone, semi-restricted zone, and staff restricted zone. These zones allow public access to certain functions while maintaining a secure office environment for clerk's office staff. A function from one zone may not occur in another. For instance, clerk's office staff should be prohibited from meeting with the public in their private offices or staff conference rooms. There should be a conference room that is accessible from both the public zone and the staff restricted zone for staff to use.

The descriptions below detail defining aspects of each zone. Figure 8.01 depicts the different security zones on a conceptual floor plan.

Public Zone

- Spaces include: public counters, waiting room, and queuing area.
- The public has access to and moves freely through these spaces.
- Interactions with clerk's office staff are at designated areas, such as public counters.

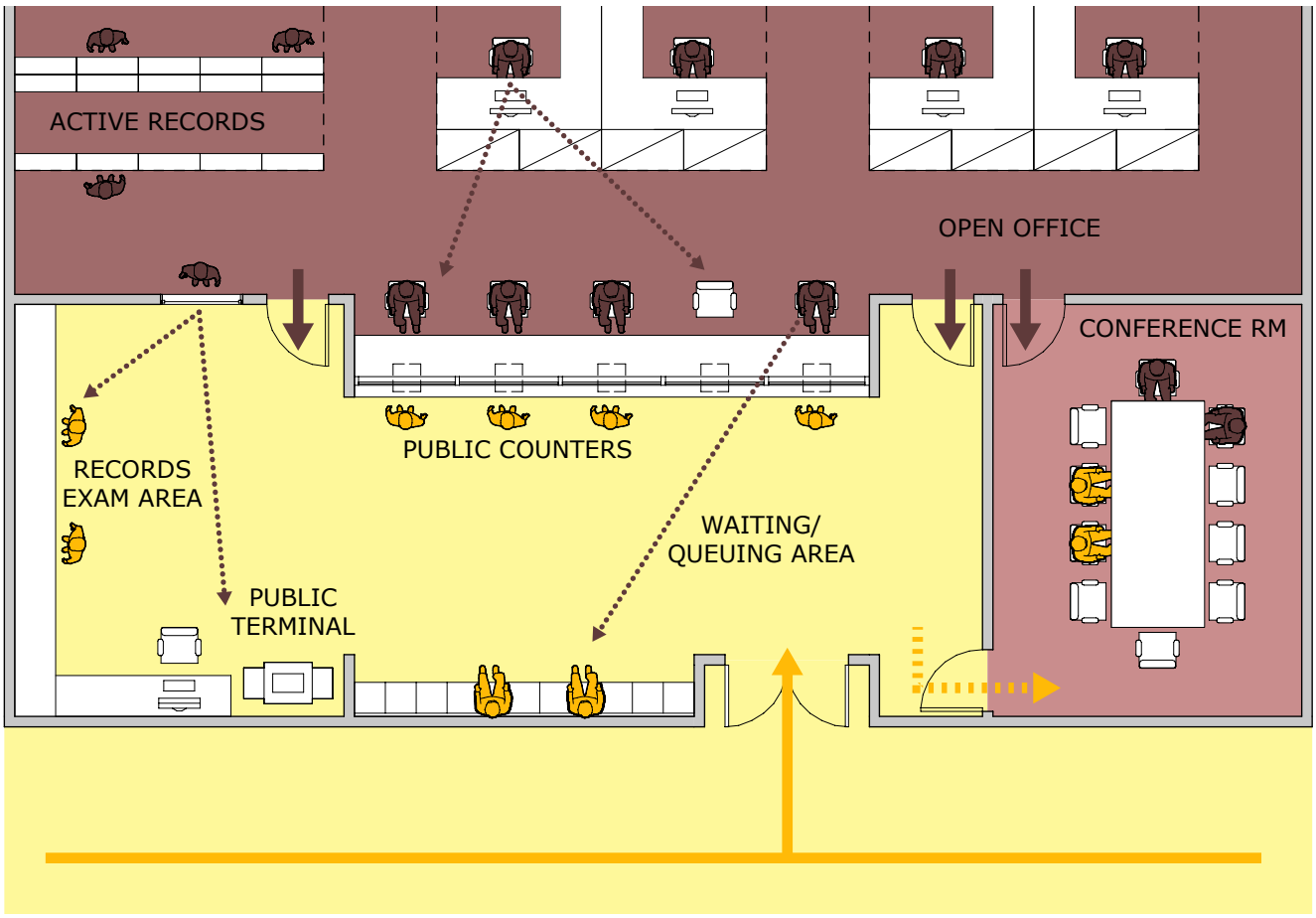
Semi-Restricted Zone

- Spaces include: conferencing spaces with access to the staff restricted zone and public zone.
- Restricted access to these spaces is controlled by staff at the public counters.
- Used for one-on-one meetings with the public.

Staff Restricted Zone

- Spaces include: staff offices, workstations, and other office support functions.
- Staff has access to and moves freely through these spaces.
- The public does not have and should not be given access to these spaces by staff.

Figure 8.01 - Clerk's Office Security Zones
Conceptual diagram of a clerk's office showing the security zones and related circulation paths



COLOR LEGEND:

- PUBLIC ZONE
- SEMI-RESTRICTED ZONE
- STAFF RESTRICTED ZONE

SYMBOLS LEGEND:

- PUBLIC CIRCULATION
- RESTRICTED PUBLIC CIRCULATION
- STAFF CIRCULATION
- STAFF VISUAL ACCESS

Best Practices

Planning

Location Within Courthouses

- Clerks' offices should be located lower in the courthouse building stack, and it is preferred that these offices have a view directly onto the lobby or elevator lobby.
- If the clerk's office cannot fit in a single contiguous space on one floor, the public intake counters are recommended to be located on the entry level or the lowest level possible above the entry in the building stack.
- If there are significant space constraints, the IT department — typically located under the purview of the clerk's office — may be located separately.

Zones of Security

- Develop dedicated work zones for public interactions, interview, mediation or conferencing, and staff work areas.
- The public counters should be visible from staff workstations.

Flexibility

- If possible, collocate the district and bankruptcy clerk functions. These offices may share intake counters, conferencing spaces, and other amenities.
- Share conferencing space, filing, and other amenities with other court units.
- Plan for flexible use of space, especially for filing areas, which may include movable shelving units or lightweight loose furnishings.

District Clerk's Office AWS Renovation

James A. Byrne U.S. Courthouse | Philadelphia, Pennsylvania

Background

The James A. Byrne U.S. Courthouse, originally constructed in 1975, houses the Eastern District of Pennsylvania's district clerk's office. The district clerk's office occupies approximately 47,000 gross square feet primarily on two floors of the courthouse, and their office space is aging, inflexible, and functionally outdated. The existing space is composed of closed offices, overflowing storage spaces, scattered departmental office suites, and over 200 linear feet of public counters. The public is provided access to the district clerk's office at many locations, which makes the suite difficult to secure and provides a difficult wayfinding experience for the users. Figures 8.02 through 8.04 depict the existing office conditions, and Figure 8.05 depicts the existing floor plan of the district clerk's office suite.

Successes

In 2018, the district clerk's office studied the implications of consolidating and reconfiguring their space to achieve an open office environment. The preferred scheme, depicted in Figure 8.06, consolidates the vast majority of the district clerk office spaces onto one floor and provides one contiguous office suite for all staff members. The public corridors, which are directly north and west of the office suite, are incorporated into the floor plan to provide spatial efficiencies, a connection to the judges' elevator, and a secure work environment.

Space Consolidation and Release

- The preferred scheme consolidated all district clerk functions into one contiguous office suite.
- A total of 7,000 gross square feet will be vacated on two floors and released back to the General Services Administration (GSA).

Public Counters

- Public functions, such as the public counters and records exam area, will be consolidated in the upper right corner of the office suite, which limits public access to the suite and provides a better wayfinding experience.
- The public counters will be reduced from over 200 linear feet to 25 linear feet. The new counters will allow for clerk's office support functions such as financial payments, and jury services functions such as jury check-in, to occur at one location.
- Hoteling stations were incorporated into the preferred scheme so staff from multiple departments may have views to the counters.

Equitable Design

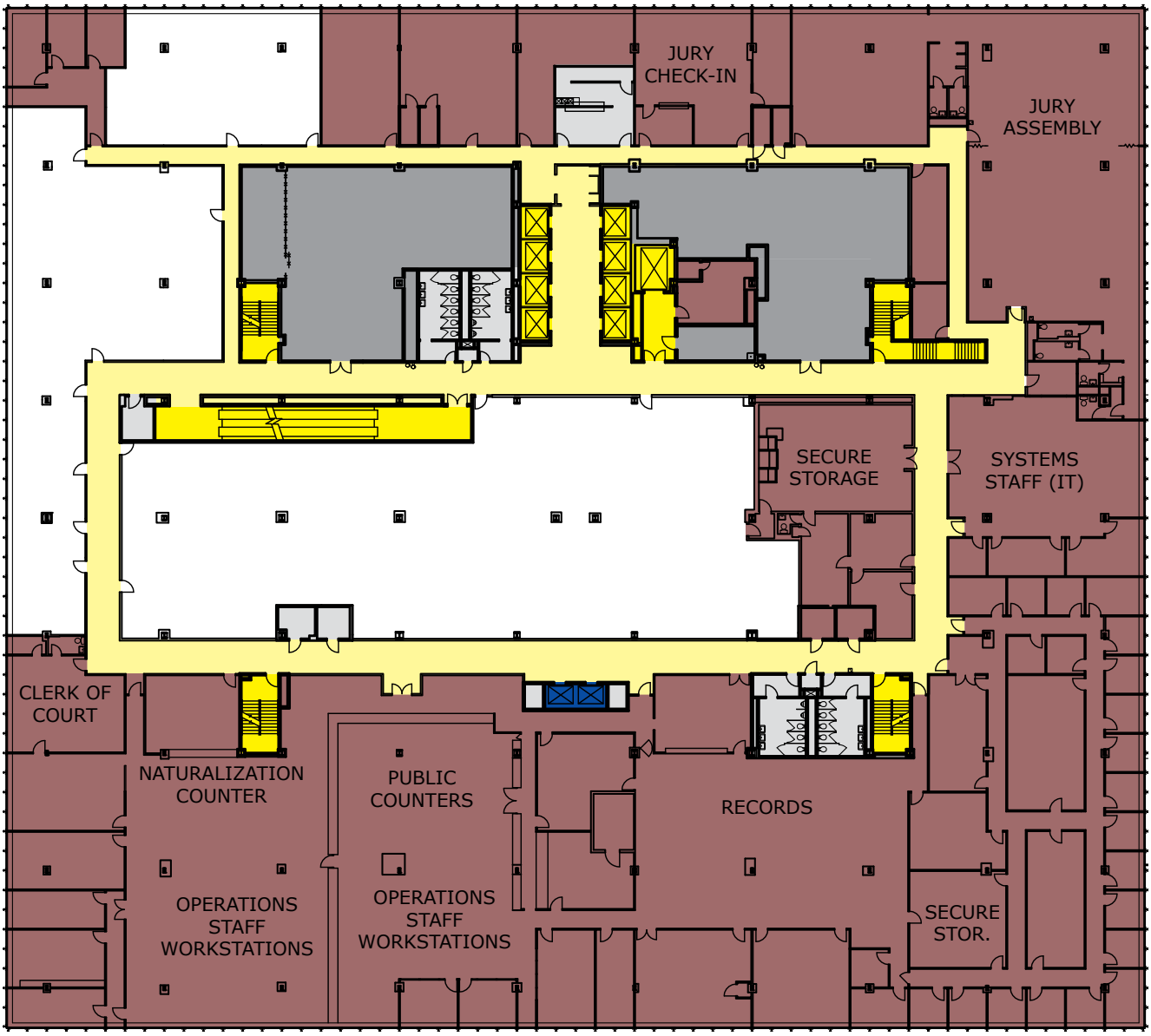
- Clerk's office staff members will be co-mingled in two professional neighborhoods allowing for staff to break out of their respective silos.
- Only three closed offices are included in the preferred scheme with the majority of staff occupying 48-square-foot workstations.
- Staff workstations will be located along the perimeter of the space to maximize access to natural light.
- A large service unit and work lounge will be strategically located together along the window wall to encourage chance encounters and collaboration.
- Common suite resources — such as conference spaces, filing space, getaway booths, and small pantries — will be distributed around the space.

Figure 8.02 — Existing Public Counters
Existing wrap-around public counters at the main District Clerk's Office suite

Figure 8.03 — Existing Office Space
Office suites were closed off from others in the court unit

Figure 8.04 — Existing Storage Areas
Storage areas were overflowing with supplies

Figure 8.05 — Existing Clerk's Office Floor Plan
Existing floor plan for the district clerk's office segmented into many office suites



COLOR LEGEND:

- CLERK'S OFFICE
- JUDICIAL VERT. CIRCULATION
- PUBLIC CIRCULATION
- PUBLIC VERT. CIRCULATION
- SERVICE SPACE
- MECHANICAL SPACE

Figure 8.06 — Preferred Conceptual Layout
Reconfigured district clerk's office floor plan utilizing AWS principles

COLOR LEGEND:

- COLLABORATION ZONES
- ENCLOSED OFFICES
- WORKSTATIONS (145 TOTAL + 8 HOTELING)
- FILES, STORAGE AND SUPPORT SPACES
- PUBLIC INTERACTION
- VACATED SPACE (+/- 3,000 USF THIS FLOOR)

Shared Clerk's Office AWS Renovation

Robert H. Jackson U.S. Courthouse | Buffalo, New York

Background

Originally, the U.S. District Court (USDC) and the U.S. Bankruptcy Court (USBC) occupied separate facilities. The USDC was located in the courthouse and the USBC was located in leased space. In 2018, the opportunity to combine the USDC and the USBC was presented because the USBC's lease was expiring. The Second Circuit and GSA analyzed how best to relocate the USBC from leased space to the Jackson U.S. Courthouse to reduce and consolidate space.

Successes

The USDC Clerk's Office and USBC Clerk's Office were collocated on the second floor of the Jackson U.S. Courthouse. Using AWS principles, the USDC clerk's space was reconfigured to house both clerk's office functions, and the leased space was permanently vacated. In the reconfiguration, closed offices were limited which allowed more natural light and views into the space. Figure 8.07 depicts the floor plan prior to the reconfiguration, and Figures 8.08 through 8.10 depict the office suite after the renovation.

Design

- Both clerks' offices utilize the public counter, breakroom, and the communal conferencing and support spaces.
- Harvesting natural light was a project priority since the existing district clerk's office contained closed offices along the perimeter windows. Workstations within the interior of the space received no natural light. The new layout helped to brighten and open up the space while also reducing the overall office footprint.
- In order to maximize natural light, the traditional office layout was flipped to place closed offices on the interior and open office workstations adjacent to exterior windows.
- Private offices were designed with fully glazed corridor walls to harvest natural light from the open work areas.

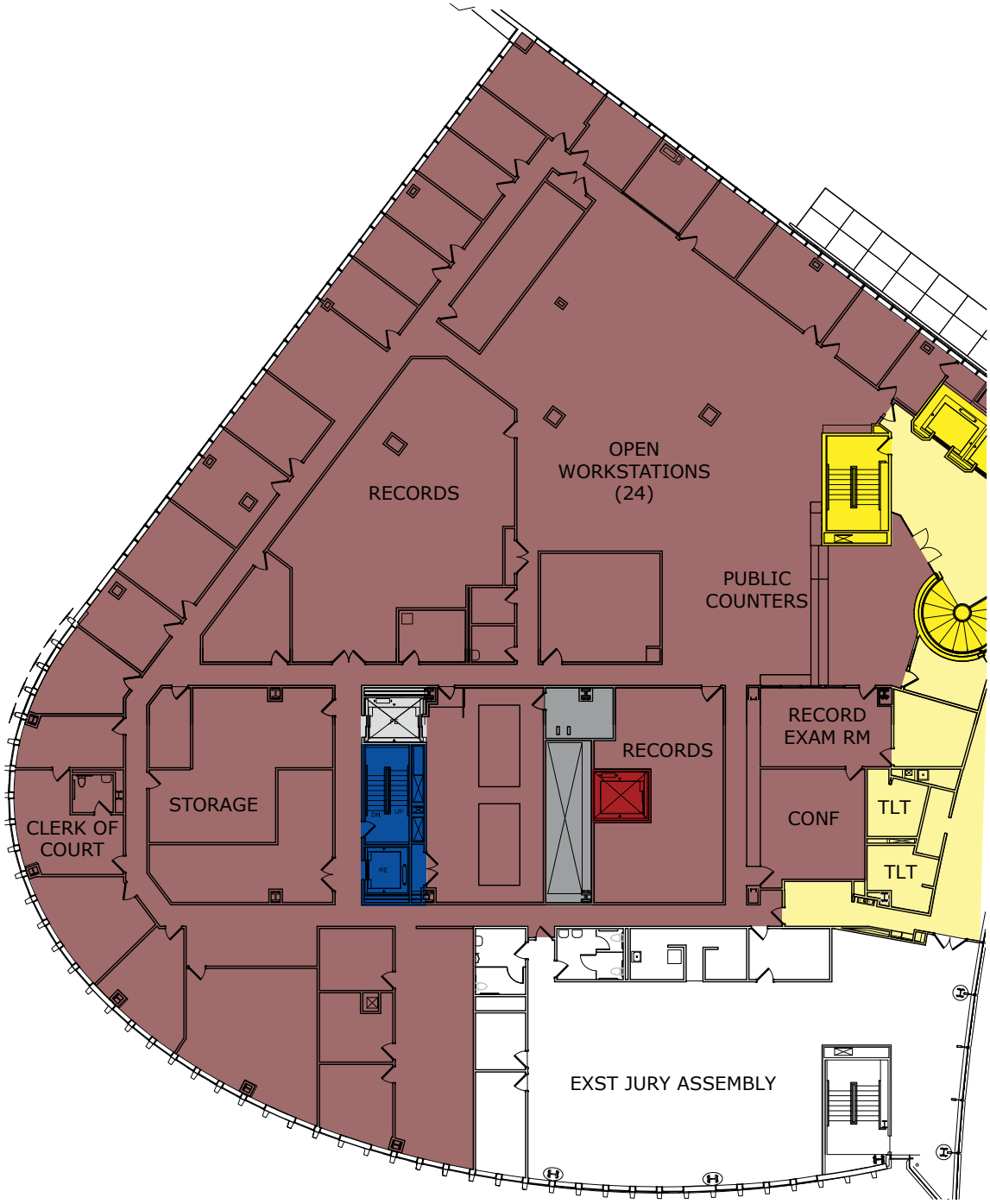
Collaboration

- Collaboration and open communication among the stakeholder groups — including GSA, the clerks' offices, and the Administrative Office of the U.S. Courts — ultimately made this project successful.
- The district clerk's office, bankruptcy clerk's office, circuit executive's office, GSA project manager (PM), and the design architect worked together to develop the scope of work and make decisions on how both offices could jointly operate in the same office suite.
- The GSA PM, Assistant Circuit Executive for Space and Facilities, and circuit architects formed a strong collaborative relationship which helped to ensure the users received the project they envisioned.

Leadership and Decision-Making

- The design was reviewed by the district clerk's office, bankruptcy clerk's office, and circuit architects during the design phase to ensure the proper design was achieved.
- Both clerks jointly led the project and created joint working teams to help collaborate and make decisions regarding joint operations, design, furniture, and finishes.
- When disagreements occurred between the different user groups, the two USDC and USBC clerks made the final decisions.

Figure 8.07 — Existing District Clerk's Office Floor Plan
Floor plan of the district clerk's office suite prior to the AWS renovation to include the bankruptcy clerk's staff



COLOR LEGEND:

- CLERK'S OFFICE
- JUDICIAL VERT. CIRCULATION
- SECURE VERT. CIRCULATION
- PUBLIC CIRCULATION
- PUBLIC VERT. CIRCULATION
- SERVICE SPACE
- MECHANICAL SPACE

Figure 8.08 — Shared District Clerk and Bankruptcy Clerk Office Suite Layout
AWS layout integrating district clerk and bankruptcy clerk staff and functions

COLOR LEGEND:

- COLLABORATION ZONES
- ENCLOSED OFFICES
- WORKSTATIONS
- FILES, STORAGE AND SUPPORT SPACES
- PUBLIC INTERACTION

Figure 8.09 — New Public Counters
Shared public counters featuring glass transaction windows

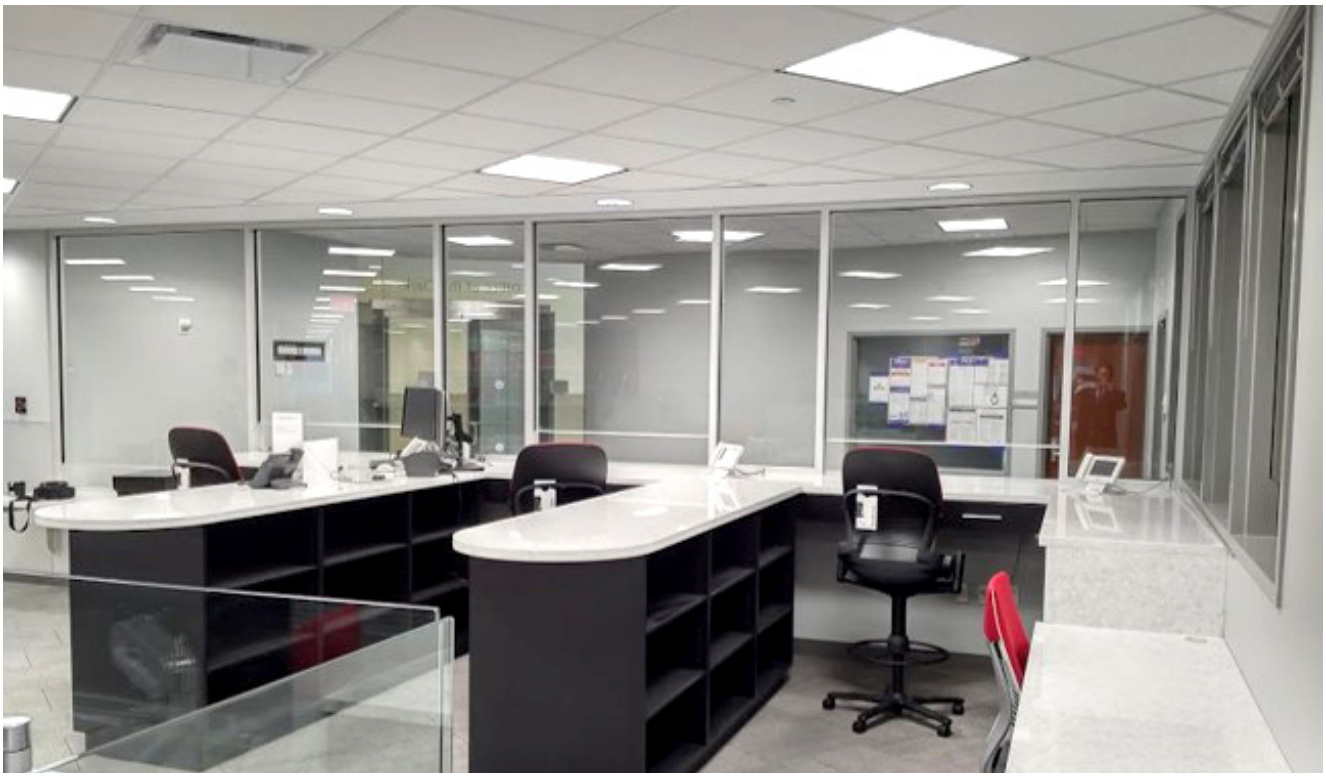


Figure 8.10 — New Office Environment
New workstations and private offices feature low workstation dividers and glass partitions

Pro Se Office and Clinic Case Study

Alfonse M. D'Amato U.S. Courthouse | Central Islip, New York

Background

The Federal Pro Se Legal Assistance Project is a free service offered by the City Bar Justice Center of the New York City Bar Association. Located in the D'Amato U.S. Courthouse, this project is a joint venture between the Eastern District of New York and the Maurice A. Deane School of Law at Hofstra University. It is one of the few pro se clinics in the country that partner with the federal courts. The project provides legal assistance to non-incarcerated pro se individuals with civil cases pending in federal court, as well as those contemplating federal litigation.

Successes

Space was allocated within the clerk's office space envelope for this service. To create the pro se office, three existing offices were reconfigured to provide public access to the new, three-room pro se office suite. The pro se suite includes a waiting room, conference room, and an office. Figure 8.11 depicts the floor plan of the pro se office suite before and after the renovation.

Design and Public Access

- The new pro se office suite provides clear and easy access for visitors including the public, attorneys, and law students who assist at the clinic.
- The entry is clearly visible from the clerk's office main public counter, and the layout of the clinic can allow for multiple functions to occur at the same time.
- The design minimally infringes on the existing clerk's office space, requiring the relocation of only two offices. Excess counter space and public functions were eliminated to allow for this relocation.
- Clerestory windows were incorporated into the design of the relocated offices to capture natural light from the adjacent corridor.

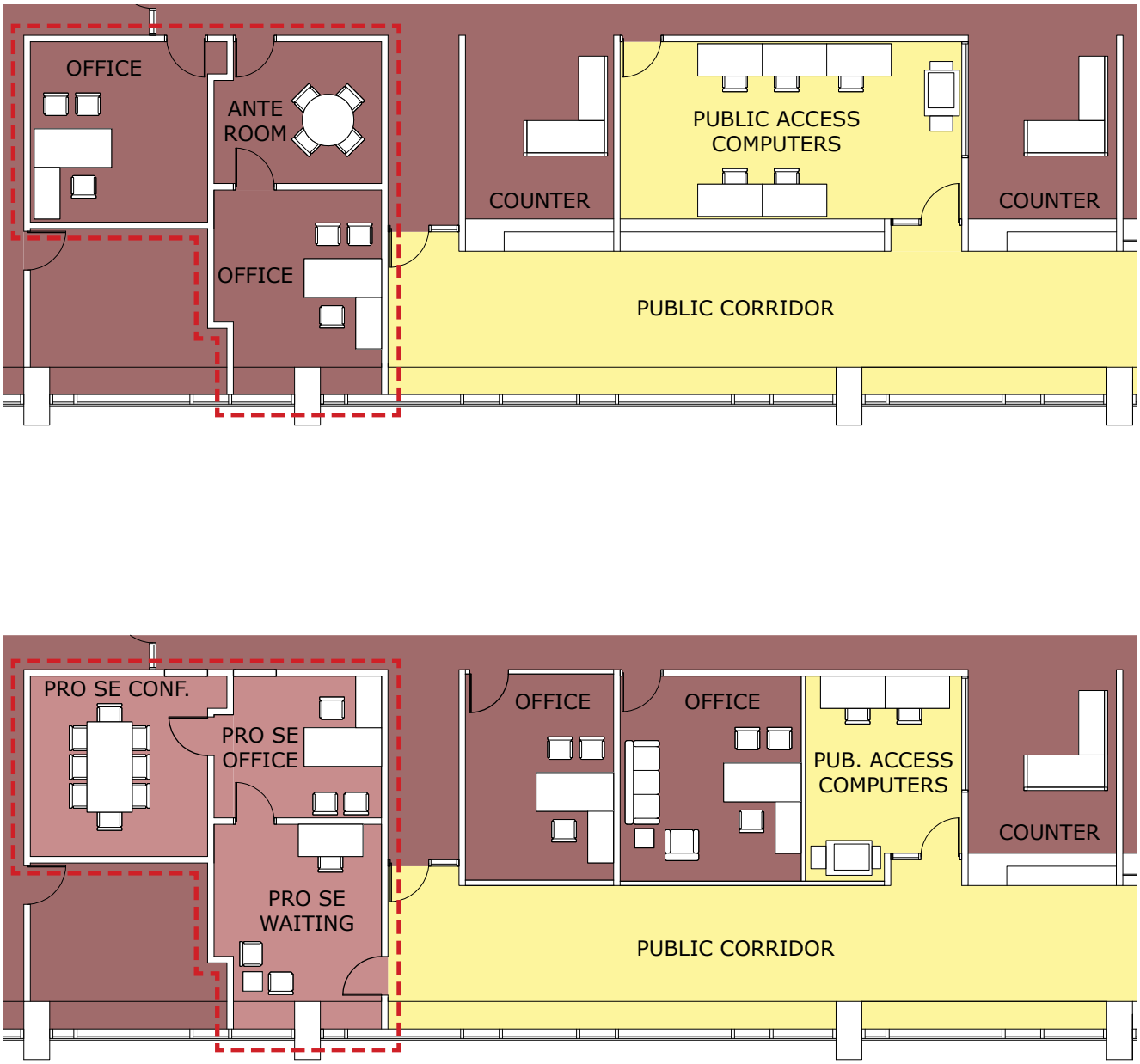
Stakeholder Engagement

- When working within an occupied space, it is necessary to get buy-in from all project stakeholders. For this project, it was critical that these stakeholders were brought into the project early in the design process.

Provided Services

- Limited legal assistance is offered by the Federal Pro Se Legal Assistance Project. Services offered are listed below:
  - Explaining federal court rules and procedures.
  - Providing brief legal counseling.
  - Advising about potential federal claims prior to filing suit.
  - Reviewing and editing draft pleadings and correspondence with the court.
  - Giving referrals to legal, governmental, and social services.

Figure 8.11 — Pro Se Office Floor Plan
Pro se offices before (top) and after (bottom) renovation and reconfiguration



Sandra Day O'Connor U.S. Courthouse
Phoenix, AZ

Image:
Richard Meier & Partners

09 PROBATION AND PRETRIAL SERVICES OFFICES

This chapter provides best practices related to the planning, design, and construction of probation and pretrial services offices.

Chapter Sections:

Introduction

The U.S. Probation and Pretrial Services System is the community corrections arm of the federal judiciary and plays a key role in the criminal justice process at both the pretrial and post-conviction stages. Each office provides a wide array of services to the court, including information gathering about defendants, drug testing, and supervision of persons released to the community. In addition, probation and pretrial offices provide valuable resources to those under supervision including substance abuse treatment, mental health treatment, and employment assistance.

Supporting Documents

The following reference documents provide additional information on the topics contained within this chapter:

- *United States Courts Design Guide,* Chapter 9, 2021
- USCourts.Gov – Probation and Pretrial Services Mission
- *United States Courts Courthouse Design Reference Manual, 2007*

Planning and Design Considerations

Although the probation and pretrial services offices are part of the same system, each office may function differently and offer different services to user groups. For instance, the pretrial services office may often write and submit reports to the Judiciary while the probation office may conduct the majority of their work in the field. Each office requires significant public access. In addition to public interactions, staff require spaces for quiet work, collaboration, and training. The public-facing nature of these court unit functions often makes them suitable candidates for implementing alternative workplace strategies (AWS) in their space planning approach. The following should be considered when planning for probation and pretrial services:

General Planning Considerations

- How do you currently engage with clients? Do you meet in private offices, conduct home visits, or meet in separate interview or conferencing spaces?
- If you meet in private offices, how does this practice affect the spatial layout and need for additional security provisions?
- Should probation and pretrial services be collocated, share an adjacency, or be spatially separated?
- Interview spaces should be provided according to the formula depicted in Table 9.01.

Table 9.01 — Formula for Probation Interview Rooms
The calculation for shared interview rooms is as follows in the table below

Probation Officers and POAs	Interview Rooms Allocated	Probation Officers and POAs	Interview Rooms Allocated
7 or fewer	1	46-65	8
8-11	2	66-85	9
12-15	3	86-105	10
16-20	4	106-155	11
21-25	5	156-205	12
26-35	6	206-255	13
36-45	7	256-305	14
		305 or more	15

Alternative Workplace Strategies

- Have you considered implementing AWS in your work areas?
- If you are considering AWS, have you discussed how these environments may impact the staff's work flow?
- Does your staff engage in alternate work schedules or other telework strategies? If so, could staff be accommodated in shared work areas to be utilized on alternate schedules?
- If AWS is desired, will your work space require white noise to mitigate or mask other noises?
- Have you taken your staff to tour examples of other probation and pretrial services offices that employ AWS?

Training Rooms and Multipurpose Spaces

- Does your court unit engage in on-site physical or other types of training? How frequently does each type of training occur?
- Does your staff conduct training or educational functions with the public? How frequently do these events occur?
- Consider developing a joint-use agreement with other tenants for use of a multipurpose space for larger training functions and public meetings.
- Consider planning interview spaces that can be accessed from the staff restricted zone as well as the public or semi-restricted zone to provide flexible use of space as conferencing or small group meeting rooms.
- Determine if physical and virtual training areas must be located within the court unit envelope.
- Consider locating mat rooms and other spaces for physical training on lower levels of the building and collocating them with an on-site fitness center. Provide the appropriate provisions for sound isolation at these spaces.
- Consider if defense tactics and MILO training will be conducted within your space envelope. Provide additional storage space within the approved space allocation for training equipment if possible. Space for these functions must be offset from within the space envelope of the court unit.

Electronic Location Monitoring (ELM) Storage and Issuance

- Does your staff maintain and issue ELM devices? What is your current process for issuing ELM devices? How many devices do you estimate having to store within your court unit?
- Consider planning for and utilizing an adjacent interview space that contains a window to secure ELM devices onto defendants or persons under supervision.

Urinalysis Labs and Toilet Rooms

- Does your court unit contain a lab function? Is any other testing conducted in the lab? If additional testing is conducted, how and where are samples collected from the public?
- Is your probation office lab function considered a regional lab?
- Does the lab function need to be collocated with other court unit functions?
- What are the procedures for public access to the collection facilities or urinalysis toilets?

Zones of Security

There are three separate security zones in probation and pretrial services offices: the public zone, semi-restricted zone, and restricted staff zone. These zones allow public access to certain functions while maintaining a secure office environment for the officers. A function from one zone may not occur in another. For instance, officers should be prohibited from meeting with defendants, or persons under supervision, in their private offices. Instead, officers should be provided and utilize shared interview rooms for such meetings.

The descriptions below detail defining aspects of each zone. Figure 9.01 depicts the different security zones on a conceptual floor plan.

Public Zone

- Spaces include: public counters, receptions, and waiting areas.
- The public has access to and moves freely through these spaces.
- Interactions with probation or pretrial services staff are at designated areas, such as public counters.

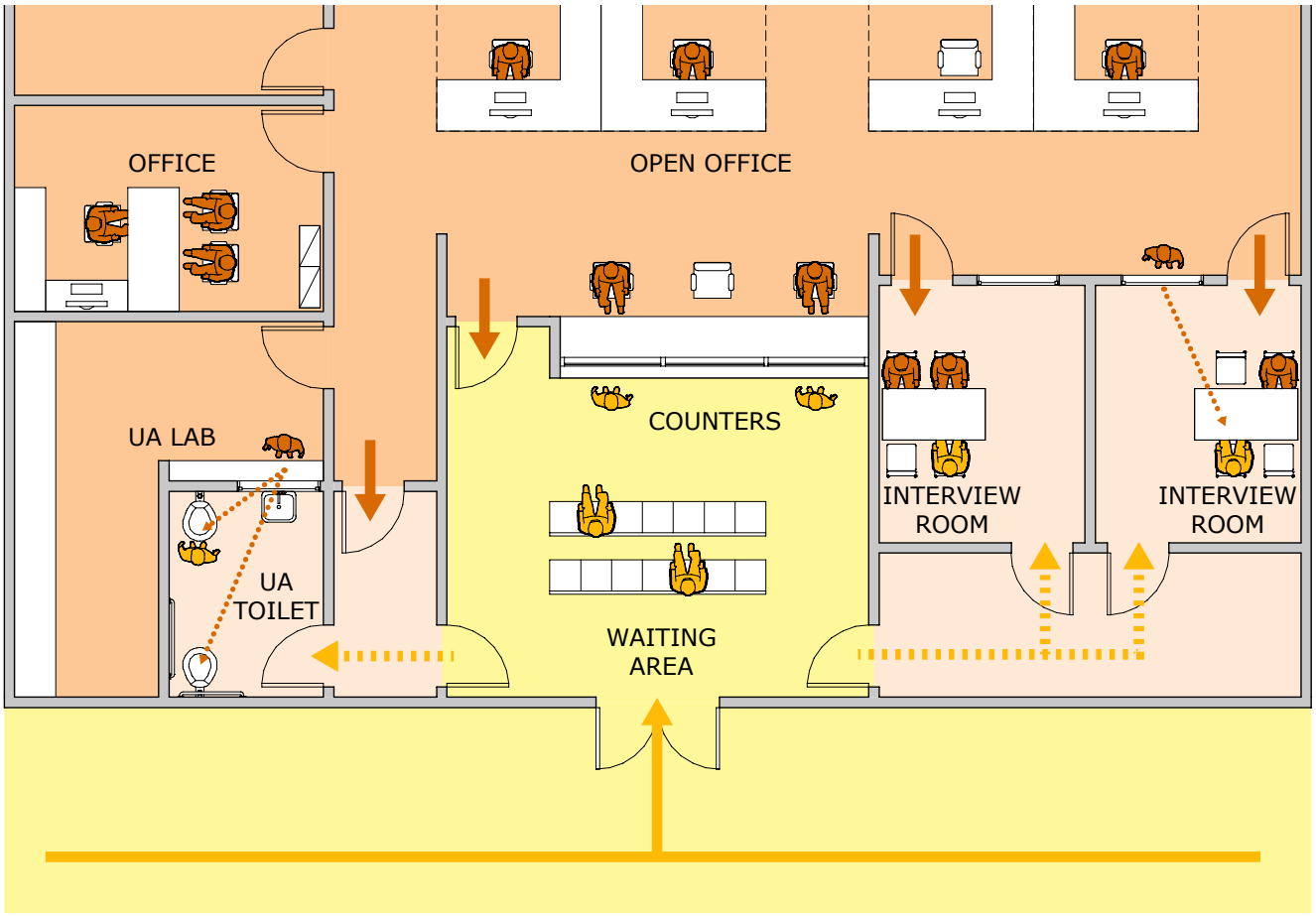
Semi-Restricted Zone

- Spaces include: urinalysis testing toilet room, interview rooms, and multipurpose rooms.
- Restricted access to these spaces is controlled by staff at the public counters.
- Used for interviews, giving urinalysis specimens, group meetings, and other functions.

