

FACILITY CONDITION REPORT

2004



Facility Management
Division
City of Eugene

210 Cheshire Avenue
Eugene, OR 97401

2004 Facility Condition Report

April 18, 2005

The data for this report was collected in the field during the Spring and Summer of 2004.

CONTENTS

2004 Facility Condition Report

INTRODUCTION

EXECUTIVE SUMMARY	1
<i>Scope, Findings, Trends, Conclusions</i>	

NARRATIVE REPORT	9
<i>CONDITION OF AUDITED GENERAL FUND FACILITIES</i>	

Scope
Methodology
Findings
Trends
Issues
Goals

REFERENCE MATERIALS	29
---------------------------	----

Background of the Facility Reporting and Planning Process
Funding Categories for Capital Projects
Definition of Facility Condition Report Terms
Example FCI Calculation
Report for Fire Station #9 – Valley River
2004 Condition Report for General Fund Building by Condition
Cross Reference by Building Name

INDIVIDUAL FACILITY CONDITION REPORTS	44
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(Abbreviated version contains covers only)

AUDITED GENERAL FUND

Essential Services – Fire Department
Essential Services – Police Department
Government and Administration
Meeting, Entertainment, and Historic
Park Support Facilities
Senior and Community Centers, Pools, Golf

INTRODUCTION

The purpose of the Facility Condition Report (FCR) is to assess the condition of the City's General Fund building inventory and determine what needs to be done to enhance and retain the value of this city asset. The report provides a measurable indicator of facility condition tracked over time. The data in the report is used to prioritize building reinvestment for capital budget projects, which will result in changes in building condition. The Facility Condition Report also provides a benchmark to evaluate the effectiveness of the City's preservation investments over time.

This report includes a summary page for each General Fund facility in the analysis. In addition to information on the size, age, and condition of the facility, the summary page also includes information on the level of existing and emerging deficiencies in the 1995, 1997, 2001 and 2004 audit cycles. This level of deficiencies is expressed as a dollar amount and also in an index which relates the dollar figure to the cost of replacing the facility with a building that meets current standards for public buildings. This provides an overview of how the condition of a facility changes over time and whether investment in a given facility has been cost effective.

This audit and the 2001 audit distinguish between "Current" and "Deferred" Deficiencies, each a type of "Existing Maintenance Deficiency". Current Deficiencies are items identified for the first time as due to be repaired within one year, and Deferred Deficiencies are items identified previously as needing repair within a year and are overdue for repair or replacement. The aggregate of deferred deficiencies is the "Deferred Maintenance Backlog". These terms are used to determine to what extent previously identified deficiencies are being addressed. As these distinctions were not used prior to the 2001 audit, comparisons to audits prior to 2001 in this report of "Existing Deficiencies" include both current and deferred data in order to establish comparable data between audit cycles.

The complete listing of deficiencies for any audited facility is available by contacting the Facility Management Division at 210 Cheshire Ave.

EXECUTIVE SUMMARY

2004 Facility Condition Report

April 18, 2005

Scope of Report

The 2004 Facility Condition Report represents a continuation of the 1995, 1997, and 2001 methodology, measuring the cost to correct existing building deficiencies needing repair within a year, and relating that sum to the cost of replacing the building with a new one up to current codes and standards—a ratio termed the Facility Condition Index (FCI).

This report focuses on 98 structures maintained by the General Fund with a total 2004 Current Replacement Value of over \$220 million, up from the 2001 audit value of \$119 million. Examples of audited buildings include the Hult Center, the new Library, various community centers, and fire stations.

Since the 2001 reporting cycle, 11 buildings totaling over 72,000 SF have been removed from City ownership either through sale, demolition, or arson; 4 buildings totaling about 180,000 SF have been added with one facility, Amazon Pool, undergoing a significant expansion. Also, 8 facilities with an area of about 75,000 SF were not included because they were under construction during the audit process.

The audited facilities encompass 895,578 square feet of building area and are an average of 44 years old on a unit facility basis, up from 717,026 SF and approximately 43 years of average age. Significantly, this audit's group of facilities is valued \$101 million higher than the last audit, due in part to the increase in area. However, the replacement values used in this audit have been revised beyond an increase for inflation to correspond to current standards for public buildings, causing the value of the inventory to be adjusted upwards proportionately more than increases in repair costs. This evaluation of replacement costs indicates a more valuable asset than previously believed.

Summary of Findings

The average Facility Condition Index (FCI) of the portfolio of facilities included in the 2004 study is 0.07, indicating that the dollar value of existing building deficiencies is equal to approximately 7% of the current replacement value of the facilities included in this audit cycle. By comparison, the 2001 FCI was 0.12, which was in turn markedly better than the 1997 value of 0.20.

However, the improvement in the FCI for this audit cycle is due in large part to an upward adjustment to the current replacement value of the City's building portfolio to reflect the escalating cost of construction and to more accurately reflect the higher quality and greater complexity of modern public buildings.

This adjustment resulted in a 34% increase in replacement value. To put this adjustment into perspective, without the adjustment in replacement value beyond inflation since the last audit, the overall index for this audit would be FCI 0.10 instead of FCI 0.07. Over half of the improvement in FCI is due to the adjustment in portfolio value.

Even though the FCI for the audited portfolio has improved since the previous audit, the dollar value of

existing maintenance deficiencies identified in the 2004 audit—\$16.2 million—is \$1.62m higher than the \$14.3m in deficiencies in 2001, an increase of 13.3%. To relate to past improvement, the '01 audit reduced existing maintenance deficiencies from '97 by \$7.32 million, or a 34% reduction from 1997 to 2001.

Similarly, the condition of buildings older than 1997 has steadily improved across audit cycles from an FCI of 0.20 in 1997, to 0.14 in 2001, to 0.11 in 2004. However, after the dollar value of existing deficiencies in these older buildings dropped from \$21.6m in 1997 to \$14.2m in '01, this value *rose* to \$15.8m in the 2004 audit. These older buildings represent 67% of the 2004 audited area and 98% of the total value of existing deficiencies. To some degree, the increase in the value of deficiencies between 2001 and 2004 is due to inflation; if the value of 2001 existing deficiencies was adjusted to account for inflation to 2004, these amounts would be nearly equal. Also, the time between the '97 and '01 audits was almost one year greater than the time between the '01 and the '04 audit. Nonetheless, these statistics reinforce the obvious notion that buildings generate increased preservation and maintenance requirements as they age.

Between 1997 and 2004 the general fund building inventory increased by 45% through the construction of new buildings including the 2nd & Chambers complex and the new Eugene Public Library. Currently, buildings newer than 1997 have about \$400,000 in existing deficiencies, or about 2.5% of the dollar value of all existing deficiencies, while equaling one-third of total square footage. Although deficiencies are very low, this class of buildings represents a significant proportion of total square footage. These new buildings, with higher asset value and more complex building systems, will require more capital intensive preservation and maintenance investment over time as well as increased maintenance needs through service and ageing of materials and systems in general.

Summary of Building Condition in 2004

The audit cycles from 1997 to 2004 reflect the overall goals of investing in buildings where most cost-effective and replacing buildings in the worst condition. Strategies included addressing emerging deficiencies as well as existing deficiencies, targeting of investment using the condition assessments, and an ongoing aggressive preventive maintenance program. The following characteristics contribute to the findings:

About one-half of the City's General Fund buildings, constituting 58% of total square footage, are in very good condition, with approximately 7% in good condition, and 34% in fair condition. Only about 1% of the square footage audited is considered in poor or very poor condition. Compared with the 2001 FCR, the condition of General Fund facilities has improved in the very good category as new larger buildings have been added. A shift also occurred in buildings from the poor category in 2001 to the fair category in 2004, due in large part to the reclassification of City Hall to fair condition based on the adjustment of its current replacement value.

The strategy adopted after the 1995 FCR was to reinvest capital preservation resources in those building in which repairs would be most cost effective, and to replace or dispose of buildings that were in the poorest condition. Since 1997, the City has disposed of old Fire Stations 2, 4, and 6, the old Fire Training center (leased space), the old library, and The Science Factory building (formerly Wistec) and has moved the 911 call center out of City Hall. During that time new buildings were constructed, including the Training Building, EFD Logistics, the EFD Drill Tower, Fire Stations 2 and 6, and the new library, as well as a major expansion of Amazon Pool.

- ◆ Since 1997 the City has developed a number of new facilities to enhance services to needed levels. The replacement of older, smaller facilities in poor or worse condition with new larger facilities in very good condition has removed some of the backlog of building deficiencies. The City removed 79,413 SF of older buildings since 1997 and added 295,721 SF of new buildings.
- ◆ Since the replacement values of buildings have been adjusted in this report, the reduction of the FCI from 0.12 in 2001 to 0.07 in 2004 is affected by the increased value of the City's portfolio of buildings. If asset values were increased by inflation only rather than adjusted for market value, the 2004 index would be 0.10 instead of 0.07.
- ◆ While the index measuring existing deficiencies has dropped from 2001 to 2004, the total dollar value of deficiencies in this period has risen by \$1.6 million from \$14.3m in 2001 to \$16.2m in 2004. Similarly, the level of deferred maintenance deficiencies has risen from \$10.9m in 2001 to \$11.2m in 2004. Since 2001, \$3.0m of previously identified deficiencies have been corrected while \$4.9m of new deficiencies have been added.
- ◆ For buildings constructed earlier than 1997, the change in FCI has indicated improvement dropping from 0.20 in 1997 to 0.14 in 2001 and 0.11 in 2004. However the \$15.8m value of 2004 existing deficiencies for these buildings is greater than the \$14.2m for 2001, indicating that buildings are in slightly worse condition, though no adjustment for inflation has been made to the 2001 figure. This apparent contradiction is due to the adjustment of replacement value to correspond to the City's actual building standards and service requirements.
- ◆ About one-half of the deficiencies in the City's General Fund building portfolio are attributed to City Hall, with \$8.4 million in existing deficiencies and \$5.5 million in emerging deficiencies. The condition of City Hall has a major impact on the measurement of the condition of these assets. Without City Hall, the overall FCI would be 0.04, meaning that the overall condition of General Fund buildings would be "very good."
- ◆ The value of deficiencies in different years has not been adjusted for inflation across audit cycles. Inflating the cost of deficiencies found in 2001 to equivalent 2004 costs would provide a more accurate comparison of the value of 2001 deficiencies corrected by 2004. Converting prior year's costs into 2004 values would improve the apparent effectiveness of building preservation program expenditures, as a higher value of outstanding deficiencies would be reported as corrected by the 2004 audit. However, the change is relatively marginal – roughly a 6% improvement in performance – and does not change the overall trends in the condition of General Fund buildings.
- ◆ As larger, more complex facilities are added to the inventory, older, smaller buildings are displaced. Over time, capital preservation measures will tend to involve repair of larger, more complex system components, and the cost of preservation is likely to increase.

