
COURT SPACE NEEDS

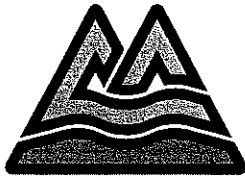
Cost-saving alternatives

Special Report

December 1995



Gary Blackmer
Multnomah County Auditor



GARY BLACKMER
County Auditor

MULTNOMAH COUNTY OREGON

MEMORANDUM

DATE: December 28, 1995

TO: Beverly Stein, Multnomah County Chair
Dan Saltzman, Commissioner, District 1
Gary Hansen, Commissioner, District 2
Tanya Collier, Commissioner, District 3
Sharron Kelley, Commissioner, District 4

SUBJECT: Report on court space needs

I initiated this special report to identify ways to save costs while providing for the space needs of the courts. We analyzed the courts' needs and alternatives, and found convincing evidence that there are many serious problems in the current courthouse, and only one good solution: build another courthouse. Even though we have reduced the price tag by at least \$16 million, a new courthouse is still a very expensive project.

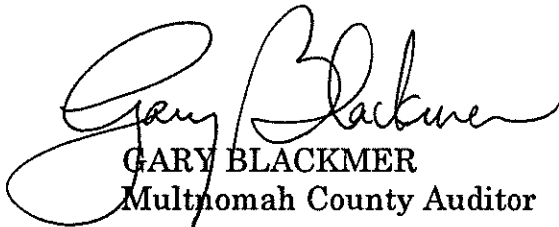
These are times when we must think more about building and repairing:

- ▶ We must meet the needs of a growing population by constructing light rail transit and preserving green spaces.
- ▶ We must renovate or replace many of the public buildings which were constructed during the last population boom 75 years ago, such as our schools, the Central Library, and Portland City Hall.
- ▶ We must strengthen all our buildings to reduce the devastating consequences of severe earthquakes that are looming in our future.
- ▶ We must respond to the citizen demand for a bigger, tougher criminal justice system with more jails and related facilities.

Our courthouse fits in all four categories. Its construction began when Teddy Roosevelt was President and, after more than 80 years of service, we must stop thinking about ways to delay the inevitable. There is much at stake: a large volume of court cases which cannot be delayed or avoided; a public facility that needs immediate attention; and no long-term solution that costs less than \$115 to \$120 million.

This report proposes a building to house the courts, District Attorney's Office, Sheriff's Office, and Department of Community Corrections. We think that 516,000 square feet is sufficient for up to 78 judges in 2040. By comparison, the new Federal Courthouse under construction will be a 508,000 square foot building to hold 21 judges, with a total cost of about \$130 million.

There were only about 250,000 residents of Multnomah County three generations ago when most of our public buildings were constructed. Those citizens committed their tax dollars to these sound investments. But we have spent their endowment of public buildings, and it is time to replace it. The Courthouse, once an asset to the community, has become a liability, and we can no longer fix it, patch it over, or ignore it.



GARY BLACKMER
Multnomah County Auditor

Audit team:

Gary Blackmer
Craig Hunt
Arlene Landry

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Summary

Due to its poor condition, safety concerns, and operational problems, the 84-year-old Courthouse must be replaced. To cost-effectively provide court space to 2040, a facility of about 516,000 gross square feet is sufficient. Decisions about the facility's location and design can also help contain construction and long-term operating costs.

The Multnomah County Courthouse was designed over 80 years ago to hold 17 courtrooms and most of the County's administrative offices. Since that time the number of judges has increased to 43 and all but court-related functions have moved out of the courthouse to make room. In 1994 the Board of Commissioners authorized a Space Planning Group to develop a long-term facilities plan. The Space Planning Group report included proposals for the construction of a new courthouse and expansion of the Juvenile Justice Complex to house more courts. It also recommended an audit of court operations and use of space in the courthouse.

While space shortages have adversely affected some operations in the courthouse, it is the condition and outmoded design of the facility which poses the most serious problems. There is a long list of mechanical and structural problems which cannot easily be fixed: poor electrical systems, plumbing, elevators, the heating, ventilation, air conditioning system, and structural weaknesses unable to withstand moderate earthquakes. Routine maintenance costs are increasing and needed repairs continue to accumulate. There is an equally long list of space and design problems including: inadequate counters, crowded security checkpoints at the entrance, structural posts blocking the views of judges in the courtroom, and an elevator which is too small for efficient inmate transport. Safety of the public and Courthouse employees was also a significant concern among many personnel that we interviewed.

The present Courthouse falls far short of meeting the court's future space needs. Based upon historical workload and staffing trends, Multnomah County should plan for about 88 judges in the year 2040. In addition to the space at the Juvenile Justice Complex and Justice Center, approximately 516,000 gross square feet will be needed to accommodate this growth. We evaluated the alternatives of extending the life of the current Courthouse with a major renovation, constructing a satellite courthouse to be used with a renovated Courthouse, or constructing a new facility.

Of these three alternatives, building a single new facility is the most cost-effective means over the long-run to provide space for the courts. We estimate that this facility would cost the public \$115 to \$120 million. Building a satellite courthouse would also meet the court's space needs but cost about \$12 million more than a new facility, in current dollars. The higher costs of a satellite facility are caused by duplicate space needs and activities such as security, inmate transport, detention and jury assembly that increase long-term operating expenses. Renovating the Courthouse would be disruptive, costly, and result in

a facility too small to allow for any future growth. We also investigated the feasibility of acquiring the Gus J. Solomon Federal Courthouse as a satellite facility. The Federal Government is considering it for bankruptcy court but, if it were to be acquired by the County, the 8-courtroom facility would provide only a short-term solution at considerable cost, due to structural and mechanical deficiencies similar to those of the County Courthouse.

More can be done to better utilize space in the current Courthouse. Evening and weekend operations should be considered for family court proceedings, such as divorce and custody hearings. These court activities are more conducive to extended hours than other civil and criminal proceedings which occur in the Courthouse. Better use should be made of two of the four courtrooms in the Justice Center in downtown Portland, which were occupied only about 5% of the time. In addition, two courtrooms assigned to the presiding judges are seldom used because of their other administrative responsibilities. The presiding judges could be provided administrative space and these courtrooms could be used by other judges. We also believe that further study of the court's productivity by the Secretary of State Audits Division could identify operational improvements.

If a new facility is approved, courthouse design strategies can significantly reduce costs. We estimate that up to \$16 million in construction costs could be saved with smaller, shared courtrooms and hearing rooms. During our courtroom observations, we found that jury cases occupied courtrooms about 20% of the time. Accordingly, smaller-sized hearing rooms can be used in place of some jury courtrooms. We also found that courtrooms were only in use about 52% of the time during the busier periods of the day and were used much less during the late afternoon. Instead of building a jury courtroom for each judge, we estimate that four jury courtrooms and four hearing rooms for each ten judges would meet the courts' needs and allow room for increases in productivity. We found that in 81% of our courtroom observations, ten or fewer people were in the audience area, indicating that the audience capacity can be reduced from the current size. Finally, construction costs would be further reduced if judges shared a library, lounge, and restrooms on each floor. Courthouse design strategies can also yield more efficient operations, increase the public's and courthouse personnel's safety, and provide flexibility and longevity to a new facility. We developed a general description of a courthouse to illustrate these principles.

A new 516,000 square foot facility is the equivalent of about 14 floors on a full downtown Portland block. The new facility should be constructed close to the Justice Center to reduce inmate transport costs and to provide good access for the public and attorneys. A floor below ground would provide an inmate holding area with tunnel access to the nearby Justice Center. The first two floors could contain the most visited locations such as traffic and small claims courtrooms, counters for paying fines and traffic tickets, records, and a large courtroom. The next two floors could hold the jury assembly area, law library, and court administration. Initially, four floors of a new facility would each contain ten judges, four courtrooms and four hearing rooms.

The District Attorney, Department of Community Corrections, and Sheriff's Office could be co-located in the new facility. Closer proximity between these agencies and the courts can result in better communications among their management and line staff. For about the first 10 years, one floor could be leased to tenants, such as private attorneys or the Portland offices of the Oregon Department of Justice to offset construction and operating costs.

To increase the safety of the public and courthouse personnel, three circulation corridors would be built to separate judges, inmates and the public. Two levels of secure parking would also be provided below ground in a new facility. Adequate lobby space could reduce congestion for persons entering and exiting the courthouse. Counter and staff areas could be designed with physical barriers to reduce the risk of assault and injury. To increase flexibility and longevity some floors should be constructed for later conversion to court floors.

We recommend that the Courthouse Task Force determine and propose to the Board of Commissioners a means of financing a new criminal justice facility and Facilities Management begin preliminary planning for the facility. Strategies for controlling construction costs should be pursued that result in a safe and operationally efficient new facility. We also recommend efforts be taken to make the best use of current courtrooms and court resources.

This report can also be viewed at <http://www.multnomah.lib.or.us/aud/>

Background

In 1983 the Oregon Legislature transferred all county court personnel and operations to the state. However, statutes continued to require that counties provide and maintain adequate space for the courts. Court space is provided in the Multnomah County Courthouse, the Justice Center, the newly constructed Juvenile Justice Complex, and leased space in Gresham.

The Multnomah County Courthouse was completed in 1914. The eight-story building was designed with 17 courtrooms of which 12 were two stories high. In addition, all of the County administrative offices were located in the Courthouse, as well as detention facilities for men, women, and juveniles on the seventh and eighth floors. As the number of judges increased, more courtrooms and space were created by several means: eight of the original two-story courtrooms had floors installed to create 16 one-story courtrooms; administrative offices were converted into courtrooms and judges' chambers; and a three-story structure was built in the interior courtyard. As recently as 1978 the Courthouse still contained the offices for elections, assessment and taxation, data processing, sheriff's operations, the commissioners, the chair, and the auditor. Now, except for meetings of the County commissioners, only court-related functions remain in the 300,000 gross square foot structure. The displaced services have been moved to some of the 78 different sites that are leased or owned by the County.

In 1994 the Board of Commissioners initiated a study to develop a long-term plan to meet the County's space needs. A consulting group of architects and facilities experts worked with County representatives to project future program needs, evaluate the condition of buildings, and select a strategy of least cost which best meets those needs. This Space Planning Group recommended renovations and new construction to address space needs to 2005 for all County programs. The group's recommendations related to court space are:

- ▶ construct a new justice facility with 42 courtrooms to replace the Courthouse and renovate the old Courthouse for County administration and operations;
- ▶ construct courtroom capacity for six more judges at the Juvenile Court;
- ▶ renovate or sell the Sheriff's Administration building at 122nd and NE Glisan street;
- ▶ appoint a Courthouse Task Force to address financing and siting alternatives, operational issues, and possible partnership arrangements in building a new criminal justice building; and,
- ▶ conduct a performance audit of Court operations and space use, which could identify organizational and technological efficiencies.

Scope and methodology

The objective of this review was to assist the Courts Task Force in identifying and evaluating alternatives which best meet the County's obligation to provide space for courts. In particular, we:

- ▶ evaluated the condition and adequacy of the current facility,
- ▶ analyzed current space use,
- ▶ projected future court space needs,
- ▶ evaluated alternatives to best meet current and future space needs.

We reviewed our assumptions, methodologies, conclusions, and draft reports with the County department directors of Environmental Services and Community Corrections, and the Courts Administrator. A draft of our report was also reviewed by Hellmuth, Obata and Kassebaum, an architectural firm specializing in courthouse construction, and the Courthouse Task Force appointed by the Board.

We analyzed space use in the Courthouse and gathered information about courthouse planning and design principles to assist the Courthouse Task Force. To understand courtroom utilization we observed 43 courtrooms at 70 different periods of time, and analyzed scheduled absences of judges during a 13-month period. We collected historical information on the number of judges and their workload to project future growth. We examined blueprints to determine sizes of rooms in the Courthouse. To understand space needs and problems, we interviewed Courthouse personnel and representatives of other criminal justice organizations, and County facilities management personnel. We also interviewed court facilities consultants and representatives of other jurisdictions which were constructing or had recently constructed courthouses. We reviewed literature about planning, designing, and operating courthouses. We participated with the Facilities Management Division in hiring a consultant to help assess the condition and needs of the courthouse.

We estimated future gross square footage needs based upon design methods and standards developed by court facilities planners. To calculate building costs, we used current estimated Portland construction prices of \$154 per gross square foot for new construction and \$132 for remodeling. An additional 40% was added for site preparation, inspections and testing, architectural fees, computer cabling, moving, and other expenses. To compare the costs of different construction alternatives we assumed a twenty-year general obligation bond would be used to finance construction and calculated the present value of future expenditures through the year 2040 with a discount rate of 6.25%.

The Space Planning Group requested a performance audit of State court operations, which would have required more resources and time than the Auditor's Office had available. Our study analyzed the utilization of County space and identified some operational issues that could affect courthouse design.

Evaluation of Multnomah County Courthouse

There are several texts which describe the necessary steps to successfully construct or renovate criminal justice facilities to meet current and future needs. The authors describe the planning process and design considerations needed to ensure that all significant factors are addressed. These books include *The Courthouse: A Planning and Design Guide*, by Don Hardenburgh (Williamsburg, Va: National Center for State Courts, 1991); *The American Courthouse - Planning and Design for the Judicial Process* and *Twenty Years of Courthouse Design Revisited* (Chicago, Illinois: American Bar Association, 1974 and 1993).

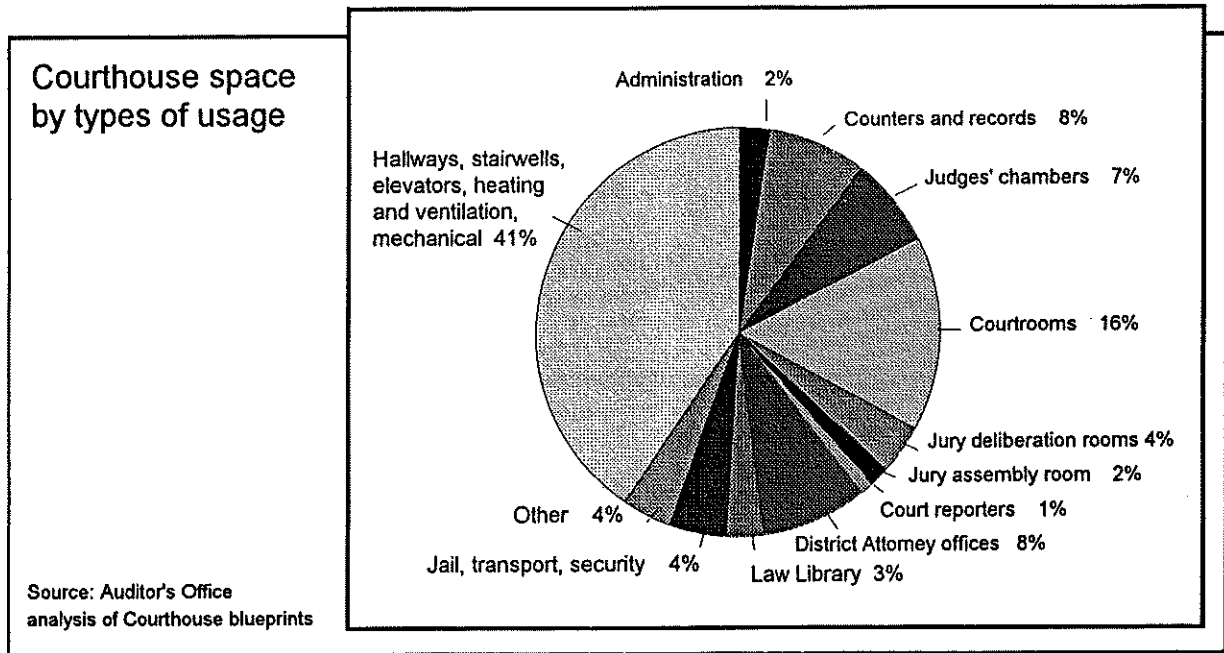
A careful analysis of operations and needs can avoid costly mistakes and produce a facility with a long and useful life. As the planning and design phase progresses, more expertise is necessary, and increasing participation with all Courthouse, Sheriff's Office, Community Corrections, and other affected personnel. This report addresses the first three phases of a criminal justice facility analysis:

- ▶ an evaluation of the condition and adequacy of the current facility,
- ▶ projections of future needs, and
- ▶ an evaluation of alternative solutions to best meet current and future needs.

An evaluation of existing court facilities involves an inventory of current space usage and needs, an assessment of facility condition, and collection of operating information.

The Courthouse is a facility where criminal cases, civil lawsuits, probate matters, divorces, traffic violations, and small claims disputes are resolved. Most citizens think of courtroom trials as the most common activity occurring in a courthouse, but the facility must also provide space for other related activities. Of the 300,000 gross square feet in the Multnomah County Courthouse, courtrooms comprise only about 16% of the total space. Many cases are decided before they reach a trial but still require space and effort from records personnel, judges, administrative staff, clerks at public counters, or district attorneys.

There is a series of procedural steps which may occur before a trial, such as filing documents with Records, hearings before a judge, pre-trial research in the law library, and conferences between attorneys (usually outside the courthouse). In order to conduct a trial, other rooms and functions must be available, such as offices for judges and their secretary (chambers), a jury assembly room, court reporter offices, detention spaces for holding inmates, and jury deliberation rooms.



Administration (2%) Administrative activities occupy five locations in the Courthouse for computers, mail room, scheduling cases, accounting, copy room, personnel, and overall management of court operations.

Counters and records (8%) Three different areas have public counters, for paying traffic and parking fines, examining court records, and filing documents such as divorce papers. Associated with these activities are spaces for records storage and data entry staff. Some records are stored in the basement and older records are stored at two other sites.

Judges' chambers (7%) There are 40 judges' chambers in the Courthouse. These areas include space for judges and their secretaries. Each judge's office generally contains a desk, bookshelves, chairs for several visitors, and a private toilet and sink. The secretary's space has a desk, file storage, and waiting space for visitors. These chambers range from less than 320 square feet to 880 square feet, with an average of about 540 square feet. (Unless noted otherwise, all measurements in the report are net square feet.)

Courtrooms (16%) There are 40 courtrooms in the Courthouse, ranging from 682 to 1,651 square feet, averaging 1,200 square feet. Some are designed for twelve-person juries and some are designed for six-person juries. Court clerks do not have offices but usually use their work area in the courtroom as an office when court is not in session. There are also four courtrooms in the Justice Center, one in Gresham, and six at the Juvenile Justice Complex.

Jury deliberation rooms (4%) There are 30 jury deliberation rooms in the Courthouse, ranging from 223 to 690 square feet, and averaging 380 square feet. Jury rooms are generally attached to courtrooms to allow jurors to be easily escorted out of the courtroom for brief periods, and to avoid contact with witnesses or victims in the courthouse hallways. Courtrooms, such as traffic and small claims, do not need jury deliberation rooms. However, some courtrooms do not have associated jury deliberation rooms, requiring jurors to use the deliberation rooms of other courtrooms.

Jury assembly room (2%) Approximately 200 potential jurors must wait in the jury assembly room for assignment to a trial. This space includes areas for reading, eating, watching television, conversing, as well as an administrative office.

Court reporters (1%) Court reporters record and transcribe court proceedings. They have seven offices in the courthouse with a combined 3,100 square feet. These offices contain workstations and records.

District Attorney offices (8%) Approximately 165 personnel in the District Attorney's Office use about 25,000 square feet of the courthouse. Another 25 staff of the Support Enforcement Division and Career Criminal Unit are located in about 8,500 square feet of another building. It is not necessary that District Attorney offices be located in the courthouse, but there are some efficiencies and conveniences that result from attorneys being near the courtrooms. In some jurisdictions the public defenders are government employees, and are also located in the courthouse.

Law Library (3%) The law library is operated by a nonprofit organization to provide a comprehensive library of legal information for attorneys and judges. The main law library is open 81 hours a week. There are also about 15,000 square feet of materials stored at another facility. Under an agreement approved by County Commissioners about 60 years ago, the law library is allowed 9,000 square feet in the courthouse. Judges and attorneys say that it is a convenience having the law library close to the courthouse. An 8,000 square foot branch library contains specialized legal material. There is also a warehouse which is not staffed.

Sheriff - Jail, Transport, Security (4%) The courthouse jail (10,400 square feet) is located on the seventh floor and serves as a holding facility during court hours for persons awaiting trial. The Sheriff's Office also has about 3,000 square feet in the courthouse for transport and court guard personnel, as well as the courthouse security staff. Two wire cells were recently installed in this area to hold juveniles being tried in adult court who must be kept segregated from the adult population in the jail.

Other (4%) The largest room in this miscellaneous grouping is the 2,700 square foot room where the Board of County Commissioners meet. Within this category are also three hearing rooms for specialized activities such as mental commitments or grand juries, of

about 900 square feet. Other functions included in this category are the family law clerk, community corrections, and the domestic relations court.

Hallways, stairs, elevators, mechanical, heating, ventilation, restrooms, basement, etc. (41%) As the chart above shows, the largest amount of space in the Courthouse is required for corridors, restrooms, heating and mechanical equipment, elevators, and stairways. Architects note that this percentage is typical of older public buildings. This figure, approximately 130,000 square feet, includes the basement but not a mechanical area located between the sixth and seventh floors.

Condition of the courthouse

Any evaluation of alternatives must consider the current condition of the 81-year-old Courthouse. Factors to consider include maintenance needs, design and security problems, seismic strength, adequacy of support functions such as elevators and electrical wiring, the cost of repair and renovation, and the operational needs of the courts.

Facilities Management has spent increasing amounts over the past four years for routine maintenance of the Courthouse. Expenditures have increased from about \$400,000 in FY91-92 to more than \$500,000 in FY94-95, with \$681,000 budgeted for FY95-96. To better evaluate overall condition and alternatives, we participated with Facilities Management in hiring experts to assess the condition, the cost of necessary repairs, security issues, and historical status of the Courthouse. The consultants concluded that "After 80 years of intensive use, the facility is functionally and operationally obsolete." Deficiencies in security, seismic condition, and mechanical, electrical and plumbing systems were identified, with estimated costs for repair of about \$36.7 million. The report (to be issued separately) lists needs such as a new roof (\$490,000), new electrical panel and distribution system (\$1.7 million), new chillers and boilers for air conditioning and heating (\$672,000), and new plumbing (\$781,000).

The most costly and disruptive improvement needed in the Courthouse is structural strengthening to better withstand earthquakes. Scientists recently discovered evidence of prior severe earthquakes in Oregon and, as a result, building codes are requiring stronger structures.

In 1991 the County hired an engineer to determine the structural strength of the Courthouse during a possible earthquake. The consulting engineer stated that the strength of the Courthouse is far less than appropriate for all except the smallest earthquakes. The consulting engineer estimated that Courthouse structural strength was only one-quarter to one-sixteenth of Portland code requirements. During an earthquake of magnitude 6 or more, the engineer predicts that the building would collapse, with large pieces of the exterior falling onto the sidewalks below.

To fortify the building against earthquakes would require significant repairs similar to those performed on the Central Library and Portland City Hall. Interior walls and floors would have to be removed to make the structural improvements, which would require the building to be vacated for 18 months to two years. The consultants estimate that seismic reinforcement will cost approximately \$22 million.

