

June 2010

# FEDERAL COURTHOUSE CONSTRUCTION

Better Planning,  
Oversight, and  
Courtroom Sharing  
Needed to Address  
Future Costs



GAO

Accountability \* Integrity \* Reliability



Highlights of [GAO-10-417](#), a report to congressional requesters

## Why GAO Did This Study

The federal judiciary and the General Services Administration (GSA) are in the midst of a multibillion-dollar courthouse construction initiative, which has since faced rising construction costs. As requested, for 33 federal courthouses completed since 2000, GAO examined (1) whether they contain extra space and any costs related to it; (2) how their actual size compares with the congressionally authorized size; (3) how their space based on the judiciary's 10-year estimates of judges compares with the actual number of judges; and (4) whether the level of courtroom sharing supported by the judiciary's data could have changed the amount of space needed in these courthouses. GAO analyzed courthouse planning and use data, visited courthouses, modeled courtroom sharing scenarios, and interviewed judges, GSA officials, and other experts.

## What GAO Recommends

Among other things, GSA should: (1) ensure that courthouses are within their authorized size or notify congressional committees; and the Judicial Conference of the United States should: (2) retain caseload projections to improve the accuracy of its 10-year judge planning; and (3) establish and use courtroom sharing policies based on scheduling and use data. GSA and the judiciary agreed with most of the recommendations, but expressed concerns with GAO's methodology and key findings. GAO believes these to be sound, as explained in the report.

[View GAO-10-417 or key components.](#)  
For more information, contact Mark L. Goldstein at (202) 512-2834 or [goldsteinm@gao.gov](mailto:goldsteinm@gao.gov).

# FEDERAL COURTHOUSE CONSTRUCTION

## Better Planning, Oversight, and Courtroom Sharing Needed to Address Future Costs

### What GAO Found

The 33 federal courthouses completed since 2000 include 3.56 million square feet of extra space consisting of space that was constructed (1) above the congressionally authorized size, (2) due to overestimating the number of judges the courthouses would have, and (3) without planning for courtroom sharing among judges. Overall, this space represents about 9 average-sized courthouses. The estimated cost to construct this extra space, when adjusted to 2010 dollars, is \$835 million, and the annual cost to rent, operate and maintain it is \$51 million.

Twenty-seven of the 33 courthouses completed since 2000 exceed their congressionally authorized size by a total of 1.7 million square feet. Fifteen exceed their congressionally authorized size by more than 10 percent, and 12 of these 15 also had total project costs that exceeded the estimates provided to congressional committees. However, there is no requirement to notify congressional committees about size overages. A lack of oversight by GSA, including not ensuring its space measurement policies were understood and followed and a lack of focus on building courthouses within the congressionally authorized size, contributed to these size overages.

For 23 of 28 courthouses whose space planning occurred at least 10 years ago, the judiciary overestimated the number of judges who would be located in them, causing them to be larger and costlier than necessary. Overall, the judiciary has 119, or approximately 26 percent, fewer judges than the 461 it estimated it would have. This leaves the 23 courthouses with extra courtrooms and chamber suites that, together, total approximately 887,000 square feet of extra space. A variety of factors contributed to the judiciary's overestimates, including inaccurate caseload projections, difficulties in projecting when judges would take senior status, and long-standing difficulties in obtaining new authorizations and filling vacancies. However, the degree to which inaccurate caseload projections contributed to inaccurate judge estimates cannot be measured because the judiciary did not retain the historic caseload projections used in planning the courthouses.

Using the judiciary's data, GAO designed a model for courtroom sharing, which shows that there is enough unscheduled time for substantial courtroom sharing. Sharing could have reduced the number of courtrooms needed in courthouses built since 2000 by 126 courtrooms—about 40 percent of the total number—covering about 946,000 square feet of extra space. Some judges GAO consulted raised potential challenges to courtroom sharing, such as uncertainty about courtroom availability, but others indicated they overcame those challenges when necessary, and no trials were postponed. The judiciary has adopted policies for future sharing for senior and magistrate judges, but GAO's analysis shows that additional sharing opportunities are available. For example, GAO's courtroom sharing model shows that there is sufficient unscheduled time for 3 district judges to share 2 courtrooms and 3 senior judges to share 1 courtroom.

---

# Contents

---

<b>Letter</b>		1
	Background	4
	Extra Space in Courthouses Cost an Estimated \$835 Million in Constant 2010 Dollars to Construct and \$51 Million Annually to Rent, Operate, and Maintain	9
	Most Courthouses Exceed Congressionally Authorized Size Due to a Lack of Oversight by GSA	12
	Estimated Space Needs Exceeded Actual Space Needs, Resulting in Courthouses That Were Larger than Necessary	26
	Low Levels of Use Show That Judges Could Share Courtrooms, Reducing the Need for Future Courtrooms by More Than One-Third	33
	Conclusions	42
	Recommendations for Executive Action	44
	Agency Comments and Our Evaluation	45
<b>Appendix I</b>	<b>Objectives, Scope, and Methodology</b>	50
<b>Appendix II</b>	<b>Comments from the U.S. General Services Administration</b>	58
	GAO Comments	64
<b>Appendix III</b>	<b>Comments from the Federal Judiciary</b>	69
	GAO Comments	87
<b>Appendix IV</b>	<b>GAO Contact and Staff Acknowledgments</b>	104
<b>Tables</b>		
	Table 1: The Different Types of Federal Judges	5
	Table 2: Estimated Construction and Annual Operations and Maintenance Costs of Building Extra Space in Seven Case Study Courthouses	11
	Table 3: Square Footage Over Authorized and Efficiency of Seven Courthouses	18

---

Table 4: Comparison of 10-Year Judge Estimates and the Actual Number of Judges After 10 Years or More for Case Study Courthouse Locations and Related Space Consequences	28
Table 5: Dedicated Courtroom-Sharing Possibilities Based on GAO Model	37
Table 6: District, Senior, and Magistrate Judge Courtroom Sharing That Could Occur in Selected Courthouses Based on the Judiciary's Data	38
Table 7: The 33 Courthouses Completed from 2000 through March 2010	50
Table 8: Courtroom Sharing for District Judges Based on Centralized Sharing	95
Table 9: Courtroom Sharing for Senior District Judges Based on Centralized Sharing	96
Table 10: Courtroom Sharing for Magistrate Judges Based on Centralized Sharing	97
Table 11: Courtroom Sharing for Courthouses Using Nationwide Ratio of District Judges to Senior and Magistrate Judges Based on Centralized Sharing	98

---

## Figures

Figure 1: Extra Federal Courthouse Space Constructed Since 2000 and the Estimated Construction and Annual Costs	10
Figure 2: Extra Federal Courthouse Space Constructed Since 2000 Due to Exceeding Congressionally Authorized Square Footage	13
Figure 3: Percentage Difference in Size of Federal Courthouses as Congressionally Authorized and as Built	15
Figure 4: Example of a Mechanical Room on a Courtroom Floor of the Eagleton U.S. Courthouse in St. Louis, Missouri, and on the Top Level of the Coyle U.S. Courthouse, in Fresno, California	21
Figure 5: D'Amato U.S. Courthouse Atrium Map and Pictures	22
Figure 6: Atrium in Ferguson, Jr., U.S. Courthouse in Miami, Florida, and Entry Space in DeConcini U.S. Courthouse in Tucson, Arizona	23
Figure 7: Extra Federal Courthouse Space Constructed Since 2000 Due to Overestimating the Number of Judges	27
Figure 8: Unassigned Chamber Suites in the Coyle Courthouse in Fresno, California	29

---

Figure 9: Total District Court Case Filings for the Eastern District of Missouri	30
Figure 10: Unassigned District Courtroom and Chamber in the Ferguson Courthouse, Miami, Florida	32
Figure 11: Extra Federal Courthouse Space Constructed Since 2000 Due to Judges Not Sharing Courtrooms	34
Figure 12: Representation of an Average 8 Hour Day for a Courtroom by Type of Judge as of July 2007	35

---

### Abbreviations

ADR	Alternative Dispute Resolution
BOMA	Building Owners and Managers Association
Design Guide	The U.S. Courts Design Guide
FJC	Federal Judicial Center
GSA	General Services Administration
judiciary	federal judiciary
Marshals	U.S. Marshals
OMB	Office of Management and Budget

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.



United States Government Accountability Office  
Washington, DC 20548

June 21, 2010

The Honorable James L. Oberstar  
Chairman  
The Honorable John L. Mica  
Ranking Member  
Committee on Transportation and Infrastructure  
House of Representatives

The Honorable Eleanor Holmes Norton  
Chair  
The Honorable Mario Diaz-Balart  
Ranking Member  
Subcommittee on Economic Development, Public Buildings,  
and Emergency Management  
Committee on Transportation and Infrastructure  
House of Representatives

Since the early 1990s, the General Services Administration (GSA) and the federal judiciary (judiciary) have undertaken a multibillion-dollar courthouse construction initiative that has resulted in 66 new courthouses or annexes,<sup>1</sup> with 29 additional projects in various stages of development. However, rising costs and other federal budget priorities threaten to stall the initiative. In 2008, for example, we found that increases in construction cost estimates for the Los Angeles, California, courthouse had led to an impasse that has yet to be resolved.<sup>2</sup> Over the last 15 years, we have raised concerns about GSA's and the judiciary's process for planning new courthouses, including concerns over limited controls and oversight over courthouse construction costs.<sup>3</sup> We have also raised questions about the accuracy of the judiciary's long-term caseload projections—projections used to estimate the number of judges who will be located in new

---

<sup>1</sup>An annex is an addition to an existing building.

<sup>2</sup>GAO, *Federal Courthouse Construction: Estimated Costs to House the L.A. District Court Have Tripled and There Is No Consensus on How to Proceed*, [GAO-08-889](#) (Washington, D.C.: Sept. 12, 2008).

<sup>3</sup>See, for example, GAO, *Federal Courthouse Construction: More Disciplined Approach Would Reduce Costs and Provide for Better Decision-making*, [GAO/T-GGD-96-19](#) (Washington, D.C.: Nov. 19, 1995) and GAO, *Courthouse Construction: Information on Project Cost and Size Changes Would Help to Enhance Oversight*, [GAO-05-673](#) (Washington, D.C.: June 30, 2005).

---

courthouses in 10 years, often under a policy that provided one courtroom for each estimated judge. Furthermore, we and some members of Congress have raised concerns that some courtrooms are underutilized; that more courtrooms than needed have been, and continue to be, constructed; and that increased courtroom sharing by judges—an option that the judiciary studied for district courtrooms in 2008<sup>4</sup>—could reduce the number of new courtrooms needed and therefore the size and cost of new courthouse projects. As a result of this study, the judiciary recently established some new policies that incorporate more sharing of courtrooms for senior judges<sup>5</sup> and magistrate judges.

To assist you in your oversight of the courthouse construction initiative, you asked us to review courthouse planning and construction, including the initiative's management and costs. Accordingly, for 33 federal courthouses completed since 2000, we examined (1) whether the courthouses contain extra space and any costs related to it, (2) how the actual size of the courthouses compares with the congressionally authorized size, (3) how courthouse space based on the judiciary's 10-year estimates of judges compares with the actual number of judges; and (4) whether the level of courtroom sharing supported by data from the judiciary's 2008 study of district courtroom sharing could have changed the amount of space needed in these courthouses. To address these objectives, we analyzed planning, construction, and budget documents associated with all 33 federal courthouses or major annexes completed from 2000 through March 2010. For the names and locations of these courthouses, see table 7 in appendix I. In addition, we selected seven of the federal courthouses in our scope to analyze more closely as case studies: the Bryant U.S. Courthouse Annex in Washington, D.C.; the Coyle U.S. Courthouse in Fresno, California; the D'Amato U.S. Courthouse in Central Islip, New York; the DeConcini U.S. Courthouse in Tucson, Arizona; the Eagleton U.S. Courthouse in St. Louis, Missouri; the Ferguson U.S. Courthouse in Miami, Florida; and the Limbaugh, Sr., U.S. Courthouse

---

<sup>4</sup>An independent and comprehensive study of courtroom use in district courts was conducted by the Federal Judicial Center (FJC) at the request of the Judicial Conference of the United States, which, after the study was completed, issued a report on the study. See Judicial Conference of the United States, *Report on the Usage of Federal District Court Courtrooms*, Sept. 16, 2008. The study served as a basis for the Judicial Conference's adoption of several policy changes related to the sharing of courtrooms by judges, which are described later in this report.

<sup>5</sup>District judges who are eligible to retire may continue to hear cases on a full- or part-time basis as senior judges.

---

in Cape Girardeau, Missouri. We chose these courthouses because they represent a wide distribution of sizes, dates of completion, and locations and their gross square footage exceeds their congressionally authorized size.

To estimate the cost of any extra courthouse space, we added together any extra square footage due to an increase in the courthouse's gross square footage over the congressional authorization, inaccurate 10-year judge estimates, and less sharing than is supported by the judiciary's data, as described below in the methodology for the other objectives. We then calculated the extra cost to construct, and rent or operate and maintain this space based on the actual construction costs and the fiscal year 2009 rent and operations and maintenance costs. We developed this methodology after discussing and validating the approach with outside construction experts. To determine how the size of courthouses compares with the authorized size, we compared each courthouse's congressionally authorized gross square footage<sup>6</sup> with the gross square footage of the courthouse as measured by GSA's space measurement program. To learn how the judiciary's 10-year judge estimates compared with the actual number of judges in service, we used courthouse planning documents to determine how many judges the judiciary estimated it would have in each courthouse in 10 years and compared that number with the judiciary's data showing how many judges or authorized vacancies are located there.

To learn more about the level of courtroom sharing that the judiciary's data support, we used the judiciary's 2008 district courtroom scheduling and use data to model courtroom sharing scenarios. Working with a contractor, we designed this sharing model in conjunction with a specialist in discrete event simulation and the company that designed the simulation software to ensure that the model conformed to generally accepted simulation modeling standards and was reasonable for the federal court system. We determined that the judiciary's courtroom data were

---

<sup>6</sup>Before Congress makes an appropriation for a proposed project, GSA submits to the Senate Committee on Environment and Public Works and the House Committee on Transportation and Infrastructure detailed project descriptions, called prospectuses, for authorization by these committees when the proposed construction, alteration, or acquisition of a building to be used as a public building exceeds a specified threshold. For purposes of this report, we refer to these committees as "authorizing committees" when discussing the submission of the prospectuses and providing additional information relating to prospectuses to these committees. Furthermore, for purposes of this report, we refer to approval of these projects by these committees as "congressional authorization." See 40 U.S.C. § 3307.



---

sufficiently reliable for our purposes by conducting checks on the data, reviewing the judiciary’s validation techniques, and interviewing staff who collected the data at both the national and the local levels. We also visited courthouses in Philadelphia, Pennsylvania, and Manhattan, New York, to observe and discuss sharing experiences with judges and judicial staff. We chose these courthouses because the judges in them have experience with sharing courtrooms. We convened a panel of judicial experts and conducted structured interviews with numerous other district and magistrate judges about the challenges and opportunities related to courtroom sharing.

We conducted this performance audit from September 2008 to June 2010 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. A detailed discussion of our scope and methodology appears in appendix I.

---

## Background

Federal courthouses vary in size and scope. While typically, one to five district court judges are located in small- to medium-sized courthouses, in several large metropolitan areas, 15 or more district judges are located in a single courthouse. Courthouses may also include space for appellate, bankruptcy, and magistrate judges, as well as other tenants. The U.S. district courts are the trial courts of the federal court system. There are 94 federal judicial districts—at least 1 for each state—organized into 12 regional circuits, each of which has a court of appeals whose jurisdiction includes appeals from the district courts located within the circuit, as well as appeals from decisions of federal administrative agencies. Each district includes a U.S. bankruptcy court as a unit of the district court.<sup>7</sup> Table 1 identifies the term, role, and numbers of the different types of federal judges.

---

<sup>7</sup>There are also two trial courts (the Court of International Trade and the United States Court of Federal Claims) and one court of appeals (the Court of Appeals for the Federal Circuit) with nationwide jurisdiction over certain types of cases.

**Table 1: The Different Types of Federal Judges**

Judge type	Appointment	Role	Authorized number	Actual number (authorized number less vacancies)
Appeals	Life term	Hears appeals from district courts located within its circuit and appeals from decisions of federal administrative agencies.	179	159 plus 93 senior judges
District	Life term	Exercises jurisdiction over nearly all categories of federal cases, including both civil and criminal matters.	678	603 plus 347 senior judges
Magistrate	8-year term	Exercises jurisdiction over matters assigned by statute as well as those delegated by the district judges.	567	Actual number not listed plus 43 recalled judges
Bankruptcy	14-year term	Exercises jurisdiction over bankruptcy cases.	352	332 plus 22 recalled judges

Source: Federal Judiciary; authorized and actual numbers from Judicial Business of the United States Courts: 2009 Annual Report of the Director.

Note: Court of appeals and district judges who are eligible to retire may continue to hear cases on a full- or part-time basis as senior judges.

The Administrative Office of the U.S. Courts is an agency within the judicial branch and serves as the central support entity for federal courts, providing a wide range of administrative, legal, financial, management, and information technology functions. The Director of the Administrative Office of the U.S. Courts is supervised by the Judicial Conference. The Judicial Conference of the United States serves as the judiciary’s principal policy-making body and recommends national policies and legislation on all aspects of federal judicial administration. The Judicial Conference of the United States periodically assesses the need for additional judgeships for the nation’s appellate, district, and bankruptcy courts and recommends additional judgeships to Congress, specifying the circuit or district for which the additional judgeship is requested—for example, the eastern

---

district of California. The additional requested and authorized judgeships may be permanent or temporary.<sup>8</sup>

Since fiscal year 1996, the judiciary has used a 5-year plan to prioritize new courthouse construction projects, taking into account a court's projected need for space related to caseload and estimated growth in the number of judges and staff, security concerns, and any operational inefficiencies that may exist. Under current practices, GSA and the judiciary plan new federal courthouses based on the judiciary's projected 10-year space requirements. To develop these projections, the judiciary evaluates historical caseload data,<sup>9</sup> among other factors, to estimate how many weighted filings<sup>10</sup> the court will have 10 years later. It then uses this information to determine how many judges to plan for. Currently, the judiciary uses a threshold of 500 adjusted annual appeals case filings per three-judge appellate panel, 430 to 500 weighted annual filings per authorized district judgeship,<sup>11</sup> and 1,500 annual weighted filings per bankruptcy judgeship. Magistrate judge positions are created based on an analysis of various factors, including the weighted caseload of the court, the ratio of magistrate judges to district judges, the workload of the

---

<sup>8</sup>Temporary judgeships are those created by statute for a specified minimum period of time because of an increase in workload that is expected to be temporary (such as a large number of asbestos filings). Temporary judgeships are temporary to the district court, not to the judge. Judges appointed to temporary district judgeships hold lifetime appointments. At the end of the period for which the temporary judgeship was authorized, the temporary judgeship expires unless Congress either extends the authorization or converts the position to a permanently authorized one. If the temporary judgeship expires, the judge who occupied that position does not leave the bench, and until the next vacancy in that court occurs, the number of judges exceeds the number of permanently authorized judgeships. When the next judicial vacancy in that court occurs, the position is not filled and the number of judges is thus reduced to the number of permanently authorized judgeships.

<sup>9</sup>In these data, the judiciary includes the total numbers of civil cases, criminal cases, and defendants; civil and criminal weighted filings; weighted and unweighted bankruptcy filings; and appeals.

<sup>10</sup>Weighted filings statistics account for the different amounts of time district judges take to resolve various types of civil and criminal actions. Types of civil cases or criminal defendants whose cases typically take an average amount of time to resolve each receive a weight of approximately 1.0; for more time-consuming cases, higher weights are assigned (e.g., a death-penalty *habeas corpus* case is assigned a weight of 12.89); and cases demanding relatively little time from judges receive lower weights (e.g., overpayment and recovery cases, such as a defaulted student loan case, are assigned a weight of 0.10).

<sup>11</sup>The Judicial Conference standard for district court judgeships is 430 weighted filings per judgeship, except in the case of small courts with fewer than five authorized judgeships, in which case the standard is 500 weighted filings per judgeship.

---

magistrate judges, and the utilization of magistrate judges in the district. Except for appeals court judges, who sit on panels of three or more, the judiciary requested one courtroom per estimated judge for courthouses built from 2000 through 2009, although it occasionally planned for senior judges to share courtrooms.

*The U.S. Courts Design Guide* (Design Guide) specifies the judiciary's criteria for designing new court facilities and sets the space and design standards for court-related elements of courthouse construction. In 1993, the judiciary also developed a space planning program called AnyCourt to determine the amount of court-related space the court will request for a new courthouse based on Design Guide standards and estimated staffing levels. GSA develops requests to congressional authorizing committees for both new courthouses and expanded court facilities. These requests are based on input from the judiciary and are reviewed by the Office of Management and Budget (OMB) before they are submitted to the congressional committees. GSA also serves as the central point of contact for the judiciary and other stakeholders throughout the construction process.

For courthouses that are selected for construction, GSA typically submits two detailed project descriptions, or prospectuses, for congressional authorization. The first prospectus, often called the site and design prospectus, outlines the scope, size, and estimated costs of the project at the outset and typically requests authorization and funding to purchase the site and design the building. The second prospectus, often called the construction prospectus, outlines the scope, size, and estimated costs of the project as it enters the construction phase and typically requests authorization and funding for construction, as well as additional funding if needed for site and design work. GSA may also provide additional prospectuses or less formal materials that contain information on the project's size and estimated total cost to the authorizing committees.

Typically, the total gross square footage of the courthouses depicted in the construction prospectus or fact sheet is based on the following:

- The judiciary's projected need for space, based on 10-year judge estimates.
- Projected space to be built for other tenants, such as the U.S. Marshals (Marshals) and U.S. Attorneys.
- Gross square footage reserved for building common and other space, such as public lobbies and hallways, atriums, elevators, and mechanical rooms.

---

The amount of gross square footage estimated for this space is based on GSA's specification that a courthouse should be 67 percent efficient, meaning that 67 percent of the total gross square footage, excluding parking, should consist of tenant space (space assigned to the courts and other tenants)<sup>12</sup> and the rest should be building common and other space.<sup>13</sup>

- Space needed for interior parking.

Congressional committees authorize and Congress appropriates funds for courthouse projects, often at both the design and construction phases. Congressional authorizations of courthouse projects typically include the gross square footage of the planned courthouse as described in the prospectus and the funding requested. After funds have been appropriated, GSA selects private-sector firms for the design and construction work through a competitive procurement process. GSA also manages the construction contract and oversees the work of the construction contractor.

After courthouses are occupied, GSA charges each tenant agency, including the judiciary, rent for the space it occupies and for its respective share of common areas, including mechanical spaces. GSA considers some space in buildings, such as vertical penetrations, including the upper floors of atriums, nonrentable space. In fiscal year 2009, the judiciary's rent payments totaled over \$970 million. The judiciary has sought to reduce the payments through requests for rent exemptions from GSA and Congress and internal policy changes, such as annually capping rent growth and validating rental rates.

---

<sup>12</sup>For the purposes of this report, we are referring to space assigned both to a specific tenant and to joint use as tenant space.

<sup>13</sup>In line with GSA's method of calculating efficiency, this category includes the space GSA categorizes as building common, floor common, and unmarketable space.

---

## Extra Space in Courthouses Cost an Estimated \$835 Million in Constant 2010 Dollars to Construct and \$51 Million Annually to Rent, Operate, and Maintain

The 33 federal courthouses completed since 2000 include 3.56 million square feet of extra space consisting of space that was constructed above the congressionally authorized size, due to overestimating the number of judges the courthouses would have, and without planning for courtroom sharing among judges.<sup>14</sup> Overall, this space represents about 9 average-sized courthouses. The estimated cost to construct this extra space, when adjusted to 2010 dollars, is \$835 million,<sup>15</sup> and the annual cost to rent, operate, and maintain it is \$51 million. More specifically, the extra space and its causes are as follows:

- 1.7 million square feet caused by construction in excess of congressional authorizations;
- 887,000 extra square feet caused by the judiciary overestimating the number of judges the courthouses would have in 10 years; and
- 946,000 extra square feet caused by district and magistrate judges not sharing courtrooms.

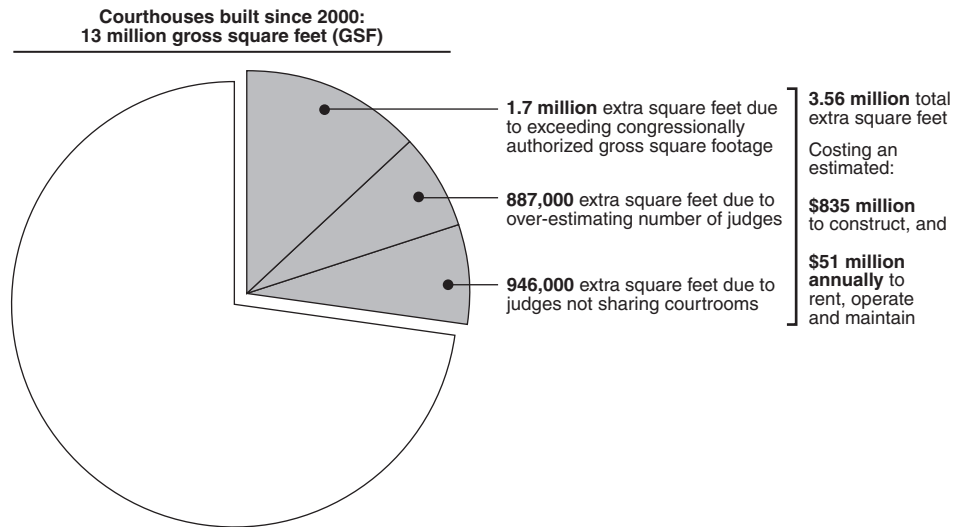
Thirty-two of the 33 courthouses include extra space attributable to at least one of these three causes and 19 have extra space attributable to all three causes. This extra 3.56 million square feet cost an estimated \$835 million in constant 2010 dollars to construct based on the cost per square foot to construct each courthouse (see fig. 1).

---

<sup>14</sup>We did not evaluate how much of the extra space was unused.

<sup>15</sup>The estimated construction cost of the extra space was \$640 million in nominal (unadjusted) dollars. We adjusted for inflation using a price index for construction costs from the Bureau of Economic Analysis and Global Insights. We adjusted expenditures to 2010 constant dollars.

**Figure 1: Extra Federal Courthouse Space Constructed Since 2000 and the Estimated Construction and Annual Costs**



Sources: GAO analysis of GSA data.