Findings by Type of Building

The condition of General Fund buildings varies by type of building. The best and worst conditions for the six general types of buildings are as follows:

- ◆ The City facilities in the best condition are in the “Library/Entertainment/Meeting Room & Historic Buildings” and “Essential Services – Fire” categories, with a Facility Condition Index (FCI) of .017 and 0.042, respectively. The high rating of the “Library/Entertainment” group of buildings is due primarily to the new Library and the Hult Center, which make up 93% of the total square footage in this group of buildings and are in very good condition. The high rating for Fire facilities reflects both the recent construction at the 2nd and Chambers Emergency Services complex, as well as the significant amount of preservation invested in the older, outlying fire stations.
- ◆ Overall, the “Senior and Community Centers, Pools and Golf” facilities are rated as being in good condition, with an FCI of .078. However, the 25 buildings in this category vary widely in condition, and have the oldest average age. While the community centers are in relatively good condition, buildings at the Laurelwood Golf Course have the worst ratings in this category. Three of the structures at Laurelwood are in very poor condition and will require complete reconstruction or replacement in the near future to continue functioning.
- ◆ Buildings in the “Park Facilities” and “Police” categories are at the upper range of the “fair” condition rating, with an FCI of .114 and .136, respectively. The Park Facilities category has thirty-five separate buildings, with the widest variation in the condition of individual buildings. A combination of factors, such as materials used in older structures, lack of heating, use for maintenance activities, and a high ratio of exterior space due to their small size, create high maintenance requirements in this building category. The Police category includes the existing City Hall space used by the Eugene Police Department, the recently constructed 9-1-1 Central Lane Communications Center, the Lincoln Yard complex and a few outlying radio repeater sites. Although the 9-1-1 Center is in very good condition, the average condition of these facilities reflects the Police space at City Hall, which is rated at the lower end of fair condition with 26.7% deficiencies.
- ◆ The “Government and Administration” category rates as being in the worst condition, with an FCI of .267, near the bottom of the “fair” condition rating. City Hall and Public Works Administration—the City’s two largest general office buildings—have the lowest condition rating of major City facilities.

Findings for Funding Categories

The deficiencies identified in the condition assessments are separated into four building preservation and maintenance categories, as defined in the capital budget (see definitions on page 23). The major findings are:

- ◆ Service Systems—including mechanical, HVAC, plumbing, and electrical systems—continue to account for about one-quarter (\$4.0m) of the total value of existing deficiencies and about one-half the value (\$5.9m) of all emerging deficiencies. Service system deficiencies will continue to emerge due in large part to the 44 year-old average age of General Fund facilities. The high level of emerging service system deficiencies is a concern, as breakdowns in these systems often require immediate action and large expenditures.
- ◆ Existing deficiencies in the area of Health, Safety and Welfare account for 41% of the value (\$6.7m) of all existing deficiencies, a reduction from 47% (but still \$6.7m) in 2001. About half of all deficiencies in this category are found at City Hall. Also, nearly two-thirds of the value of

the Health, Safety and Welfare existing and emerging deficiencies are due to seismic issues. Facility Management has implemented a program to address seismic retrofits in key city facilities, with the exception of City Hall.

- ◆ Existing deficiencies in Structural Building Systems have been reduced since 2001 from \$2.6m to \$1.9m, a drop of 27%. However the cost of all emerging deficiencies of this type has grown from \$2.6m to \$4m during the same period.
- ◆ Deficiencies in Interior Systems—including carpeting, painting, and minor remodeling—are a small part of all deficiencies and minor repairs can often be addressed in the building maintenance program. However, the cost to repair observed existing deficiencies has grown 20% (to \$1.55 million) and to repair emerging ones has grown 68% (to \$2.1 million) since 2001. This acceleration of repair needs reflects the shorter functional life of a variety of interior finishes.

Summary of Trends

1. The proportion of existing deficiencies relative to portfolio value (FCI) continues to drop as it has for the previous two audits. However, the reduction of the FCI from 0.20 in 1997 (\$21.65m existing deficiencies) to 0.12 in 2001 (\$14.33m) to the 2004 ratio of FCI 0.07 (\$16.18m) should be understood in combination with the increased area and value of the city portfolio of assets. The 2004 audit incorporates an adjustment in building replacement values according to actual estimates in this region and reflects the City's quality needs to support required service levels. Without the adjustment in replacement values from the last audit the index would have dropped from 0.12 in 2001 to FCI 0.10 in 2004.
2. The estimated cost of existing deficiencies has increased, in contrast to the reduction accomplished between the 1997 and 2001 audits. In the 2004 audit, the cost to repair observed existing deficiencies is almost \$16.2million, increased from the 2001 figure of \$14.3m but lower than the 1997 amount of \$21.7m.
3. During FY01 and FY02, the General Fund Capital Budget dedicated to building preservation was equal to about 1.5% of Current Replacement Value. However, with additions to the General Fund building inventory and implementation of budget reduction strategies, the General Fund Capital Budget in FY04 for preservation (\$2.19 million) has dropped to just under 1% of current replacement value. This trend is projected to continue through FY06 and beyond. When combined with major maintenance provided through the Facility Management Division's operating budget, resources dedicated to General Fund facility preservation and maintenance equal approximately 1.7% of the value of the inventory of General Fund buildings. This is below the lower limit of the range of 2% to 4% of asset value recommended by the National Research Council for the maintenance and repair of publicly owned buildings.
4. While progress has been made on reducing the backlog of existing deficiencies, the level of deficiencies emerging within the next five years will continue growing, due in large part to the average 44 year age of the General Fund inventory. Approximately \$7.2 million in deficiencies are expected to emerge over the next three fiscal years, which is more than the projected funding available to address building preservation. Building service systems make up the largest component of emerging deficiencies, and will require continuing rehabilitation to prevent system failures. Overall, it will be financially difficult to reduce the maintenance backlog and address new preservation needs as they emerge.

5. The City has added about 188,000 square feet of building area since the 2001 audit, which in turn listed 109,000 SF of added area to the General Fund building inventory since 1997 for a total of 297,000 SF of new construction since 1997. During the same period, about 79,000 square feet of older buildings were sold or demolished for a net increase of approximately 218,000 square feet. This is a 45% increase since 1997 of building area to be operated and maintained. While buildings constructed in recent years are still relatively free of maintenance deficiencies (with some in this report still covered under warranties), these buildings represent a large amount of square footage that will require an increasing level of maintenance in coming years to preserve their condition. Funding adequate maintenance of these newer facilities in the near term will help avoid more costly problems in future years.

6. Maintaining an adequate level of resources for building preservation will become challenging as the Capital Budget faces increasing competition for limited General Fund resources in the next several years. There still remains a backlog of current deficiencies in General Fund buildings of approximately \$16 million, with nearly \$12 million identified at this time in emerging deficiencies. Retaining capital investment in facility preservation at current or increased levels is necessary to maintain the functionality of City buildings and prevent the backlog of deficiencies from increasing.

7. City Hall accounts for over one-half of the existing deficiencies in all General Fund buildings, while equaling about one-quarter of the total square footage. Less than half of City Hall's square footage is actually occupied space. If the parking level and plaza area were excluded, City Hall would equal only 11% of occupied General Fund space, but account for over one-half of existing building repair needs. Without City Hall, the overall condition of the General Fund building inventory would increase from "good", with a Facility Condition Index of 7.3, to "Very Good", with an FCI of 4.1. Also, City Hall has a disproportionate level of emerging deficiencies. About 45% of General Fund building deficiencies expected in the next 5 years are related to City Hall, concentrated in building service systems.

Meeting Goals Set in the 2001 Audit Cycle

The 2001 FCR established four specific goals to help focus decisions on investment in building preservation. The Facility Management Division has met two of those goals, and made substantial progress on the other two. These strategies and actions are:

- ◆ Goal: Reduce the amount of existing deficiencies to a total of 10% or less of the Current Replacement Value of the inventory of General Fund buildings.

Result: The existing deficiencies in General Fund buildings in 2004 were 7.3% of Current Replacement Value. However, a portion of this improvement in relative condition was due to an adjustment in the calculation of Current Replacement Value. To make the Facility Condition Index more comparable to the 2001 measure, this adjustment can be backed out, reducing the Current Replacement Value. This results in an FCI of 10.1%, still effectively meeting the 2001 goal.

- ◆ Goal: Improve the condition of individual facilities so that two-thirds of the total square footage of General Fund buildings is in good or very good condition.

Result: The 2004 FCR found that 65% of the square footage of General Fund buildings is in good or very good condition. Again, this is partly due to the adjustment made in the estimation of Current Replacement Value of these facilities. If the adjustment made in Current Replacement Value is

reversed, 61% of the square footage of General Fund buildings is in good or very good condition, compared to 57% of square footage in the 2001 FCR. The improvement in 2004 is due primarily to the addition of new facilities, and only partly the result of investment in or disposal of buildings in the fair and poor categories. While a number of buildings in poor condition were removed from the building inventory, the larger ones were not included in the 2001 FCR, so did not affect the facility condition index in that audit or the change between 2001 and 2004. The buildings that had been in the 2001 audit and dropped from the 2004 FCR were of small size, with no measurable impact on the index based on total square footage.

- ◆ Goal: Resolve the long-term status of City Hall.

Result: This goal has been partially achieved. Since the 2001 FCR, the City Council has directed staff to plan for the eventual replacement of City Hall. Both Fire Station #1 and the Police Forensic Evidence and Property Control units were relocated from City Hall to other facilities by the start of FY06. Council also approved a policy of limiting investment in repair to City Hall, pending a decision on replacement or reconstruction of the existing facility. Council is currently considering initiating a more formal master planning process to address creation of a City Hall complex. The expectation is that a more definitive plan for the future of City Hall will be adopted during FY06.

As City Hall accounts for over 50% of the repair needs in General Fund buildings, the final disposition of this facility will have a significant impact on overall measures of the condition of the City's building inventory and management of the City's funding for building preservation.

- ◆ Goal: Refine a long-range facility investment strategy that addresses emerging deficiencies in addition to the existing deficiencies in City buildings. The Facility Management Division needs to more effectively target the investment of building preservation funds to maximize effectiveness.

Result: This goal has been partially addressed. In 2001, the primary strategy identified to achieve this goal was to obtain a computerized capital asset management system that would be capable of "real time" analysis of building conditions and the impact of capital investment in repair and preservation projects. Due to the cost to purchase and maintain a sophisticated system, the decision was made to complete the 2004 FCR using existing technology. A more in-depth evaluation of the current system will determine if the system can be modified to meet the Division's information management needs, or if it would be cost effective to develop such a system in-house. Once this evaluation is done, the decision can be made to modify the existing system, build one in-house, or continue to look at the purchase of a system from a vendor.

Summary of Goals from the 2004 Audit Cycle

The progress made in decreasing the amount of existing deficiencies in City General Fund buildings increases the ability to manage further improvements to the condition of City buildings more strategically. Establishing specific goals will help focus decisions on investment in building preservation. The Facility Management Division recommends implementation of the following strategies:

- ◆ Maintain the percentage of existing deficiencies to a total of 10% or less of the Current Replacement Value of the inventory of General Fund buildings. Meeting this goal will result in

improved condition of the assets, more efficient use of funding, and less potential for service disruption.

- ◆ Improve the condition of individual facilities so that 75% of the total square footage of General Fund buildings is in good or very good condition. Meeting this goal will continue to require investment in or replacement of facilities in fair and poor condition.
- ◆ Anticipate that with new larger buildings, more capital intensive maintenance measures will be needed to preserve their condition and useful value to the public over their service life. Many of these aspects can be identified with a review of expected service lives of major building systems.
- ◆ The long-term status of City Hall is currently under review by the City Council. Once direction is provided on the retention or replacement of City Hall, an appropriate building maintenance and preservation maintenance plan will be developed. As City Hall accounts for over 50% of the entire backlog of existing deficiencies, improvements to or replacement of this facility will have a significant impact on overall measures of the condition of the City's building inventory.
- ◆ Refine a long-range facility investment strategy. In order to meet the recommended performance targets, emerging deficiencies will need to be addressed in addition to the existing deficiencies in City buildings. The Facility Management Division needs to continue to improve the ability to target the investment of building preservation funds to maximize effectiveness.

For more information, please contact Glen Svendsen at 682-5008.

NARRATIVE REPORT

2004 Facility Condition Report

Scope of Report

The Facility Condition Report establishes baseline data for facility condition through a detailed, structured inspection process. This report represents a snapshot in time to which future inspection results can be compared. An ongoing condition assessment program allows tracking of future facility conditions relative to capital reinvested. The information obtained from this process also allows for: 1) generating decision models to calculate alternate reinvestment rates and their effect on facility condition; and 2) a wide range of reporting capabilities related to the condition of the facilities portfolio.