With additional money, each of these problems can be corrected. But correcting them individually is likely to cost much more than a comprehensive renovation of the building. For example, an office can be cabled for a computer network, but the work may need to be redone if a wall is removed later for better space utilization. This approach would result in two disruptions of office operations instead of one.

Time is an important element in the deteriorating condition of the courthouse and decisions about the repairs that are needed. Systems and materials will continue to deteriorate and money will have to be spent to maintain operations. But when a facility reaches an advanced age, with an accompanying decline in condition, it becomes more difficult to develop a cost-effective solution to each problem. Fixing problems piecemeal only delays the inevitable, more cost-effective alternatives of complete renovation or demolition.

Impact of Courthouse design and condition on operations

We also interviewed Courthouse personnel and observed spaces and operations to identify facility problems which affect citizens and Courthouse operations.

Corridors and circulation

- ▶ There are no conference rooms where attorneys may negotiate a settlement to avoid a trial. Lack of meeting rooms requires participants to conduct conferences in public hallways which can result in angry interchanges, overheard private conversations, and overcrowding.
- ▶ Lack of a secure passage for judges and court staff increases risk of confrontations by trial participants.
- ▶ Lack of a secure hall for inmates results in trial delays while waiting for all jurors to return to the courtroom before escorting the inmate in.
- ▶ There are steep and narrow stairs between the sixth and seventh floors, which are often used because of the poor elevator service.
- ▶ The marble floors can be slick and dangerous.

Courtrooms and jury rooms

- ▶ The area for attorneys and clients is too small for multiple party or multiple defendant trials which are becoming more common. As many as 12 clients and their attorneys may need to fit into areas designed for about six persons.
- ▶ Poor courtroom layout and structural posts obstruct the views in some courtrooms.

- ▶ To protect witnesses and reduce conflicts, waiting areas are needed to separate witnesses and opposing sides who are waiting for a trial.
- ▶ There is inadequate electrical and signal cabling in courtrooms for technological aids such as computers, printers, and monitors for video arraignments.
- ▶ Inadequate temperature control and ventilation in some courtrooms makes it difficult for some trial participants to concentrate.
- ▶ Traffic court is too small, causing blocked hallways when the line of persons waiting for court combines with lines of persons waiting to pay tickets.
- ▶ The jury assembly room is too small for the increased numbers of jurors that the courts would like to call.
- ▶ Inadequate-sized bathrooms in some jury deliberation rooms require at least 30 minute breaks to allow all jurors to use the bathroom.
- ▶ Many jury rooms are not connected to courtrooms. This increases the risk that jurors will be exposed to Courthouse conversations during transit that could result in a mistrial.
- ▶ Many jury rooms are cramped and unpleasant, making jury duty less desirable.

Counters, records, and storage

- ▶ Counter space is inadequate at the traffic desk which results in long lines. In addition, tellers often cannot hear citizens speak because of poor acoustics.
- ▶ Inadequate space for records requires storage at multiple sites and extra staff time to locate the records. Citizens may have to make one trip to the courthouse to request the records and a second trip when the records are available for review. There is also inadequate space for the public to spread out records for review.
- ▶ There is poor lighting in the basement where some records are stored. Basement records are being stored around machinery and in passageways. In addition there are low protruding pipes and reports of cockroaches and fleas.

Law Library

- ▶ Space is inadequate for the volume of materials and patrons. Floors cannot support space saving shelves.
- ▶ Inadequate space and electrical outlets for copiers and terminals preclude use of legal information in a CD-ROM format.

Administrative areas

- ▶ Many administrative areas are being crowded out by records and files. We heard repeated comments about delays, extra work, and risks of injury which are resulting from the accumulation of court documents.
- ▶ Some administrative areas lack counters or other means to separate staff from the public. Several clerks described incidents of intimidation and physical assault.
- ▶ Some administrative areas are too small, poorly located, or located in rooms whose layout results in inefficient operations or use of space.

Jail, transport, security

- ▶ There are inadequate facilities for juveniles being tried in adult court who must be held separate from adult defendants.
- ▶ The inmate elevator is too small and extra transport trips are required. The inmate entrance outside the Courthouse is also cumbersome.
- ▶ The inmate elevator does not stop at all floors. Inmates must be transported to the floor above and escorted down the stairs to the appropriate courtroom.
- ▶ The four meeting booths in the jail only have one telephone on the attorney's side which makes it more difficult to use a translator.
- ▶ Inadequate number of meeting booths for attorneys and inmates results in delays in case disposition. Additional attorney time is required while waiting to speak to inmates.
- ▶ It is difficult to provide security in high profile trials. For example, a trial several years ago required that a portion of the Courthouse be cordoned off, which could only be done by closing access to several other courtrooms as well.

Mechanical, electrical, and plumbing

- ▶ An inadequate electrical system throughout the Courthouse has resulted in damaged computers and data losses. Insufficient outlets prevent increased use of computers in some court operations. Cabling for computer networks is difficult and costly to install.
- ▶ Computers are not adequately protected against flooding.
- ▶ Staffs have brought in portable heaters and fans because of poor heating and ventilation, resulting in additional electrical loads. Staff contend that increased transmission of colds and illness were caused by poor ventilation.
- ▶ Lighting systems are not energy efficient and of poor quality in some work areas.

Estimates of future needs

Experts recommend that justice buildings be sized to accommodate activities for at least 40 years to get the best value for the public's money. However, future needs can only be an uncertain estimate. The most common method of prediction is to project the consistent patterns of the past into the future. There is always the possibility that predictions will be wrong because patterns change and trends come to an end, especially in a 40-year time period. Most projection methods assume that the forces which spurred past growth will continue to operate in the same manner. However, no projection can anticipate changes in laws such as the recent voter-approved Ballot Measure 11 which could significantly affect the volume and complexity of future workloads. Nevertheless, expecting more of the same may be the only basis for prediction.

The cost of an error should be considered when predictions are used to decide how to spend large amounts of money. In the case of facility construction, underestimating needs can result in a building too small for the community's needs. An expert told us of one Florida jurisdiction which had outgrown its new courthouse before construction was completed.

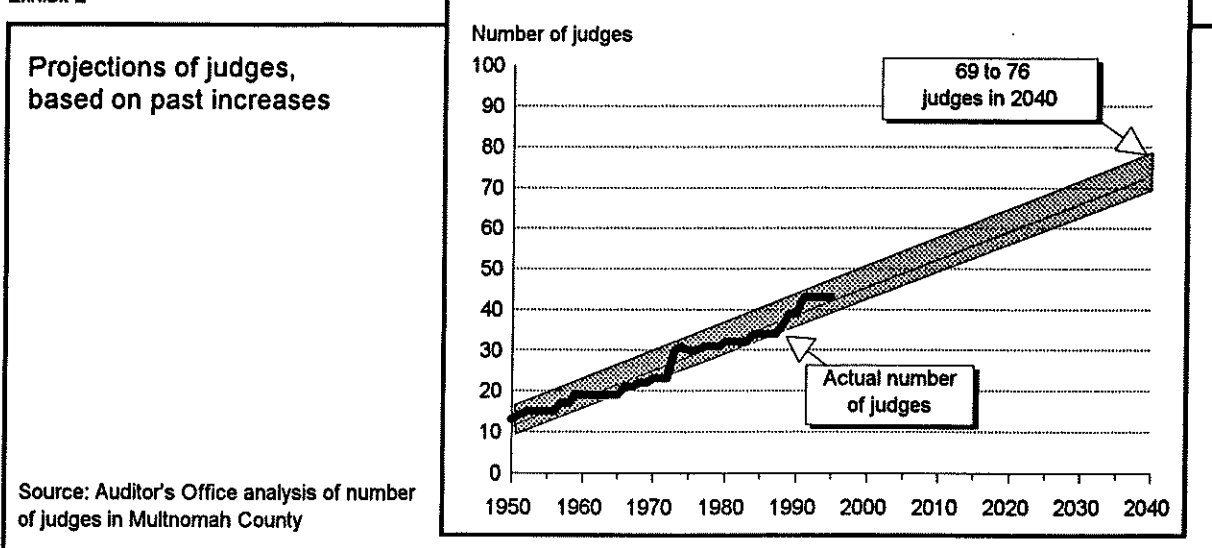
There is less risk that money will be wasted when courthouses are built too large rather than too small. Jurisdictions often intentionally overbuild and use the extra space for related government organizations or lease the space to others, such as private attorneys. Justice programs such as Community Corrections, the District Attorney or the Sheriff's Office can be located in the building until their growth, or the growth of the courts forces them to another site after several decades.

Courts projections

The Courthouse was designed in 1914 to hold 17 courtrooms although there were only 10 elected judges at that time. The Sheriff and Portland Police Chief also operated out of the Courthouse when it was first constructed. It was not until 1959 that the number of judges exceeded 17. There is now a total of 43 judges, consisting of 36 elected judges, three juvenile referees, and four traffic court judges. The Courthouse has 40 courtrooms or hearing rooms, with four additional courtrooms at the Justice Center and six courtrooms at the Juvenile Justice Center. The increase in judges and courtrooms is a national trend in response to a growing legal workload. Court experts state that the increasing number of courtrooms generally results from larger populations, more crimes, fewer guilty pleas because of severe sentences, growing complexity of cases, and an increasingly litigious society. The data most often used for court projections are civil and criminal case filings, the number of judges, and population.

Trend extrapolation is one statistical method of making projections. Using the growth trend in the number of judges over the last 45 years produces an estimate of 72 judges in 2040. If the past trend of increases were to continue into the future, the 95% confidence interval of the projection has a low range of 69 and a high range of 76. However, projecting judges based upon past budgetary decisions of the Oregon Legislature may not necessarily reflect the need for judges. Exhibit 2 shows the number of judges in Multnomah County over the past 45 years, projections to 2040, and the expected range.

Exhibit 2

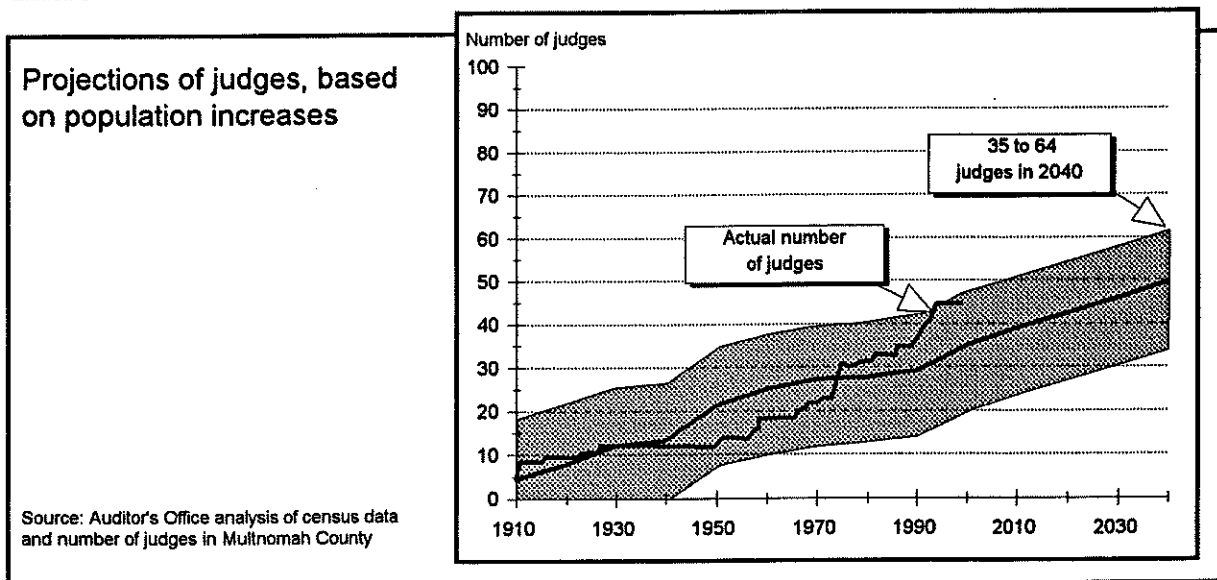


Several other organizations have projected the number of future judges. The County's strategic space plan includes a projection of 55 judges in 2005. The Court Administrator said that this figure was determined from the growing workload in Multnomah County since the last increase in judges in 1991, and an estimate of growth in the next ten years.