Note: Numbers in figure 1 do not add up due to rounding.

In addition to the one-time construction cost increase, the extra square footage in these 32 courthouses causes higher annual operations and maintenance costs, which are largely passed on to the judiciary and other tenants as rent. According to our analysis of the judiciary's rent payments to GSA for these courthouses at fiscal year 2009 rental rates, the extra courtrooms and other judiciary space increase the judiciary's annual rent payments by \$40 million. In addition, our analysis indicates that other extra space cost \$11 million in fiscal year 2009 to operate and maintain.<sup>16</sup> Typically, operations and maintenance costs represent from 60 to 85 percent of the costs of a facility over its lifetime, while design and construction costs represent about 5 to 10 percent of these costs.<sup>17</sup>

<sup>16</sup>We did not attempt to calculate the rent attributable to the extra square footage due to exceeding congressionally authorized gross square footage because some of this extra square footage is for tenants other than the judiciary or occurs in building common or other space, the costs of which are not directly passed on to the judiciary in rent. We therefore calculated the annual operations and maintenance costs for all extra space due to exceeding congressionally authorized gross square footage and for the extra building common and other space due to overestimating the number of judges and judges not sharing courtrooms.

<sup>17</sup>The remaining lifetime costs include land acquisition, planning, renewal/revitalizations, and disposal.

Therefore, the ongoing operations and maintenance costs for the extra square footage are likely to total considerably more in the long run than the construction costs for this extra square footage. Table 2 identifies the amount of extra space and associated costs for our seven case study courthouses.<sup>18</sup>

**Table 2: Estimated Construction and Annual Operations and Maintenance Costs of Building Extra Space in Seven Case Study Courthouses**

Dollars in millions

<b>Courthouse</b>	<b>Estimated extra square feet constructed</b>	<b>Estimated annual rent, operations, and maintenance costs for extra space</b>	<b>Estimated extra construction costs in constant 2010 dollars</b>
Bryant U.S. Courthouse Annex, Washington, D.C.	218,000	\$4.0	56.5
Coyle U.S. Courthouse, Fresno, Calif.	131,000	2.2	34.9
D'Amato U.S. Courthouse, Islip, N.Y.	282,000	3.8	74.7
DeConcini U.S. Courthouse, Tucson, Ariz.	78,000	1.3	17.2
Eagleton U.S. Courthouse, St. Louis, Mo.	398,000	2.8	88.8
Ferguson U.S. Courthouse, Miami, Fla.	238,000	3.8	48.5
Limbaugh, Sr., U.S. Courthouse, Cape Girardeau, Mo.	26,000	0.2	7.4

Source: GAO.

<sup>18</sup>We chose the seven courthouses for case studies because they provided examples of courthouses that exceeded the congressionally authorized size and represented a wide distribution of courthouse sizes, dates of completion, and geographical locations.



---

## Most Courthouses Exceed Congressionally Authorized Size Due to a Lack of Oversight by GSA

Twenty-seven of the 33 federal courthouses constructed since 2000 exceed their congressionally authorized size,<sup>19</sup> and 15 of the 33 courthouses exceed their congressionally authorized size by 10 percent or more. Most of the courthouses that exceed the congressionally authorized size by 10 percent or more also had total project costs that exceeded the estimated budget provided to congressional authorizing committees. All seven courthouses we examined as case studies had increases in size made up at least in part of increases in building common and other space.<sup>20</sup> Five of the seven courthouses also had increases in tenant space. In all seven of the case study courthouses, the increases in building common and other space were proportionally larger than the increases in tenant space, leading to a lower efficiency than GSA's target of 67 percent.<sup>21</sup> Efficiency is important because, for a given amount of tenant space, meeting the efficiency target helps control a courthouse's gross square footage and therefore its costs.<sup>22</sup> According to GSA officials, controlling the gross square footage of a courthouse is the best way to control construction costs. However, GSA lacked sufficient controls to ensure that courthouses were planned and built according to authorized gross square footage, initially because it had not established a consistent policy for how to measure gross square footage. GSA established a policy for measuring gross square footage by 2000, but GSA has not demonstrated it is enforcing this policy because the most recently completed courthouses continue to exceed the congressionally authorized size.

---

<sup>19</sup>For all 33 courthouses in our scope, we used the congressionally authorized gross square footage for the construction of the courthouse. We compared the authorized gross square footage, including inside parking, with the actual gross square footage, including inside parking.

<sup>20</sup>For the purposes of this report, we are using the term *building common and other space* to include GSA's categories of building common, floor common, and unmarketable space and the term *tenant space* to include GSA's categories of tenant space, joint use space, and vacant space.

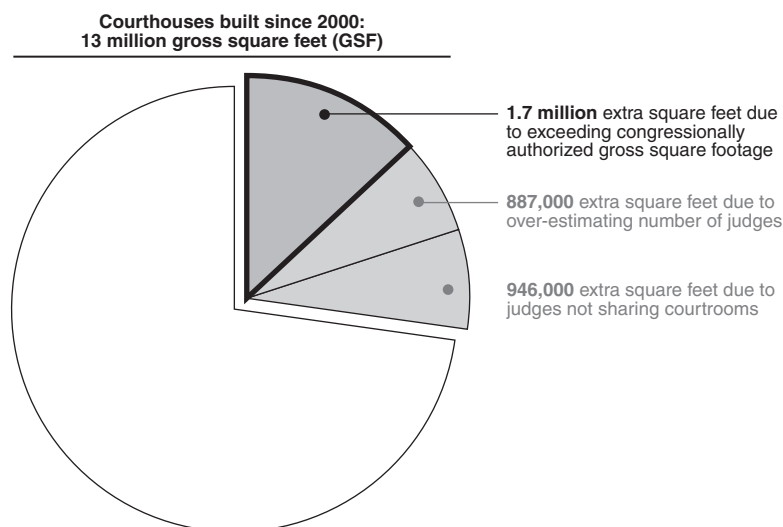
<sup>21</sup>In a building with 67 percent efficiency, 67 percent of the total gross square footage, excluding parking, consists of tenant space and the remainder consists of building common and other space.

<sup>22</sup>GSA defines the gross square footage of a building as the total constructed area of a building, which includes tenant spaces and building common and other spaces, such as lobbies and mechanical rooms—as well as indoor parking.

## Most Federal Courthouses Constructed Since 2000 Exceed Authorized Size, Some by Substantial Amounts

Twenty-seven of the 33 federal courthouses built since 2000 are larger than the congressionally authorized gross square footage. As shown in figure 2, altogether, these 27 courthouses have about 1.7 million more square feet than authorized.

**Figure 2: Extra Federal Courthouse Space Constructed Since 2000 Due to Exceeding Congressionally Authorized Square Footage**



Sources: GAO analysis of GSA data.

Fifteen of these 33 courthouses are over 10 percent larger than authorized, and 3 of the federal courthouses built since 2000—the O'Connor U.S. Courthouse in Phoenix; the U.S. Courthouse in Hammond, Indiana; and the Arnold U.S. Courthouse Annex in Little Rock, Arkansas—are at least 50 percent larger than congressionally authorized.<sup>23</sup> For example, the O'Connor Courthouse in Phoenix was congressionally authorized at 555,810 gross square feet but is 831,604 gross square feet, an increase of 50 percent.

On the other hand, 6 of the 33 courthouses are smaller than congressionally authorized, as shown in figure 3, and 3 of these are more

<sup>23</sup>The O'Connor Courthouse is 831,604 gross square feet (275,794 square feet over its authorized 555,810 gross square feet), the Hammond, Indiana, Courthouse is 315,978 gross square feet (104,778 square feet over its authorized 211,200 gross square feet), and the Arnold Courthouse Annex is 254,911 gross square feet (99,594 square feet over its authorized 155,317 gross square feet).

---

than 5 percent smaller. For example, the Arraj U.S. Courthouse in Denver, Colorado, is 6 percent smaller than authorized. We reported in 2005 that, according to GSA's construction manager, construction price increases caused GSA to implement cost-saving measures that included cutting one floor from the design.<sup>24</sup> According to a GSA official, it was possible to delete this floor because two judges retired instead of taking senior status. In spite of this and other cost-saving measures, according to GSA's project manager, the competition in the local construction market contributed to actual costs that were 6 percent higher than the estimated costs submitted with the construction funding request.

In addition, 8 courthouses are within 5 percent of their authorized gross square footage. Courthouses from 0 to 5 percent below their authorized square footage include

- the U.S. Courthouse in Laredo, Texas;
- the U.S. Courthouse Annex in London, Kentucky; and
- the Hruska U.S. Courthouse, in Omaha, Nebraska.

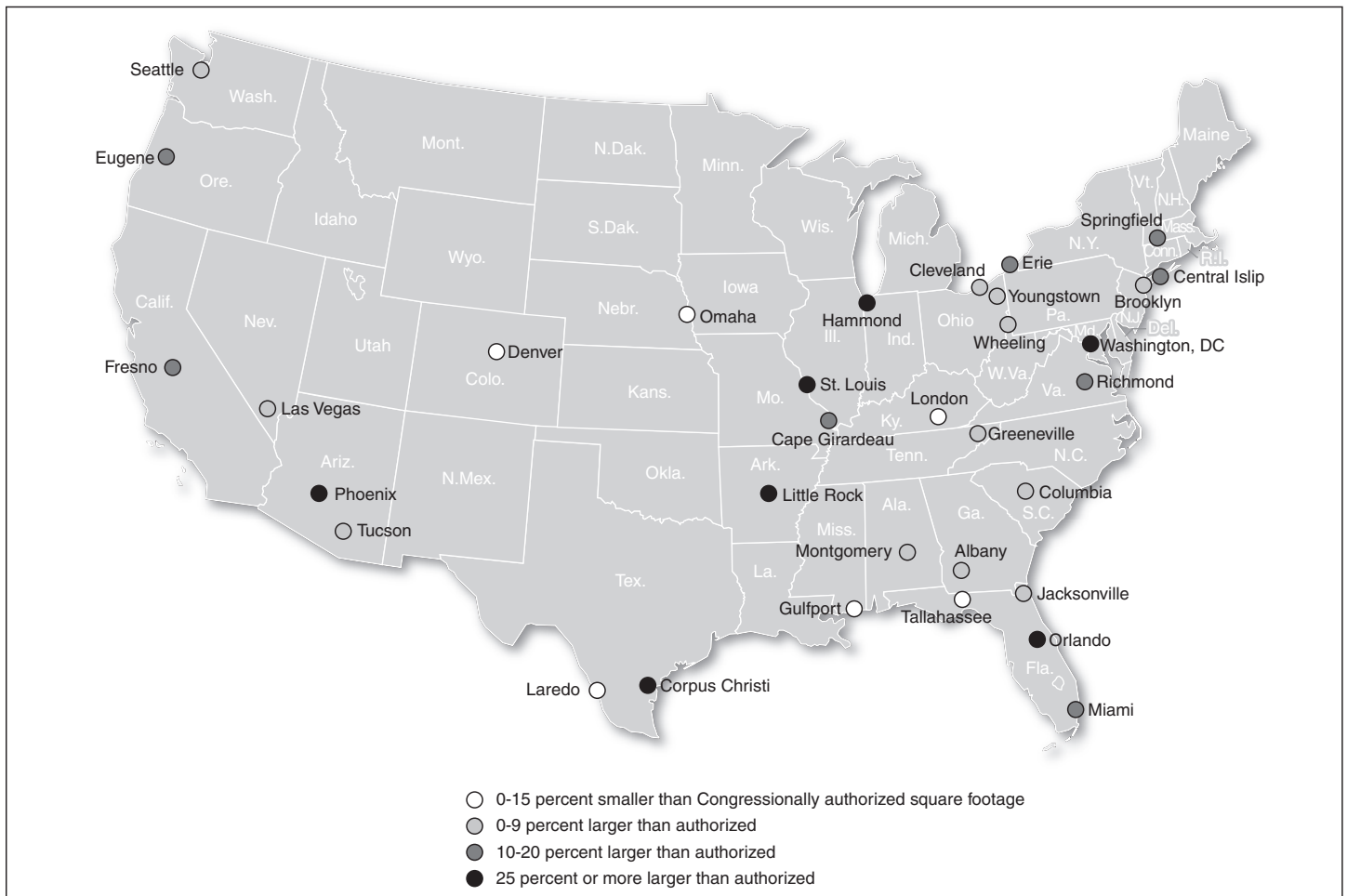
Courthouses from 0 to 5 percent above their authorized gross square footage include

- the Federal Building and U.S. Courthouse in Wheeling, West Virginia;
- the King U.S. Courthouse in Albany, Georgia;
- the Quillen U.S. Courthouse, in Greeneville, Tennessee;
- the George U.S. Courthouse in Las Vegas, Nevada; and
- the DeConcini U.S. Courthouse, in Tucson, Arizona.

---

<sup>24</sup>[GAO-05-673](#).

**Figure 3: Percentage Difference in Size of Federal Courthouses as Congressionally Authorized and as Built**



Source: GAO presentation of GSA data; Map Resources (map).

**Most of the Courthouses That Exceeded Authorized Size by 10 Percent or More Also Exceeded Budget Estimates**

Twelve of the 15 courthouses that exceeded the congressionally authorized gross square footage by 10 percent or more also had total project costs that exceeded the total project cost estimate provided to congressional authorizing committees. There is a 10 percent statutory cap in the authorizing language on the estimated maximum cost increase of a project. GSA’s annual appropriations acts include a provision stating that GSA may increase spending for a project in an approved prospectus by more than 10 percent if GSA obtains advance approval from the

---

Committee on Appropriations.<sup>25</sup> There is no statutory requirement for GSA to notify congressional authorizing or appropriations committees if the size exceeds the congressionally authorized square footage. Four of the 15 courthouses had total project costs that exceeded the estimate provided to congressional authorizing committees at the construction phase by about 10 percent or more.<sup>26</sup> The construction industry commonly uses 10 percent as a benchmark for the expected variance between the actual cost and the construction estimate. However, while GSA sought approval from the appropriations committees for the cost increases incurred for these 4 courthouses, GSA did not explain to these committees that the courthouses were larger than authorized and therefore did not attribute any of the cost increase to this difference.

For example, the total project cost of the Coyle U.S. Courthouse in Fresno, California, (about \$133 million) was about \$13 million over the estimate provided to congressional authorizing committees before construction (an increase of 11 percent), while the courthouse is about 16 percent larger than its authorized gross square footage. In requesting approval from the appropriations committees for additional funds for the Coyle U.S. Courthouse, GSA stated that, among other things, additional funds were needed for fireproofing and electrical and sewer line revisions—but did not mention that the courthouse was 16 percent larger than authorized. Because the construction costs of a building increase when its gross square footage increases, the cost overruns for this courthouse would have been smaller or might have been eliminated if GSA had built the courthouse to meet the authorized square footage.

---

<sup>25</sup>See GSA's 2010 Fiscal Year Appropriations Act, Pub. L. No. 111-117, Div. C. Title V, 123 Stat. 3034, 3187-3188 (2009). Every year from fiscal year 1995 through fiscal year 2010, the GSA appropriations act has contained this requirement except for fiscal year 1998, when no appropriation was made for new construction or acquisition. For fiscal years 1990 through 1994, the GSA appropriations acts stated that these projects could not exceed their authorized cost by more than 10 percent.

<sup>26</sup>For 8 of these 15 courthouses, the total project cost increased by about 1 to 9 percent over the cost estimate provided to congressional authorizing committees at the construction phase, while for 3 of the 15 courthouses, the total project cost was at or slightly under budget.

---

## Increase in Overall Size Consisted of Increases in Building Common and Tenant Spaces

We found that in five of the seven courthouses we examined as case studies, the size increase over the congressionally authorized gross square footage consisted of increases in both tenant space and building common and other space over the space that was congressionally authorized. Two of the seven had decreases in tenant space, while all seven had increases in the building common and other space compared with the congressionally authorized sizes for these spaces. In the two with decreases in tenant space, the increase in the building common and other space more than offset the decreases, so that the gross square footage of all seven exceeded the congressionally authorized gross square footage. In addition, for all seven courthouses, the increase in building common and other space was proportionally larger than the increase (if any) in tenant space, and the efficiency of all seven courthouses was below GSA's target, as stated in the judiciary's Design Guide, of 67 percent. According to GSA officials, a building's efficiency is important because, as it declines, less of the building's space directly contributes to the tenant's mission-related activities. In addition, for a given amount of tenant space, meeting the efficiency target helps control a courthouse's gross square footage and therefore its costs. The efficiency of five of our seven case study courthouses fell at least 5 percentage points below GSA's efficiency target of 67 percent.<sup>27</sup> (see table 3).

---

<sup>27</sup> According to GSA, the 67 percent efficiency target is intended for application to standalone new courthouses, and application to an annex is impractical because of the need for connections between the courthouse and the annex. However, we consider the efficiency of the Bryant Annex to be relevant because in the plans for this annex provided to congressional committees for authorization, GSA based its request for total gross square footage on an annex that would be 67 percent efficient.

**Table 3: Square Footage Over Authorized and Efficiency of Seven Courthouses**

	<b>Bryant U.S. Courthouse Annex, Washington, D.C.</b>	<b>Coyle U.S. Courthouse, Fresno, Calif.</b>	<b>D'Amato U.S. Courthouse, Central Islip, N.Y.</b>	<b>DeConcini U.S. Courthouse, Tucson, Ariz.</b>	<b>Eagleton U.S. Courthouse, St. Louis, Mo.</b>	<b>Ferguson, Jr., U.S. Courthouse, Miami, Fla.</b>	<b>Limbaugh, Sr., U.S. Courthouse, Cape Girardeau, Mo.</b>
Gross square footage over authorized	82,374	67,536	156,031	20,075	273,244	97,477	18,982
Actual gross square footage, including parking	409,974	495,912	1,014,031	439,817	1,310,876	605,800	173,392
Authorized gross square footage for construction, including parking	327,600	428,376	858,000	419,742	1,037,632	508,323	154,410
Actual tenant space square footage <sup>a</sup>	188,955 (38,722 over planned)	278,654 (21,658 over planned)	416,827 (33,173 under planned)	255,225 (2,285 over planned)	671,050 (73,696 over planned) <sup>b</sup>	366,924 (46,924 over planned)	96,025 (998 under planned)
Actual building common and other space square footage <sup>a</sup>	149,628 (75,633 over planned)	173,157 (46,577 over planned)	468,411 (185,411 over planned)	148,015 (23,433 over planned)	518,006 (224,865 over planned) <sup>b</sup>	188,766 (44,443 over planned)	68,008 (20,221 over planned)
Actual Efficiency	56%	62%	47%	63%	56%	66%	59%

Source: GAO.

<sup>a</sup>The square footage for tenant space and building common and other space does not include indoor parking and, thus, does not add up to the actual gross square footage, which includes indoor parking.

<sup>b</sup>While the square footage to be used for tenant space and building common and other space is not specifically congressionally authorized, GSA provides congressional committees with plans it has developed with the judiciary that show how much of the gross square footage not including parking (which is congressionally authorized) is to be used for tenant space, with the rest of the square footage planned for building common and other space.

---

## GSA Lacked Sufficient Oversight and Controls to Ensure That Courthouses Were Planned and Built According to Authorized Size

GSA lacked sufficient control activities to ensure that the 33 courthouses were constructed within the congressionally authorized gross square footage, initially because it had not established a consistent policy for how to measure gross square footage. GSA established a policy for measuring gross square footage by 2000, but has not ensured that this space measurement policy was understood and followed. Moreover, GSA has not demonstrated it is enforcing this policy because all 6 courthouses completed since 2007 exceed their congressionally authorized size. According to GSA officials, the agency did not focus on ensuring that the authorized gross square footage was met in the design and construction of courthouses until 2007. Our *Standards for Internal Control in the Federal Government* define control activities as the policies, procedures, techniques, and mechanisms that enforce management's directives, such as the process of adhering to requirements and budget execution.<sup>28</sup> GSA lacked such policies, procedures, techniques, or mechanisms to enforce adherence to the authorized square footage in the design and construction of these federal courthouses. GSA lacked such mechanisms even though, according to GSA officials, controlling the gross square footage of a building is important to controlling its construction costs because when the gross square footage of a building increases, construction costs increase as well. This lack of oversight and controls contributed to the increase over the congressionally authorized size in some courthouses built since 2000.

## Lack of GSA Oversight Contributed to More Building Common Space Than Planned

All seven of the courthouses we examined in our case studies had increases in building common and other space—such as mechanical spaces and atriums—as compared with the square footage planned for these spaces within the congressionally authorized gross square footage. The percentage of increase over the planned space ranged from 19 percent to 102 percent. According to a GSA official, at times, courthouses were designed to meet various design goals without an attempt to limit the size of the building common or other space to the square footage allotted in the plans provided to congressional authorizing committees—and these spaces may have become larger to serve a design goal as a result. Regional GSA officials involved in the planning and construction of several courthouses we visited stated that they were unaware until we told them that the courthouse was larger and less efficient than authorized.

---

<sup>28</sup>GAO, *Internal Control: Standards for Internal Control in the Federal Government*, GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999.)



---

For example, the building common and other space in the Eagleton U.S. Courthouse in St. Louis is 77 percent larger than planned, and the courthouse has an efficiency of 56 percent. While we could not determine the cause of all of this additional space, all courtroom floors of the St. Louis courthouse have mechanical rooms near the courtrooms, and in total, the mechanical space in the St. Louis courthouse takes up proportionally more space than it does in the DeConcini U.S. Courthouse, in Tucson, Arizona. In addition, the Eagleton U.S. Courthouse in St. Louis has two empty elevator shafts—rising all 33 floors—that were built but are not used. Together, the mechanical space and the elevator shafts bring the efficiency of the Eagleton U.S. Courthouse well below GSA’s target of 67 percent and limit the proportion of the building’s total space that contributes to mission-related activities. However, regional GSA officials stated that they were unaware until we told them that the courthouse was larger and less efficient than authorized.

Similarly, according to GSA officials, some of the mechanical space in the Coyle U.S. Courthouse in Fresno, California, was enclosed to serve the design of the courthouse. Specifically, the top level of the courthouse could have been left unenclosed except for the elevator tower, but to prevent the elevator tower from marring the line of vision of the roof, the architect enclosed a larger-than-necessary space, which became mechanical space (see fig. 4). The efficiency of the Coyle U.S. Courthouse in Fresno is 62 percent. In addition, the DeConcini U.S. Courthouse in Tucson, which has an efficiency of 63 percent, several percentage points below the target of 67 percent, has public hallways on every floor with large open areas, which increase the size of the hallways. GSA officials stated that these areas were created to meet the architect’s vision for the building’s façade, which did not consider how the space would work inside the building.

**Figure 4: Example of a Mechanical Room on a Courtroom Floor of the Eagleton U.S. Courthouse in St. Louis, Missouri, and on the Top Level of the Coyle U.S. Courthouse, in Fresno, California**



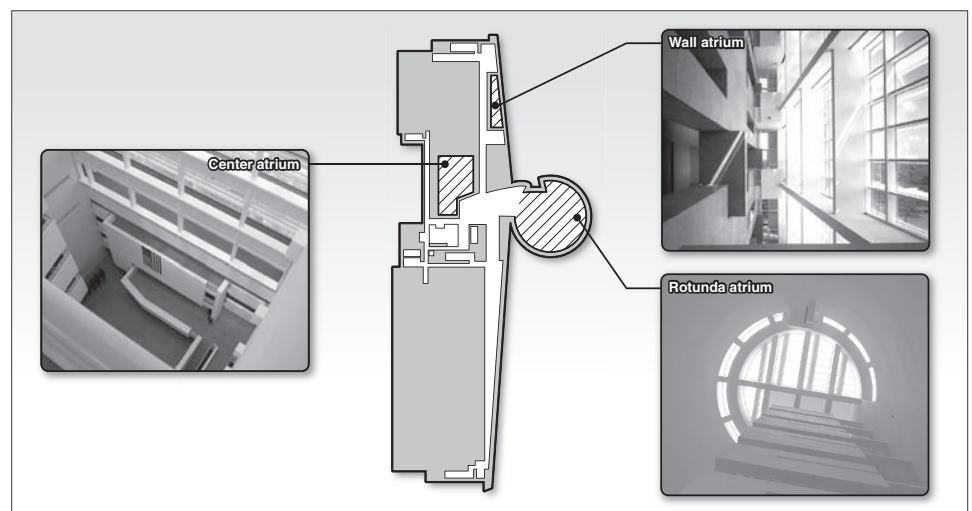
Source: GAO.

Another element of GSA’s lack of oversight in this area was that GSA relied on the architect to validate that the courthouse’s design was within the authorized gross square footage without ensuring that the architect followed GSA’s policies for how to measure certain commonly included spaces, such as atriums. Although GSA officials emphasized that open space for atriums would not cost as much as space completely built out with floors, these officials also agreed that there are costs associated with constructing and operating atrium space. In fact, the 2007 edition of the Design Guide, which reflects an effort to impose tighter constraints on future space and facilities costs, emphasizes that courthouses should have no more than one atrium.

According to GSA officials, a primary reason why the Limbaugh, Sr., U.S. Courthouse in Cape Girardeau, Missouri, and the Bryant U.S. Courthouse Annex in Washington, D.C., exceeded their congressionally authorized square footage is that the architect did not consider the upper atrium levels as part of the gross square footage of the courthouse—in conflict with GSA’s standards for measuring atrium space. In GSA’s policy for determining a building’s gross square footage, the atrium space is counted on all floors because multifloor atriums increase a building’s volume and thus its costs. However, according to GSA officials, GSA’s practice in the early 2000s—when the Limbaugh, Sr., and Bryant Courthouses were under design—was to rely on the architect to measure and validate the plans for the courthouse, and GSA did not expect its regional or headquarters officials to monitor or check whether the architect was following GSA’s policies. The D’Amato U.S. Courthouse in Central Islip, New York, was also larger than congressionally authorized, according to a regional GSA

official, because in designing this courthouse, the square footage of the air space of three large atriums was not included as part of the gross square footage (see fig. 5). In our visits to courthouses, we found that some GSA regional staff were still unclear about GSA's policy for measuring atrium space.

**Figure 5: D'Amato U.S. Courthouse Atrium Map and Pictures**



Sources: GSA (floor map); Scott Frances/Esto (wall atrium photograph); and GAO.