The 2004 Facility Condition Report (FCR) assesses the condition of 98 General Fund buildings, with an area of 895,578 square feet and a 2004 replacement value of \$220 million (the valuation excludes site remediation, site development, and land acquisition costs). This is a net increase of 178,552 SF of building area and an increase of \$101 million in replacement value compared to the 2001 inventory which totaled 717,026 SF with a value of \$118,878 million (in '01 dollars).

Four new buildings totaling 179,769 SF were added to the facilities portfolio since 2001. The Amazon Pool expansion project, which was excluded from the 2001 audit as it was under construction, added another 8,283 square feet to the 2004 inventory. Eleven General Fund buildings with 72,545 SF were sold or demolished since the 2001 audit. (Of these eleven buildings, only 8,993 square feet were included in the 2001 audit, as most had already been slated for disposal or replacement.) The report excludes park improvements like bike paths, sport courts and fixed equipment. Eight buildings with 74,643 SF were not included in the 2004 audit because they were under construction at the time.

<u>New Buildings Added Since 2001</u>	<u>Bldg. #</u>	<u>Area</u>	
Library	39301	178,272	
New Alton Baker Park Restrooms	12402	822	
Amazon Park Pool Concession Building	131009	373	
Laurelwood Golf Course Ball Wash	21207	<u>302</u>	
			179,769 SF added (whole buildings)

<u>Buildings Removed Since 2001</u>	<u>Bldg. #</u>	<u>Area</u>	
Old Library	401	36,822	sold
Old Fire station #2	901	2,482	”
Old fire station #4 & drill Tower	1101 & 2	5,853	”
Old Fire station #6	1301	2,911	”
Wistec	133402	10,768	”
Old Alton Baker Park Restrooms	12406	738	demolished
Old Fairmount Park Restroom	16401	166	”
Old Amazon Ballfield Restrooms	13106	494	”
Old Hendricks Park “A-Frame” Restrooms	17704	202	”
Lincoln Yards Shed	3713	1,540	”
Lincoln Yards Warehouse	3709	<u>10,569</u>	”
			72,545 SF sold/demolished

<u>Buildings Excluded from this Audit</u>	<u>Bldg. #</u>	<u>Area</u>
New Fire Station #1		28,000 under construction
New fire station #11	6201	20,335 " "
New Amazon Ballfield Restrooms	131110	990 " "
New Police Services Building	201	15,000 " "
Fire Prop Storage Building	6006	1,728 " "
Fire Live Burn training Building	6007	2,884 " "
Eugene Depot	3401	5,346 under renovation
Eugene Depot Bunkhouse	3402	360 " "
Total excluded from audit		74,643 SF excluded

For the 2004 FCR, the building area data includes area added in remodels as well as minor revisions to reflect more accurate building information. Also, the Fairmount Park Restroom replacement had not started, and is not included in the list of buildings under construction.

Methodology

Various agencies were cited as information sources by previous staff in research conducted to develop an improved approach to managing a facilities portfolio, including The International Facility Management Association, the American Public Works Association, the City of San Jose, California, and the City of Scottsdale, Arizona. A publication entitled *Managing the Facilities Portfolio* by the National Association of College and University Business Officers (NACUBO) provided broadly accepted practical tools for institutional facility management and was referenced by all of the above listed agencies. This publication was prepared for NACUBO by Applied Management Engineering, P.C., and Coopers and Lybrand.

The 2004 Facility Condition Report process followed the procedures established for previous audits as described in the NACUBO publication. This includes detailed, systematic inspections of each facility during which observed deficiencies are recorded along with a priority ranking and any other data needed to complete the audit process. An estimated cost is then developed for the correction of each deficiency. The audit process for the 2004 Facility Condition Report was performed by Berry Architects PC. The estimating of inflation since the last audit and the adjustment of replacement values to reflect current public building standards was performed by Giesen-Cummins Associates, Construction Estimator. The Facility Management Division's Design & Construction staff coordinated the pricing and estimating information, reviewed the field inspection results, and circulated preliminary information to user departments for review. To assure future usability and compliance with corporate systems, the database design and data entry were accomplished in-house in conjunction with Information Services Division staff.

This audit's methodology distinguishes between "Current Deficiencies" and "Deferred Deficiencies," each a type of "Existing Maintenance Deficiency." "Current Deficiencies" are those items identified for the first time in this audit cycle as needing repair within one year, predominantly; "Deferred Deficiencies" are items judged to have been overdue for repair beyond one year and, except for a few instances, have been identified in previous audits. This information can be used in future audits to determine the extent to which previously identified deficiencies are being addressed. As this distinction was not used

in audits prior to 2001, comparisons of total “existing” deficiencies to 1997 data include both deficiencies previously identified and newly discovered deficiencies to make the data comparable.

In many existing facilities, there are building elements that do not comply with current building code requirements but are not considered code violations because they were code compliant at the time of installation. In the 2001 and 2004 facility audits these items are identified as “Priority 6” deficiencies indicating they do not pose a hazard and do not require correction unless in conjunction with concurrent work.

Focus of Inspection

The audits for the Facility Condition Report focus on the physical condition of City-owned buildings. Facilities were audited for the condition of all architectural, civil, structural, mechanical, and electrical components. With the exception of floor, wall and ceiling finishes, this report does not address class or quality of space, furniture and equipment not integral to the facility, or space allocation.

This report includes limited information on seismic evaluations. Seismic deficiencies and estimated costs of correction are included for eight General Fund buildings in this Condition Report. Seismic concerns noted by inspectors for other General Fund buildings are noted as a deficiency and an estimated cost for further study is included. A 1995 “rapid visual” seismic study of 45 City facilities contained a recommendation that the 13 lowest-ranked buildings be studied further to provide cost estimates for the correction of seismic deficiencies. These seismic recommendations and estimates have been used and updated in each audit cycle as more accurate data has become available from other reports on a building by building basis.

Deficiencies relative to the Americans with Disabilities Act (ADA) were excluded from the scope of this report. ADA deficiencies have been identified in a separate report, updated in 2000. ADA remediation projects are funded jointly through the General Fund Capital Budget (CIP) and Community Development Block Grant (CDBG) funds.

Findings

The average Facility Condition Index (FCI) of buildings included in the 2004 study is 0.07, an improvement over previous audit cycles. The 2001 FCI was 0.12, better than the 1997 FCI of 0.20.

Audited General Fund Facilities over 4 Audit Cycles

		<u>1995</u>	<u>1997</u>	<u>2001</u>	<u>2004</u>
Facilities audited	=	98	100	99	98
Area audited	=	656,042 SF	676,686 SF	717,026 SF	895,578 SF
Total Replacement Value (facilities audited, '01 dollars)	=	\$94,837,320	\$106,158,039	\$118,878,489	\$220,399,258
Ave. replacement cost (per square foot)	=	\$149.07 / SF '01 \$	\$156.51 / SF '01 \$	\$165.80 / SF '01 \$	\$245.91 '04 \$
Average Age*	=	39 years	41 years	43 years	44 years
Existing Deficiencies	=	\$19,588,147	\$21,652,134	\$14,330,281	\$16,182,002
Portfolio FCI	=	0.207	0.204	0.121	0.073

*on a per-facility basis; since recent buildings built have been larger, a per-square-foot calculation for 2004 yields an average age of about 28 years old

Compared with the 2001 FCR, the amount of building area of General Fund facilities rated in the “very good” category has increased, and a significant amount of square footage has shifted from the “poor” category to the “fair” category. Buildings in the very good and fair categories now represent over 90% of the total building square footage. This reflects both the addition of new buildings to the inventory and adoption of the strategy since the 1995 FCR of reinvesting capital preservation resources in those building in which repairs are most cost-effective and replacing or disposing of buildings that were in the poorest condition. Of the General Fund facilities in the 2004 FCR, 36% of the buildings covering 58% of the area are in very good condition with less than 5% deterioration overall. While the recently-built larger facilities are in very good condition, just over 40% of the square footage of buildings in very good condition was built before 1997. Similar to the 2001 audit, buildings in very good condition had an average age of 25 years at the time of audit.

Approximately one-eighth of city buildings—accounting for 7% of total square footage—are in good condition. The group categorized in fair condition includes 34% of the square footage of facilities and 33% of the buildings. The “fair” category includes City Hall, which is still the City’s largest building. Finally, just under one-fifth of the facilities, totaling just over 1% of the area of General Fund buildings, are in poor and very poor condition. Buildings in poor and very poor condition are some of the smallest buildings in the inventory, and many are most vulnerable to wear and deterioration. The following table shows the condition, square footage and age of the inventory of General Fund buildings.

2004 FCR Facilities by Condition and Square Footage

Condition	# of Facilities	Total Sq. Ft.	% by Sq. Ft.	Average Age	Average FCI
Less than 5% deterioration Very Good	36	520,729	58%	1979	0.02
5% to 10% deterioration Good	12	59,724	7%	1960	0.07
10% to 30% deterioration Fair	32	303,714	34%	1955	0.22
30% to 50% deterioration Poor	8	4,222	0%	1950	0.36
Over 50% deterioration Very Poor	10	7,189	1%	1949	0.69

Shift in Building Condition

The following table compares facility condition, square footage, and age of the General Fund building inventory as identified in the four Facility Condition Reports completed since 1995. Over the past nine years, the General Fund building inventory has moved from predominately in fair or poor condition into good condition, and then into predominately very good condition. The proportion of buildings in the poor and very poor categories has been reduced significantly over this time period. Although there are 18 buildings in poor or very poor condition, they account for less than one percent of inventory square footage and value. The shift in buildings from the poor to fair category in 2004 is due almost entirely to the shift of City Hall from poor to just within the “fair” range, at 26% deterioration. As noted earlier, the overall shift in the condition of the General Fund inventory is a result of both improvements in the condition of existing facilities, and the replacement of buildings in the poorest condition with new and larger facilities.

The largest single factor affecting the General Fund inventory is the condition of City Hall, as this single facility accounts for about two-thirds of the square footage in fair condition. Major improvement to or replacement of City Hall would increase the condition of the total General Fund building inventory from 65% “good or better” to almost 90% “good or better”. Conversely, due to its deteriorating condition, City Hall is likely to slip down to “poor” condition by the next audit cycle.

Comparison of Building Condition - 1995, 1997, 2001, and 2004

Building Deterioration and Condition	1995		1997		2001		2004	
	% of Total SF Area	% of Total CRV	% of Total SF Area	% of Total CRV	% of Total SF Area	% of Total CRV	% of Total SF Area	% of Total CRV
< than 5% Very Good	26	40	25	39	50	63	58	68
Between 5%-10% Good	7	6	17	18	7	7	7	7
Between 10%-30% Fair	20	22	15	14	7	7	34	24
Between 30%-50% Poor	40	28	35	25	35	23	0	0
> 50% deteriorated Very Poor	6	4	7	4	1	0	1	0

Buildings in the very poor category have deficiencies with repair costs estimated to equal one-half or more than their Current Replacement Values. A “point of no return” exists when replacing an entire facility is more cost effective than renovating and repairing it. Facilities exhibiting this magnitude of deficiencies need to be evaluated on a case-by-case basis considering utility, function, historical value, operating cost, and perceived value to the community in order to determine whether replacement is a more viable option than renovation and repair.

Facility Condition by Type of Building

The condition of occupied space varies across different building types. The information on specific buildings is grouped in the audit into six general types of buildings. The following table summarizes the Facility Condition Index averages for city facilities as they are grouped in the full audit report.

