



**Office of the Director**

**City of Portland, