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City of Las Vegas, Department of Building and Safety: Valuation based fee schedule analysis

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City of Las Vegas, Department of Building and Safety:

Valuation Based Fee Schedule Analysis

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University of Nevada, Las Vegas

Department of Public Administration

Final Project for the Master's in Public Administration

In partial fulfillment of PUA 791 Topics in Public Administration

Dr. Christopher Stream

August 6, 2010

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Executive Summary

The City of Las Vegas' Department of Building and Safety (B & S) utilized the University of Nevada, Las Vegas' Master's of Public Administration student group (UNLV MPA group) to conduct an analysis on their current valuation based fee structure. Currently, the department is operating as an enterprise fund and as such has the authority to set permit and fee schedules to cover costs (NRS 354.59891 4.) The 1997 Title 16 Administrative Code allows the city to cover the administrative costs. A multi-phased analysis was conducted to determine if an increase in B & S' fee schedule is warranted. The results of this analysis are specified in detail in this report. This analysis is not intended to provide specific recommendations on fee schedule changes, but general suggestions for modifying the current structure or alternatives for potential revenue generation.

Recommendations:

- 1) Increase the fees based on the Western Urban Non-seasonally Adjusted Consumer Price Index as published by the United States Department of Labor by 25 percent and valuation schedules by 25 percent.
- 2) Update the current building valuation schedule to a current valuation table and possibly reduce the overall base permit fees.
- 3) Improve tracking of inspection hours on a per permit basis to allow for future analysis of the labor costs associated with permit fees generated.
- 4) Include the 50 percent reserves as a line item in the budget.
- 5) Form a partnership with other departments such as Business Licensing and the Fire Department to identify non-permitted construction.

- 6) Investigate a joint venture with Clark County to develop a Memorandum of Understanding (MOU) where Clark County staff could systematically inspect all businesses for non-permitted work and both would share in the revenue generated from the fees collected.

Historical data on B & S was gathered and analyzed from 1997 to 2010, which included permit and valuation volume, and full time employee equivalents. General income and expense data was also gathered from FY 2001 to FY 2010. Once a historical understanding was established, the analysis was then broken into phases as follows:

Phase 1: A performance analysis was conducted to understand if B & S is performing at adequate service levels. B & S is utilizing both internal measures and citywide initiated Performance Plus measures to analyze performance.

Phase 2: An investigation of the value based fee structures of local (Clark County, North Las Vegas) and national (Henderson, Phoenix, Portland, and San Diego) jurisdictions were conducted. Comparisons were made based on fee schedules and valuations schedules. This comparison indicated that all jurisdictions were higher than B & S in permit fees by a blended average of 24 percent. An analysis of the International Code Council's 2009 Building Code Valuation Schedule indicate an overall higher valuation than B & S' valuation schedule by 100 percent.

Phase 3: A longitudinal analysis was conducted on the historical revenue and potential revenues based on the application of the Consumer Price Index. Though B & S has not utilized this option, NRS 354.59891(2) grants B & S the ability to increase building permit fees based on the Western Urban Non-Seasonally Adjusted Consumer Price Index as published by the United States Department of Labor each year. Starting with a base point of December 1977 at 100

points, the CPI has increased by 30.25 percent for the period of 1997 to 2009. Paired with the results of the fee analysis in Phase 2, this finding substantiates a one-time permit fee adjustment based on the CPI of at least 25 percent (See Figure 1).

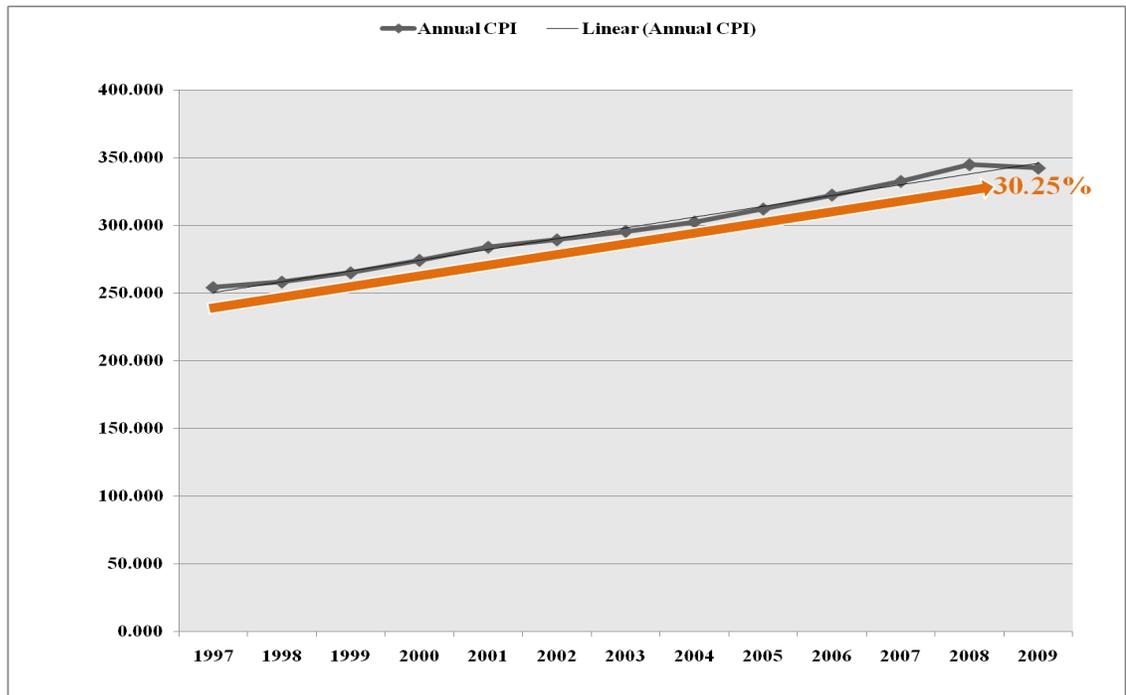


Figure 1: Western Urban Non-seasonally Adjusted Consumer Price Index
Note: Base Period December 1977 = 100

Phase 4: A break-even analysis was conducted. Both the fixed and variable costs need to be accounted for in this analysis. The City Manager wants to maintain at least 50 percent of the budget in the reserve account, so to break-even the Department needs to collect 150 percent of the projected budget each fiscal year. Contributing to the reserve account would then be considered a fixed expense and should be a budgeted line item.

Table 1: Break-even Analysis with percentages in actual dollars

	Increase of Fees by 25%	Increase of Valuation by 100%	Over/Under Application
Actual Revenue	\$ 7,734,166	\$ 7,734,166	\$ 7,734,166
Bldg Revenue	\$ 7,333,228	\$ 7,333,228	\$ 7,333,228
Non Building Revenue	\$ 400,938	\$ 400,938	\$ 400,938
Potential Building Rev	\$ 8,948,795	\$ 12,751,345	\$ 11,166,330
Overall Potential Revenue	\$ 9,349,733	\$ 13,152,283	\$ 11,567,268
Actual Expenses	\$ 7,711,360	\$ 7,711,361	\$ 7,711,363
Allowable Reserves	\$ 3,855,680	\$ 3,855,680	\$ 3,855,681
Exp including Reserves	\$ 11,567,040	\$ 11,567,041	\$ 11,567,044
Under/Over	\$ (2,217,307)	\$ 1,585,241	\$223
% Under/Over	-24.78%	12.43%	0%

The UNLV MPA group examined the current fiscal years permit count; total valuation and the corresponding generated building revenues. Increasing the permit fees by 25 percent based on the CPI analysis in Phase 3 translates into potential revenue of \$8,948,795. When applying this revenue to the expenses including reserves the balance is under by 24.78 percent. Additionally, the analysis considered increasing the valuations for FY 2010 by 100 percent indicated from the analysis on the valuation schedules in Phase 2. This would increase total revenues to \$12,751,345. When applying the increase to the expenses including reserves the balance is over by 12.43 percent (See Table 1).

The CPI increase of 25 percent indicates that valuation should additionally be increased by 24.78 percent to cover 100 percent of expenses plus the additional amount of 50 percent held in reserves. Applying the 100 percent increase to valuation indicates that fees should be reduced by 12.43 percent to cover 100 percent of expenses plus the additional 50 percent amount held in reserves. Both of these applications conclude to potential revenue of the \$11.6 million and a break-even target.

Phase 5: An investigation into the public opinion regarding raising fees was conducted, which concluded to varied results. The current economic situation has caused many jurisdictions facing the same issues as B & S to already raise fees. Nevertheless, the feedback from the public has been mixed with commissioners not willing to support the increases without clear justification of the necessity of the service.

Final Phase: Through literature review and interviews other options were identified for additional revenue generation.