Building Type	Deficiencies	Square Feet	FCI	Deficiencies / sq. ft.	Replacement Value/sq. ft.
Fire	\$1,331,798	138,119	4.2%	\$9.64	\$228
Police	\$2,008,000	57,934	13.6%	\$34.66	\$255
Government & Administration	\$6,423,632	189,463	26.7%	\$33.90	\$259*
Libraries/ Entertainment	\$1,753,580	336,025	1.7%	\$5.21	\$305
Park Facilities	\$596,121	27,540	11.4%	\$21.65	\$190
Centers, Pools & Golf	\$3,054,053	135,917	7.8%	\$22.46	\$290

*This figure excludes the value and area of non-occupied parking and plaza areas at City Hall

- ◆ *Essential Services – Fire Department.* This category includes fire stations and the buildings at the 2nd and Chambers Emergency Services Complex excluding the 9-1-1 Center. This category includes a number of newer and larger City facilities, as well as older fire stations located throughout the City, totaling about 140,000 square feet. The overall condition of these facilities is very good, with a facility condition index of 4.2%.
- ◆ *Essential Services – Police Department.* This category includes the existing City Hall space used by the Eugene Police Department, the recently constructed 9-1-1 Central Lane Communications Center, the Lincoln Yard complex and a few outlying radio repeater sites, totaling almost 60,000 square feet. Although the 9-1-1 Center is in very good condition, the average condition of these facilities is in the upper end of the “fair” condition range, with a facility condition index of 13.6%. This reflects the large amount of Police’s City Hall square footage, rated at the bottom of fair condition with 26.7% deficiencies. (Including the new Police Services Building on Garfield, which was not completed at the time of the audit, will improve the overall condition of Police Department facilities, although it only partially relocates Police from City Hall.)
- ◆ *Government and Administration.* This category of buildings includes the rest of City Hall not occupied by Police, the Public Works Administration building, and the Facility Management complex. The overall condition of this category of buildings is at the lower end of the fair condition rating, with a facility condition index of 26.7%. City Hall and Public Works Administration - the City’s two largest general office buildings - have the lowest condition rating of major City facilities. As these two buildings make up 90% of the 190,000 square feet of space in this category, they determine the condition index for this category of facilities.
- ◆ *Libraries, Entertainment, Meeting Rooms and Historic Buildings.* This category includes the Hult Center, Cuthbert Amphitheater, the Eugene Main Library and historic buildings such as Wayne Morse Ranch, Shelton-McMurphey-Johnson House, McNail-Riley House, Lamb Cottage and Skinner’s Cabin. The total area of this category of buildings is 336,000 square feet. The overall condition of these types of facilities is 1.7%, which is the highest condition rating of all

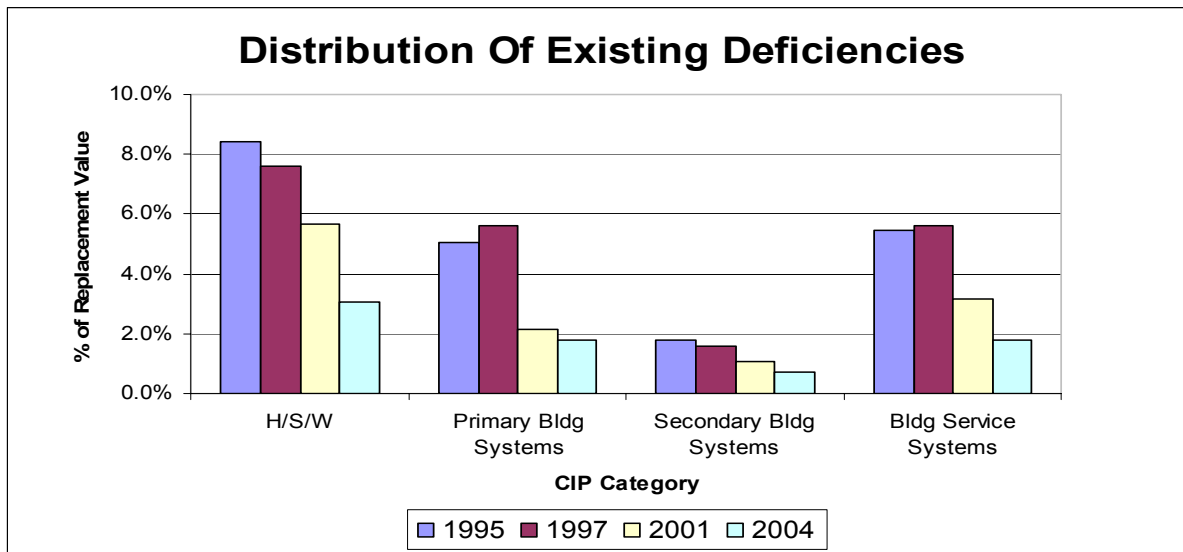
City building types. This high rating is due to the new Library and the Hult Center, which make up 93% of the total square footage in this group of buildings.

- ◆ *Park Support Facilities.* This category has thirty-five separate buildings—the largest number of facilities—but at 28,000 square feet has the lowest total area of the six building types. This category includes a variety of park shelters and maintenance buildings as well as 15 park restrooms. Overall, these facilities are in the upper end of the fair condition rating, with a facility condition index of 11.4%. This category also has the widest variation in condition of individual buildings with several structures in very poor condition and others in good and very good condition. A combination of factors—such as materials in older structures, lack of heating, use in maintenance activities, and high ratio of exterior space due to their small size—create high maintenance requirements in this building category that is disproportionate to their actual square footage.

- ◆ *Senior and Community Centers, Pools and Golf Facilities.* This category of buildings includes all of the City’s community and senior centers, three pools, and the Laurelwood Golf Course buildings, totaling 136,000 square feet. With twenty-five buildings, this category has the second highest total number of structures. The overall condition index of 7.8% places this group in the “good” condition rating. However, there is also a wide variation in condition among buildings within this category, and this category on average is the oldest of the six building types. While the community centers are in relatively good condition, buildings at the Laurelwood Golf Course have the worst ratings in this category. Three of the structures at Laurelwood are in very poor condition and require complete reconstruction or replacement to continue functioning. The Kaufman Annex, to be sold by the City in the near future, also is rated as in very poor condition.

Distribution of Existing Deficiencies

As shown in the following graph, the measure of existing deficiencies as a percentage of current replacement value has decreased across all categories of deficiencies. From 2001 to 2004, the relative proportion of deficiencies expressed as a percentage of asset replacement value decreased by 44% from approximately 23% of total value in 2001 to just under 13% in 2004. This follows a reduction of 33% in the relative proportion of deficiencies between 1997 and 2001.



However, a portion of this relative decrease is due to the adjustment in current asset replacement value in 2004. Using an inflation factor related to construction cost indexes, there would have been a 23% decrease in deficiencies as a percentage of asset value (that is, from about 23% in 2001 to 17% in 2004). This is still a significant decrease in the level of deficiencies in relation to overall asset replacement value.

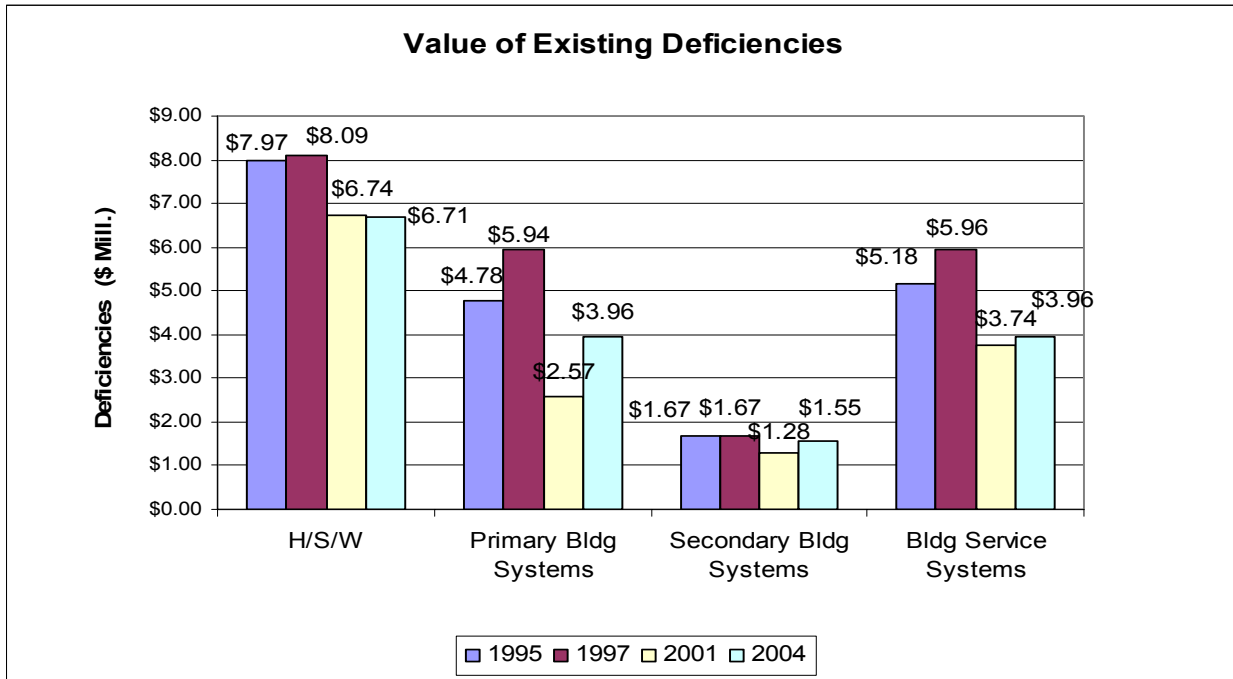
Under either replacement cost estimate, the largest improvements in facility condition as a percent of replacement value were in the “Health, Safety and Welfare” and the “Service Systems” categories, the latter of which encompasses building mechanical, electrical, and plumbing systems. Service Systems account for about one-quarter of the total value of existing deficiencies, or \$3.96 million, about one-half the value of all emerging deficiencies. Emerging Service System deficiencies, estimated at \$5.87 million, will continue to appear in the near future, due in large part to the average 44 year age of General Fund facilities.

Health, Safety and Welfare deficiencies, at \$6.71 million, account for over 40% of existing deficiencies, with the majority—\$5.4 million—related to City Hall. Seismic rehabilitation, about one-half the total value of Health, Safety and Welfare deficiencies, is predominately due to City Hall’s lack of seismic resistance. A plan to address the seismic deficiencies of City Hall depends on decisions about the future status of the building. Health, Safety and Welfare deficiencies in other City buildings total less than 10% of total existing deficiencies, and seismic deficiencies in these buildings can be addressed by smaller-scale projects.

Smaller percentage decreases in existing deficiencies occurred in the “Primary Building Systems” and “Secondary Building Systems” categories. The Primary Building Systems category—which encompasses building structure, roofing, siding, and other exterior envelope components—also had existing deficiencies of \$3.96 million, or roughly one-quarter of all existing deficiencies.