Justice 2020, an Oregon Judicial Department study, projects more than a threefold increase in statewide case filings by 2020. To address this increased workload, *Justice 2020* proposes greater efficiencies through increased use of technology, and dispute resolution methods which do not rely upon the courts. Nevertheless, only a small percentage of the total caseload would be amenable to these innovative practices. One of the authors of the study said that these practices could reduce the rate of increase for judges but more judges will still be necessary. He said that the number of judges in Multnomah County probably wouldn't increase at the statewide rate, but would probably grow at least as much as population growth.

Population growth is another projection method used by experts. A mathematical relationship can be calculated to measure the degree that population growth affects court workload. Metro has projected County population to 2020 and this formula could be used to project court growth. The Metro population analyst suggested that a .28% annual growth rate beyond 2020, reflecting historical patterns, would be a reasonable estimate for Multnomah County. Exhibit 3 below shows the 85 year history and projection of judges in 2040 to serve an estimated population of 880,000. The resulting projection is only 7 judges more than the current number. The confidence interval of 95% produces a range of between 35 and 64 judges in 2040. Visual inspection of Exhibit 3 shows the poor fit between the actual number of judges and the number estimated from the population, which is the reason for the wide range.

Exhibit 3



Past trends in courts workload is another method of projecting the number of judges. Court case filing data has been collected for 27 years and has been used by the Legislature to make decisions for more judges. The Courts Administrator and others noted that the increasing numbers do not entirely reflect the growing workload because the cases have become more complex in the past ten years. As a result, more time and resources are required to handle the caseload.

Examination of case filings shows distinct differences between civil, felony, and misdemeanor workload. Exhibit 4 shows the civil case filings from 1970 to 1994 for Multnomah County courts, and a projection of 57,000 filings in 2040. The 95% confidence interval is between 48,000 and 66,000 filings in 2040. Based upon current judge productivity, the 57,000 filings represents about 16 judges of civil workload.

Exhibit 4

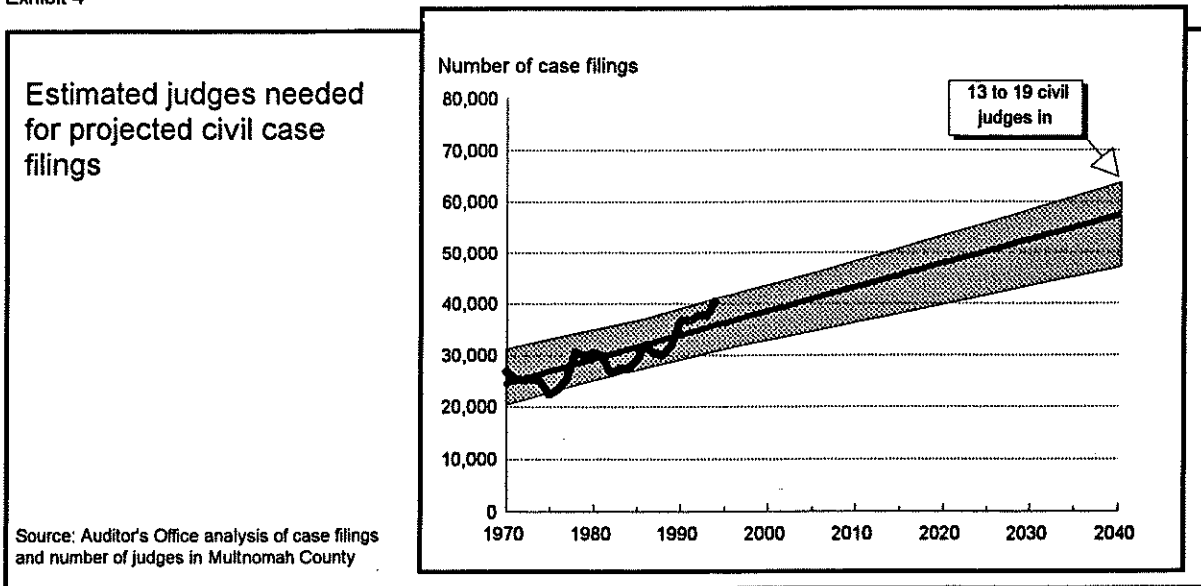
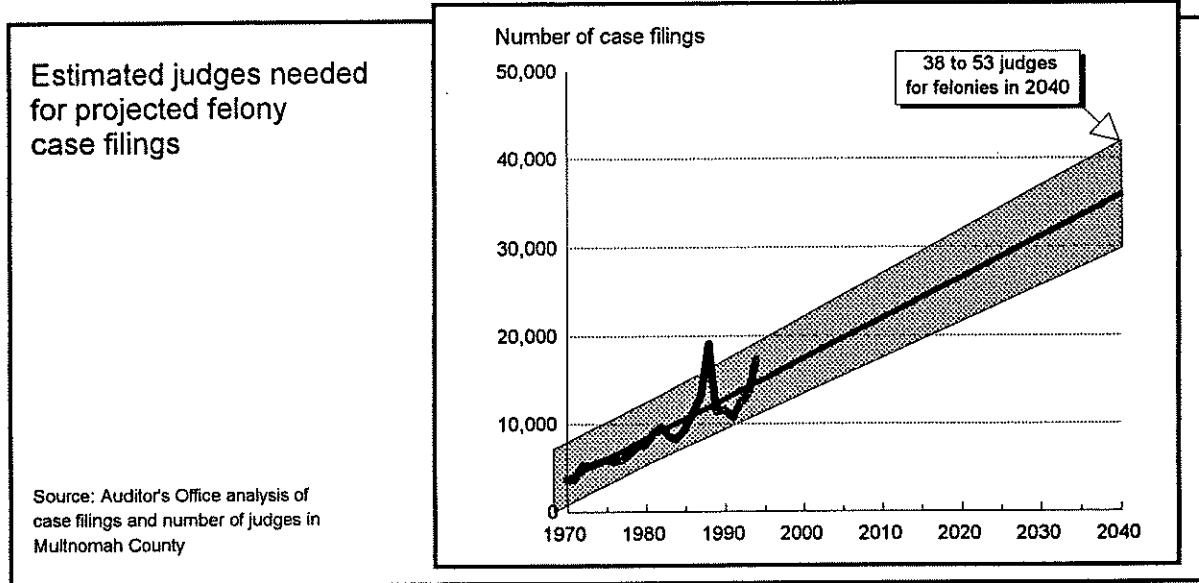


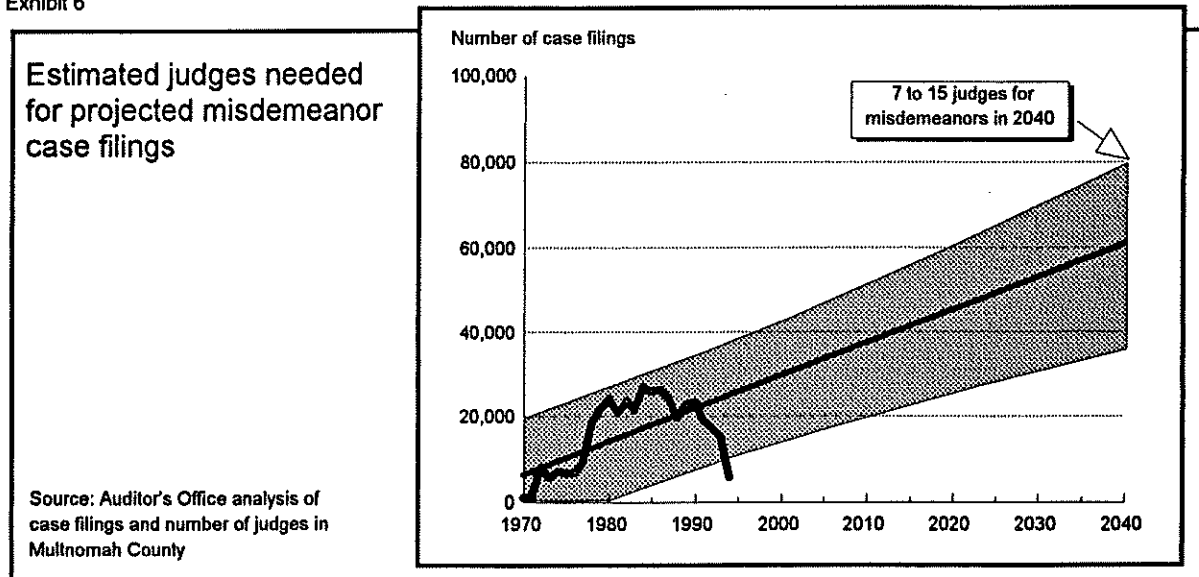
Exhibit 5 on the following page shows felony case filings from 1970 to 1994 for Multnomah County courts, and a projection of 36,000 filings in 2040. The 95% confidence interval is between 30,000 and 42,000 filings in 2040. Based upon current judge productivity, the 36,000 filings represents about 45 judges of felony workload.

Exhibit 5



The pattern of misdemeanor case filings produces a less reliable prediction. Exhibit 6 shows increasing filings for more than 20 years followed by five years of steep decline. Fewer cases are reaching the courts despite continued increases in misdemeanor arrests. Assuming that misdemeanor cases will continue to be filed, the projection in 2040 is 61,000 filings. The 95% confidence interval is between 38,000 and 84,000 filings in 2040. Based upon current judge productivity, the 61,000 filings represents about 11 judges of misdemeanor workload.

Exhibit 6



There are about 10 judges who conduct other types of trials or hearings, such as probate cases, juvenile hearings, and mental health hearings. There are insufficient statistics to

develop projections for this caseload, but applying the civil growth rate to this category would result in about 16 judges in 2040.

In total, about 88 judges would be needed to manage the civil, felony, misdemeanor, and other caseload in 2040, assuming the judges continue to work at the current level of productivity. Exhibit 7 shows the estimated number of judges to 2040.

Exhibit 7

Estimated number of judges to 2040	Judges needed	Judges needed	Judges needed	Other Judges	Total Judges	
	Year	for civil cases	for felony cases	for misdemeanors	needed	needed
	2000	11	22	5	11	49
	2005	11	25	6	11	53
	2010	12	28	7	12	59
	2015	13	31	7	13	64
	2020	13	34	8	13	68
	2025	14	36	9	14	73
	2030	15	39	10	15	79
	2035	15	42	11	15	83
	2040	16	45	11	16	88

Source: Auditor's Office

District Attorney space and growth projections

The District Attorney's Office currently occupies 25,000 square feet in the Courthouse. It also leases 8,500 square feet at another downtown Portland site for its support enforcement and career criminal prosecution activities. Growth in criminal caseloads also requires growth in deputy district attorneys and support staff. Total criminal case filings would double by 2040 if current trends continued. As a result we estimated a need for about 50,000 square feet of space for the District Attorney's Office in 2040. Support enforcement activities could be located with the District Attorney's Office until the other prosecution activities expand to 50,000 square feet.