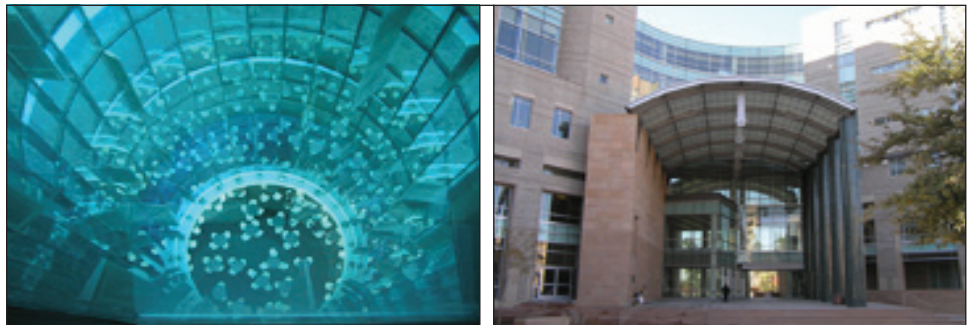
According to GSA officials, GSA's current policy on how to count the square footage of atriums and the target of 67 percent efficiency for federal courthouses should make it difficult, if not impossible, for a courthouse project to include large atriums spanning many floors—although relatively modest atriums should still be feasible. For the Bryant U.S. Courthouse Annex and Limbaugh, Sr., U.S. Courthouse, a result of GSA not providing oversight to ensure that the architect's measurement of the courthouse followed GSA's standards for measuring atrium space was that the courthouses were built larger than authorized. Moreover, these courthouses include larger atriums than would likely have been feasible within the authorized gross square footage if the atrium space had been measured according to GSA's standards.

The Design Guide states that courthouses must provide a civic presence and that the architecture must promote respect for the tradition and purpose of the American judicial process. While some GSA officials we met with suggested that atriums were part of what provided this civic presence, we found evidence that courthouses could be built with

---

relatively small atriums or other elements to create a grand entrance without causing low building efficiency. The Ferguson, Jr., U.S. Courthouse in Miami, for example, which has an efficiency of 66 percent, close to GSA’s target of 67 percent, has a public atrium that is not a major contributor to the courthouse being larger than authorized, and the DeConcini U.S. Courthouse in Tucson has a grand entrance without a multistory atrium (see fig. 6.).

**Figure 6: Atrium in Ferguson, Jr., U.S. Courthouse in Miami, Florida, and Entry Space in DeConcini U.S. Courthouse in Tucson, Arizona**



Source: GAO.

### A Lack of GSA Oversight Contributed to Some Courthouses Being Built with Larger Tenant Spaces

GSA’s lack of focus on meeting authorized square footage also contributed to increases in the size of tenant spaces in five of our seven case study courthouses. For example, the Ferguson, Jr., U.S. Courthouse in Miami has about 46,924 more square feet of tenant space than planned. The district court has about 20,768 more square feet of space in this courthouse than planned. Among other things, the 14 regular district courtrooms built in this courthouse are each about 2,800 square feet—17 percent larger than the Design Guide standard of 2,400 square feet—while the two special proceedings courtrooms on the 13th floor are each about 3,200 square feet, about 7 percent larger than the Design Guide standard of 3,000 square feet. GSA officials stated that courtroom space is among the most expensive of courthouse spaces to construct and the Design Guide’s criteria are in part meant to help ensure that courthouses are built to be cost-effective as well as functional.

The Coyle U.S. Courthouse, in Fresno, California, and the Bryant U.S. Courthouse Annex in Washington, D.C., also have more tenant space than planned, in part because the design of these courthouses led to the construction of more space than planned for U.S. marshals. According to

---

regional GSA officials, both of these courthouses needed additional marshal space to accommodate the movement of prisoners from the courthouse entrances into the holding cells via secured passageways. As a result, the U.S. marshal space in the Coyle U.S. Courthouse almost doubled, and in the Bryant U.S. Courthouse Annex, it more than doubled. GSA and court officials said that for the Bryant U.S. Courthouse Annex, an additional subterranean floor had to be built beneath the basement parking levels to accommodate the passageway. According to GSA officials, because of the security elements necessary for U.S. marshal space, this space is among the most expensive types of courthouse space to construct. Therefore, design decisions that create a need for more U.S. marshal space than planned may have a significant impact on the cost of constructing the courthouse.

In addition, some courthouses encompass more courtroom space than planned because during the planning stages, neither the judiciary nor GSA took into account the possibility that the design of the courthouse could double the size of each courtroom. Under Design Guide standards in effect when these courthouses were designed, courtroom ceilings were to be at least 16 feet high,<sup>29</sup> while judges' chambers and other court-related spaces did not have ceiling height requirements. Courthouses have been designed in various ways to address the height requirement for courtroom ceilings. For example, in a collegial floor plan, courtroom floors alternate with floors for judicial chambers and other spaces that do not need higher ceilings, so that each floor can be built to a height that is suitable for the rooms it contains. However, because federal courthouses have typically been built with judges' chambers on the same floors as the courtrooms, some courthouses have courtrooms on floors designed to hold rooms with 10-foot ceilings, and the ceiling of each courtroom is cut out so that each courtroom takes up two floors. For example, Eagleton U.S. Courthouse in St. Louis and the Bryant U.S. Courthouse Annex in Washington, D.C., were constructed with courtrooms that span two floors. According to GSA's policy, when a courthouse is designed so that a courtroom takes up two floors, the space on the second floor—referred to as a tenant floor cut—is considered part of the gross square footage of the building and—if it would otherwise be usable space—is also considered to be court-occupied space. Therefore, in this type of courthouse, each courtroom is counted as

---

<sup>29</sup>The ceilings of special proceedings courtrooms and appellate *en banc* courtrooms (in which all the circuit's judges sit together on a panel and decide a case) were to be 18 feet high.

---

having double the square footage of the courtroom floor. Although the extra square footage in this type of courtroom is multistory space, like the extra square footage in atria, and therefore, according to GSA, costs less than square footage that is completely built out, nevertheless there are costs associated with this space.

Judiciary officials said that space planning is done well before they know if they will need to incorporate additional space for tenant floor cuts in courtrooms. Under the judiciary's current automated space planning tool, AnyCourt, which the judiciary uses to determine how much court-related space to request for a new courthouse, the Design Guide's standard of 2,400 square feet is provided for each district courtroom planned for a new courthouse. However, because the gross square footage requirements that GSA identifies in the prospectus to congressional committees are based on AnyCourt's output for the amount of space needed by the courts, for courthouses designed with district courtrooms that have tenant floor cuts, the AnyCourt program identifies only half of the square footage the courtroom will take up when calculating the courthouse's gross square footage following GSA's standards. If GSA requests court space based on the AnyCourt model, it therefore may not be requesting sufficient space for courtrooms to account for courtrooms that are designed with tenant floor cuts.

### Recently, GSA Has Taken Some Steps to Improve Oversight of Courthouse Size

Recently, GSA has taken some steps to improve its oversight of the courthouse construction process by clarifying its space measurement policies and increasing efforts to monitor the size of courthouse projects during the planning stages. In May 2009, GSA published a revised space assignment policy to clarify and emphasize its policies on counting the square footage of atria and tenant floor cuts, among other things. In addition, according to GSA officials, to avoid further inconsistencies between its policies and the process for measuring courthouses during the planning stages, GSA established a collaborative effort in 2008 between its Office of Design and Construction and its Real Estate Portfolio Management to establish policy and practices for avoiding inconsistencies. This effort includes, among other things, using data management software to ensure that space guidelines are followed in the early planning phases of courthouse projects. It is not yet clear whether these steps will establish sufficient oversight to ensure that courthouses are planned and constructed within the congressionally authorized square footage.

---

## Estimated Space Needs Exceeded Actual Space Needs, Resulting in Courthouses That Were Larger than Necessary

---

### Because the Judiciary Overestimated the Number of Judges, Courthouses Have Much Extra Space After 10 Years

Our analysis of construction plans for the 33 courthouses built since 2000 shows that 28 have reached or passed their 10-year planning period<sup>30</sup> and 23 of those 28 courthouses have fewer judges than estimated.<sup>31</sup> Overall, the judiciary has 119, or approximately 26 percent, fewer judges than the 461 it estimated it would have. As a result, these 23 courthouses have extra courtrooms, chamber suites, and related support, building common, and other spaces covering approximately 887,000 square feet (see fig. 7). A variety of factors led the judiciary to overestimate the number of judges it would have after 10 years, including inaccurate caseload projections, challenges associated with estimating when judges will take senior status, and not factoring in the time associated with obtaining new judgeship authorizations.

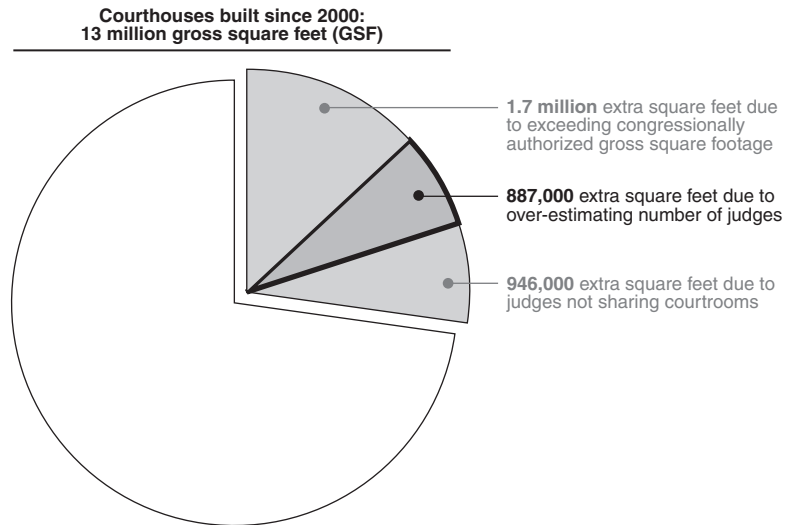
---

<sup>30</sup>The judiciary makes the 10-year estimates during the planning stages of new courthouses and major annexes. We did not include 5 courthouses in this section because they have not yet reached the end of their 10-year planning period.

<sup>31</sup>Each of the five courthouses that met or exceeded their 10-year estimates for judges projected increases of zero or one judge for planning periods ending from 2004 to 2006.

---

**Figure 7: Extra Federal Courthouse Space Constructed Since 2000 Due to Overestimating the Number of Judges**



Sources: GAO analysis of GSA data.

Six of the seven case study courthouses we reviewed have reached the end of their 10-year planning period and were designed for more judges than they actually have.<sup>32</sup> Table 4 compares the estimated and actual numbers of judges for each of these courthouses and the space consequences of overestimating the number of judges.

---

<sup>32</sup>The Limbaugh, Sr., Courthouse in Cape Girardeau, Missouri, is not included as a case study in this analysis because it has not reached the end of its 10-year planning period.



**Table 4: Comparison of 10-Year Judge Estimates and the Actual Number of Judges After 10 Years or More for Case Study Courthouse Locations and Related Space Consequences**

	<b>Bryant Courthouse, Washington, D.C.</b>	<b>Coyle Courthouse, Fresno, Calif.</b>	<b>D'Amato Courthouse, Central Islip, N.Y.</b>	<b>DeConcini Courthouse, Tucson, Ariz.</b>	<b>Eagleton Courthouse, St. Louis, Mo.</b>	<b>Ferguson Courthouse, Miami, Fla.</b>
Year estimate was made	2000	2000	1995	1995	1994	2000
10-year judge estimate	49	18	25	15	29	33
Current judges, including vacancies	39	10	15	12	20	27
Judges short of estimate	10	8	10	3	9	6
Estimated extra square footage built because of incorrect judge estimates	62,000	52,000	89,000	25,000	76,000	57,000

Source: GAO.

Note: Our analysis includes judges who are located in the new courthouse and authorized vacancies not covered by recalled judges.

Extra space includes courtroom suites,<sup>33</sup> ranging in size from 3,500 to 5,000 square feet, and chamber suites, ranging in size from 1,500 to 2,400 square feet, as specified in the Design Guide (see fig. 8). In addition to the court space, these spaces require a proportional allocation of additional public and mechanical spaces, and judges are generally provided with secure, inside parking space in new courthouses. These additional spaces are also not needed if estimates exceed authorized judges.

<sup>33</sup>Courtroom space calculations include square footage for spaces that are necessary for courtroom use, such as soundlocks (an entryway designed to reduce sound), audiovisual storage space, and public waiting areas. Additional spaces associated with courtrooms vary by courtroom type and may include, among other things, coat closets, judges' conference rooms, judges' robing rooms, exhibit storage spaces, and offices for court reporters.

---

**Figure 8: Unassigned Chamber Suites in the Coyle Courthouse in Fresno, California**



Source: GAO.

---

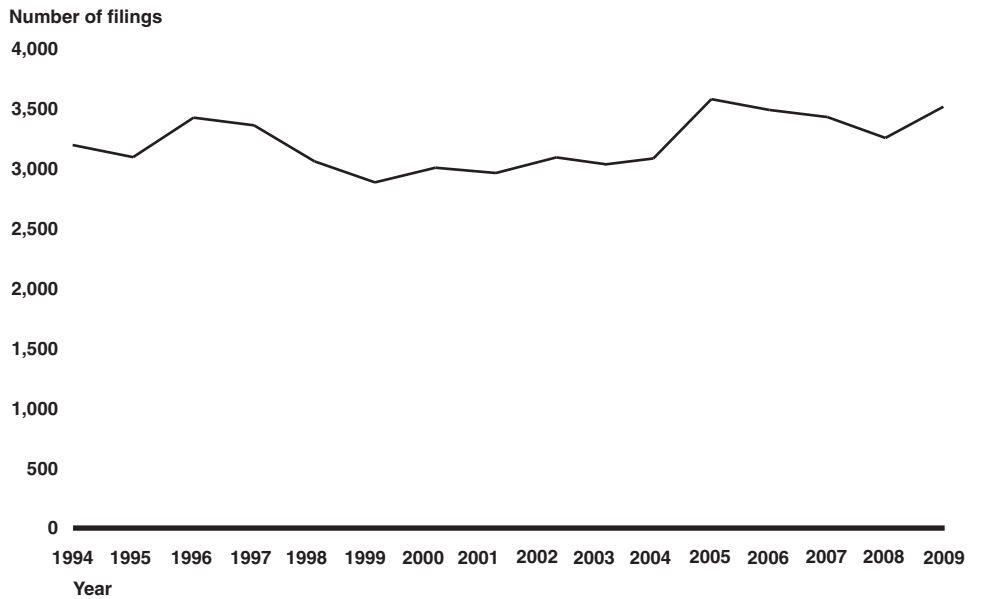
## Judiciary Planning Overstated the Need for Space through Inaccurate Caseload Projections and Allocations of Space for Visiting Judges

Inaccurate caseload growth projections and inconsistent application of planning guidelines led the judiciary to estimate a need for more judges, and subsequently overestimate the need for space, for some courthouse projects. In a 1993 report, we questioned the reliability of the caseload projection process the judiciary used.<sup>34</sup> In that report, we showed that the judiciary's estimates of future space needs exceeded estimates made using a standard statistical method by about 3.6 million square feet. For this report, we were not able to determine the degree to which inaccurate caseload projections contributed to inaccurate judge estimates because the judiciary did not retain the historic caseload projections used in planning the courthouses. Judiciary officials said that the judiciary does not typically review the accuracy of the caseload and judge estimates for courthouse construction projects. However, judiciary officials at three of our site visit courthouses indicated that the estimates used in planning for these courthouses inadvertently overstated the growth in district case filings and, hence, the need for additional judges. For example, for the Eagleton Courthouse in St. Louis, judiciary officials said the district estimated that it would need four additional district judges by 2004 to handle a high level of estimated growth in case filings; however, that case filing growth never materialized and the Eagleton Courthouse has the same number of authorized judges that it had in 1994 when the estimates were made. Specifically, the Eastern District of Missouri, in which the Eagleton Courthouse is located, had 3,182 case filings in 1994 and 3,241 case filings in 2008 (see fig. 9).

---

<sup>34</sup>GAO, *Federal Judiciary Space: Long-Range Planning Process Needs Revision*, GAO/GGD-93-132 (Washington, D.C.: Sept. 28, 1993).

**Figure 9: Total District Court Case Filings for the Eastern District of Missouri**



Source: Administrative Office of the U.S. Courts.

Planning for nonresident judges, or visiting judges, is another reason of overestimating the 10-year need for judges and space. Our analysis of courthouse space planning documents showed that 5 courthouses included courtrooms for visiting district judges, which is a way of building extra space into courthouses above the estimated number of judges expected to be permanently located in the courthouse. The judiciary indicated that its guidance has since been revised to exclude estimates of space needs for visiting judges. These five courthouses contain a total of six courtrooms allocated for visiting district judges, totaling approximately 30,000 extra square feet, which are not assigned to a specific judge. For example, when planning the Perry, Jr., Courthouse in Columbia, South Carolina, the judiciary estimated a need for two visiting district courtrooms—one in a new courthouse and one in an existing space. As a result, the number of district courtrooms in the courthouse exceeds the estimated number of judges by two, and these two courtrooms account for approximately 15,000 extra square feet, including court, support, and public spaces.

---

## The Judiciary’s Method of Estimating Judges Does Not Account for Uncertainty in When Judges Will Take Senior Status and in How Many New Judgeships Will Be Authorized

Limitations of the judiciary’s 10-year judge estimates are also due, in part, to the challenges associated with predicting how many judges will be located in a courthouse in 10 years. Such challenges include predicting when judges will take senior status, how many requested judgeships will be authorized, and where newly authorized judges will be seated. By not accounting for the outcomes of these challenges—which is that the actual number of judges was smaller than the estimated number—the judiciary overestimated how many judges it would have in courthouses after 10 years or more.

Predicting when district judges will assume senior status is challenging because judges are not required to take senior status when they become eligible. For example, the judiciary estimated that the Washington, D.C., district court would have 14 senior judges by the end of the 10-year planning period; however, because some judges left the bench, died, or remained active after they became eligible for senior status, the court currently has 9 fewer senior judges than estimated.

Determining how many requested judgeships will be authorized and how many judicial vacancies will be filled is also challenging for several reasons. First, Congress has authorized fewer positions than the judiciary has requested over the years. It has been 20 years since Congress passed comprehensive judgeship legislation. Yet, the judiciary did not incorporate historic trends into its planning for new courthouses. Instead, it requested new courthouses that could accommodate the number of judges it would have if all of its estimated judgeships were approved, and some of the excess space in new courthouses reflects the judiciary’s receipt of fewer judgeships than it requested. Problems with the reliability of the weighted caseload data—the workload indicator that the judiciary uses to decide when a new judge is needed—can undermine the credibility of the judiciary’s requests for new judgeships. For example, in a 2009 hearing, a member of Congress cited a lack of reliability in weighted caseloads to question if all of the requested judgeships are necessary. In a 2008 report, we found that a weighted caseload is not reliable because its accuracy for district and appeals courts cannot be tested.<sup>35</sup>

A second challenge the judiciary faces in estimating how many judges it will need for specific courthouses is that judgeships are requested and

---

<sup>35</sup>GAO, *Federal Judgeships: General Accuracy of District and Appellate Judgeship Case-Related Workload Measures*, [GAO-08-928T](#) (Washington, D.C.: June 17, 2008).

---

thus authorized at the district or circuit levels as a whole, rather than for a specific courthouse. Hence, it is hard to predict which courthouses the additional judgeships requested in the Federal Judgeship Act of 2009,<sup>36</sup> if enacted, would be assigned to if the positions were authorized. However, the judiciary's estimation process does not take this uncertainty into account. For example, in 2009, the judiciary requested 18 judgeships for districts that contain courthouses built since 2000, but not all of the judges for these requested judgeships, if approved by Congress, would necessarily be placed in those courthouses. For example, in the Eastern District of California where the Coyle Courthouse in Fresno is located, the average weighted caseload is 1,095 weighted filings per district judge, well above the 430 weighted filings outlined in the judiciary's guidelines and the highest in the nation according to the judiciary. The judiciary estimated that the Coyle Courthouse would have 6 more district judges than it currently has, and it has requested 4 additional district judgeships for the Eastern District of California. However, these judgeships, if approved, could be located at other locations in the district. In addition, the Ferguson Courthouse in Miami has space reserved for 4 extra district courtrooms (see fig. 10), yet Southern District of Florida officials said they anticipate that the next new authorized judgeship in the district will be allocated to the courthouse in Fort Lauderdale.

**Figure 10: Unassigned District Courtroom and Chamber in the Ferguson Courthouse, Miami, Florida**



Source: GAO.

---

<sup>36</sup>H.R. 3662, 111th Cong. (2009) and S. 1653, 111th Cong. (2009).

---

---

## Low Levels of Use Show That Judges Could Share Courtrooms, Reducing the Need for Future Courtrooms by More Than One-Third

Most courthouses constructed since 2000 have enough courtrooms for all of the district and magistrate judges to have their own courtrooms. According to the judiciary's data,<sup>37</sup> courtrooms are used for case-related proceedings only a quarter of the available time or less, on average. Furthermore, no event was scheduled in courtrooms for half the time or more, on average. Using the judiciary's data, we designed a model for courtroom sharing that shows sufficient amounts of unscheduled time for judges to share courtrooms at high levels. Specifically, it shows that 3 district judges could share 2 courtrooms, 3 senior judges could share 1 courtroom, and 2 magistrate judges could share 1 courtroom with time to spare. This level of sharing would reduce the number of courtrooms the judiciary requires by a third for district judges and by more for senior district and magistrate judges. For example, courtroom sharing could have reduced the number of courtrooms needed in 27 of the 33 district courthouses built since 2000 by a total of 126 courtrooms—about 40 percent of the total number of district and magistrate courtrooms constructed since 2000.<sup>38</sup> In total, not building these courtrooms and their associated support, building common, and other spaces would have reduced construction by approximately 946,000 square feet<sup>39</sup> (see fig. 11). During our interviews and convening of an expert panel on courtroom sharing, some judges raised potential challenges to courtroom sharing, such as uncertainty about courtrooms' availability, but other judges with sharing experience have overcome those challenges when necessary and no trials have been postponed. The judiciary has adopted sharing policies for senior and magistrate judges in the future, but our analysis shows that additional sharing opportunities are available.

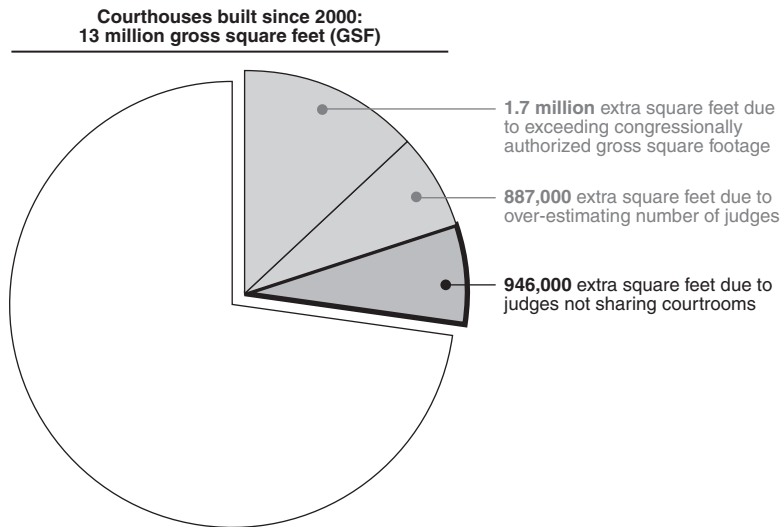
---

<sup>37</sup>Federal Judicial Center, *The Use of Courtrooms in U.S. District Courts: A Report to the Judicial Conference Committee on Court Administration & Case Management*, (Washington, D.C.: July 18, 2008).

<sup>38</sup>Our model does not reduce the number of courtrooms in six courthouses for the following reasons: four already had sharing between judges and the model did not find increased sharing possibilities and therefore imposed no reduction in courtrooms; one has only one district and one magistrate judge; and one courthouse has only bankruptcy judges and is out of our scope for district and magistrate sharing opportunities.

<sup>39</sup>This number also includes the support spaces directly related to a courtroom, as applicable, such as jury rooms, evidence closets, and lawyer conference rooms.

**Figure 11: Extra Federal Courthouse Space Constructed Since 2000 Due to Judges Not Sharing Courtrooms**



Sources: GAO analysis of GSA data.

### Courtrooms Assigned to One Judge Are Used a Quarter of the Time or Less for Case Proceedings

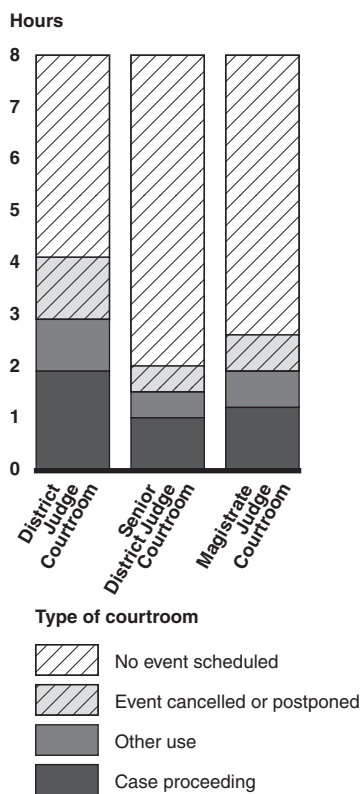
In 1997, we reported that the district courtrooms in seven locations were unused for 115 of 250 federal days in 1995 and recommended that the judiciary gather data to determine how much courtroom sharing was possible.<sup>40</sup> The judiciary implemented this recommendation by hiring a consultant to examine space use issues, including courtroom utilization. A more recent 2008 study commissioned by the judiciary contains the data necessary to determine the level of sharing possible for district and magistrate judges.<sup>41</sup> The study shows that, as of July 2007, on average, a courtroom is scheduled to be used 4.1 hours a day for active district judge courtrooms, 2 hours a day for senior judge courtrooms, and 2.6 hours a day for magistrate judge courtrooms. Beyond that, only half of the scheduled courtroom time is actually spent on case-related proceedings. Specifically, the 4.1 hours scheduled for the use of courtrooms assigned to district judges includes about 1 hour, on average, for scheduled events that are subsequently canceled or postponed and about 1 hour for events that

<sup>40</sup>GAO, *Courthouse Construction: Better Courtroom Use Data Could Enhance Facility Planning and Decisionmaking*, GGD-97-39 (Washington, D.C.: May 19, 1997).

<sup>41</sup>Federal Judicial Center, *The Use of Courtrooms in U.S. District Courts: A Report to the Judicial Conference Committee on Court Administration & Case Management* (Washington, D.C., July 18, 2008).

are not related to case proceedings. Events not related to case proceedings include set-up and take-down time for attorneys, maintenance, education, ceremonies, and other uses. For example, judges said that they would allow their courtrooms to be used for public tours and by law schools, and local bar associations when available. Figure 12 illustrates the average daily uses of courtrooms assigned to single district, senior district, or magistrate judges.