Staff Restricted Zone

- Spaces include: staff offices, workstations, and other office support functions.
- Staff has access to and moves freely through these spaces.
- The public does not have access to these spaces and should not be given access to these spaces by staff.

Figure 9.01 — Zones of Security
Conceptual diagram of a probation or pretrial services office showing the security zones and related circulation paths



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Best Practices

Planning

Terminology

- In the probation office setting, offenders should be referred to as "persons under supervision" (PUS).

Location of Probation and Pretrial Services Offices

- In some locations, the probation and pretrial services offices are combined into one space.
- If the probation office or pretrial services office cannot each be in their own single contiguous space, locate the pretrial services office and all interview rooms on the entry level, or the lowest level possible above the entry in the building stack.
- Probation and pretrial services offices should be located close to the security screening station in the main lobby to limit the amount of space visitors must traverse.
- In leased facilities, it is recommended that probation and pretrial services offices be located on the second floor for security purposes.
- Locate probation and pretrial services offices near elevators to minimize the amount of space that visitors must traverse.
- Pretrial services offices should be directly adjacent to secure circulation within the courthouse.

Zones of Security

- Develop dedicated work zones for public interactions, interview or conferencing, and staff work areas.
- Locate interview rooms off of public space to maximize security.

Alternative Workplace Strategies

- Limit the number of private offices in favor of open workstations; however, offices should take client privacy into consideration when making this decision.
- Encourage working from home and utilize shared hoteling desks when staff must work from the office. Employ a reservation system to allow staff to reserve workstations.
- When not in use, interview rooms may be used as hoteling private offices or small shared conference rooms.
- Utilize furniture storage cabinets in workstations rather than built-in lockers to allow the open office to be more flexible.

Design

Virtual Receptionist

- Consider employing virtual check-in kiosks and eliminating permanently-staffed public counters to minimize the amount of lobby space required. Visitors may utilize the kiosk to call staff directly and schedule meetings.
- Figure 9.02 depicts an example of a virtual check-in kiosk.

Urinalysis Testing Toilet Rooms

- Provide a mirror at the back of the toilet fixture and on the side wall at a minimum to allow officers visibility while urine specimens are being provided.
- Provide a separate viewing room and discuss with stakeholders the best location for a pass-through window.
- Install two toilets in the urinalysis testing toilet room: one for male use and one for female use. Both toilets must meet Architectural Barriers Act Accessibility Standard (ABAAS) requirements and grab bars must be provided.

Safes and Evidence Vaults

- An evidence vault may be a true vault or heavy-duty filing cabinet within a space. If not built in, the vault may be paid for from the furniture budget.
- Pretrial services offices require a secure safe to hold passports.

Figure 9.02 — Virtual Receptionist Kiosk
Check-in kiosk that does not require a public counter

Armories and Gun Vaults

- Vaults may require additional structural support. Project teams should consider the weight of the vault.
- If providing a gun vault, the following should be provided:
  - Walls that span from deck to deck with metal mesh on one side of the partition.
  - Solid core doors with card readers to limit access to the space.
  - Individual hand gun storage lockers.
  - Table top clearing barrel.
  - Loose furniture to allow for spatial flexibility.
  - Infrastructure for future power and data needs.
  - Adequate air flow – one supply and one return.
  - Hard surface or anti-static flooring.
  - Separate space for gun cleaning.
  - Separate ammunition storage areas.

Clothing Storage

- An area for client clothing storage may be provided within the space envelope of the probation or pretrial services office. This space should be limited to 150 square feet. Space is not currently allocated within the *Design Guide* for this function.

Training Rooms

- Maximize conferencing space and collocate large conference rooms so they may serve as a large training suite.
- Consider eliminating unneeded spaces to offset conferencing needs and to stay within the total allotted space envelope.
- Training spaces should be accessible from the staff restricted zone and the public zone to maximize use of the space.

Leased Space

- Leased space requires enhanced security including, but not limited to, additional cameras, duress alarms, and intrusion detection systems (IDS).
- If offices are located in a leased space, consult with the U.S. Marshals Service (USMS) to see if court security officers (CSOs) are authorized for the location. If CSOs are not authorized, then plan for ballistic-rated transaction windows.
- Consider space for security screening equipment while planning probation or pretrial services offices in leased space.
- When planning for leased space, consider the surrounding community and ensure the office is not in proximity to a school or daycare facility. Leased space also requires ample parking.
- Access to public transportation for these offices should be considered.

Probation Office AWS Renovation Case Study

John C. Kluczynski Federal Building | Chicago, Illinois

Background

This project relocates the probation office from two floors in a privately-owned building to one floor in the Kluczynski Federal Building. The existing space consisted mainly of closed offices, very few training and interview rooms, and contained underutilized spaces. When the office's lease was set to expire, the probation office contacted the Administrative Office of the U.S. Courts to discuss if the Integrated Workplace Initiative could solve some of their existing space issues. The project was funded by the Judiciary Space Reduction program and the General Services Administration (GSA) Total Workplace Initiative.

Successes

At the start of the project, the majority of the probation officers were already working remotely. The biggest driver of the project was the release of existing space in exchange for training space, shared amenities, and enhanced security. Figures 9.03 through 9.05 depict the reconfigured office that incorporates AWS principles and different functional neighborhoods.

Space Consolidation and Release

- This project vacated over 31,521 usable square feet, reducing the probation office's footprint by 59 percent. This resulted in a reduction of $1.4 million in annual rent and security costs.
- Future personnel growth will be accommodated through increased mobility and remote working rather than increasing the amount of space required for the office.
- To help facilitate the release of space, the probation office completed a records management project which digitized, archived, and destroyed over 2 million sheets of paper. This project helped to decrease the amount of space required for the storage of hard-copy files in the probation office.

Office Location

- The probation office preferred to have a direct adjacency to other court units located in the federal courthouse, and as a result their new office suite is located in a federal building adjacent to the courthouse. These two buildings are connected by an underground tunnel.

Enhanced Security and Amenities

- The open office floor plan incorporates collaborative spaces, a variety of enclosed and open workspaces, enhanced training areas, interview rooms, mentoring spaces, and urinalysis testing spaces.
- The floor plan utilizes different security zones, which enhances the security of the office suite for the officers.
- Interview rooms and a urinalysis testing suite are accessed from the secure reception area and the office space is only accessible to office personnel.

Involvement of Staff in the Design Process

- The staff was involved in interviews, workshops, operations review, mobile office tours, furniture showrooms tours, and review meetings for the concept design and design development phases.
- The staff feedback from the furniture and technology mock-up was incorporated into the final design. Staff tested potential personal devices prior to implementation.

Figure 9.03 — Reconfigured Probation Office Layout
Floor plan depicting the reconfigured probation office with AWS principles incorporated

COLOR LEGEND:

- PROFESSIONAL NEIGHBORHOOD
- SUPPORT ZONES
- COLLABORATION NEIGHBORHOOD
- WORK CAFE/ INTERACTION NEIGHBORHOOD
- PUBLIC INTERACTION/ INTERVIEW NEIGHBORHOOD

Figure 9.04 — Open Office Workstations
The design incorporates workstations for most probation officers

Figure 9.05 — Conference Rooms
Small conference rooms are dispersed throughout the suite

Probation Office AWS Renovation Case Study

Sandra Day O'Connor U.S. Courthouse | Phoenix, Arizona

Background

The existing probation office was originally located in two facilities: one in the Sandra Day O'Connor U.S. Courthouse and another in the adjacent federal building. The existing probation office located in the courthouse is depicted in Figure 9.08.

This project relocated all probation office staff members onto the first floor of the courthouse and vacated all staff and support functions from the federal building. To prepare for this project, supervisors and staff were involved in another AWS project in Tucson and reviewed the design of the Chicago Probation Office AWS project. After reviewing the design of the Chicago Probation Office, the project team requested additional open workstations be incorporated into the design of their office.

Successes

The new AWS office supports mobility and incorporates an open office floor plan, collaborative spaces, interview rooms, and urinalysis operations. In addition, the office is nearly paperless. Figures 9.06, 9.07, and 9.09 depict the reconfigured office space and shared amenities.

Space Consolidation and Release

- This project vacated over 7,200 usable square feet in judiciary space and 6,550 usable square feet of GSA space. This space consolidation resulted in a reduction of $313,000 in annual rent and security costs.
- The new office design accommodates the projected 15-year growth by increasing officer mobility and telework. Growth will not be accommodated by space expansion.

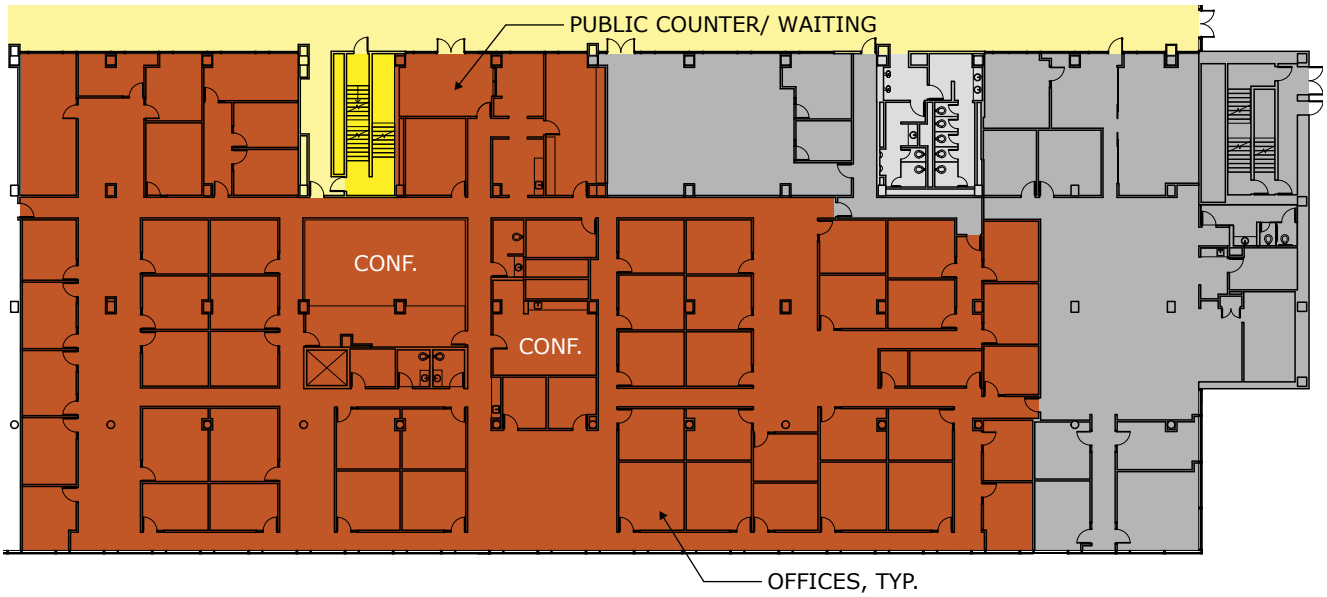
Enhanced Security and Amenities

- The new office suite utilizes different security zones and locates interview rooms and a urinalysis testing suite off of the secure reception through an adjoining vestibule. The office suite is only accessible to judiciary personnel.
- The design maximizes the space to support operations and training, including a defensive tactics room that may be available for use by the USMS.

Figure 9.06 — Interview Rooms
Ample secure interview spaces were incorporated into the design

Figure 9.07 — Work Cafe
A large work cafe provides for interaction between staff members

Figure 9.08 — Existing Probation Office Floor Plan
Probation office layout before construction consisting of mainly private offices



COLOR LEGEND:

- PROBATION AND PRETRIAL
- OTHER TENANTS
- SERVICE SPACE
- PUBLIC CIRCULATION
- PUBLIC VERT. CIRCULATION

Figure 9.09 — Reconfigured Probation Office Layout
Floor plan depicting the reconfigured probation office with AWS principles incorporated

COLOR LEGEND:

- PROFESSIONAL NEIGHBORHOOD
- SUPPORT ZONES
- COLLABORATION NEIGHBORHOOD
- WORK CAFE/ INTERACTION NEIGHBORHOOD
- PUBLIC INTERACTION/ INTERVIEW NEIGHBORHOOD

Urinalysis Toilet Case Study

Connecticut Financial Center | New Haven, Connecticut

Background

In 2015, the U.S. Bankruptcy Court released space on the 17th floor which created an opportunity to consolidate the probation office's space. The existing probation office lacked sufficient space for additional functions, such as a security screening area, interview rooms, and a urinalysis testing toilet room. By combining shared services, the court was able to increase the size of the probation office while still decreasing their overall rent footprint in the building. The renovation on the 17th floor created a shared IT data closet, shared security screening area, and shared conference rooms, in addition to a new urinalysis testing toilet.

Successes

The floor plate of the Connecticut Financial Center made it difficult to accommodate different AWS neighborhoods since the occupiable space on the floor is often narrow. To accommodate equal access to the new urinalysis space, the bulk of the probation space is concentrated near the public zone. A partial floor plan depicting the reconfigured public zone is depicted in Figure 9.12, and the new urinalysis space is depicted in Figures 9.10, 9.11, and 9.13.

Toilet Room Design

- Secure access to the toilet room from the waiting area is provided through a vestibule, which is monitored by a receptionist.
- In addition to a viewing area, the toilet room features a mirrored finish that spans 7 feet on every wall. This allows officers unlimited visual access to the testing process.
- A separate and secure interview room is directly adjacent to the toilet room, which allows those being interviewed direct access to the testing room.
- A small work area in the viewing room allows officers to fill out paper work prior to and after testing has taken place.

Figure 9.10 — Urinalysis Toilet Viewing Room
A large window allows for views into the toilet room

Figure 9.11 — Urinalysis Toilet Testing Room
Mirrored surfaces provide officers with unlimited viewing angles

Figure 9.12 — Context Plan
Context floor plan depicting the office security zones and circulation paths to the urinalysis testing toilet

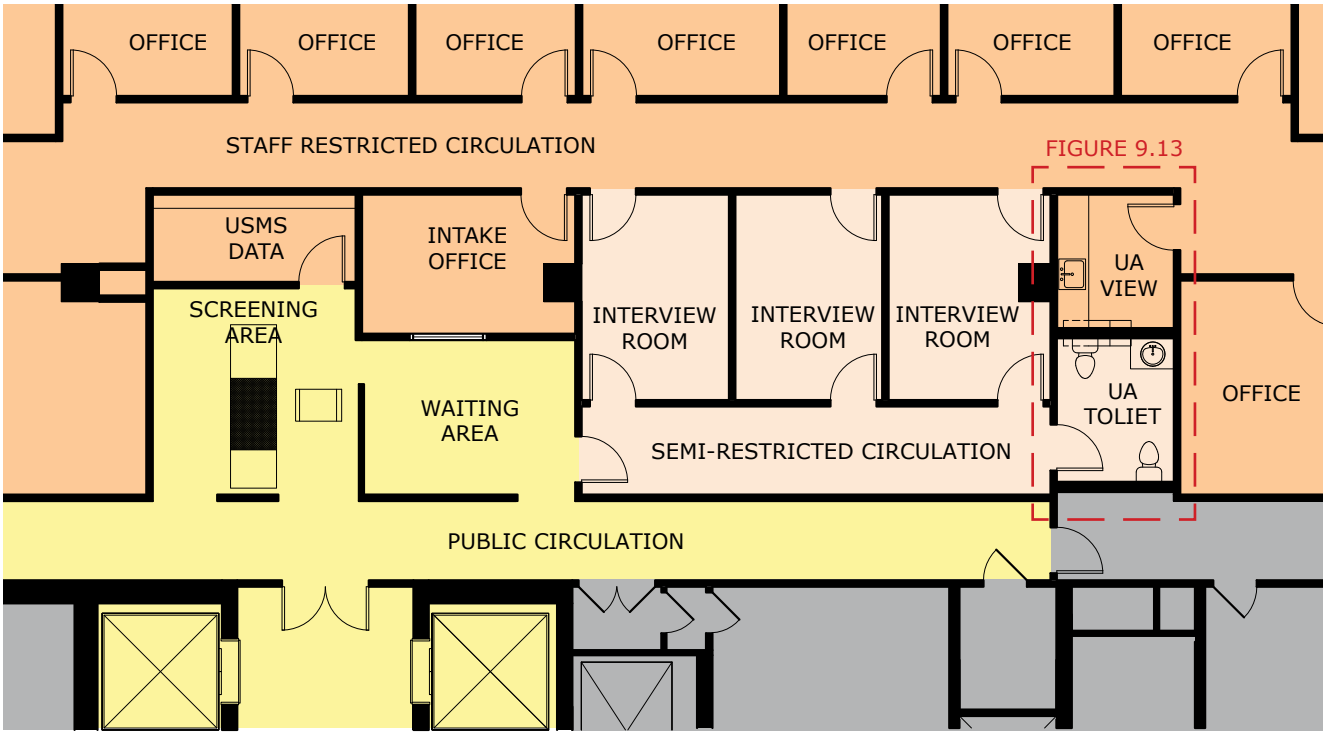
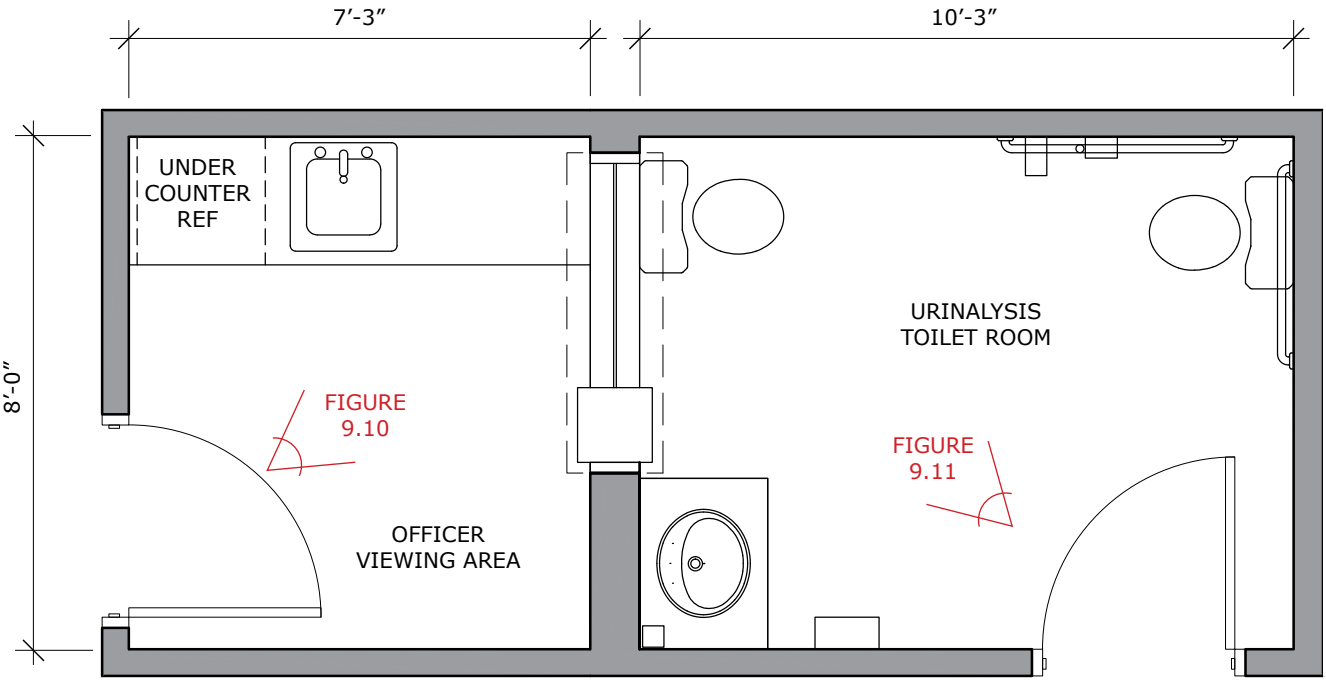


Figure 9.13 — Urinalysis Toilet Layout
Floor plan depicting the urinalysis toilet and viewing room



Urinalysis Toilet Case Study

U.S. District Courthouse | Burlington, Vermont

Background

The renovation of the urinalysis lab and toilet was part of a larger probation AWS project, which addressed inadequate space and program adjacency issues. The probation office, which was located on the fourth floor, was inefficient, undersized, and lacked interview rooms and a secure urinalysis toilet. The lack of a viewing room and layout of the existing urinalysis toilet forced officers to stand in the urinalysis toilet room with the probation client. In addition, the testing lab was a retrofitted breakroom that lacked the infrastructure to appropriately serve the probation office.

Successes

The renovation to the probation office included an updated urinalysis testing toilet and adjacent testing lab with viewing and pass-through window. Officers are now able to view the testing process from a safe and secure location. A partial floor plan depicting the reconfigured urinalysis testing suite is depicted in Figure 9.16, and the new urinalysis toilet and viewing room are depicted in Figures 9.14, 9.15, and 9.17.

Toilet Room Design

- Secure access to the toilet room from the waiting area is provided through a vestibule. Visitors must check-in through an intercom system, which allows probation officers to monitor those in the waiting room.
- In addition to a viewing area, the toilet room features a 7-foot-high mirrored finish on all wall surfaces. This finish allows officers unlimited visual access to the testing process.
- The urinalysis toilet room and its fixtures are ABAAS compliant.
- A separate and secure interview room is directly adjacent to the toilet room, which allows those being interviewed direct access to the testing room.

Figure 9.14 — Urinalysis Toilet Viewing Room
View of the specimen pass-through and officer viewing area

Figure 9.15 — Urinalysis Toilet Room
View of the window and specimen pass-through

Figure 9.16 — Context Plan
Context floor plan depicting the office security zones and circulation paths to the urinalysis testing toilet

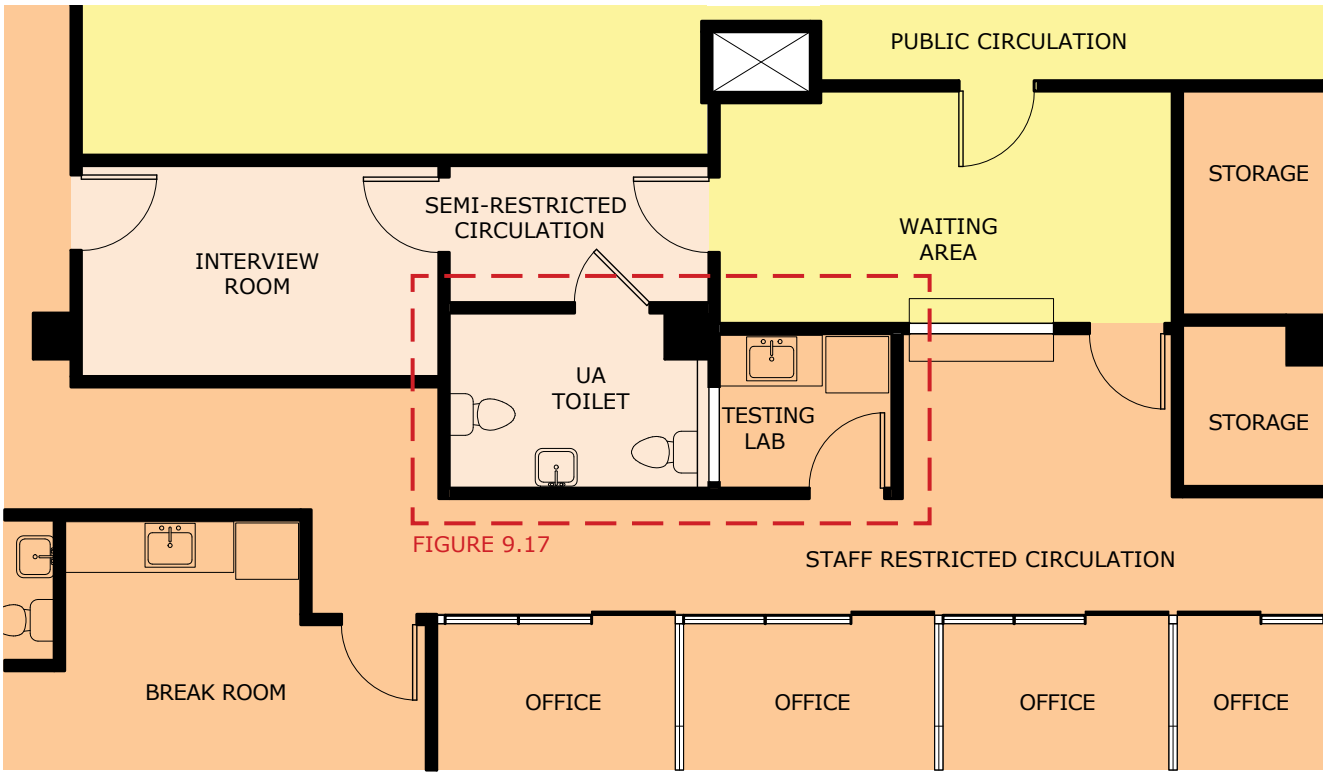
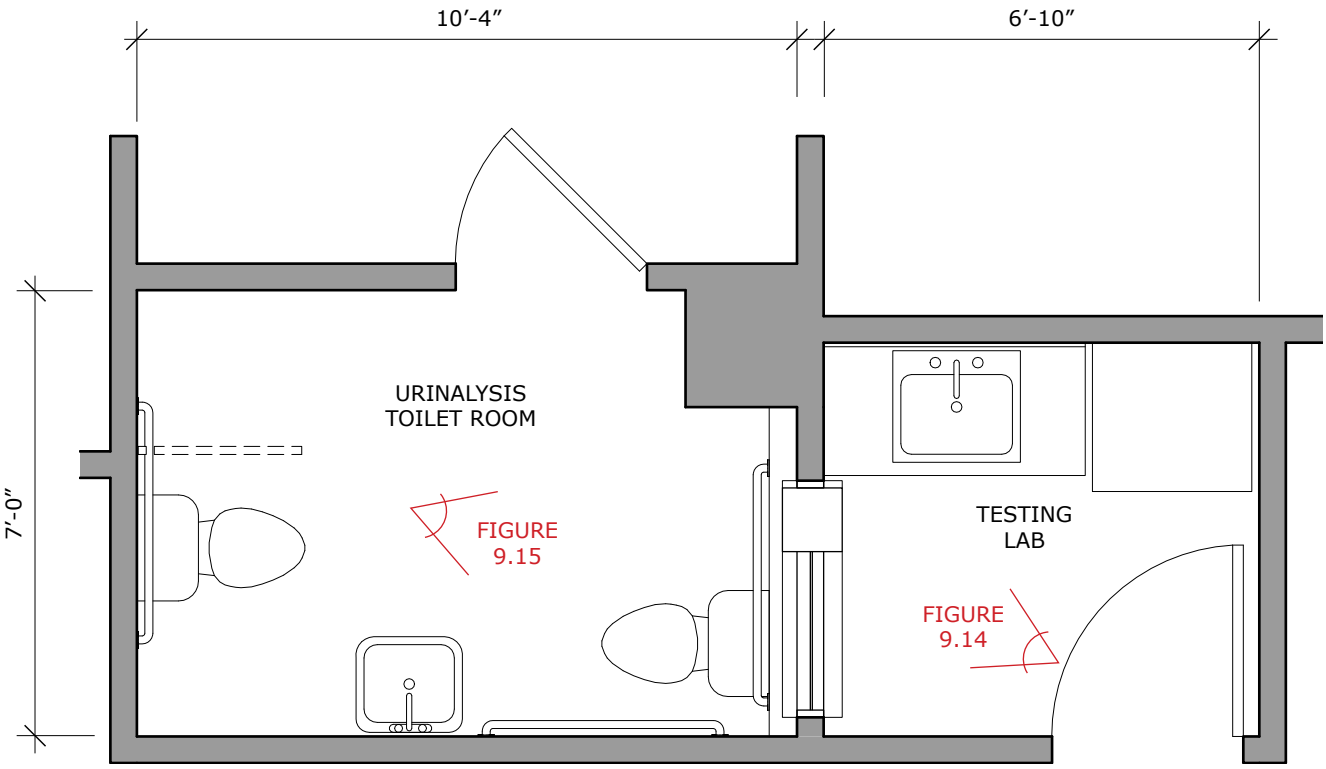


Figure 9.17 — Urinalysis Toilet Layout
Floor plan depicting the urinalysis toilet and viewing room



Carter/Keep U.S. Courthouse
San Diego, CA

Image:
Richard Meier & Partners Architects

10/11 OTHER COURT UNITS AND SHARED SUPPORT SPACES

This chapter provides best practices related to the planning, design, and construction of shared judges' conference rooms, fitness centers, central mail rooms, alternative dispute resolution (ADR) suites, and sensitive compartmentalized information facilities (SCIFs).

Chapter Sections:

Introduction

Courthouses contain additional specialized functions that support the mission of the Judiciary and provide necessary amenities to its staff. These support spaces should be designed to be as flexible as possible and shared among different judicial stakeholders since they may not be consistently utilized by a single court unit. Some of these functions are not allocated space in the *U.S. Courts Design Guide (Design Guide)* and may require court units to reconfigure their space envelopes to gain these functions.

Planning and design considerations for other court units addressed in the *Design Guide* are not given below; however, some best practices may be located within this chapter.

Supporting Documents

The following reference documents provide additional information on the topics contained within this chapter:

- *United States Courts Design Guide,* Chapters 10 and 11, 2021
- *United States Courts Courthouse Design Reference Manual,* 2007
- National Counterintelligence and Security Center, *Technical Specifications for Construction and Management of Sensitive Compartmented Information Facilities*, most current edition
- OPM, *Employee Health Services Handbook*, most current edition
- *American College of Sports Medicine's Health/Fitness Facility Standards and Guidelines*, most current edition

Planning and Design Considerations

SCIFs and SCIF-Ready Spaces

Sensitive compartmented information facilities (SCIFs) are becoming increasingly necessary in courthouses as litigation involving classified information are adjudicated. A SCIF is a dedicated, enclosed space accredited by the Executive Branch and used for the review, preparation, processing, discussion, and storage of an especially sensitive category of classified national security information. Depending on their use, SCIFs may be temporary or permanent facilities and vary in size and function. Every facility must be accredited and evaluated for vulnerabilities by the Director of National Intelligence (DNI) and through the Department of Justice (DOJ) based on prescribed specifications. To maintain its accreditation, a SCIF may only be used for its intended purpose by those holding the requisite security clearance. If a SCIF is modified or disassembled, it must be re-accredited by the DNI through DOJ.

The DOJ's Litigation Security Group (LSG) is a dedicated office composed of security specialists detailed to the courts pursuant to the Classified Information Procedures Act and its Revised Security Procedures Established by the Chief Justice of the United States for the Protection of Classified Information (18 USC App. III §9). LSG's security officers serve the courts in a neutral manner as classified information security officers (CISOs) outside the realm of litigating divisions of DOJ, and they function as liaisons to the DNI and as SCIF control officers as prescribed through Intelligence Community directives (ICD). LSG also issues the necessary security clearances for judicial staff requiring access to classified information.

It is difficult to predict when a case requiring use of a SCIF may be heard in each federal circuit or district court facility. Some courts may never hear classified cases while others may hear them regularly. Case frequency may be dependent on such factors as urban density and proximity to military, sensitive government facilities, or intelligence agencies. Judiciary policy allows for construction of these facilities, but space for SCIFs is not currently allocated within the *Design Guide*. A court unit that desires this function may reconfigure their existing space envelope to accommodate the requirement. Modification to an existing space after construction can take a significant amount of time and resources. Early consultation with LSG regarding the potential for SCIF or SCIF-ready space is recommended. Additionally, new courthouses are not budgeted for SCIF or SCIF-ready spaces; any SCIF infrastructure would be paid by a reimbursable work authorization.

When determining if a SCIF is required to be constructed within a courthouse, the following should be considered:

- How often is there a need to review, prepare, or store classified materials?
- If the need to review, process, or store classified materials arose, would it be a hardship to stakeholders to visit another courthouse or federal building that contained a SCIF?
- What is the volume of people and information that would require access to the SCIF?
- Is it likely that cleared defense counsel would require SCIF workspace in addition to the court?
- Consider locating the space off of a public circulation path to enhance usability by other cleared users outside of the Judiciary.

SCIF Construction

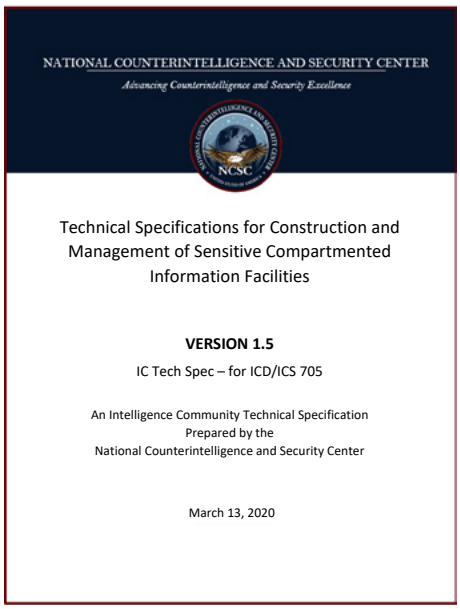
Technical specifications for SCIF and SCIF-ready spaces are prescribed by the *National Counterintelligence and Security Center ICD/ICS 705*. The cover of this document is shown in Figure 10/11.01. This document sets forth the physical and technical security specifications for SCIFs. This document is publicly available and is updated as construction, accreditation, and best practices change. SCIFs require specific HVAC configuration; extensive wall, ceiling, and door construction and sound-proofing; specific alarm, utilities, and telecommunications infrastructure; and distinctive locking mechanisms and hardware. Although hardware may be different than the standard facility door, the hardware may be designed to fit into the overall design intent.

Prior to engaging in SCIF design or construction, engage an LSG representative to discuss the following:

- How will the SCIF be used?
- Will the SCIF be constructed in a new or existing facility?
- Is SCIF-ready space available in a limited-access corridor?
- Will the space accommodate safe storage, workspace, and classified on-camera meetings or proceedings?
- Are there certain architectural design limitations?
- Will security-cleared court staff maintain and secure the facility?

Figure 10/11.01 — ISD/ICS 705 Cover

The cover of the document containing SCIF requirements



SCIF-Ready Spaces

A SCIF-ready space is a room enclosure that is physically constructed according to ICD/ICS 705 standards but is missing several security features that are necessary for SCIF accreditation. Infrastructure for these features are provided by the LSG so the space can be easily converted and accredited as a SCIF when case demand necessitates. SCIF-ready spaces allow the Judiciary to utilize the space while the function is not needed, which creates flexibility within the space layout.

If a federal circuit or courthouse rarely hears cases that require a SCIF, it is recommended that a SCIF-ready space is incorporated into the court's space envelope. These enclosed rooms should consider the following:

- The minimum space allocation should be between 150–250 square feet.
- Locate the space off a public circulation path to enhance usability by other cleared users outside of the Judiciary.
- Wall, ceiling, and floor elements should be constructed to meet ICD/ICS 705 requirements unless determined otherwise by a DOJ accrediting official. These elements must be monitored throughout construction by the DOJ accrediting official.
- Radio frequency shielding may be required to achieve compliance.
- Select interior spaces and adjacencies that limit openings such as windows, unnecessary doors, and penetrations into the enclosure envelope.
- Provide infrastructure to easily modify the space at fit-out and accreditation to accommodate building systems and technology.