Sheriff's Office and Community Corrections space

The Sheriff's Office and Department of Community Corrections could also occupy substantial portions of a new criminal justice building for several decades until the space is needed for courtrooms. They may also continue to grow and require more space. However, projecting their growth rate is more difficult because of the impact of legislative changes such as Senate Bill 1145 which will require Oregon counties to take responsibility for offenders who had been sentenced to a year or less at state prisons.

The Sheriff's Office occupies 38,000 gross square feet in the Hansen Building as well as 356,000 gross square feet in jails and other sites. Plans are also underway to construct

more jail space. There are several drawbacks to the Hansen Building: it does not meet essential facility earthquake standards, lacks adequate electrical and heating systems, and is situated several miles from the nearest Sheriff's jail or patrol area. The Sheriff has expressed an interest in relocating most of these activities downtown, closer to the other criminal justice agencies and County operations. The Sheriff said that the law enforcement functions at the Hansen Building would be more efficient if located at a separate site closer to the patrol areas in east Multnomah County. These ideas complement the Space Planning Group's recommendation of renovating the Hansen Building for other uses, or selling it.

The Sheriff's functions located in a new criminal justice building would grow as corrections programs are expanded and more jails are constructed, although not at the same rate. Many of the functions are administrative and would exhibit a slower growth rate. If space becomes limited in new criminal justice building, some activities could be relocated to one of the other Sheriff's Office facilities.

The Department of Community Corrections occupies approximately 72,000 gross square feet at ten sites. About 32,000 gross square feet of the space is outside the downtown area, occupied by probation and parole staff. The other 40,000 gross square feet of space could be located in a new criminal justice building. It is difficult to project Community Corrections' space needs growth because of significant changes in the recent past. Community Corrections staffing increased when Multnomah County took responsibility for state probation and parole duties in 1992. It will continue to increase as Senate Bill 1145 takes effect in 1997.

Space Needs

Using space design standards for criminal justice operations, we estimate that approximately 516,000 total gross square feet will be required to accommodate the expected growth of the courts and court-related activities over the next 45 years. Until the space is needed by the courts, it can be used by the Sheriff's Office and Department of Community Corrections and some space can be leased out. Exhibit 8 on the following page illustrates the estimated gross square footage that will be needed by the courts through the year 2040 and an approximate chronology of moves.

Alternatives to meet space needs

Courthouse designers state that renovation, building a satellite facility, or building a new facility are the most common alternate space plans evaluated. Cost, feasibility, and operational efficiencies are criteria for evaluating alternative space plans. We considered the following alternatives:

- ▶ renovate the courthouse;
- ▶ build a satellite facility and renovate the Courthouse; and
- ▶ build a new facility.

Exhibit 8

Projected facility usage to 2040	Year	Judges	Space needed for courts (gsf)	Court Floors	Major Actions
	2000	49	319,400	4	
2005	53	319,400	4		
2010	59	355,500	5	Convert leased space for courts	
2015	64	355,500	5		
2020	68	391,600	6	Sheriff or Community Corrections floor converted	
2025	73	391,600	6		
2030	79	427,700	7	Community Corrections or Sheriff floor converted	
2035	83	427,700	7		
2040	88	463,800	8	One District Attorney floor converted, Or build a new courthouse	

Source: Auditor's Office

We concluded that building a new criminal justice building that will meet the courts' long-term space needs is the most cost-effective alternative. The alternative of renovating the courthouse would be disruptive, more costly, and inadequate for growing court space needs. Building a satellite courthouse would meet the Courts space needs but would duplicate activities, increasing operating costs for the courts and court-related functions.

Alternative: Renovate the Courthouse

The Courthouse has been patched, modified, retrofitted, and gerry-rigged to prolong its service life to more than 80 years. But its poor condition requires that it be renovated soon, or demolished to make room for another building. We analyzed the possibility of extending the life of the Courthouse with a major renovation. Our analysis indicates that phased renovation of the Courthouse is not a feasible alternative to meet the court's space needs. In addition to being costly, renovation would disrupt court operations, and result in space shortages soon after modifications were complete.

Renovating the Courthouse would be much like the work currently being performed on the Central Library. Interior walls, floors, and ceilings would have to be torn out to make major structural modifications. Mechanical, plumbing, and electrical systems as well as elevators would have to be upgraded. To make the best use of the courthouse site, the interior courtyard could be filled in, adding about 40,000 gross square feet.

Renovating the Courthouse may result in less efficient use of space. For example, interior support columns may prevent the best courtroom layout in the available space. Even if new floor layouts could improve the use of space in the Courthouse, a renovated 335,000

gross square foot courthouse, completed in 2000, would be too small to meet any of the court's future space needs.

There are also logistical problems in remodeling the Courthouse. Because the modifications are so extensive, they cannot be performed around courtroom schedules, and courtroom activities would have to be conducted elsewhere. If the Courthouse were renovated two floors at a time, court operations would experience disruption for several years, and construction costs would be at least 50% higher. To renovate the Central Library, facilities managers found it was less expensive, safer, and faster to move all the occupants to leased office space in another building. Unfortunately, trials cannot be conducted in leased office space without extensive remodeling. Courtrooms require careful design to ensure judges and jurors have a clear view of the proceedings, that acoustics are carefully controlled, and heating and ventilation are adequate, among other things. Inmate transport and detention facilities further compound the difficulties. Facilities management personnel noted that building owners are often reluctant to lease space to the County because of the associated volume and type of traffic.

Alternative: Build a satellite facility

Another way to meet court facility needs is to construct a satellite courthouse. Under this alternative, a satellite facility would be constructed first, court functions would move into the new facility, and then the present courthouse would be renovated for additional court space needs. While there are advantages to this alternative, we found that operating two courthouses would be more costly over the next 40 years than operating a single courthouse large enough to meet the courts' space needs.

The Multnomah County courts operate a satellite courtroom in Gresham, four in the Justice Center, and six courtrooms in the Juvenile Justice Complex at northeast Halsey streets at 68th. Another satellite facility, or several satellite facilities, could reduce public travel time and produce a more community-based court system.

Court facilities experts and literature state that, while multiple courthouses can improve citizen access, there are also higher operational costs. Traffic, small claims, and criminal misdemeanor adjudication can be successfully decentralized. The National Center for State Courts indicates that many jurisdictions try to provide these services within about 20 minutes' driving time as a convenience to the public. However, more serious or specialized cases require more staff and support services, greater security, and more coordination of police, probation officers, witnesses, and prisoner transport which can require substantial additional costs. Jury assembly, prisoner-holding, and security are other examples of activities that would be duplicated.

In addition, multiple courthouses create the risk of confusion among the public about which courthouse is the right one for them. The Space Planning Group considered the

option of building a satellite courthouse in the downtown area. This option would not reduce citizen travel times and might create greater confusion.

A satellite facility would have to be large enough to move all the judges out of the present courthouse while it was being renovated. Using current construction cost estimates, this alternative would cost approximately \$12 million more than a single new facility, or \$127 to \$132 million. We calculated the costs over 40 years assuming that 18 additional people would be needed for transport, guarding inmates, facility security, and operating another jury assembly room. In addition, total gross square feet was increased approximately 5% for duplicated space.

Alternative: Construct a new facility

Constructing a new building could produce a facility that matches current and future operational needs, increases productivity, increases safety, and reduces costs. The District Attorney's Office could consolidate all of its activities at one site as well. The Sheriff's Office and Community Corrections could also be located in the facility. Locating the Sheriff's Office in this building also avoids the cost of retrofitting the Hansen Building or another facility for essential facility seismic standards. The Sheriff's Office would have to evaluate which of its activities need to be located in an earthquake-resistant facility designed at 125% of seismic Zone III standards.

We estimated that constructing a new facility to meet the court's long-term space needs would cost about \$115 to \$120 million, about \$12 million less in County costs than building a satellite facility and renovating the Courthouse.

Construction cost and financing

The architecture firm of Hellmuth, Obata & Kassabaum estimate an average cost for courthouse construction in the Portland area in late 1995 at \$149 per square foot. They also suggest a 3% contingency amount to address possible labor and material shortages. There are additional expenses such as site preparation, project management, architects, quality control, and moving which would add another 40% to costs. The Space Planning Group estimated the cost of a downtown site at \$5 million. Two levels of parking would cost about \$2.25 million.

The cost is likely to increase with inflation until the building construction is bid. The architecture firm suggested an escalation rate of 5% to 6% which would add \$6 to \$7 million to facility costs each year. Most projects of this magnitude require about a year for planning and approval, another year to obtain a site and prepare the construction documents, and several years of construction time. Using these figures, about \$115 to \$120 million is needed to purchase a downtown site and construct a 14-floor building with two levels of secure parking if construction bidding occurred in early 1997. Detailed

programming, planning and architectural studies will be needed to better estimate costs and are beyond the scope of this report.

The Space Planning Group had estimated a cost of \$102.3 million for justice needs which would be adequate until about 2010 using \$140 per square foot for construction costs. Our more detailed analysis of needs and cost containment strategies would result in a higher cost for a facility with a useful life to 2040.

Construction costs of \$149 per square foot are higher than for commercial property in Portland. Distinct features of a courthouse increase costs. For example, inmate holding areas require special materials and separate elevators are required for inmate transport. Extra costs for durable materials and fixtures can reduce vandalism and extend their useful life.

One means of controlling costs practiced by other jurisdictions is the development of a detailed facility "program." Court management experts and architects are hired to work with courts personnel to analyze court operations, space needs, and alternative designs. The resulting detailed description of needs is called the program, which can be used in the design and construction phases of the project.

Other jurisdictions have experimented with contracting and construction methods which can have a large impact on costs. For example, a court complex in Salt Lake City used detailed specifications and a design-build process to reduce planning and construction costs. This approach required the development of a comprehensive program. The program can also address cost-containment strategies in materials selection. The Oregon Secretary of State Audits Division recommended several other methods for containing public building costs in their June 1993 *Statewide Facility Planning and Construction Management* report.

The Space Planning Group suggested pursuing state participation in the construction and/or operation of a new criminal justice building. While statutes require counties to provide space for courts, this magnitude of state-imposed cost may exceed legislative intent. Without State assistance for construction and operating costs, a new criminal justice building may not be feasible. The Space Planning Group also suggested financing options such as general obligation bonds, certificates of participation, and lease-back options from private development. Some of the annual costs of the building would be offset by lease savings for the Department of Community Corrections and the District Attorney's office. Alternately, if those organizations were located elsewhere, the initial excess space could be leased out to private attorneys or to agencies such as the Oregon Justice Department which has offices in Portland. If one floor were leased out at the current market rate of about \$20 per square foot, the County could earn approximately \$420,000 per year for the first 10 years. There may also be other financing alternatives such as user fees to offset costs.

Other alternatives we investigated

We considered other alternatives to address court space needs. These suggestions do not address problems with the current condition or design of the structure, or long-term space needs. Some alternatives were not feasible and others suggest ways to better use existing space. Unfortunately, these short term improvements, by increasing the volume of work or number of judges in the Courthouse, will worsen space problems for some of the support functions such as records, court reporters, and district attorneys. It is difficult to determine the costs to ensure that these functions or others, such as computer systems, do not become bottlenecks in court proceedings.

Better use of courtrooms

Two courtrooms in the Justice Center and the two courtrooms of presiding judges are underutilized. During the period of our observations two of the four Justice Center courtrooms were in use only about 5% of the time. The Court Administrator stated that they will increase use of those courtrooms in January 1996. If use rates continue at low levels the County should consider remodeling the space for administrative offices for Community Corrections or the Sheriff's Office. Both are seeking more space for their jail-based operations. Court administrative offices and counter areas in the Justice Center are also crowded.