**Figure 12: Representation of an Average 8 Hour Day for a Courtroom by Type of Judge as of July 2007**



Source: GAO analysis of Judiciary data.

These low levels of courtroom usage are consistent across courthouses regardless of case filings. Specifically, the judiciary's data showed no correlation between the number of weighted and unweighted cases filed in a courthouse and the amount of time courtrooms are in use. Although the judiciary uses weighted case filings as the measurement criteria for requesting additional judgeships, this representation of higher levels of activity does not translate into higher courtroom usage rates, according to



---

the judiciary's courtroom use data. According to the data, courthouses located on the nation's border and those with higher pending caseloads do make greater-than-average use of their courtrooms, but other courthouses in the same districts offset that higher use for district and senior district judges' courtrooms.

There is some consensus in federal court-related literature, and among federal judges we interviewed, that there has been a trend toward decreasing time spent on trials—the main use of a courtroom. For example, some trials have been replaced with other types of case resolution, including Summary judgment, settlements, and alternative dispute resolution (ADR) that require less use of a courtroom. Court-related literature indicates that the use of courtrooms for trials has declined since the mid-1960s and the role of judges has changed with the changes in case resolution.<sup>42</sup> A judge said that the decrease in the number of trials does not mean that cases are not being resolved—it means they are being resolved through other means, including settlement, dismissal, and pleas. Other judges said that there has been an increased emphasis on ADR, which is done outside of a courtroom by a third-party mediator, as well as an increase in Summary judgments, a written procedure that allows speedy disposition of a controversy without the need for a trial or a courtroom.

---

### Increased Courtroom Sharing Is Feasible and Could Reduce the Need for Courtrooms By More Than One-Third

Based on the low levels of use indicated by the judiciary's data, we found that sharing is feasible in 27 of the 33 district courthouses built since 2000 and could have resulted in the construction of 126 fewer courtrooms—40 percent of all district and magistrate courtrooms in those courthouses.<sup>43</sup> The Design Guide in place when these courthouses were built encouraged judicial circuits to adopt courtroom-sharing policies for senior judges. However, most of the courthouses constructed since 2000 provided enough courtrooms for all district and magistrate judges to have their own courtrooms.

---

<sup>42</sup>Marc Galanter, "The Vanishing Trial: An Examination of Trials and Related Matter in Federal and State Courts," *Journal of Empirical Legal Studies*, Vol. 1, Issue 3 459-570, November 2004.

<sup>43</sup>Sharing was not possible in some courthouses because there were only one or two district and/or magistrate judges.

The 2008 study by the judiciary states that the data collected during the study could be used with computer modeling to determine how levels of use might translate into potential sharing opportunities for judges, but that such a determination was outside the scope of the study. As a result, we applied generally accepted modeling techniques to the judiciary’s data to develop a computer model for sharing courtrooms. The model ensures sufficient courtroom time for

- all case-related activities;
- all time allotted to noncase-related activities, such as preparation time, ceremonies, and educational purposes; and
- all events cancelled or postponed within a week of the event.

Under our model, the remainder of time remains unscheduled—approximately 18 percent of the time for district courtrooms and 22 percent of the time for magistrate courtrooms on average. In this way, our model includes substantial time when the courtroom is not in use for case proceedings. Some noncase-related events could be held outside of normal business hours, and 60 percent of events are cancelled or postponed within 1 week of the event’s original date, according to the judiciary’s data. Not allocating time in the model for these purposes would create even more opportunity for sharing; however, we chose to include these data, keep the model conservative, and allow for unpredictability.

The judiciary’s report also included a section of case studies based on in-depth interviews with judges at courthouses where judges share courtrooms. These interviews suggested that courtrooms can be shared in two ways (1) through dedicated sharing, in which judges are assigned to share specific courtrooms, and (2) through centralized sharing, in which all courtrooms are available for assignment to any judge based on need. Our model shows the following possibilities for dedicated courtroom sharing, with additional unscheduled time to spare (see table 5).

<b>Judges</b>	<b>Dedicated courtrooms needed</b>
3 district judges	2 district courtrooms
3 senior district judges	1 district courtroom
1 district and 1 senior judge	1 district courtroom
2 magistrate judges	1 magistrate courtroom

Source: GAO.

Our model shows that centralized sharing improves efficiency by increasing the number of courtrooms each judge can access, whereas in dedicated sharing judges only use the shared courtroom assigned to them. We used the model to estimate how the courtrooms in one courthouse could be shared both ways. Specifically, to illustrate the increased efficiency of centralized sharing over dedicated sharing, we applied the two types of sharing to the current district and magistrate judges in the Ferguson Courthouse in Miami, Florida. Currently, the Ferguson Courthouse has 26 courtrooms for 26 judges, including 12 district judges, 3 senior district judges and 11 magistrate judges (two of whom are recalled). Under a dedicated sharing model, the Ferguson Courthouse could accommodate these judges in 15 courtrooms. Under a centralized sharing model, in which all district judges have access to all district judge courtrooms and all magistrate judges have access to all magistrate courtrooms, the number of needed courtrooms is reduced to 14. Table 6 shows the levels of sharing possible and the amount of space that could be eliminated for all of our seven case study courthouses through centralized sharing.

**Table 6: District, Senior, and Magistrate Judge Courtroom Sharing That Could Occur in Selected Courthouses Based on the Judiciary’s Data**

<b>Courthouses</b>	<b>Current number of courtrooms by type with one courtroom per judge</b>	<b>Number of courtrooms needed under centralized sharing</b>	<b>Number of extra courtrooms under centralized sharing</b>	<b>Square footage of extra courtroom and associated support and public spaces</b>
Bryant Courthouse Annex, Washington, D.C.	District: 20 Magistrate: 3	District: 11 Magistrate: 2	10	74,000
Coyle Courthouse, Fresno, Calif.	District: 3 Magistrate: 4 <sup>a</sup>	District: 2 Magistrate: 2	3	20,000
D’Amato Courthouse, Islip, N.Y.	Active District: 7 Magistrate: 4	District: 4 Magistrate: 2	5	35,000
DeConcini Courthouse, Tucson, Ariz.	Active District: 5 Magistrate: 7	District: 4 Magistrate: 3	5	33,000
Eagleton Courthouse, St. Louis, Mo.	Active District: 9 Magistrate: 6	District: 5 Magistrate: 3	7	49,000
Ferguson Courthouse, Miami, Fla.	Active District: 15 Magistrate: 11	District: 9 Magistrate: 5	12	83,000
Limbaugh Courthouse, Cape Girardeau, Mo.	Active District: 2 Magistrate: 1	District: 1 Magistrate: 1	1	7,500

Source: GAO analysis of the judiciary’s data.

---

<sup>43</sup>There are 5 magistrate judges in the Coyle Courthouse, including 1 vacancy, but only 4 courtrooms. The model was run for 5 magistrate judges and the result was that there would need to be 2 magistrate courtrooms—eliminating the need for 2 magistrate courtrooms.

---

## Some Judges Said They Could Overcome the Challenges to Courtroom Sharing

We solicited expert views on the challenges related to courtroom sharing through interviews with judges and court administrators on site visits to courts with sharing experience and assistance from the National Academy of Sciences in assembling a panel of judicial experts.<sup>44</sup> While some judges remained skeptical that courtroom sharing among district judges could work on a permanent basis, judges with experience in sharing courtrooms said that they overcame the challenges when necessary and trials were never postponed because of sharing.

The primary concern judges cited was the possibility that a courtroom might not be available. They stated that the certainty of having a courtroom available encourages involved parties to resolve cases more quickly. They further noted that courtroom sharing could be a disservice to the public if it meant that an event had to be rescheduled for lack of a courtroom; in that case, defendants, attorneys, families, and witnesses would also have to reschedule, costing the public time and money. To address the concern that a courtroom would not be available when needed, we programmed our model to provide more courtroom time than necessary to conduct court business. As stated earlier, the model includes time for all case-related events, all noncase-related events, all canceled events, all postponed events, and approximately 18 percent to 22 percent of courtroom time remained unscheduled. Most judges with experience sharing courtrooms agreed that court staff must work harder than in nonsharing arrangements to coordinate with judges and all involved parties to ensure that everyone is in the correct courtroom at the correct time, but that such coordination is possible as long as people remain flexible and the lines of communication remain open. Additionally, some judges said that sharing increased the need for coordination, not space. However, one district court official cautioned that other indicators of courthouse efficiency were negatively affected by sharing; including the time it takes from the day a case is filed to when it is resolved.

---

<sup>44</sup>The panel consisted primarily of judges and included other judicial experts with experience in or knowledge of courtroom sharing. Judges who were chosen for the panel but were unable to take part in the 1-day discussion were contacted separately, and semistructured interviews were conducted with them via telephone or in person.

---

Judges who share courtrooms in one district also said that coordination is easier when there is a great deal of collegiality among judges. A few panel members noted that the design of many courthouses today, with judges' chambers located adjacent to courtrooms, is not conducive to collegiality or courtroom sharing. While this design is convenient for judges who are assigned exclusively to the adjacent courtroom, it leads to isolation from other judges. Alternative courtroom designs, such as that of the Roosevelt Courthouse in Brooklyn, New York, may be more conducive to collegiality and sharing. In this courthouse, the chamber and court floors alternate so that judges' chambers are not located on the same floor as the courtrooms. The chamber floors are completely secure because the public does not need direct access to them, and chambers are grouped so that judges have greater opportunities to interact. This design breaks the apparent association of chambers with specific courtrooms without significantly increasing the distance from chambers to courtrooms. Another judge suggested perimeter chambers around several courtrooms of varying sizes to make courthouses more conducive to sharing.

Another concern about sharing courtrooms was how the court would manage when judges have long trials. Judges noted that long trials present logistical challenges requiring substantial coordination and continuity, which could be difficult when sharing courtrooms. However, when the number of total trials is averaged across the total number of judges, each judge has approximately 15 trials per year, with the median trial lasting 1 or 2 days.<sup>45</sup> Hence, it is highly unlikely that all judges in a courthouse will simultaneously have long trials. Also, a centralized sharing arrangement would allow for those who need a courtroom for multiple days to reserve one.

Panelists' concern about sharing courtrooms between district and magistrate judges stems in part from differences in responsibilities, which can affect courtroom design and could make formal courtroom sharing inappropriate. For example, district judges are constitutionally empowered to handle all types of federal cases, whereas magistrate judges are hired by the court and are not constitutionally empowered to try felony criminal cases. Although magistrate judges can try all civil cases with the consent of the parties, civil cases do not require as much

---

<sup>45</sup> There are different definitions of what constitutes a trial. The median trial length reported here reflects Table C-8 from the Administrative Office of the United States Courts, *2008 Annual Report of the Director: Judicial Business of the United States Courts*. (Washington, D.C., U.S. Government Printing Office, 2009).

---

courtroom space because the jury box for civil cases is smaller. Accordingly, the Design Guide allots smaller courtrooms with smaller jury boxes to magistrate judges. In addition, judges we interviewed said that it would be highly unusual for district judges to routinely share courtrooms with magistrate judges. To address this concern, our model separated district and magistrate judges for sharing purposes, reducing the potential for sharing that could occur through cross scheduling in courthouses with both district and magistrate judges.

Judges expressed concern about the compatibility of the current scheduling system with courtroom sharing. Most judges keep their own schedules through their personal staff, making centralized sharing difficult. For example, one concern raised by the panel was that sharing was very difficult because judges were unable to access one another's calendars or see if a courtroom had been reserved for another event. According to panelists, a new calendar system approved by the judiciary is also not conducive to sharing because it shows judges' Products, but not courtroom Products. One courthouse we visited that has a courtroom sharing arrangement overcame this challenge by assigning courtrooms centrally through the Clerk of Court's office.

Finally, judges said that increasing the use of technology could help overcome some of the challenges to courtroom sharing. Panel judges agreed that increased technology saves money; it expedites general processing because documents can be submitted to the court electronically. Technology makes certain conferences easier through the use of teleconferences and videoconferencing. One judge said that videoconferencing with a defendant who was being held in a prison hundreds of miles away potentially saved thousands of dollars. Another judge said that if less money were spent on space, more could be spent on technological upgrades to increase flexibility and increase the ability to share space among judges.

---

## The Judiciary Has Taken Some Steps to Increase Sharing in Future Courthouse Projects

In 2008 and 2009, the Judicial Conference adopted sharing policies for future courthouses under which senior district and magistrate judges will share courtrooms at a rate of two judges per courtroom plus one additional duty courtroom for courthouses with more than two magistrate judges. Additionally, the conference recognized the greater efficiencies available in courthouses with many courtrooms and recommended that in courthouses with more than 10 district judges, district judges also share. Our model's application of the judiciary's data shows that more sharing opportunities are available. Specifically, sharing between district judges

---

could be increased by one-third in all but the largest courthouses by having three district judges share two courtrooms in all-sized courthouses. Sharing between senior district judges could also be increased by having three senior judges—instead of two—share one courtroom. If implemented, these opportunities could further reduce the need for courtrooms, thereby decreasing the size of future courthouses.

To date, the Judicial Conference has made no recommendations for bankruptcy judges to share courtrooms. However, the judiciary is conducting a study for bankruptcy courtrooms similar to the 2008 district court study and expects to complete it in 2010.

---

## Conclusions

It is important for the federal judiciary to have adequate, appropriate, modern facilities to carry out judicial functions. However, the current process for planning and constructing new courthouses has resulted in the 33 federal courthouses built since 2000 being overbuilt by more than 3.5 million square feet—the size of 9 average-sized courthouses. This extra space not only cost \$835 million in constant 2010 dollars to construct, but has additional annual costs of \$51 million in operations and maintenance and rent that will continue to strain GSA's and the judiciary's resources for years to come. This extra space exists because the courthouses, as built, are larger than those congressionally authorized; contain space for more judges than are in the courthouses at least 10 years after the space was planned, and, for the most part, were not planned with a view toward judges sharing courtrooms.

GSA has not exercised sufficient oversight to ensure that regional GSA staff and architects focused on designing courthouses within the congressionally authorized gross square footage, as measured according to GSA's space measurement policies—and this lack of oversight contributed to the construction of courthouses that are larger than congressionally authorized. While GSA's appropriations acts include a provision stating GSA is to obtain advance approval from the Committees on Appropriations if the expenditures for a project will exceed the amount included in an approved prospectus by more than 10 percent, there is no statutory requirement for GSA to notify the congressional authorizing or appropriations committees if the size of a courthouse project exceeds the congressionally authorized gross square footage. Without such a requirement, GSA did not notify congressional committees that four courthouses that had cost increases of about 10 percent or more were also more than 10 percent larger than authorized. In addition, GSA did not focus on avoiding such increases during the design and construction of

---

these courthouses—to the extent that regional GSA officials involved in the planning and construction of several courthouses we visited were unaware until we told them that the courthouse projects they worked on were larger than congressionally authorized. GSA lacked such mechanisms even though, according to GSA officials, controlling the efficiency and gross square footage of a building is important to control construction costs. One additional contributor to the construction of more tenant space than planned is the judiciary’s automated space planning tool, AnyCourt, which incorporates a standard square footage requirement for each district courtroom. However, according to GSA’s space measurement policy, the amount of a courtroom’s square footage doubles if the courtroom is designed with a tenant floor cut. Without a mechanism to adjust AnyCourt’s calculation of a planned courthouse’s square footage to reflect GSA’s space measurement policy when the design includes tenant floor cuts, GSA may not request sufficient gross square footage to build a courthouse with tenant floor cuts that falls within the authorized gross square footage. Further, it is not yet clear whether GSA’s recent steps to better monitor the size of courthouse projects provide sufficient oversight to ensure that courthouses are constructed within the congressionally authorized square footage. The ongoing confusion that we identified among some GSA regional staff about GSA’s policies for measuring atriums and the gross square footage of courthouses—and the fact that the six most recently completed courthouses exceeded the congressionally authorized size—raise questions about the sufficiency of GSA’s oversight improvement steps to date.

The judiciary’s inaccurate estimates of future numbers of judges further contributed to the size and cost of these courthouses. Estimating the number of judges that will be stationed at a specific location in the future is challenging for a number of reasons, but the judiciary usually overestimated the number of judges. Overly optimistic projections of growing caseloads, combined with unsupported assumptions about the amount of time it would take to obtain authorizations for new judgeships, led the judiciary to estimate it would have 120 more judges than it actually has at courthouses built since 2000. The full extent to which the overly optimistic caseload projections contributed to the inaccurate judge estimates is unknown, because the judiciary has not analyzed and does not retain its caseload projection data. Without analyzing the accuracy of its caseload estimates, the judiciary cannot determine what changes to its planning for 10-year needs would yield more accurate estimates. Furthermore, the interplay between the judiciary’s policy of authorizing judges districtwide and its need to estimate how many judges will be



---

needed at specific locations creates additional challenges to accurately estimating future numbers of judges.

The third major contributor to the extra space in most of the 33 courthouses built since 2000, the judiciary's one-judge, one-courtroom policy—which the judiciary's data show is inefficient—has undergone some initial changes, but considerably more efficiencies are possible. As our computer modeling has shown, higher levels of courtroom sharing would not jeopardize the availability of courtrooms or delay trials, and even with the modeled level of sharing, the courtrooms would be dark much of the time because of frequent cancellations. Yet, given the challenges to effective courtroom sharing raised by some judges we spoke with, the transition could be difficult without an effort by the judiciary to promote practices that have helped other judges overcome the challenges to sharing courtrooms. Such an effort, while a challenge to the status quo, could reap long-term benefits for taxpayers and the judiciary, since further courtroom sharing could significantly reduce the size of new courthouses—as well as the costs associated with constructing and renting them.

While it is too late to reduce the extra space in the 33 courthouses constructed since 2000, for at least some of the 29 additional courthouse projects underway and for all future courthouse construction projects not yet begun, GSA and the judiciary have an opportunity to align their courthouse planning and construction with the judiciary's real need for space. Such changes would greatly reduce construction, operations and maintenance, and rent costs.

---

## Recommendations for Executive Action

In order to improve the planning and oversight for future courthouse construction projects and to increase the efficiency of courtroom usage through courtroom sharing, we are making six recommendations.

To ensure that future courthouses are built within the congressionally authorized gross square footage, we recommend that the Administrator of GSA take the following three actions:

- Establish sufficient internal control activities to ensure that regional GSA officials understand and follow GSA's space measurement policies throughout the planning and construction of courthouses. These control activities should allow for accurate comparisons of the size of a planned courthouse with the congressionally authorized gross square footage throughout the design and construction process.

- 
- To avoid requesting insufficient space for courtrooms based on the AnyCourt model's identification of courtroom space needs, establish a process, in cooperation with the Director of the Administrative Office of the U.S. Courts, by which the planning for the space needed per courtroom takes into account GSA's space measurement policy related to tenant floor cuts if a courthouse may be designed with courtrooms that have tenant floor cuts.
  - Report to congressional authorizing committees when the design of a courthouse exceeds the authorized size by more than 10 percent, including the reasons for the increase in size.

In planning for future space needs, we recommend that the Director of the Administrative Office of the U.S. Courts, on behalf of the Judicial Conference of the United States, improve the accuracy of its 10-year estimation of judges by taking the following action:

- Retain caseload projections for at least 10 years for use in analyzing their accuracy and incorporate additional factors into the judiciary's 10-year judge estimates, such as past trends in obtaining judgeships.

To increase the efficiency of courtroom use, we recommend that the Director of the Administrative Office of the U.S. Courts, on behalf of the Judicial Conference of the United States, take the following two actions:

- Expand nationwide courtroom sharing policies to more fully reflect the actual scheduling and use of district courtrooms.
- Distribute information to judges on positive practices judges have used to overcome challenges to courtroom sharing.

---

## Agency Comments and Our Evaluation

We provided copies of a draft of this report to GSA and AOUSC for review and comment and received written comments from both. GSA agreed with our recommendation to inform congressional committees when courthouses exceed their authorized size by more than 10 percent. However, GSA indicated that it has serious concerns with the report and takes exception to much of our methodology and many of the report's conclusions, commenting that much of the information in the report is misleading. GSA's complete comments are contained in appendix II, along with our response to specific issues raised. AOUSC commented that it has serious concerns about the accuracy of key data, the way in which information is presented, and the methodologies employed, but indicated

---

that it welcomes constructive and feasible recommendations and will implement them as it has in the past. AOUSC's complete comments are contained in appendix III, along with our response to specific issues raised. In general, we believe our methodology, analysis, findings, and conclusions are sound. In response to AOUSC's comments, we made some technical clarifications, none of which materially affected our findings, conclusions, or recommendations.

---

## GSA Comments

In commenting on a draft of our report, GSA cited serious concerns with our methodology and many of the report's conclusions and stated that much of the information in the report is misleading. As detailed below, our methodology applied GSA's policies and data directly from original documents and sources. Our conclusions address the opportunity to improve courthouse planning and construction for future courthouses by quantifying the costs of GSA's lack of oversight on past courthouse projects. We believe that our findings are presented in a fair and accurate way.

Regarding our methodology, GSA stated that we assume that upper-level space in building atriums is included in the gross square footage of an asset. This is true. We included this space in the gross square footage calculation because that is GSA's space measurement policy. Since at least August 2000, GSA's explicit policy has been and remains today to include all levels of atriums and tenant floor cuts in measuring the gross square footage of a building. GSA also states that we mistakenly ascribed normal operating and construction costs to the upper-level space in atriums. This is an oversimplification of our cost estimation methodology, which balanced higher cost space, such as courtroom and marshal space, with lower cost space, such as the upper floors of atriums to create a conservative estimate of the costs associated with the extra space in courthouses. Our report indicates that, according to GSA, the upper floors of atriums are less expensive to construct. However, these spaces represent only a portion of the 1.7 million square feet built above congressional authorization and none of the 1.8 million extra square feet due to overestimating the number of judges and not sharing courtrooms. Furthermore, GSA states that we retroactively apply courtroom sharing policies to courthouses. Our congressional requesters specifically asked that we consider how a courtroom sharing policy could have changed the amount of space needed in these courthouses. However, our draft and final reports indicate that the judiciary's policy at the time was largely to provide one courtroom per judge.

---

GSA also stated that (1) our cost estimates for the extra space are contrived and (2) the final construction costs for 32 of the 33 exceeded appropriations by \$269 million. Our cost estimates were based on GSA data and generally accepted construction cost estimation methods, and appropriation levels are not relevant to this discussion. We validated our cost estimation approach with a number of construction industry experts. All agreed that in order to develop an order of magnitude estimate for such cost implications, determining the cost per square foot of constructing the building was the best methodology. GSA's approach of comparing costs with appropriations is not relevant because there are numerous reasons why projects can go over or under budget. Appropriation levels did not take into account that these courthouses could have been much smaller than authorized with improved judge estimates and courtroom sharing, and previous appropriation levels were not adjusted for inflation.

---

## AOUSC Comments

In commenting on a draft of our report, AOUSC cited concerns about our data, presentation, and methodologies but effectively concurred with our recommendations and said it will implement them as it has in the past. Specifically, AOUSC disputed our conclusion that the 33 courthouses completed since 2000 have 3.56 million extra square feet. In AOUSC's view, it was misleading to conclude that space is extra because the actual number of judges in courthouses is smaller than the number the judiciary estimated. According to AOUSC, this conclusion does not provide a complete picture of the judiciary's need for courthouse space, and the shortfall in the actual number of judges has occurred, in part, because Congress has not approved all needed new judgeships. AOUSC also stated that it was not appropriate for us to retroactively apply courtroom sharing policies that were not in effect at the time the courthouses were planned. AOUSC further questioned the soundness of our courtroom sharing model and maintained that the report did not describe the model in enough detail to permit a complete analysis of its sufficiency. AOUSC also disputed our characterization of the views of the experts who participated in our panel on courtroom sharing, in part because of the objections of a U.S. District Judge, who participated in the 1-day portion of the expert panel.

We believe our findings, analysis, conclusions, and recommendations are well supported by the facts. GAO adheres to generally accepted government auditing standards, which ensure the accuracy and relevance of the facts within this report. These standards include a layered approach to fact validation that includes supervisory review of all work papers, independent verification of the facts within the report, and the judiciary's review of the facts prior to our release of the draft report for agency

---

comment. We also believe that our estimation of the extra space in courthouses is appropriate. Our congressional requesters specifically asked that we consider how a courtroom sharing policy could have changed the amount of space needed in these courthouses. However, our draft and final reports indicate that the judiciary's policy at the time was largely to provide one courtroom per judge. Our report acknowledges the challenges associated with estimating future needs for judges, and we continue to believe that the judiciary could overcome some of those challenges and improve courtroom planning by increasing the accuracy of its caseload projections and by being more realistic about the number of authorized judgeships it is likely to have after 10 years.

With regard to our courtroom sharing model, the report contains sufficient detail so that anyone with access to the judiciary's data and familiarity with discrete event simulation modeling techniques could replicate our model. We developed our model to demonstrate the benefits of the judiciary developing a policy for courtroom sharing based on courtroom scheduling and usage data, not to provide a specific model for the judiciary's use. Our analysis of the views of the expert panel were based on the results of a 1-day panel session with 7 participants and subsequent interviews with 5 additional experts who could not attend the 1-day session. We used an official transcript of the statements from the 1-day panel to support the facts in our report, but none of the experts who participated in the 1-day session participated in the individual interviews with experts who could not attend the 1-day session. As a result, none of the individual experts had the opportunity to hear all experts' views. Our report notes that some judges remained skeptical that courtroom sharing could work on a permanent basis, but not all the experts held that view. In response to AOUSC's comments, we clarified the report and added detail to our methodology in appendix I as appropriate.

---

We are sending copies of this report to the Director of the Administrative Office of the U.S. Courts, the Director of the Federal Judicial Center, the Administrator of GSA, and interested congressional committees. The report is also available at no charge on GAO's Web site at <http://www.gao.gov>.

---

If you or your staff have any questions concerning this report, please contact me at (202) 512-2834 or [goldsteinm@gao.gov](mailto:goldsteinm@gao.gov). Contact points for our offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix IV.

A handwritten signature in black ink, appearing to read 'M. Goldstein', with a long horizontal flourish extending to the right.