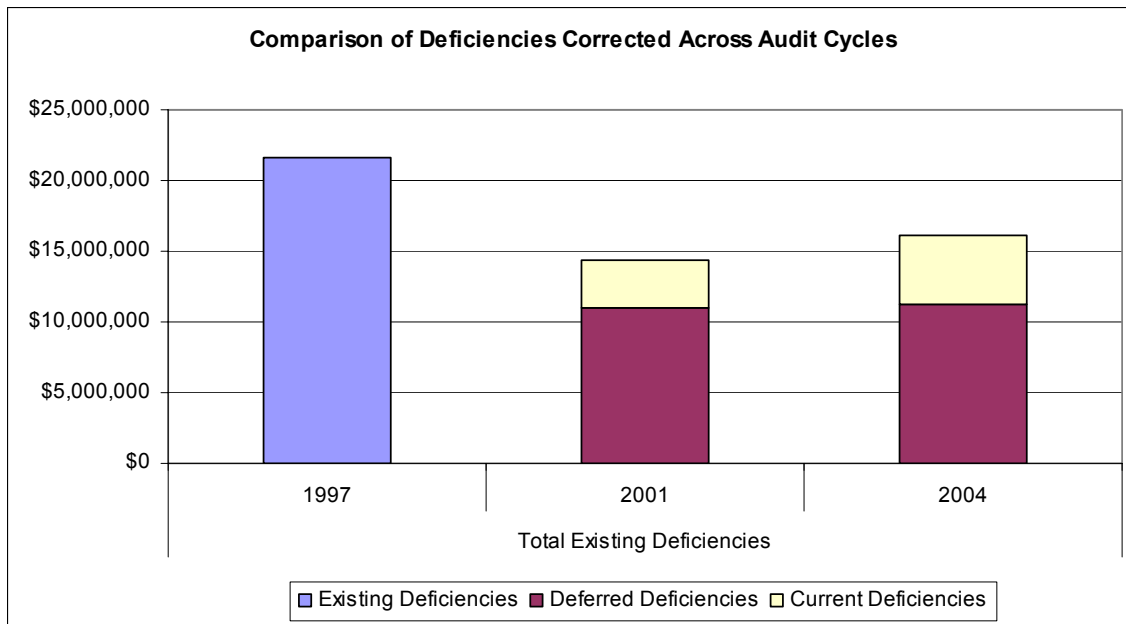
Finally, deficiencies of “Secondary Building Systems”—primarily encompassing interior finishes such as flooring, ceiling systems, and paint—are less than 10% of existing deficiencies, estimated at \$1.6 million. Secondary Building Systems repairs are usually lower in cost and smaller in scale than in other categories, and can often be addressed via the ongoing building maintenance program rather than through the capital budget.

While the measure of existing deficiencies as a percentage of asset value improved across all categories of deficiencies, looking at the actual dollar value of deficiencies presents a different picture. As shown below, the value of deficiencies increased, with the exception of the Health, Safety and Welfare category which decreased slightly. The reason for this apparent contradiction is that asset value increased more dramatically between 2001 and 2004 than the increase in the value of deficiencies. The largest increase between 2001 and 2004 is in Primary Building System deficiencies, at about \$1.4 million above the 2001 level.

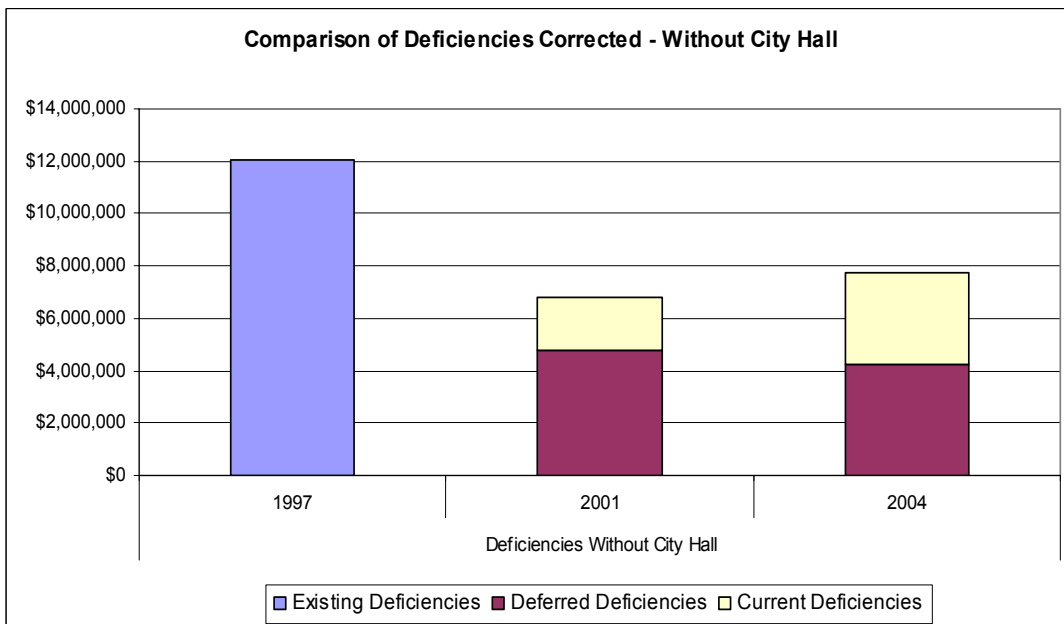


The obvious question is: how can the amount of existing deficiencies be increasing if building preservation projects are being carried out? One measure of the effectiveness of the building preservation program is the amount of previously identified deficiencies that have been corrected each reporting cycle. Beginning with the 2001 report, the measure of existing deficiencies separately identifies both deficiencies noted in prior years and deficiencies identified for the first time during the current audit. On the following chart, the lower segments of 2001 and 2004 data show the level of deficiencies in each of those years that were “held over” from the prior audit. The top portion of the 2001 and 2004 data are “new” deficiencies that appear for the first time in that audit cycle. Between 1997 and 2001, approximately 50% of the deficiencies identified in 1997 were corrected by 2001. In 2004, about 79% of the 2001 deficiencies remain, meaning that only 21% of 2001 deficiencies had been corrected.

The apparent effectiveness in addressing deferred maintenance is influenced by the inclusion of City Hall in the inventory. City Hall accounts for over one-half of all existing deficiencies in General Fund buildings, and the current policy is to defer major preservation projects at City Hall as much as possible. As a result, the majority of these deficiencies will carry over from one audit cycle to the next.



Excluding City Hall from the comparison gives a different view of the effectiveness of the building preservation program. As shown below, about 60% of the 2001 deficiencies remain in 2004, meaning that almost 40% of 2001 deficiencies in General Fund buildings other than City Hall had been corrected. (For the 1997 – 2001 period, approximately 60% of the deficiencies in General Fund buildings other than City Hall had been corrected by 2001.) This performance is relatively comparable, given that there were only three years between the 2001 – 2004 audit cycles, versus four years between the 1997 and 2001 audits. If the 2004 data were extrapolated to an equivalent four year period, the expectation is that about 53% of deficiencies in General Fund buildings (other than City Hall) would have been addressed.



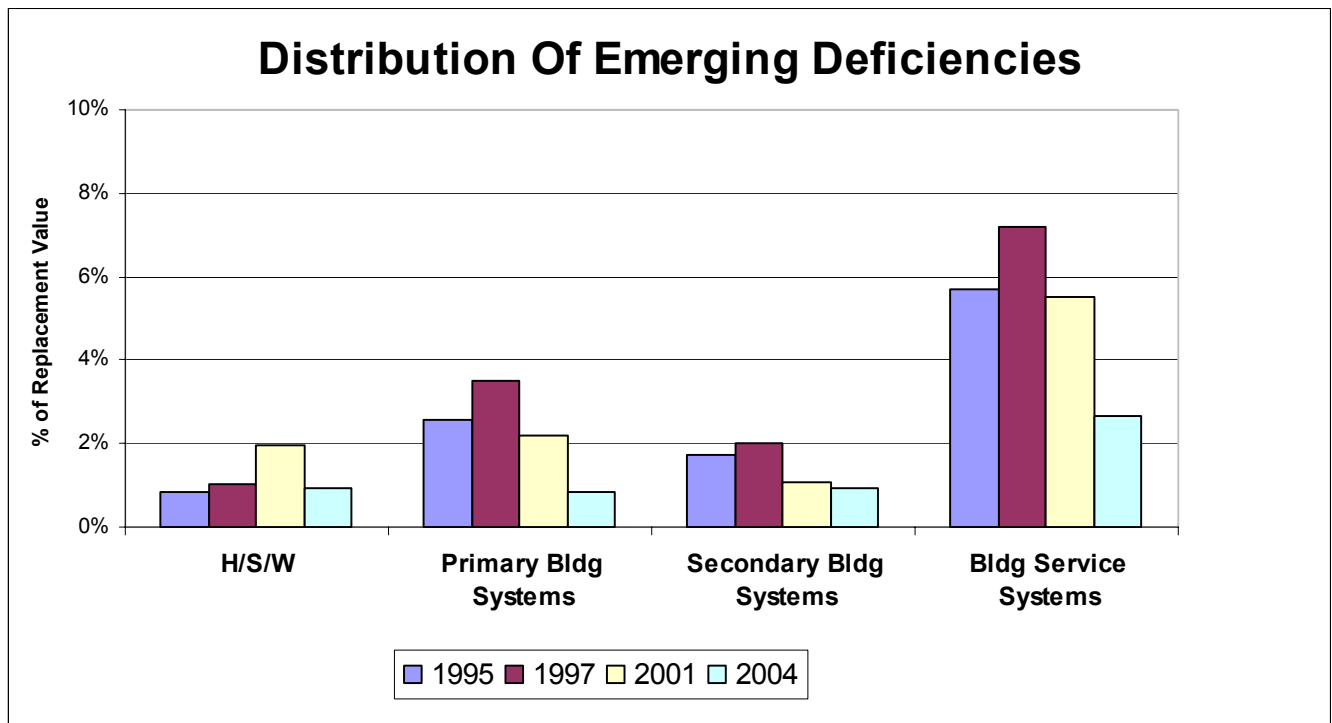
Newly emerging repair needs also impact the comparison of existing deficiencies across audit cycles. The level of “current deficiencies” indicates repair needs that are new items, added since the previous

audit cycle. In 2004, comparisons both with and without City Hall show that the cost of these new repair needs was larger than the value of deficiencies that had been corrected from the previous audit cycle. As a result, total existing deficiencies grew even while a substantial amount of deferred needs were being addressed.

Distribution of Emerging Deficiencies

As buildings age, new deficiencies will continue to emerge. The 2004 FCR identified approximately \$12.7 million in emerging deficiencies, or about 5.4% of the Current Replacement Value of City facilities. This is an improvement over the 2001 FCR, in which emerging deficiencies amounted to 10.7% of the value of General Fund buildings, and the 1997 FCR which found emerging deficiencies to be 13.7% of asset replacement value.

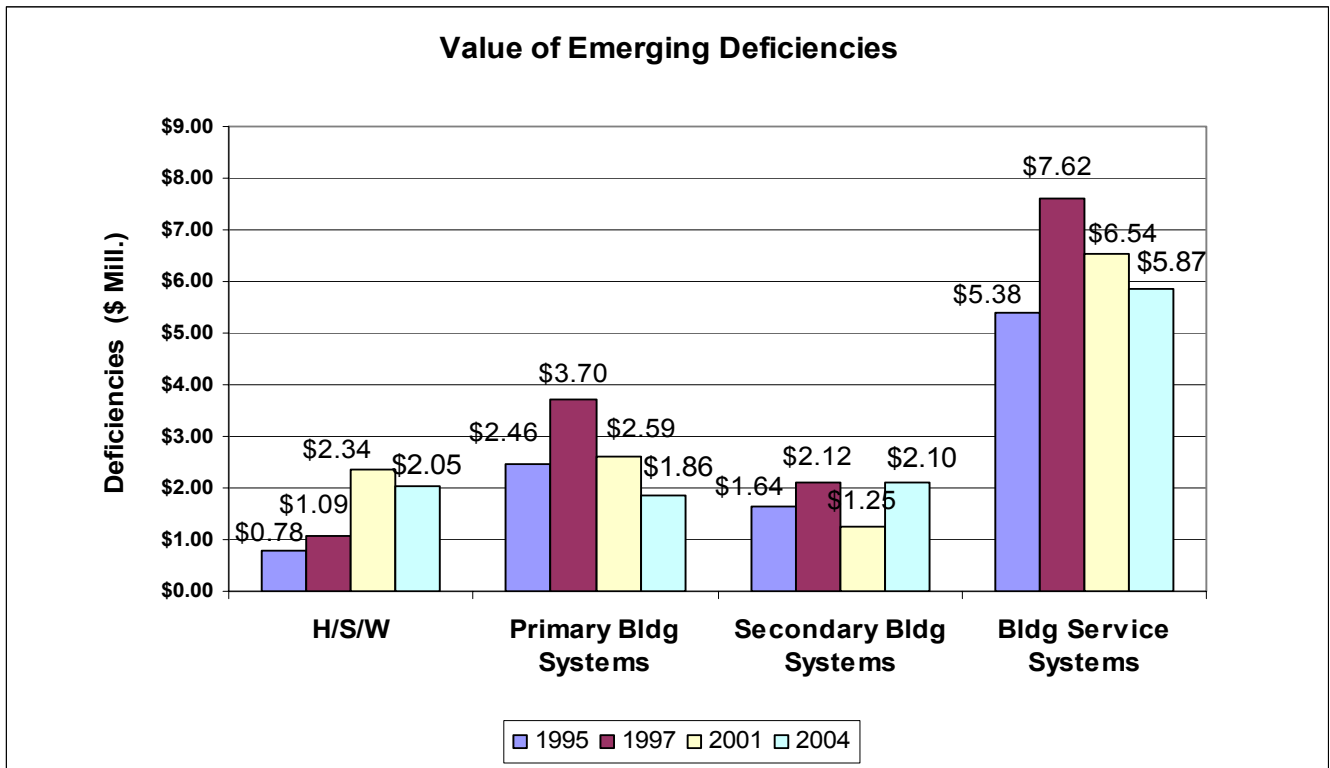
If not addressed in a timely manner, these emerging deficiencies add to the backlog of deferred maintenance. While the present inventory includes nearly 180,000 square feet of new space, these facilities will need ongoing preventive maintenance and preservation to retain their condition. The following graph shows the nature of these emerging repair and preservation needs.