During the period of our observations the courtrooms of the two presiding judges were in use only about 15% of the time. Because of their administrative responsibilities, the courtroom caseload of the presiding judges is limited. The courtroom of one presiding judge is used for about an hour each morning, then usually remains vacant the rest of the day. If administrative offices were built for these judges, their chambers and courtrooms could be assigned to two judges able to carry a full load of cases.

Expand court hours

Operational changes such as night and weekend court could increase court workload capacity but would not solve facility condition, space, or operational problems. We did not conduct a cost and feasibility analysis but night court or weekend court may improve citizen access for some specialized activities such as family law cases. Family law activities (domestic violence, juvenile, divorce, child custody, and probate) seldom require a jury or transport of inmates, and more flexible hours would allow participation without missing work.

Nevertheless, experience in Multnomah County and other jurisdictions has shown that extended hours have not worked for most other court responsibilities. For example, jury trials are more difficult to conduct for several reasons. Jurors and witnesses feel less safe traveling to and from the courthouse in the evening. Jury and non-jury trials would have to be adjourned before 10:00 p.m., limiting the amount or type of work which could be accomplished each day. In addition, civil and criminal attorneys see a risk that they might have to argue two cases consecutively over the course of several 14-hour days.

The design of the current Courthouse, with open stairwells to every floor, also makes it difficult to secure the rest of the building when night court or weekend court is in session. A recent estimate was made of the additional costs to conduct night court by the affected agencies. Managers from courts, the District Attorney's Office, the police departments, and the Sheriff's Office estimated that night court trials would cost an additional \$270,000 annually for staffing.

Increase courts' productivity

Shortages of courtrooms are not an immediate problem, but if judges could manage a larger caseload, courtroom shortages could be put off further into the future. Our observations of courtroom usage indicate that on average judges are in their courtrooms about 52% of the time. The majority of courtroom work appeared to be scheduled during the first part of each morning and afternoon. We learned that judges recently rejected a proposal to schedule sentencing and probation violation hearings at 4:00 p.m. to ease inmate transport requirements and increase productivity. Judges may need to conduct legal research or meet with attorneys when they are not in the courtroom, but interviews with judges and attorneys indicate that these activities are not common.

In designing a new criminal justice building, experts suggest analyzing needs based upon case scheduling practices. This review could also ensure that the judges' time is most effectively used. Analyzing scheduling practices, gathering workload statistics for judges, and developing recommendations is a complex and time-consuming task, beyond the scope of our review. We believe that such a review by the Oregon Secretary of State Audits Division could also improve other elements of the criminal justice system such as county jail and probation activities.

Move out other functions

Another alternative we investigated is to move out other functions to make more room for judges. The pattern of the last 80 years has been to move all non-court-related functions out of the Courthouse. Except for the County Board Room all the space left in the Courthouse is used by the courts or a related function. The only remaining functions which could be moved are the District Attorney's Office, the Law Library, and the County Board Room, which occupy approximately 36,000 square feet.

Not all of the vacated space could be effectively converted into courtrooms and there would be leasing costs for the displaced programs. There would also be remodeling costs in the Courthouse. Operational inefficiencies would occur if district attorneys are farther away from courtrooms, with more time spent in transit and possible delays in hearings.

Expand the Juvenile Justice Complex

The Space Planning Group recommended that family law cases be moved to the Juvenile Justice Complex. Additional hearing rooms, chambers, and administrative space would have to be built at an estimated cost of about \$8.2 million for about 49,000 gross square

feet. Because of site limitations, a parking structure would also have to be built. In our projections of court needs we are assuming full use of all six of the current courtrooms at the Juvenile Justice Complex.

Purchase the old Federal Courthouse

A new federal courthouse is being constructed to replace the Gus J. Solomon Federal Courthouse, which might be available for lease or purchase from the Federal government. The General Services Administration is considering alternative uses for the 8-courtroom facility. One of the alternatives is renovation and use by the federal bankruptcy courts. Like the County Courthouse, the federal facility has significant structural and mechanical deficiencies which would require major financial outlays. If the County were to acquire the building, it would operate like a small annex, with the problems described for satellite facilities. The General Services Administration has not made a final decision about the building.

Remodel an office building into a courthouse

Office buildings would require major renovations to serve as a courthouse. Many features of an office building are incompatible with a courthouse. For example, an inmate holding area and a secure entrance would have to be incorporated. Lobbies, elevators, and corridors would have to be modified for the public. Heating and air circulation systems would have to be upgraded and soundproofing improved. Commercial buildings usually lack the floor-to-ceiling heights to allow raised judge and jury seating, and column spacing may impede clear views of courtroom presentations. Further, the building may have to be reinforced to meet new seismic requirements.

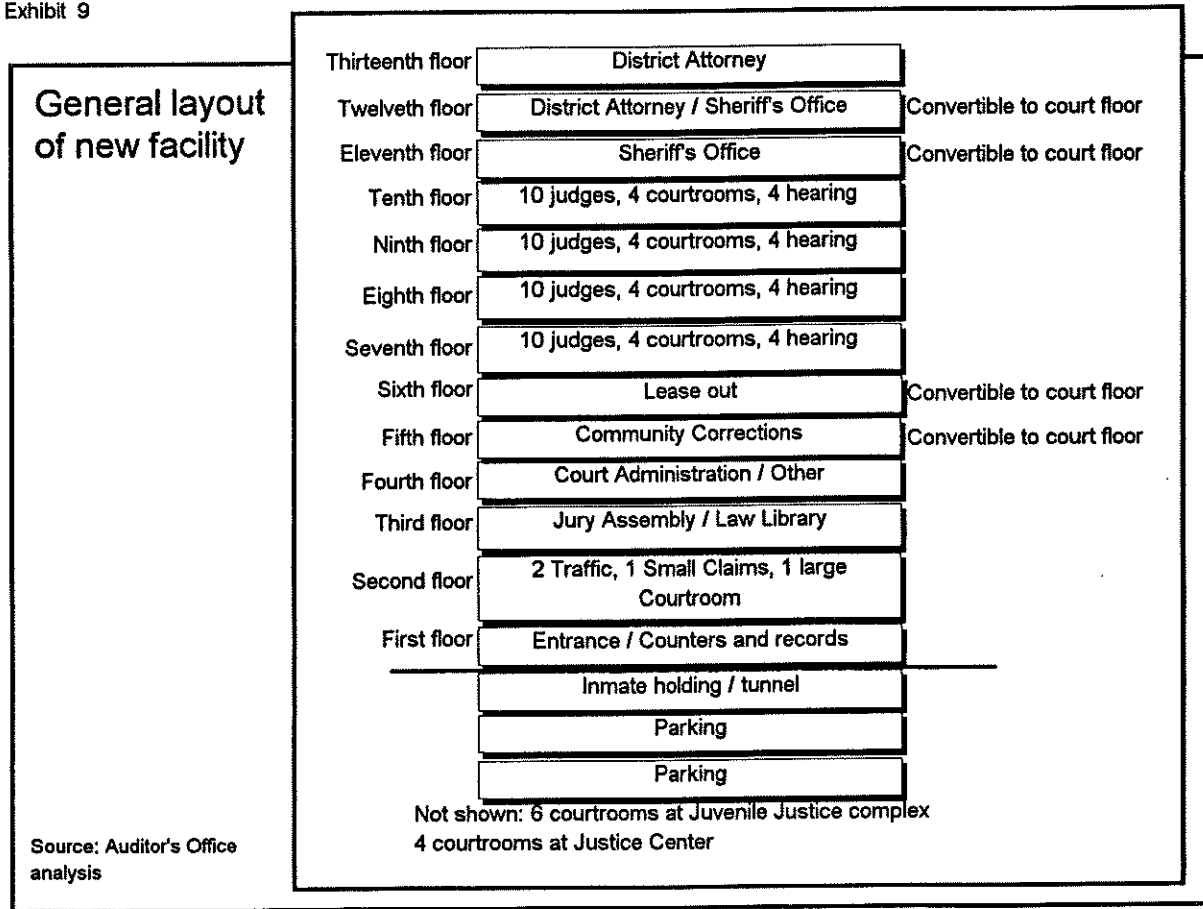
Designing cost-savings into a new building

General picture of a new criminal justice building

If there is support for constructing a new criminal justice building, design considerations can significantly reduce costs and improve operations. We developed a general layout for a new criminal justice building, based upon our analysis of space needs and circulation guidelines. More detailed review, as well as architectural considerations, would likely result in modifications. For example, locating the Civil Process Unit of the Sheriff's Office on the first or second floor rather than an upper floor may provide easier public contact and better coordination with the courts.

To ensure longevity and flexibility, at least three of the floors should be constructed so they can be converted to court floors. For example, these floors should have the same ceiling heights as the court floors and the ability to access the secure elevators. The District Attorney floors could also be built for conversion to court floors to maintain the option of extending the useful life of the building by moving those functions to leased space and adding more courtrooms. Exhibit 9 shows the general layout of a new criminal justice building.

Exhibit 9



Approximate square footages for the functions in the facility are shown in Exhibit 10. Current average and proposed sizes of court operations are shown as well as total spaces of functional areas in the facility for the years 2000 and 2040.

Exhibit 10

Approximate size of areas in facility	Type of area	Current Courthouse	Current Ave.sq.ft	Proposed sq. ft.	Year 2000	Year 2040
		Number of judges in facility	40			*43
	Judges' chambers (includes secretary space)	20,897	536	523	20,920	36,610
	Shared judges' library, restrooms	0	0	1,600	6,400	11,200
	Jury courtrooms	45,608	1,216	1,500	24,000	42,000
	Witness waiting/Attorney conference rooms		0	150	2,400	4,200
	Hearing rooms		0	1,000	16,000	28,000
	Jury deliberation rooms	11,459	382	400	6,400	11,200
	1 large courtroom with jury room		0	2,200	2,200	2,200
	2 Traffic and 1 Small Claims courts with chambers		1,300	2,000	6,000	6,000
	Jury assembly room	4,797		8,000	8,000	8,000
	Clerk offices				4,800	8,400
	Court reporters	3,113			2,100	3,710
	Counters and records	23,276			33,000	33,000
	Law Library	8,938			12,000	12,000
	Administration	7,204			9,000	9,000
	District Attorney offices	33,266			35,400	50,600
	Sheriff - jail, transport, security	13,283			22,000	22,000
	Other	3,116			8,400	8,400
	Community Corrections	0			22,500	0
	Sheriff's Office	0			32,500	0
	Other leasable space	0			22,500	0
	Hallways, stairwells, mechanical, HVAC, etc.	119,223			219,480	219,480
	Total Gross Square Feet	294,181			516,000	516,000

*10 additional courtrooms are located at the Justice Center and Juvenile Justice Complex

Source: Auditor's Office analysis

Access and site selection

Criteria often used to evaluate building sites include:

- ▶ availability of public transit and parking;
- ▶ proximity of other government buildings;
- ▶ prominence of site in terms of image and identity;
- ▶ architectural compatibility with surrounding buildings;
- ▶ availability and cost;
- ▶ potential for expansion;
- ▶ amenities such as views and landscaping; and
- ▶ physical constraints such as topography, soil conditions, utilities, and use restrictions.

Most criminal justice agency managers favored a new facility close enough to the Justice Center to allow a skybridge or tunnel for inmate transport. They said the current need to bus inmates two blocks to the current courthouse is inefficient. A nearby site would make more inmates immediately accessible to the courts. Nevertheless, the Sheriff's Office would have to continue to transport inmates from the other jails to a new criminal justice building. The tunnel or skybridge would eliminate the cost of constructing an entrance and loading area for inmate transport buses in a new criminal justice building. Experts indicate that tunnels or skybridges can reduce the risk of escapes and reduce the

cost of operating transport vehicles, but do not save staffing costs because the same number of staff are generally required for escort.