Mark L. Goldstein  
Director, Physical Infrastructure Issues

# Appendix I: Objectives, Scope, and Methodology

For the 33 federal courthouses completed since 2000, we examined (1) whether the courthouses contain extra space and any costs related to it; (2) how the actual size of the courthouses compares with the congressionally authorized size; (3) how courthouse space based on the judiciary’s 10-year estimates of judges compares with the actual number of judges; and (4) whether the level of courtroom sharing supported by data from the judiciary’s 2008 study of district courtroom sharing could have changed the amount of space needed in these courthouses. The 33 courthouses in our scope included the courthouses in table 7.

**Table 7: The 33 Courthouses Completed from 2000 through March 2010**

Year completed	Courthouse
2000	George U.S. Courthouse, Las Vegas, Nevada Eagleton U.S. Courthouse, St. Louis, Missouri D’Amato U.S. Courthouse, Central Islip, New York DeConcini U.S. Courthouse, Tucson, Arizona Hruska U.S. Courthouse, Omaha, Nebraska U.S. Courthouse Annex, Tallahassee, Florida O’Connor U.S. Courthouse, Phoenix, Arizona
2001	U.S. Courthouse, Corpus Christi, Texas Johnson U.S. Courthouse Annex, Montgomery, Alabama Quillen U.S. Courthouse, Greeneville, Tennessee
2002	U.S. Courthouse Annex, London, Kentucky U.S. Courthouse, Hammond, Indiana King U.S. Courthouse, Albany, Georgia Stokes U.S. Courthouse, Cleveland, Ohio Jones Federal Building & U.S. Courthouse, Youngstown, Ohio Simpson U.S. Courthouse, Jacksonville, Florida
2003	Arraj U.S. Courthouse, Denver, Colorado Perry, Jr., U.S. Courthouse, Columbia, South Carolina
2004	Russell, Jr., U.S. Courthouse, Gulfport, Mississippi Federal Building & U.S. Courthouse, Wheeling, West Virginia U.S. Courthouse Annex, Erie, Pennsylvania U.S. Courthouse, Laredo, Texas U.S. Courthouse, Seattle, Washington
2005	Coyle U.S. Courthouse, Fresno, California
2006	Bryant U.S. Courthouse Annex, Washington, D.C. Roosevelt U.S. Courthouse Annex, Brooklyn, New York Morse U.S. Courthouse, Eugene, Oregon

<b>Year completed</b>	<b>Courthouse</b>
2007	Arnold U.S. Courthouse Annex, Little Rock, Arkansas U.S. Courthouse Annex, Orlando, Florida Ferguson, Jr., U.S. Courthouse, Miami, Florida Limbaugh, Sr., U.S. Courthouse, Cape Girardeau, Missouri
2008	Robinson, III, and Merhige, Jr., U.S. Courthouse, Richmond, Virginia U.S. Courthouse, Springfield, Massachusetts

Source: GSA.

To meet all four objectives, for each of the 33 courthouses in our scope, we reviewed the site and design prospectuses, construction prospectus, and other relevant fact sheets and housing plans provided by the General Services Administration (GSA) to congressional authorizing committees to support the request, as well as the congressional authorizations provided at the construction phase of the project. To understand how much square footage is allocated to different types of court space and the process for determining how much space is requested for a new courthouse, we reviewed the 1997 and 2007 editions of the judiciary’s Design Guide and examples of the judiciary’s space program model, AnyCourt, for those courthouse projects in our scope for which an AnyCourt model had been developed. We discussed verbally and in writing with GSA officials GSA’s and the judiciary’s processes for planning and constructing courthouses, and we requested and received written responses to questions related to the judiciary’s process for determining its space needs. We also reviewed prior GAO work on courthouse construction and rent paid by the judiciary to GSA, and we researched relevant laws. Furthermore, to meet all four objectives, we selected 7 federal courthouses in our scope to analyze more closely as case studies. We chose the 7 case studies because they provided examples of courthouses that are larger than congressionally authorized. In addition, we chose these sites to represent a wide distribution of courthouse sizes, dates of completion, and geographical locations. Our analysis of courthouse size and cost is based on data for all courthouses and major annexes completed from 2000 through March 2010. The information specifically from our site visits cannot be generalized to that population. These case studies included the following courthouses (1) Bryant U.S. Courthouse Annex in Washington, D.C.; (2) Coyle U.S. Courthouse in Fresno, California; (3) D’Amato U.S. Courthouse in Central Islip, New York; (4) DeConcini U.S. Courthouse in Tucson, Arizona; (5) Eagleton U.S. Courthouse in St. Louis, Missouri; (6) Ferguson, Jr., U.S. Courthouse in Miami, Florida; and (7) Limbaugh, Sr., U.S. Courthouse in Cape Girardeau, Missouri. For these courthouses, we analyzed blueprints labeled with size and tenant allocations for each space, which we



requested and received from GSA. For all of these courthouses except the DeConcini Courthouse in Tucson, we visited the courthouse, where we toured the courthouse and met with court officials, including judges, circuit executives, and others involved in planning for judicial space needs and requesting and using courthouse space; and we met with GSA officials involved in planning, constructing, and operating the courthouse. For the DeConcini Courthouse, we reviewed workpapers from a prior GAO engagement that included a December 2005 visit to the Tucson courthouse that involved a tour of the courthouse and discussions with court and GSA staff. During our meetings with court officials, we discussed issues pertaining to all four of our objectives, including the process for determining the size of the courthouse needed, the planning and construction of the courthouse, and the current uses of courthouse space, including courtrooms and chambers, and we sought the officials' views on the potential for more than one judge to share a courtroom.

In addition to these activities, we performed the following work related to each specific objective:

To determine whether the courthouses contain extra space and any costs related to it, we added together any extra square footage due to an increase in the courthouse's gross square footage over the congressional authorization, inaccurate judge estimates, and less sharing than is supported by the judiciary's data, as described below in the methodology for the other objectives. We consider the sum of the extra space as calculated according to the method described in our discussion of the following objectives to be the extra space for each courthouse. We then discussed how to calculate an order of magnitude estimate for the cost of increasing a courthouse's square footage with construction experts within GAO, at the Construction Institute of America, and at a private sector firm that specializes in developing cost estimates for the construction of buildings. All agreed that in order to develop with an order of magnitude estimate for such cost implications, determining the cost per square foot for constructing the building was the best methodology. Based on these conversations, we estimated the cost per square foot through the following method:

- To determine the total construction cost of each courthouse, we obtained from GSA the total net obligations, excluding claims, for each of the 33 courthouses through September 11, 2009, and determined that these data, which equal the total cost of each project as of September 11, 2009, were sufficiently reliable for our purposes through discussions with GSA officials and by reviewing information related to the reliability of these

data from a previous GAO engagement. GSA officials told us that GSA could not break out the construction costs from the total costs of courthouse projects. Therefore, except for most annexes, we then subtracted from the total project costs the estimates GSA had provided for site, design, and management and inspection costs in its construction prospectuses to congressional authorizing committees. We consider the resulting figure to be an estimate for the total construction cost for each courthouse.

- We then calculated the construction cost per square foot by dividing the construction cost of each courthouse, as calculated above, by the gross square footage, as measured using ESmart and reported by GSA, for each courthouse. For annex projects that involved substantial work on older buildings, we used a different method to determine the construction cost per square foot. GSA officials told us that for those annexes that involved substantial costs both to renovate an older building and to construct a new annex, they could not separate the costs of work done on the annex from the costs of any work done on the older building. Therefore, we used GSA's estimated cost per square foot for constructing the annex, which was reported in the construction prospectus, as our figure for the construction cost per square foot.
- We then reduced the construction cost per square foot of each courthouse or annex by 10 percent based on discussions with construction experts to account for the economies of scale that cause the construction cost per square foot to decrease slightly in larger buildings.
- We removed the effect of inflation from the estimates by applying two sources of information on annual increases in construction costs—the Bureau of Economic Analysis's Office Construction Series for years up through 2008 and the Global Insight Projections on Commercial Construction Costs for 2009 to the present based on each courthouse's completion date.
- Then, we multiplied the sum of the extra square footage by the construction cost per square foot for each courthouse to estimate the total construction cost implications for each courthouse.

To estimate the annual costs to rent or operate and maintain the extra space, we took the following steps. To the extent practical, we determined whether the costs of the extra space were directly passed on to the judiciary as rent. If the costs of the space are passed on to the judiciary as rent, such as for extra courtrooms, we calculated the annual rental costs for the space to the judiciary. To do so, we obtained information on the

rent payments that the judiciary made to GSA for fiscal year 2009, which we determined was reliable for our purposes. Then, we multiplied the annual rent per square foot for each courthouse by any extra square footage. If the costs of the space are not directly passed on to the judiciary as rent (including the costs of all the extra space, if any, due to construction above the congressional authorization, which we did not attempt to allocate between the judiciary, other tenants, and GSA), we calculated the annual operations and maintenance costs of the space. To do so, we obtained from GSA the total operations and maintenance costs for each of the 33 courthouses for fiscal year 2009 and determined that these data were sufficiently reliable for our purposes. For each courthouse, we divided these costs by the actual gross square footage to come up with an operations and maintenance cost per square foot. We then multiplied the cost per square foot by any extra square feet. Finally, we summed the extra operations and maintenance costs with the extra rent costs for all 33 courthouses built since 2000.

To determine how the actual size of the courthouses compares with the congressionally authorized size, we compared the congressionally authorized gross square footage of each courthouse with the gross square footage of the courthouse as measured by GSA's space measurement program, ESmart. We determined that these data were sufficiently reliable for our purposes through discussions with GSA officials on practices and procedures for entering data into ESmart, including GSA's efforts to ensure the reliability of these data. To determine the extent to which a courthouse that exceeded its authorized size by 10 percent or more had total project costs that exceeded the total project cost estimate provided to the congressional authorizing committees, we used the same information obtained from GSA on the total net obligations (i.e., total project costs), excluding claims, for each of these courthouses through September 11, 2009, as described above. We compared the total project cost for each courthouse to the total project cost estimate provided to the congressional authorizing committees in the construction prospectus or related fact sheets. We also examined GSA's communications to the committees on appropriations for four courthouses that we found exceeded the authorized size and estimated total budget by about 10 percent or more. To increase our understanding of how and why courthouse size exceeds congressional authorized size, we reviewed GSA's space measurement policy and guidance and discussed these documents with GSA officials. We also discussed the reasons that some courthouses are larger than congressionally authorized with GSA headquarters and regional officials and reviewed written comments on the size and space allocations for some of our case study courthouses. In addition, for two of

---

the case study courthouses, we contracted with an engineer and architect to advise us on analyzing the extra space in these courthouses.

To determine how courthouse space based on the judiciary's 10-year estimates of judges compares with the actual number of judges, we used courthouse planning documents to determine how many judges the judiciary estimated it would have in each courthouse in 10 years. We then compared that estimate with the judiciary's data showing how many judges are located there including authorized vacancies identified for specific courthouses and interviewed judiciary officials. We determined that these data were sufficiently reliable for our purposes. To determine the effects of any differences, we calculated how much excess space exists in courthouses that were estimated to have more judges than are currently seated there at least 10 years after the 10-year estimates were made. We also discussed challenges associated with accurately estimating the number of judges in a courthouse with judicial officials and analyzed judiciary data where available.

To determine whether the level of courtroom sharing supported by data from the judiciary's 2008 study of district courtroom sharing could have changed the amount of space needed in these courthouses, we also took the following steps. We created a simulation model to determine the level of courtroom sharing supported by the data. The data used to create the simulation model for courtroom usage were collected by the Federal Judicial Center (FJC)—the research arm of the federal judiciary—for its *Report on the Usage of Federal District Court Courtrooms*, published in 2008. The data collected by FJC were a stratified random sample of federal court districts to ensure a nationally representative sample of courthouses—that is, FJC sampled from small, medium, and large districts, as well as districts with low, medium, and high weighted filings. Altogether, there were 23 randomly selected districts and 3 case study districts, which included 91 courthouses, 602 courtrooms, and every circuit except that of the District of Columbia. The data sample was taken in 3-month increments over a 6-month period in 2007 for a total of 63 federal workdays, by trained court staff who recorded all courtroom usage, including scheduled but unused time. These data were then verified against three independently recorded sources of data about courtroom use. Specifically, the sample data were compared with JS-10 data routinely recorded for courtroom events conducted by district judges, MJSTAR data routinely recorded for courtroom events conducted by magistrate judges, and data collected by independent observers in a randomly selected subset of districts in the sample. We verified that these methods were reliable and empirically sound for use in simulation modeling.

To create a simulation model, we contracted for the services of a firm with expertise in discrete event simulations modeling. This engineering services and technology consulting firm uses advanced computer modeling and visualization as well as other techniques to maximize throughput, improve system flow, and reduce capital and operating expenses. Working with the contractor, we discussed assumptions made for the inputs of the model and verified the output with in-house data experts. We designed this sharing model in conjunction with a specialist in discrete event simulation and the company that designed the simulation software to ensure that the model conformed to generally accepted simulation modeling standards and was reasonable for the federal court system. The model was also verified with the creator of the software to ensure proper use and model specification. Simulation is widely used in modeling any system where there is competition for scarce resources. The goal of the model was to determine how many courtrooms are required for courtroom utilization rates similar to that recorded by FJC. This determination is based on data for all courtroom use time collected by FJC, including time when the courtroom was scheduled to be used but the event was cancelled within one week of the scheduled date.

The completed model allows, for each courthouse, user input of the number and types of judges and courtrooms, and the output states whether the utilization of the courtrooms does not exceed the availability of the courtrooms in the long run. When using the model to determine the level of sharing possible at each courthouse based on scheduled courtroom availability on weekdays from 8 a.m. to 6 p.m., we established a baseline of one courtroom per judge to the extent that this sharing level exists at the 33 courthouses built since 2000. In selecting the 8 a.m. to 6 p.m. time frame for courtroom scheduling, we used the courtroom scheduling profile that judges currently use, reflecting the many uses and flexibility needed for a courtroom. Judges stated that during trials courtrooms may be needed by attorneys before trial times in order to set up materials. This set up time was captured in the FJC data; other uses of a courtroom captured by FJC are time spent on ceremonies, education, training, and maintenance. We differentiated events and time in the model by grouping them as case-related events, nonjudge-related events, and unused scheduled time, and we allotted enough time for each of these events to occur without delay. Then we inputted the number of judges from each courthouse and determined the fewest number of courtrooms needed for no backlog in court proceedings.

To understand judges' views on the potential for, and problems associated with, courtroom sharing, we contracted with the National Academy of

Sciences to convene a panel of judicial experts. This panel, which consisted of seven federal judges, three state judges, one judicial officer, one attorney, and one law professor and scholar, discussed the challenges and limitations to courtroom sharing. Not all panelists invited were able to attend the 1-day panel, and these panelists were individually contacted and interviewed separately. We also conducted structured interviews either in person or via telephone with 14 federal judges, 1 court staff, 1 state judge, 2 D.C. Superior Court judges, 1 lawyer, and 1 academic, during which we discussed issues related to the challenges and opportunities associated with courtroom sharing. Additionally, we used district courtroom scheduling and use data to model courtroom sharing scenarios. We determined that these courtroom data were sufficiently reliable for our purposes by analyzing the data, reviewing the data collection and validation methods, and interviewing staff that collected and analyzed the data. Besides the 7 courthouses we selected as case studies, we visited 2 district courthouses that have experience with sharing—the Moynihan U.S. Courthouse in Manhattan, New York, and the Byrne U.S. Courthouse in Philadelphia, Pennsylvania. In addition, we visited the Roosevelt U.S. Courthouse Annex in Brooklyn, New York, as an example of a courthouse with a collegial floor plan.

We conducted this performance audit from September 2008 to June 2010 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

# Appendix II: Comments from the U.S. General Services Administration

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



GSA Administrator

JUN 03 2010

The Honorable Gene L. Dodaro  
Comptroller General of the United States  
Government Accountability Office  
441 G Street, NW  
Washington, DC 20548

Dear Mr. Dodaro:

The U.S. General Services Administration (GSA) appreciates the opportunity to review and comment on the draft report, "Federal Courthouse Construction: Better Planning, Oversight, and Courtroom Sharing Needed to Address Future Costs" (GAO-10-417).

GSA has serious concerns with this draft report and takes exception to much of GAO's methodology and many of the report's conclusions. We welcome the opportunity to clarify and correct the information presented in this report, as much of this information is misleading:

- GAO has used a space measurement that assumes upper space in building atriums is included in the gross square footage of an asset;
- GAO compounded this erroneous assumption by mistakenly ascribing normal operating and construction costs to these empty volumes; and,
- GAO retroactively applies a methodology of "courtroom sharing" to buildings designed in some cases more than a decade ago, prior to the creation of the courtroom sharing policy, and then claims that the buildings thus previously designed and built somehow violate this retroactive standard.

In the enclosed document, we address these concerns in greater detail for your consideration in composing the final report. If you have any questions or concerns, please contact me. Staff inquiries may be directed to Mr. Ralph Conner, Acting Associate Administrator, Office of Congressional and Intergovernmental Affairs. He can be reached at (202) 501-0563.

Sincerely,

A handwritten signature in black ink that reads "Martha Johnson".

Martha Johnson  
Administrator

Enclosure

U.S. General Services Administration  
1800 F Street, NW  
Washington, DC 20405-0002  
Telephone: (202) 501-0800  
Fax: (202) 219-1243  
www.gsa.gov

See comment 1.

See comment 2.

See comment 3.

See comment 4.

**U.S. General Services Administration's Response to the  
Government Accountability Office's Draft Report:  
Federal Courthouse Construction: Better Planning, Oversight, and  
Courtroom Sharing Needed to Address Future Costs**

The GAO's draft report, titled "Federal Courthouse Construction: Better Planning, Oversight, and Courtroom Sharing Needed to Address Future Costs" (GAO-10-417), determines that GSA has constructed 3.56 million square feet of extra and unauthorized courthouse space, totaling \$835 million in construction costs and \$51 million annually to rent, operate and maintain. GSA strongly disagrees with and disputes most of the significant findings in this draft report.

See comment 5.

The dollar amounts are contrived, largely based on phantom space and faulty cost calculations. In fact, for 32 of the 33 courthouses studied by GAO, total construction costs originally appropriated by Congress were \$3.05 billion; final costs were \$3.32 billion. And the additional \$269 million was due largely to historically high construction cost inflation. The remaining courthouse studied by GAO, in Little Rock, Arkansas, is not yet completed.

See comment 6.

Most egregious is the report's suggestion that GSA and the Courts flouted the intentions of Congress. On the contrary, all the spending described above was approved in advance by Congress pursuant to longstanding procedures, including the additional 258 million.

See comment 7.

It is true that the courthouses built contained more square footage than was originally requested by GSA in authorizing prospectuses. However, those prospectuses are submitted when only a generic courthouse program exists, prior to the detailed architectural and engineering design that is necessary to flesh out the program and fit it to a particular site. Still, the courthouses were built within their authorized cost limits. Moreover, our courthouse projects are managed to meet functional needs within budget limitations.

*Background on the Courthouse Construction and Renovation Program* - The Federal Courts play a critical role in the constitutional framework of American democracy. Local, state and Federal courthouses are a traditional landmark, dating back to the founding of the Nation. As the steward of federally owned buildings, GSA is proud to build courthouses worthy of that role. GSA has compiled a solid track record of delivering high quality buildings that support the Courts' unique needs while enhancing the buildings' surroundings. We do so within carefully considered design and budgetary guidelines and pursuant to Congressional authorization and appropriations.

In this draft report, GAO asserts that GSA has constructed additional space, costing taxpayers millions of dollars. GSA disagrees with GAO's methodology and manner in which the auditors calculated extra space built and the associated cost to construct, operate, and maintain this space. GAO's assessment of these additional costs misleads Congress and the American public.



See comment 8.

*Measuring Space* - The amount of extra courthouse space constructed, as cited in the GAO report, counted all of the square feet in the building, including tenant floor cuts and vertical floor penetrations<sup>1</sup> in multi-story atriums and double height courtrooms that are, in reality, "phantom floors." GAO used this phantom square footage to calculate additional costs supposedly incurred to complete the building. GAO divided the total cost of the facility, excluding site costs, design fees and other soft costs, by the gross square footage (GSF) of the building. GAO then used this grossly inflated GSF number and multiplied it by the alleged amount of additional space GSA constructed to determine the cost of the alleged overbuilt space. These assertions and calculations are inaccurate and grossly misleading.

See comment 9.

GAO assumes the costs to build and maintain tenant floor cuts and multi-story atriums are the same as other building space, such as hallways, courtrooms, Marshals holding facilities, or general office space. This is an incorrect assumption and significantly overstates the cost of constructing and maintaining this phantom floor space in a building. Obviously, a square foot of air inside an atrium costs less to build, maintain, and operate than a square foot of floor space inside an office, courtroom or holding cell.

The cost of constructing phantom space in an atrium or double height courtroom is only a fraction of the cost of constructing occupied space in the building. These phantom spaces do not require slabs of concrete, nor do they have finishes such as carpeting or wood paneling. The cost of maintaining and operating this type of space is less compared to the rest of the facility. For example, the O'Connor Courthouse in Phoenix, Arizona and referenced in the report, has an atrium that is not air conditioned, so it is fallacious to assume these operating costs are the same as the occupied space inside the building. This type of space also requires little cleaning, repair or maintenance, so operating costs are also minimal.

See comment 10.

*Alleged Cost Overruns* - GAO also suggests that cost overruns were a direct result of constructing this additional 1.7 million square feet of space. The increases in construction costs were primarily due to unprecedented increases in construction costs during GAO's audited time period. This phenomenal cost growth was well documented and was due to an industry worldwide building boom that resulted in acute material and labor shortages.

The Construction Cost Index, as published annually by RS Means, reflects a cumulative escalation of 58 percent from October 1, 2000 to October 1, 2008, which is during GAO's audit time period. GSA prepares cost information years in advance of actual construction. The budget inflation factors used to project future costs simply did not keep pace with the real inflation happening across the globe. This was a common occurrence across the construction industry and was not due to a lack of planning

<sup>1</sup> Vertical floor penetrations are air space within a building created by the absence of a floor slab. Tenant floor cuts are the upper portion of a tenant space that expands into the floor above; if a floor were present in this upper area, it could be used for office space. This space could also be the upper air space of a double-height courtroom.

foresight on the part of GSA. This too is well documented. This industry cost increase, not the design and layout of the courthouses, was the major driver for the increase in construction costs found by GAO.

In addition to the unprecedented increase in construction costs, during the period covered by the audit, the U.S. was attacked by both domestic and international terrorism. As a result of those attacks, both our building designs and projects under construction received a tremendous increase in security requirements which had a direct impact on construction costs and the resultant cost increases associated with our projects.

*Congressional Authorization of Additional Space* –The GAO report implies that GSA has willfully neglected Congressional direction in the courthouse program. On the contrary, GSA has scrupulously sought and followed regular Congressional authorizations and appropriations and has been subject to strict Congressional oversight of the courthouse program. We built only courtrooms requested by the Judiciary and authorized by Congress. GSA has been forthright and transparent in all of our documents, testimony, and briefings to Congress throughout the history of our courthouse program.

GAO asserts that 27 out of the 33 Federal courthouses built since 2000 are larger than authorized by Congress. GSA disagrees with GAO's claim that this additional space contributes considerably to the increase in project costs since approximately 50 percent of the supposedly additional 1.7 million square footage cited in this report is due to vertical floor penetrations associated with atriums, according to GSA's estimates. For example, GAO stated that the Springfield Courthouse in Massachusetts exceeded Congressional authorization by 17,299 GSF, or 11 percent. GSA disagrees with this assertion because 17,606 GSF of this courthouse is associated with phantom floors or void space.

Reasons for the remaining 50 percent of the alleged 1.7 million square feet above authorized amount can be attributed to:

- 1) Site limitations and restrictions, such as site configurations and grading, can result in less than optimal building construction, resulting in design responses that provide less than optimal layout for space.
- 2) Constructing connections for annexes. One third of the audited projects were annexes connected to existing buildings; and
- 3) New requirements not included in the space programming due to new design standards, such as LEED and security requirements, as well as expanding customer requirements.

GAO also suggests that GSA should notify Congressional authorizing and appropriation committees if the size of a courthouse exceeds the Congressional authorized GSF. GSA notifies the appropriate Congressional committees when the cost of a project exceeds 10 percent of the maximum identified in the prospectus and seeks further approval in accordance with 40 U.S.C. § 3307(c). We have multiple levels of

See comment 11.

See comment 12.

See comment 13.

management and system controls to ensure costs do not exceed this threshold, without Congressional approval.

When the original gross square footage is exceeded, GSA often has pressing and logical reasons for doing so. For example, during design, architects can develop more energy-efficient methods, such as creating atriums or light wells to bring natural light into interior windowless space within the building that could increase the building's total square footage. GSA will ensure that Congress is notified of these increases in the future, along with the rationale for the increase.

In estimating the cost of this additional space, GAO applies current GSA policy retroactively in its analysis. Although GSA adopted the American National Standards Institute and the Building Owners and Managers Association (BOMA) measurement standards in 1997, GSA did not establish formal national guidance to include atrium space in the gross area calculation until fiscal year 2005. The 33 courthouse projects under review by GAO were authorized prior to this policy, so applying this policy retroactively inflates the gross area of the building during the time of the projects

As discussed in 2009 in the BOMA publication of *The Gross Areas of a Building: Methods of Measurement*, current industry standards exclude atrium space in the gross square foot calculation. If GAO were to apply this BOMA standard or analyze the 33 projects in context prior to the issuance of the formal GSA guidance in 2005, the atrium voids would be excluded from the gross square feet, resulting in more than a 50 percent decrease in square footage above authorized prospectus levels. Courthouses such as Greenville, Laredo, Wheeling, Springfield and Richmond would be at or below the square footage given in the authorized prospectus by approximately 10,000 – 20,000 square feet.

*Oversight and Controls* – GAO asserts that GSA needs additional oversight and controls over the management of our courthouse program. GSA has implemented additional oversight and controls. Policies are in place that require GSA's Central Office and GSA's Regional Offices, during the design process, to approve the facilities' measurements and ensure they are in line with the appropriation and authorized prospectus. Additionally, we have measurement experts, who provide an independent evaluation of the design. This evaluation is done during the development of the design and compliance with the square footage given in the authorized prospectus is necessary to proceed with the project. GSA continues to educate our project teams on these policies and ensure our measurement experts are involved throughout the project's phases to continually review the design and ensure the size remains within the authorized amount.

*Judgeship Projections and Courtroom Sharing* – GAO also discusses overestimating judgeship projections and courtroom sharing in this report. GAO recommends that the Judicial Conference of the United States through the Administrative Office of the United States Courts improve the accuracy of the planning currently done to estimate courtroom needs over a 10-year time horizon. GSA agrees this issue warrants further

See comment 14.