Shared Judges' Dining Room

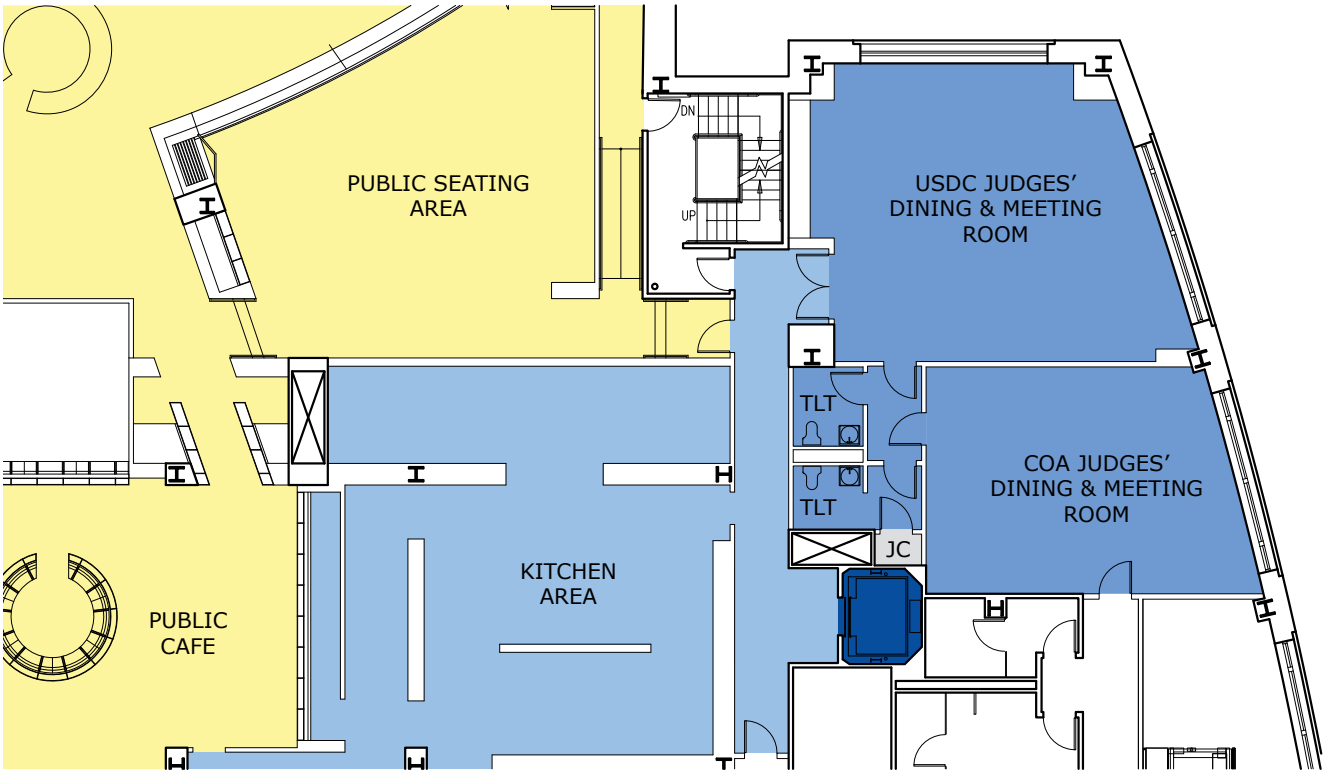
A shared judges' dining room is typically provided only when the courthouse contains a public cafeteria. As per the *Design Guide*, this space should be located adjacent to the cafeteria and near restrooms. The dining room should not be publicly accessible and should be located off restricted circulation.

When designing a shared judges' dining room, the following should be considered:

- It is recommended that this space also be utilized as a conference space. The appropriate audiovisual and technology infrastructure should be provided to allow for video calls and presentations.
- Furniture should be easily moved and reconfigured by one person.
- A counter or kitchenette area should be provided to allow judges to heat food or be used as a serving counter for catered events.

Figure 10/11.02 shows how judges' dining rooms have been incorporated at the John Joseph Moakley Courthouse in Boston, Mass. This courthouse contains two dining rooms: one for the District Court and one for the Court of Appeals. Shared dining rooms are located with a direct adjacency to the public cafeteria and food preparation areas, but these dining rooms are only accessible from restricted circulation. The shared judges' dining rooms share two single-user restrooms located off of an adjoining vestibule.

Figure 10/11.02 — Judges' Shared Dining Rooms
Shared dining rooms are adjacent to the public cafeteria and private restrooms.



COLOR LEGEND:

- PUBLIC SPACE/ CIRCULATION
- RESTRICTED SPACE/ CIRCULATION
- JUDICIAL SPACE
- JUDICIAL VERTICAL CIRCULATION

Figure 10/11.03 — News Media Room Waiting
News media room is located in the clerk's space

Figure 10/11.04 — News Media Room
News media room that may also function as a conference room

News Media Room

The news media room is heavily utilized by some jurisdictions and rarely used by others. If the news media room is not used frequently, consider locating this space off a public corridor and utilizing it as a judiciary multi-purpose room. This space should be easily accessible from the public lobby. Figures 10/11.03 and 10/11.04 depict the news media room at the Mobile U.S. District Courthouse, which is located near the clerk's office and features a glass wall. This room is used frequently as a multipurpose meeting space for many court units.

Alternative Dispute Resolution (ADR) Suites

ADR is the process of settling disputes or claims outside of the courtroom through the use of mediation or arbitration. This method of settling claims may be more expedient than conducting a traditional hearing or trial. Typically, magistrate judges preside over these proceedings.

If these proceedings cannot be held in an unoccupied courtroom, the following should be considered:

- Locate the ADR room or suite adjacent to the security screening area.
- It is recommended that at least one publicly-accessible conference room be designated as an ADR room.
- A suite of differently-sized, publicly-accessible conference rooms may be necessary for more elaborate proceedings.
- Typically, an ADR suite may be composed of two, six- to eight-person conference rooms and one, 10- to 12-person conference room. The smaller conference rooms may be used as break-out spaces for the individual parties while the larger conference room allows the parties to come together.
- When constructing ADR suites, the acoustics of the suite and surrounding space should be considered.

Figure 10/11.05 and Figure 10/11.06 show an example of how court space and jury deliberation rooms have been utilized as an ADR suite when court is not in session at the U.S. District Courthouse in Mobile, Ala.

Fitness Centers

Fitness centers may be constructed by reconfiguring space within the space envelope to accommodate this function including appropriate shower facilities. Fitness centers cannot increase the total programmed square footage for the Judiciary. It is encouraged to share fitness facilities with other building tenants; however, per U.S. Marshals Service (USMS) policy, the Judiciary should not share facilities with the USMS. Work with the General Services Administration (GSA) and local stakeholders to evaluate fitness center needs and entertain shared facility opportunities.

Consider utilizing the *American College of Sports Medicine's Health/Fitness Facility Standards and Guidelines* to determine fitness center guidelines. The Judiciary is responsible for all build-out and maintenance costs including the exercise equipment, lockers, and any nonstandard interior finishes. Consider the following when planning for a fitness facility:

- Will the facility be shared by multiple court units or other tenants?
- What type of activities will be offered in the facility, e.g., free weights, strength training machines, cardio equipment, multi-purpose/ classroom space, etc.?
- Will shower and changing facilities be provided? Will they be collocated in the fitness facility or available elsewhere within the building?

Location

- Locate the facility on a lower level or basement location.
- Consider adjacent tenants and court units and the implications of sound, vibration, and traffic in the fitness center.
- Fitness centers often require higher ceiling heights to accommodate equipment use.

Building Systems

- Consider types of activities and quantity of people utilizing the space when determining systems.

Technology

- Provide appropriate infrastructure for cable television connections to cardio equipment.
- Provide infrastructure for sound and amplification systems.

Materials

- Select materials that are durable, provide acoustical enhancement, are appropriate for the facility uses, and can be easily disinfected.

Lockers, Showers, and Changing Facilities

- Consider incorporating gender-neutral changing and shower facilities within the space.

Figure 10/11.05 — Magistrate Jury and Visiting Judge Functions
When court is in session, two rooms are utilized as visiting judges' offices and a magistrate jury deliberation room

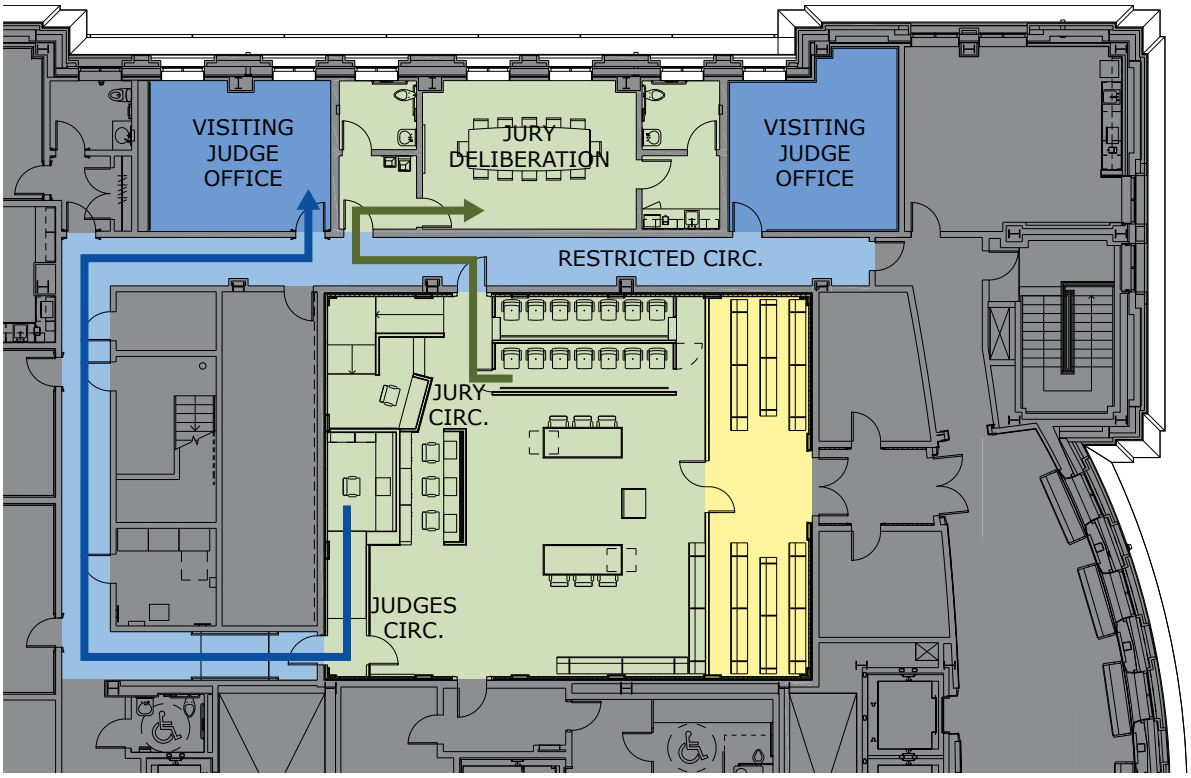
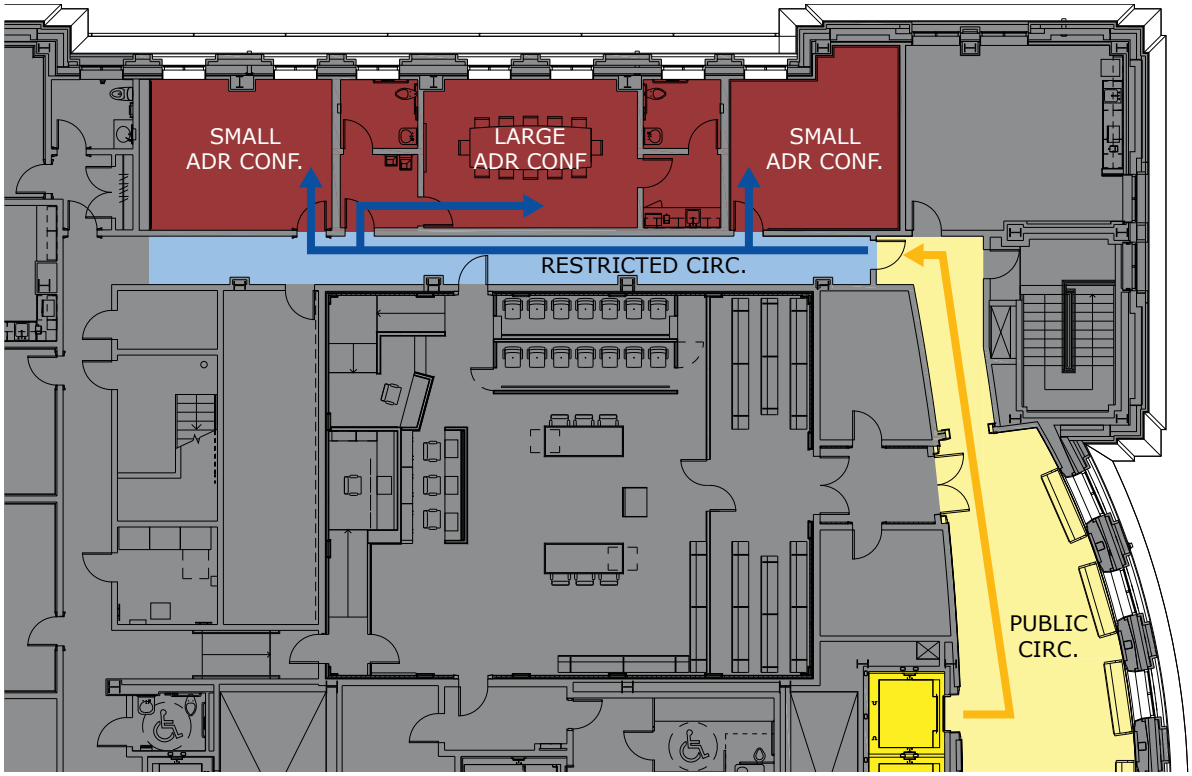


Figure 10/11.06 — ADR Functions
When court is not in session, the three rooms function as an ADR suite with two small and one large ADR conference rooms



Best Practices

Other Court Units

- Consider utilizing alternative workplace strategies for the Office of the Circuit Executive, Office of the Bankruptcy Appellate Panel Clerk, Office of the Senior Staff Attorney, Office of the Pre-argument/Conference Attorney, Office of the District Court Executive, Office of the Bankruptcy Administrator, and Office of the Federal Public Defender's trial preparation suite. These principles will ensure that the offices are planned with the goal to free up space for alternative uses.
- Consider utilizing the grand jury hearing room for bankruptcy administration hearings, if they are not assigned their own space.
- The creditor meeting room (341) may be located directly next to a grand jury hearing room, which may provide overflow space.
- The Office of the Federal Public Defender should not be located near U.S. Attorney's Office (USAO) space, but should still be publicly accessible.

SCIF and SCIF-Ready Spaces

- Engage LSG security officers early to evaluate SCIF needs, review existing conditions, and provide guidance on minimum accreditation requirements.

Fitness Centers

- Facilitate agreements to consolidate and share one fitness facility among building tenants when possible; however, facilities should not be shared with the USMS in order to comply with USMS policy.
- If the fitness facility contains multipurpose space, consider utilizing it for physical trainings conducted by stakeholders such as the probation office.
- Fitness centers should not be constructed over, below, or adjacent to courtrooms or judicial chambers.

Central Mail Facilities

- Mail opening should occur within the central mail room under a negative pressure hood and then be distributed to the appropriate court units.
- If a central mail room is not available or court units desire a mail opening space within their space envelope due to the sensitivity of the mail, court units may purchase a negative pressure fume hood for their individual office suite. Space is not currently allocated within the *Design Guide* for this function.

SCIF-Ready Space Case Study

U.S. District Courthouse | Austin, Texas

Background

In 2011, the Austin U.S. District Courthouse project judge contacted the chief of the LSG to view the construction and assess plans for a new SCIF-ready space. The judge was introduced to SCIFs and SCIF-ready spaces during a conference in which these spaces were recommended to be included in new courthouse projects. It was requested that a CISO travel to Austin and work closely with the Central Intelligence Agency to ensure that the space would be accredited upon activation. At the time, only two judges presided in Austin but cases were being heard quickly in a rocket docket format. This practice meant that any delay in construction would unacceptably stall litigation.

Successes

Based on LSG recommendations, a SCIF-ready space was included in the courthouse project. The final build-out became the model for SCIF-ready spaces in other new builds.

DOJ Project Engagement

- Early contact with the LSG meant that the appropriate SCIF requirements could be incorporated directly into the construction documents.
- The CISO and project architect collaborated and extensively coordinated to ensure accreditation would be successful.

SCIF-Ready Space Design

- The SCIF-ready space provides flexibility to the Judiciary that a permanent SCIF does not provide. The SCIF-ready space may be brought online should a case before the court warrant it. In the meantime, the space is available to be utilized for other functions.
- The size of the SCIF-ready space is the size of a law clerk's office, which is ideal for courthouses that do not have extensive national security dockets. When not in use, the space is utilized as a law clerk's office in a visiting judge's chambers.
- The SCIF-ready space design includes slab-to-slab constructed walls, capped piping, air ducts with inspection ports, door sweeps, X09 door lock, and drywall for sound attenuation. Space within the partition is carved out for an alarm panel and a scramble pad.

SCIF-Ready Space Case Study

U.S. District Courthouse | Huntsville, Alabama

Background

During the planning of a new U.S. District Courthouse, the Judiciary contacted the LSG to discuss permanent solutions for the storage of classified material and requirements for spaces in which classified conversations may occur. The Judiciary and LSG decided to incorporate a SCIF-ready shell into the design documents since future classified litigation may occur often at this location. After initial conversations between the LSG and the Judiciary, three space options were identified as potential future SCIF locations.

Successes

Early discussions between the Judiciary's project team and LSG proved beneficial when discussing various options for the SCIF shell location. The LSG was provided initial building plans ahead of choosing the final SCIF shell location, which allowed the LSG to recommend locations that provided better overall security and future cost savings.

DOJ Project Engagement

- Early contact with the LSG meant that the Judiciary could better understand the requirements and cost of building SCIF-ready shell spaces. The LSG was able to answer many of the Judiciary's questions regarding square footages and adjacent functions, which informed the location of the SCIF-ready space and the design of the courthouse.
- The LSG was granted access to initial conceptual design plans and provided feedback on pros and cons of each potential location.
- The LSG was also involved with the design of the cell blocks since defendants would be required to utilize the SCIF-ready spaces.
- The open communication ultimately prevented confusion and answered concerns from project stakeholders early on. The Judiciary and LSG continue to be close partners on this project.

SCIF Case Study

Everett McKinley Dirksen U.S. Courthouse | Chicago, Illinois

Background

When a court becomes more active in hearing national security cases, consideration should be given to construct a dedicated SCIF space. Prior to the completion of this project, the USAO maintained a SCIF in the Dirksen Courthouse which stored classified material on the Judiciary's behalf. Although convenient for the Judiciary, the USAO should not typically engage in this practice, and it became evident that the Judiciary required its own classified storage space. This project included the retrofit and construction of two SCIFs in the Dirksen Courthouse: one for use by the Judiciary and the other for defense counsel.

Successes

The SCIFs are located directly adjacent to one another. They are often used for classified proceedings and as classified work and storage space.

SCIF Design

- Both SCIFs are large and contain both conference tables and individual workstations.
- The defense counsel SCIF is roughly the size of a jury room and contains multiple workstations. Judges presiding over classified cases find the size of this SCIF to be adequate for classified hearings.
- Careful selection of doors and hardware ensured the SCIFs' entries would visually mimic the rest of the courthouse.

Stakeholder Engagement

- The GSA, CISO, USMS, and Judiciary worked diligently together to bring the SCIFs online, and the project's success is attributed to this partnership.

Hazardous Materials

- During any renovation, project teams should be cautious of hazardous materials. The existence of asbestos in the ceiling of the courthouse made it difficult to run conduit for alarms and secure phone lines; however this challenge was overcome by identifying this issue early in the design process.

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Fitness Center Case Study

James M. Carter & Judith N. Keep U.S. Courthouse | San Diego, California

Background

The Carter/Keep Fitness Center is located in the basement of the courthouse and classified as joint use space by the original building's space assignment plan. Both the Judiciary and GSA pay service fees to maintain the space; however, other building tenants, such as the USMS and Internal Revenue Service, are allowed to use the space. The Judiciary will infrequently pay to replace broken machines and equipment, but GSA is responsible for daily maintenance of the space. The local court has used its funding to provide the fitness equipment.

Successes

The fitness center serves roughly 20 people per day, which may be a mix of judges, judiciary staff, and GSA staff. Figures 10/11.07 through 10/11.10 depict the fitness center design and layout.

Fitness Center Design

- The fitness center is roughly 1,200 usable square feet and contains treadmills, stationary bicycles, and weight-training equipment.
- Treadmills and stationary bicycles are located around the perimeter to take advantage of the views into the light well.
- The locker rooms are designed to include showers, toilets, and a changing area. Built-in lockers provide temporary storage of belongings.
- The fitness center is located in the basement; as a result, noise and vibrations minimally impact adjacent spaces. Courtrooms, judicial chambers, and other noise-sensitive areas are located far away from the fitness center.
- A light well is incorporated into the design, which brings natural light into the space.

Adjacency

- The fitness center is accessible from the judges' elevator and an underground tunnel, which connects the Keep Courthouse to the nearby Schwartz Courthouse. The judges and staff in the Schwartz Courthouse are also allowed to utilize this fitness center.
- The fitness center is adjacent to the USMS fitness center and locker rooms. This practice collocates similar functions and reduces the potential impact on more sensitive areas located in the building.

Figure 10/11.07 — Equipment
Weight-training equipment located in the middle of the space

Figure 10/11.08 — Fitness Center Floor Plan
Floor plan depicting the fitness center and locker room amenities

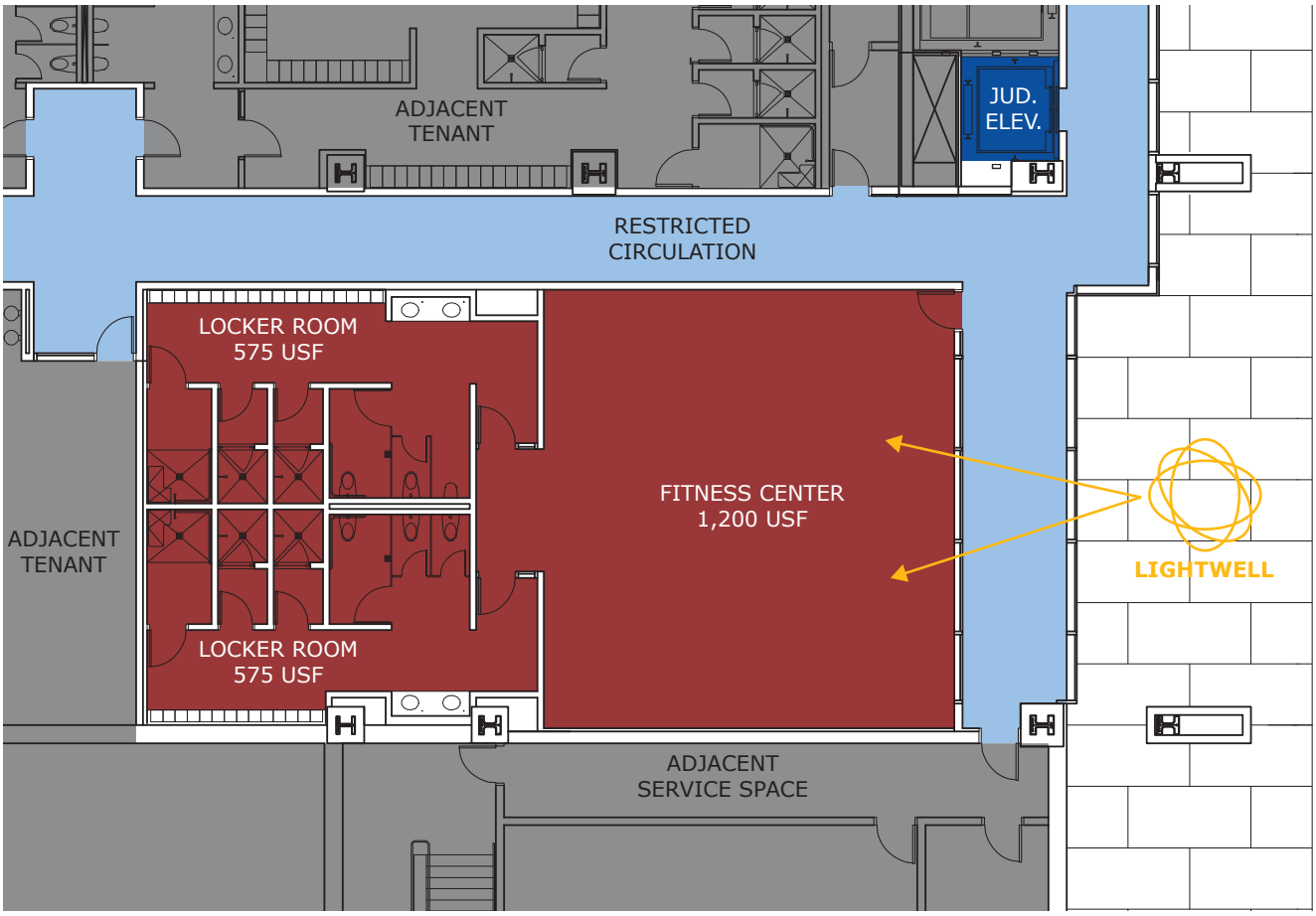


Figure 10/11.09 — Equipment
View of the treadmills and stationary bicycles

Figure 10/11.10 — Locker Room
Built-in lockers and benches at the changing areas

John C. Kluczynski Federal Building | Chicago, IL

Image: STL Architects

12/13 TENANT IMPROVEMENTS, FURNISHINGS, AND SIGNAGE

This chapter provides best practices related to tenant improvements, furnishings, and signage.

Chapter Sections:

Introduction

Tenant improvements, such as interior finishes and millwork, bring a space from a shell condition to a finished, usable space. Tenant improvements should balance the reflection of the dignity and purpose of the courthouse with the requirements for durability and ease of maintenance. Tenant improvements should align with the criteria established in the *Design Guide* and the established tenant improvement budget. When developing a tenant improvement plan, it is important to understand how scope items are procured and which agency or court unit retains financial responsibility.

Supporting Documents

The following reference documents provide additional information on the topics contained within this chapter:

- *United States Courts Design Guide*, Chapters 12 and 13, 2021
- *United States Courts Courthouse Design Reference Manual,* 2007
- *Guide to Judiciary Policy, Volume 14*, most current edition
- *Guide to Judiciary Policy, Volume 16, Chapter 4*, most current edition
- *AO Manual – Volume 7: Contracts and Agreements*, most current edition

Planning and Design Considerations

Finishes

A sample finish board is depicted in Figure 12/13.01. When selecting equipment, materials, and finishes you should consider the following:

- Is there a facility-specific standard in place (i.e., carpet manufacturer or pattern used throughout, door hardware, or light fixture type)?
- Does the selected equipment, material, or finish meet the criteria addressed in the *Design Guide* and the *Facilities Standards for the Public Buildings Service* (GSA PBS P-100)?
- Utilizing complementary palettes throughout the building and standardizing finishes for departments, public spaces, courtrooms, and chambers provides a more economical procurement value and allows for easier storage of attic stock, future repair, and replacement.
- The Judiciary has adopted cost ceilings for finishes requiring cyclical maintenance, such as carpet. These cost ceilings are updated yearly, so project teams should contact the Administrative Office of the U.S. Courts for additional information on finish cost ceilings prior to undertaking a new project or renovation.

Figure 12/13.01 — Sample Finish Board
A sample board showing the selected materials

Millwork

When designing millwork and selecting materials you should consider the following:

- Select regionally-appropriate wood species.
- Simplify millwork designs and layout plans across courtrooms and other spaces (i.e., utilize consistent bench dimensions and components across courtroom types).
- Consider utilizing standard, manufactured spectator benches for courtroom seating and matching veneers instead of developing custom millwork.

Furnishings

Furniture for smaller projects are typically funded by the local court. If a project reaches a certain monetary threshold, a furniture acquisition plan (FAP) will be required and the project will be funded through the FAP process. Project teams should be mindful of any furniture cost ceiling and review the most current FAP guidance in the *Guide to Judiciary Policy* for additional information.

There are three primary procurement strategies to procure furniture and installation services as outlined under the *Guide to Judiciary Policy*, Volume 14 below. Table 12/13.01 details pros and cons for each procurement strategy.

Judiciary Multiple Award Blanket Purchase Agreement (BPA)

- The judiciary BPAs are a group of national agreements for use on a judiciary-wide basis. Court units have delegated authority to place calls though the agreements.

General Services Administration (GSA) Multiple Award Schedule and Other Federal Agency Contracts

- Judiciary contracting officers (COs) may use ordering procedures for Federal Supply Schedules, also known as the GSA Schedule program.
- The program provides federal agencies including the Judiciary with a simplified process for obtaining commercial products and services.

Open-Market Sourcing

- Open-market purchases are those made directly from commercial sources using competitive procedures if applicable, without reference to any other existing federal contracts.

Signage

Electronic signage is typically funded by the Judiciary within judiciary space. Electronic, room, and directional signage in public spaces is typically funded by GSA for wayfinding purposes.

When specifying signage, consider the following:

Electronic Signage Technology

- Consider areas where electronic signage may be implemented in the future and provide infrastructure such as power and data connections for these areas.
- For electronic signage that may be mounted to a wall or ceiling, include provisions for blocking and appropriate wall supports during the design and construction process.
- Consider utilizing electronic signage and scheduling software for shared amenity spaces, such as conference or training rooms.
- Figures 12/13.02 and 12/13.03 depict various types of electronic signage that may be incorporated into the lobby of a new courthouse.

Figure 12/13.02 — Electronic Dockets
Electronic docket in the lobby of a federal courthouse

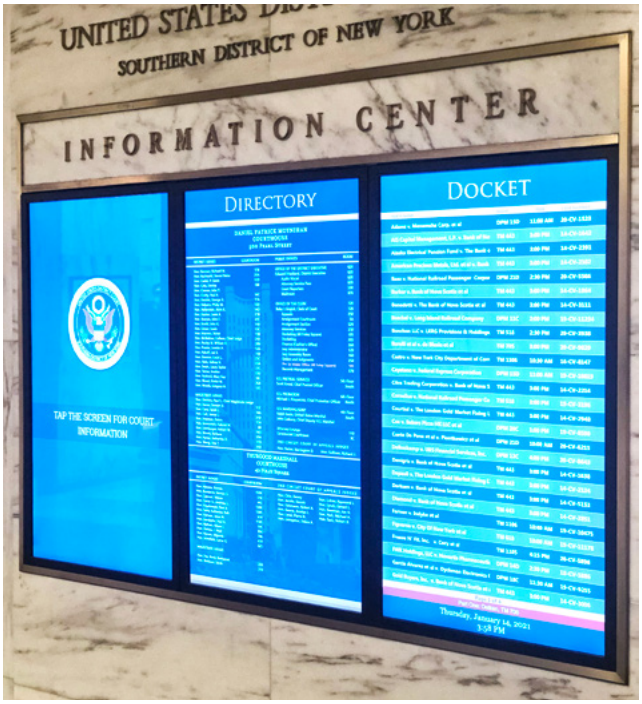


Figure 12/13.03 — Kiosks
Wayfinding kiosks in a courthouse lobby

Table 12/13.01 — Furniture Procurement Method Pros and Cons
Pros and cons are listed for each procurement method

Judiciary Multiple Award Blanket Purchase Agreement (BPA)	
Pros	**Cons**
Reduced administrative effort.	Limited to the contractors with the Judiciary's BPA agreements.
No maximum ordering threshold.	
Simplified supply of common-use products.	
Access to multiple contractors.	
Streamlined competition requirements, including limited source justifications for courts embedded with one of the listed contractor's products.	
Contractors have been pre-vetted and evaluated.	
Furniture and services can be procured by local CO.	
General Services Administration (GSA) Multiple Award Schedule and Other Federal Agency Contracts	
Pros	**Cons**
Access to indefinite delivery/indefinite quantity contracts to provide products and services at stated prices for a given period of time.	Limited only to contractors under the GSA Schedule.
No competition required with orders $10,000 or less.	Some vendor's contracts have maximum order thresholds that are lower than larger courts' furniture requirements.
Court CO can place order directly with schedule contractors.	
Contractors have been pre-vetted and evaluated.	
Access to GSA Advantage (online shopping service).	
Access to eBuy – an electronic system that allows COs to post requirements and obtain quotes electronically.	
Open Market Sourcing	
Pros	**Cons**
Competitive, lowest price, technically-acceptable open-market procurements.	Timeline could be a minimum of six months.
Access to all contractors registered to do business with the government.	Competition is required when the government estimate is over $10,000.
	Advertising in SAM.gov is required when the government estimate is over $25,000.

Room and Directional Signage

Planning and designing for signage procurement and installation can be a complex process:

- Consider engaging a manufacturer during design to provide suggestions for signage solutions.
- Utilize a consistent approach for room numbering and room identity.
- Consider permanent signage solutions for room numbers and flexible solutions for room identity or personnel identified in space (i.e., Room 1234 – permanent, Office – flexible, Jane Doe – flexible). Refer to Figure 12/13.04 for example room signage that utilizes flexible solutions for personnel identification but permanent solutions for the room number.
- Be mindful of Architectural Barriers Act Accessibility Standard (ABAAS) requirements such as text height, view angle and distance, raised lettering, requirements for braille, and mounting-height tolerances.
- Consider flexible solutions such as magnetic signage elements.

Figure 12/13.04 — Sample Room Signage

Room signage procured by the Judiciary

Best Practices

Finishes

- The project team should gain the approval of the tenant regarding finishes. The Judiciary is not always consulted, which may result in rework for the architect/engineer (A/E) later in the project schedule.
- The project team should be aware of cost ceilings for standard judiciary items, such as carpet and conferencing or chambers furniture.

Furniture Acquisition Plan Process

- The furniture procurement process will minimally take between 6–9 months to complete. Start the FAP process at least one year in advance.
- The procurement strategy should be determined at the start of the FAP process (e.g., AO BPA, GSA Schedule, or full and open). Coordinate the FAP schedule and lead times of each item.
- Conduct a detailed inventory of the existing furniture prior to beginning the selected procurement method, and identify furniture that will be incorporated into the new space or eliminated.

Furniture Procurement Methods

- Review the requirement, delegated procurement authority and limitations, and experience of the available contracting officers to determine the strategy that best meets your furniture need.
- Survey and examine the following procurement guidance resources:
  - *Guide to Judiciary Policy*, Volume 16, Chapter 4, "Furniture, Appliances and Related Services"
  - *Guide to Judiciary Policy*, Volume 14, "Procurement"
  - GSA Schedules
- Review procurement bulletins to obtain timely procurement news and information.
- Seek advice and guidance from Procurement Management Division when uncertain.

Signage Acquisition Plan Process

- For larger projects, create a signage acquisition plan early in the design process.
- It is best to design signage to be simple and flexible, so it can be replaced easily.

Furniture Acquisition Plan Case Study

U.S. District Courthouse | Mobile, Alabama

Background

The FAP process for the Mobile U.S. Bankruptcy Court (USBC) and U.S. Probation Office focused on the acquisition of $1 million worth of furnishings to modernize and provide a shared aesthetic across the agencies. The anticipated move-in date for these court units was June 2020. The process to prepare the FAP began in January 2019, which gave the team a little over a year to design, select, bid, and manufacture the furnishings to complete the process. Though this timeline was feasible, an additional six months would have been ideal.

The contract to produce the FAP was originally considered as a reimbursable work authorization to GSA's A/E contract; however, the proposal to procure these services came in too high. This price forced the local court team to procure these services separately and locally. The FAP RFP went to three architecture and interior design firms, and one was selected to provide furniture inventory, design, acquisition, and installation services. Because of the extensive time on-site, procuring services locally helped reduce overhead costs.

Successes

Starting the FAP process early allowed the local court to design, bid, and acquire the selected furniture in a timely manner. The anticipated move-in date was met with no delays in furniture delivery. Timely delivery was achieved by ongoing management and tracking shipments through the manufacturers' representatives.