A downtown site would also assure good attorney access and good public transit access. There is a vacant lot directly east of the Justice Center which could allow skybridge or tunnel travel between the buildings. This site is privately owned and the cost is unknown. The City of Portland restricts the building size on this lot to about 350,000 square feet, but exceptions can be granted if the building's features are designed to meet certain goals. The County owns a site one block away from the Justice Center which could allow tunnel access. Regardless of proximity, detention space to hold inmates temporarily in a new criminal justice building is still necessary.

There are several arguments to be made for siting the courthouse outside downtown Portland. The small block size prevents phased additions to the courthouse in future years. A large campus setting with good transit access could allow co-location of a new jail and other administrative offices as well as construction of additional courthouse wings as they are needed. This would reduce initial costs, allow more expansion options, and permit courthouse designs to be modified to better meet changing needs in the future. Parking was perceived by some to be a problem at a downtown site. Further, new communications technologies may make courthouse location less important in the future. The Sheriff also raised a concern that the Justice Center, a very expensive facility to operate, could be utilized in other ways if the Courthouse was moved.

The County is also investigating building a jail facility. Courthouse planning literature identifies some problems when jails and courthouses are co-located. Efficient courthouses tend to be vertical (multi-story), whereas efficient jails tend to be horizontal (single-story). Building another vertical jail on Portland's small downtown blocks, like the Justice Center, can increase operating costs because extra staff are required to manage security and inmate movement. There is also an argument that courthouses and jails should not be co-located for philosophical reasons.

Courtrooms

Many court experts state that courthouses with more than 10 judges can have fewer courtrooms than judges, in anticipation of absences and canceled hearings or trials. Some facilities place judges and shared courtrooms on the same floor, while others have alternating floors of judges and courtrooms. There has also been an increasing trend to smaller courtrooms or hearing rooms, with one or two large courtrooms. We estimate that up to \$16 million in construction costs can be saved by building shared courtrooms and hearing rooms instead of providing a jury courtroom for each judge.

These smaller, shared courtrooms would reduce construction costs and increase the courtroom utilization rates we observed in Multnomah County. We found that an average of only 52% of courtrooms were in use during the busiest part of the day, from 9:30 to

10:30am each weekday. The maximum percent of courtrooms in use during our observation period was 70%. We also saw courtroom usage decline through the day. A small five-day sample in August showed an average use rate of about 20% from 3:30 to 4:30pm. When we analyzed scheduled absences, we found that vacations did not appear to affect the courtroom usage rate differently during the observation period.

We analyzed usage percentages with a probability model to estimate the likelihood of courtroom shortages for different ratios of courtrooms to judges. Courthouse design experts state that every judge should have "litigation space" available, such as a hearing room or courtroom. They state that no case should ever be postponed for lack of a jury courtroom. For a single floor, a ratio of seven courtrooms to ten judges would produce courtroom shortages about 19 times a year. If a judge could also use a courtroom on an adjacent floor, the pool of courtrooms is increased to 21 courtrooms for 30 judges, which reduces the likelihood of a courtroom shortage to about six times a year. A ratio of eight courtrooms to ten judges would cause courtroom shortages less than once a year. We also analyzed the frequency of jury trials and found that a ratio of four jury courtrooms for every ten judges resulted in a courtroom shortage less than once a year.

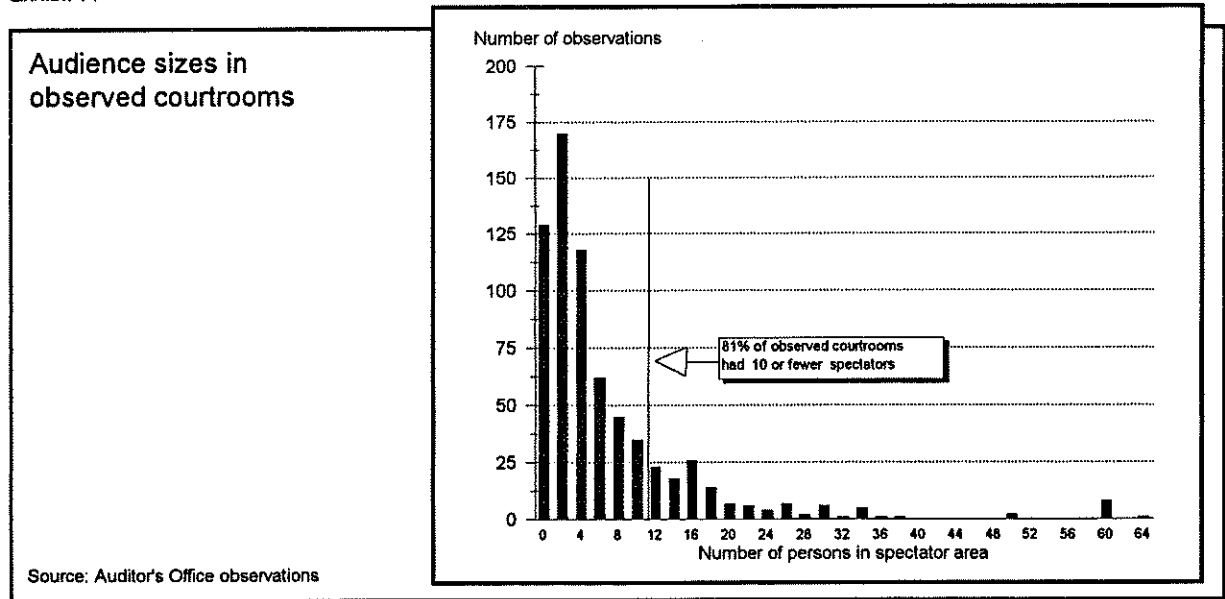
About seven courtrooms are needed for every ten judges, four of which would be built for jury trials. However, constructing a new criminal justice building to these specifications could limit increases in judicial productivity. Adding another hearing room allows for about 14% improvement in judicial productivity. Four moderate-sized jury courtrooms of about 1,500 square feet are needed, with one constructed to meet ADA standards. Four hearing rooms averaging about 1,000 square feet would be sufficient, with at least one of them slightly larger to add a jury box later, if needed. The hearing rooms could also be used for non-jury trials. To notify the public and employees of courtroom assignments, television monitors would have to be installed on each floor, much like airport terminals. If the alternative to build a satellite courthouse and remodel the current courthouse is considered, this ratio would have to be re-examined. It is more difficult to share courtrooms among smaller numbers of judges.

Not assigning courtrooms to judges allows ADA-compliant features to be included on some courtrooms. If a judge, witness, juror, or observer needs special provisions the case can be scheduled for a courtroom or hearing room with features such as ramps and extra space for wheelchairs. Every courtroom doesn't have to be completely accessible to people with disabilities, according to one courthouse architect.

Each jury courtroom should also have a waiting room. There is a general consensus that victims of violent crime and witnesses in criminal trials deserve sensitive treatment, and waiting areas should be provided for them. This reduces the possibility of contact between defendants and witnesses for the prosecution which could result in intimidation, conflict, or improper communication. These rooms can also serve as attorney conference rooms.

Smaller jury courtrooms could also save money. We found that 81% of the courtrooms contained 10 or fewer persons in the observers' area. Arraignment, traffic and small claims courtrooms contained an average of 17 persons in the observers' area, but the other courtrooms averaged only 5 persons. The jury courtrooms must be large enough to hold 36 potential jurors for the jury selection process. Exhibit 11 below shows the total number of persons in the courtroom and the number of times we observed that number.

Exhibit 11



One very large courtroom of 2,200 square feet could be constructed on a lower floor to handle trials that need a large spectator area, the morning session when cases are assigned to judges, ceremonies, and orientation and selection from the large jury pools needed for aggravated homicide cases. Larger traffic and small claims courtrooms could also be located on this floor.

Technology

Courtrooms and administrative offices can be designed to incorporate current and future technologies. One judge has already installed a computer system in his courtroom to provide on-line access to a legal database and to write and print out judgment orders on the spot, saving his own and clerical time. These technologies are likely to play a more prominent role in courtrooms and other court operations in the future. Electronic record storage is likely to be allowed in the future which will reduce space demands and improve access. Computer and video cabling should be installed to all possible work stations, with the capacity to install the next technology of cabling, when needs and costs justify it. Data entry and clerical work areas should be constructed to provide space for cabling and easy access for future changes.

Other technologies such as interactive video for arraignments are currently being used when possible. Increased use of video can reduce inmate transports to attend hearings or to confer with attorneys. Video can also be used in the courtroom to present information, such as witness testimony.

Jury operations

The jury assembly area of 5,000 square feet is inadequate for the current number of prospective jurors. At least 3,000 more square feet is needed to provide a comfortable area for current and projected jurors.

According to some experts, unless there are more than five courtrooms on a floor, each courtroom should have a jury deliberation room. The average size of the current jury deliberation room is 380 square feet including bathrooms, which is less than the 450 to 500 square feet suggested by guidelines. If pairs of jury deliberation rooms can be located next to each other, shared bathrooms can save space and construction costs.

Chambers

Judges' chambers in the courthouse average 540 square feet, which includes space for the judge, secretary, files, waiting area, and bathroom. The chambers at the new Juvenile Justice Complex are about 530 square feet. These sizes fit within general guidelines for chambers. One means of reducing plumbing costs and saving space is to replace private bathrooms with a multipurpose judges' lounge, with adjoining bathrooms. The lounge could also serve as a centralized library on the floor to reduce the costs of purchasing and updating the legal texts maintained by each judge. Criminal justice managers and experts suggest that shared areas can increase "collegiality" among judges and improve productivity. Another method suggested by experts is to create suites of chambers for judges to share resources and staff.

Court reporters and court clerks

There is approximately 3,000 square feet of space in seven courthouse offices for 17 court reporters, who record courtroom proceedings and use these offices to transcribe their notes. By combining the space into groupings to hold six reporters on each courtroom floor we believe that 3,500 to 4,000 square feet would be adequate.

Court clerks use their desk in the courtroom to conduct their administrative work. If courtrooms are to be shared, additional space for court clerks must be set aside. Courthouse guidelines suggest about 120 square feet per clerk, which can be combined into a ten-person clerks' office on each floor with courtrooms.

Counters and records retention

Approximately 23,000 square feet of the courthouse is used by staff to serve the public at counters, enter data, and locate and store records. About 8,000 to 10,000 square feet of

the courthouse basement is currently used to store these records. Space limitations at the traffic counter, in records, and other areas cause slow service, crowding, and records searches in the basement which are difficult and time-consuming. Adding another 10,000 square feet would resolve most of the space problems and allow for some short-term growth in record storage. One judge suggested that the courts would likely accept electronic records storage in the next five years, which could significantly reduce space requirements in this area.

Law library

The law library currently occupies about 9,000 square feet in the Courthouse, and operates in crowded conditions. The library also has about 8,000 square feet of materials in a nearby building, and 15,000 square feet of storage space on the east side of Portland. With increasing use of digital data storage, space needs for legal information will not grow as quickly. We are estimating 12,000 square feet in a new criminal justice building for the law library, with no further growth necessary.

Security and inmate detention

A new criminal justice building could be designed to better manage the secured and unsecured spaces. Some functions may be placed outside secured areas of a new criminal justice building to reduce the workload of security staff and reduce delays at security points. For example, the placement of the jury assembly room on the first floor of the current courthouse forces jurors to pass through security each time they are sent to a courtroom.

A new criminal justice building which is better designed to prevent violent incidents is not likely to reduce security staffing needs below current levels, but it could reduce delays experienced by the public when entering the building. Some space is needed near the lobby as an operations site for security staff.

Criminal justice managers noted that lack of adequate attorney-client meeting space in the courthouse makes it more difficult to dispose of cases. A new criminal justice building could also provide video-equipped work areas to allow attorneys to confer with inmates at the County's other jails. These activities could be combined into ten secure attorney-client conference rooms of 90 square feet each which could allow either video or in-person contacts with inmates.