While some of the reduction in the relative level of emerging deficiencies is due to the increase in current replacement value between the 2001 and 2004 condition audits, the estimated cost to repair emerging deficiencies has also decreased. Compared to prior condition assessments, the estimated cost of emerging deficiencies is lower across all categories of deficiencies except Secondary Building Systems. The estimated cost of emerging deficiencies decreased from \$14.5 million in 2001 to the 2004 level of \$12.7 million.

As shown below, building Service Systems is the largest category of emerging deficiencies across all audit cycles, estimated at \$5.9 million in 2004. Due to the average age of General Fund facilities, build-

ing service systems will continue to comprise a large proportion of future repair and replacement needs. City Hall alone accounts for about \$4.7 million of emerging Service System deficiencies, and just under half of all emerging deficiencies in 2004.



The 2004 decrease in the estimated cost of emerging deficiencies is a result of several factors. First, these potential deficiencies—once they are identified in a condition audit—can be addressed as part of other building preservation projects. During the three years between the 2001 and 2004 condition audits, a number of the conditions identified as “emerging” in 2001 became current repair needs, and now show up as existing deficiencies in the 2004 assessment. As noted in a previous section, approximately \$4.9 million in “new” building preservation needs developed between 2001 and 2004. Finally, the replacement of old facilities with new construction eliminated some of the problems identified as emerging deficiencies in 2001.

Using this information

Beyond providing benchmark data on the overall condition of the General Fund inventory, this database serves several other purposes:

- It provides an objective basis for prioritizing CIP projects each year.
- It sorts, by facility and by cost, smaller repairs that can be managed by the Operations & Maintenance Section.
- It will sort, by building component (for example, roofs), the best and worst components of the inventory.

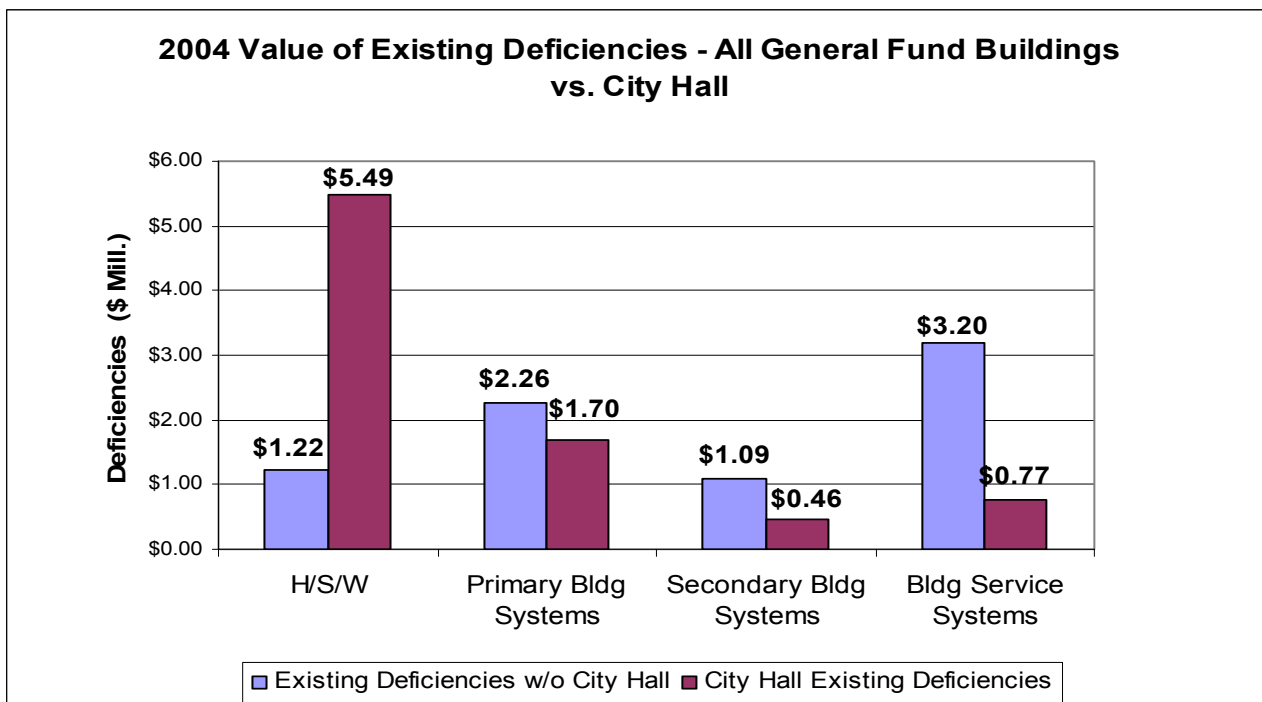
Impact of City Hall

Because of its size and age, City Hall has a major impact on the Facility Condition Index for the entire General Fund building inventory. City Hall accounts for over one-half of the existing deficiencies in all General Fund buildings while equaling about one-quarter of the total square footage. (In reality, this overstates City Hall’s proportion of the square footage of the General Fund building inventory, as the parking level, basement and plaza areas are included in the City Hall square footage figure. Less than half of City Hall’s square footage is actually occupied space. If the parking level and plaza area were excluded, City Hall would equal only 11% of occupied General Fund space, but account for over one-half of existing building repair needs.)

Without City Hall, the overall condition of the General Fund building inventory would increase from “good”, with a Facility Condition Index of 7.3, to “Very Good”, with an FCI of 4.1. In addition, City Hall also has a disproportionate level of emerging deficiencies. About 45% of General Fund building deficiencies expected in the next 5 years are related to City Hall.

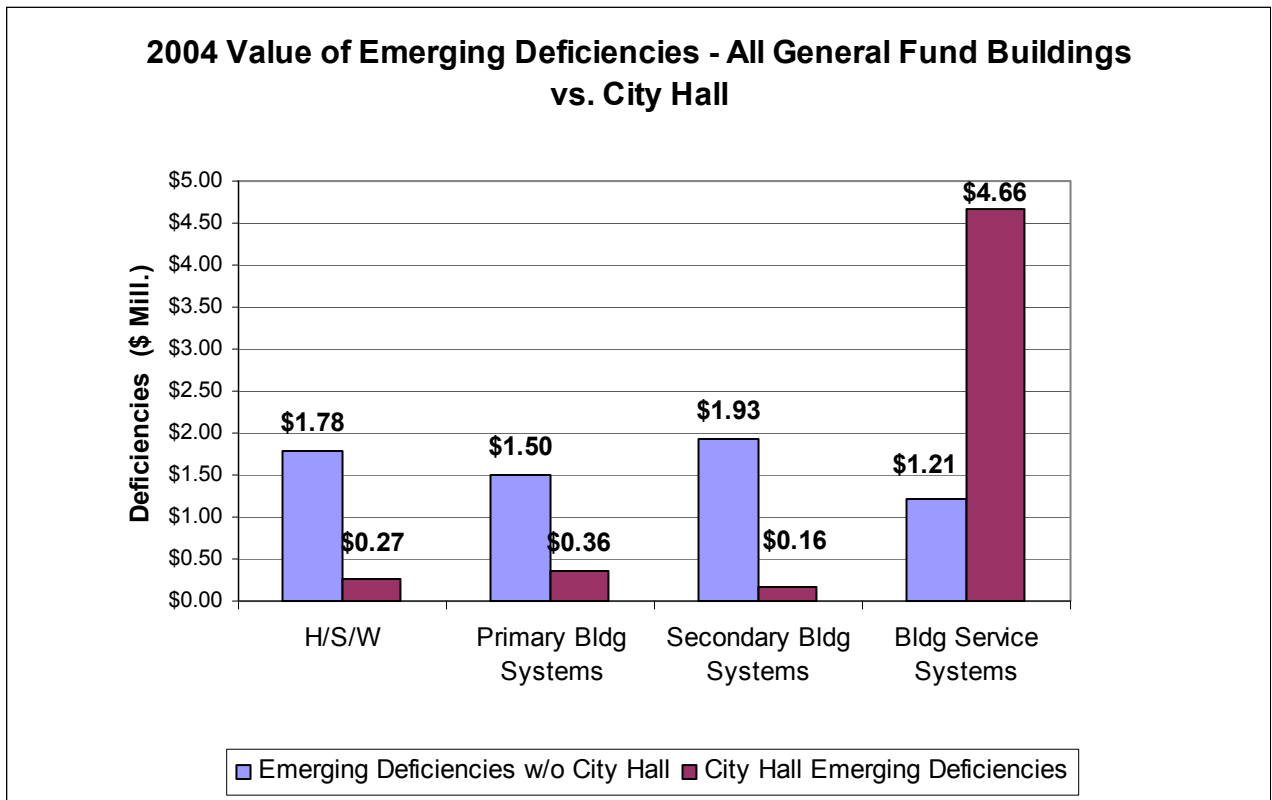
City Hall’s combined existing and emerging deficiencies total \$13.9 million, about one-half of the total existing and emerging deficiencies of the entire General Fund building inventory.

Existing City Hall deficiencies totaled \$8.4 million in 2004. The table below compares deficiencies in City Hall—with 24% of total square footage—against the remaining 75% of the square footage of the General Fund building inventory. The majority of City Hall’s existing deficiencies are related to seismic and other safety concerns, estimated at \$5.5 million—nearly four times the level of Health, Safety and Welfare deficiencies in the rest of the General Fund buildings. Primary Building System deficiencies in City Hall are the next largest category at \$1.7 million, comparable to the \$2.3 million in Primary Building System repairs required in the remaining General Fund inventory. Presently, Service System deficiencies in City Hall—at less than \$1 million—are significantly below the \$3.2 million existing Service System needs of other General Fund buildings.