Introduction

The focus of the study is to provide the City of Las Vegas, Department of Building and Safety (B & S) an assessment of the “valuation-based” fee schedule that allows the department to cover the costs necessary to maintain the mission of “...provid[ing] reasonable controls for the construction, use and occupancy of buildings to ensure public safety” (CLV website 2010).

B & S operates as an enterprise fund that functions as a private business enterprise. All revenues generated by B & S are received from the fees and fines charged for permitting, plan reviews and inspections and are expected to at least equal the cost of operations. An enterprise fund is defined as “a fund established to account for operations (NRS 354.559891 Section 3d).”

The task of this analysis is to conduct a multi-phase investigation of the “valuation-based” fee structure to determine if a restructuring of B & S’ permit fees and valuation schedule is warranted. The phases include:

1. An investigation into the performance measurements, currently utilized by the City of Las Vegas, to determine that adequate service levels are being met
2. An investigation and comparison of the value based fee structures of local and national jurisdictions to B & S’ current fee structure
3. A longitudinal analysis on the historical revenue and potential revenues based on the application of the Consumer Price Index
4. An analysis determining the break-even point where revenues will cover expenses
5. An investigation of the potential public reaction to changes in the fee structures

The conclusions drawn from the data in this analysis are presented to B & S in order to make informed decisions regarding the future of their fee and valuation structure. This analysis

is not intended to provide specific recommendations on fee schedule changes, but general suggestions for modifying the current structure or possible alternatives for other avenues of revenue generation.

Conceptual Framework

To outline the course of action a conceptual framework was established. The first step for the University of Nevada Las Vegas' Master's of Public Administration student group (UNLV MPA group) was to build an expert knowledge base. The search for expert knowledge began with a national search for a similar locale with similar population size and similar economic factors (Mintrom, 2003, p. 44-47). The research found Nashville, Tennessee to be a similar jurisdiction who has recently accepted a study completed by a paid consultant, Maximus, Inc. regarding Nashville's building department permit fee structure. After reviewing the study by Maximus, commonalities were discovered and linked to general and particular knowledge for the present study of the City of Las Vegas Building and Safety fee schedules (Mintrom, 2003, p.48-50).

Extensive interviews and site visits were conducted with the City of Las Vegas Building and Safety that led to more questions and more interviews. The group began to draw broad connections to national trends in policy regarding both cities and counties within the United States. By then conducting research of official government websites and personal interviews of numerous city and counties both nationwide and locally, it was clear that the trends in the "valuation-based" building fees were similar on a nationwide basis (Mintrom, 2003, p.53-58). Investigation into public opinion concerns over the fee structures increases from various national jurisdictions garnered an invaluable knowledge base (Mintrom, 2003, p. 58-59). By then triangulating the information from different sources, the study was able to clarify the policy

question and diffuse opposition to the conclusions reached (Mintrom, 2003, p. 59-60).

Substantial amounts of fee comparison tables were compiled, analyzed, and then reduced to be able to compare similar fee structures. In order to compare the fee schedules directly, the spreadsheets were combined into workable data for analysis (Mintrom, 2003, p. 62-63).

The specific background and expertise in the research group included a member of the Clark County Assessor's Office, a former Associate Director of Finance, a current member of the Construction Industry and an associate who works in the Business License field. Each member of the group contributed to a diverse knowledge base for this project. Utilizing all the skills of the group to analyze, research and coordinate information and meetings was a huge asset to the completion of the project. The final step for the group was to assemble the knowledge and scrutinize the information assembled. By playing the skeptic, the group further solidified the data collected and the conclusions reached (Mintrom 60-63). It was extremely important that team members fulfill their role whether the assignment was researcher, writer, organizer or analyst. While each team member had a specific assignment, members frequently switched roles to fill in where gaps were perceived (Mintrom, 2003, p.138-141).

Historical Background

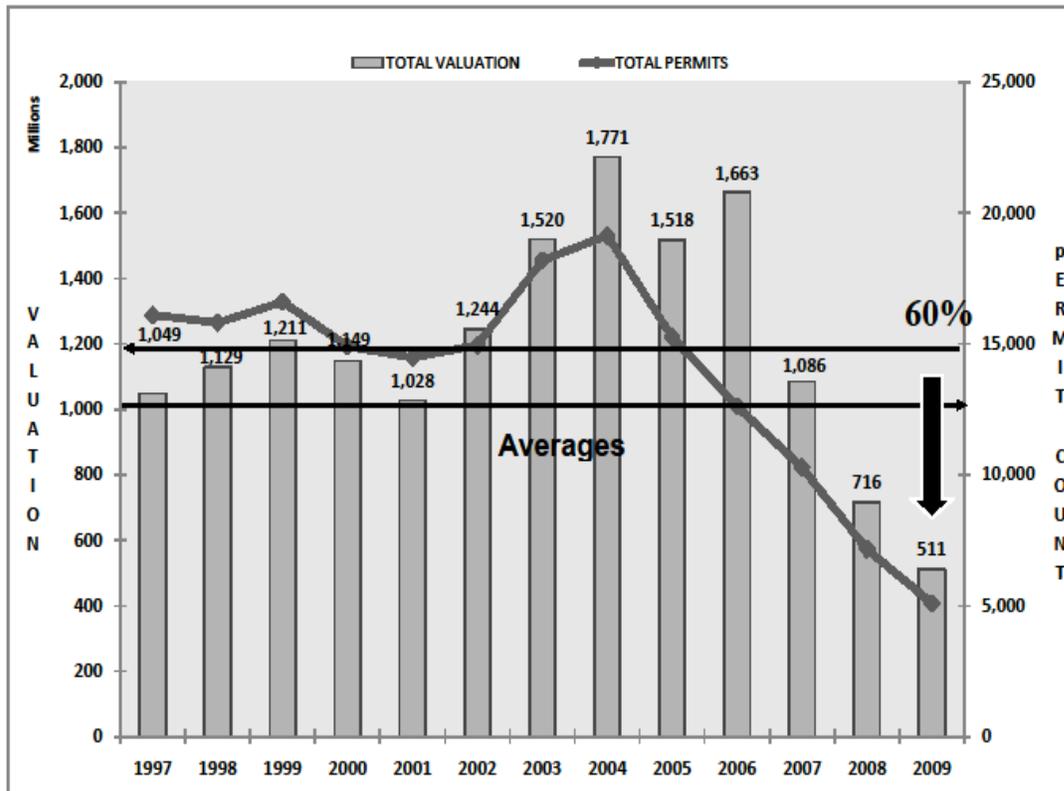
Historical Trends and Performance Measures

The project originated with the City of Las Vegas' request for UNLV MPA group to analyze the current "valuation-based" fee and permit schedule for the department of Building and Safety. B & S serves and answers to key stakeholders that include the City Council, an Advisory Committee appointed by the City Council, the Associated General Contractors of America (AGC), local vendors, contractors and the public at large.

The prohibitive political environment has contributed to the reasons behind the static fees. Over the past few years, suggestions to change the fee structure and/or increase of the fees have been proposed. The AGC and the local contractors have pleaded with B & S and the City Council to maintain the current fees, arguing any increase would have an extremely negative impact on the construction industry (C. Knight, 2010, personal communication). Across the nation, building departments have used “valuation-based” systems to cover costs for the expenses incurred. As an enterprise fund, the City of Las Vegas (CLV) by Nevada Revised Statute (NRS) is allowed to set permit and fee schedules to cover costs, while the 1997 Title 16 Administrative Code allows the city to cover the administrative costs of the department. B & S has not updated this administrative code with regards to permit fees nor valuation fees since at least 1997. While B & S has raised the administration fee in 1997, the “valuation-based” fee has not been raised since before 1990 (City of Las Vegas Metropolitan Code 1997).

Total permit values were examined for each year since 1997 and compared this to the total permit count for the same time frame. The average valuation since 1997 is \$1.2 billion while the average permit count is 13,895. Comparing this to the 2009 valuation (\$511,352,224) and permit count (5093) there is a 57.4 percent and 63.3 percent decrease, respectively (See Figure 2), leaving an overall average decline of 60 percent. Several large government projects currently under construction contribute approximately \$380 million in valuation. These projects were subtracted out for comparison purposes.

Figure 2. Building & Safety Historical Permit & Valuation Volume



Labor expenses are a major component of total expenses in most governmental departments and the Department of Building and Safety is no exception. Over the past 10 years labor expenses have averaged about 79 percent of total expenses and 77 percent of revenues (See Figure 3). Labor is such a large component of expenses, therefore, it is important to review the historical employment numbers. B & S became an enterprise fund in FY 2004. It was not possible to obtain data on FTE's (full time equivalents) prior to this on a fiscal year basis. However, the City of Las Vegas Human Resource Department provided budgeted positions since 1997 on a calendar year basis. As a result, the budgeted positions were utilized from 1997 to 2003 and the filled positions from FY 2004 to FY 2010 (See Figure 4). Averaging these numbers since 1997 to present indicates a historical average of 106 FTE's. Beginning in FY 2009, staff has been reduced from 124 FTE's to 53 FTE's. The third quarter of 2010 brought an

additional 15 percent reduction in staff with the elimination of eight more positions (45 FTEs). This is down approximately 58 percent from the 13-year average. At first glance this appears appropriate and in line with the decline in permit volume and valuation. Prior to this recent lay off, B & S has been able to maintain an adequate service level, in spite of static fee or valuation schedules since the late 1990s. The application of any increase in fees is only justifiable if service levels have declined. These indicators led the UNLV MPA group to review the current performance of the department.

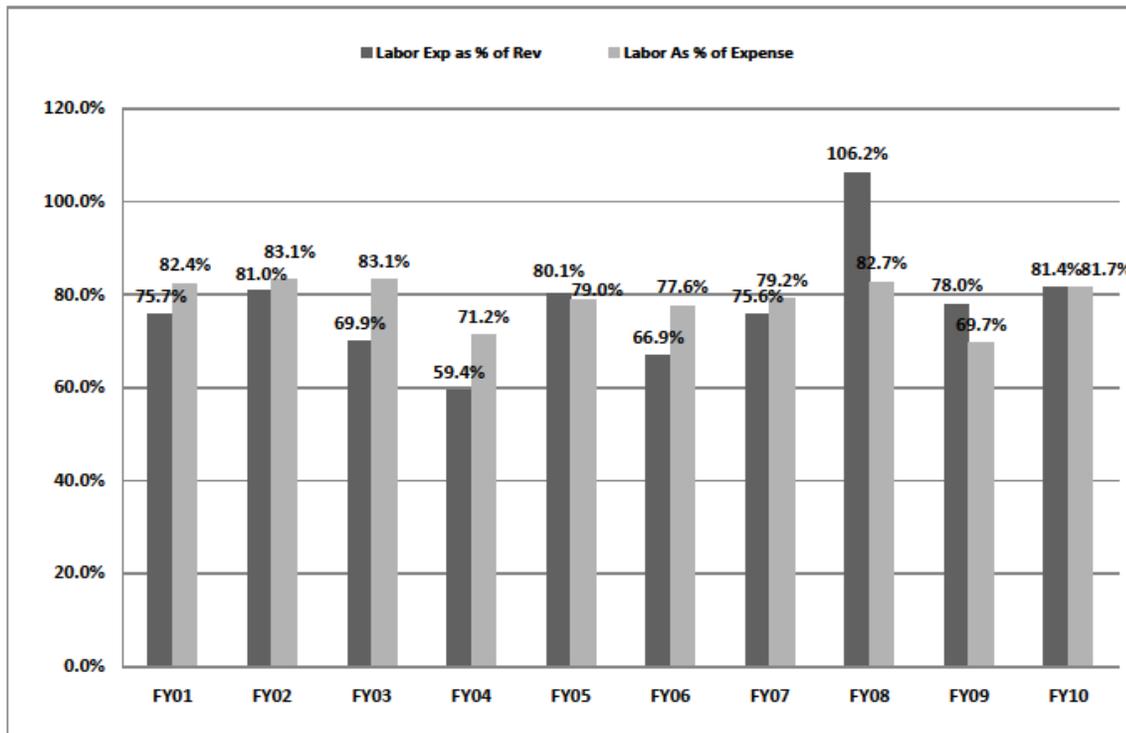


Figure 3. Building & Safety’s Labor Expense as a percent of Revenue & Expenses

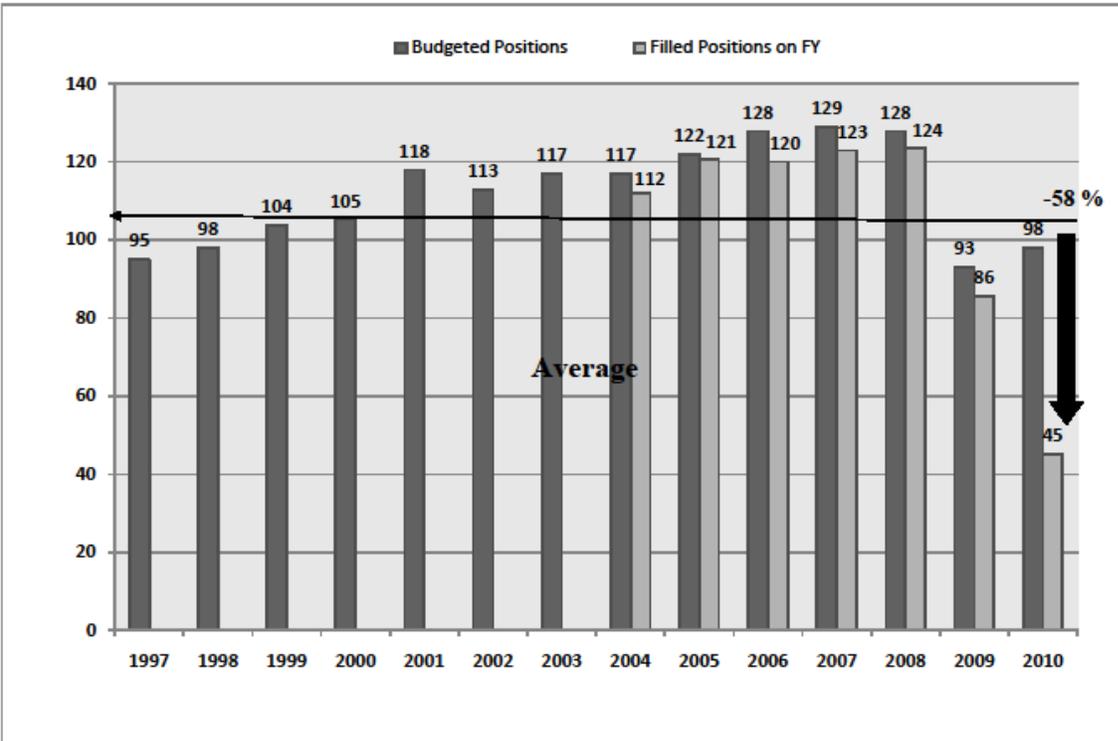


Figure 4. Building & Safety's 1997 - 2010 Fiscal Listings of Budgeted & Filled Position

Purpose of the Research

The purpose of the research is to determine if a change to the B & S' "valuation-based" fee structure is warranted. A "valuation based" system relies on the value of the property to dictate the permit prices and fees collected. For B & S, the valuation is either the value declared by the contractor or a calculated valuation off the C-schedule in the Administrative code, whichever is higher (CLV, Uniform Administrative Code, 2006 Ordinance 5884, section 304.2). This calculation is on a "per square footage" basis by construction type. During the boom years of 2003 to 2006 when the volume of new construction permits was at the highest levels and the valuation equally high, the fee schedule was not a major consideration. The large volume of permits covered the budget of B & S and generated more than sufficient revenue for the cost of operations. The economic downturn has caused a dramatic drop in the levels of construction and

B & S has struggled to cover the costs of operations using the current “valuation-based” fee structure (C. Knight, 2010, personal communication).

Data Collection: Methods and Evaluation Criteria

First phase. In the first phase of the investigation, the UNLV MPA group gathered data on the several measures that B & S is currently utilizing to track performance. “A jurisdiction with a good system of performance measures can compare its performance against that of other jurisdictions or simply against its own performance at an earlier point in time” (Ammons, 2009, p. 98). In 2007, a citywide initiative called “Performance Plus – Managing for Results” was implemented “...in an effort to increase transparency and accountability in the way the City of Las Vegas conducts business” (City of Las Vegas City Initiative, 2010). The Quarterly Performance Report is the measurement tool utilized for collecting and evaluating this performance and is tied to the budgeting process.

Second phase. In the second phase, data was collected on the national standards in “valuation-based” fee schedules of building departments both locally and nationally: Clark County, City of North Las Vegas, City of Henderson, City of Nashville; City of Portland; City of Phoenix, and City of San Diego. Researching the administrative code, gathering data from websites (Clark County, n.d.; City of North Las Vegas, n.d.; City of Henderson, n.d.; City of Nashville, Codes and Regulations, n.d.; City of Portland, n.d.; City of Phoenix, n.d.; City of San Diego, n.d.) and interviewing building and safety employees enabled data collection on each jurisdiction regarding permit fees and valuation schedules. Initially, the entities chosen for comparisons were based on similar population, similar number of building permits issued and similar levels of unemployment as compared to the City of Las Vegas. However, B & S requested the inclusion of other jurisdictions in this analysis: the City of San Diego and the City

of Henderson. The City of Phoenix was included because growth and decline of both construction and construction employment in this city has paralleled that of Southern Nevada (Brookings, 2009).

During this second phase, the focus of the analysis was broken out into three categories. The first category examined “local” and “other” (western region) jurisdictions. The local jurisdictions included City of North Las Vegas and Clark County. The other jurisdictions included City of Henderson, City of Phoenix, City of Portland and City of San Diego. Henderson was not included in the local jurisdictions because they are currently on a cost based permit system and are better suited for comparison in the “other” category. Utilizing the report (Analysis of Fees for Service Report), published by Maximus for the City of Nashville and Davidson County Tennessee comparisons were made of the fees generated on the construction of two single-family residences, an office building and an office/warehouse building. Comparisons of the total fees were based on the commonalities of Building Permit Fees, Plan Review Fees, Zoning Fees, Issuance Fees, and Mechanical, Plumbing and Electrical (MPE) fees.

MPE fees for San Diego and Portland were not attainable. To do so required expertise in these fields to determine the appropriate components that would be included in a given construction project for each permit type. Portland collects an additional “Development Service Fee” that was added 6 years ago and was approved by the Development Review Advisory Committee (D. Kleim, personal communication, July 7, 2010). The basis for this decision was an agreement to maintain static building fees for 5 years. Now past the five-year provision, it is interesting to note that Portland raised the Building Permit fees along with the Development Service Fee effective July 1st of 2010. Consequently, the comparison of fees to San Diego and Portland included Building, Plan Review and the Development Service fees only.

The City of Las Vegas and the local jurisdictions are able to issue MPE permits based on a percentage of the total building permit. When applying for a permit, a contractor can choose the lesser of the percentage basis or the actual cost valuation of the components. For comparison purposes, the percentage basis was utilized. Henderson and Phoenix do not have separate MPE fees and are inclusive in the building and plan review fees.

The second category valued each example construction type based on reviewed each jurisdiction's current valuation schedule and made comparisons based on valuation only. Since the various jurisdictions each used different years for their valuation schedules, this led to a comparison of the International Code Council's International Building Code Valuation table for 2009.

The third category compared the total fees of all the jurisdictions based on the scheduled valuations. All jurisdictions examined use a "valuation-based" fee structure except Henderson and San Diego, which use a "cost-based" fee structure.

Third phase. In the third phase a longitudinal analysis was conducted on the historical revenue and potential revenues based on the application of the Consumer Price Index. Though B & S has not utilized this option, NRS 354.59891 Section 2 grants the department the ability to increase building permit fees based on the Western Urban Non-Seasonally Adjusted Consumer Price Index as published by the United States Department of Labor each year.

Fourth phase. In the fourth phase, data was collected in the form of reports for budget totals and actual income and expenses. This information was utilized to perform a break-even analysis to determine if the increase in fees will be sufficient to cover costs (Ammons, 2009, p. 252-255).

Fifth phase. In the fifth phase, an investigation into potential public reaction to changes in the fee structures was conducted. This was accomplished through interviews and review of literature regarding different jurisdictions that have increased their fees. By triangulating information from multiple independent sources, trends within the Western United States area can be substantiated (Mintrom, 2003, p.59-60).

Analysis and Findings

First Phase: Performance Analysis

In an attempt to understand the B & S' levels of service and current performance, the UNLV MPA group reviewed several measures that are currently being utilized to track performance. Most recently, B & S implemented an inspection tracking system. The system has the capacity to track the average time spent on inspections per permit, per inspector, per inspection type, per day. Unfortunately, because of the recent implementation, there is no historical data to make comparisons. Training issues in transmitting the start and ending time for each inspection also needs addressing. Issues with the remote wireless connectivity have impacted the accuracy of the reporting. The tracking will not produce effective measures until these concerns are resolved.

Additionally, B & S is currently tracking inspection numbers; plan review numbers, the average time for initial plan reviews and the number of appeals filed (See Appendix A). For inspections, the data includes total number of inspections, total daily and monthly holdover of inspections and the average number of inspections per day per inspector. A holdover is an inspection that was held over to the next day. Holdovers cost construction projects, contractors and customer's time and money. The same is true for plan reviews. The daily holdovers of 51 were high for the 15,569 permits in FY 2005, but showed a dramatic decline over the following

three years where, in FY 2008 there were 8,217 permits with an average of only one holdover per day. The first increase registers in FY 2009 at 4.2 and FY 2010 at 4.6. We were unable to obtain historical monthly holdovers, except for FY 2009, which is indicating a monthly holdover rate of 65. The monthly holdovers increase dramatically to 93 for the FY 2010 even though the number of permits is similar (5671 for FY 2009 and 5344 for FY 2010). Inspection requests totaling 250 or more in any given day, will delay actual inspections by two days or more due to the lack of full staffing (whether due to training, sick leave or vacation time) (Y. Palomo, 2010, personal communication).

Appeals have been another area of concern for the Director. In FY 2005, the number of appeals reached 445 per year. Appeals have been reduced to 31 for FY 2010. Appeals are decreasing as the decisions from the inspections or plan review have been diverted to more supervisor intervention instead of going through the formal appeal process.

The next measure looks at the average wait time for the initial review of submitted plans. This indicator improved from an average of 15.7 days in FY 2005 to 5.1 days in FY 2010. Yolanda Palomo, the main contact person at B & S, indicated that the internal performance goal was 20 days prior to Chris Knight becoming the director (C. Knight, 2010, personal communication). Mr. Knight lowered the goal to 5 days and it appears the department has been successful at attaining this goal. The recent layoffs have no impact on this internal service level since the positions were for field service personnel, inspectors and inspection supervisors.

The last measure reviewed is the FY 10 Quarterly Performance Report. This report categorizes “Key Result Measures” and identifies an annual target goal. The measures specifically related to B & S’ service performance were combined into a quick reference table by category for a visual comparison (See Table 2). The items in green indicate that B & S is

meeting or exceeding the target goal. The yellow indicates B & S is falling below the target. The items in red indicate B & S is falling below the target by 15 percent or greater. When looking at the entire fiscal year, B & S is performing well for the items in the “Inspections” category. Nevertheless, the full impact of the latest layoffs may not be realized until well into the next fiscal year of 2011. Though still within their target, early signs of a decline appear in the fourth quarter for “Inspections completed within 24 hours of request”.

Table 2. Summary of FY10 Quarterly Performance Report ending June 30, 2010

Summary of FY10 Quarterly Performance Report

Line of Business:	Administrative	Inspections	Permits				Operational Support		
Key Result Measures:	Total costs of the plans checks, permits and inspections will be covered by our fees.	Inspections completed within 24 hours of request	Inspections available on-line to the customer within 1 hour of inspection	Residential Plans check initial review completed by B&S staff within an average of 20 days.	Commercial Plans review completed by B&S staff within an average of 20 days.	Wait Time to see technician will be 20 minutes or less (All Plans)	Plans are reviewed for pricing & completed by technicians within an average of 2 Days or less for all projects	Customer transactions will be completed in 10 minutes or less	Customers will wait 20 minutes or less
Qtr. 1	125.00%	99.10%	95.20%	99.30%	99.70%	74.90%	83.40%	79.20%	99.30%
Qtr. 2	100.82%	98.80%	96.70%	100.00%	100.00%	83.70%	86.20%	85.70%	99.20%
Qtr. 3	87.25%	99.30%	96.60%	100.00%	100.00%	88.35%	89.83%	88.90%	99.40%
Qtr. 4		96.20%	90.50%	100.00%	100.00%	82.70%	87.10%	85.60%	99.20%
YTD	102.71%	98.31%	94.65%	99.83%	99.91%	82.25%	86.50%	84.75%	99.25%
Annual Target	97.00%	97.00%	90.00%	80.00%	80.00%	90.00%	90.00%	90.00%	90.00%
Red *	82.45%	82.45%	76.50%	68.00%	68.00%	76.50%	76.50%	76.50%	76.50%
% from Target	5.88%	1.35%	5.17%	24.79%	24.89%	-8.61%	-3.89%	-5.83%	10.28%

Information provided by the City of Las Vegas Building and Safety Department.

* Red indicates 15% or more under target percent.

B & S is performing on target in the “Permit” category for the initial plan check. However, the measure is looking at a goal of 20 days for the initial review. As mentioned earlier, the internal standard has changed to 5 days. This should be updated in the performance measurement standards. The measure for “Wait Time to see technician ...20 minutes or less” and “Plans reviewed for pricing & completed ...average of 2 Days or less” are falling below the current target by 8.6 percent and 3.9 percent, respectively. Additionally, in “Operational Support” the measure for “Customer transactions...completed in 10 minutes or less” is 5.8 percent under target. The three measures have been falling below target for the entire year, which is a reflection of the prior year layoffs. The numbers above are not affected by the most recent layoffs.

The “Administrative” measure “Total costs of plan checks, permits and inspections... covered by fees” for the fourth quarter was not available. The third quarter shows a dramatic drop of approximately 13 percent from the second quarter, but B & S is still meeting the overall target up to the third quarter. The decline may be a result of the layoffs that occurred in the later part of FY 2010. B & S does not accrue the benefit expenses each month with the salaries paid. The benefits are only expensed when actually paid out. The layoffs required the payout of accumulated benefits for eight individuals. This payout may have contributed to the decline in the third quarter performance on covering costs and may impact the fourth quarter as well.

What does this mean? It is clear that the quality of service is showing signs of decline. If the permit counts and permit valuations stabilize, this would indicate that internal service levels would not improve at the current staffing levels. Current performance numbers indicate the internal office is understaffed and are not meeting current goals. The full impact of the most recent layoffs of the inspectors and supervisors has yet to be experienced in the field service

levels. The fourth quarter is showing the beginning signs of problems in the area of holdover inspections with the possibility of further decline into the next year. Consequently, a change in B & S' current fee structure may be warranted.

The future of the construction industry is difficult to predict, but the current economic indicators are not positive. The local and national employment numbers underline the current trend. According to research by Restrepo Consulting Group (June, 2010), the "...[j]ob losses persisted in 8 of the 11 major employment sectors... [when comparing year over year in May with 85 percent of the losses in] ...Construction (-16,500) [or -25.4 percent], Trade, Transportation & Utilities (-5,600) and Leisure and Hospitality (-5,300)...In May, Clark County's Construction sector had 48,400 jobs, 50,600 fewer than it had in December 2007. The last time the industry had a similar number of jobs was June 1995 (47,800)". If the permit counts and permit valuations continue to decline, then it appears that B & S is taking the appropriate corrective actions. This suggests the internal office and field service performance levels will adjust and realign with the current targets. Nevertheless, if the permit counts and permit valuations remain static then additional staff will be needed to bring the performance levels back on target. An increase in the fees would be necessary in order to cover the associated costs.

Second Phase: Parallel analysis of the national standards

The second phase is broken into three categories of analysis. As mentioned in the data collection section, the first category looks at the preset valuations based on the examples used in the Maximus Analysis of Fees for Services Report prepared for the City of Nashville. Table 3 is displaying the examples and corresponding valuations.

Table 3. Maximus Valuation Examples

Description of Building Type		Size	Value	Construction Type
Example #1	Single Family Residence	1200 SF	\$135,000	Type 5B
Example #2	Single Family Residence	2500 SF	\$250,000	Type 5B
Example #3	Office Building	12,000 SF	\$1,636,080	Type 2B
Example #4	20% Office/80% Warehouse	40,000 SF	\$3,301,740	Type 2B

On an overall basis, the comparisons indicated that the City of Las Vegas’ permit fees were lower than every other jurisdiction analyzed (See Appendix B). For the local jurisdictions, the results indicated higher fees by an overall average of 12.77 percent. For the residential examples, the average was 12.16 percent and for the commercial examples, the average was 13.39 percent (See Figure 4).

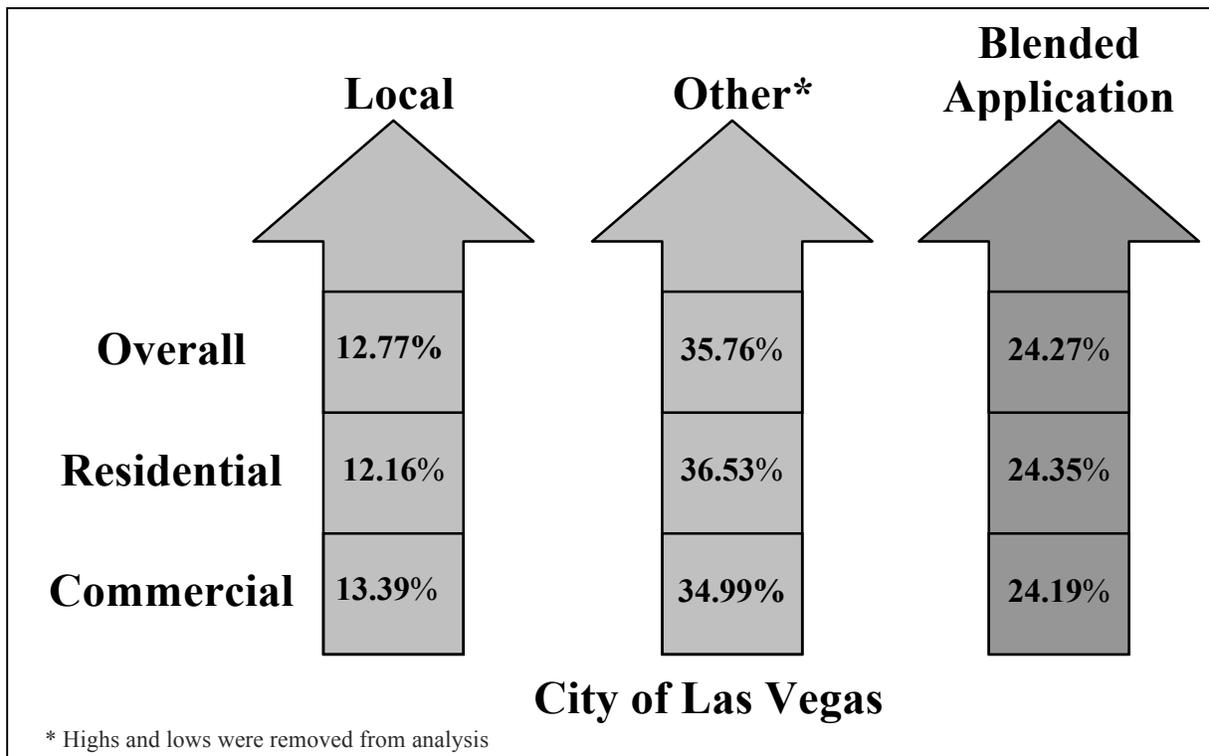


Figure 4. Fee Comparison Analysis
 Note: From analysis shown in Appendix B

For the other jurisdictions, the overall average difference was higher by 35.76 percent. The overall residential average indicated 36.53 percent, while the commercial average indicated 34.99 percent. San Diego was the highest for residential fees at 245 percent and Henderson was the lowest for commercial fees at -5.0 percent. The other jurisdictions fell into a tighter range with residential fees from 27 percent to 63 percent and commercial fees from 21 percent to 60 percent. Eliminating the highs and the lows indicates a blended average of 24.35 percent for residential fees and 24.19 percent for commercial fees for an overall average of 24.27 percent (See Figure 4).

In the second category of this phase, the differences in valuation schedules were examined for the various entities (See Appendix C). The first part of this comparison looked at the valuation of the four examples mentioned above based on each jurisdiction's current valuation schedules. Again, San Diego and Henderson were not included in this analysis because they are cost based and do not utilize a valuation schedule.

Both the City of North Las Vegas and Clark County are using valuation schedules that are only slightly higher than B & S. This is because both of these entities are also utilizing antiquated valuation schedules similar to B & S. City of North Las Vegas' is from 1997 and Clark County's appears to be similar in age based on the indicated values for the example properties. Still, for the residential examples the overall valuation averages were around 10 percent higher than B & S. The commercial examples showed a greater range with Clark County at a higher rate on the office project by 19 percent and North Las Vegas at a lower rate by 8 percent. The values for the local jurisdictions were very close to B & S on the office/warehouse example. For the other jurisdictions, (Phoenix and Portland), the valuations indicated higher by

95 percent for the residential examples and 148 percent for the commercial examples with an overall indication of 122 percent (See Figure 5).