Furniture Selection

- The selected architect set up appointments at different furniture showrooms in a nearby city. When the team arrived, certain preselected furniture was set up for them to view and test. During this trip, over 80 percent of the final furniture was selected.
- The local court team consisted of the USBC and probation court unit executives and deputy clerks, procurement representatives, and the court architect. Refer to Figure 12/13.05 and Figure 12/13.06 for photography of the selected furniture.
- The furniture floor plans and furniture requirements were established prior to selecting furniture. This process helped the team narrow the options and focus only on a few types of furniture during the trip.
- Many of the selected furniture systems were custom-designed or specialized for the spaces. Fortunately, these furniture systems did not result in an upcharge for customization. Courts should verify the manufacturer's policy prior to selection.

Cost Ceilings

- During the FAP process, judiciary stakeholders worked within the confines of the cost ceilings stipulated by Judiciary policy. Stakeholders should be aware of the furniture cost ceiling for each court unit and employee classification.

Move Management and Coordination Services

- The selected architect held a subcontract with another company to provide on-site move coordination services. Vendors providing move coordination services should have experience in major construction projects and be able to process hundreds of pieces of furniture. This experience and processing ability helps with the final invoicing and payment issues.

Figure 12/13.05 — Classroom
Modern furniture provides visual cohesion and a flexible layout

Figure 12/13.06 — Probation Touchdown
New furniture offers a variety of casual seating options

Clemente Ruiz Nazario U.S. Courthouse
San Juan, Puerto Rico

Image:
Dattner Architects

14/ 15/ 16 ACOUSTICS, BUILDING SYSTEMS, AND SECURITY

This chapter contains best practices related to courthouse acoustics; mechanical, electrical, and plumbing (MEP) integration and coordination; and security integration. Best practices range from systems planning to device integration.

Chapter Sections:

Introduction

Space acoustics, building systems, and security systems are integral and complex parts of all courthouse projects. Too often, these systems are not considered until after much of the architectural design is complete. Although these systems are described in *Facilities Standards for the Public Buildings Service* (GSA PBS P-100), *Requirements and Specifications for Special Purpose and Support Space Manual* (USMS Publication 64), and the *U.S. Courts Design Guide (Design Guide)*, this chapter provides insight into how these systems work, why they are required, and best practices for their utilization.

Supporting Documents

The following reference documents provide additional information on the topics contained within this chapter:

- *Design Guide*, Chapters 14, 15, and 16, 2021
- *United States Courts Courthouse Design Reference Manual,* 2007
- *Sound Matters: How to Achieve Acoustic Comfort in the Contemporary Office*, 2011
- GSA PBS P-100, most current edition
- *Requirements and Specifications for Special Purpose and Support Space Manual*, *Volume One, Construction Requirements* (USMS Publication 64 Vol. I), Office of Facilities and Courthouse Construction, most current edition
- *Requirements and Specifications for Special Purpose and Support Space Manual, Volume Two*, *Security Products* (USMS Publication 64 Vol. II), Office of Facilities and Courthouse Construction, most current edition
- *Requirements and Specifications for Special Purpose and Support Space Manual*, *Volume Three, Judicial Security Systems Requirements and Specifications* (USMS Publication 64 Vol. III), Office of Facilities and Courthouse Construction, most current edition
- *AV & IT Infrastructure Guidelines for Courts,* AVIXA AIA, 2013

Acoustics Planning and Design Considerations

General Acoustics Considerations

The performance and well-being of occupants within a court facility is strongly influenced by the acoustical design. Room acoustics, sound isolation, and noise control are primary components of acoustical design. These three factors relate respectively to interior finishes, wall and floor/ceiling assemblies, and the design of building systems.

An acoustical consultant should be included at the inception of any new courthouse project. Acoustical consultants do not typically provide contract documents, but rather reports, sketches, and recommendations for inclusion into other disciplines' documents. An acoustical report for new courthouses will be required, validating the proposed courtroom acoustics design. It is important to engage an acoustical consultant early in the design process, so each team may have sufficient time to collaborate.

When engaging an acoustical consultant, it is important to consider the following:
Make sure that the acoustical consultant contract includes mechanical system noise control as well as architectural acoustics.

- Does the request for proposal (RFP) contain acoustical criteria, and does the RFP criteria differ from the criteria listed in the *Design Guide* or GSA PBS P-100? If so, speak with the acoustical consultant about the best way to reconcile these differences.
- Does the acoustical consultant have the design criteria for each of the building's tenants?
- Consult GSA PBS P-100 to determine the acoustic performance of the building.

In addition, project teams should consider the following when planning and designing acoustic systems:

General Planning Considerations

- Will the project be required to comply with a local noise ordinance?
- If so, does this ordinance apply to exterior mechanical equipment at all times? Or only during emergency use and the brief testing of emergency equipment?

Sound Isolation
The sound isolation goals outlined in the supporting documents are presented in both sound transmission class (STC) and noise isolation class (NIC). Refer to the *Design Guide*, Chapter 14, "Internal Airborne Sound Isolation," section for a more detailed discussion of STC and NIC.

- STC is a laboratory rating and is more often used for design.
- NIC is a field performance goal used for field testing and can be used to discuss the occupant experience of sound isolation.
- For design purposes, STC is roughly equal to NIC+5.
- Manufacturer door and glazing systems are listed based on STC performance.

Fitness Centers
Carefully consider the location of the fitness center as the impacts from free weights and weight machines may create airborne noise as well as structure-borne noise that may be felt by building occupants. For fitness centers on upper floors, the impacts may be felt and heard in spaces below and in adjacent spaces on the same level. Project teams should consider the following:

- Where will the fitness center be located? What kinds of spaces will be above, below, or adjacent to the room? Consider locating this space on the basement or ground-floor levels.
- What spaces need immediate or easy access to this fitness center?
- Will the fitness center be used during normal business hours while court could be in session? Or will use be limited to after hours?
- Will the Judiciary be sharing the fitness center with another tenant?
- What are the court users' expectations of sound isolation from the fitness area?

Acoustical Finishes
Acoustical finishes will be needed in courtrooms, jury spaces, meeting rooms, conference rooms, offices, and most gathering spaces. Project teams should consider the following:

- Different materials have different acoustic properties as well as different aesthetics. Consider if the material is achieving both the desired aesthetic and desired acoustical rating.
- Can acoustical ceiling tile (ACT) or acoustical ceiling panels (ACP) be used in a space to limit the amount of wall treatments?
- Will acoustical plasters be used for the courtroom ceiling? Acoustical plaster is often considered early in design because it achieves the aesthetic goals while proving acoustical absorption. However, this aesthetic and performance may come at a higher cost and should be evaluated against the project budget.
- Will the courtroom include convex curved surfaces? Such surfaces must often include acoustically-absorptive finishes to limit sound focusing.
- Will there be large atria or other large spaces that will be used for large gatherings?
- Will offices or other spaces include gypsum soffits at the ceiling? Gypsum soffits may provide an enhanced aesthetic but decrease the amount of ACT in the space. The acoustical consultant will assist in determining if a higher-value acoustically-absorptive tile could be used or if the soffit area needs to be adjusted.

Acoustically-Rated Walls
The performance of sound-rated walls is dependent on the:

- Stud gauge.
- Stud spacing.
- Number of layers of gypsum board.
- Type and thickness of insulation in the cavity.
- Mounting method of gypsum board.
- Height of the wall.
- Sealing of the wall and all penetrations in the field.
- Location and staggering of outlets and other penetrations.

Be cautious when selecting wall types based on acoustical performance. Make sure the stud gauge and spacing matches that of the project requirements.

- Lighter gauge studs spaced further apart will provide a higher sound isolation performance than heavier studs placed closer together for a wall with the same layers of gypsum board.
- Most easily accessible guides show STC performance for walls based on 25-gauge studs spaced 24 inches on center.
- Most span tables and wall stability documents require walls constructed of 20-gauge studs spaced 16 inches on center.

For best performance, sound-rated walls should be constructed as follows:

- Extend finished walls to the floor/roof assembly above, and seal at the deck, floor track, and all corners.
- Gypsum board layers should be glued and screwed together with overlapping seams.
- Penetrations should be sealed air-tight.
- Seal electrical outlets and boxes with fire-stop putty pads or other methods as recommended by the acoustical consultant.
- Include sound attenuation batts to match stud depth.

Table 14/15/16.01 — Wall Construction
Typical wall construction and their corresponding NIC and STC ratings

NIC Rating	Wall Construction	STC Rating
35	3-5/8” or 6” metal stud with one layer of 5/8” gypsum wall board (GWB) each side. 20-gauge studs at 16” O.C. Extend GWB to underside of structure. Batt insulation full width of stud to underside of structure.	40
40	3-5/8” or 6” metal stud with two layers of 5/8” GWB on one side and one layer on the other side. 20-gauge studs at 16” O.C. Extend GWB to underside of structure. Batt insulation full width of stud to underside of structure.	45
45	3-5/8” or 6” metal stud with two layers of 5/8” GWB each side. 20-gauge studs at 16” O.C. Extend GWB to underside of structure. Batt insulation full width of stud to underside of structure.	50
45	8” reinforced CMU, fully grouted.	50
50	3-5/8” or 6” metal stud with two layers of 5/8” GWB on one side and one layer on resilient clips on the other side. Extend GWB to underside of structure. Batt insulation full width of stud to underside of structure.	55
50	Staggered rows of 3-5/8” metal studs with two layers of 5/8” GWB each side. 20-gauge studs at 24” O.C., staggered 12” O.C. Extend GWB to underside of structure. Batt insulation in stud cavity woven through studs.	55
55	Double rows of 3-5/8” metal studs with two layers of 5/8” GWB each side. Minimum 0.5” gap between studs with little to no bracing across studs. GWB extend to underside of structure. Batt insulation in each stud cavity to underside of structure.	60

When walls do not extend to the structure, extra steps should be taken to provide the needed sound isolation:

- Coordinate locations closely with the acoustical consultant. Some locations are required to utilize full-height walls.
- Extend finished wall a minimum of 6 inches above the ceiling.
- Provide a ceiling with a high ceiling attenuation class (CAC) and consider the use of sound masking.

Typical wall constructions that meet various NIC/STC ratings are included in Table 14/15/16.01 for general design purposes. Nevertheless, wall types should be confirmed and coordinated with an acoustical consultant.

Demountable Walls

Demountable walls are an efficient way to configure tenant office areas and may be used to provide varying levels of sound isolation for relatively less sensitive rooms. Figure 14/15/16.01 depicts demountable walls dividing space to create law clerk offices.

- Are demountable walls or furniture walls expected to be included in the project?
- Are demountable walls included in the general contractor’s scope or as part of furniture, fixtures, and equipment?
- Will demountable walls include glazed systems?

Demountable wall systems typically have the following acoustical performance:

- Solid demountable walls are available at ratings up to approximately STC 50 (NIC 45).
- Glazed demountable walls are available at ratings up to approximately STC 45 (NIC 40).
- Associated doors are available at ratings up to approximately STC 40 (NIC 30), but performance varies significantly by manufacturer. A sliding door will not perform as well as a hinged door that can be latched.
- It should be noted that a higher STC rating comes at a financial premium.

Figure 14/15/16.01
Demountable walls at law clerk offices

Use of demountable partitions to meet sound isolation and speech privacy requirements requires careful coordination during design and installation.

- Engage an acoustical consultant and the manufacturer's representative as early in the design process as possible.
- An architectural bulkhead may be required from the top of the partition to the deck to meet acoustic goals.
- Select a system to meet the required sound isolation performance.
- Coordinate installation of all system components with the manufacturer's instructions, and follow the manufacturer's standard review procedures after the installation of the system.
- Do not mount frames on carpet, which may prevent the demountable partition from sealing properly.

Doors and windows decrease the NIC and STC of a partition. The final composite NIC and STC created by the combination of the wall, doors, and glazing should be determined by the acoustical consultant. The door and glazing STC should match that of the wall. However, this practice can be costly. The design team should evaluate ways to balance the wall, door, and glazing performance to achieve the sound isolation performance requirements. In addition, project teams should consider the following with regard to doors and glazing:

Acoustical Door Requirements

The sound isolation of a partition will be maintained or decreased by the doors in that partition. High-performing doors can be a costly and time-consuming design item.

- Where are acoustically-rated doors required by the RFP or the design documents?
- Are there specific areas of acoustical concern other than courtrooms, judges' chambers suites, grand jury suites, and jury deliberation areas?

Sound-rated doors can be implemented in the following general ways:

Option 1: A manufacturer-assembled system that arrives on site with frame and seals already installed to be placed into the prepared opening.

- This practice provides the highest STC ratings available.
- The manufacturer's installation team should oversee installation to confirm proper function and performance.
- This approach is the highest cost option.
- These doors are heavy and require coordination with architectural and structural designs.

Option 2: A manufacturer package that consists of a rated door slab with a sound seal package (kit) that is field assembled.

- This practice can provide a high level of sound isolation.
- The kit is still a high-cost item, but lower cost than the first option.
- The final performance of the door is highly dependent on the installation.
- The door package should include a door frame. If not, the acoustical consultant may provide recommendations for the door frame.

Option 3: A standard solid core door with a sound seal package.

- This practice is the lowest performance acoustical option.
- The sound seal package must include full perimeter seals and either a door bottom or an acoustical threshold.
- Knock-down frames are typically not sufficient. An acoustical consultant may provide recommendations for the door frame.

In addition, the project team should consider the following:

- The acoustical consultant should assist in determining where sound-rated doors or sound seals are needed and what kinds can be used.
- For the best performance, provide a flat, hard floor and threshold or a smooth, flat flooring transition for the door bottom to seal against. Carpet will degrade the performance, and some judges prefer not to have thresholds at their office doors. A section of hard flooring at the door opening is preferred.

Acoustical Glazing Requirements

Similar to doors, the glazing in a sound-rated partition should be designed to maintain the required level of sound isolation. Project teams should consider the following:

- At what locations is glazing expected or required per the RFP?
- Will glazing be used in highly sensitive areas such as courtrooms, judges' suites, or jury deliberation areas?
- Will doors include glazing elements such as sidelights, transoms, or glazing within the door? Or will any spaces include clerestory windows?
- Will the building enclosure include glazing assemblies? Will these systems include mullions that may span horizontally or vertically between offices or judges' suites?

Glazing can be provided to meet most NIC/STC requirements. However, project teams should consider the following:

- Like doors, glazing can decrease the overall sound isolation performance of a partition if not designed appropriately.
- Sound control windows could be used where needed, but glazing to maintain a high STC is typically costly and thick.
- Verify that the design requirements meet those included in the *Design Guide*, and discuss these requirements with an acoustical consultant.

Sound can flank or bypass the demising construction through mullions between enclosed spaces, and at the slab edge for curtain wall or storefront glazing systems.

- Where the building shell includes glazing, walls between sound-sensitive spaces should seal against solid sections of the building perimeter or the mullion.
- Where walls terminate at a mullion between sound-sensitive spaces such as judges' offices, use mullion covers or mullion plugs to increase isolation at the mullion itself.
- When the building slab edge detail includes a mullion or connection to a glazing system, a detail will be required to limit sound transfer between floors. Coordinate these details with the acoustical consultant.

Sound Masking

Sound masking is often used to enhance speech privacy in open office spaces adjacent to jury deliberation rooms, grand jury suites, and other spaces requiring privacy. Sound masking is commonly referred to as white noise. It is important to note that modern sound masking is not white noise and is designed by sound-masking manufacturers to provide a less obtrusive sound to help increase speech privacy. It is preferred to first address speech privacy through the demising assembly construction for rooms with high speech privacy requirements such as courtrooms, jury suites, and probation interview rooms. Pending approval, sound masking may be used to supplement the architectural design. Project teams should consider the following:

- Will the courtroom interior include sound masking? Courtroom side bar and bench conference privacy is provided by the courtroom audiovisual (AV) system and is independent of building sound-masking systems.
- Do you have open office areas that require speech privacy?
- Does the confidentiality or privacy of a space require augmentation by electronic sound-masking systems?
- Are there areas where walls will not be full height where sound masking might be needed?
- Refer to the *Design Guide* regarding sound masking combined with NIC 55 walls at trial jury suites and grand jury hearing rooms.

Emergency Generator and Exterior Equipment Locations

If an emergency generator is located within or on the exterior of a courthouse, coordinate the location with an acoustical consultant to minimize the noise impact to adjacent spaces.

For interior generators:

- Do not locate under courtrooms, judges' chambers, or other sensitive spaces.
- Enhanced wall or floor/ceiling design may be required for sound isolation to adjacent spaces.
- Interior generators cannot use acoustical enclosures so acoustical louvers and silencers may be needed to control noise.

For exterior generators:

- Plan for an acoustical enclosure with an exhaust silencer.
- Coordinate enclosure performance with the acoustical and electrical teams.
- Enhanced glazing or building shell designs may be needed if the generator is located too close to a building.

Exterior equipment placement should be chosen carefully so that they are not adjacent to or clearly visible from noise-sensitive spaces such as courtrooms or judges' chambers.

- Coordinate noise control design items with the acoustical team.
- Select equipment as quiet as practical given the mechanical or electrical requirements.

Acoustical Conformance Testing

Verify if acoustic testing after construction is required by the RFP. Testing may not be required on all projects.

LEED Acoustic Credits

Acoustical LEED credits can be achieved and typically align with the requirements in the *Design Guide*. LEED credits should be discussed early in the project's design process, so the acoustical consultant may review the various guidelines to determine the acoustical goals and assist the design team in determining the cost impact.

- Will the project pursue LEED acoustics credit(s)?
- Is design and documentation for LEED included in the acoustical consultant's scope?
- Do project-specific design criteria differ from the LEED goals? If so, confirm that more stringent criteria will take precedence.

Acoustics Best Practices

General

- Require the design team to incorporate and coordinate with an acoustical consultant.

Fitness Centers

- Locate all fitness centers on the basement, first, or ground floors. Fitness centers should not be located above or below any courtrooms.

Acoustical Finishes

Acoustical finishes may be needed in the courtrooms, meeting rooms, conference rooms, offices, and most gathering spaces.

- Use high NRC ACT in all offices and meeting or conference rooms.
- Acoustic wall panels may be needed in judges' conference rooms and courtrooms.
- Courtrooms may include ceilings at various heights; however, all ceilings are required to have higher NRC acoustic performance.

Acoustically-Rated Walls, Doors, and Glazing

For best performance, sound-rated walls should be constructed as follows:

- Extend finished walls to the floor/roof assembly above, and seal at the deck, floor track, and all corners.
- Gypsum board layers should be glued and screwed together with overlapping seams.
- Penetrations should be sealed air-tight.
- Seal electrical outlets and boxes with fire-stop putty pads or other methods as recommended by an acoustical consultant.
- Include sound attenuation batts to match stud depth.
- Select doors and windows to match wall goals. Coordinate door and glazing selections with an acoustical consultant, so the performance is balanced between wall, doors, and glazing to limit cost impacts.

Equipment Noise Control

- Emergency generators should include acoustically-rated enclosures and exhaust silencers.
- Carefully locate mechanical equipment areas to limit impact upon the building.
- Mechanical equipment should be located as far away as possible from the courtroom. Mechanical equipment should not be located inside the courtroom perimeter, directly above or adjacent to the courtroom. Mechanical penthouses should not be located directly over courtrooms or judges' chambers.
- Mechanical system elements often penetrate the courtroom walls. These penetrations should not make rigid contact with the courtrooms partition assemblies and should be sealed air-tight as coordinated with the acoustical consultant.

Trial Jury Suite Location Case Study

U.S. District Courthouse | San Antonio, Texas

Background

The U.S. District Courthouse, anticipated to be completed in 2022, houses the U.S. District and Magistrate courts for the Western District of Texas. The three-level facility contains eight courtrooms each with an adjacent trial jury suite. The layout of the typical courts floor is depicted in Figure 14/15/16.03.

The trial jury suite and grand jury hearing rooms require a confidential level of speech privacy, which is the highest level of speech privacy within a federal courthouse facility. This goal cannot be practically met through the design of the demising walls alone. Typically, sound masking may be provided in the adjacent space to provide the intended level of speech privacy. However, sound masking is not desired in spaces with low background noise goals, such as a courtroom. Therefore, locating a trial jury or grand jury suite adjacent to a space with low background noise criteria can present unique acoustical challenges.

Successes

The layout of spaces was determined in the bridging design documentation as part of the bridging design-build process. A continuously operating sound-masking system could not be provided in courtrooms adjacent to trial jury suites due to the courtrooms' low background noise goal. The design-build team had to develop a solution for the trial jury suite and courtroom adjacency that met the intent of the *Design Guide*'s confidential speech privacy requirement. With approval, the following design solution was implemented:

Design Approach

- An acoustically robust stud wall construction, consisting of separate stud systems with insulation and multiple layers of gypsum board, was provided between the trial jury suites and courtrooms. This wall type is depicted in Figure 14/15/16.02.
- Demising walls between spaces were limited as much as possible. Required penetrations were acoustically sealed, and items that penetrated the wall were located to not rigidly contact any partition elements.
- Potential for crosstalk between the spaces was limited by careful design and coordination of the mechanical system.

Additional Considerations and Best Practices

- It is generally not practical to increase speech privacy by providing a partition assembly and associated components that exceed NIC 55. Higher levels of isolation typically require isolated flooring systems, masonry walls, and isolated ceiling systems. Such designs are typically not addressed in a project's benchmark budget and do not use standard construction materials.
- Sound masking cannot be provided in spaces with background noise goals lower than NC 35.
- Acoustically, it is preferable to locate trial jury suites and grand jury hearing rooms away from other highly acoustically-sensitive spaces.

Figure 14/15/16.02 — STC 60 Partition Type

Typical acoustic separation between jury trial rooms

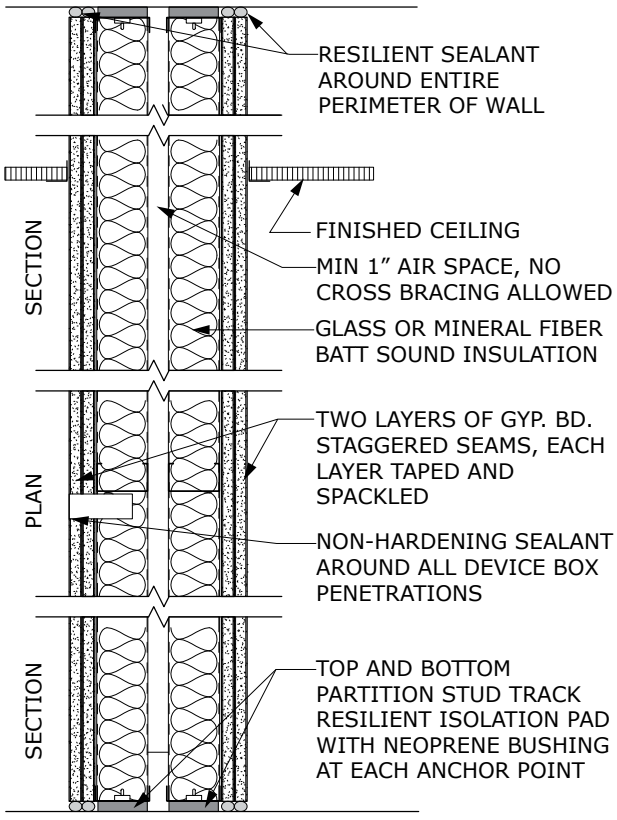
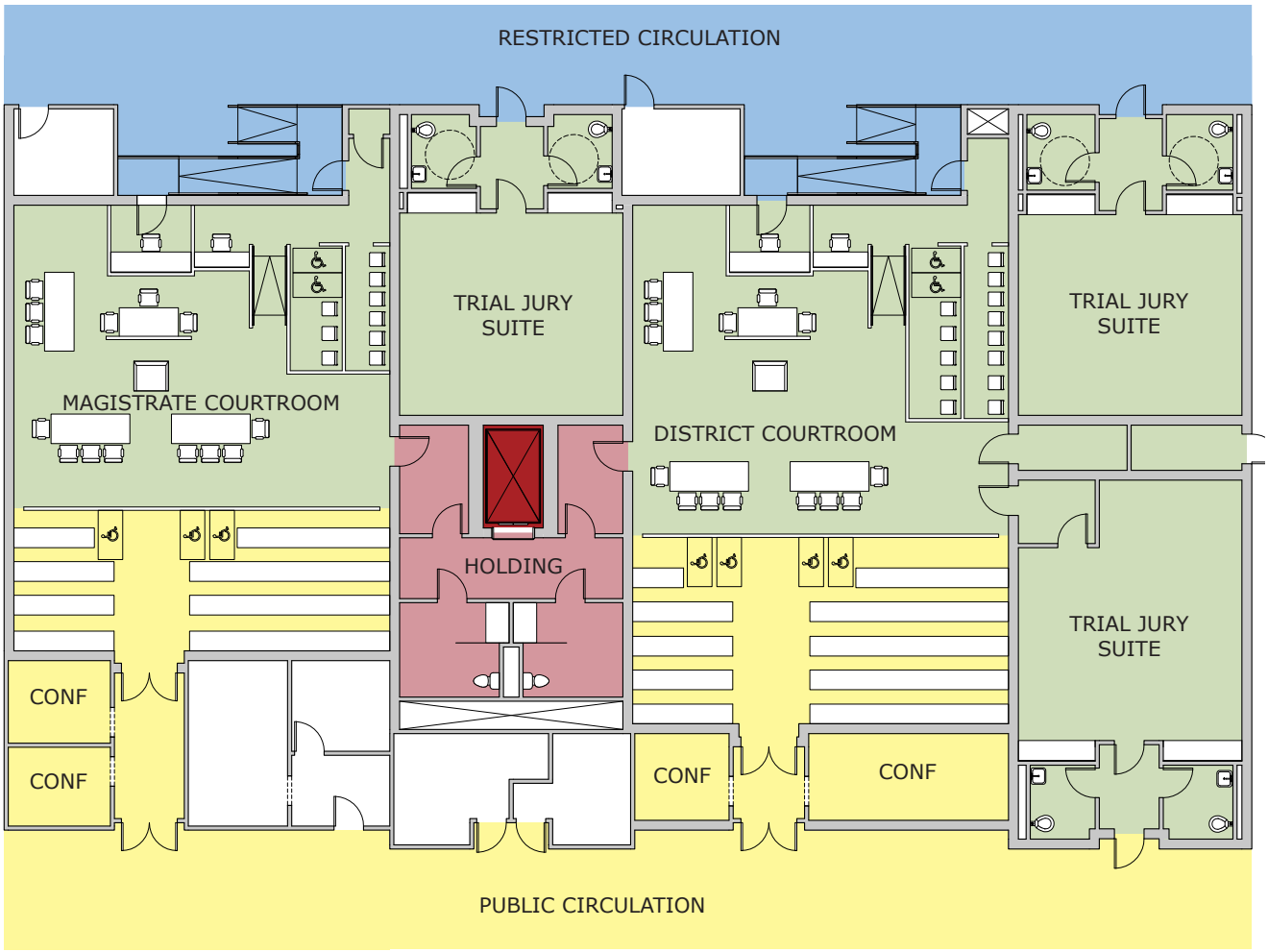


Figure 14/15/16.03 — Courtroom and Trial Jury Suite Layout
Floor plan depicting the proximity of trial jury suites to the courtrooms



COLOR LEGEND:

- COURTROOM / JURY SPACE
- PUBLIC SPACE / CIRCULATION
- RESTRICTED SPACE / CIRCULATION
- SECURE SPACE / CIRCULATION

Curtain Wall Sound Flanking Case Study

U.S. District Courthouse | San Antonio, Texas

Background

Structural floor slabs, which terminate into a curtain system, can create areas of acoustical sound isolation deficiency. These deficiencies are referred to as flanking sound paths, or areas at which sound can bypass the primary partition construction. The slab-edge condition at a curtain wall system can be a potential flanking path because the glazing components are typically less acoustically robust than the adjacent floor/ceiling assembly. Appropriate acoustical treatment and detailing of the curtain wall slab-edge condition is essential to ensure speech privacy between stacked spaces is maintained. This condition existed at the U.S. District Courthouse in San Antonio.

Successes

Acoustically treating the slab-edge condition at an exterior curtain wall system requires creating a continuous airtight barrier. Potential solutions to create this barrier include the use of manufactured mullion compression seals, field-built acoustical soffits, or detailing of acoustical seals and insulation. The U.S. District Courthouse design-build team developed two solutions to provide an acoustical barrier between the structural slab and curtain wall glazing, which effectively limited the potential for sound flanking.

Slab-Edge Design

- Figure 14/15/16.04 depicts a conceptual detail utilizing an acoustical compression seal to limit curtain wall sound flanking. Acoustical compression seals generally consist of a sound transmission barrier layer, such as mass-loaded vinyl or foam, coupled with layers of insulation to block sound transmission.
- Figure 14/15/16.05 depicts a conceptual detail utilizing layers of gypsum board, insulation, sealant, and compressible filler to block sound transmission.

Additional Considerations and Best Practices

Appropriate solutions to limit curtain wall sound flanking require careful coordination between the design team, contractor, and curtain wall system manufacturer, as they are project specific. Consider the following:

- Vertical space adjacencies should be evaluated with the acoustical consultant early in design. Space planning and adjacency changes may be used to mitigate the need for acoustical enhancements.
- It is typically more cost effective to address curtain wall flanking paths during design and construction rather than post-construction.
- A shadow box can interrupt the continuous seal needed to limit sound flanking at the curtain wall. Spandrel glass may be more appropriate where acoustical enhancements are needed.
- Shade pockets should be coordinated with the design of slab-edge acoustical treatments.
- The use of window wall systems limits the potential for sound transmission between vertically adjacent spaces, because the structural slab is continuous to the perimeter of the building.

Figure 14/15/16.04 — Conceptual Detail
Compression seal conceptual detail

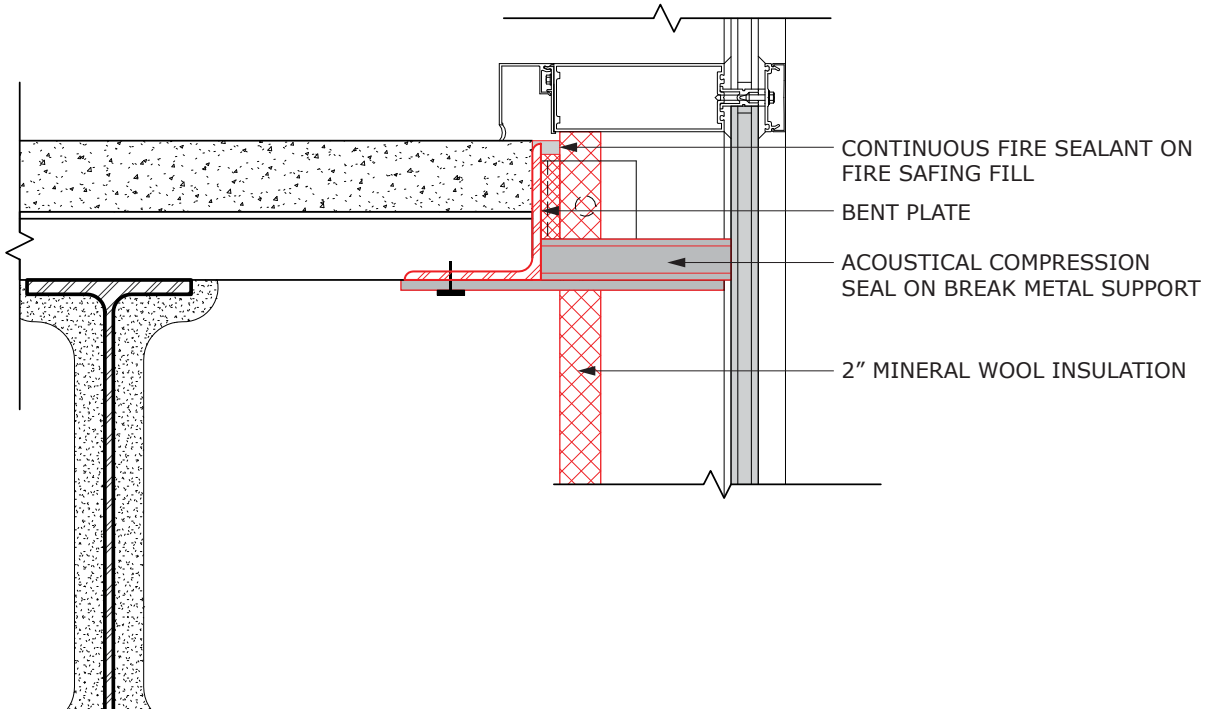
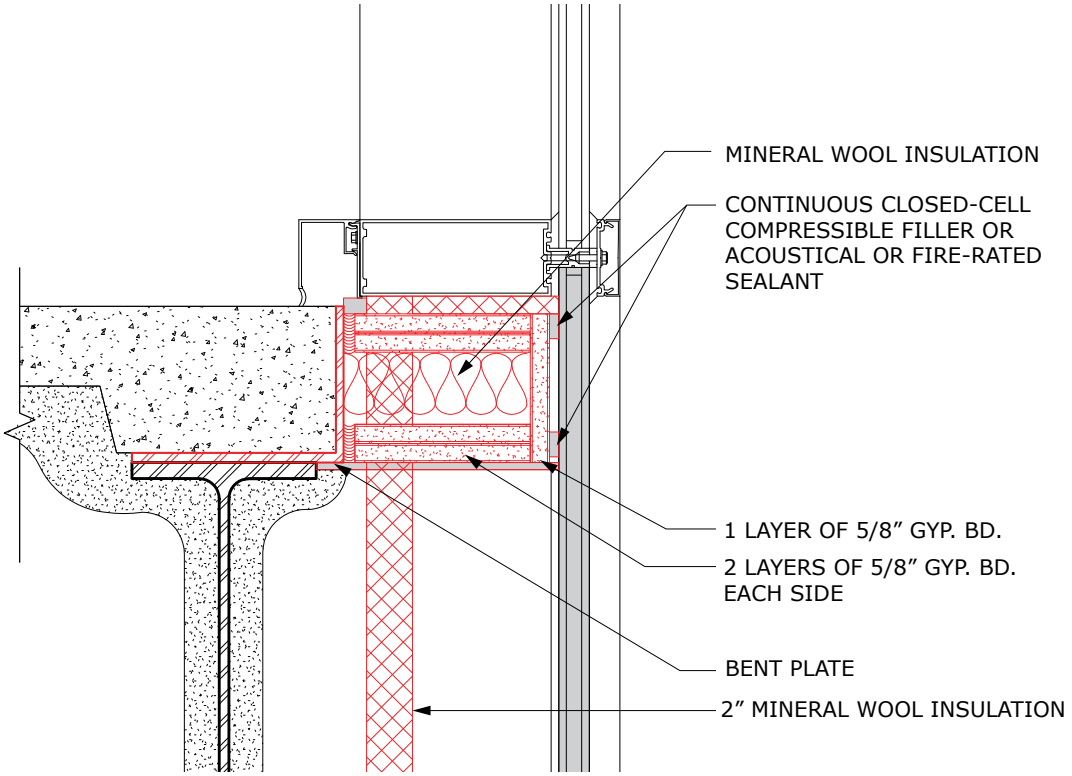


Figure 14/15/16.05 — Field Conceptual Detail
Field-built conceptual detail



Penthouse Equipment Noise Isolation Case Study

Fred D. Thompson U.S. Courthouse and Federal Building | Nashville, Tennessee

Background

The Fred D. Thompson U.S. Courthouse and Federal Building, anticipated to be completed in 2021, houses the U.S. District Courts for the Middle District of Tennessee. The facility, occupying approximately 280,000 square feet over six floors, contains eight courtrooms and 11 judges' chambers. The majority of the building's primary mechanical systems are located within a rooftop penthouse and on the surrounding roof structure. Courtrooms and other acoustically sensitive spaces, which require low background noise levels, are located on the floor below.

Mechanical equipment located on the roof structure has the potential to contribute various forms of airborne and structure-borne noise into occupied spaces below. Figure 14/15/16.06 shows the numerous noise paths associated with rooftop mechanical equipment. Careful placement and design of mechanical systems, as well as design of supporting structures, is critical to a successful design.

Successes

The base roof slab for the Thompson U.S. Courthouse was found to be insufficient to limit rooftop mechanical noise to the sensitive spaces below. As a result, the design required a floated concrete slab isolation system to increase the sound isolation provided by the roof structure. The system is included continuously throughout each penthouse, boiler room, and cooling tower enclosure.