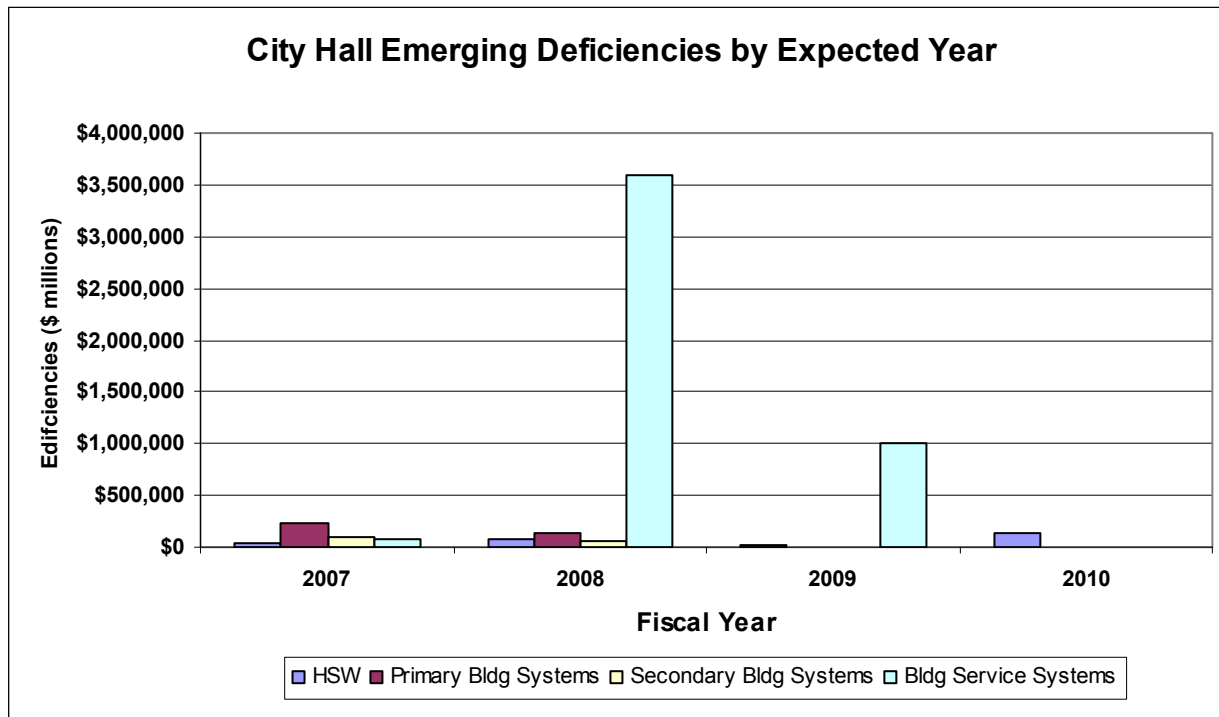


The situation is very different for emerging City Hall deficiencies versus other General Fund buildings. The chart below compares deficiencies expected to emerge within five years in City Hall with the rest of the General Fund building inventory. Overall, about \$12 million in deficiencies in roughly equal proportion across all categories are expected to emerge in General Fund buildings over the next five years. For City Hall, the level of new deficiencies in the Health, Safety and Welfare and Primary Building System categories will be low, as these deficiencies for the most part already exist.

However, the expectation is that major repairs to City Hall Service Systems could occur within the five-year planning horizon. City Hall Service Systems are, in general, well beyond their design life. As City Hall is constructed in separate wings, there are five mostly independent HVAC systems, with major components in operation for over forty years. It is expected that nearly \$4.7 million in Service System repairs may be needed within five years at City Hall, compared with only about \$1.2 million for other General Fund buildings in total.



The following chart shows the fiscal year in which City Hall deficiencies are expected to occur, by type of deficiencies. The major impact of failing mechanical and electrical systems on the cost of maintaining City Hall is apparent, as other types of deficiencies are relatively minor compared to the cost of these systems. The mechanical systems at City Hall are well beyond their anticipated design life and could require complete replacement by fiscal year 2008. Major Service System failures typically need to be corrected in a timely manner to allow continued occupancy and use of a building.



The potential for very costly service system repairs in the near future reinforces the importance of resolving questions on the future status of City Hall and implementing a plan to either renovate or replace City Hall. Currently, the City is in the initial stages of developing a City Hall Complex Master Plan, to be completed in late 2006. This Plan will establish policies for the long-term disposition of City Hall.

Building Age and Condition

Except for the newest City facilities that are in very good condition, there is little relationship between a building’s age and its condition. This is not surprising, as nearly 99% of the total square footage of these buildings is in fair or better condition. About 11% of the total building area was constructed prior to 1950, and just over one-third (primarily City Hall) was built between 1950 and 1975. Over one-half of the General Fund building area was constructed since 1975.

If City Hall is excluded from the analysis, there is a clearer trend between building condition and age. Buildings constructed since 1975 are in very good condition, and buildings constructed between 1925 and 1975 are, overall, in good condition. If City Hall is excluded, only those buildings built before 1925 have an average condition in the “fair” category. All other age ranges would be in good or very good condition. Given the limited amount of square footage of these oldest building, the overall condition of these buildings could be increased with a modest investment. However, the age of a particular building is only one element in the decision of how to prioritize limited building preservation funds.

The following table shows the age of City General Fund buildings and their condition.

Condition	# and sq. ft. of Buildings	1924 and earlier	1925 through 1949	1950 through 1974	1975 through 1996	1997 through 2004	Total by Condition
Very Good – < 5% deterioration	#	0	7	5	10	14	36
	sq. ft.	0	21,413	45,614	156,484	297,218	520,729
Good – 5% to 10% deterioration	#	2	2	4	4	0	12
	sq. ft.	9,286	4,877	40,050	5,511	0	59,724
Fair – 10% to 30% deterioration	#	5	9	9	9	0	32
	sq. ft.	34,662	24,048	235,278	9,726	0	303,714
Poor – 30% to 50% deterioration	#	1	2	5	0	0	8
	sq. ft.	240	2,346	1,636	0	0	4,222
Very Poor – > 50% deterioration	#	3	0	6	1	0	10
	sq. ft.	3,863	0	3,153	173	0	7,189
Total by Age	#	11	20	29	24	14	98
	sq. ft.	48,051	52,684	325,731	171,894	297,218	895,578
Deficiencies (\$ millions)		\$2.18	\$0.91	\$11.01	\$1.68	\$0.40	\$16.18
FCI		.203	.093	.174	.026	.006	.073
FCI without City Hall		.203	.093	.085	.026	.006	.041

Trends and Issues

The Deferred Maintenance Backlog

The 2004 inspection process recorded Existing Maintenance Deficiencies totaling \$16,182,000. Most of this amount (70%) represents the deferred maintenance backlog accumulated over the years. The deferred maintenance backlog is a compounding problem with three factors contributing to its growth:

- Inflation annually increases the cost of correcting deficiencies.
- Deferred items tend to deteriorate faster than components in good condition. For example, a blister on a flat roof that is not repaired will eventually allow water to infiltrate the roof membrane, rotting the plywood, ruining the insulation and damaging interior finishes. This is known as the backlog deterioration factor and is commonly considered to increase costs by 2% to 10% per year.
- Funds intended for routine preservation and maintenance inevitably are diverted to pay for emergency deferred repairs. The routine preservation and maintenance work does not get accomplished, adding to the backlog.

Annual capital reinvestment is below industry recommendation

There is a strong relationship between the level of capital reinvestment and operation & maintenance costs. Without adequate funding for an effective preservation and maintenance program, building components deteriorate more quickly, increasing the need for repairs and replacement. Industry standards recommend a 2-4% level of annual reinvestment relative to the Current Replacement Value (CRV) of a facility. Additional pressure on capital resources is added if resources are not indexed to inflation or changes in local construction costs, or adjusted when square footage in the facility inventory increases.

Historically, the City's General Fund has been the primary source of funding for building and facility preservation. Prior to 1995, there was not a consistent policy of funding building preservation and the General Fund capital program was consistently under-funded. From FY95 through FY00, the General Fund capital budget was funded by an annual appropriation of \$1.9 million, which was about \$1 million below the industry standard of reinvesting two to four percent of total asset replacement value in ongoing preservation and maintenance. During this period, funding levels were in the range of 1% to 1.5% annually.

The Budget Committee adopted a new general capital budget strategy for FY01. The base transfer was increased in FY01 by \$700,000 to \$1.7 million, with a commitment to increase the base funding level by \$100,000 in each subsequent fiscal year. The strategy also called for continued dedication of an additional \$900,000 of end-of-year General Fund balances to capital projects for facility preservation, maintenance, and replacement. Accordingly, the total General Fund Capital Budget increased from \$2.6 million in FY01 to \$2.8 million in FY03.

During the FY04 budget process, the General Fund transfer to the Capital Budget was reduced below the FY03 level through elimination of the planned annual \$100,000 increase coupled with a 4.5% reduction (\$85,500) in base funding. The total FY04 General Fund contribution to capital projects was \$2.715 million, which included \$900,000 of available end-of-year General Fund balance.

For FY05, the General Fund Capital Budget was \$2.769 million, reflecting a \$100,000 base transfer increase as adopted by the Budget Committee in FY01 and a \$45,200 base transfer reduction in accordance with the budget priority reduction strategy adopted in FY04. The proposed capital budget for FY06 is \$1.969, with an additional \$900,000 of available end-of-year General Fund balance bringing the total projected FY06 General Fund contribution for capital projects to \$2.869 million.

As a result of these budget actions, the FY06 General Fund capital budget is \$231,000 per year lower than if the budget strategy adopted in FY01 had been carried forward. Over time, this will constitute a significant reduction in the resources committed to preservation of General Fund buildings.

The total General Fund Capital Budget projected for FY06 is distributed as follows:

Capital Preservation & Maintenance of Buildings (Health/Safety/Welfare, Primary Bldg. Systems, Secondary Bldg. Systems, Service Systems)	=	\$2,193,000
Preservation & Maintenance of Park Improvements	=	\$ 316,000
General Site and Facility Improvements (ADA Improvements and Site Renovation/Rehabilitation)	=	\$ 360,300
Total Capital Budget (FY06 with mid-year allocation)		\$ 2,869,300

A second important component of facility preservation is the City's ongoing major maintenance program, which includes preventive maintenance. General Fund major maintenance in FY06 is budgeted at \$1.9 million. When combined with the Capital Budget funding for facility preservation, the City's reinvestment ratio is 1.7% of CRV, below the lower end of the recommended range of 2% to 4% of CRV. The projected funding for preservation of General Fund buildings is about \$800,000 below the amount required to meet a 2% reinvestment threshold.

Square footage is being added to the building inventory

Eugene initiated a cycle of increased capital investment in 1997 with the addition of new Fire Department facilities, the regional Central Lane Communications Center, the new Library, and the expansion of Amazon Pool. Since the 2004 audit was completed, the City has added the Police Services Building on Garfield, the Live Fire Training facility at 2nd and Chambers, and the new Downtown and Santa Clara Fire Stations. As noted earlier, the General Fund building inventory increased by 297,000 square feet between 1997 and 2004, or 45%. With the addition of those buildings completed since the 2004 audit, the City's inventory of General Fund buildings will have increased by 50% since 1997.

This relatively rapid growth will impact capital reinvestment needs in two ways. As the building area and value of the inventory increase, proportional increases in both capital reinvestment and operations & maintenance service are required simply to maintain current levels of facility preservation and service capacity. However, this new stock of buildings is more complex and costly to maintain than the City's existing building stock. More complex mechanical systems and higher technology systems and materials throughout a structure are likely to drive future costs for major repairs and renovation higher than the City's current experience with older buildings. Adequate ongoing maintenance of these newer facilities will help extend the useful life of building systems and delay the need for major capital reinvestment in the future.

Health, Safety and Welfare deficiencies are being addressed

While almost 40% of existing deficiencies fall within the category of Health, Safety and Welfare, the majority of these deficiencies are related to seismic deficiencies, primarily at City Hall. Recent changes in the Uniform Building Code identify our geographic area as more vulnerable to stronger earthquakes than was previously known. Although most of the buildings in the General Fund inventory were constructed at a time when there were much less stringent requirements for seismic resistance, City Hall creates the largest seismic risk factor due to its size, type of construction, and number of occupants.