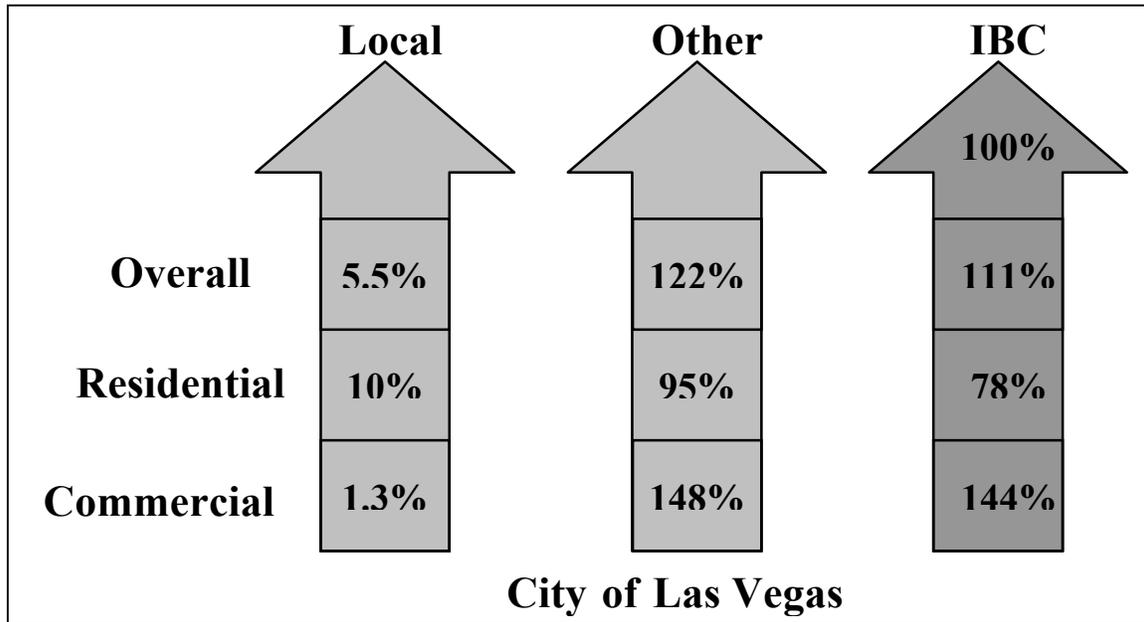


Figure 5. Valuation Comparison Analysis
Note: From analysis shown in Appendix C

Phoenix utilizes the International Code Council's International Building Code (IBC) Valuation Table for 2006 and Portland recently moved to the IBC 2009 Building Valuation Table. The comparison indicated varying percentages for different construction type/occupancies categories, and led to analyzing B & S' current valuation table against the IBC 2009 Building Valuation Table, (See Appendix D). Some judgment was exercised in matching the categories for comparison purposes. This resulted in the exclusion of some occupancy categories because an appropriate match could not be identified. Other categories were combined for a blended indicated percentage. We first reviewed the categories that fit into our previously noted example properties. The IBC valuation tables indicated 144 percent higher for residential and 78 percent higher for the commercial examples with all examples indicating an

overall 111 percent higher. When reviewing all of the matching categories, the overall indication was higher by 100 percent (See Figure 5).

The third category of this phase was a comparison of the permits fees based on the actual valuations of each entity (See Appendix C). Once again, the local jurisdictions were higher by 14.36 percent on residential and 17.91 percent on commercial for an overall of 16.14 percent higher. The other jurisdictions were higher by 97.32 percent on residential and 174.92 percent on commercial with an overall of 136.12 percent higher. The blended overall indication for all jurisdictions and all examples showed 76.13 percent higher than B & S' current permit fees. Though interesting, this information did not contribute to making recommendations to B & S.

Third phase: Longitudinal analysis based on Consumer Price Index

Using the Western Urban Seasonally Adjusted Consumer Price Index from the Bureau of Labor, starting with a base point of December 1977 at 100 points, the CPI has increased from 254.100 to 342.307 from 1997 to 2009 (the last full year of comparison). The cumulative calculated annual increase for this period is 30.25 percent. B & S, under the Nevada Uniform Administrative Code, is entitled to increase fees by the CPI on a yearly basis. The CPI actually decreased in 2009. If this trend continues then increasing fees based on the full 30 percent may be excessive. Nevertheless, this finding substantiates a one-time permit fee adjustment based on the CPI of at least 25 percent.

Fourth phase: Break-Even Analysis

B & S had originally projected a deficit of \$999,832 for the FY 2010. However, actual income less expenses left a net income of \$22,806 (See Appendix E). With actual income of \$7,734,166 and actual expenses of over \$7,711,360, a net income of \$22,806 is equivalent to a break-even (.003 percent). The difference can be explained when \$400,000 of additional

revenue was realized over budget projections and \$608,140 less expenses in actual revenues. Significant increases in revenues occurred in “plumbing permits” (\$403,293) and charges for “labor/material” (\$423,091), while one significant decrease occurred in “on-site construction inspections” (express inspections) of \$261,003. Other minor decreases were noted but not significant in the area of income.

The real savings was realized in the labor despite the increase in benefit allocation, which doubled in October of 2009 due to the reduction in force. Benefit allocation saved \$143,185 over budget. Significant savings were realized over budget in the area of overtime of \$256,636. By restricting overtime and carefully monitoring expenses such as copying, printing and reproduction fees, application software and not paying for professional certifications, B & S realized significant savings. Policy initiatives regarding expenses, such as limiting overtime and reducing printing, reproduction and copying charges, can translate into additional savings for cities and counties throughout the United States.

Some issues have arisen out of the practice of cash accounting. Work in Progress projects are one example where all of the monies collected are expensed in the same year. While B & S is planning on changing their accounting methodology to allocate the revenues generated from work in progress projects over the life of the project, (Y. Palomo, 2010, personal communication) this change will not control rising expenses. October showed significantly higher salaries & benefits, banking fees, and general government allocation line items expenses (See Appendix E).

B & S explained that salaries in October were high because of the three pay periods in this month. The layoffs and attrition of staff increased the benefits line item due to the paying out of both vacation pay and sick pay. Banking fees are based on 62 percent of total benefits and

General Government Allocation is based on 8 percent of total benefits and salary, which contributed to the jump in these items in October.

During the process of this analysis, some questions were raised that included: what amount of reserves is B & S comfortable with during these difficult economic times; and what amount of reserves is appropriate for a business enterprise fund? As mentioned earlier, the Nevada Revised Statutes (NRS 354.59891(4)(d)) permits a government enterprise fund to “maintain a balance of unreserved working capital ... that does not exceed 50 percent of the annual operating costs and capital expenditures for the program for the issuance of barricade permits, encroachment permits and building permits of the local government...” Based on the information provided, it does not appear that B & S maintained the full allowable 50 percent in reserves over the past several years. At the start of the FY 2010 (July 1, 2009), the reserves were at \$4,601,071. The account was reduced to \$4,400,470 as of May of 2010.

The allowable reserve at the end of the FY 2009 was \$5,810,335 (See Appendix F). However, for FY 2008 & FY 2009 expenses exceeded revenue by \$3,259,724 and \$1,236,401, respectively, indicating this fund has accumulated over time. Without the historical account balances, it is difficult to explain exactly when and if the account balance was ever at the full 50 percent. The historical income and expenses from FY 2001 to FY 2009 showed a surplus in six of the nine years with FY 2004 showing the highest at \$3,249,244. The allowable reserves in FY 2004 were \$6,871,922. For all practical purposes, B & S broke even in FY 2010 with a minimum surplus of \$22,806. The allowable reserve for FY 2010 is \$3,855,680. The current account balance of \$4,400,470 is in excess of the allowable amount and exceeds the limit. In spite of this, the City Manager precluded a draw on the reserve to prevent the latest layoffs. If

services appear to be dropping off and reserves can only be 50 percent of the operating cost and capital expenditures, why was this decision made?

The answer lies in a two-year provision in NRS 354.59891(6) that provides for a balance in excess of the allowable 50 percent for up to two consecutive fiscal years. However, if by the end of the second year the reserves are in excess of the allowable amount, then fees for barricade permits, encroachment permits and building permits must be reduced "... by an amount that is sufficient to ensure that the balance in the enterprise fund at the close of the fiscal year next following those 2 consecutive fiscal years does not exceed the amount authorized..." (NRS 354.59891(6)). Though the account is currently over the allowable amount, B & S and the City Manager appear to be anticipating further decline in the construction industry, which would further affect the revenues to this department. According to our contact at B & S, the City Manager is not comfortable with a margin of less than the full allowable 50 percent (Y. Palomo, 2010, personal communication). Currently, reserves are not included as a line item in the budget.

B & S is mandated to cover all costs with the revenue and fees it collects, so the "break-even" analysis would need to account for both the fixed costs and the variable costs in this case. The City Manager wants to maintain at least 50 percent of the budget in the reserve account, so to break-even B & S needs to collect 150 percent of the projected budget each fiscal year or add a line item for collection of the reserve account at 50 percent of the budget. Contributing to the reserve account would then be considered a fixed expense and should be a budgeted line item. This is a difficult number to predict since the permits and fees are calculated differently depending on the type of project, the type of construction and the size of the project undertaken (Ammons, 2009, p.252-255).

What does this translate into? For the purpose of this phase of the analysis, two indications from phase two and three were examined and applied: increasing fees by 25 percent based on the CPI or increasing the valuation schedule by 100 percent. To provide a context for examination we first derived an average dollar per permit value based on the historical revenues and permit counts for each year from FY 2005 to FY2010. The analysis indicated a range of \$974 to \$1,669 per permit amount with a mean of \$1,340 and a median of \$1,356 (See Appendix G). Even though the revenues and permit counts for FY 2005 to FY 2008 are more than double the current fiscal year, the average dollar per permit amount is fairly stable as shown by the tight mean and median. As a result, the dollar per permit mean amount of \$1,340 was increased by 25 percent for an indicated \$1,675 per permit average. The permit count for the past two years has been in the 5000 + range and for FY 2010 has remained consistent on a month-to-month basis. Multiplying the current year permit count (5344) by the increased average dollar per permit amount of \$1675 yields indicated potential revenue for the FY 2010 of \$8,948,795 (See Table 4).