Design Features

- The concrete topping slab is supported by an isolation layer. The isolation layer for these systems is typically a pad system with a continuous isolation layer. The pad systems include compressed fiberglass, neoprene, or polyurethane pads embedded in insulation with one or more layers of plywood on top to support the topping slab. Figure 14/15/16.07 depicts the components for a floated concrete slab on a pad isolation system.
- The perimeter of the system is isolated from the adjacent building structures to limit flanking sound paths. This practice incorporates a perimeter isolation layer, typically an engineered, closed-cell foam or recycled rubber, at all junctions with interior walls and rooftop boundary assemblies.
- Penetrations through the isolated system are limited to only penetrations required for proper function of building systems on the rooftop. Required penetrations, including drains, are isolated.

Additional Considerations and Best Practices

- Mechanical equipment should be located as far away as possible from acoustically-sensitive spaces. Locating equipment at the ground level outside the building results in fewer noise paths into the building.
- While floated slab isolation systems typically have higher upfront cost, they are easier to install and require less coordination with other building components. Ceiling isolation systems, such as a spring-suspended gypsum board assembly, may have lower material cost but require significant coordination with building systems and are more challenging to install.
- Inclusion of floating slab or suspended ceiling isolation systems does not eliminate the need for vibration isolation of mechanical equipment. Coordinate this approach with the acoustical consultant or a vibration expert.
- For floated slab isolation systems, the thickness of the topping slab depends on the acoustical requirements and the weight of the supported systems. Coordinate this approach with the structural engineer and system manufacturer.
- Rooftop floated slab isolation systems may have additional waterproofing requirements. Coordinate this approach with the system manufacturer.

Figure 14/15/16.06 — Noise Pathway Issues
Noise may be generated from rooftop mechanical units in a variety of different ways

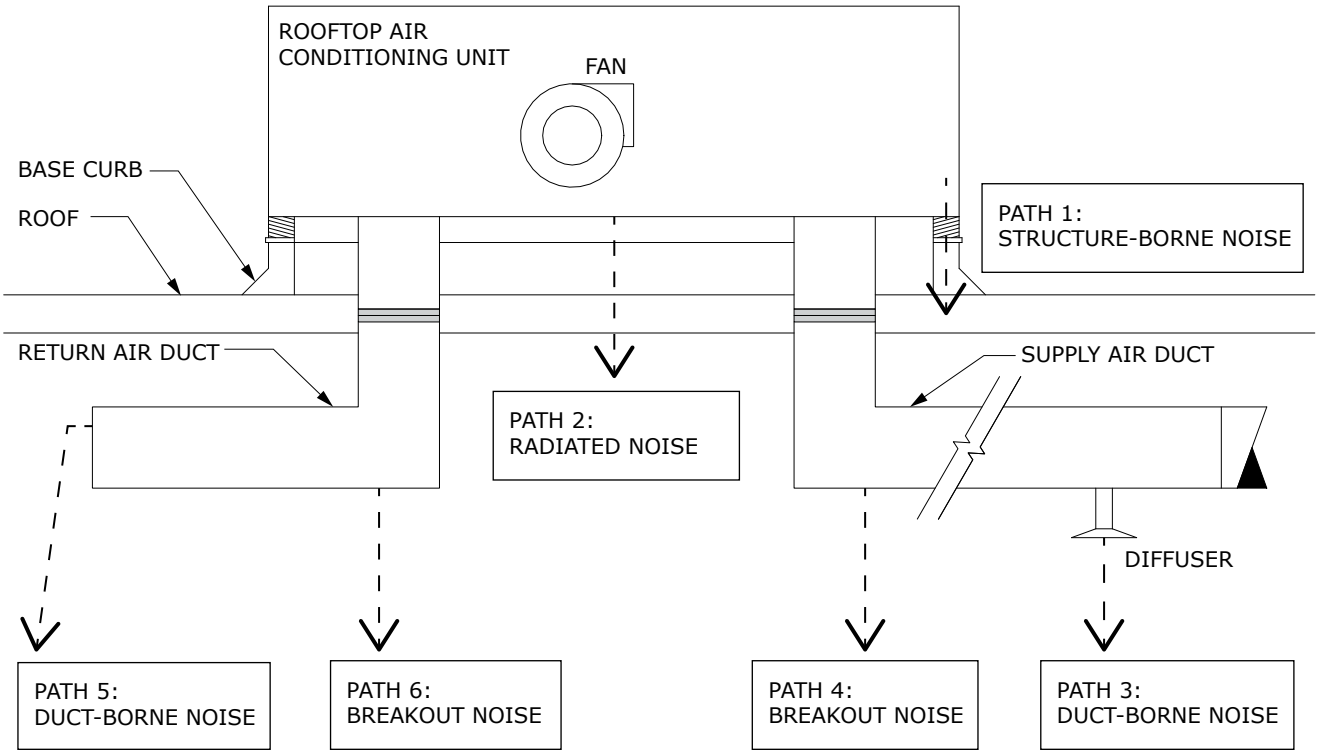
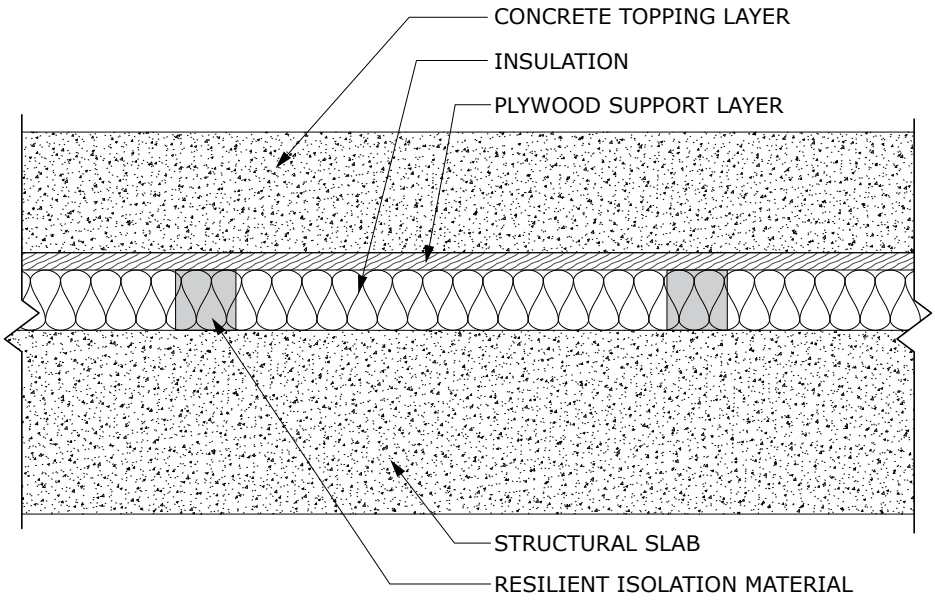


Figure 14/15/16.07 — Floated Concrete Slab Solution
Generic floated concrete slab detail to mitigate noise pathway issues



Building Systems Planning and Design Considerations

Mechanical and Plumbing Systems

Mechanical systems requirements are outlined in the *Design Guide* and GSA PBS P-100. When planning for and designing these systems, the following should be considered:

General Planning Considerations

- Prior to the beginning of design, the engineer should understand the MEP requirements outlined in GSA PBS P-100 and the *Design Guide*. The engineer should consider:
  - Type of building air and water systems for the HVAC system design.
  - Type of building plumbing systems, such as sanitary risers, vent pipes, hot and cold water pipes, natural gas piping, and storm piping.
  - Spare capacity of the courthouse's mechanical and plumbing systems.
  - Controls systems.
  - Location of terminal units, main ductwork, and piping risers.
  - The servicing and maintenance of mechanical equipment and how that might affect court operations. For example, terminal units should not be located in the courtroom. In the event that the terminal unit needs to be serviced, the courtroom is unusable while the unit is being worked on.
  - Location of mechanical rooms and available space for the installation of new equipment, including clearance around the equipment for maintenance.
- HVAC temperature control zones should be carefully planned as per the schedules and temperature set-points in each space. Location of thermostats and allowable level of set-point adjustment should be considered based on the number and function of occupants in that zone.
- Outside air intakes and exhaust louver locations should be discussed early in the project to comply with GSA PBS P-100 requirements and any historic preservation considerations for louvers on the building.

After-Hours MEP Services

- Spaces which require cooling, dehumidification, or heating outside the hours of operations of the core systems should be provided with dedicated cooling, dehumidifying, and heating capability that is decoupled from the core systems. These special systems should be provided with standalone controls.
- Engineers should consider the size of the space requiring 24/7 cooling to determine the best recommended solution. Engineers should also consider whether this 24/7 equipment needs to be on emergency power.
- Appropriate turndown ratios should be considered for the supplementary systems to support single zone operations, if needed.
- Systems in colder climate conditions, such as ASHRAE 90.1 Climate Zones 5,6 and 7, should have high heating turndown and humidification capability. Climate zones 1, 2, and 3 should have high cooling turndown in addition to full dehumidification capability. Moderate climate zone 4 should be evaluated for all heating, cooling, humidification, and dehumidification supplemental capabilities.

ASHRAE and LEED

- Engineers should comply with the requirements of ASHRAE 90.1 while designing mechanical, electrical, and plumbing systems.
- Engineers should evaluate if the project's energy consumption achieves the desired cost percentage savings over the baseline building in ASHRAE 90.1-Appendix G. The cost percentage savings will determine the number of LEED points that can be obtained for the project.
- If the points obtained are less than the targeted points in the LEED scorecard, engineers will need to incorporate additional energy savings measures in the construction documents.

Mechanical Penthouse Noise and Vibration Control

Mechanical penthouses should not be located directly over courtrooms or judges' chambers. Mechanical penthouses create significant noise and vibration. If penthouses are located over noise-sensitive spaces, additional acoustic mitigation may be needed. Solutions typically include the following:

- Install a floating concrete floor inside the penthouse, which provides significant noise control and is easy to install. However, this solution adds cost, structural weight, and raises the penthouse floor height, which requires coordination between multiple disciplines.
- Install a sound isolation interstitial ceiling in the spaces below the mechanical penthouse, which may require significant installation coordination. This solution requires a spring-isolated, multi-layer gypsum board ceiling suspended from the structure. Building systems must be installed beneath the sound isolation ceiling, and the finished ceiling must be installed beneath the building systems.

- The mechanical engineer and acoustical consultant should coordinate vibration isolation and systems should be selected to be as quiet as possible.

Plumbing Noise Control

Plumbing noise is most easily controlled by carefully locating the plumbing pipe chases.

- Do not put restroom chases adjacent to noise-sensitive spaces such as courtrooms, judges' chambers, conference rooms, or jury deliberation areas.
- Isolate pipes in judges' private restrooms using acoustic pipe isolators, closed cell foam, or as directed by the acoustical consultant.
- Isolate plumbing pipes in other noise-sensitive spaces also using pipe isolators, closed cell foam, or as directed by the acoustical consultant.

Electrical Systems

Electrical systems requirements are outlined in the *Design Guide,* GSA PBS P-100, and USMS Publication 64 Vol. III. When planning for and designing these systems, the following should be considered:

General Planning Considerations

- Consider providing multi-zoned lighting systems to allow for flexibility in illuminating the courtrooms.

Emergency Generator Locations

- Refer to the "Acoustics Planning and Design Considerations" section for information regarding location of emergency generators.

Systems Requiring Emergency Power

Some systems that require emergency or back-up power are listed below; however, project teams should refer to GSA PBS P-100 for a full list of building systems.

- Life safety devices and egress lighting.
- Secure circulation lighting, elevators, roll-up doors, and other systems serving secure spaces.
- U.S. Marshals Service (USMS) security systems and equipment.
- AV and information technology (IT) equipment. Courts and the General Services Administration (GSA) should discuss on a project-by-project basis what, if any, AV/IT equipment requires emergency power.
- The Court COOP Plan should be considered when preparing emergency generator requirements.

Communication Systems

Communication systems requirements, which typically include AV, IT, and structured cabling, are outlined in the *Design Guide* and GSA PBS P-100. Figure 14/15/16.08 depicts the overall process of approving, designing, and installing this equipment in a new courthouse project. In addition, Figures 14/15/16.09 through 14/15/16.11 depict some additional requirements for common AV and technology spaces.

When planning for and designing these systems, the following should be considered:

General Planning Considerations

- Will court technology systems, such as clocks, printers/copiers, room reservation systems, sound masking systems, and digital signage, be network based?
- Will court technology head-end systems be in the telecommunications rooms or located in their own space?
- The IT rooms for the court should be separate. Other tenants, such as USMS and GSA, will require separate IT rooms.
- Will AV systems use a dedicated AV technology network?
- Will IT infrastructure be consolidated for all court units, or will each court unit have their own infrastructure? The IT cabling for the court should be separated from other tenants' IT cabling. Separate cable pathways and trays will be required.
- Will a court unit be responsible for AV help desk services?
- Diverse cable pathways from outside manholes will be required for WAN service providers.
- If demountable partitions or modular furniture will be installed, coordination with the structured cabling designer and installer will need to occur for proper design and timely installation.

Coordination

MEP, security, communications, and other technology systems require extensive coordination at various points in the planning and design process. When beginning the planning or design process, project teams should consider the following:

- AV control systems need to be coordinated with lighting control systems where appropriate. Intersystem control should be discussed during planning and design with the project team and GSA.
- Does the USMS require audio feeds from the courtrooms? Coordinate these systems with the USMS.
- Coordinate AV and technology needs between court units during design. Significant cost savings may be realized by adopting a unified IT infrastructure and network plan.
- Do you want to share court technology content and video conferencing across multiple divisional locations? Discuss with court IT staff and the communications systems designer.
- The local court IT manager should be involved early and often in the design process and throughout construction of the courthouse.

Figure 14/15/16.08 — GSA and Administrative Office of the U.S. Courts (AOUSC) Court AV/IT Flow Chart
Chart depicting the process and party responsibilities of integrating AV/IT for a courthouse project

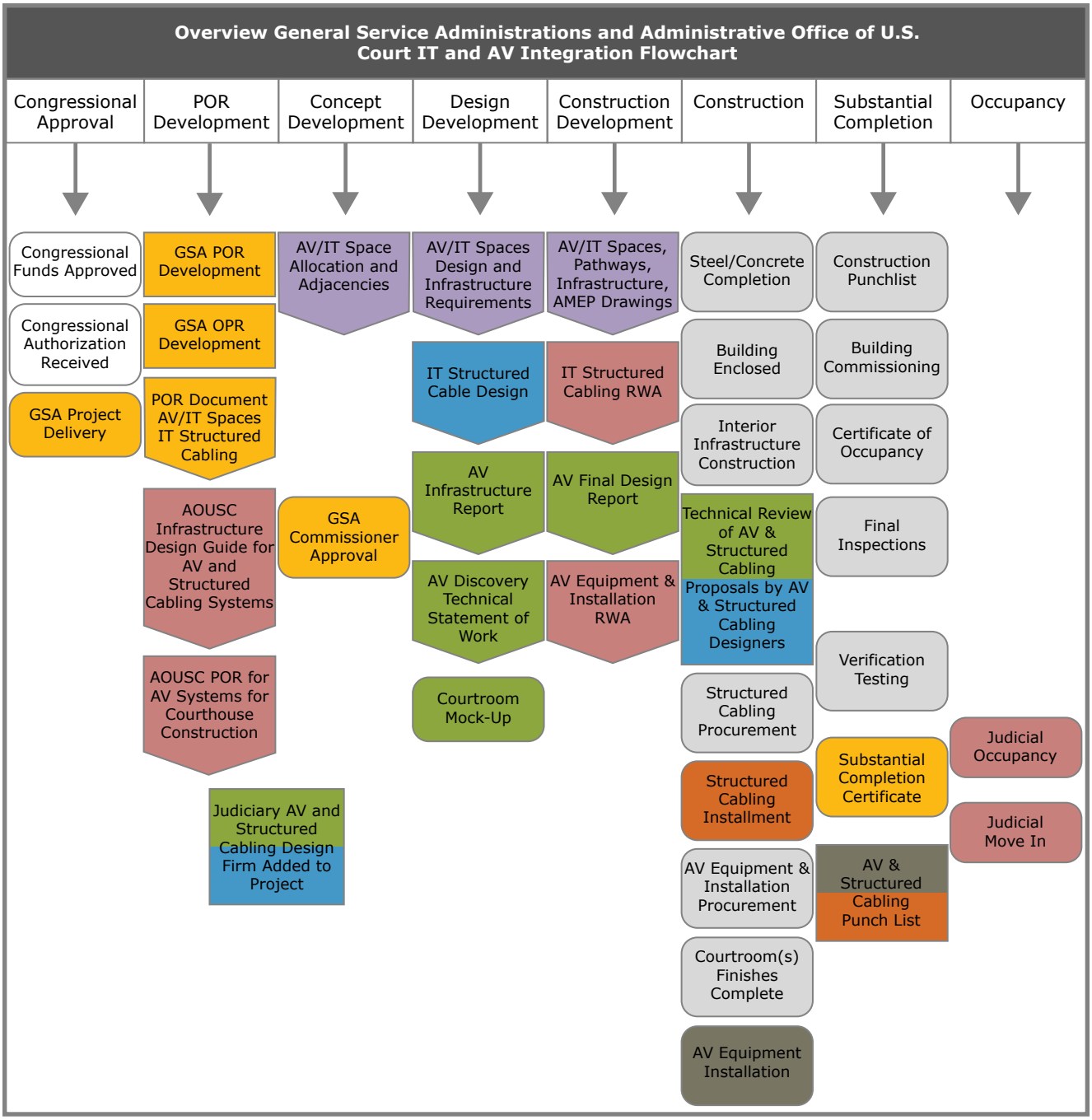


Figure 14/15/16.09 — Telecommunications Room
Typical telecommunications room requirements (ANSI/TIA-569)

Architectural

General Requirements:

Security Level:	Card Access
Ceiling Height:	Minimum 10’-0”

Location:

- Minimum one per floor;
- Central to area served;
- No more than 295’-0” to farthest equipment outlet;
- Aligned vertically (stacked) on multi-level buildings.

Finishes:

Wall:	Fire-Rated Plywood
Floor:	Anti-Static Floor Tile
Base:	Vinyl or Rubber
Ceiling:	Open to Structure

Building Systems

Illumination:

Horizontal:	46 fc
Vertical:	18.6 fc
Lighting Control:	Yes

Electrical:

- Dedicated 100A, 120/208V sub-panel.
- Two dedicated 120V, 20A circuits per rack.
- Telecommunications grounding busbar (TMGB).
- Emergency power.

Mechanical:

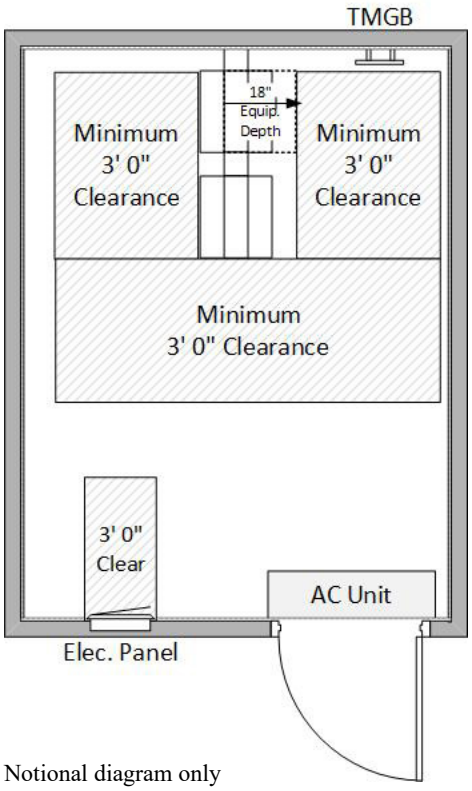
- HVAC – continuous and dedicated environmental control (24/7/365).
- Positive pressure with minimum one air change per hour.

Conduit Pathways:

- Two 2” (minimum size) EMT conduit to other telecommunications rooms on same floor.
- Four 4” EMT conduit or sleeves to telecommunications room on the floor above and on the floor below.
- Minimum two 4” EMT conduit or sleeves to basket-style cable tray in corridor.
- From the server room, three 2” minimum EMT conduit to each telecommunications room on the same floor.

Space Notes

- Rooms are restricted to court use only;
- Design for a minimum of two, two-post telecommunications racks.
- Equipment that is not related to the support of telecommunications spaces (e.g., piping, ductwork, distribution of building power) should not be located in or pass through a telecommunications space.
- Rooms should be located above any threat of water ingress (flooding).
- Locations that are below or adjacent to areas of potential water ingress (e.g., restrooms, kitchens) should be avoided.



Notional diagram only

Equipment Outlets Served (per Floor)	Minimum NSF Required	Typical Space Dimensions
Up to 100	120 NSF	10’-0” x 12’-0”
101–200	150 NSF	10’-0” x 15’-0”
201–800	400 NSF	20’-0” x 20’-0”
801–1,600	800 NSF	20’-0” x 40’-0”
1,601–2,400	1200 NSF	30’-0” x 40’-0”

Figure 14/15/16.10 — Server Room
Typical server room requirements

Architectural

General Requirements:

Security Level:	Restricted 3 (or Secure 1)
Ceiling Height:	Minimum 10’-0”

Finishes:

Wall:	Fire-Rated Plywood
Floor:	Anti-Static Floor Tile
Base:	Vinyl or Rubber
Ceiling:	Acoustic Ceiling Tile

Building Systems

Illumination:

Horizontal:	46 fc
Vertical:	18.6 fc
Lighting Control:	Yes

Electrical:

- Dedicated 150A, 120/208V sub-panel.
- Two dedicated 208V, 30A circuits per cabinet.
- Telecommunications grounding bus bar (TMGB).
- Emergency power.

Mechanical:

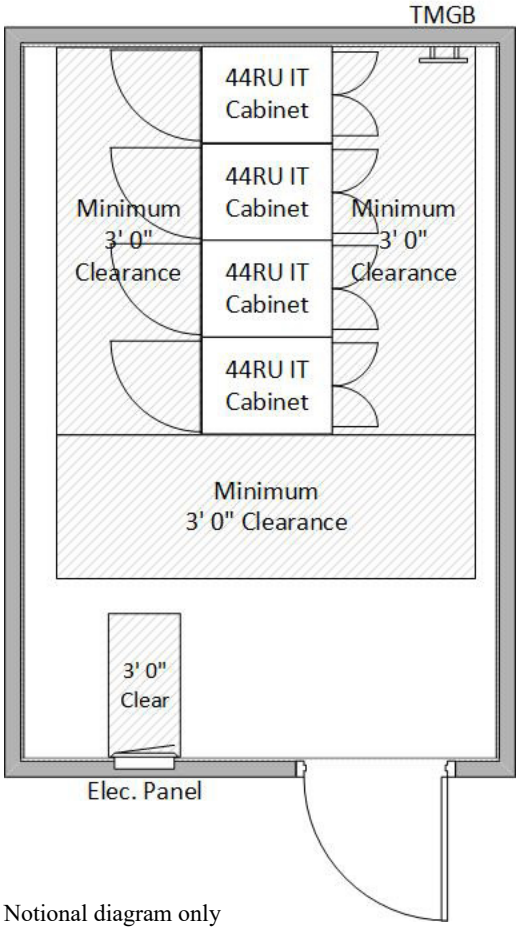
- HVAC – continuous and dedicated environmental control (24/7/365).
- Positive pressure with minimum one air change per hour.

Conduit Pathways:

- Two 4” EMT conduit with three 1.25” innerduct each to telecommunications demarcation room.
- Three 2” (minimum size) EMT conduit to each telecommunications room on the same floor.

Space Notes

- Rooms are restricted to court use only;
- Design for a minimum of four 24.25” x 32.625” network equipment cabinets.
- Size of room will vary based on server equipment requirements of the court.
- A centralized UPS system may be required in larger courthouses. Additional space for the centralized UPS equipment shall be accommodated.
- Equipment that is not related to the support of the server room (e.g., piping, ductwork, distribution of building power) should not be located in or pass through the server room.
- Rooms should be located above any threat of water ingress (flooding).
- Locations that are below or adjacent to areas of potential water ingress (e.g., restrooms, kitchens) should be avoided.
- Minimum Dimensions: 10’ x 20’ (varies by courthouse; consult with court IT manager)



Notional diagram only

Figure 14/15/16.11— AV Room
Typical AV room requirements

Architectural

General Requirements:

Security Level:	Restricted 3 (or Secure 1)
Ceiling Height:	Minimum 10’-0”
Adjacencies	Adjacent to/close proximity to courtroom

Finishes:

Wall:	Fire-Rated Plywood
Floor:	Anti-Static Floor Tile
Base:	Vinyl or Rubber
Ceiling:	Acoustic Ceiling Tile

Building Systems

Illumination:

Horizontal:	46 fc
Vertical:	18.6 fc
Lighting Control:	Yes

Electrical:

- Two dedicated 120V, 20A circuits per cabinet. Must be on the same phase as associated courtroom AV equipment.
- Telecommunications grounding bus bar (TMGB).
- Emergency power.

Mechanical:

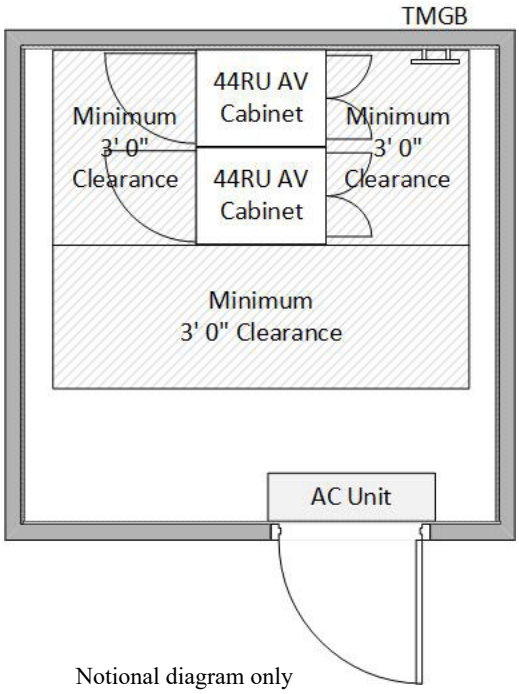
- HVAC – continuous and dedicated environmental control (24/7/365).
- Positive pressure with minimum one air change per hour.

Conduit Pathways:

- Two 2” (minimum size) EMT conduit to closest telecommunications room on same floor.

Space Notes

- Rooms are restricted to court use only.
- Design space for a minimum of two 24.25” x 32.625” network equipment cabinets (per courtroom, if serving more than one courtroom).
- Location of room (adjacency and proximity to courtroom) is more critical than size of room.
- The AV room design shall not impact the acoustical envelope of the courtroom nor impact any acoustical performance in the courtroom.
- Equipment that is not related to the support of the AV room (e.g., piping, ductwork, distribution of building power) should not be located in or pass through the AV room.
- Rooms should be located above any threat of water ingress (flooding).
- Locations that are below or adjacent to areas of potential water ingress (e.g., restrooms, kitchens) should be avoided.
- Minimum Dimensions: 10’-0” x 10’-0”



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Building Systems Best Practices

Building Systems Coordination

General

- It is important to stack MEP, security, telecommunications, and AV rooms to minimize floor slab penetrations. If the design does not allow for this practice, then it is important to plan for a pathway to the spaces that are stacked.

Technology Rooms and Wiring

- The Judiciary's space request includes dedicated AV, telecommunications, and server rooms. These are for the dedicated use of the courts and are not intended to be shared with other agencies.
- Wiring for different agencies will travel to different locations within the courthouse. Architects and engineers should carefully consider wire runs from each telecommunications, security, or AV room to avoid the degradation of services.
- Refer to Figure 14/15/16.08 to understand the overall AV/IT cabling timeline, party responsibilities, and milestones.
- Coordination between the furniture installer and the cable installer is required to determine how power and communications cables run through demountable walls during installation.

Security Planning and Design Considerations

Security Systems

Physical and electronic security systems in federal courthouses provide increasing levels of security and protection throughout a facility. Their objectives are to deter any unauthorized intruders from entering the facility, detect any unauthorized intrusions, and to deny or delay unauthorized intrusions to allow time for an appropriate response. The USMS is responsible for physical and electronic security systems within courthouses and court space. Additional responsibilities of all project stakeholders are detailed in Table 14/15/16.02.

Table 14/15/16.02 — Stakeholder Security Responsibilities
Depicting the various responsibilities of project stakeholders for a new courthouse project

GSA	A/E	AOUSC	USMS	FPS
GSA has multiple business lines responsible for security. Their responsibilities include, but are not limited to, product procurement, device locations, building perimeter access control systems, lobby turnstiles, and infrastructure for proposed devices and future capacity.	Locates backboxes, power, and data, and other infrastructure and pathways as required to facilitate incorporation of security equipment and devices for a fully functioning building.	Provides oversight and guidance.	Procurement of judicial security equipment and installation within the building. Refer to Appendix 2, "Supporting Documentation," for the USMS Security Systems Procurement and Installation Checklist.	The perimeter of the building and IDS equipment inside the building. FPS provides feedback to GSA on location and types of devices.
Serves as the facilitator to coordinate activities of A/E, and all stakeholders to achieve a coordinated, functioning security system design.			Coordinating device locations and reviewing infrastructure plans with GSA, AOUSC, and A/E.	Coordinating products, device locations, and reviewing infrastructure plans with GSA, AOUSC, and A/E.
			Reviews and approves A/E design to accommodate infrastructure for security equipment.	Reviews and approves A/E design to accommodate infrastructure for security equipment.

Project teams should refer to USMS Publication 64, Volume III for additional details, diagrams, and design requirements regarding security systems. A brief description of the equipment may be found below:

- Intrusion Detection Systems (IDS) – used to monitor interior and exterior entrances and exits under USMS or Judiciary control. Equipment may vary by application and may include microwave motion detectors, passive and active infrared detectors, door contacts, and glass break sensors.
- Access Control Systems (ACS) – used to control traffic into and within pre-defined areas by limiting access to only authorized personnel. Equipment typically includes a card reader and door hardware.
- Closed Caption Video (CCV) – used to monitor designated areas of the facility, both interior and exterior. The CCV should be compatible with the IDS and ACS.

Along with the requirements listed in USMS Publication 64 Vol III, project teams should consider the following:

Exterior and Lobby Security

- The intent is to deter unauthorized personnel from attempting to enter the facility.
- The court security officer (CSO) security screening station should be placed inside of the main entrance doors and prior to the lobby of the courthouse. Visitors should be directed through a reception area to a security queuing area. An ideal security configuration is depicted in Figure 14/15/16.12.
- All entrances and exits must be monitored by CCV.
- A separate employee-only entrance may be provided to separate cleared employees. The decision to add this employee-only entrance needs to be made very early in the design process with the concurrence of the Court Security Committee.

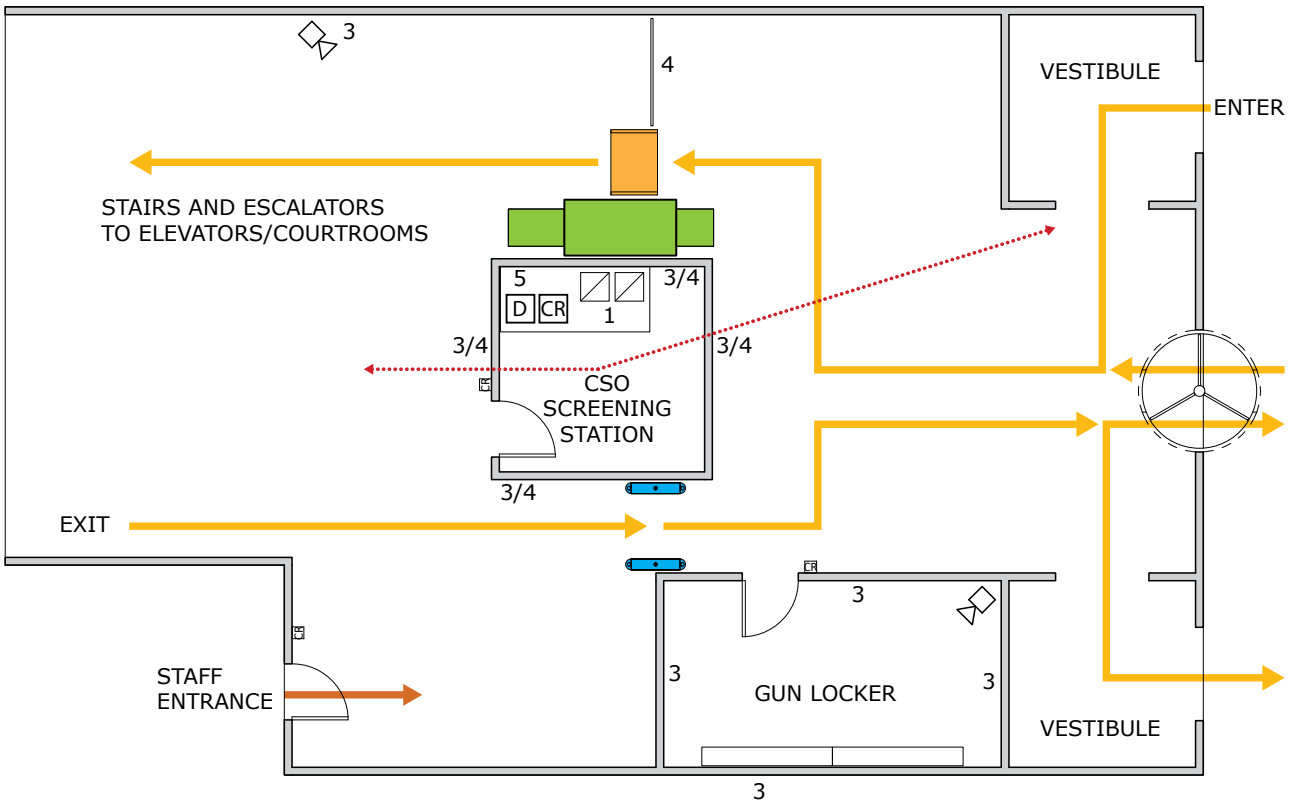
Mass Notification Systems

- Mass notification systems are used to issue facility-wide and location-specific alerts to staff and other personnel of an active shooter, fire emergency, severe weather occurrence, public disturbance, and other imminent threat.
- These systems typically utilize pre-configured messages to alert people of an immediate danger. These systems may connect to IP-based equipment, which will alert staff through desktop banners, emails, text messages, emergency beacons, or audible messages. For additional information regarding these systems, refer to GSA PBS P-100.
- Mass notification systems are considered betterments and not standard security systems funded by GSA or USMS. As a result, these systems may be funded directly by the local court. If this system is desired by the Judiciary, project teams should consult with GSA, USMS, and a security design consultant at the beginning of a courthouse project.

Funding

The process to acquire security funding is depicted in Figure 14/15/16.13. The chart depicts the typical steps necessary to complete a security or building improvement project. Users should select the type of resources requested and follow the funding path through the resource providers, the proper funding authority, and finally the agency to implement that resource.