Less space would be needed for the inmate detention area if a new criminal justice building can be sited within skybridge or tunnel distance of the Justice Center. Sheriff's transport staff stated that the current 10,400 square feet of detention space is adequate to hold inmates if the space is not also being used as an overnight facility. They noted that any new detention space should include a separate holding area for juveniles being tried in adult court.

We could find no standards relating inmate detention space to courtroom space. Sheriff's personnel said that current space was adequate to hold inmates on even the busiest days. Quick access from the Justice Center jail can compensate for any space shortages in the holding area. We applied a growth factor of about 50% to the total space for security and inmate detention, setting it at approximately 22,000 square feet in a new criminal justice building.

Administration

Current court administrative space is scattered among five different locations, totaling 7,200 square feet. The growth rate of administration is likely to be less than that of judges. We assumed that consolidation of the spaces will increase the usable amount of space and applied a 20% growth to project 9,000 square feet. Included in this area is the chamber for the presiding judge.

Other program space

This category includes 3,100 square feet for family law, mental commitment hearings, grand jury operations, and a police waiting room. We project that the activities would grow to about 8,400 square feet.

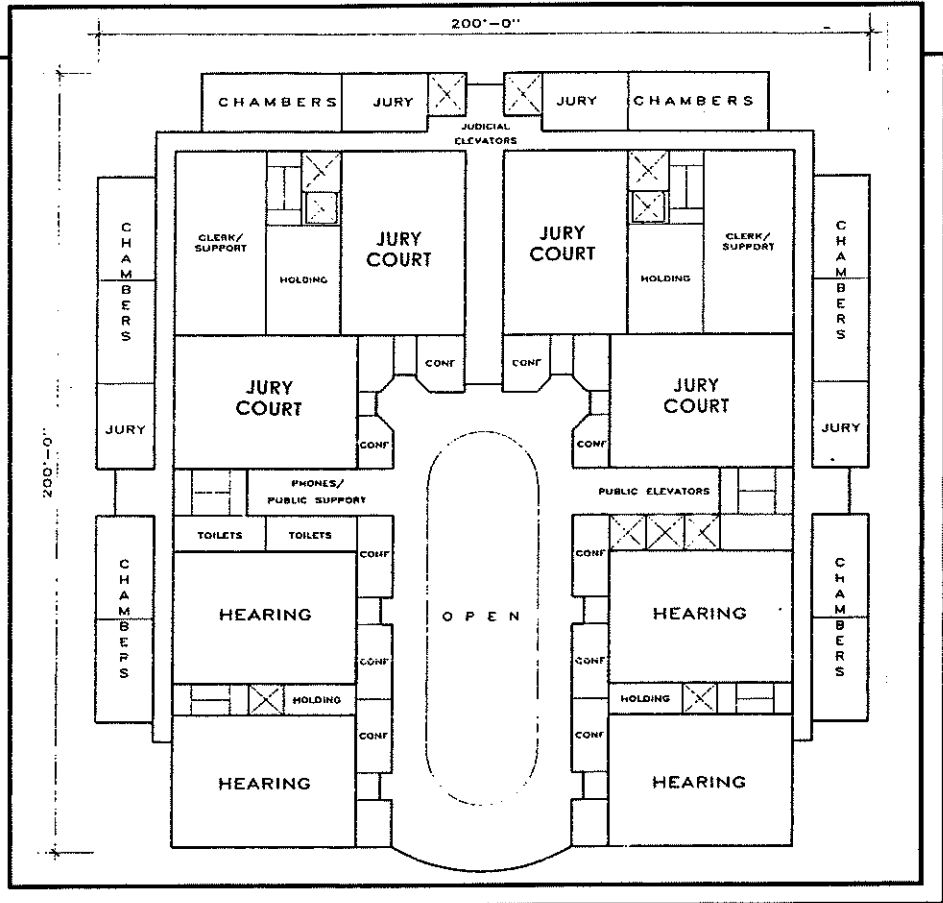
Lobby, corridors, and waiting areas

Public access must be balanced against security risks. Justice facilities must be accessible to the public, but inmates must be secured against escape, and measures must be taken to prevent violence against staff and trial participants. Modern courthouses are being designed with three separate circulation systems for the public, inmates, and courthouse personnel.

Exhibit 12 is a court floor plan showing the separate circulation corridors. The public enters the courtrooms from the building center and judges and staff enter the courtrooms from the secure corridor running outside their chambers. Secure inmate elevators and holding areas are located between pairs of courtrooms. Sheriff's personnel currently transport prisoners from a central detention area rather than staffing each courtroom with a bailiff.

Example of a court floor

Source: Hellmuth, Obata & Kassabaum architects



The lobby should have adequate and well-designed space to avoid congestion and bottlenecks for persons entering and exiting the building. Corridors should also contain areas large enough to accommodate persons waiting for a trial or a hearing.

Elevators and circulation

An adequate number of elevators are needed to transport the public to the desired floor. Escalators may also supplement the elevators for high volume transport to a second or third floor. In addition, two secure large-sized elevators should be provided for inmate transport. At least two elevators are also needed for circulation of judges, staff, and freight.

Experts suggest location of high volume activities such as traffic court and records on lower floors, and lower volume activities such as trials on upper floors. Middle floors could be filled by the Sheriff's Office and Community Corrections until the space is needed by the courts.

Restrooms

For security reasons, separate restrooms should be provided for the public and personnel. Restrooms in a judges' lounge could avoid the cost to construct and maintain private toilets for judges.

Vehicle parking

Experts recommend that judicial access to parking spaces be secure. Additional parking would be required for County vehicles of the District Attorney's Office, Sheriff's Office, and Department of Community Corrections personnel. Two floors of parking would be required, which could hold about 150 vehicles.

Recommendations

- I. To cost-effectively meet current and future justice facility needs, the Courthouse Task Force should determine and propose to the Board of Commissioners the best means of financing a new criminal justice facility. Some activities include:
 - A. **Seek state assistance** County-provided facilities and state court operations affect each other's long-term costs and efficiencies. Seek financial assistance from the state to construct a new justice facility that will accommodate growth in the number of judges until 2040.
 - B. **Generate community financial support** Work with citizens groups, Facilities Management personnel, and Board of County Commissioners to obtain local funding to augment state financial assistance to construct a 516,000 square foot facility. State-imposed fees are used in some jurisdictions to finance courthouse construction.

- II. To ensure that all cost-saving methods are considered, Facilities Management should carefully plan for a new criminal justice facility, including:
 - A. **Obtain a suitable site** Take immediate steps to obtain a facility site in downtown Portland which will allow a tunnel or skybridge connection with the Justice Center for inmate transport. Potential sites are limited, and a tunnel or skybridge would eliminate the cost of constructing a secure entrance for the inmate transport bus, reduce transport costs, and decrease the amount of space needed to hold inmates.
 - B. **Monitor other courthouse projects** Begin investigating justice facility design and construction practices from other jurisdictions such as Salt Lake City and Dade County, Florida which best meet court needs while controlling costs.
 - C. **Develop a facility program** Initiate meetings among future facility users to define specific needs. Contract with experienced facility design consultants to develop detailed design specifications to assist in construction bidding.

- III. To control costs, a new criminal justice building should be constructed to match the needs of court proceedings. For example:
 - A. **Design smaller courtrooms to be shared among judges** Current usage patterns require only four jury courtrooms for every ten judges. Sharing courtrooms would reduce construction costs and increase utilization rates. These courtrooms could be constructed for smaller audiences than current courtrooms. In addition, sharing courtrooms would reduce construction costs by including specialized features such as interactive video or ADA-compliant features in some, but not all, courtrooms.
 - B. **Supplement courtrooms with hearing rooms for judges** We found that judges are often involved in hearings which do not require space for juries, jury

deliberation rooms, or a large number of spectators. A new courthouse should be designed with four hearing rooms for every ten judges.

- C. **Reduce the number of jury deliberation rooms** No more than four jury deliberation rooms are needed for each ten judges. Jury deliberation rooms are needed for each jury courtroom but not for hearing rooms.
 - D. **Construct one large-capacity courtroom** One large courtroom should be constructed on a lower floor to handle high-profile trials, public ceremonies, and other activities which could require room for 100 spectators and large numbers of litigants and attorneys.
- IV. To control costs, a new criminal justice building design should consolidate or co-locate functions. The design should involve representatives of all Courthouse, Sheriff's Office, and Community Corrections staff. Some design features which save money include:
- A. **Co-locate Sheriff's Office and Community Corrections** Proximity between these agencies and the courts can result in better communications among their management and line staff. These areas should be constructed for future conversion to floors of courtrooms.
 - B. **Provide multi-purpose judge lounges** Costs can be saved by building multi-purpose judicial lounges instead of having individual amenities for each judge. Plumbing costs, as well as space savings can be realized by centralizing bathrooms, sinks, coffee areas and libraries on each court floor.
 - C. **Design for adjoining clerical space** Judges' secretaries could assist each other if their offices had a connecting door or shared the same space.
- V. To ensure the safety of the public, trial participants, judges, and facility employees, a new criminal justice building design should control circulation.
- A. **Provide separate corridors** Most large modern courthouses are being constructed with three circulation corridors to separate judges, inmates, and the public. Secured parking should be provided for judges. In addition, each jury courtroom should have a waiting room for victims or witnesses to reduce the possibility of contact or conflict between trial participants.
 - B. **Design for adequate security** The lobby should be designed with adequate space to avoid congestion for persons entering and exiting the courthouse. Counter and staff areas should also be designed with physical barriers to reduce the risk of assault and injury.
- VI. To reduce long-term costs, the courthouse should be designed to use current and future technology to improve court operations. Some areas to consider are:
- A. **Build in computer capability** Install conduits and computer cabling to all possible work stations, and the capacity to install the next technology of cabling.

- B. **Build in video capability** Construct at least one courtroom on each floor to provide interactive video for arraignment or conferences with attorneys to reduce inmate transport. Construct all courtrooms with the capacity to install video and other technology in the future. Include attorney/inmate conference rooms and video capability in the holding area of the courthouse.
 - C. **Plan for electronic data storage** Design for a small amount of short-term growth in records storage until electronic storage begins reducing space needs.
- VII. To improve citizen access and better respond to growing workload, pursue decentralized court operations in areas where efficiencies would not be adversely affected. For example:
- A. **Plan for decentralized pay stations** Citizens wishing to pay traffic and other fines could benefit from satellite kiosks or electronic transactions. This would reduce demand for future counter space in the courthouse.
- VIII. To reduce current and future need for court space, courtrooms and judicial resources could be better utilized. Better management by the state courts can reduce County space costs. For example,
- A. **Use Justice Center courts** Past efforts to use all four courtrooms in the Justice Center have been unsuccessful. If plans to use two vacant courtrooms for drug court do not succeed, they should be remodelled for badly needed administrative space.
 - B. **Re-assign underutilized courtrooms** The courtrooms of the two presiding judges are seldom used because of their administrative responsibilities. Provide them with office space and assign their chambers and courts to other judges.
 - C. **Expand court hours** Some court activities, such as family law, may be amenable to expanded hours for the convenience of participants. Other activities such as trials may have difficulty operating in evening hours.
 - D. **Increase judicial productivity** Our observations indicate that, at the busiest of times, judges are in their courtrooms about 52% of the time, and much less in the late afternoon. We recommend that the Oregon Secretary of State Audits Division review court scheduling practices, workload statistics for judges, and opportunities to streamline court operations. Because we believe such a review could also produce improvements in local elements of the criminal justice system we are willing to commit resources from this Auditor's Office to assist in the effort.