Table 4. Permit and Valuation Increase Analysis

Average \$/permit	\$1,340
Applied 25% increase	\$1,675
Permit Count 09/10	5,344
Indicated Potential Building Revenue	\$8,948,795
Actual Building Revenue 09/10	\$522,596,093
Applied 100% Valuation Increase	\$1,045,192,186
Times Revenue as % of Valuation Average	1.22%
Indicated Potential Building Revenue	\$12,751,345

Table 5. Break-even Analysis

	Increase of Fees by 25%	Increase of Valuation by 100%	Over/Under Application
Actual Revenue	\$ 7,734,166	\$ 7,734,166	\$ 7,734,166
Bldg Revenue	\$ 7,333,228	\$ 7,333,228	\$ 7,333,228
Non Building Revenue	\$ 400,938	\$ 400,938	\$ 400,938
Potential Building Rev	\$ 8,948,795	\$ 12,751,345	\$ 11,166,330
Overall Potential Revenue	\$ 9,349,733	\$ 13,152,283	\$ 11,567,268
Actual Expenses	\$ 7,711,360	\$ 7,711,361	\$ 7,711,363
Allowable Reserves	\$ 3,855,680	\$ 3,855,680	\$ 3,855,681
Exp including Reserves	\$ 11,567,040	\$ 11,567,041	\$ 11,567,044
Under/Over	\$ (2,217,307)	\$ 1,585,241	\$223
% Under/Over	-24.78%	12.43%	0%

The actual revenue indicated non-permit generated revenue, which was added into the potential revenue numbers to get a total of \$9,349,733. Applying the reserves as a line item to the total expenses indicates total expenses of \$11,567,040. The potential revenues less total expenses leave a deficit of \$2,217,307 or 24.78 percent under revenues (See Table 5).

A similar calculation was done applying a 100 percent increase to the valuations. To provide a context for this, revenues were examined as a percent of value for each year from FY2005 to FY 2010. The mean is 1.22 percent while the median is 1.23 percent. Increasing the valuations for FY 2010 by 100 percent from \$522,096,093 to \$1,045,192,186 multiplied by 1.22 percent calculates a potential revenue amount of \$12,751,345 (See Table 4). Using the same application as before, including reserves in the expenses for \$11,567,040 leaves a surplus of \$1,585,241 or 12.43 percent overage (See Table 5).

Applying the CPI increase of 25 percent to the building fees indicates a need to increase the valuations by 24.78 percent in order to break-even. Applying the 100 percent increase to valuations indicates a need to reduce building fees by 12.43 percent to break-even. Applying

both of these results indicate average potential building revenue of \$11,116,330. Adding in for non-permit revenue, the total potential revenue is \$11,567,268 less the “expenses including reserves” of \$11,567,040 shows the break-even target.

Fifth phase: Interviews with area jurisdictions and performance measures

B & S finds itself at a crossroads of a decision between raising fees or sacrificing service levels. Raising fees in this current economy appears prohibitive and the key stakeholders, including the AGC and the local contractors, have prevented this from occurring in the past. Notwithstanding, B & S is not alone in this crisis. With jurisdictions throughout the United States facing the same plight, many cities including Nashville, Portland, San Diego, and Phoenix have already raised fees.

Located within Davidson County, Nashville increased building permit fees and other Metro Codes fees by 30 percent effective May 1, 2010 (Garrison, J., 2010). Among the members of the Metro Council who were opposed to the rate hike were Councilmen Michael Craddock and Charlie Tygard. Councilman Craddock said, “Anytime you raise a fee it’s a tax increase... It’s not warranted to do it right this minute in some of the slowest economic times we’ve ever had in this city” (Nashville, The City Paper). Councilman Tygard added, “that raising fees and increasing costs to consumers in a bad economy is just a very bad idea [and] sends the wrong signal to the community in a time when we’re desperately seeking new development and new projects in [Davidson] county” (Nashville, The City Paper). The revenues generated by Davidson County’s building department have been insufficient to cover costs over the past few years. Terry Cobb, who serves as the Director of the Codes Department, stated “a 30 percent fee increase puts Nashville on par with rates enforced in several cities with similar populations” (Garrison, J., 2010).

The lack of sufficient revenues has impacted both medium and small sized communities. One example is Orange County, Virginia with a population just over 30,000. Similar to Las Vegas, building permit fees in Orange County have not changed since July 1, 2000 (Poole, J., 2010). County administrator Julie Jordan related that the building department was directed to review fees to determine if the department was self-sufficient and if the fees were comparable to surrounding counties (Poole, J., 2010). The investigation found Orange County's fees were lower than the surrounding counties. Since the department draws from the general fund, District 5 Supervisor, Lee Frame, said, "It's raise [fees] or raise taxes" (Poole, J., 2010).

Recently, in the San Diego suburb of Encinitas, the Building Industry Association protested a proposed fee increase saying that it would stifle any chance of a recovery in the decimated construction industry (Encinitas website). The Association vowed that they "would not stand idly by as local government operates business as usual." In spite of this outcry, the city had not raised fees in over four years. By city policy, fees could have been raised at least twice during this time frame (Henry, B., 2009).

Clark County has seen its share of complaints from the construction industry as well. Clark County has recently increased signage permit fees. Sign companies argue that the increase has harmed their ability to do business (8 News Now.com, 2010). At a regular meeting of the Clark County Board of Commissioners held on June 15, 2010, one of the emerging topics addressed was the raising of fees by various enterprise fund departments. Commissioner Larry Brown expressed concern over the motivations behind raising fees. Concern was also expressed over the public's perception of the aggressiveness of inspectors. Larry Brown cautioned the departments regarding the appropriate application of their safety function. Commissioner Brown posed the challenge of reviewing the core service functions of these departments to make sure

the driving force is not to prevent layoffs, but to maintain service levels specifically associated with the relative public service function (Clark County Board of Commission). Commissioner Tom Collins further added that addressing fee structures is timely, if done in a fair way.

Commissioner Collins indicated that addressing fees was pushed back over the past several years (at least 10 years) because of various influences such as the economy and special interest groups.

Commissioner Collins believes all fees should be reviewed at least annually (Clark County Board of Commission).

Final phase: Investigate other avenues of revenue generation

Further research has shown that the Clark County conducts on-going safety inspections, which provide numerous new permits and support the “safety” of buildings to the general public. According to a recent article in the Las Vegas Review Journal, Clark County has implemented a new program to inspect existing casino properties for building code compliance (Whitely, J., 2010, February 4). This decision came after the discovery of work that was completed without permits (33 overlooked renovations) by Harrah’s Entertainment on several casino properties. (Whitely, J., 2009, September 26). The inspections began in November of 2008. To present the 18 inspected sites have yielded almost 8000 code violations. “To encourage casinos to pull permits, the county... began an "annual permit" system for resorts and other large facilities.

Using a single permit for the calendar year, a casino can expedite construction projects of modest scope, as long as it summons inspectors when the work is over. County code spells out limits for the projects that qualify” (Whitely, J., 2010, February 4). The article further stated that the rate for work could be three times the standard hourly inspection rate if the work is completed without a permit and is not pre-disclosed. The county increased this rate from \$75 per hour to \$105 per hour in February 2010. The current director of Clark County Development

Services, "... [Mr.] Lynn...[anticipates] inspect[ing] each gaming site about every three years, and he will eventually expand the program to also inspect nongaming resorts and high-rise condominiums" (Whitely, J., 2010, February 4).

Currently, B & S is not conducting systematic investigations into non-permitted work. Creating a policy for scheduled inspections in this manner is a potential revenue generator. Based on the feedback from Commissioner Brown, of Clark County, this must be done in a justifiable manner.

Limitations

This study was limited by several factors as outlined below:

- Historical information on inspection times was limited due to it being a newly implemented tracking system
- Detailed information on historical actual revenues and expenses was only available for one year
- Insufficient time limited the drilling down of permit specific revenue and expense analysis
- Insufficient time limited drilling down jurisdictional comparisons for specific permit types. E.g. signage, renovations, water heaters etc.
- Insufficient time for a formal survey of the opinions of local contractors and other jurisdictions' views on increasing permit fees
- Historical performance measurements were only available from FY 2005 to FY 2010

Recommendations

As mentioned earlier, this analysis is not intended to provide specific recommendations on fee schedule changes, but general suggestions for modifying the current structure or alternatives for potential revenue generation. In concluding the analysis, the UNLV MPA group presents the following options:

- 1) Applying a one-time 25 percent increase to base permit fees and valuation schedules based on the CPI analysis
- 2) Updating to a current Building Valuation Schedule and possibly reducing overall base permit fees
- 3) A synthesis of the policy options that may include a combination of the aforementioned, or
- 4) No change in fee or valuation schedule.