The Facility Management Division has been addressing seismic deficiencies in facilities other than City Hall through rehabilitation projects as well as replacement of older facilities. Facility Management has completed seismic upgrades in some of the older fire stations, and will initiate seismic projects in the five remaining stations over the next two to three years

Strategic Planning Component

Our goal is to provide the most cost-effective facilities from which city staff can provide the highest possible level of service to the public. City ownership of buildings is for the long term and therefore must include a life-cycle cost perspective. Short term initial cost solutions to facility problems can be expedient but usually result in increased operations and maintenance costs and premature replacement of systems. Low life-cycle cost of occupancy is a priority, as is flexibility to meet changing service

needs. Ongoing council review of the long-term use of City Hall will have a major impact on management of the condition of the General Fund building inventory.

In addition, public buildings are frequently unique and specialized facilities. An inventory of public buildings will typically include a relatively high Current Replacement Value because of a substantial quantity of specialized equipment and technology required to provide a diverse range of public services. Systems in facilities such as swimming pools, community centers, performing arts centers, 9-1-1 communications facilities, courtrooms, and Police and Fire Stations will drive these costs higher than a general office building or a retail storefront. These specialized needs are part of the evaluative process when looking at ownership vs. leasing.

Goals

Overall Condition of General Fund Buildings

The FY06 Budget includes two overall performance goals related to General Fund buildings. One is to improve the condition of individual facilities so that 75% of the total square footage of General Fund buildings is in good or very good condition. Meeting this goal will continue to require investment in or replacement of facilities in fair and poor condition. However, achieving this goal will be difficult without significant repair to City Hall, or its complete replacement.

The second performance goal is to maintain the value of existing deficiencies to a total of 10% or less of the Current Replacement Value of the inventory of General Fund buildings. Meeting this goal will result in improved conditions of the assets, more efficient use of funding, and less potential for service disruption.

Balance Reduction of the Deferred Maintenance Backlog with Emerging Deficiencies

A significant reduction in the deferred maintenance backlog provides an opportunity to re-evaluate how capital preservation funds are programmed. Expenditures can be targeted more effectively between and within categories of deficiencies. In addition, a review of emerging deficiencies needs to be incorporated in decisions on capital funding to increase the effectiveness of projects addressing deferred maintenance. By considering existing as well as emerging needs, facilities can be maintained in an acceptable condition with reasonable annual reinvestment. Given that the combination of capital and preventive maintenance funding is currently below the target range for ongoing reinvestment in the City's inventory, maximizing the effectiveness of spending decisions will be critical if continued reductions in deferred maintenance are to be achieved.

Pursue a Long-Range Facility Investment Strategy

Funding for routine preservation and maintenance requires a long-term commitment. Deficiencies will continue to emerge, especially considering that the buildings in the General Fund inventory have an average age of over 40 years old. Strategies to address both the deferred maintenance backlog and emerging deficiencies need to be developed. Funding an adequate percentage of the CRV to maintain the value and condition of the facilities must continue as long as the City owns and operates facilities. An ongoing program of condition assessment inspections will better ensure that city facilities are in good or better condition, identify trends in facility condition, and provide the information needed to develop effective preservation and maintenance strategies.

One short-term goal is to improve the ability to strategically manage capital investment in facility preservation by improving the Facility Management Division’s data management systems. A coordinated program is needed in concert with the Information Services Division—possibly including specialized consultants—to optimize our rather “low tech,” but cost-effective method of providing the level of information, and to make our system more robust and resistant to inadvertent anomalies. Our system provides benchmark data on the overall condition of the General Fund inventory which can be used as an objective basis for prioritizing CIP projects each year. The data can be sorted by facility and by cost, identifying smaller repairs that can be implemented by the Operations & Maintenance Section, and can also be sorted by building component (e.g., roofs), identifying the best and worst components of the inventory.

Resolve Future Status of City Hall

As noted throughout this report, City Hall has a major impact on the overall condition of the General Fund building inventory. However, with \$8.4 million in existing deficiencies and \$5.5 million in additional deficiencies expected within five years, addressing the condition of City Hall will require funding beyond the City’s current capital preservation program.

Since 2001, the City’s policy has been to work toward relocation of critical services from City Hall, with the eventual replacement of that facility with one or more new buildings. During 2005 and 2006, the City will develop a master plan for the future City Hall complex. One aspect of that Plan will focus on whether to repair or replace City Hall. Resolution of this question will provide more direction on how ongoing maintenance and preservation of City Hall should be prioritized with other General Fund building preservation needs.

REFERENCE INFORMATION

Background of the Facility Reporting and Planning Process

In 1990 the firm Nagao-Pacific Architectural PC conducted a condition assessment of City-owned facilities. The purpose of this Facilities Condition Report was to record facility condition and document the need for a planned, long-range approach to facility preservation and maintenance. This report was the first effort to assemble a comprehensive database and examine these conditions.

Of all 158 city facilities, excluding park improvements, 85 were inspected without regard to which fund owned which building. Of those 85 buildings, 40 were General Fund buildings. Deficiencies were noted, prioritized, and cost estimates prepared for each facility inspected. This process merely provided a “snapshot” of conditions at the time of the assessment.

Because the 1990 report showed General Fund buildings to be older and more deteriorated, the focus shifted from a discussion of the entire portfolio of facilities, to only General Fund facilities.

In 1992, Nagao-Pacific was commissioned to update the 1990 report and to provide data on current construction costs and improve the accuracy of projected budget needs. This report found that less than 0.5% of the CRV, or \$600,000 per year, had been reinvested into the facilities since the 1990 report. The report again called for one-time funding to deal with the increasing accumulation of deferred maintenance and revised the recommended annual budget for routine preservation and maintenance to 3% of the CRV (approximately \$3.6 million annually). This revision was based upon research of information provided by the private sector, the high average age of the facilities, and information contained in *Committing to the Cost of Ownership: Maintenance and Repair of Public Buildings* (APWA Special Report No. 60).

In 1995 and 1997, reports were prepared that addressed a number of comments about the earlier reporting formats. These followed a broadly accepted model prepared by the National Association of College and University Business Officers used widely by local government, universities, and federal agencies. The model allows for a detailed condition assessment to be summarized, quantified, and tracked over time, and it includes only general fund buildings expected to in the inventory for some time.

Three phases of development were discussed with Council, first, the condition report, second, facility needs and hindrances perceived by the facility operators, and third, long-range strategic planning. In effect, all of these are now incorporated in the philosophy and services of the Facility Management Division.

The knowledge and experience gained from previous Facility Condition Reports demonstrated the need to better plan for facility preservation since the asset value of City facilities continued to decline. They also pointed out the need for better information. Several items were identified that were addressed in the 2001 report:

- The condition assessment process needed to produce a measurable indicator of facility conditions that could be tracked over time, an important tool for infrastructure management.

- Tools were needed to evaluate the probable effects of alternate funding levels on facility conditions.
- The issues of physical condition vs. other factors such as quality or adequacy of space needed to be clearly separated.

Funding Categories for Capital Projects

The Facility Management Division works with the Facility Management Board to allocate funding between these Council-approved funding categories to address facility management goals. The definitions have been established through a City Council review and approval process. Preservation and maintenance deficiencies, except for park facilities, are addressed in the Facility Condition Report. The reporting program assigns deficiencies to four preservation and maintenance funding categories. Two other funding categories – General Site and Facility Improvements, and ADA Renovations – address other facility requirements not required to meet preservation and maintenance deficiencies.

HEALTH, SAFETY AND WELFARE – items are included in the FCR

Preserve and maintain the health, safety and welfare of users of City facilities, including asbestos abatement, air quality and building safety programs designed to protect the public and employees.

PRIMARY BUILDING SYSTEMS – items are included in the FCR

Preserve, maintain, and rehabilitate the exterior systems of City buildings, such as foundations, sub/superstructure, floors, exterior closure and roofing.

SECONDARY BUILDING SYSTEMS – items are included in the FCR

Preserve and maintain interior building features such as partitions and doors, walls, floors, ceilings and all related finishes.

SERVICE SYSTEMS – items are included in the FCR

Preserve and maintain building service systems, including elevators, mechanical systems (plumbing, heating cooling), needed to maintain reasonable service levels. Program includes electrical systems necessary for lighting, equipment and computers.

PARK SITE RENOVATIONS & REHABILITATION – items are not included in the FCR

Preserve and maintain special site-specific features, such as recreational facility parking lots and drives, irrigation systems, drainage systems, bike path preservation, outdoor lighting systems, and park furnishing and equipment.

GENERAL SITE AND FACILITY IMPROVEMENTS– items are not included in the FCR

Modify and/or add to existing facilities to meet operational, safety and cost efficiency goals. Primary goal is to address changing program function/needs and/or to improve service delivery. Does not include acquisition or construction of new sites.

ADA RENOVATIONS– items are not included in the FCR

ADA projects based on ADA Transition Plan recommended by the Human Rights Commission.

Definitions of Facility Condition Report Terms

Current Replacement Value (CRV): The current replacement value is arrived at by estimating the total cost of replacing a facility, building or structure to facilitate the current usage. It includes costs for project administration, code upgrades, design, bidding, and contracting as well as construction costs, but not the cost of land.

Routine Preservation and Maintenance (Preventative Maintenance): Buildings, like road, sewer or storm water systems, are in a constant state of deterioration. Buildings are made up of components such as roofs, walls, doors, windows, floors, electrical and mechanical systems that have finite life spans. Routine preservation and maintenance projects are activities planned to assure the life span of a building's components and to replace these components at the end of their useful life span. The average annual rate of this type of deterioration is estimated to be between 2% and 4% of the Current Replacement Value of the facility.

Examples of non-General Fund buildings excluded from this report include the complex at the Eugene-Springfield Water Pollution Control Facility, the Eugene Airport buildings, the Public Works Maintenance and Transportation facilities and City-owned parking garages. The condition assessment procedure completed for the General Fund buildings could also be applied to these buildings which would allow consistent reporting on the entire

Deferred Maintenance Backlog: Deferred preservation and maintenance occurs when routine preservation and maintenance projects are postponed, usually due to a lack of funds, to a future funding cycle. Often, these conditions continue to be postponed for years. The estimated cost to correct an accumulation of several years of deferred preservation and maintenance items is called the Deferred Maintenance Backlog.

Existing Maintenance Deficiencies: Existing Maintenance Deficiencies are the sum total of all Current observed routine preservation and maintenance items and Deferred Maintenance Backlog items, which exist and require correction within one year of the audit. They do not include other types of work such as adaptation, additions or new construction.

Facility Condition Index (FCI): The ratio of the total Cost of Existing Maintenance Deficiencies to the Current Replacement Value. The Facility Condition Index indicates the percentage a facility has deteriorated from its Current Replacement Value.

$$\text{Facility Condition Index (FCI)} = \frac{\text{Total Preservation and maintenance Deficiencies}}{\text{Current Replacement Value}}$$

The FCI provides a valid indication of the relative condition of a single facility or group of facilities. The higher the Facility Condition Index, the worse the condition of the facility.

Example FCI Calculation

To better understand this rating system it may be useful to use an example of a building type such as a house:

Assumed: A 30-year-old house estimated to cost \$100,000 to rebuild in today's market and to today's codes (CRV=\$100,000). A detailed, structured inspection of the house is conducted and determines the following:

1. The cedar shake roof is leaking into the attic in several locations and shakes are curled, rotten and broken. The roof must be replaced right away at a cost of \$5,500.
2. Carpenter ants and dry-rot are active in the crawl space and have damaged several areas. The cost to repair the damage and treat for ants is \$3,500.
3. The paint protecting the cedar siding of the house has peeled and is allowing weathering and degradation of the siding. The house must be repainted at a cost of \$2,500.
4. The front door has delaminated and must be replaced at a cost of \$300.
5. All the floor coverings in the house are completely worn out and must be replaced at a cost of \$5,200.
6. The 30 year-old oil-fired furnace has become dangerous and must be replaced with a gas furnace at a cost of \$3,000.

To calculate the Facility Condition Index (FCI) for the house we need to total the Cost of Existing Deficiencies. Therefore the theoretical house has deteriorated 20% from its current replacement value.