See comment 15.

See comment 16.

review, since these projections have been overestimated in the past. GSA, the Judiciary, and Congress should discuss a realistic approach for the future.

Regarding courtroom sharing, GSA works closely with the Judiciary to develop their courthouse requirements. The Judiciary has developed and implemented policies that require courtrooms to be shared among judges. We commend the Courts for developing these new courtroom sharing models, which were developed in recent years. GSA will continue to work with the Judiciary on courtroom sharing alternatives.

GAO audited courthouses that were, in most cases, designed and built before the Judiciary and GSA implemented the sharing models. Thus, GAO retroactively applies a methodology of "courtroom sharing" to buildings designed in some cases more than a decade ago and then claims that the buildings thus previously designed and built somehow violate this retroactive standard.

The current sharing requirement, included initially in the 2007 design guide, requires one courtroom for every two senior judges. In 2009, it was updated further to require one courtroom for every two magistrate judges. The Judiciary and GSA also implemented additional sharing policies that were included for the first time for projects funded by the American Recovery and Reinvestment Act of 2009. These new courtroom sharing policies state that there should be no more than one courtroom for every two district judges who are within 10 years of their senior eligibility date. Additionally, GSA makes every effort to more fully utilize any vacant space in a courthouse previously built. GSA and the Judiciary are committed to the courtroom sharing policies for current and future courthouse projects.

In conclusion, GSA will continue to work with the Judiciary in designing Federal courthouses that meet the Courts' needs. GSA helps the Judiciary shape their requirements and ensure buildings are constructed efficiently, considering cost, space, and energy needs, with sufficient controls and oversight. Working with the Courts, GSA will use courtroom sharing practices and review judgeship projections. As recommended by GAO, GSA will also notify the appropriate Congressional committees when the square footage increase exceeds by 10 percent or more the maximum identified in the prospectus.

See comment 17.

See comment 18.

The following are GAO's comments on the U.S. General Services Administration letter dated June 3, 2010.

---

## GAO Comments

1. GSA stated that it has serious concerns with much of our methodology and many of the report's conclusions and that much of the information in the report is misleading. As detailed in the next three comments, our methodology applied GSA's policies and data directly from original documents and sources. Our conclusions were meant to improve courthouse planning and construction for future courthouses by quantifying the costs related to GSA's lack of oversight on past courthouse projects, not to suggest the methodology should have been applied retroactively. We believe that our information is presented in a fair and accurate way in illustrating how past problems with the courthouse program could affect future courthouse projects.
2. GSA stated that GAO assumes that upper-level space in building atriums is included in the gross square footage of an asset. This is true. We included this space in the gross square footage calculation because that is GSA's space measurement policy. Since at least August 2000, GSA's written policy has been and remains today to include all levels of atriums and tenant floor cuts in measuring the gross square footage of a building.
3. GSA stated that we mistakenly ascribed normal operating and construction costs to the upper-level space in atriums. This is an oversimplification of our cost estimation methodology, which balanced higher cost space, such as courtroom and marshal space, with lower cost space, such as the upper floors of atriums, to create a conservative estimate of the costs associated with the extra space in courthouses. Our report indicates that according to GSA, the upper floors of atriums are less expensive to construct and operate. However, these spaces represent only a portion of the 1.7 million square feet built above congressional authorization and none of the 1.8 million extra square feet due to overestimating judges and not sharing courtrooms. For example, GSA's analysis that appears later in its comments on our report (see p. 61) indicate that about 850,000 square feet of the space constructed in excess of the congressionally authorized gross square footage is upper-level space in atriums—meaning that 2.7 million square feet—or about 75 percent—of the extra space in courthouses may be higher-cost space.
4. GSA stated that we retroactively applied courtroom sharing policies to courthouses. Our congressional requesters specifically asked that we

consider how a courtroom sharing policy could have changed the amount of space needed in these courthouses. However, our draft and final reports indicate that the judiciary's policy at the time was largely to provide one courtroom per judge.

5. GSA stated that (1) our cost estimates for the extra space are contrived and (2) the final construction costs for 32 of the 33 courthouses exceeded appropriations by \$269 million. Our cost estimates were based on GSA data and generally accepted construction cost estimation methods, and appropriation levels are not relevant to this discussion. We validated our cost estimation approach with a number of construction industry experts. All agreed that in order to develop an order of magnitude estimate for such cost implications, determining the cost per square foot of constructing the building was the best methodology. GSA's approach of comparing costs with appropriations is not relevant for the following reasons:
- There are numerous reasons why construction projects can go over or under budget. For this report, we did not conduct a detailed examination of GSA's process of estimating courthouse construction costs. However, it does stand to reason that the cost overruns would have been lower or nonexistent if the courthouses had been constructed within the congressionally authorized gross square footage limits. For example, our report states that because the construction costs of a building increase when its gross square footage increases, cost overruns for the Coyle U.S. Courthouse in Fresno would have been smaller or might have been eliminated if the courthouse had been built within the authorized square footage. As discussed in the report, the courthouse is about 16 percent larger than authorized and cost about \$13 million, or 11 percent, more than estimated when congressionally authorized its construction.
  - We suggest that the extra square footage due to GSA constructing the courthouses larger than authorized may have contributed to cost overages. However, about half of the extra square footage we found—and therefore about half of our estimated construction costs—are attributable to over estimating the number of judges and not sharing courtrooms. This extra space was factored into the plans and, thus, would be factored in to the appropriations, for the courthouses. Reducing this space would, therefore, be likely to have led to a corresponding reduction in the courthouses' appropriations.

- Even if relevant, GSA’s estimate of \$269 million spent over congressional appropriations does not appear to have been adjusted for inflation. Adjusting GSA’s cost estimate for inflation would most likely increase it significantly, since the courthouses we reviewed were completed up to 10 years ago.
6. According to GSA, our report suggests that GSA and the judiciary purposefully disregarded the intentions of Congress. This is not the case. While it is unclear to what extent GSA was aware that the courthouses we reviewed exceeded their authorized gross square footage, the report does not indicate that GSA or the judiciary purposefully disregarded congressional authorizations. Instead, we found that GSA lacked sufficient oversight and controls to ensure that courthouses were planned and built as authorized.
  7. GSA acknowledged that the courthouses built since 2000 contain more square footage than GSA requested in the prospectuses and congressionally authorized. We understand that prospectuses are submitted for courthouses before their detailed architectural and engineering designs are completed, but the congressionally authorized gross square footage is to be the maximum allowable gross square footage. As we reported, GSA lacked the oversight and controls to ensure that 27 of the 33 courthouses we reviewed were designed and constructed within the authorized gross square footage.
  8. GSA described the upper-level floors of atriums and “double-height courtrooms” as “phantom floors” and stated that the incorporation of these spaces grossly inflates the gross square footage amounts for courthouses. These spaces are not phantom floors—they increase the volume and cost of buildings, and it is GSA—not GAO—that chose to count them as part of a building’s gross square footage. As discussed in comment 2, our calculations are based entirely on GSA’s longstanding space measurement policy.
  9. See comment 3.
  10. See the first bullet of comment 5.
  11. See comment 6.
  12. GSA questioned our finding that 27 of the 33 federal courthouses built since 2000 are larger than congressionally authorized and that this extra square footage has significant cost implications. The extra 1.7 million square feet of extra space built above congressional authorization is substantial, representing 13 percent of all courthouse

space built since 2000, and was also expensive to construct because gross square feet is a key construction cost driver. See comments 2 and 3 for additional discussion of these issues.

13. Our report does not provide any data on the square footage of the Springfield courthouse, other than its inclusion in Figure 3 as being 10-20 percent larger than authorized, because it was not one of the 7 courthouses we selected for case studies. GSA appears to have calculated the overage for this courthouse as we did for the courthouses in our review by comparing the congressional authorization with the gross square footage measurement in GSA's ESmart database. GSA's calculation of the overage—17,299 gross square feet, or 11 percent more than authorized—includes the square footage of the upper levels of the atrium and tenant floor cuts, consistent with GSA's policy. Moreover, the total project cost of the Springfield Courthouse was about \$65 million, more than 20 percent over the estimated total project cost of about \$53 million provided to congressional committees. As discussed in comment 5, we did not fully analyze the reasons for cost overruns in the courthouses we reviewed, including the Springfield Courthouse. But because a building's construction costs increase with its gross square footage, cost overruns for the Springfield Courthouse would likely have been reduced if it had been built with a smaller atrium or less void space. The extent to which GSA overbuilt the public and nontenant spaces becomes clear through the efficiency rating. GSA specifies that 67 percent of the space in courthouses should be tenant spaces—or 67 percent efficient—but only 50 percent of the Springfield Courthouse is tenant space. In other words, half of the courthouse's space is dedicated to public circulation, mechanical, and other nonmission-related spaces.
14. GSA stated that we applied current GSA policy retroactively in estimating the costs of additional courthouse space and maintained that it did not establish formal national guidance to include atrium space in the gross area calculation until fiscal year 2005. GSA incorrectly represents the evolution of its policy. GSA's policy manual dating from August 2000 instructs that all levels of atriums and tenant floor cuts be included in the gross square footage of a building. In our report, consistent with this evidence, we state that GSA had this space measurement policy since at least 2000, but did not ensure that it was understood and followed. Moreover, GSA has not demonstrated it is enforcing this policy because all 6 courthouses completed since 2007 exceed their congressionally authorized size.



15. GSA suggested that we should have applied 2009 Building Owners and Managers Association (BOMA) standards to measure the gross square footage of the courthouses we reviewed. We believe it is appropriate to apply GSA's own policies to develop our estimates, and we, therefore, used the square footage numbers GSA provided us from its ESmart program and in blueprints.
16. GSA commented that it has implemented additional oversight and controls over its courthouse program. However, as we state in our report's conclusion, it is not yet clear whether GSA's recent steps to better monitor the size of courthouse projects provide sufficient oversight to ensure that courthouses are constructed within the congressionally authorized square footage. The ongoing confusion that we identified among some GSA regional staff about GSA's policies for measuring atriums and the gross square footage of courthouses—and the fact that the six most recently completed courthouses exceeded the congressionally authorized size—raise questions about the sufficiency of the steps GSA has taken to date to improve its oversight. Our recommendation for GSA to establish sufficient internal control activities to ensure that GSA space measurement policies are followed, therefore, remains unchanged at this time.
17. See comment 4.
18. GSA agreed with our recommendation to notify congressional authorizing committees when the design of a courthouse exceeds the authorized size by more than 10 percent, including the reasons for the increase in size. However, to ensure that future courthouses are built within the congressionally authorized gross square footage, it is important that GSA also implement our other two recommendations: to establish sufficient internal control activities to ensure that regional GSA officials understand and follow GSA's space measurement policies throughout the planning and construction of courthouses; and to establish a process, in cooperation with the Director of the Administrative Office of the U.S. Courts, by which the planning for the space needed per courtroom takes into account GSA's space measurement policy related to tenant floor cuts if a courthouse is designed with courtrooms that have tenant floor cuts.

# Appendix III: Comments from the Federal Judiciary

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



## ADMINISTRATIVE OFFICE OF THE UNITED STATES COURTS

JAMES C. DUFF  
Director

WASHINGTON, D.C. 20544

June 1, 2010

Mr. Mark L. Goldstein  
Director, Physical Infrastructure Issues  
U.S. Government Accountability Office  
441 G Street, N.W.  
Washington, DC 20548

Dear Mr. Goldstein:

I write on behalf of the Federal Judiciary in response to the draft report entitled, *FEDERAL COURTHOUSE CONSTRUCTION: Better Planning, Oversight, and Courtroom Sharing Needed to Address Future Costs* (GAO-10-417). The Judiciary takes its stewardship responsibilities seriously and would welcome a fact-based and objective analysis as well as constructive suggestions for improving our facilities planning approach. It is regrettable at a time when the General Services Administration (GSA) and the Federal Judiciary are working closely and effectively to control courthouse costs – including current and planned courtroom-sharing measures adopted by the Judiciary – that GAO has produced a misinformed report that distorts both the current facilities planning process and prior projects.

In short, we have serious concerns about the accuracy of key data, the misleading way in which information is presented, and the soundness of methodologies employed to substantiate the draft report's conclusions. We emphatically dispute the draft report's contention that the 33 federal courthouses completed since 2000 have 3.56 million square feet of unnecessary and wasted space; and we have grave doubts about the validity and viability of the courtroom-sharing model developed by GAO.

We are also deeply troubled that the draft report issued by the GAO under strict disclosure restrictions was released to the public by GAO as its testimony to Congress on May 25, 2010, before Judiciary and GSA officials had provided comments. Additionally, after hearing GSA's and the Judiciary's testimony before the House Subcommittee on Economic Development, Public Buildings and Emergency Management of the Committee on Transportation and Infrastructure disputing key facts underlying the draft report's conclusions, you nevertheless discussed those conclusions on Federal News Radio.

---

A TRADITION OF SERVICE TO THE FEDERAL JUDICIARY

See comment 1.

See comment 2.

Mr. Mark L. Goldstein  
Page 2

See comment 3.

This letter describes concerns related to those aspects of the draft report that pertain directly to the Federal Judiciary's programs and policies. A companion Judiciary response is enclosed in the form of a letter from the Honorable Loretta A. Preska, Chief Judge, United States District Court for the Southern District of New York. Chief Judge Preska's letter decries GAO's misleading characterization of her district's temporary experience with courtroom sharing as proof of the long-term efficacy of sharing by district judges (as asserted by GAO obliquely in the draft report and explicitly at the May 25 hearing); and it refutes the accuracy of the draft report's portrayal of an expert-panel discussion in which she participated. The draft report also covers important issues that are under the purview of the GSA, which will be responding separately.

See comment 4.

We appreciate that the internal review process within GAO strives to ensure the objectivity and fairness of reports as well as the accuracy of facts and analyses. It is worrisome, however, that a senior member of the GAO audit team disclosed a predilection for a particular outcome when he told a group of Judiciary officials that more courtroom sharing would be coming and there would be no point in arguing against it. It appears that the audit team's zeal to meet certain objectives may have compromised its ability to be entirely objective and fair. It may be too late to change false impressions already generated by the premature disclosure and discussion of an unreviewed draft report, but it is not too late to make corrections and you expressed a willingness to do this during the May 25 hearing. We hope these comments will be helpful to GAO to produce a final product that will satisfy its high standards of quality, objectivity, and fairness. Primary issues are outlined below, followed by more detailed analysis.

See comment 5.

- For the 33 courthouses studied by GAO, the Judiciary's courtroom policies in effect at that time were used to determine the number of courtrooms needed in each facility and these numbers were authorized by Congress. Those policies provided a courtroom for each judge. Auditors typically review actions and operations against the policies and rules in effect at the time. Instead, GAO has manufactured its own rules in the course of this study regarding how many courtrooms it thinks should be provided to judges, and it has applied these untested and unapproved rules retroactively to the 33 courthouses that were already built. The report attributes to this made-up concept 946,000 excess square feet.

See comment 6.

- Because of GAO's retroactive application of its notion about courtroom sharing, this draft has defined as excess and wasted space courtrooms that currently are assigned to and used daily by federal judges. This is not reasonable.
- It is misleading to suggest that 887,000 extra square feet exist because of inaccurate estimates of judges for the 33 courthouses studied. GAO's snapshot approach to counting heads simply does not provide a complete picture. For example, the draft report supports its conclusion that the Judiciary's planning process overstates the need for judges by showing photographs of unassigned chambers' suites in the Coyle Courthouse in Fresno, California (on p. 29). The Eastern District of California is desperately in need of

---

**Appendix III: Comments from the Federal  
Judiciary**

---

Mr. Mark L. Goldstein  
Page 3

See comment 7.

additional judges. Its caseload per judge is the highest in the nation (with over 1000 cases per district judge, it has twice the national average caseload), and additional judgeships are currently pending approval by Congress. To suggest that those empty chambers are because of poor planning or are unneeded is absurd.

See comment 8.

- The draft report focuses a great deal of attention on courtrooms, but nowhere in the report is a table indicating the numbers of courtrooms and judges in the courthouses studied. For a fact-based analysis of courtrooms, the absence of such vital data is surprising. The facts present a different picture than what has been suggested. Our analysis of facts (actual data on courtroom numbers, current judges, existing vacancies, soon-to-be vacant authorized positions, and pending new judgeships) indicates that for most of the 33 courthouses studied, either all courtrooms are assigned now, or they will be shortly or in the next few years. Moreover, these courthouses must suffice for many decades of occupancy.

See comment 9.

See comment 10.

- Based on the limited information provided about the simulation model, it is highly doubtful that GAO's courtroom-sharing model is sufficiently sound to be worthy of publishing, much less touted as an alternative to the carefully studied courtroom-sharing policies that have been promulgated over the last few years by the Judiciary. Running a simulation model for courtroom sharing requires making a large number of assumptions about case processing. It appears that the model was developed without the involvement of any experts in the judicial process and included some invalid assumptions. The draft report does not describe this model in the level of detail typically presented in research products to enable its assumptions and methods to be critically scrutinized. GAO has steadfastly refused to provide this information. Minutes after the May 25 hearing concluded, despite the Subcommittee's request that the GAO work collaboratively with the Judiciary and GSA and make available these assumptions, GAO pointedly refused to share them. If the model is well-grounded, why has GAO withheld this critical information?

See comment 11.

- GAO has suggested that a one-day confidential meeting of an expert panel convened by GAO and the National Academy of Sciences helped to develop assumptions used for the simulation model. All of the Judiciary's participants in that panel have repudiated the representation of the panel discussion that appears in the draft report. A panel member's comprehensive and detailed critique is enclosed with this response.

See comment 12.

- GAO's conclusions about feasible courtroom-sharing formulas do not appear to be supported by the source data. For example, courtroom-usage data provided by the Federal Judicial Center and used by GAO to develop the model showed that courtrooms in the top quartile of use during the study period had an average 6.6 hours of use per day. This level of usage would appear to leave approximately one hour free in a typical workday for other use. In a three-judge courthouse, for example, if the judges each

Mr. Mark L. Goldstein  
Page 4

needed to use a courtroom for 6.6 hours each day but had to share one or two courtrooms as suggested by GAO, there clearly would be insufficient courtroom availability, and this would result in serious delays in the administration of justice.

Additional details about these and other issues are provided below.

Evolution of the Judiciary's Facilities Planning Process

The GAO report is critical of the Judiciary's planning process. Predicting what will happen in the future is, to say the least, challenging, and the GAO has recognized these challenges. A 1993 GAO report titled, *Federal Judiciary Space: Long-Range Planning Process Needs Revision* (GAO/GGD-93-132, Sept. 28, 1993), also noted that:

*GAO recognizes that it is difficult to project future space needs with precision. The projection of such needs is not an exact science, and in the final analysis, it is reasonable to expect some variation between the estimate and what is actually needed. Space estimates are particularly challenging for the judiciary because there are numerous factors that cause changes in the workload, and therefore space needs, which are beyond its control.*

It can take upwards of 15-20 years from the time of initial planning to occupancy of new federal courthouses. During that time circumstances change: judgeship bills are not passed when anticipated, judges do not take senior status when planned, and judges retire or die. In addition, caseloads can fluctuate, prosecutorial policies change, and federal jurisdiction can expand – all impacting the workload of the federal courts. But once the decision is made to size a building based on a certain set of assumptions, it becomes very difficult and costly to change course mid-stream. To do so results in expensive change orders and a building that is not likely to meet longer-term needs.

The Judiciary was one of the first entities in government to establish a systematic approach to space and facilities planning. In the mid-1980s, the Judiciary began its formal facilities program to address problems associated with outdated and antiquated courthouses, the need for additional space to accommodate a growing Judiciary, and security issues. We have continued to improve and refine our space-planning process as additional data have been gathered and analyzed. Thus, the methodologies used in planning the courthouses studied by GAO have changed.

The Judiciary has been open to suggestions for improvements made by outside entities, and has adopted recommendations previously made by GAO and by private-sector consultants. Some of the improvements include use of multiple forecasting methods, review of the accuracy of the prior year's forecasts, and re-instituting the on-site planning sessions in each district and comprehensive facility evaluations of each courthouse. Perhaps most dramatically, the Judiciary

Mr. Mark L. Goldstein  
Page 5

stopped its space planning process entirely in 2004 so that it could, once again, re-evaluate its planning methodology with a view toward cost containment. The Judicial Conference, the Judiciary's policymaking body, determined that the long-range planning process should be modified to ensure that the courts with the most urgent space needs were highlighted. The courts now employ a new long-range facilities management process known as Asset Management Planning to assess facilities needs on a go-forward basis. The process was developed as an objective methodology that identifies costs and benefits for alternative housing solutions such as renovating existing space. We have worked with the GSA to contain costs, including implementing cost controls for the approval of deviations from space standards.

Amount of Excess Space

The draft GAO report asserts that many courthouses have not been fully occupied and it suggests that what it then deems to be "excess" space constitutes a waste of funding. There are several reasons to question the validity of these conclusions. One key question concerns the number of courtrooms and judges in these facilities. We analyzed the 33 buildings identified by GAO and found that in most of these buildings, the number of courtrooms is either equal to the number of judges in the building, or will be equal to or be very close to the number of judges to be housed in the building once vacancies are filled and required new judgeships are approved. It also appears from the draft report that GAO did not always take into account congressionally authorized vacant judgeship positions in its analysis. The building sizes authorized by Congress assumed that vacant, congressionally authorized judgeship positions would be filled at these locations, that senior district judges and magistrate judges would not be sharing courtrooms, and that space would be provided for future new judgeship positions. It is more appropriate to apply the planning policies in place *at the time* to determine whether we met or came close to our projections.

Out of the 33 courthouses studied, GAO chose to highlight six (p. 28) to demonstrate what appear to be large differences between planned and actual numbers. It is not clear how GAO calculated the numbers in this table. To provide a much simpler and understandable assessment of whether there is excess space in these courthouses, we have produced a table below that indicates for each courthouse the number of district, magistrate and bankruptcy judges compared to the number of courtrooms for these judges. The table below shows a very different picture. All of the courtrooms in these facilities are expected to be assigned within the next few years, and in three of the six courthouses there will be fewer courtrooms than judges.

See comment 13.

See comment 14.

Mr. Mark L. Goldstein  
Page 6

See comment 15.

**Number of District and Bankruptcy Judges & Courtrooms  
at GAO's Selected Courthouses  
(By 2016)**

	Current Number of Judges & Vacancies	Pending New Judgeships Anticipated	Judges Eligible for Senior Status by 2016	Possible Number of Judges by 2016	Current Number of Courtrooms	Surplus/Deficit Number of Courtrooms by 2016
Bryant/ Prettyman CHs Washington, DC	24	0	9	33	27	(6)
Coyle CH, Fresno, CA	10	3	1	14	14	0
D'Amato CH Central Islip, NY	15	2	2	19	19	0
DeConcini CH Tucson, AZ	12	1	3	16	14	(2)
Eagleton CH St. Louis, MO	19	0	1	20	20	0
Ferguson/King Atkins CHs Miami, FL	25	1	7	33	27	(6)

Note: Our analysis includes all district, magistrate and bankruptcy judge types and authorized vacancies not covered by recalled judges.

See comment 16.

There are factual corrections previously provided to GAO in response to a "Statement of Facts" that should be made. For example, GAO states (on p. 31) that the U.S. District Court for the District of Columbia had projected 14 senior judges by the end of the 10-year planning period. The correct projected number of senior district judges is 7. Also, GAO incorrectly reports that the district court currently has 9 fewer senior judges than estimated. The correct number is 1. Within the next 6 years, that district court will have 9 additional judges who will be eligible for senior status. On page 32, the draft reports an incorrect figure. There are 5 not 4 pending new district judgeships in the Eastern District of California.

See comment 17.

As noted in the draft report, there are locations where we did not meet our projections. Several of these buildings were planned at the inception of our planning process – a process that has evolved over time. With the adoption of courtroom sharing policies for senior district judges and magistrate judges approved by the Judicial Conference in 2008 and 2009, many of these locations will now be able to support the operations of the Judiciary and the U.S. Marshals Service well beyond the initially planned 10-year time frame. It is misleading to say that the space is "extra" because of incorrect judge estimates. The space will be needed at some point in the near future. It may not be needed until the 12<sup>th</sup> year or the 14<sup>th</sup> year from the time design of the building started, but it will be needed.

See comment 18.

Mr. Mark L. Goldstein  
Page 7

See comment 19.

The draft report charges that “the Judiciary’s method of estimating judges does not account for uncertainty in when judges will take senior status and in how many new judgeships will be authorized.” To account accurately for “uncertainty” would seem to be an oxymoron. The draft report states that the Judiciary’s estimates were based on “unsupported assumptions about the amount of time it would take to obtain authorizations for new judgeships.” This is false. When the courthouses studied by GAO were planned, Congress regularly enacted new judgeship legislation. In fact, up until 1990, Congress had passed comprehensive judgeship legislation about every six years, including 1978, 1984, and 1990. These bills added hundreds of new judgeships to the courts, and this history formed a reasonable basis for the planning assumptions. Likewise, history regarding when eligible judges, on average, tended to take senior status formed the basis for the planning assumptions.

Although Congress has not passed regular comprehensive judgeship legislation in recent years, in the past two decades, the Judiciary has gained 103 district judgeships, 61 bankruptcy judges, and 210 magistrate judges. The draft GAO report criticizes the Judiciary for continuing to plan space for new judgeships – however, if Congress had enacted our requests, as they had historically done, and we had *not* planned chambers and courtrooms for these judges, there would have been a critical shortfall of space around the country.

See comment 20.

The draft report incorrectly characterizes space provided for visiting judges by stating that it is a way of building “extra” space (p. 30). In smaller courts with few judges, it is not unusual to have all the Article III judges recuse themselves because of a connection or conflict with one of the parties. In other courts, judges are assigned from other districts or circuits to assist with a surge in workload. And, in some courts, judges travel from one division within a district to another because there are not enough judges at any one location to handle the caseload. When these circumstances exist, smaller chambers and sometimes a courtroom dedicated to use by visiting judges is provided. Characterizing this space as “extra” space because it is not assigned to a specific judge demonstrates a fundamental misunderstanding of how the judicial system operates at some locations.

See comment 21.

We are sensitive to the costs of constructing courthouses, and we are willing to consider reasonable changes to our planning assumptions to reduce the risk of significant over-projections of future needs. Failing to take into account requested judgeships that are already needed because of existing caseload, but that have not yet been authorized by Congress, would be imprudent. Most courthouses are occupied for many decades. To employ a planning process that could never result in unassigned space would be extremely shortsighted, would risk having inadequate capacity to house needed judges and staff for the future, and would therefore reduce the useful life of these courthouses.