In the future, the UNLV MPA group recommends an investigation into a joint venture with Clark County to develop a Memorandum of Understanding (MOU). In this venture, Clark County staff could systematically inspect all businesses for non-permitted work. Clark County would provide the staff and collect the fees while B & S would receive a percentage of all the fees collected. The project could be renewable if deemed financially feasible after one year.

Another avenue of investigation is partnering with the Business Licensing Department for tracking changes in types of businesses, for example from a hair salon to a restaurant. Currently, each business license application (whether a new business or change of business) received is routed directly to the Planning Department and Fire Department. These applications could be routed to B & S for review as well. The Fire Department already utilizes these applications to conduct safety fire inspections. During these inspections the Fire Department

may discover questionable construction to a location and require further permit verification. Coordination with B & S in these cases would promote the mission of ensuring public safety while providing an avenue for generating additional revenues.

As stated earlier in this analysis, the City Manager is not comfortable with a margin of less than the full allowable 50 percent reserves. Currently, reserves are not included as a line item in the budget. As a result, a final recommendation is to consider the reserve account a fixed expense and include it as a budgeted line item. A considerable amount of data was gathered, analyzed and synthesized to provide educated recommendations for the City of Las Vegas' Department of Building and Safety. B & S will need to make tough decisions and continue to evaluate the permit fee schedule to ensure public safety and cover the costs of the department.

References

- Ammons, David N. (2009), *Tools for Decision Making: A Practical Guide for Local Government* (2nd ed.). (pp. 49-59; 252-255) Washington, D.C.: CQ Press.
- Bardach, Eugene. (2009). *A Practical Guide for Policy Analysis: The Eightfold Path to More Effective Problem Solving* (3rd ed.). (pp. 18-64) Washington, D.C.: CQ Press.
- Brookings (2009, December). Tracking economic recession and recovery in the intermountain west's metropolitan areas. *Mountain Monitor*. Retrieved from http://www.brookings.edu/~media/Files/Programs/Metro/metro_monitor/2009_12_metro_monitor/2009_12_mountain_monitor.pdf
- City of Henderson, Nevada (n.d.) Building and safety. Retrieved from http://www.cityofhenderson.com/building_fire_safety/index.php
- City of Las Vegas (n.d.) Building and Safety. Retrieved April 2, 2010 from <http://www.lasvegasnevada.gov/Government/buildingandsafety.htm>
- City of Las Vegas (n.d.) Building and Safety. *Building code*. Retrieved from http://www.lasvegasnevada.gov/LawsCodes/building_code.htm
- City of Las Vegas (n.d.) *City Initiatives*. Retrieved from <http://www.lasvegasnevada.gov/Government/13566.htm>
- City of Las Vegas (CLV), Uniform Administrative Code, 2006 Ordinance 5884, section 304.2
- City of Phoenix (n.d.) Development services department. *Fee schedules*. Retrieved from <http://phoenix.gov/DEVSERV/fees.html>
- City of Portland (n.d.) Bureau of development services. *Fee schedules*. Retrieved from <http://www.portlandonline.com/bds/index.cfm?c=34168>

City of Nashville (n.d.). Codes and Regulations. Retrieved April 1, 2010 from

http://www.nashville.gov/ds/codes_and_regs.asp

City of Nashville, Development Services (n.d.) *Market survey*. Retrieved March 23, 2010 from

http://www.nashville.gov/ds/codes_and_regs.asp

City of Nashville, Development Services (n.d.) *Compare the proposed fees to other communities*.

Retrieved March 23, 2010 from http://www.nashville.gov/ds/codes_and_regs.asp

City of North Las Vegas (n.d.) Public works building and safety division. *Current adopted codes and ordinances*. Retrieved from

<http://www.cityofnorthlasvegas.com/Departments/PublicWorks/BuSaCurrentAdoptedCodesOrds.shtm>

City of San Diego (n.d.) Development services: forms and development information. *Current fee schedules*. Retrieved from [http://www.sandiego.gov/development-](http://www.sandiego.gov/development-services/industry/feeschedules.shtml)

[services/industry/feeschedules.shtml](http://www.sandiego.gov/development-services/industry/feeschedules.shtml)

Clark County (n.d.) Development services. *Building services*

current adopted local code amendments. Retrieved from

http://dsnet.co.clark.nv.us/dsweb/bldg_codes.html

Clark County Board of Commission (2010, June 15) Regular joint meeting agenda. Item 111: emerging issues. Meeting retrieved from:

http://clark.granicus.com/MediaPlayer.php?view_id=7&clip_id=1917

Garrison, J. (2010, April 20). Builders will pay 30 percent more in davidson county fees.

Nashville, The City Paper. Retrieved on June 20, 2010 from

<http://nashvillecitypaper.com/content/city-news/builders-will-pay-30-percent-more-davidson-county-fees>

Gluck, K. (2010, May 28) Fairview park building permit fees could go up soon. *Sun News*.

Retrieved from

http://www.cleveland.com/sunpostherald/index.ssf/2010/05/fairview_park_building_permit.html

Henry, B. (2009, April 27) Encinitas: city contemplates building fee increase. *North County*

Times. Retrieved from http://www.nctimes.com/news/local/encinitas/article_7dd30ab9-52f5-5ffc-85a3-174ced364916.html

Kleim, D. (2010, July 7). Personal and e-mail interview.

Knight, C. (2010, March 15) Personal interview regarding the City of Las Vegas Department of Building and Safety.

Las Vegas Metropolitan Code (LVMC) 16.02.010B which repeals the Uniform Administrative Code 1997 Edition

Maximus (2009, September 25) *Metropolitan Government of Nashville and Davidson County*

Tennessee Department of Codes and Building Safety; Analysis of fees for service report.

Retrieved March 23, 2010 from

<http://www.nashville.gov/ds/docs/codes/CodesAnalysisofFeesReportFina090925.pdf>

Mintrom, Michael. (2003). *People Skills for Policy Analysts*. (pp. 44-63; 138-141) Washington,

D.C.: Georgetown University Press.

Nevada Revised Statute § 354.59891

Palomo, Y. (2010, March/July). Personal and Email Interviews conducted from March 2010 to July 2010.

Poole, J. (2010, June 3), Orange County looking at increase in building fees. *Media General News Service*. Retrieved June 20, 2010 from http://www2.starexponent.com/cse/news/local/orange/article/orange_county_looking_at_increase_in_building_fees/58607/

Restrepo Consulting Group, LLC, (2010, June). News flash: realism finally taking hold in so. Nevada. *Economic Insight: Southern Nevada Issues and Trends*, 13 (4), 4.

The Associated General Contractors of America (2010, May). Percentage Change in Producer Price Indexes (PPIs) for Construction Materials, Structure Types & Subcontractors, 2003-2010. Retrieved from <http://newsletters.agc.org/datadigest/files/2010/05/ppi-tables-201004.pdf>.

The Associated General Contractors of Las Vegas (2010). First Quarter 2010. *Southern Nevada Construction Industry Quarterly Market Briefing* . Retrieved from <http://agclv.org/Documents/Marketing%20Briefs/AGC%20QMB%20Q1%202010.pdf>.

The Associated General Contractors of America Nevada Chapter (2010). Status of Capital Project Funds. Retrieved from http://agclv.org/Documents/2010/AGC%20Presentation%20-%20IFC%20Version_19.pdf

Vincent, J. (2010, June 18). Building permit fees to increase. *The Journal*. Retrieved from <http://www.journal-news.net/page/content.detail/id/538771.html>

Weinstein, N, (2010, May 17) Public opinion on permit and inspection fees increase. *Daily Journal of Commerce Oregon*. Retrieved from

<http://djcoregon.com/news/2010/05/17/permit-and-inspections-fees-could-increase/>

Whitely, J. (2010, February 04). Inspections a win-win: program praised by casino, county officials. *Las Vegas Review Journal*. Retrieved from

<http://www.lvrj.com/news/inspections-a-win-win-83527597.html>

Whitely, J. (2009, September 26). Undisclosed Renovations Under Investigation at Paris Las Vegas: Whistle-blower Prompts 20 Notices of Violation. *Las Vegas Review Journal*.

Retrieved from http://www.hotel-online.com/News/PR2009_3rd/Sep09_ParisVegas.html

8 News Now.com. (2010, March 2). Las Vegas building permit costs soar for some. Retrieved

from <http://www.lasvegasvalley.com/Global/story.asp?S=12072499>

Appendix – attached as a separate document