Figure 14/15/16.12 — Lobby Security Plan
Ideal security plan for courthouse lobby space



COLOR LEGEND:

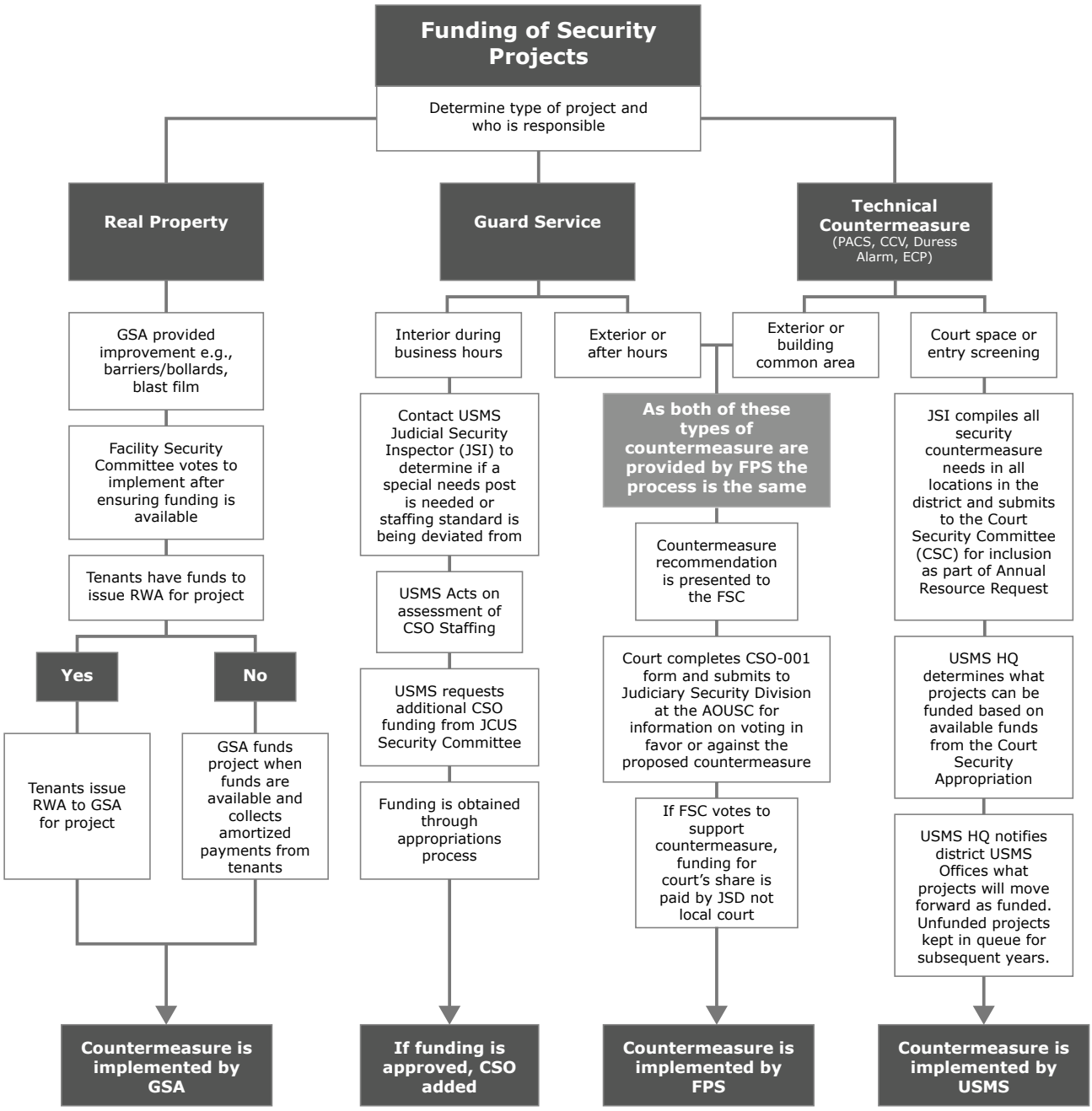
- METAL DETECTOR
- X-RAY MACHINE
- BARRIER TURNSTILES

SYMBOLS LEGEND:

- PUBLIC CIRCULATION
- STAFF CIRCULATION
- VISUAL ACCESS

1. SECURITY CONSOLE, TELEPHONE LINE REQUIRED
2. CCTV CAMERA
3. UL STANDARD 752, LEVEL III FOR ALL WALLS
4. UL STANDARD 752, LEVEL III GLAZING
5. DURESS ALARM [RC3]

Figure 14/15/16.13 — Security Funding Flow Chart
Chart depicts how security projects are funded based on the type of project, stakeholder responsibilities, and other project parameters



Security Best Practices

Security

Coordination

- The USMS local judicial security inspector, USMS headquarters Office of Security Systems security specialist, and a representative from the USMS headquarters Office of Construction Management should be involved as early as possible in all new construction, renovation, and alteration projects. This practice will ensure that they are engaged for their input in the planning phases and able to commit resources to the project as soon as possible.

Parking/Exterior Security

- Security drop arms are the preferred means of providing crash-resistant protection. This equipment will provide initial and maintenance savings.
- Wedges are acceptable alternatives but may have higher maintenance issues as they are housed underground and susceptible to water, dirt, and debris.
- Retractable bollards should not be considered for vehicle access.

Lobby/Security Screening Station

- Security screening stations are ideally located before and separated from the grand lobby or atrium space.
- Security pavilions may be considered if existing courthouses have inadequate space for the security screening function.
- The security screening station should be raised so the officers may view the entire lobby from one central point. The screening area should contain additional electrical outlets dedicated for the screening equipment.
- If a screen wall is necessary to separate the secure and non-secure sides of the lobby, consider a laminated glass screen wall. The glass may be adorned with a seal and complements modern and historic aesthetics alike. A screen wall should not be less than 6 feet in height.
- Security screening stations should have finishes that match the surrounding space. Matching finishes prevent stations from looking like an afterthought. For high touch areas avoid light colors, glass, and stainless steel.

USMS Control Center

- If a courthouse facility contains more than one building, construct only one USMS control center for the complex with approval from the USMS. This control center should have the capacity to appropriately handle the security needs of the complex. This approach will provide building, space, and court security cost savings.

Equipment

- Wireless duress alarms may be preferred by the USMS. These wireless devices may reduce the conduit cost for the building.

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Lobby Security Case Study

U.S. District Courthouse | Mobile, Alabama

Background

The architectural design of the lobby was a top priority for project stakeholders. When originally planned, the CSO station, magnetometer, X-ray machine, and turnstiles were placed at the center of the lobby. It was determined that this location distracted users from the overall spatial experience so the security equipment was moved to a new location out of view. This move created some security challenges which were ameliorated by unique design strategies.

Successes

The overall architectural design of the lobby was not compromised and the security equipment was successfully located and integrated into the space. Refer to Figures 14/15/16.14 through 14/15/16.16, which depict the overall design of the lobby.

Architectural Vision

- The security equipment occupies its own alcove directly adjacent to the CSO station. This equipment is out of view to the average user of the lobby space, which allows the architectural vision to shine through.
- The glass barrier directs users toward the security screening area without distracting the user from the overall experience of the lobby space. From many angles, the barrier is essentially invisible.

Security

- The elevated CSO station has direct lines of sight to the public elevators, entrance doors, security queuing area, and exit turnstiles.
- Security cameras are located in the lobby, entrance vestibule, and at the exterior doors.
- The glass barrier prevents unauthorized access into the courthouse and creates an integrated queuing space for the security screening area.

Compromise

- The biggest concern from project stakeholders was the amount of time it would take to travel from the CSO breakroom to the lobby in the event of a security threat. The CSO breakroom was subsequently located directly above the security screening area, which is accessible to the lobby through a staircase. The design of the breakroom also incorporates a large window looking into the lobby to allow for a faster CSO reaction time. Figure 14/15/16.15 depicts the CSO station with the breakroom windows above.

Figure 14/15/16.14 — Lobby Security Plan
Floor plan depicting the security equipment and circulation through the screening area and lobby

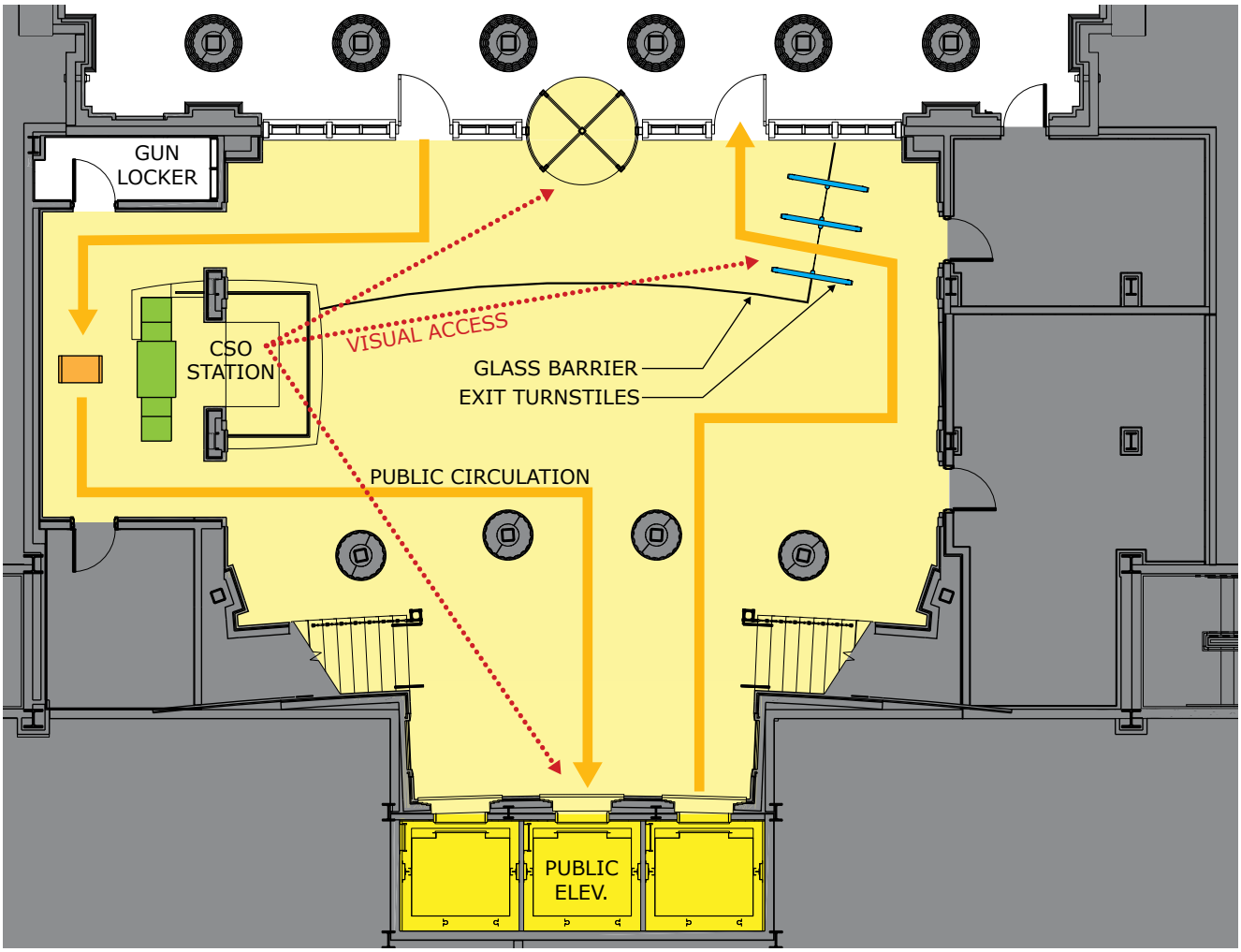


Figure 14/15/16.15 — Glass Barrier
Glass security barrier at the courthouse entrance

Figure 14/15/16.16 — CSO Station
Elevated CSO station and CSO breakroom windows above

Lobby Security Case Study

U.S. District Courthouse | Los Angeles, California

Background

Completed in 2016, the LA U.S. District Courthouse was designed to be a sustainable, secure, and cost-effective courthouse in downtown Los Angeles. The courthouse's form takes shape as a serrated glass cube cantilevered over a stone base. Inside, the cube is divided down the center by a light court that runs the length of the building. A large skylight allows natural daylighting to flood the spacious atrium. Creating a visually open courthouse interior and accommodating the courthouse's high volume of visitors required careful planning in order to screen visitors efficiently without sacrificing the atrium's through-building views.

Successes

The security lobby and the building atrium were designed to complement each other while remaining separate areas. The location of the security lobby is in an ideal location since it is not integrated into the main atrium space. Figure 14/15/16.19 depicts the layout of the security lobby adjacent to the main atrium.

Architectural Vision

- To maintain the architectural quality of the atrium's ground floor, the security screening station is finished with the same materials featured in the rest of the lobby. Figures 14/15/16.17 and 14/15/16.18 depict the atrium and CSO station.
- Screening equipment that would otherwise stand out is integrated into the station design.
- The reserved use of glass barriers creates a secure separation between the screening queue and public lobby without obscuring views through the atrium at ground level.

Security

- The CSO station's lowered profile provides direct lines of site to the entrance, exits, and the main lobby.
- Visitors proceed through one double-door entrance and can be screened on one or both sides of the CSO station depending on the volume of people in queue.
- Departing visitors pass through perimeter turnstiles and proceed through designated exit doors. The adjacency of entrance and exit circulation minimizes the amount of glass barriers required.
- An aluminum-clad canopy at the north end of the building provides lighting at the security booth as well as overhead lighting for the screening areas and turnstiles. The light level assists building security to efficiently screen visitors and help them navigate their way through the building's primary entryway.

Figure 14/15/16.17 – Main Atrium
Interior view of the main atrium space

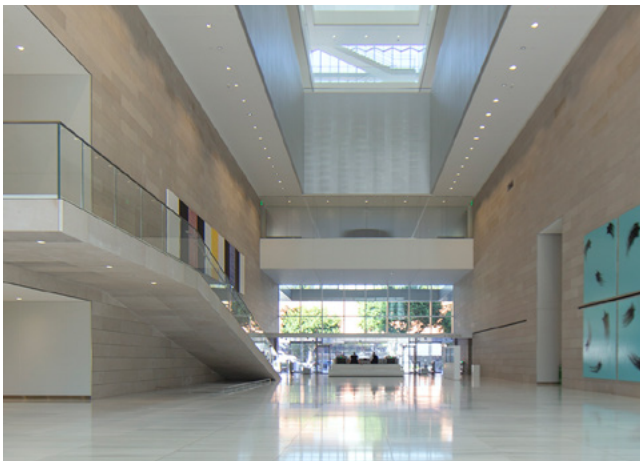
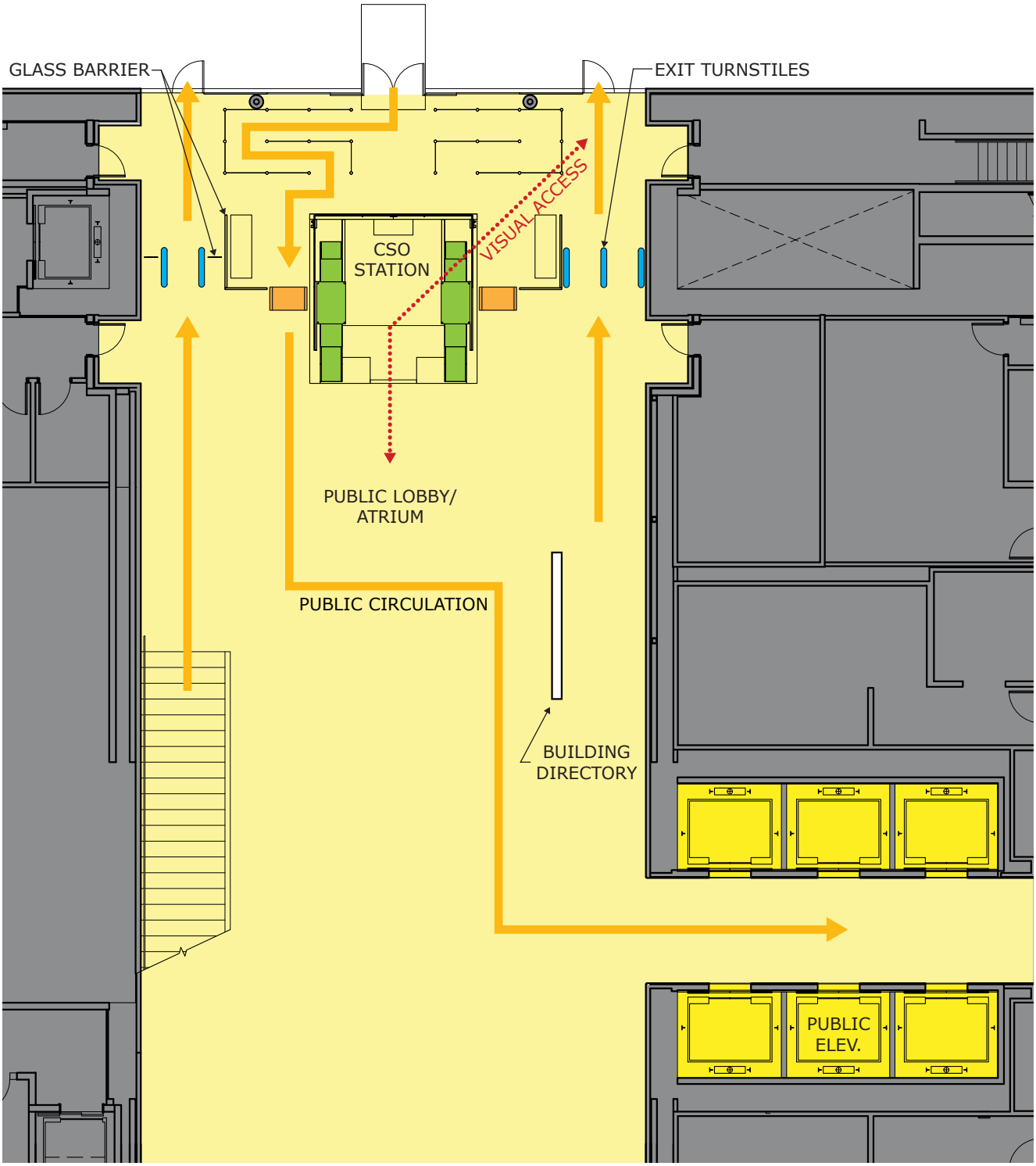


Figure 14/15/16.18 – CSO Station
View of the security lobby and CSO station from the atrium

Figure 14/15/16.19 — Lobby Security Plan
Floor plan depicting the security equipment and circulation through the screening area and lobby



Security Pavilion Case Study

Prince Jonah Kūhiō Kalaniana'ole Federal Building & U.S. Courthouse| Honolulu, Hawaii

Background

The Prince Jonah Kūhiō Kalaniana'ole (PJKK) Federal Building and U.S. Courthouse is the only federal building in Honolulu and houses a variety of federal agencies, including the U.S. District Court for the District of Hawaii, USMS, and the U.S. Attorney's Office. The different court units and federal agencies were originally housed in separate parts of the facility connected by a skybridge that enclosed the internal courtyard. The courtyard was accessible from the public stairway and obscured from CSO view; this scenario allowed visitors into the interior of the buildings prior to going through a security checkpoint.

In 2009, Congress funded the modernization of the building, and in 2010, the first phase of this modernization began. The original scope did not include the new security pavilion, but it was soon determined in the initial designs and through some cost savings analysis that this was a major improvement, greatly needed for the entire facility. Expanding the scope to include this pavilion would provide enhanced building security and additional space as required by the USMS. While a security pavilion transformed this particular facility, it should be noted that security pavilions are only constructed when no other option is available to ensure the safety of patrons and the Judiciary.

Successes

The security pavilion spanned between the courthouse wing and the rest of the federal facility. This pavilion provides a modernized entrance with enhanced security features, line of site, vehicular bollards, and improved wayfinding. Refer to Figures 14/15/16.20 through 14/15/16.22, which depict the design of the pavilion.

Design and Security

- Two identical screening stations are located next to each other, one for the Federal Protective Service (FPS) and the other for the USMS and entry into the U.S. District Courthouse. This practice consolidates the screening areas and equipment into one location, while separating the two functions and allowing for overflow if one side is overloaded.
- The screening stations have uninterrupted views of the security pavilion, lobby space, and public plaza.
- The pavilion dramatically improves wayfinding in the facility. Each security line is visually marked and spatial cues direct patrons left toward the federal facility or right toward the courthouse.
- Bamboo fritted glass and natural wood tones accent the security pavilion while still allowing visibility through the walls for security purposes. The glass walls act as security barriers while bringing life and light to the space.

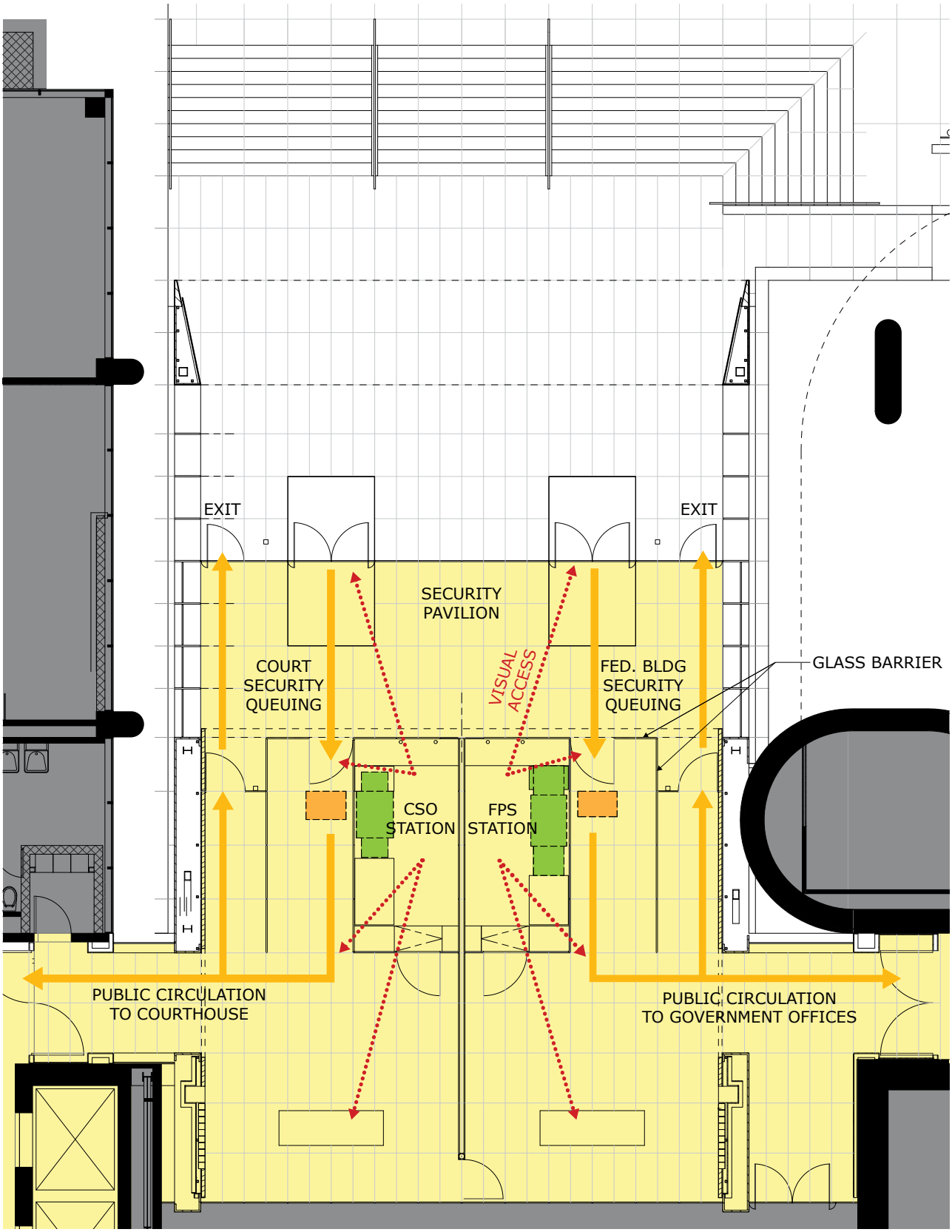
Scope

- The total cost of the PJKK Courthouse renovation/modernization included a new security pavilion; a total modernization/renovation to judiciary, probation, pretrial, and USMS tenant space; and green design alterations to the courthouse. This phase gave the Judiciary an opportunity to implement green principles and reduce building energy consumption by 30 percent.

Figure 14/15/16.20 — Street View of Pavilion
Exterior view of the new security pavilion

Figure 14/15/16.21 — Interior View of Pavilion
View of CSO station and screening equipment

Figure 14/15/16.22
Security pavilion floor plan depicting the security equipment and circulation through the screening area



U.S. District Courthouse | Pensacola, FL

Image: Beyer Blinder Belle

17 RENOVATIONS AND ALTERATIONS

This chapter provides best practices regarding prospectus and non-prospectus renovations to existing court space.

Chapter Sections:

Introduction

Unlike new courthouse construction, renovation and alteration (R&A) projects present unique opportunities and challenges. The project scope, schedule, and stakeholders may vary depending on the complexity of the project and known existing conditions. The General Services Administration (GSA) may handle projects in different manners depending on the region or cost of the project. Smaller projects may be handled by an individual field office while larger projects may be handled by the regional design and construction office. Local courts may choose to handle smaller projects through a building manager; however, any changes to judiciary space should be coordinated through the GSA, and the authorities having jurisdiction (AHJ) for review and inspection.

Supporting Documents

The following reference documents provide additional information on the topics contained within this chapter:

- *United States Courts Design Guide*, Chapter 17, 2021
- *United States Courts Courthouse Design Reference Manual,* 2007
- *Requirements and Specifications for Special Purpose and Support Space Manual*, *Volume One, Construction Requirements* (USMS Publication 64 Vol. I), Office of Facilities and Courthouse Construction, most current edition
- *Requirements and Specifications for Special Purpose and Support Space Manual, Volume Two*, *Security Products* (USMS Publication 64 Vol. II), Office of Facilities and Courthouse Construction, most current edition
- *Requirements and Specifications for Special Purpose and Support Space Manual*, *Volume Three, Judicial Security Systems Requirements and Specifications* (USMS Publication 64 Vol. III), Office of Facilities and Courthouse Construction, most current edition

Planning and Design Considerations

General Considerations

Facilitating construction in occupied facilities requires careful coordination between design and construction teams, building occupants, and facility managers. During the planning and design stage, the following considerations should be explored to help overcome the challenges of renovating occupied facilities:

Stakeholder Coordination

Depending on the scope and complexity of the R&A project, stakeholder engagement and responsibilities may vary between projects. Stakeholders should openly communicate during the project phases to make sure responsibilities are understood amongst the parties.

- Court staff must participate in design reviews to ensure they understand, are satisfied with, and approve of the design.
- GSA, U.S. Marshals Service (USMS), Federal Protective Service (FPS), court staff, and other stakeholders should coordinate early to ensure financial obligations and responsibilities are understood and met.
- During the design phase, GSA and USMS should meet to address the continuity of security and operations. It is incumbent on GSA to ensure that its architect/engineer and general contractor understand the degree of security and operations to be maintained during the renovation process.
- The phasing of construction and demolition should be planned jointly with GSA; the Office of Construction Management; Office of Security, Safety, and Health; and the local USMS district office, with the goal of minimizing the impact on operations and security.

Swing Space and Project Phasing

If a building is intended to remain occupied and operational during a renovation, swing space should be identified for areas of construction disturbance. It is important to understand how the project may be phased during the conceptual design and feasibility study stages to align expectations for the budget, project duration, and stakeholder disruption.

- Is there a vacant area within the building, or building complex, that could serve as swing space? Depending on where the vacant area is located, security upgrades may be necessary prior to utilizing the vacant area as swing space.
- Can staff telework during the renovation effort and still fulfill their intended mission?
- Does the court unit interface with the public?
    - How will the swing space location affect other court operations or the public interface?
    - Will the swing space accommodate the existing court functions that need to occur, or will it require additional renovation and furniture procurement to facilitate the interim moves?

- Costs should be considered for all phases, including interim swing space alterations and other move and mobilization activities. Stakeholders should understand that swing space alteration may need to occur prior to moving staff into and out of swing space. Costs may also be incurred for signage and messaging to alert the public and building occupants of court unit location shifts.

Hazardous Materials

Older facilities may contain hazardous materials that require different demolition and abatement techniques. Hazardous materials should be identified and quantified prior to beginning a project. Project teams should take the following steps with regard to hazardous materials:

- Request that a hazardous materials assessment report be procured by the GSA. Request a budget estimate for hazardous materials assessment, documentation, and abatement within your scope.
- Hazardous materials testing, design, and abatement activities should be conducted in accordance with the AHJs.
- Abatement activities may occur while the building is occupied or outside of operation hours. Require additional air quality testing, air purification, and air filtration requirements during abatement activities.

Leased Space

In leased spaces, it may not be possible to achieve the spatial and programmatic intent of the *Design Guide*. It may also be challenging to meet all the requirements of *Facilities Standards for the Public Buildings Service* (GSA PBS P-100). Building systems are often shared by multiple tenants, and the systems' performance criteria may already be established and maintained by the leasing agent.

Unforeseen Conditions

Existing facilities present unique design and construction challenges because of hidden or unforeseen conditions. These conditions are typically uncovered during construction activities and may affect the scope, schedule, and cost of the project. It is important that stakeholders plan for these conditions accordingly.

- During the design and construction of an R&A project, stakeholders should hold a financial and schedule contingency for unforeseen conditions.
- Beware of scope creep on R&A projects. Renovating a certain portion or percentage of your space may trigger other necessary upgrades that were not part of the project. For instance, an egress route may need to be made accessible or expanded although it may be outside of your project scope and boundaries.

Architectural Barriers Act Accessibility Standards (ABAAS)

Existing conditions may make it difficult to meet ABAAS requirements. If so, waivers will be required. Project teams should discuss whether there are requirements that need to be addressed. Some states, such as California, may have more stringent accessibility requirements than others.

Historic Preservation

Nearly 50 percent of existing courthouses and federal buildings in the U.S. are eligible for or listed in the National Register of Historic Places. As such, these buildings are to comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties. The building preservation plans (BPP) or historic structure reports (HSR) should be reviewed as part of the planning process to note where the preservation zones of importance are located. For buildings that are approaching or at the milestone of 50 years, historic preservation staff in each region should be consulted for review and inquiry:

- If determination of eligibility (DOE) is underway or completed in preparation for a BPP.
- To ensure that the character-defining features are retained in any undertaking.

Construction Considerations

Construction in occupied facilities requires constant communication to align expectations and establish acceptable tolerances for noise and disruption. Notify project stakeholders regarding changes in the approved schedule and areas of disturbance. Project teams should consider the following with regard to construction in occupied facilities:

Communication

- Request a partnering session at the onset of large renovations to establish expectations and project protocols.
- Prepare schedules and discuss short- and long-term milestones. Update and discuss these schedules at project meetings so that adjustments to building operations and construction services may be accommodated in a timely manner.

Hours of Construction

It is important to minimize disruptions to building occupants and visitors during a construction project. Many contracts require off-hours and weekend work to facilitate construction efforts. Off-hours and weekend work often bear a cost premium. Requirements for off-hours work should be established in the early project budgeting phases.

- Provide guidance on work that is acceptable to be facilitated during work hours.
- Clarify expectations for acceptable construction noise tolerance.
- Discuss schedules of court operations (especially any court proceedings that could be disrupted) and construction activities together on a weekly basis.

Best Practices

Coordination

- Review the GSA scope of work to ensure the project meets the Judiciary's needs. This review may result in a more accurate cost estimate by GSA.
- GSA's cost estimates should be requested well in advance of the funding fiscal year.
- GSA's fees typically include a set number of site visits, travel costs, and different services performed by GSA. These services are not all encompassing and may be limited, so it is important to understand what services the fees cover.
- GSA will conduct a hazardous materials survey, and this survey should be factored into the project plan for timing purposes. If hazardous materials are found, GSA may require extra time to fund hazardous material remediation. This additional time may result in project delays.
- The Judiciary should participate in GSA's punch list activities. By participating and becoming an active project stakeholder, the Judiciary's final concerns will be heard.
- Other tenants should be made aware of the renovation, and efforts should be made to coordinate operating hours and construction activities.
- Refer to Figure 17.01 for additional best practices and roles and responsibilities during the project close-out process.

R&A Projects

Swing Space and Project Phasing

- Project teams should study different swing space options and budget alterations for these temporary spaces accordingly.
- Once the project is complete, tenants should move into their new space in a timely manner. This practice will avoid double rent charges – one charge for the new space and a separate charge for the swing space.
- Project phasing should be carefully considered since a prolonged renovation, or a renovation with many phases, may result in a higher cost.
- When determining each phase of the project, consider the circulation paths of the different tenants or user groups. For instance, the public should be able to circulate to public amenities through public circulation.

Leased Space

- Projects occurring in leased space may involve a few extra steps. The lease may require amendments, and the project may require local building permits and reviews by the AHJs. Project teams should factor in time for these activities in the project schedule.
- If the court unit is in a leased location and the lease is up for renewal, there may be an opportunity to provide tenant improvement funding for renovations.
- Know the security screening and contractor badging procedures for the leased facility. Contractors may require access to the building off hours to avoid disrupting other tenants.

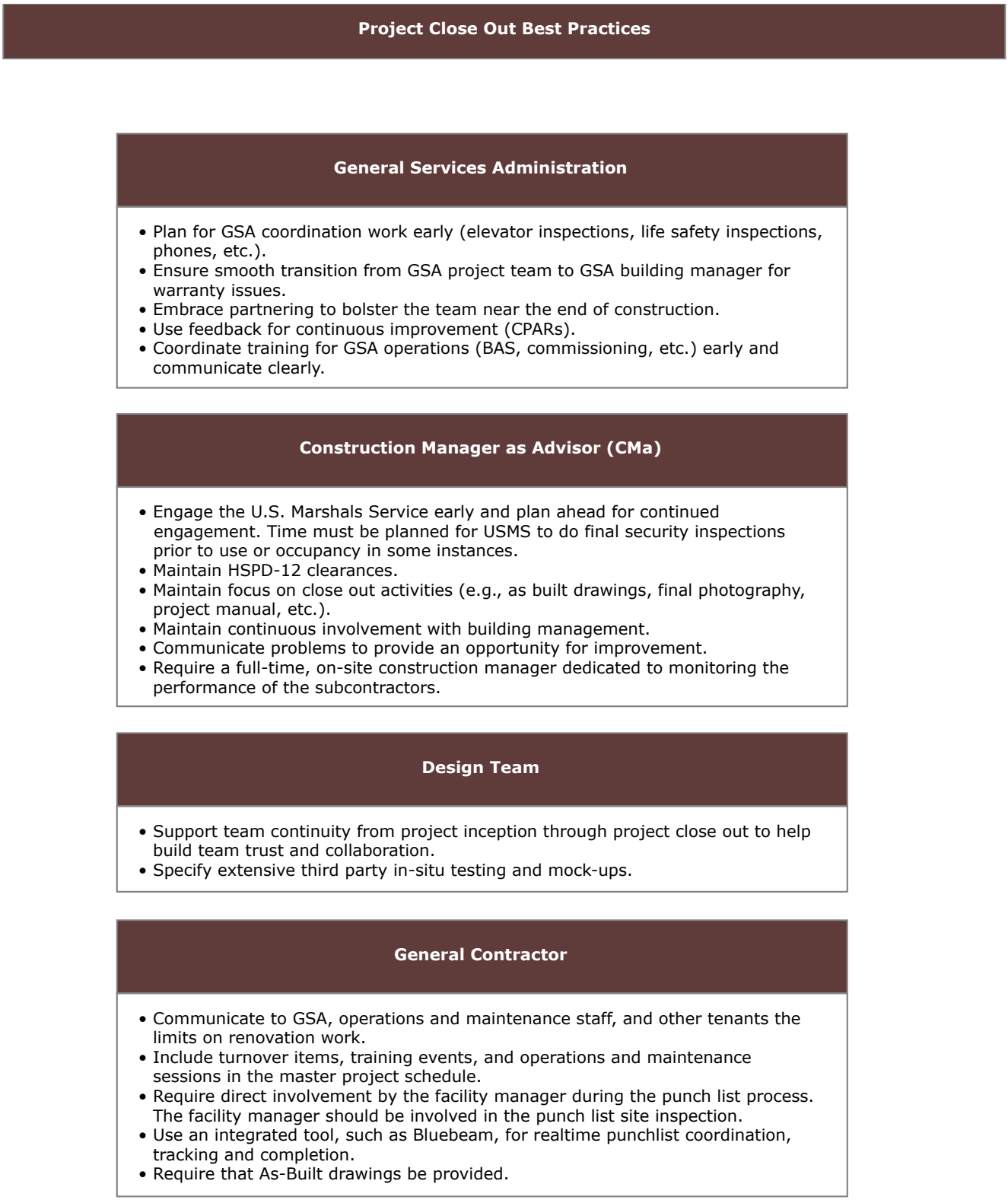
Unforeseen and Existing Conditions

- It is critical to schedule contingency in the project schedule for unforeseen or hidden conditions.
- Existing infrastructure should be examined to determine if building systems have spare capacity and are able to accommodate the renovation. Coordinate these efforts with the building manager or leasing agent.

Renovation Risks

- A renovation is an inherently risky endeavor, because there are many unknown conditions and variables at the onset of the project.
- Successfully estimating the cost of the project and keeping to the submitted budget may be difficult due to unforeseen conditions.

Figure 17.01 — Project Close-Out Best Practices
The chart outlines project close-out best practices, lessons learned, and responsibilities per stakeholder



Exterior Facade Replacement Case Study

U.S. District Courthouse | Pensacola, Florida

Background

The U.S. District Courthouse in Pensacola, Fla., is a leased, five-story facility that houses the U.S. District Court, the Office of the U.S. Attorneys, USMS, an office for a U. S. senator, and the GSA. The courthouse experienced water infiltration issues dating back to its initial construction in 1997. Many repairs to the building were completed over the years; however, issues with water and mold continued to persisted. Due to funding issues and the active and occupied nature of the facility, the previous building repairs were limited and insufficient.

Significant water intrusion and mold issues were identified in two studies completed in 2014 and 2015. It was determined that a renovation and alteration project was needed to remediate mold, eliminate water infiltration, and upgrade the building's envelope. Figure 17.03 depict the existing facade prior to the renovation.