Mr. Mark L. Goldstein  
Page 8

Courtroom Sharing

The Judicial Conference has adopted several significant policy changes that included a policy to provide one courtroom for every two senior judges, and a policy to provide one courtroom for every two magistrate judges. In addition, a courtroom usage study of bankruptcy courts is currently underway and after a determination is made regarding the bankruptcy courts, the Judiciary will consider a courtroom sharing policy for courthouses with more than 10 active district judges. These are major changes to the courtroom allocation policies for the Federal Judiciary, which were made only after a great deal of consideration of their impact on the litigation process and the delivery of justice.

See comment 22.

While these policies were not in effect at the time the 33 courthouses were planned, the Judiciary now applies its courtroom-sharing policies to new planning efforts. These policies will result in substantial cost savings. The draft GAO report proposes senior district judges and magistrate judges sharing policies that differ from those endorsed by the Judicial Conference. The draft GAO report also proposes a sharing ratio for active district judges, a matter that the Judiciary is still working on. The report provides practically no information about the assumptions used to produce these results and nothing to support the contention that a single ratio could apply in districts of all sizes. Experience demonstrates that this cannot possibly work.

See comment 23.

The GAO proposals – articulated in a scant seven pages – are based on two sources of information. One source is interviews of court officials and an expert panel convened by GAO and the National Academy of Sciences, which included federal judges and a court clerk who had experience with courtroom sharing. GAO mischaracterizes many of the participants’ comments. For example, the draft asserts that a district court official said that “indicators of courthouse efficiency . . . increased when the judges of the court were sharing.” As noted in the enclosed comments from Chief Judge Loretta A. Preska, this statement is completely contrary to what was said. Chief Judge Preska’s letter contains numerous examples of GAO’s misrepresentation of the panelists’ views and GAO’s interviews in that district court.

See comment 24.

The other source of information is a computer model of the Federal Judicial Center’s study data that was developed for the GAO by a contractor with no apparent claim to any particular expertise in courts or the judicial system. As a result, the model does not reflect the reality of what happens in the courtroom or the litigation process. As with any type of modeling effort, the courtroom model must be based on certain assumptions, the formulation of which requires significant expertise and understanding of how courts actually work, and the consideration of possible impacts on litigants, parties, jurors and judges. The only key assumption identified by GAO in its report that may have radically affected the outcome of the modeling is noted in the appendix, i.e., that every courtroom should be in use for 10 hours every day. This is unrealistic and virtually impossible. It inflates the work day by 25 percent.

See comment 25.

Federal employees of the court and DOJ are dedicated and may well work long hours on a regular basis, but jurors, litigants, witnesses, family members, and other parties would have

Mr. Mark L. Goldstein  
Page 9

See comment 26.

trouble arranging their schedules for the extra hours and may have difficulties arranging for child care, or meeting other commitments that would be necessary if normal work hours of 8:00 a.m. to 6:00 p.m. are assumed. This 10-hour-a-day assumption alone would have grossly distorted the resulting courtroom sharing ratios. The draft report also contains incorrect statements about trials (p. 42). Average trials per judge in 2008 were 20 trials.<sup>1</sup> The median length of a trial was 3 days.<sup>2</sup>

See comment 27.

A courtroom is not simply a facility but an essential tool for the delivery of justice. The application of courtroom usage data to construct a simulation model may give the appearance of authentic analysis, but the approach has serious logical and conceptual flaws, primarily through what appears to be simplistic and unrealistic assumptions. An assessment of the need for courtrooms was completed by Ernst & Young in 2000 as part of an *Independent Assessment of the Judiciary's Space and Facilities Program*. That report noted:

See comment 28.

*Planning for courtrooms and the impact of courtroom sharing is more complex than a simple assessment of actual courtroom use would indicate. Understanding the dynamics of the judicial process is fundamental to any attempt to anticipate courtroom needs accurately and to use courtrooms effectively.*

See comment 29.

In describing factors that affect courtroom usage and needs, the 2000 Ernst & Young study concluded that it would be wrong to assume that all of the hours spent by judges in a courthouse can be perfectly redistributed across fewer courtrooms without adding a generous allowance for flexibility. They indicated that such a factor is needed because scheduling full utilization of courtrooms would require conditions that do not exist in the judicial environment, namely, greater certainty that scheduled events will occur; greater certainty about event duration; adequate notice of all events; and the ability to reschedule events to fill open courtroom time.

As noted by Ernst & Young, it would be a false premise to assume that judicial events are largely knowable and predictable. They are not. It is one thing to plug into a mathematical model statistics about events that have already occurred, but it is another matter altogether to predict the duration of these events in advance. This would be difficult, even for experts, because of the inherent variability and uncertain nature of the judicial process. Trial times can range significantly in length, and juries may deliberate for minutes or many days. Not only is the duration of many proceedings unpredictable, but only in a simulation model and not in reality can a suddenly available courtroom be readily used for another case. After the fact, one may know

<sup>1</sup>Administrative Office of the United States Courts. *2008 Federal Court Management Statistics*, Washington, D.C., March 2009.

<sup>2</sup>Administrative Office of the United States Courts. *2008 Annual Report of the Director: Judicial Business of the United States Courts*, Washington, D.C.: U.S. Government Printing Office, 2009.

Mr. Mark L. Goldstein  
Page 10

that a case concluded at noon and the courtroom was free in the afternoon, but how foreseeable was that circumstance? Perhaps it could have been foreseen the day before, but probably not a month earlier. An average trial for a particular type of case may take three or four days, but others will not. There is considerable variability. A 1998 study by the National Center for State Courts entitled *On Trial: the Length of Civil and Criminal Trials*, demonstrated there were substantial differences in experienced state court judges' and attorneys' estimates of trial length compared to the actual length of the trials.

The draft report does not describe in any sufficient detail the methodology and assumptions used to determine its recommended ratio of judges to courtrooms. GAO did not provide the draft report to the Federal Judicial Center, which is the Judiciary's research and education entity, although GAO used the Federal Judicial Center's data to develop its simulation model. After review of GAO's draft report, the Federal Judicial Center has provided the following response:

***The GAO's draft report provides little or no information about most of the model elements....Thus, there is not enough information or details about the simulation model, in general, or about the components of the simulation, in particular, to allow the Center to make a constructive technical assessment of the GAO's efforts to model and simulate courtroom use in the district courts. It is possible, however, to identify instances where this lack of detail raises questions about the completeness and adaptability of the model and therefore the ability of GAO's simulation to provide useful guidance for the judiciary.***

- *According to the draft report (page 56 of Appendix I), the GAO used discrete event simulation techniques, such as those discussed above, to develop their simulation model of courtroom use. From the limited information the report provides about the simulation, however, it is difficult to determine exactly what elements were included in the GAO's model. It is unclear, for example, what entities were defined (e.g., case proceedings, sessions of court) and whether different types of entities were represented (e.g., were case proceedings differentiated into trials and hearings). Decisions made about the elements of the model are critical for the outcome of the modeling effort. The GAO report provides little information about those decisions.*
- *From the information given, it does not appear that the model included the concept of cases or a caseload, either as a specific entity of the model or as a parameter that could be varied in each simulation. If the model does not include cases and caseloads, then the simulation cannot estimate how changes in the model affect the time to disposition for individual cases or how changes in caseload affect courtroom use. The GAO report notes that the Center's study "... showed no correlation between the number of weighted and un-weighted cases filed in a courthouse and the amount of time courtrooms are in use" (page 36). The study did, however, show a statistically significant correlation between pending caseloads and courtroom use, suggesting that cases and caseloads are important elements of a model. (See the continuation of the Executive Summary table on page 4 of the Center's report.)*

See comment 30.

See comment 31.

See comment 32.

Mr. Mark L. Goldstein  
Page 11

See comment 33.

- *The draft report notes that the model allowed for "...user input of the number and types of judges and courtrooms," (page 56) so it seems that both judges and courtrooms were identified as resources in the model. But it is not clear how the coordination of judge and courtroom availability was handled. In particular the report mentions that the model was "...based on scheduled courtroom availability on weekdays from 8 a.m. to 6 p.m." (page 56), but it does not mention what schedules were used for judges. It also doesn't mention if those hours of operation are typical for the federal courthouses they studied or what the results would be if a typical operating schedule of less than 10 hours per day were assumed (e.g., if 8 hours per day were used).*

See comment 34.

- *The draft report does not provide details on what processing statistics were gathered during the simulation runs and only describes the output measures of the simulation broadly ("...the output states whether the utilization of the courtrooms does not exceed the availability of the courtrooms in the long run." (page 56)). It is unclear whether this means that all scheduled events were processed each day as expected, or if it implies that events were sometimes "bumped" from the day they were scheduled, but over the course of a week or a month all events were eventually processed. Whether events are processed on the same day as scheduled or over some longer period is an important distinction decision makers would want to take into account when determining the impact of changing the system.*

See comment 35.

- *The draft report seems to imply that simulation runs were made for different courthouse configurations and that these runs resulted in different outcomes ("When using the model to determine the level of sharing possible at each courthouse..." (page 56)), but it provides no specific information about what those outcomes were. The report also recommends a single sharing configuration for each type of judge – e.g., 3 district judges to 2 district courtrooms – suggesting that level was sufficient in every modeled situation. The report does not, however, provide details that support a recommendation that a single ratio can apply in districts of all sizes.*

See comment 36.

- *The draft report states that "The goal of the model was to determine how many courtrooms are required for courtroom utilization rates similar to that recorded by FJC." (page 56) The level of utilization it seems to be referring to is the average use of a courtroom per day based on actual use and unused scheduled time combined (e.g., 4.1 hours for courtrooms assigned to individual active district judges (page 35)) reported by the Center in our report on Courtroom Use. The average time per courtroom is not the only level of courtroom use that was reported for the Center's study, however. In particular, courtrooms in the upper quartile of use reported 6.6 hours per day on average. (See the Executive Summary table on page 3 of the Center's report on courtroom use.) The draft report does not appear to take into account the impact of a 3-to-2 courtroom sharing ratio in situations where use is different than the average level of use.*

See comment 37.

Mr. Mark L. Goldstein  
Page 12

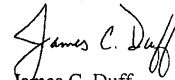
- *The draft report describes GAO's efforts, with the assistance of the National Academy of Sciences, to assemble a panel of judicial experts to discuss the challenges to courtroom sharing (pages 40- 41). However, it does not appear that the expert panel had an opportunity to review the GAO's model assumptions, decisions about entities and resources, decisions about the processing statistics that should be collected and reported, and so on. In other words, it does not appear that the expert panel had an on-going role in development of the model.*

Conclusion

The Judiciary has already made great strides to reduce construction and rent costs. We understand that we must use limited resources wisely. The Judiciary and GSA will continue to work collaboratively as we plan new court facilities with an emphasis on cost and function. We will continue to look for ways to improve our planning methodologies. We welcome constructive and feasible recommendations from the GAO and will implement them as we have in the past. Also, the Judiciary will continue to examine seriously courtroom needs based on a thorough and considered analysis of data and its potential impact on the administration of justice and the Judiciary's responsibility to provide an impartial forum in which criminal prosecutions and civil cases can be resolved in a just, speedy, and inexpensive manner.

GAO should consider carefully the Judiciary's comments (including those of Chief Judge Preska and the Federal Judicial Center) as well as those to be provided by the General Services Administration, to make substantial, realistic, and informed modifications to the report.

Sincerely,



James C. Duff  
Director

Enclosure

**Appendix III: Comments from the Federal  
Judiciary**

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK  
500 PEARL STREET  
NEW YORK, NEW YORK 10007-1312

LORETTA A. PRESKA  
CHIEF JUDGE

212-805-0240  
FAX 805-7941

June 1, 2010

Mr. Mark L. Goldstein  
Director, Physical Infrastructure Issues  
U.S. Government Accountability Office  
441 G Street, N.W.  
Washington, DC 20548

Re: Federal Courthouse Construction Draft

Dear Mr. Goldstein:

Please accept this as a formal response to the draft report on Federal Courthouse Construction (GAO-10-417) (the "Draft"). I request that this letter be published in the final report. I participated in both the Government Accountability Office ("GAO") visit to my courthouse and the GAO/National Academy of Science panel discussion of September 14 on courtroom sharing ("Panel").

The Draft is disappointing in that it mis-characterizes, over-simplifies, and omits important parts of the discussions that took place at the Panel and at the meeting at the Moynihan Courthouse with the GAO and members of the Third Branch. That the Draft relies on those inaccuracies in reaching its conclusions is, I suggest, reason to reject those conclusions.

Panel of Experts

As noted above, I participated in the "panel" of experts held in Washington on September 14, 2009. I understand that the judiciary panelists were selected as experts because of our practical experience with courtroom sharing.

The Draft states as facts and relies on matters that, at least in this district, are demonstrably incorrect. The Draft states at page 42 that the median trial lasts one or two days. Using our district's jury statistics for the six-month period from November, 2009 to April, 2010, the median civil trial lasted four days, and the median criminal trial lasted seven days. The average civil trial lasted almost five-and-a-half days, and the average criminal trial lasted eight days. Indeed, trials in our district often last for weeks or months. Statistics aside, in my seventeen years experience as a trial judge, it takes a total of more than a full day to select a jury,

See comment 38.

See comment 39.

**Appendix III: Comments from the Federal Judiciary**

sum up and charge in the most simple criminal or civil case. Thus, the numbers relied on in the Draft allow no time at all for the taking of evidence in single-day jury cases and less than a day for the taking evidence in two-day jury cases. For both reasons, these supposed statistics about median trial length are demonstrably incorrect and thus provide adequate grounds for rejecting the Draft.

See comment 40.

Even if these statistics were correct, the Draft oversimplifies the facts by implying that trials are the only use for courtrooms. It ignores conferences, oral arguments, evidentiary hearings, pleas and sentencings. It is beyond peradventure that all these non-trial activities, conducted in the courtroom, are necessary to the disposition of any case. The incorrect implication that these activities are not conducted in the courtroom infects the entire analysis of the Draft.

See comment 41.

The Draft oversimplifies the disservice to the public of rescheduling court proceedings by saying only that it costs the public time and money (Draft at 41). While that is correct as far as it goes, it ignores the severe difficulty, discussed at the Panel, that rescheduling presents to our pro se litigants. Those litigants generally are not easily reachable for notification of the rescheduling and often must plan ahead to take a day off from work to attend court proceedings. Rescheduling on the short notice apparently contemplated by the “modeling techniques” employed by the Draft would likely result in litigants’ not receiving timely notice and thus being required to take an additional day off. Unexpected changes in location of a proceeding, even if on the same day at the same time, would certainly result in pro se litigants’ missing proceedings, causing delay of the case and increasing the amount of pay lost to litigants due to court appearances. On the criminal side, the Draft also omits the damage (discussed at the Panel) that such rescheduling would cause to transparency of criminal proceedings when a defendant’s family and friends are prevented from witnessing a trial, plea or sentencing.

See comment 42.

The supposed mitigating effect of “coordination . . . as long as people remain flexible and the lines of communication remain open” (Draft at 41) oversimplifies facts and ignores discussion at the Panel. It also reflects a lack of understanding (or, in light of the specific discussion at the Panel of these issues, a refusal to acknowledge) the realities of what district judges do. As discussed at the Panel, a great deal of time is expended in district judges’ chambers attending to scheduling and rescheduling of proceedings. Indeed, that activity consumes much of the ordinary courtroom deputy’s time—even without courtroom sharing. What is unmentioned in the Draft, however, is the unanimous view of the judges present at the Panel and at the Moynihan Courthouse meeting that the kind of scheduling coordination that would be necessary for substantial courtroom sharing would be entirely unworkable and would result in serious disservice to the judicial process and to the public we serve. While an easy palliative to invoke, the call for increased coordination (and the observation at page 41 that “court staff [in sharing arrangements] must work harder than in non-sharing arrangements to coordinate with judges and all involved parties to ensure that everyone is in the correct courtroom at the correct time”) fails (or refuses) to acknowledge the opinion of the experienced judges in the trenches that it is easily said but impossible to achieve on a long term basis. It is also remarkable that factual information provided by a Clerk of Court on the Panel about the negative effect of courtroom sharing on case disposition times has been described in the Draft (at page 41) as an efficiency improvement. The Draft cites only those “facts” that support the

desired outcome and ignores the impossibility imposed by reality and brought to the drafters' attention by the judges who do this every day.

The supposed mitigating effect of technology discussed at page 43 misstates what was said at the Panel and relates "facts" that show a serious lack of understanding of what goes on in a trial in a district court. At the Panel, the participants discussed greater use of videoconferencing in non-jury matters as a way to save courthouse construction costs. For example, it was discussed that some courts have eliminated the need for an additional place of holding bankruptcy court by use of videoconferencing from a normal room in a remote location to the bankruptcy courthouse. The Panel mentioned, as does the Draft,<sup>1</sup> the cost savings associated with conferences, including Rule 16 conferences and other pretrial conferences with incarcerated parties (although these savings are in time and travel costs because these conferences also take place from the courtroom). So far, so good. The unremarkable observation in the Draft that "increased technology saves money; it expedites general processing because documents can be submitted to the court electronically" (at page 43) has nothing whatsoever to do with courtroom sharing. The final observation in the Draft on this topic (at page 43) is "Another judge said that if less money were spent on space, more could be spent on technological upgrades to increase flexibility and increase the ability to share space among judges." First, I do not recall hearing that comment, but, of course, it could have been made at a session I did not attend. Second, the comment is a meaningless non-sequitur. Third, and most importantly, by implying that technology will decrease courtroom usage, the Draft is seriously misleading. The Draft fails to mention that Rule 43 of the Rules of Criminal Procedure specifically requires that the defendant be present in the courtroom at the initial appearance, initial arraignment and every trial day. Indeed, in the Second Circuit, a plea and a sentencing NOT held in a courtroom (but in the adjacent robing room) were reversed. See United States v. Alcantara, 396 F.3d 189 (2d Cir. 2005). Thus, the technology section of the Draft is at least irrelevant and at worst misleading.

#### Discussion at the Moynihan Courthouse

The Draft states categorically that "judges with experience in sharing courtrooms said that they overcame the challenges when necessary and trials were never postponed because of sharing." I suggest that the authors are cherry-picking the facts here. For example, the reason my court, the Southern District of New York, was chosen for a site visit is that our court is currently engaged in limited courtroom sharing (about ten judges total) because of the on-going renovation of our second courthouse at Foley Square, the Thurgood Marshall Courthouse, with the resulting scarcity of courtrooms. Both at the Panel and during the interview GAO personnel conducted in New York with judges who are sharing (at which, as noted above, I was present), it was stated that this limited sharing is only workable because of collegiality, that is, the sharing pairs were carefully chosen for compatibility of workload and personality. While the Draft does

<sup>1</sup> On this topic, the Draft states:

"Technology makes certain conferences easier through the use of teleconferences and videoconferencing. One judge said that videoconferencing with a defendant who was being held in prison hundreds of miles away saved potentially thousands of dollars."  
(Draft at 43).

See comment 43.



See comment 44.

mention the word “collegiality,” stating at page 41 that “[j]udges that share courtrooms in one district also said that coordination is easier when there is a great deal of collegiality among judges,” it omits the point made at the discussion in the Moynihan Courthouse. Perhaps the Draft is making reference to remarks made in some other district, but, even if it is, it fails to convey accurately the statements of judges in our district who actually do share courtrooms and the statement that I made at the Panel. The careful pairing of judges on which the temporary sharing in the Moynihan Courthouse is proceeding cannot be replicated in the widespread sharing urged in the Draft.

The Draft discusses alternating chambers with courtroom floors (Draft at 41–42) stating that such design “may be more conducive to collegiality and sharing.” First, collegiality is not the issue here. Second, courtroom floors and chambers floors DO alternate in the Moynihan courthouse, and that has no effect on our view that courtroom sharing to the extent contemplated in the Draft is not a viable option among active judges and should be subject to local exemption for senior judges. While some designs might, in fact, be more conducive to courtroom sharing without unduly increasing security risks (for example, perimeter chambers around several courtrooms of varying sizes), alternating courtroom and chambers floors is not one of them. The observation that “this design breaks the apparent association of chambers with specific courtrooms without significantly increasing the distance from chambers to courtrooms” is simply irrelevant.

The Model

In support of its conclusion that “GAO’s courtroom sharing model shows that there is sufficient unscheduled time for 3 district judges to share two courtrooms and 3 senior judges to share 1 courtroom” (Draft at 1), the Draft relies on a computer simulation model. In describing the creation of that Model, the Draft states:

To create a simulation model, we contracted for the services of a firm with expertise in discrete events simulations modeling. This consulting engineering services and technology firm uses advanced computer modeling and visualization and other techniques to maximize throughput, improve system flow, and reduce capital and operating expenses. Working with the contractor, we discussed assumptions made for the inputs of the model and verified the output with in-house data experts. We designed this sharing model in conjunction with a specialist in discrete event simulation and the company that designed the simulation software to ensure that the model conformed to generally accepted simulation modeling standards and was reasonable for the federal court system. The model was also verified with the creator of the software to ensure proper use and model specification. Simulation is widely used in modeling any system where there is competition for scarce resources. The goal of the model was to determine how many courtrooms are required for courtroom utilization rates similar to that recorded by FJC. This determination is based on data for all courtroom use time collected by FJC, including time when the courtroom was scheduled to be used but the event was cancelled within 1 week of the scheduled date.

(Draft at 56.)

See comment 45.

This description is, I suggest, merely gibberish and fails to inform the reader about precisely what assumptions were made and the method employed. To the extent that any assumptions are stated, the Draft states that it is “based on scheduled courtroom availability on weekdays from 8 a.m. to 6 p.m.” (Draft at 56). First, these hours of operation are wholly unrealistic. Assuming that jurors would not be required to serve from 8 a.m. to 6 p.m., but only during a portion of that time, it is unrealistic to expect any juror to appear ready to start a trial by 8 a.m. or to serve until 6 p.m. Many jurors have children who need to be attended to and cannot appear in Court by 8 a.m. or sit until 6 p.m.<sup>2</sup>

See comment 46.

Assuming that the Model contemplates jury trials running in shifts, for example, 8 a.m. to 1 p.m. and 1 p.m. to 6 p.m., such shifts would close to double the time it takes to try any case, thus vastly increasing the cost to the litigants. There is already public outcry over the cost of litigation,<sup>3</sup> and doubling the cost of trial would be a severe injustice to the public we serve.

See comment 47.

Finally, from the scant description of the Model presented in the Draft and from the conversation at the Panel, I infer that the Model assumes all court proceedings are the same in kind and manner. Such treatment is directly contrary to fact and, more importantly for these purposes, contrary to the specific discussion at the Panel. Participants of the Panel specifically stated that courtroom proceedings are not interchangeable, especially trials and other evidentiary proceedings. A preliminary injunction hearing, for example, is by definition of great urgency and ordinarily must proceed from day to day until complete. Also, considering all trials as portable—subject to movement from courtroom to courtroom—is inaccurate. Even the Draft acknowledges (at page 35) that some courtroom use involves attorney set-up and break-down time (although the Draft incorrectly considered this as an “[e]vent[] not related to case proceedings”). These days, almost all trials involve the presentation of some evidence by electronic means, and lawyers (more likely computer contractors) spend time in advance of trial setting up their equipment for presentation of evidence electronically and time after trial taking it down. Most trials also involve boxes of files and other materials that are stored in the courtroom or in the hall outside the courtroom for ready access by counsel throughout the trial. Counsel’s need for electronic equipment for presentation of evidence and for access to hard copy materials cannot be accommodated when the courtroom changes during a trial.

<sup>2</sup> In New York State Courts, jurors generally commence service between 8:30 and 9:00 a.m. and are generally dismissed between 4:00 and 4:30 p.m. The State Courts only draw jurors from a single county, however, while the SDNY draws jurors from eight counties, including from the cities of Poughkeepsie (85 miles) and Monticello (94 miles).

<sup>3</sup> See INSTITUTE FOR THE ADVANCEMENT OF THE AMERICAN LEGAL SYSTEM, CIVIL LITIGATION SURVEY OF CHIEF LEGAL OFFICERS AND GENERAL COUNSEL BELONGING TO THE ASSOCIATION OF CORPORATE COUNSEL 17 (2010), available at <http://www.du.edu/legalinstitute/form-chieflegal.html> (“[A]n astonishing 97% of respondents responded that the system is ‘too expensive,’ with 78% expressing strong agreement.”).

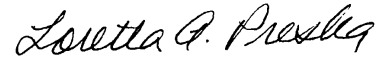
See comment 48.

Conclusion

The authors of the Draft have not reported accurately the statements of even those they recognize as experts—the members of the Panel and the participants in the site visit to the Moynihan Courthouse. To the extent that the assumptions and techniques used in the modeling were disclosed, they are counter-factual, according to the same experts. Thus, the Draft is without foundation and, I suggest, should be rejected.

Moreover, the Draft relies on only one metric—efficiency. While efficiency is a fair factor to be considered, it is only one. Less susceptible to quantitative measurement, however, is a more important consideration—delivery of justice to the citizens of this country. I suggest that doing so in a user-friendly manner is inherently inefficient and thus that efficiency is only one of many factors to be considered.

Very truly yours,



Loretta A. Preska

---

The following are GAO's comments on the Federal Judiciary letters dated June 1, 2010. stated

---

## GAO Comments

1. In commenting on our draft report, the Administrative Office of the U.S. Courts (AOUSC) stated that it has concerns about the accuracy of key data, the presentation of information, and the soundness of the methodologies used. We drew the key facts in our report—the size of courthouses, the number of judges estimated, and the number of current judges—from judiciary and GSA documents. In this report and all of its Products , GAO adheres to generally accepted government auditing standards, which ensure the accuracy and relevance of the facts within this report. These standards include a layered approach to fact validation that includes supervisory review of all work papers, independent verification of the facts within the report, and the judiciary's review of the facts prior to the draft report's release for agency comment. For example, our conclusion that the 33 courthouses completed since 2000 contain 3.56 million extra square feet was based on our analysis of the original documents related to all 33 courthouses. The data supporting our analysis were traced and verified, independently checked by analysts who were not part of the engagement team, and reviewed and approved by experts in the relevant methodologies. As a result of this strong fact checking and review process, we are confident in our presentation of the facts in this report. We will address AOUSC's additional points in the pages that follow. However, we did not refer to this extra space as "wasted" in our draft report as AOUSC indicates in its letter.
2. AOUSC indicated that it was troubled by our release of the report's preliminary findings at a May 25, 2010, hearing and in a related media report before the judiciary and the General Services Administration (GSA) could comment. We were asked to testify on our preliminary findings by the same committee that requested the report, which is well within the committee's purview under GAO's Congressional Protocols. We made it clear that these findings were preliminary because AOUSC and GSA had not yet had an opportunity to comment on them. We provided the draft report to the judiciary and GSA on April 29—almost a month before the hearing—and we notified them of the hearing and invited the judiciary and GSA to provide comments before the hearing. Both the judiciary and GSA declined. Responding to press inquiries following a hearing is also a standard part of our work, and in doing so we stated that our findings were preliminary at that time. We do not have control over what media outlets choose to report.