Successes

The GSA purchased the building and undertook a major renovation project. The renovation included a facade replacement to create a weather-tight building envelope, mold remediation, and mechanical system updates to better control building humidity. During construction, tenants were located in two separate swing space facilities. Substantial completion for the renovation occurred in spring 2020, and the courts moved back into the facility following substantial completion. Since completing the renovation, the Judiciary has not reported any new mold growth or water infiltration.

Exterior Facade and Site Design

- The new facade meets Florida's hurricane requirements and the latest federal blast requirements.
- The building's exterior was originally brick and was upgraded to limestone-embedded precast panels. This new facade material creates a timeless presence and elevates the stature and dignity of the facility. Figure 17.04 depicts the new facade.
- Because precast panels are engineered and manufactured, the panels are more durable than many natural stone types or brick, faster to install, and more resistant to blast and hurricane winds.
- Site drainage was improved and parking areas were repaved to take rainfall away from the building.

Water Infiltration and Mold

- A full renovation and alteration project is typically required to holistically address water infiltration issues.
- Water infiltration issues were remediated by right-sizing roof drains, incorporating internal rain leaders into the building's envelope, and constructing redundant overflow scuppers and a new standing seam roof system.
- Flashing assemblies at curtain walls, punched windows, and parapets were revised to prevent future incidents of water infiltration.
- To address mold within the building, the mechanical system was modernized to better control humidity levels.

Interior Improvements

- The main lobby was expanded to incorporate force protection elements to meet federal blast requirements. Refer to Figure 17.02, which depicts the reconfigured lobby.
- Public restrooms were upgraded to incorporate floor drains and meet ABAAS requirements. The floor drains allow for easy cleaning of restrooms while reducing the amount of moisture on the floor.

Figure 17.02 — Reconfigured Lobby
Modified lobby and security area to incorporate blast protections

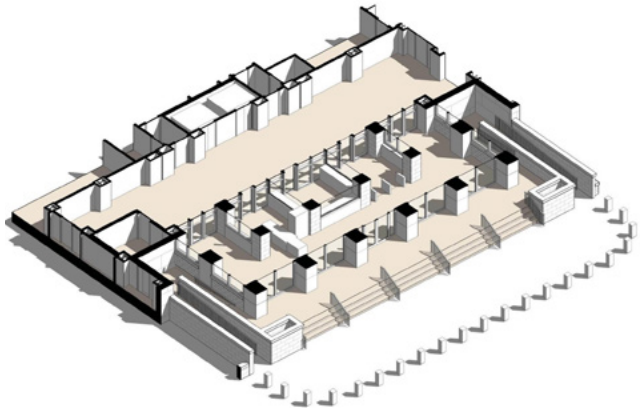


Figure 17.03 — Existing Pensacola Facade
Pre-construction view of the Pensacola U.S. District Courthouse brick facade

Figure 17.04 — New Site Design, Roof and Building Facade
Aerial view of the Pensacola U.S. District Courthouse with new pre-cast paneling, site drainage, and roofing systems

Component B Project Planning Case Study

U.S. District Courthouse | Baton Rouge, Louisiana

Background

Originally designed in 1994, the Baton Rouge U.S. District Courthouse was designed to accommodate a future courtroom. This courthouse currently contains three active district judges and three district judge courtrooms. Once a judge elects senior status, per the *Asset Management Planning (AMP) Business Rules*' courtroom sharing policy, the senior judge is eligible for an assigned senior judge's courtroom. Because the building was designed to accommodate a future courtroom, providing a new assigned senior judge's courtroom is possible. The planned courtroom associated with this Component B project complies with the courtroom sharing policy.

Successes

This Component B project provides a new senior judge's courtroom, jury deliberation room, attorney/witness rooms, and additional spaces that comply with the Circuit Rent Budget (CRB) program's Component B business rules. The project is currently in the planning stages with the anticipated design and construction stages occurring in fiscal year 2023. Figure 17.05 depicts the existing floor plan of the planned courtroom location.

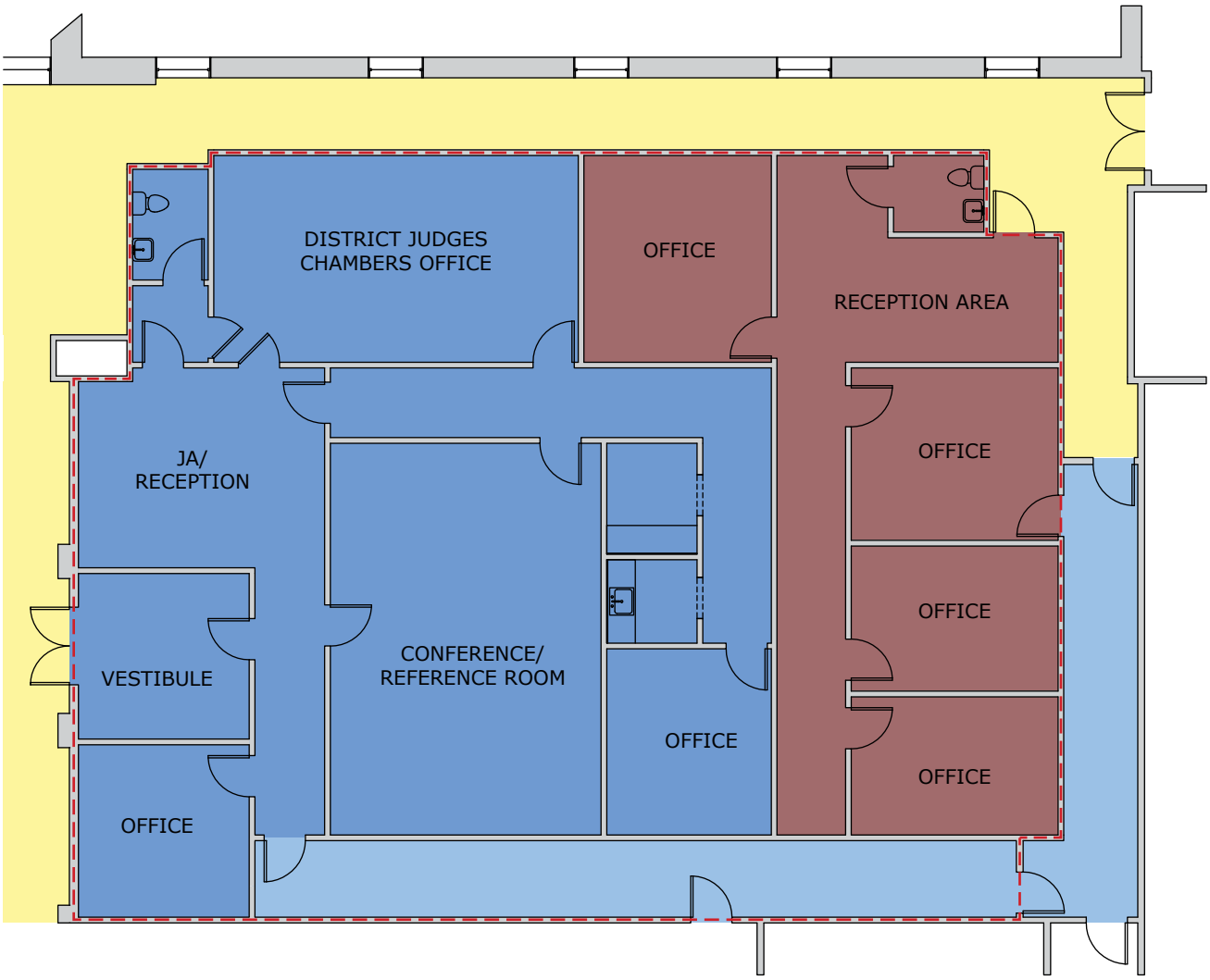
CRB Business Rules

- Complying with the CRB business rules, the circuit submitted the Component B request for a senior judge's courtroom in advance of the judge's eligibility for senior status. This practice allows displaced tenants to plan for other accommodations and provides time for the design and construction of a new courtroom.
- Early planning by the circuit allowed time needed to validate the recommended housing strategy outlined in the LRFP.

Project Planning

- The Component B planning strategy was based on housing recommendations from the district's LRFP.
- To accommodate the new courtroom, a visiting judge's chambers suite and court reporters' space is required to be reconfigured. Both the chambers suite and the court reporters' space will be relocated.
- The future courtroom's planned location takes advantage of existing secure and restricted circulation, as well as an existing in-custody elevator and holding cells.

Figure 17.05 — Existing Courthouse Floor Plan
Floor plan depicting the existing visiting judge's chambers suite and court reporters' space



COLOR LEGEND:

- JUDICIAL SPACE
- RESTRICTED CIRCULATION
- COURT REPORTERS SPACE
- PUBLIC CIRCULATION

SYMBOLS LEGEND:

- FUTURE COURTROOM BOUNDARY

National IWI Demonstration Project | Washington, DC

Image: AECOM

18 ALTERNATIVE WORKPLACE STRATEGIES

This chapter provides best practices related to the planning, design, and implementation of alternative workplace strategies within judiciary offices.

Chapter Sections:

Introduction

Cost containment is a top priority for the Judicial Conference of the United States (JCUS) Committee on Space and Facilities. The No Net New (NNN) policy is a JCUS-approved cost containment policy and requires that any increase in square footage within a circuit to be offset by an equivalent reduction in square footage identified within the same fiscal year (JCUS-SEP 13, p. 32; JCUS-SEP 14, p. 29). The policy was adopted in 2013 as part of the national space reduction program and remains in effect to ensure continued cost containment, efficient space planning, and restrained growth. New courthouse construction, renovation, and alteration projects approved by Congress are not subject to this policy; however, implementation of these strategies in these projects may provide added benefits.

There are many strategies considered to reduce space including right-sizing current space to better align with operations, personnel, and requirements established in the *U.S. Courts Design Guide (Design Guide)*. Additionally, courts may consider implementing Integrated Workplace Initiative (IWI) strategies to reduce, reconfigure, and consolidate space within a facility, city, division, or district. Implementing IWI and alternate workplace strategies (AWS) is intended to facilitate improvement in workflow within a space, offer employees enhanced opportunities for collaboration and choice in how they interact within their space, and provide greater flexibility for future growth.

Supporting Documents

The following reference document provides additional information on the topics contained within this chapter:

- *United States Courts Design Guide*, Chapter 18, 2021

Planning and Design Considerations

IWI and AWS balance three important factors: people, technology, and design. Figure 18.01 depicts the importance of these factors.

The AWS process examines how court units function and may incorporate alternative workplace strategies. The design typically incorporates an open plan that provides for growth, collaboration, and enhanced amenities through the use of systems furniture. Enhanced technology is employed to allow for mobile working solutions.

There are many beneficial aspects of AWS, but employing these principles often involves a culture shift and may present some communal challenges. Table 18.01 describes the opportunities and challenges of implementing AWS.

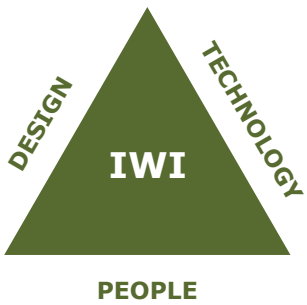
Planning and Change Management

Because court units function differently across the Judiciary, all projects are uniquely planned and designed by the project team specific to each court unit and facility. Figure 18.02 describes the overall process in planning for and implementing AWS projects across the Judiciary. When considering implementation of AWS, it is important to begin the process early to evaluate the feasibility of the design approach and opportunities for funding. Project teams should consider the following:

Planning
Determine the objective of the project. AWS may be a viable option for your project if you are looking to consolidate space, provide opportunities for growth and flexibility, and enhance technology use and operational processes.

- What do future staffing projections forecast for your court unit? Forecasts are typically limited to a 10-year period.
- Are you currently working in multiple non-contiguous spaces?
- Does your current space meet or exceed *Design Guide* standards?
- Is your interface with the public being conducted in a way that puts your safety, security, or mission at risk?
- Is your staff amenable to evaluating how they currently work and participating in a process to optimize and

Figure 18.01 — Important IWI Factors
IWI balances design, technology, and people



change the way they work and how they use their space?
- Does your workforce utilize alternate work schedules and does your court unit allow telework?
- Does your court unit engage in activities that are more individually focused or do they often collaborate?
- Are there opportunities to share or consolidate amenities such as breakrooms and conference spaces with other court units?
- Are there opportunities to consolidate filing into a central location or to digitize files?
- Can your furniture needs be met with the existing blanket purchase agreements (BPAs) currently held by the Judiciary? Refer to Chapter 12/13, "Tenant Improvements, Furnishings, and Signage," for additional information regarding BPAs.

Change Management

Change management can be a useful tool on both small and large projects to gain approval from staff and managers. Involving staff in space tours, programming sessions, design charrettes, town halls, workplace focus groups, and development of office etiquette manuals are valuable methods to set a shared vision among end users and empower staff to think creatively about their office environments. Building consensus will help drive exemplary behaviors, allow colleagues to take ownership of the change from the beginning of the project, and create a following around the vision. A sample overall design and change management process is depicted in Figure 18.03.

When embarking on a change process, project teams should consider the following:
- What are the overall project goals and objectives? Set and explore a common vision with your staff.
- Communicate early and often with your managers and staff. Provide multiple venues for staff to communicate questions and concerns.
- Conduct large group town halls and smaller focus groups aimed at communicating objectives and validating the shared vision.
- How does your staff work now? Is this the most efficient and effective work mode for your staff?
- How would your staff like to work in the future? Do office policy changes need to occur to optimize desired future work modes?
- Allow your staff to participate in every step of the planning and design process. For instance, mock-up workstation options for your staff to utilize and provide feedback when selecting furniture. Engage staff in decision making through surveys and other engagement tools.
- Changes in workplace operations will influence changes in workplace behaviors. Work collaboratively with staff to develop expectations for workplace behaviors. Consider developing an office etiquette guide that outlines expectations.

Design Process

Changing how we work and engage in our workplace can provoke strong feelings and opinions. One of the advantages to engaging in an AWS and IWI process is the ability to build consensus on how your workforce uses and influences spatial and operational decisions. Understanding how the workforce engages in the space and what they like and dislike can help inform the design process and the approach to change management.

Although new construction, alterations, and renovations approved by Congress are not subject to the NNN policy, these projects should consider implementing IWI or AWS strategies for the added flexibility benefits. In order to provide flexibility for the future, it is advantageous to design workplaces to work with interchangeable space modules. Spatial modularity allows spaces to easily adapt to new functions and work processes without the need for costly renovation. For instance, a 100-square-foot office may easily be converted to a 100-square-foot conference room by replacing the furniture. By planning offices, workstations, conference rooms, and other support spaces on a standard module, workplaces may be easily modified to support the needs of an office well into the future.

Design

During the design phase of an AWS or IWI project, project teams should consider the following:
- Utilize panel-based modular workstations for maximum flexibility.
- Demountable partitions may provide additional flexibility, but may have acoustical trade-offs.
- Acoustical considerations should be evaluated during the design process. Sound masking may be required.
- Glass walls provide for natural light and communicate transparency of operations. Translucent or patterned films may be applied to achieve some level of privacy within a space.

Technology

A fundamental part of any AWS or IWI project is the technology that supports and enables mobile work within and outside the office. When determining technology requirements, project teams should consider the following:
- What kind of technology does your staff currently use, and does this technology allow your workforce to be mobile? For instance, desktop computers may not provide mobility or flexibility for your staff.
- Consider standardizing workstations, private workspaces, and collaboration spaces with plug-and-play technology to maximize mobility among staff.
- Consider including network printer/scanner/copier stations located throughout the space in lieu of individual desktop printers and scanners.
- Increase wireless technology (Wi-Fi) in the workspace to allow staff to easily move from workstations to collaboration areas.

Table 18.01 — AWS Opportunities and Challenges
Pros and cons for implementing AWS in a given court unit

Opportunities	Challenges
Potential space reductions while providing flexibility for future growth.	Cultural shift in workplace operations and requires buy-in at all levels of the workforce.
Greater access to amenities such as conference rooms, breakrooms, and natural light.	Requires commitment to establishing shared values for use of space.
Creates an equitable distribution of space and amenities.	May require greater construction effort during the implementation phase when converting from a traditional private office environment.
Promotes a mobile workforce and encourages collaboration.	Limits privacy among staff.
Enhances transparency in the design process by allowing staff to participate in programming and design sessions.	May require additional considerations to achieve acoustical preferences.

Figure 18.02 — Project Development Process
AWS and IWI programming, design, construction, and implementation process

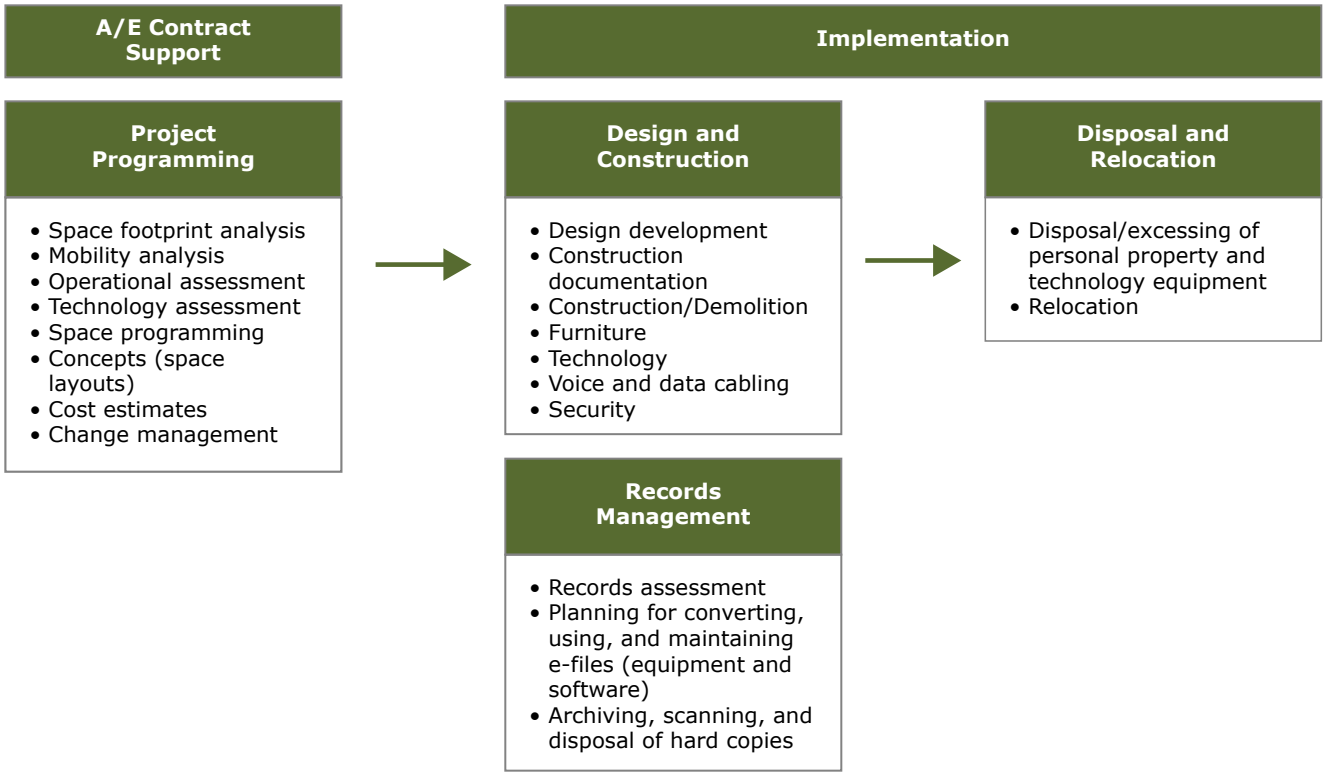


Figure 18.03 — Planning and Change Management Process
Steps to take when planning for AWS or IWI projects

AWS Reference Projects

With the adoption of the NNN policy and implementation of the IWI program, the Judiciary has completed a multitude of AWS projects around the country. Additional projects are approved and funded each year as court units look to modernize their spaces and implement new technology. Design teams should contact the Administrative Office of the U.S. Courts (AOUSC) for additional information regarding these projects. Internal judiciary stakeholders may also reference JNET.

Best Practices

Planning

- Begin to communicate information about AWS and IWI strategies within your management structure as early as possible. Senior leaders, who lead by example, are typically the most successful in implementing these strategies.
- Identify change champions to assist leadership in building consensus and support for change.
- Understand how your current space compares to what is allocated in the *Design Guide*.
- Keep in mind that demountable walls can be funded using a furniture, fixtures, and equipment budget and not construction funds.

Change Management

- Engage stakeholders and staff in the feasibility stage of a project to begin to build consensus around the approach for how you will work in the future. Change management essentially starts during this stage.
- Educate staff on what AWS and IWI entails. Explain the potential benefits to implementing these strategies. Explain what it means for them (i.e., private offices become workstations, increased access to daylight and amenities such as conference rooms and dedicated breakrooms, enhanced technology and mobile or alternate work schedule opportunities, etc.).
- Allow staff to participate in town halls and focus groups designed to communicate project goals and allow their input into the planning and design process.
- Office etiquette guides help define staff behaviors in the new office setting. Staff should collaborate on these guidelines with senior leadership, which will create buy-in at all organizational levels for these new rules of office engagement.

Design

- AWS and IWI offer scalable design solutions for both small and large offices. It is recommended that offices utilize these principles to the fullest extent possible. This approach should be considered for new construction as well as for renovation and alteration projects.
- Move workstations, private offices, conference rooms, and other programmatic spaces away from exterior windows to allow for equitable access to natural light.
- Distribute support spaces, such as getaway booths, print/copy areas, conference spaces, filing areas, and pantries equally among the professional neighborhoods. Utilize these support spaces to better define certain professional neighborhoods and other zones within an office suite.

Technology

- To enhance mobility and flexibility, consider updating and standardizing technology and enhancing wireless connectivity as part of the AWS or IWI project.
- Workstations and other private workspaces should incorporate docking stations, computer monitors, and power and data receptacles.
- Collaborative zones, such as conferencing rooms, should support plug-and-play technology to maximize their use. Consider utilizing a reservation system to allow staff to book conference rooms and private workspaces through a centralized calendar system.
- Incorporate sound masking systems into the workstation areas and collaboration zones.

National IWI Demonstration Project Case Study

Thurgood Marshall Federal Judiciary Building | Washington, D.C.

Background

Previously, the Facilities and Security Office (FSO) of the AOUSC was split between four separate office suites. The original layout of the FSO office mirrored that of a traditional office plan, and is depicted in Figure 18.04. The FSO office space was mostly comprised of single-occupant offices, some open workstations without access to natural light, and very few collaboration or meeting spaces. This arrangement greatly hindered intra-office collaborations and did not allow for future growth of the FSO.

In working with court units throughout the Judiciary to implement new AWS office strategies, it became apparent that a national showroom demonstrating these strategies would be extremely beneficial for the advancement of the program and for the FSO. In 2014, the FSO initiated this project to create a national demonstration space to serve as a working model and showroom for various AWS design concepts.

Successes

The redesign of the FSO showcases different AWS workplace strategies to more efficiently use space, support mobile workers, and improve the opportunities for collaboration. The new fit-out is depicted in Figures 18.05 through 18.09 and features an open-office concept with different neighborhoods and collaboration settings. Table 18.02 compares the original FSO layout with the new fit-out.

Space Reduction

- This project vacated over 5,300 usable square feet, which was a 21-percent space reduction. In addition, a concurrent file digitization project recycled over 8 tons of paper.
- The new office design accommodates future staff growth by increasing mobility and telework.

Design

- The design consolidated all of the FSO's space into one contiguous office suite. The new suite absorbs an existing building corridor which previously divided the office.
- The FSO office suite is divided into three main neighborhoods which are supported by different collaborative zones. Workstations are prominently featured throughout the office suite and available to staff through a reservation system. Enclosed spaces and workstations are placed away from the exterior wall to maximize the amount of natural light into the suite.
- The main reception area is designed to be an inviting comfortable space that reflects the office culture of the FSO, yet formal enough to reflect the culture of the Judiciary as a whole. The reception area prominently features a curved wood wall that features a custom metal sculpture of the United States. The entrance features glass storefronts to enhance visibility into the space.
- The workplace lounge serves as one of the primary focal points of the workplace as it accommodates several functions. It is a multi-use area serving employee break-out areas and social interaction as they relate to meetings, social functions, and daily gatherings. Walls and ceilings accented with contrasting textures create a vibrant environment for social interaction.
- The large conference room includes full-height glass walls into the main reception area, solid walls facing the open workspace and pantry, and sliding wood panels between the conference room and the workplace lounge. During large group functions, the wood sliding doors may be opened to unite the conference room and the workplace lounge, which provides flexibility to accommodate almost any event.
- Pantries, lockers, and other support spaces are placed throughout the office suite to provide each neighborhood equal access to these amenities. Program spaces were designed to be the exact dimensions proposed in the *Design Guide*.

Change Management

- Change management was employed at the beginning of the project and staff continued to be involved in the decision-making process through construction administration. Additionally, staff collaborated on etiquette policies for the new space.
- Town halls and theme-based and work-mode focus groups were conducted to announce project objectives, validate and refine work modes pre-established by the AOUSC, and explore critical success factors.
- The focus groups provided a high-level understanding of how staff work throughout the day and a strategic vision for how they may desire to work in an ideal future work environment.

AWS Showcase

- Judges and other court executives frequently tour the office to see the benefits of applying AWS principles, which has prompted other projects across the Judiciary.

Figure 18.04 — Existing FSO Office Floor Plan
The FSO contained mainly closed offices with few amenities and conferencing spaces

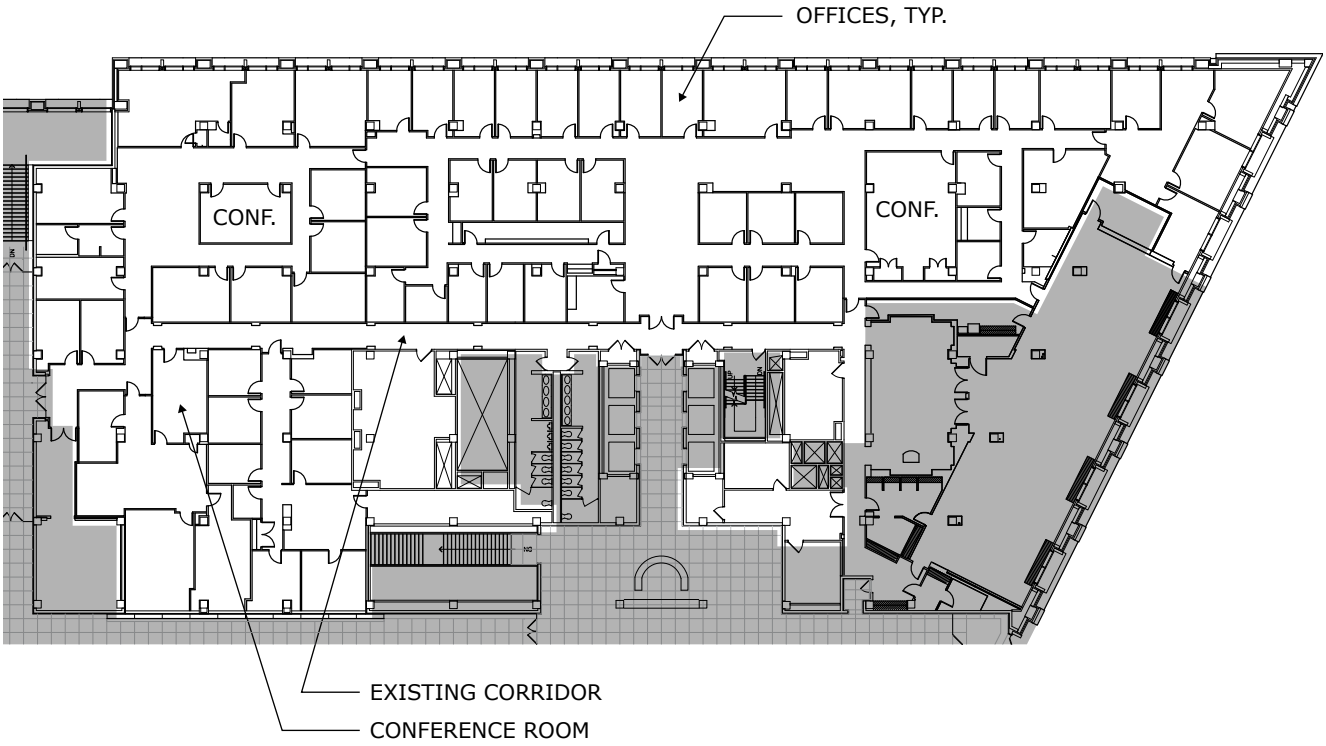
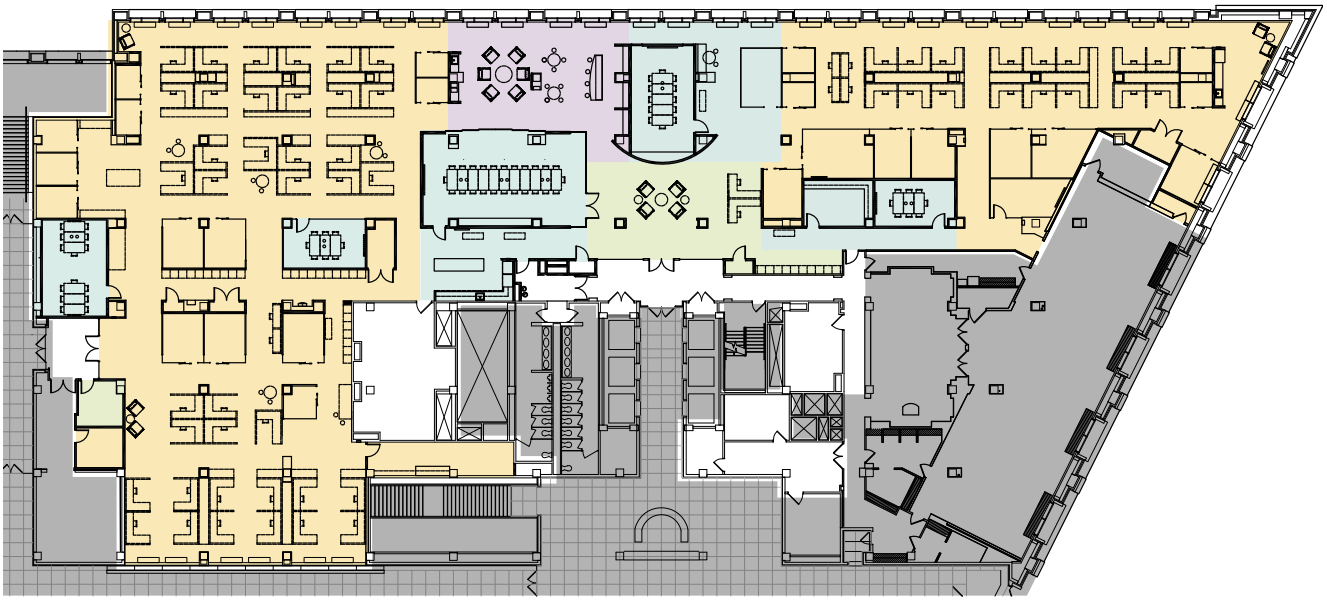


Table 18.02 — Original vs. New Fit-out Metrics
Comparing the original office space for the FSO with the new fit-out space

Metrics	Original Space	New Fit-Out
Number of Floors	1 Floor	1 Floor
Number of Suites	4 Suites	1 Suite
Private Offices	74 Private Offices	6 Private Offices
Workstations	19 Workstations	57 Workstations
Meeting/Collaboration Spaces	3 Meeting Spaces	11 Meeting/ Collaboration Spaces
Private Workspaces (Available by Reservation)	0 Workspaces	14 Workspaces
Work Lounges	0 Work Lounges or Pantries	1 Work Lounge 2 Pantries
Reference Libraries and Storage Areas	6 Storage Areas	1 Reference Library
Usable Square Footage (USF)	25,585 USF	20,248 USF

Figure 18.05 — Reconfigured FSO Suite Layout
The redesigned FSO suite incorporating AWS principles



COLOR LEGEND:

- NOT IN SCOPE/ OTHER TENANTS
- PROFESSIONAL NEIGHBORHOOD
- INTERACTIVE NEIGHBORHOOD
- INFORMAL NEIGHBORHOOD
- PUBLIC NEIGHBORHOOD

Figure 18.06 — Huddle Room
A space used for small informal and team meetings

Figure 18.07 — Workstations
Open office work areas with reservable workstations

Figure 18.08 — Large Conference Room
Large conference room located adjacent to the workplace lounge, shared library, and reception

Figure 18.09 — Workplace Lounge
A new FSO workplace lounge and shared library was created for impromptu gathering and collaboration

From Top Left Clockwise:

U.S. District Courthouse | Pensacola, FL — Image: Beyer Blinder Belle
U.S. District Courthouse | Los Angeles, CA — Image: Skidmore, Owings & Merrill
U.S. District Courthouse | Mobile, AL — Image: Hartman-Cox, AECOM
Orrin G. Hatch U.S. Courthouse | Salt Lake City, UT — Image: Thomas Phifer and Partners
Fred D. Thompson U.S. Courthouse | Nashville, TN — Image: Michael Graves
U.S. District Courthouse | San Antonio, TX — Image: Munoz & Company

19 Construction

This chapter provides best practices regarding issues that arise during construction.

Chapter Sections:

Introduction

Construction and post-occupancy activities vary greatly depending on the size, complexity, contract requirements, and overall scope of the project. Construction of a new courthouse may engage a variety of different professions, stakeholders, and agencies while a smaller renovation and alteration (R&A) project may contain few activities and engage only a limited amount of stakeholders. Some activities, such as substantial completion, the construction punch list, and final completion, are common to all projects. A baseline understanding of these common practices is necessary to successfully complete a courthouse construction project.

Supporting Documents

The following reference documents provide additional information on the topics contained within this chapter:

- *The Architect's Handbook of Professional Practice*, The American Institute of Architects (AIA), most current edition
- *Facilities Standards for the Public Buildings Service* (GSA PBS P-100), most current edition

Construction Considerations

Construction

Roles and Responsibilities During Construction
Courthouse construction projects are very complex, and the roles and responsibilities of each stakeholder may be different based on the type of project and procurement method.

General Contractor
- The general contractor (GC) will facilitate monthly meetings at a minimum with such stakeholders as judges, clerk's office staff, and court staff, as well as the General Services Administration (GSA), Administrative Office of the U.S. Courts (AOUSC), and the architect or engineer of record to communicate construction progress. The attendees will vary depending on the project scope.
- The GC will coordinate look-ahead schedules and abide by work and noise restrictions as dictated within their contracts.
- The GC has to submit an initial schedule for approval. Upon approval, the schedule must be updated on a regular basis to reflect progress.

GSA
- Once the construction contract is awarded, the GSA project manager coordinates two key meetings: a project kick-off and a construction partnering meeting, in addition to weekly or bi-weekly progress meetings.
- During construction, the GSA project manager coordinates site access and visitation. In addition, the GSA construction management team handles the management of the punch list and the completion of the listed items.
- The GSA PM's responsibilities include, but are not limited to, project oversight of the quality control, cost control, and scheduled milestones.

AOUSC
- The AOUSC facilities program manager (FPM) works closely with GSA and the court, and coordinates the judiciary requirements with GSA Central Office and/or the GSA project manager.
- The FPM will also review design and construction drawings, attend design and construction meetings, facilitate problem resolution, coordinate with the court's architect and/or clerk of court, and observe construction during site visits. FPM must also coordinate with AOUSC audiovisual (AV) and information technology (IT) consultants.
- The FPM should participate in monthly meetings with stakeholders, such as judges, clerk's office staff, and court staff to communicate construction progress or issues.

Circuit or Local Court
- During construction, the court is represented by the court's architect, clerk of court, or representative of the Circuit Executive's office on a day-to-day basis. This individual should attend both the kick-off and partnering meeting, attend construction meetings, make regular site visits, and bring any issues to the AOUSC FPM.
- The local court IT manager should be engaged early and throughout the construction process. The IT manager should regularly walk the construction space to verify placement of communications outlets, cable pathways, and the telecommunications room layouts.

Construction Manager as Advisor (CMa)

- Most projects will have a CMa to supplement the GSA project manager and advise on constructability, sequencing, and overall construction cost. A CMa also develops requests for proposal (RFPs) for GSA, administers the request for information (RFI) process, and is on site for day-to-day observations.
- If the construction is a reimbursable work authorization (RWA) project, the Judiciary will pay for CMa services out of the project management services fee.

Architect of Record

- During construction, the role of the architect is to generally review construction progress and verify that construction conforms to the design intent conveyed through the contract drawings and specifications.
- An architect typically has the following responsibilities:
  - Attend contractor-led or GSA-led construction meetings which are set at regular intervals.
  - Visit the site at contracted intervals appropriate to observe construction and provide a written record to GSA of observed construction progress, deficiencies, or contract non-compliance issues.
  - Review and respond to RFIs, change orders, and submittals. It is paramount that the architect respond in a timely manner to construction RFIs and change orders.
  - Unless contractually obligated, architects and engineers are not responsible for inspecting the general contractor's work. Instead, architects may make general and reasonable construction observations where deviations from the contract documents are noted and provided in writing to GSA.

Typical Construction Activities

Substantial completion, final completion, and punch list inspections are typical aspects of any project, and these activities are all inextricably linked. Every project has different procedures since these activities are specified in the contract between the general contractor, GSA, and the architect of record and vary by procurement method. These project close-out activities are described below:

Punch List

- A punch list is a list of construction deficiencies that must be completed prior to the issuance of the final payment.
- The general contractor creates and manages the punch list. The subcontractors are responsible for completing the work listed on the punch list. The general contractor will issue the punch list to the GSA project team and the Judiciary prior to project substantial completion.
- All parties will conduct an on-site inspection where construction deficiencies and outstanding work are observed and discussed. The punch list is updated and reissued to the general contractor.
- Large-scale projects often have a punch list for floors rather than for the entire building. There may be a phased occupancy on some projects.
- Third-party vendors, such as audio and video installation, may have their own punch list and substantial completion process outside of the GC's responsibility depending on how those items are procured. The courts may have primary responsibility in how these other contracts reach final completion.

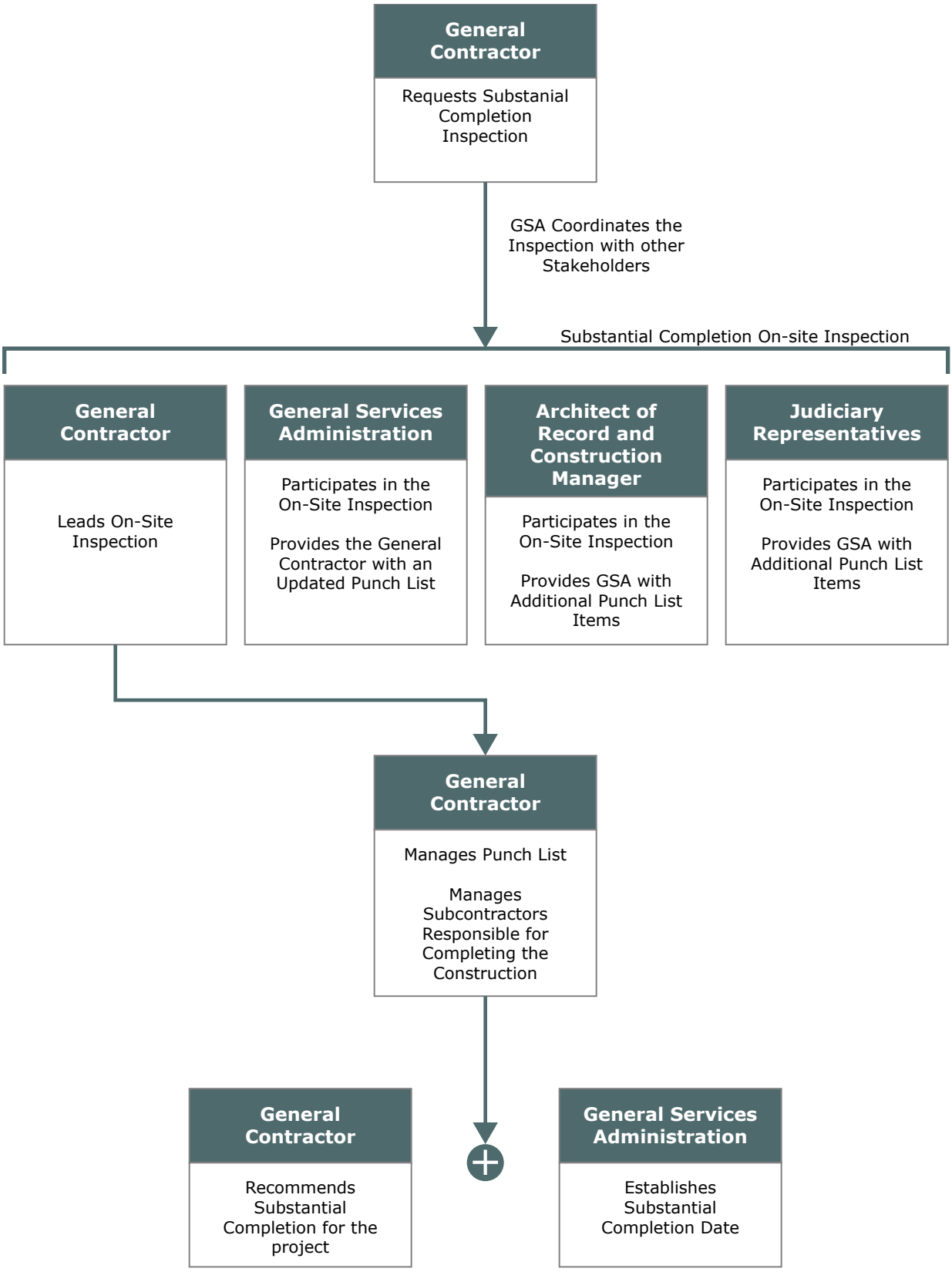
Substantial Completion

- According to GSA, a project is substantially complete when the customer agency may take beneficial occupancy of the space.
- At the time of substantial completion, all major work is complete and the Judiciary may utilize the space for its intended purpose. Construction warranties will often begin at the time of substantial completion. Under the terms of occupancy agreements with GSA, judiciary rent may start at substantial completion and prior to the completion of all punch list items.
- GSA or their construction manager designee provides concurrence that the project has reached substantial and final completion, participates in on-site inspections, and confirms that all items on the punch list are completed.
- GSA and the general contractor must agree that the project is substantially complete prior to issuing the punch list to the architect of record and the Judiciary.
- The Judiciary participates in the substantial completion on-site inspection and provides insight and input into the work that needs to be corrected.
- The architect of record reviews construction progress and quality, and confirms that what was built meets the design intent detailed in the contract drawings and specifications.
- Figure 19.01 shows the construction process at substantial completion.

Final Completion

- When final completion is achieved, all parties will conduct an on-site inspection to ensure that all items have been addressed to an acceptable level and construction is complete.
- If construction is found to be complete, GSA will issue a certificate of occupancy and release the contractor's final payment.

Figure 19.01 — Substantial Completion Workflow Diagram
The process to deem work substantially complete flows from the general contractor and GSA to other project stakeholders



Inspection Terminology

- It should be noted that although architects and engineers are not responsible for inspecting the contractor's work. The site walks and construction reviews at substantial and final completion are called inspections by the most current American Institute of Architects (AIA) contract documents.

Commissioning

Commissioning is a systematic quality assurance process implemented to ensure that all building systems perform adequately, interactively, and in accordance with the design documents and intent. Successful commissioning is achieved by applying quality control principles to all aspects of the project from pre-design through post-acceptance. Design reviews, on-site verification, and construction documentation help to ensure building quality, longevity, and efficiency. The commissioning process is integral to the success of the project and active participation by project stakeholders is essential to the success of the commissioning process. Though the Judiciary has no role or responsibility in commissioning, this section is included to provide knowledge of the process. Refer also to the *Whole Building Design Guide* for additional information.

Roles and Responsibilities During Commissioning

The roles and responsibilities may vary depending on the complexity of the project. The following activities can be expected on most projects.

GSA Management Team

- Reviewing and approving document transmittals between the commissioning team members.
- Facilitating the coordination of the commissioning work by the commissioning authority, and ensuring commissioning activities are included into the GC's master schedule.
- Participating in the commissioning process and responding to recommendations made by the commissioning authority throughout the duration of the project.
- Reviewing and accepting pre-functional checklists (PCs), functional performance tests (FPTs), and integrated systems testing (ISTs). After acceptance, engaging facility operating and maintenance personnel to participate in contractor or vendor provided training.

Commissioning Authority

The primary role of the commissioning authority is to ensure that the design meets the project requirements, installation is in accordance with the construction documents, systems are functionally tested, and operational personnel are provided adequate documentation and training to successfully operate the building. Other responsibilities include:

- Preparing commissioning documentation, including the project requirements, commissioning plan, commissioning specifications, PCs, FPT procedures, and IST procedures.
- Verifying installation is in accordance with the contract documents by reviewing contractor submittals, observing installation, systems start-up, controls checkout, and contractor and third-party testing. Directing and overseeing the functional performance and integrated systems testing for all commissioned systems.
- Recommending acceptance to GSA and preparing the final commissioning report and systems manual.

Designer of Record

- Coordinating with the commissioning authority on project specifications to ensure all commissioning requirements are included in the construction documents.
- Reviewing PCs, FPTs, and ISTs developed by the commissioning authority to ensure that design intent has been properly interpreted.
- Evaluating results and conclusions from the commissioning process.

GC and Trade Contractors

- Facilitating and coordinating the commissioning work and ensuring activities are being scheduled with appropriate durations.
- Executing and completing start-up documentation, checkout plans, and PCs.
- Executing FPTs and ISTs as coordinated by the commissioning authority.
- Resolving commissioning issues identified during testing and notifying the commissioning team of required corrective actions.
- Coordinating, scheduling, and conducting equipment and systems training for operations personnel.

Manufacturers and Vendors

- Coordinating and completing factory tests per the contract documents and commissioning plan.
- Providing technical support and qualified technicians responsible for inspecting, start-up services, testing, and troubleshooting.
- Providing training and demonstrating operation and performance of the system per the contract documents.

Best Practices

Construction

- Set early expectations for communicating schedule, scope, and budget changes.
- The Judiciary may not direct the architect of record or the general contractor, but must communicate through GSA.
- Engage key stakeholders in construction look-ahead schedule discussions and collaborate to ensure building construction and court operations are maintained.
- Identify agency champions to coordinate implementation of security, technology, move management, and furniture installation if not included in the GC's scope of work.
- The AV, IT, and security contractors are typically different and require coordination between the three contractors prior to move-in and furniture installation.
- Inspections and testing during construction may reveal that certain systems do not perform as specified. GSA and AOUSC should evaluate these performance issues and consider employing the appropriate specialists to propose solutions for implementation.
- Review the GSA occupancy agreement and assignment drawings to ensure rent charges are correct.
- GSA should consolidate punch lists rather than each project stakeholder submitting their own.
- Coordinate with GSA during project close out to determine when warranties expire, so the contractor may fix issues within a timely manner.
- Additional construction activities are listed in Table 19.01. This table describes best practices and additional action items for staff during construction to facilitate occupancy.

Post Occupancy

- Operational and building issues should be addressed with GSA in a timely manner to track and resolve warranty and other non-conformance issues.
- Consider implementing a post-occupancy evaluation survey immediately following move-in and then prior to the close of the construction warranty period to capture how the building is functioning and if it is meeting stakeholder needs. The post-occupancy evaluation should be coordinated with GSA and use their standard template.

Commissioning

- Depending on the complexity of the project, consider bringing commissioning agents on board earlier to provide added value.
- Commissioning should be included in all phases of the design and construction process to realize the greatest benefit. Commissioning should not be viewed only as an add-on to the end of a project.
- The commissioning authority should report directly to GSA and should be financially independent of the general contractor, trade contractors, vendors, and suppliers.
- The commissioning authority should be integrated into the construction team, travel to the site frequently, and be solution oriented. The commissioning authority should not limit their role to infrequent visits and reporting of deficiencies.
- The commissioning acceptance phase should not begin until construction has been appropriately completed to ensure systems are tested and accepted while operating in the final condition and sequences.
- A final commissioning report and systems manual should be provided to GSA's operations staff at the conclusion of process. The final commissioning report should include all checklists, test records, deficiencies, corrective actions, and other details to fully document the commissioning process. The systems manual should provide the information needed to understand and properly operate the building systems, which typically includes operation-and-maintenance documentation, submittals, as-built drawings, specifications, certifications, and training documentation.

Warranty

- The Judiciary may find items that were not sufficiently addressed in the initial construction. It is important that these items are addressed within the one-year warranty period after substantial completion. Stakeholders should discuss any construction defects or outstanding items with the GSA project manager or building manager. This information may be captured by utilizing a post-occupancy evaluation survey.
- Request information from GSA on extended warranties.
- If construction is phased, there may be overlapping warranty periods. Understand when different warranties start and end, so it is not an issue during post-occupancy.

Table 19.01 — Construction Checklist
Additional construction activities that facilitate occupancy are described in the table

Construction Checklist for the Judiciary	
Networks	☑
• Coordinate discussion of WAN services with AOUSC/DTS one year prior to move-in.	☐
• Issue RWA to GSA for structured cabling 12–18 months prior to move-in.	☐
• Network Equipment Contract Award – This contract will be awarded to an independent contractor. Gain buy-in from the general contractor and GSA for early occupancy and acceptance of the network data closets, so the install can begin prior to substantial completion. Reach out to AOUSC one year prior to move-in to initiate discussion on network equipment procurement.	☐
AV Networks and Equipment – Award Contract One Year Prior to Move-In	☑
• AV systems are a significant contract the Judiciary is responsible for during the construction process. Focus on verification of AV infrastructure early in the construction process.	☐
• Typically the AV contractor and GC are not under the same contract, therefore the AV contractor cannot gain access to the courtrooms to install wiring and devices until after substantial completion. Work with GSA and the GC to take possession of the courtrooms early prior to substantial completion, so move-in is not delayed. A typical courtroom takes roughly three weeks to fully install and test.	☐
• Other spaces, such as jury assembly and other conference rooms, may also have AV needs that should be installed early. Punch list and acceptance of the equipment closets serving these spaces should be completed prior to substantial completion.	☐
• The AOUSC will fund an audio-only system in new created grand jury suites if identified and budgeted. The U.S. Attorney's Office may choose to implement video systems, so coordinate these systems early on.	☐
Furniture Contracts – Award Contracts Six Months Prior to Move-In	☑
• Coordinate with the GC to verify power and data hookups are constructed correctly. An RWA is required to fund this.	☐
• If demountable walls are procured separately, data, power, and lighting controls will be required.	☐
• Post-order activities often take longer than anticipated. Allow enough time in the schedule for shop drawing review and approval and final finish selections.	☐
• During the furniture delivery period, schedule specific times with the facility loading dock and freight elevator for these activities to occur.	☐
• Purchase new appliances that may be required to outfit your new space. It is often more efficient to purchase these items in a separate local order.	☐
Move Contract – Award Contracts Six Months Prior to Move-In	☑
• GSA may provide these services through an RWA, or the Judiciary may procure move services through a separate contract. Begin move planning early in the construction process.	☐
• Focus staff on purging extraneous items that have accumulated over the years. The Judiciary is responsible for waste disposal, dumpster services, shredding services, and recycling services. This process should begin 3–4 months prior to moving.	☐
• Recycling of surplus electronic equipment may require additional services and cannot typically be included in the normal waste stream.	☐
Signage Contract – Award Contracts Six Months Prior to Move-In	☑
• GSA provides room and directional signage in public spaces; however, room signage within judiciary space is the responsibility of the Judiciary.	☐
• Create consistent signage throughout the courthouse by utilizing the same signage style procured by GSA. An RWA may be added to GSA's signage contract to allow all signage to be provided by a single contractor. If digital signage, monitors, or informational kiosks are used, coordinate power, cabling, and infrastructure requirements as necessary.	☐
• Thoroughly review the signage package to avoid costly changes and additions in the future.	☐

Updated Court Security Officer Coverage	☑
• New facilities may require an increase in the number of court security officers. Request additional court security from the U.S. Marshals Service (USMS) well in advance of occupancy, so new staff may be hired and trained appropriately.	☐
Electronic Card Readers and Physical Keying	☑
• The process to key a new building, whether physically or electronically, can be complicated and should begin well in advance of building occupancy. Determine the areas requiring different keys and which staff should have access to certain spaces, master keys, and submaster keys.	☐
• Coordinate keying information with GSA. GSA is responsible for installing the cores and producing the keys.	☐
Secure Parking Assignments	☑
• Coordinate with GSA to finalize parking assignments in secure parking areas.	☐
Security Systems Schedule	☑
• The Judiciary does not have a direct role in the security systems contract; however, the security contractors should be monitored closely. Time delays may occur with this contract that could impact the final move in date.	☐
Emergency Occupancy Planning and Training	☑
• Update or create facility emergency occupancy plans.	☐
• Train staff on the new or updated emergency plan prior to public occupancy of the building. This training should include proper procedures for evacuation and several drills to familiarize staff with the egress paths.	☐
Cleaning, Operations, and Maintenance Contracts	☑
• As move in approaches, GSA will revise and amend their cleaning, operations, and maintenance contracts. The Judiciary should be aware of these processes and amendments since there may be significant changes.	☐
New User Orientation	☑
• Orient your staff to the new facilities, including new technology or functions, prior to move-in. This orientation training should include multiple site visits during construction and formal training on any new equipment. GSA, USMS, and other agencies will be conducting similar activities.	☐

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A1 Courthouse Fact Sheets

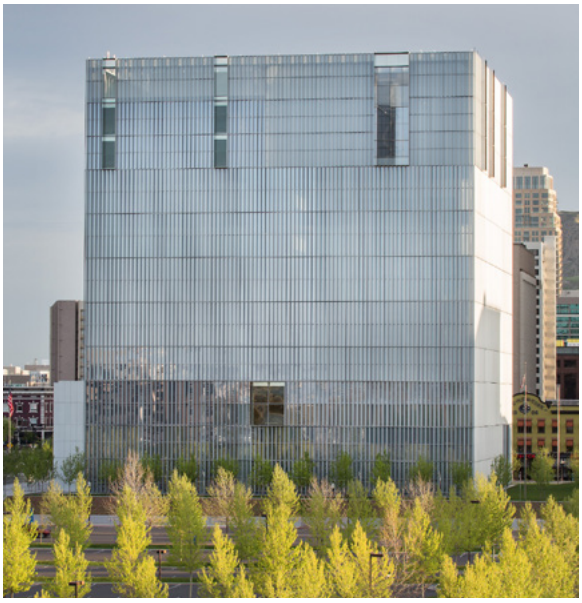
This appendix provides details and key metrics for each referenced courthouse project in the *U.S. Courts Design Guide Best Practices Guide*.

Appendix Sections:

Courthouse Fact Sheets

Courthouse Name: U.S. District Courthouse

Location:	Bakersfield, CA
Project Type:	New Construction
Year Completed:	2012
GSA Region:	9 - Pacific Rim
Delivery Method:	Design-Build/Construction Manager as Agent
Construction Budget:	$27,000,000
Total GSF:	33,400
No. of Courtrooms:	(1) Magistrate
No. of Chambers:	(2) Magistrate
Design Architect:	NBBJ
General Contractor:	Gilbane



Courthouse Name: Orrin G. Hatch U.S. Courthouse

Location:	Salt Lake City, UT
Project Type:	New Construction
Year Completed:	2014
GSA Region:	8 - Rocky Mountain
Delivery Method:	Design-Bid-Build
Construction Budget:	$185,000,000
Total GSF:	409,597
No. of Courtrooms:	(7) District, (3) Magistrate
No. of Chambers:	(7) District, (3) Magistrate
Design Architect:	Thomas Phifer and Partners
Architect of Record:	Naylor Wentworth Lund Architects
General Contractor:	Okland Construction

Note: Post-occupancy evaluation available upon request.

Courthouse Name: U.S. District Courthouse

Location:	Los Angeles, CA
Project Type:	New Construction
Year Completed:	2016
GSA Region:	9 - Pacific Rim
Delivery Method:	Design-Build
Construction Budget:	$393,607,464
Total GSF:	633,000
No. of Courtrooms:	(24) Courtrooms
No. of Chambers:	(32) Chambers
Design Architect:	Skidmore, Owings & Merrill (SOM)
Architect of Record:	SOM
General Contractor:	Clark Construction Group
Construction Management:	Jacobs

Note: Post-occupancy evaluation available upon request.

Courthouse Name: U.S. District Courthouse and John A. Campbell Courthouse

Location:	Mobile, AL
Project Type:	New Construction and Renovation
Year Completed:	2018 (New Construction), 2020 (Renovation)
GSA Region:	4 - Southeast Sunbelt
Delivery Method:	Design-Build
Construction Budget:	$117,500,000
Total GSF:	155,660 (New Construction)
No. of Courtrooms:	(3) District, (3) Magistrate, (2) Bankruptcy, (1) District Admin Hearing Room, (1) Bankruptcy Admin. Hearing Room
No. of Chambers:	(6) District, (4) Magistrate, (2) Bankruptcy, (2) Court of Appeals
Design Architect:	Hartman-Cox Architects
Architect of Record:	AECOM
General Contractor:	Yates Construction

Courthouse Name: Fred D. Thompson U.S. Courthouse and Federal Building

Location:	Nashville, TN
Project Type:	New Construction
Year Completed:	2021 (estimated)
GSA Region:	4 - Southeast Sunbelt
Delivery Method:	Bridging Design-Build
Construction Budget:	193,544,000 (appropriated)
Total GSF:	314,321
No. of Courtrooms:	(6) District, (2) Magistrate
No. of Chambers:	(7) District, (3) Magistrate, (1) Visiting Judge
Design Architect:	Michael Graves
Architect of Record:	Fentress Architects
General Contractor:	Hensel Phelps Construction Co.

Courthouse Name: Thomas F. Eagleton U.S. Courthouse

Location:	St. Louis, MO
Project Type:	New Construction
Year Completed:	2000
GSA Region:	6 - Heartland
Construction Budget:	$206,018,304
Total GSF:	1,310,874
No. of Courtrooms:	(4) Circuit, (4) Bankruptcy, (8) District, (7) Magistrate, (1) Special Proceeding
No. of Chambers:	(3) Circuit, (4) Bankruptcy, (8) District, (7) Magistrate, (1) Special Proceeding, (15) Visiting
Design Architect:	Hellmuth, Obata + Kassabaum (HOK)
General Contractor:	CRSS Constructors, Denver, CO

Courthouse Name: Mark O. Hatfield U.S. Courthouse

Location:	Portland, OR
Project Type:	New Construction
Year Completed:	1997
GSA Region:	10 - Northwest Arctic
Construction Budget:	$109,571,400
Total GSF:	591,685
No. of Courtrooms:	(10) District, (4) Magistrate (1) Special Proceedings
No. of Chambers:	(15) District
Design Architect:	Kohn Pedersen Fox Associates
General Contractor:	CRSS Constructors

Courthouse Name: James M. Carter & Judith N. Keep U.S. Courthouse

Location:	San Diego, CA
Project Type:	New Construction
Year Completed:	2012
GSA Region:	9 - Pacific Rim
Delivery Method:	Design-Bid-Build
Construction Budget:	$377,000,000
Total GSF:	480,941
No. of Courtrooms:	6
No. of Chambers:	12
Design Architect:	Richard Meier & Partners Architects
General Contractor:	Hensel Phelps Construction Co.

Note: Post-occupancy evaluation available upon request.

Courthouse Name: John Joseph Moakley Courthouse

Location:	Boston, MA
Project Type:	New Construction
Year Completed:	1998
GSA Region:	1 - New England
Construction Budget:	$177,194,400
Total GSF:	945,426
No. of Courtrooms:	(2) Circuit, (18) District, (6) Magistrate, (1) Special Proceedings
No. of Chambers:	(2) Circuit, (18) District, (6) Magistrate, (14) Visiting
Design Architect:	Pei Cobb Freed & Partners
Architect of Record:	Jung/Brannen Associates
General Contractor:	Clark Construction Group

Courthouse Name: U.S. District Courthouse

Location:	Austin, TX
Project Type:	New Construction
Year Completed:	2012
GSA Region:	7 - Greater Southwest
Construction Budget:	$123,000,000
Total GSF:	224,098
No. of Courtrooms:	(4) District, (3) Magistrate, (1) Special Proceedings
No. of Chambers:	(7) District, (3) Magistrate
Design Architect:	Mack Scogin Merrill Elam Architects
General Contractor:	White Construction Company

Courthouse Name: U.S. District Courthouse

Location:	Huntsville, AL
Project Type:	New Construction
Year Completed:	N/A (Under Construction)
GSA Region:	4 - Southeast Sunbelt
Delivery Method:	Design-Build Bridging
Construction Budget:	$86,400,000
Total GSF:	123,100
No. of Courtrooms:	(3) District, (1) Magistrate, (1) Bankruptcy
No. of Chambers:	(3) District, (1) Magistrate, (1) Bankruptcy, (1) Visiting Judge
Design Architect:	Fentress Architects

Courthouse Name: U.S. District Courthouse

Location:	San Antonio, TX
Project Type:	New Construction
Year Completed:	2022 (Anticipated)
GSA Region:	4 - Greater Southwest
Delivery Method:	Design-Build Bridging
Construction Budget:	$121,000,000
Total GSF:	230,536
No. of Courtrooms:	(8) Courtrooms
No. of Chambers:	(13) Chambers
Design Architect:	Munoz & Company with Lake|Flato Architects
Architect of Record:	CBRE | Heery
General Contractor:	Brasfield & Gorrie

Courthouse Name: Robert H. Jackson U.S. Courthouse

Location:	Buffalo, NY
Project Type:	New Construction
Year Completed:	2011
GSA Region:	2 - Northeast and Caribbean
Construction Budget:	$137,000,000
Total GSF:	265,000
No. of Courtrooms:	9
No. of Chambers:	11
Design Architect:	Kohn Pedersen Fox
General Contractor:	Mascaro Construction

Courthouse Name: U.S. District Courthouse

Location:	Baton Rouge, LA
Project Type:	New Construction
Year Completed:	1994
GSA Region:	7 - Greater Southwest
Construction Budget:	$21,235,000
Total GSF:	201,104
No. of Courtrooms:	(2) District, (2) Magistrate, (1) Special Proceedings
No. of Chambers:	6
Design Architect:	Holly and Smith Architects

Courthouse Name: Charles R. Jonas Federal Courthouse

Location:	Charlotte, NC
Project Type:	Annex and Modernization
Year Completed:	2021 (Annex), 2023 (Modernization)
GSA Region:	4 - Southeast Sunbelt
Delivery Method:	Construction Manager as Constructor
Construction Budget:	$102,300,000 (Annex), $38,500,000 (Modernization)
Total GSF:	198,000 (Annex), 119,000 (Modernization)
No. of Courtrooms:	(6) District, (2) Magistrate, (2) Bankruptcy
No. of Chambers:	(8) District, (2) Magistrate, (2) Bankruptcy
Design Architect:	Robert A.M. Stern Architects
Architect of Record:	Jenkins Peer Architects
General Contractor:	Brassfield and Gorrie

Courthouse Name: U.S. District Courthouse

Location:	Pensacola, FL
Project Type:	Repair and Alteration (Exterior)
Year Completed:	2020
GSA Region:	4 - Southest Sunbelt
Delivery Method:	Construction Manager as Constructor
Construction Budget:	$30,781,000
Total GSF:	79,840 RSF
No. of Courtrooms:	(3) District, (2) Magistrate
No. of Chambers:	(3) District, (2) Magistrate
Design Architect:	Beyer Blinder Belle
Architect of Record:	TTV Architects
General Contractor:	Yates Construction

Courthouse Name: Sandra Day O'Connor U.S. Courthouse

Location:	Pheonix, AZ
Project Type:	New Construction
Year Completed:	2000
GSA Region:	9 - Pacific Rim
Construction Budget:	$88,000,000
Total GSF:	948,443
No. of Courtrooms:	(13) District, (4) Magistrate, (1) Special Proceedings
No. of Chambers:	(14) District, (4) Magistrate
Design Architect:	Richard Meier & Partners Architects

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A2 Supporting Documentation

This appendix provides documentation referenced in the *Best Practices Guide*.

Appendix Sections:

Security Systems Milestone Checklist

[INSERT LOCATION] New COURTHOUSE
Courthouse USMS Security Systems Procurement & Installation

Version [01] **Last Updated: [11-18-2020]**

	ACTION	LEAD AGENCY	Duration (calendar days, weeks)	Proposed Start Date	Proposed Completion Date	Actual Completion date
	Project Design Activities					
1	Identification of USMS technical design support	USMS OSS PSS Assigned to Project	**NAME:**			
2	Completion of security drawing e.g. general placement of devices, types (card reader, camera etc), ownership	GSA & A/E with GSA-OMA, USMS-OSS, DHS-FPS, AOUSC Security Div.	Design process			
3	Completion of Responsibility Matrix	GSA & A/E with GSA-OMA, USMS-OSS, DHS-FPS, AOUSC Security Div.	Design Process			
4	Project Construction Schedule to USMS	GSA	**DATE:**			
5	**Courthouse Project Substantial Completion Date**	GSA				
6	Set Acquisition Schedule Discuss Role & Responsibilities (CO, COR, Technical SME, PM) Evaluation Criteria & Process	USMS & GSA	1 day			
7	GSA PM & CO sign USMS NDA	USMS to GSA	1 day			

	ACTION	LEAD AGENCY	Duration (calendar days, weeks)	Proposed Start Date	Proposed Completion Date	Actual Completion date
8	Notification to BPA vendors about impending RFP	USMS				
9	Development of IGCEs for both parts of SOW (OCM & OSS) Development of SOWs for OCM & OSS work	USMS	TBD depending on complexity & workload			
10	Internal USMS QA/QC of completed IGCE & SOW	USMS	14 days			
11	GSA Review and comment on SOW and IGCE; Review proposed schedule. Provide USMS OSS with current construction schedule.	GSA – USMS	7 days			
12	Request for Funding for OSS work (internal budget process)	USMS-OSS	7 days			
13	GSA confirms to USMS Availability of Funds (BM Allowance) & Calculation of estimated RWA, if needed; eRETA process	GSA (Benchmark) and OCM				
14	USMS Acquisition Review; Issue RFQ	USMS Contract Office	3-5 days			
15	Vendor site visit, if required	USMS/Coordination w GSA for site visit	TBD			
16	Response Period Upon receipt of package		15-20 business days			
17	Response to Vendor Questions; Evaluate Proposals; Select Vendor	USMS & GSA together	2-10 days			
18	USMS Award	USMS Contracting Officer				
19	GSA Request Funding Transfer	GSA Region to GSA CO				
20	GSA Receive & Process RWA (if applicable)	USMS, GSA	14-21 days			
21	GSA Award	GSA Contracting Officer				

	ACTION	LEAD AGENCY	Duration (calendar days, weeks)	Proposed Start Date	Proposed Completion Date	Actual Completion date
22	Kickoff/Walk Thru Discuss Roles & Responsibilities (CM QA/QC team - Govt/Contractors)Validate infrastructure plans and installation; Perform gap analysis. Discuss contract administration for	USMS&GSA	Within 1 week of NTP			
23	Installation Based on Security Contractor & GSA Construction Schedules.	USMS Contractor & GSA Construction Schedule				
24	Inspection 1 Wiring	USMS OCM; USMS OSS	15 days after 100% design approval			
25	Turn Over of Command Control Room by GC	GSA/GC				
26	Inspection 2 Phase 2	USMS OCM; USMS OSS Head end & Command Control Complete				
27	Inspection 3	USMS OCM; USMS OSS All remaining items				
28	Inspection 4	USMS				
29	Vendor Clearance (required after Substantial Completion)	USMS				
30	Security Sweep			**DATE:**		
31	Substantial Completion					
32	Commissioning/Testing	USMS				
33	Address Punchlist	Contractor				
34	USMS Contract Close out	USMS				
35	GSA Contract Close out	GSA				

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G Glossary: Definitions and Abbreviations

This glossary provides definitions to terms used in the *Best Practices Guide* and a list of abbreviations.

Glossary Sections:

Definitions

A

AnyCourt – a planning tool that generates an objective, benchmark-driven program of requirements for proposed courthouse construction projects based on *Design Guide* space allocations.

C

Collegial – relating to or involving shared responsibility, as among a group of colleagues.

D

Design Guide Working Group – a group of judges, clerks, and other judiciary stakeholders formed in 2018 to address existing *Design Guide* issues and recommend policy and technical changes.

J

Jeffersonian Courtroom – courtroom layout where the jury box is located in the center of the courtroom near the judge's bench.
Judicial Conference of the United States – responsible for making policy regarding the administration of the federal courts.
Judiciary – the judicial authorities of a country; judges collectively.

Abbreviations

A

A/E - Architect/Engineer
AV - Audiovisual
ABAAS - Architectural Barriers Act Accessibility Standard
ACE - Assistant Circuit Executive, Assistant Court Executive
ACP - Acoustical Ceiling Panel
ACS - Access Control Systems
ACT - Acoustical Ceiling Tile
ADR - Alternative Dispute Resolution
AIA - American Institute of Architects
AMP - Asset Management Process
ANSI/TIA - American National Standards Institute/Telecommunications Industry Association
AOUSC - Administrative Office of the U.S. Courts
ASHRAE - American Society of Heating, Refrigerating and Air-Condition Engineers
AWS - Alternative Workplace Strategies

B

BAS - Building Automation System
BDB - Bridging Design-Build
BIM - Building Information Model
BPA - Blanket Purchase Agreement
BPG - Best Practices Guide

C

CAC - Ceiling Attenuation Class
CATEX - Categorical Exclusion
CCV - Closed Caption Video
CIA - Central Intelligence Agency
CISO - Classified Information Security Officer
CM - Construction Manager
CMa - Construction Manager as Advisor
CMc - Construction Management as Constructor
CMU - Concrete Masonry Unit
CO - Contracting Officer
COA - Court of Appeals
COOP -
CPP - Courthouse Project Priorities
CRB - Circuit Rent Budget
CSO - Computer Security Officer
CSP - Capitol Security Program

D

DB - Design-Build
DBB - Design-Bid-Build
DNI - Director of National Intelligence
DOJ - Department of Justice
DoR - Designer of Record

E
ELM - Electric Location Monitoring
EMT - Electromagnetic Tube
EPA - Environmental Protection Agency
EXST - Existing

F

FAP - Furniture Acquisition Plan
FBA - Facility Benefit Assessment
FF&E - Furniture, Fixtures, and Equipment
FONSI - Findings of No Significant Impact
FPM - Facilities Program Manager
FPM - Facilities Program Manager
FPS - Federal Protective Service
FPT - Functional Performance Test
FSO - Facilities and Security Office

G

GC - General Contractor
GSA - General Services Administration
GYP. BD. - Gypsum Board

H

HQ - Headquarters
HR - Human Resources
HSPD - Homeland Security Presidential Directive
HVAC - Heating Ventilation Air Conditioning

I

ICD/ICS - Intelligence Community Directive/Intelligence Community Standard
IDS - Intrusion Detection System
IIC - Impact Isolation Class
IST - Integrated Systems Testing
IT - Information Technology
IWI - Integrated Workplace Initiative

J

JA - Judicial Assistant
JCUS - Judicial Conference of the United States

L

LEED - Leadership in Energy and Environmental Design
LRFP - Long-Range Facilities Planning
LRFPB - Long-Range Facilities Planning Branch
LSG - Litigation Security Group

M

MEP - Mechanical, Electrical, Plumbing

N

NEPA - National Environmental Policy Act
NHPA - National Historic Preservation Act
NIC - Noise Isolation Class, Not in Contract
NNN - No Net New
NRC - Noise Reduction Criteria

O

OPR - Office of Professional Responsibility
OSB - Oriented Strand Board

P

PC - Prefunctional Checklist
PM - Project or Program Manager
POR - Plan of Record
PUS - Persons Under Supervision

R

R&A - Renovations and Alterations
RCDD - Registered Communications Distribution Designer
RECEPT - Receptionist
RF - Radio Frequency
RFI - Request for Information
RFP - Request for Proposal
ROD - Record of Decision
RT - Right Honorable
RWA - Reimbursable Work Authorization

S

SCIF - Sensitive Compartmentalized Information Facilities
SF - Square Feet or Footage
SFD - Facilities Division
SHPO - State Historic Preservation Office
STC - Sound Transmission Criteria

U

UE - Urgency Evaluation
USAO - U.S. Attorney’s Office
USBC - U.S. Bankruptcy Court
USDC - U.S. District Court
USF - Usable Square Footage
USMS - U.S. Marshals Service

V

VAV - Variable Air Volume
VRF - Variable Refrigerant Flow

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I INDEX

This index provides the locations of key words and terms used in the *Best Practices Guide.*

Index Sections:

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