3. AOUSC noted that Chief District Judge Loretta Preska indicated in an attached letter that GAO misleadingly characterized her experiences and the statements of the expert panel in which she participated. We visited numerous courthouses in addition to the judge's, and Judge Preska was present only for the 1-day portion of our panel, not the subsequent interviews with experts who could not attend the 1-day panel. As stated in the report, some experts were unable to attend the 1-day session, and we interviewed them separately.
4. AOUSC stated that a senior GAO team member revealed his bias toward courtroom sharing with a group of judiciary officials (which was during the 1-day portion of the expert panel). This is not the case. In framing the discussion surrounding the issue of courtroom sharing at the 1-day panel discussion, the GAO team member correctly cited the Judicial Conference's new policy requiring courtroom sharing in future courthouses, not his own views on the subject.
5. AOUSC said that at the time the 33 courthouses we reviewed were planned, the judiciary's policy was for judges not to share courtrooms and that it would be more appropriate for us to apply that policy. Our congressional requesters specifically asked that we consider how a courtroom sharing policy could have changed the amount of space needed in these courthouses. However, our draft and final reports indicate that the judiciary's policy at the time was largely to provide one courtroom per judge.
6. AOUSC suggested that our report describes the extra space we identified as *wasted*—a term that does not appear in either the draft or the final report. We also indicated in the report that we did not evaluate how much of the extra space was unused. We used judiciary-generated data on courtroom scheduling and use to determine how many courtrooms the judiciary actually needed in order to illustrate how courthouses could support the same number of judges with fewer courtrooms.
7. AOUSC indicated that some extra courtrooms exist because the judiciary did not receive all the new judge authorizations it requested. We recognize, and our draft and final reports indicate, that some of the extra courtrooms reflect the historic trend that the judiciary has not received all the additional authorized judges it has requested.
8. According to AOUSC, the draft report does not indicate how many courtrooms are in the courthouses we reviewed. This is correct. Our

report instead focuses on the number of square feet in the courthouses, which includes all space, not just courtroom space.

9. AOUSC drew conclusions related to the accuracy of its judge estimates that are very different from ours in several key ways and may partly illustrate why the judiciary consistently overestimates its need for judges.
  - The judiciary used “soon-to-be vacant authorized positions” in its analysis but provides no criteria for what constitutes such a position. However, the judiciary’s previous estimates showed that all of the 28 courthouses that have met or exceeded their 10-year planning window should now be fully occupied.
  - The judiciary also included “additional pending judgeships” in its count, which assumes immediate congressional approval of all requested judgeships. Moreover, the judiciary inappropriately made assumptions about where the new judgeships will be located. However, Congress has not passed comprehensive judgeship legislation in 20 years, and new judges are authorized for a district, not for a specific courthouse.
  - The judiciary also implied that having a vacancy is equivalent to having an authorized judgeship, which is not the case. The nomination and confirmation process, as the judiciary agrees, can be lengthy.
10. AOUSC questioned the development of our courtroom sharing model and what it said was our refusal to release critical elements for review. Early in the engagement, we spoke with officials from the Federal Judicial Center (FJC) about how FJC’s data could be used to develop a courtroom sharing model. Contrary to the judiciary’s contention, we have not withheld any information critical to understanding or replicating the model. We carefully documented the data and parameters throughout our report so that our model could be replicated by anyone with access to the judiciary’s data and familiarity with discrete event simulation modeling techniques. We confirmed this was the case with simulation model experts. We do not recommend that the judiciary use our model, but, instead, institute courtroom sharing policies that more fully reflect the actual scheduling and use of district courtrooms. Our model provides one option for how to accomplish this. In doing so, our model incorporates the judiciary’s courtroom sharing and usage data, and the model’s parameters are based on detailed discussions with judges, other judicial experts

whose views we obtained through a 1-day panel or additional interviews, and visits to districts with experience in sharing courtrooms. To date, the judiciary has not applied computer modeling techniques for courtroom sharing in developing its sharing policies, even though it gathered the data on courtroom scheduling with that purpose in mind.

11. AOUSC questioned our characterization of the expert panel convened by the National Academy of Sciences and their contribution to the courtroom sharing model. As stated earlier, the panel consisted of a 1-day session with experts and individual interviews with the remaining experts who could not attend. We used an official transcript of the statements from the 1-day panel to support the facts in our report, and none of the experts at the 1-day session participated in the individual interviews. As a result, none of the individual experts can draw conclusions about our overall characterization of all panelists' views.
12. AOUSC questioned the feasibility of our courtroom sharing model based on the level of use of courtrooms in the top quartile of use. As we state in the report, we did not analyze the usage data by courtroom, but rather by courthouse, since courtrooms are used to varying degrees. In that way, our model is based on the real use of courtrooms in the courthouses where they are located and not on an artificial collection of the most-used individual courtrooms nationwide. In addition, the judiciary data incorporated variations across the country and included some sensitivity analysis as noted in our report.
13. AOUSC noted that it conducted its own analysis of the numbers of courtrooms and judges in the 33 courthouses completed since 2000. The judiciary's analysis was very different from ours and highlighted some of the reasons the judiciary may overestimate the number of judges it will have in a courthouse after 10 years.
  - The judiciary counts judgeships that have not yet been authorized by Congress. We chose to count only the judgeships that are currently authorized because the judiciary has historically not received many of the judgeships it has requested and new judges are authorized for districts, which include multiple locations, not for individual courthouses.
  - The judiciary appears to count vacancies that are not linked to a specific location. We chose to count only the vacancies that the judiciary's data indicated were assigned to a specific courthouse because the other vacancies are districtwide, making it

inappropriate to assume which specific courthouse a new judge would be assigned to once the judge was appointed and confirmed.

14. See comment 5.

15. AOUSC produced a table showing that, according to its projections, the six case study courthouses that have met or exceeded their 10-year planning period will be fully utilized by 2016. AOUSC's analysis is flawed in several important ways.

- The judiciary extended its own 10-year planning period to 2016—a date that is 16 to 25 years after the planning of each courthouse. The judiciary had projected, as part of its justification for a new courthouse, that each of these courthouses would already be fully utilized. Moving the deadline out to 2016 more than doubles the number of years that the judiciary indicated it needed to fill some of these courthouses.
- The judiciary counted judgeships that have not yet been authorized by Congress. We chose to count only the judgeships that are currently authorized because the judiciary has historically not received many of the judgeships it has requested and new judges are authorized for districts, which include multiple locations, not for individual courthouses.
- The judiciary appeared to count vacancies that are not linked to a specific location. We chose to count only the vacancies that the judiciary's data indicated were assigned to a specific building. The judiciary's data show that several vacancies are districtwide, making it inappropriate to assume which specific courthouse a new judge would be assigned to once the judge was appointed and confirmed.
- The judiciary assumed that all judges would take senior status as soon as they were eligible, that no current senior judges would leave the bench, and that all vacancies would be immediately filled by newly appointed and confirmed judges. These assumptions are unlikely. As the judiciary has told us, many judges do not take senior status immediately, others leave the bench, and the nomination and confirmation processes can take years.

The judiciary's methodological decisions led to counting the maximum number of judges a courthouse could have by a certain date, not the number it is likely to have by that date. As a result, the judiciary has



overestimated by 26 percent the number of judges it should have in the courthouses completed since 2000.

16. AOUSC noted that it suggested changing the number of judges the District of Columbia projected from 14 to 7 when it was planning what would become the Bryant Courthouse Annex. However, we did not make that change because the planning documents used to justify the new building clearly indicate that the number of senior judges used to develop the 10-year estimate for that location was 14, and the judiciary did not provide any documentary evidence to support its contention that the number was actually 7.
17. According to AOUSC, we incorrectly identified the number of pending district judgeships in the Eastern District of California as 4 when, AOUSC says, the actual number is 5. AOUSC is incorrect. The 2009 Federal Judgeship Bill includes language that would, if passed as currently written, increase the number of authorized judgeships in the Eastern District of California by 4. The other judgeship, if approved, would be temporary and would not increase the number of authorized permanent judgeships in the district. We chose not to count temporary judgeships as permanent, in part because the judges in the Eastern District of California told us during our visit that the last temporary judgeship in the district was lost because it was not converted into a permanent judgeship through an act of Congress.
18. AOUSC noted that judges will eventually fill the vacancies within the courthouses we identified. This may be the case, but the judiciary has established the 10-year planning period as a reasonable time frame for estimating its new courthouse needs. Many of the courthouses in our study are well past the 10-year period and have still not met their 10-year estimate for judges. For example, planning for the Eagleton U.S. Courthouse in St. Louis, Missouri, began 16 years ago, but the courthouse remains 9 authorized judgeships short of the judiciary's 10-year estimate.
19. AOUSC stated that it expected Congress to approve new judgeships on a regular basis because it had done so in previous years. Our report acknowledges the challenges associated with estimating judgeships and suggests that the judiciary incorporate some of the realities of the current process into its estimates. One of those realities is that Congress has not passed comprehensive judgeship legislation for 20 years. The judiciary has, instead, planned for the maximum number of possible judges after 10 years, which has led it to overestimate the

number of judges by 26 percent and to construct far more courthouse space than needed.

20. AOUSC stated that we incorrectly characterize space for visiting judges as extra. Our decision to refer to this space as extra is based on the judiciary's policy, which is to exclude estimates of space needs for visiting judges in courthouse planning.
21. AOUSC stated that it is prudent to plan for unauthorized judgeships when caseloads support the need for a new judge. Our conclusion is that the judiciary can improve its judge estimation process for three reasons stated in our report: First, the judiciary's caseload projections have not always been correct. Second, Congress has not passed comprehensive judgeship legislation in the last 20 years and has recently questioned the reliability of weighted caseload as a workload indicator. Third, in measuring the effectiveness of the judiciary's space planning, we applied the judiciary's criteria, which includes the number of authorized judgeships and senior judges that will be located in a facility after 10 years.
22. According to AOUSC, our report provides practically no information about the assumptions we used to produce the results of our sharing scenarios. However, the report provides information about the assumptions used to create the model in sufficient detail to replicate the model. Both a senior methodologist and the contractor hired to develop the model stated that the model could be replicated by an expert in discrete event simulation with the information included in the report.
  - As noted in the report, we used data that were nationally representative of courtroom use and scheduling, which the Federal Judicial Center (FJC) collected for a discrete event simulation model. When creating the simulation model, we used all data capturing the time a courtroom was actually used, including time for education, training, set-up and take-down, and maintenance, as well as for all case proceedings. Above and beyond modeling all the time the courtrooms were reported to be used, we also incorporated all unused scheduled time. Thus, if an event was scheduled to take place over 4 days, but lasted only 2 days, the remaining unused scheduled time was still included in the model as time a courtroom was not available for other events. This was done in recognition of the experts' concerns about the uncertainty involved in the judiciary's scheduling.

- As noted in the report, when modeling, we allowed the courtroom to be in use for 10 hours a day. We do not presume that people could or should work 10 hours a day, but rather that the courtroom is available for a variety of uses between 8:00 a.m. and 6:00 p.m. We recognize that judges hold events at various times throughout the day to best serve the interests of parties and the public, and assuming that courtrooms are available for 10 hours a day allows for activities in addition to judicial proceedings. For example, materials may be brought into a courtroom before trial, staff training and educational tours may take place, and maintenance may be performed. We did not cut the time in which a courtroom was in use for these types of activities and, therefore, it would have been unrealistic to limit the time a courtroom can be used to less than the 10 hours.
- For modeling purposes, we also developed two different sharing scenarios. In the first scenario, dedicated sharing, specific judges are assigned to courtrooms. In applying the model under dedicated sharing, we considered several base levels of sharing that work in all instances, according to the data. Please see table 5 in the report for a list of these results. In the second scenario, centralized sharing, all courtrooms are open to all judges, and significant efficiencies are gained. We have included the following tables (tables 8-11) to illustrate these efficiencies. The tables were prepared using our courthouse sharing model at the request of the House Transportation and Infrastructure Committee Subcommittee on Economic Development, Public Buildings, and Emergency Management following a hearing on May 25, 2010. They show the efficiencies gained through centralized sharing based on increases in the numbers of district judges, senior judges, and magistrate judges, respectively. Table 11 provides the results of our model for entire hypothetical courthouses, based on the nationwide ratios of district judges to senior and magistrate judges, when all judges have centralized access to all courtrooms. The tables illustrate the potential of courtroom sharing to reduce the number of courtrooms needed. It is up to the judiciary to determine how much sharing is possible as indicated in our recommendation.

**Table 8: Courtroom Sharing for District Judges Based on Centralized Sharing**

Number of district judges	Number of district courtrooms needed	Courtrooms per judge	Per-room utility <sup>a</sup>
3	2	0.67	89%
4	3	0.75	78
5	4	0.80	74
6	4	0.67	88
7	5	0.71	84
8	5	0.63	94
9	6	0.67	89
10	7	0.70	85
11	7	0.64	92
12	8	0.67	88
13	8	0.62	95
14	9	0.64	91
15	10	0.67	89
16	10	0.63	93
17	11	0.65	91
18	12	0.67	89
19	12	0.63	93
20	13	0.65	90

Source: GAO.

<sup>a</sup>100 percent is full use.

**Table 9: Courtroom Sharing for Senior District Judges Based on Centralized Sharing**

Number of senior judges	Number of senior courtrooms needed	Courtrooms per judge	Per-room utility <sup>a</sup>
3	1	0.33	81%
4	2	0.50	52
5	2	0.40	67
6	2	0.33	81
7	2	0.29	94
8	3	0.38	72
9	3	0.33	81
10	3	0.30	91
11	4	0.36	75
12	4	0.33	82
13	4	0.31	86
14	4	0.29	95
15	5	0.33	81
16	5	0.31	86
17	5	0.29	91
18	6	0.33	80
19	6	0.32	85
20	6	0.30	90

Source: GAO.

<sup>a</sup>100 percent is full use.

**Table 10: Courtroom Sharing for Magistrate Judges Based on Centralized Sharing**

Number of magistrate judges	Number of magistrate courtrooms needed	Courtrooms per judge	Per-room utility <sup>a</sup>
2	1	0.50	75%
3	2	0.67	55
4	2	0.50	76
5	2	0.40	92
6	3	0.50	75
7	3	0.43	86
8	4	0.50	75
9	4	0.44	85
10	4	0.40	93
11	5	0.45	83
12	5	0.42	88
13	6	0.46	79
14	6	0.43	86
15	6	0.40	92
16	7	0.44	85
17	7	0.41	89
18	7	0.39	95
18	8	0.44	83
19	8	0.42	88
20	8	0.40	93

Source: GAO.

<sup>a</sup>100 percent is full use.

**Table 11: Courtroom Sharing for Courthouses Using Nationwide Ratio of District Judges to Senior and Magistrate Judges Based on Centralized Sharing**

District judges	Senior judges	Magistrate judges	Total judges	Number of district courtrooms needed	Courtrooms per judge	Per-room utility <sup>a</sup>
2	1	1	4	2	0.50	92%
3	1	2	6	3	0.50	93
4	2	3	9	5	0.56	80
5	2	4	11	6	0.55	82
6	3	4	13	7	0.54	83
7	3	5	15	8	0.53	84
8	4	6	18	9	0.50	88
9	4	7	20	10	0.50	89
10	5	7	22	11	0.50	89
11	5	8	24	12	0.50	90
12	6	9	27	13	0.48	92
13	6	10	29	14	0.48	92
14	7	10	31	15	0.48	92
15	7	11	33	16	0.48	92
16	8	12	36	17	0.47	94
17	8	13	38	18	0.47	95
18	9	13	40	19	0.48	94
19	9	14	42	20	0.48	94
20	10	15	45	21	0.47	95

Source: GAO.

<sup>a</sup>100 percent is full use.

- For the outcomes we reported, we also modeled centralized sharing for magistrate judges separately because expert panel members stated that magistrate courtrooms differ in size from district courtrooms and would not be appropriate for district judges to use.
- As we stated in the report, our sharing model resulted in approximately 18 to 22 percent of unused courtroom time. Our levels of sharing resulted in events being completed as scheduled with extra time to spare.

23. AOUSC highlighted Judge Preska's contention that the draft report misrepresented panelists' views and included a partial quote from the draft report. However, the whole quote was in agreement with Judge Preska's view that the panelist was indicating it took longer to resolve cases when judges were sharing courtrooms. We revised the report to make this clearer.
24. We addressed Judge Preska's statements about our characterization of the experts' views in our comments on her letter that is attached to AOUSC's letter.
25. AOUSC indicated that an effective courtroom sharing model requires an understanding of the litigation process. We incorporated these elements into our model to the fullest extent possible. However, we recognize that there are different approaches to computer modeling of courtroom use and recommend that the courts expand nationwide courtroom sharing policies to more fully reflect the actual and scheduled use of courtrooms as demonstrated with the comprehensive data collected by FJC.
26. See comment 22.
27. We clarified the report to indicate that there are different definitions of what constitutes a trial; however, the median length of trials identified in our report was taken from the *2008 Annual Report of the Director: Judicial Business of the United States Courts*, published by AOUSC. Furthermore, this number was not inputted into the model; the percentage of time spent on trials incorporated into the model was taken directly from the specific courtroom scheduling and use data gathered by FJC.
28. AOUSC cited a 2000 Ernst & Young report in describing the complexities of courtroom sharing. In a 2001 report,<sup>1</sup> we assessed the sufficiency of Ernst & Young's data and analysis in determining the feasibility of courtroom sharing and found that Ernst & Young did not gather sufficient data or conduct the needed analysis to resolve the courtroom sharing issue.
29. According to AOUSC, it is difficult to model judicial processes because of its inherent variability and uncertain nature. Our model addresses

---

<sup>1</sup>GAO, Courthouse Construction: Sufficient Data and Analysis Would Help Resolve the Courtroom-Sharing Issue, [GAO-01-70](#) (Washington, D.C.: Dec. 14, 2000).



the uncertainty of courtroom scheduling by accounting for unused scheduled time (see bullet 1, comment 22). We also note in our report that, according to our model, the average time that remained unscheduled for the mix of judges from the 27 courthouses was between 18 and 22 percent.

30. AOUSC questioned why we did not provide the draft report to FJC for comment. We coordinated with FJC beforehand and agreed that we would provide the draft report to our judiciary liaison and that, as part of the judiciary, FJC would obtain a copy of the report and provide comments through the central judiciary liaison, which they did.
31. FJC stated that it is unclear how we differentiated events in our model. This information is not relevant, since we ensure that all events are able to occur as scheduled. Nonetheless, we added the following information to our report. We differentiated events and time in the model by grouping them as case-related events, nonjudge-related events, and unused scheduled time, and we allotted enough time for each of these events to occur without delay (for further assumptions in the model, see comment 22).
32. FJC stated that we did not incorporate caseload data into our model. The data FJC provided to us did not include any additional details about caseload, and FJC removed the identifiers from the data as a condition of providing the data to us, precluding any caseload analysis. However, we did note when the data were correlated and not correlated to different caseload and case-filing measures, as FJC noted.
33. For information on why we assumed a 10-hour work day, see bullet 2 of comment 22.
34. FJC noted that our model output might suggest that some events may get bumped from their scheduled day. This is not the case. Our model allows us to determine the fewest number of courtrooms needed for no backlog in court proceedings.
35. FJC indicated that we provided little information on the outcomes of our model. The dedicated sharing ratios identified in table 5 represent a lowest common denominator that can be calculated for courthouses with any number of judges, and our model results under centralized sharing are identified in table 6 for our case study courthouses. However, we did not recommend the judiciary implement our courtroom sharing model, but expand sharing based on actual

courtroom scheduling and use data. For additional model output for centralized sharing, see the tables in comment 22.

36. FJC stated that we seem to use only average levels of courtroom use in our model. This is not the case. We modeled the actual and scheduled usage levels for all assigned courtrooms. Our statement meant that our model assumes the data provided are representative of the actual demand for courtrooms, which FJC indicated that it tried to accomplish in its data collection.
37. FJC stated that our expert panel did not have an ongoing role in the development of our model. We did develop the model, but the expert panel provided input into the parameters of the model, as appropriate, throughout our engagement.
38. Judge Preska indicated that our report mischaracterizes, oversimplifies, and omits important parts of the discussions that took place during our expert panel and at our visit to the Moynihan U.S. Courthouse. We disagree. Our standards of evidence detailed in generally accepted government auditing standards and outlined in comment 1, ensure that our facts are sound. We visited numerous courthouses, in addition to the judge's, and Judge Preska was present only for the 1-day portion of our panel. As stated in our draft and final reports, some of the invited experts were unable to attend the 1-day session, and we interviewed them separately. Their views and our analysis of all the experts' views were not available to Judge Preska.
39. Judge Preska disagreed with the statistics we used related to the length of trials. We do not dispute that trial frequency and length may differ across districts and Judge Preska's personal experience may differ from other judges. However, we use AOUSC's statistics as cited in the report. See comment 27 for additional information related to this point.
40. Judge Preska stated that our model implies courtrooms are used only for trials. This is incorrect. As noted in both the draft and final versions of the report, all used and unused scheduled time documented by FJC were considered use of a courtroom and included in our model, not just trial time.
41. Judge Preska stated that our model contemplates rescheduling events on short notice. Our model does not reschedule any unused time for events canceled or postponed within a week of the event.

42. Judge Preska stated that our report does not cite the expert panel's unanimity that courtroom sharing was unworkable. We believe that our report does reflect the accurate views of the entire experts' panel. In the report, we note that some judges remain skeptical that sharing could work on a permanent basis. Nonetheless, all judges that we spoke with who had sharing experience stated that a trial had never been delayed because a courtroom was not available. Additionally, as noted in comment 38, Judge Preska was only present for the 1-day portion of our panel. Some experts were unable to attend the 1-day panel session and were interviewed individually. Judge Preska did not participate in these interviews.
43. Judge Preska stated that our discussion of the use of technology in the judicial process demonstrates our lack of understanding of the judicial process. In terms of increased technology, we reported what the expert panel and other judges told us and our report consequently reflects the expert panel's knowledge of the judicial process.
44. Judge Preska stated that designs of courthouses may be more or less conducive to courtroom sharing, but disagreed with the alternating courtroom and chamber floors that we present in the report. We revised the report to include the idea that perimeter chambers around several courtrooms of varying sizes could facilitate courtroom sharing.
45. Judge Preska stated that courtroom availability from 8 a.m. to 6 p.m. is wholly unrealistic. See bullet 2 of comment 22 for our discussion of why we assumed courtrooms would be available for scheduling from 8:00 a.m. to 6:00 p.m.
46. Judge Preska stated that we assume that trials would run in shifts. This is not the case. All that we assume is that the courtroom is available for the 10 hours. According to judges we spoke with early morning and late afternoon hours during trial time are used for set up and take down. Other possible uses for hours judges do not wish to hold case events are ceremonies, education, training, and maintenance. How courts choose to use that time in practice is not addressed in our report.
47. Judge Preska represented our model as treating all court proceedings the same. We gave all scheduled events top urgency and made time for all events because we did not have criteria for prioritizing some areas over others. A different model could establish a priority ranking for events and might allow for even more efficient courtroom use. We recommended that the judiciary expand nationwide courtroom sharing

policies to more fully reflect the actual scheduling and use of district courtrooms.

48. Judge Preska stated that our model relies on only one metric—efficiency—at the expense of the delivery of justice. We understand that providing one courtroom per judge is convenient for scheduling purposes, but we remain confident that our model shows that the efficiency of courtroom use can be improved through sharing without harming the delivery of justice. We designed our courtroom sharing model specifically to ensure more than sufficient court space would be available to deliver justice. For example, not treating courtrooms as available after events have been canceled or postponed greatly reduces the amount of time courtrooms can be scheduled by leaving courtrooms dark much of the time. Also, our model includes all of the time for noncase-related uses, such as tours and other educational events that could be scheduled on weekends and after 6 p.m. In addition, not requiring district judges to share courtrooms with magistrate judges reduces opportunities for efficiencies that could otherwise be achieved (see table 11 in comment 22). That said, we continue to believe that efficiency must enter into the equation of courtroom use. Otherwise, the practices that resulted in the construction of 3.56 million square feet of extra courthouse space at a cost of \$835 million will continue.

---

# Appendix IV: GAO Contact and Staff Acknowledgments

---

## GAO Contact

Mark L. Goldstein (202) 512-2834 or [goldsteinm@gao.gov](mailto:goldsteinm@gao.gov)

---

## Staff Acknowledgments

In addition to the contact named above, Tammy Conquest (Assistant Director), Keith Cunningham, Bess Eisenstadt, Brandon Haller, William Jenkins, Susan Michal-Smith, Steve Rabinowitz, Alwynne Wilbur, Jade Winfree, and Sarah Wood made key contributions to this report.

---

## GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

---

## Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's Web site ([www.gao.gov](http://www.gao.gov)). Each weekday afternoon, GAO posts on its Web site newly released reports, testimony, and correspondence. To have GAO e-mail you a list of newly posted Products, go to [www.gao.gov](http://www.gao.gov) and select "E-mail Updates."

---

## Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's Web site, <http://www.gao.gov/ordering.htm>.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

---

## To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Web site: [www.gao.gov/fraudnet/fraudnet.htm](http://www.gao.gov/fraudnet/fraudnet.htm)

E-mail: [fraudnet@gao.gov](mailto:fraudnet@gao.gov)

Automated answering system: (800) 424-5454 or (202) 512-7470

---

## Congressional Relations

Ralph Dawn, Managing Director, [dawnr@gao.gov](mailto:dawnr@gao.gov), (202) 512-4400  
U.S. Government Accountability Office, 441 G Street NW, Room 7125  
Washington, DC 20548

---

## Public Affairs

Chuck Young, Managing Director, [youngc1@gao.gov](mailto:youngc1@gao.gov), (202) 512-4800  
U.S. Government Accountability Office, 441 G Street NW, Room 7149  
Washington, DC 20548

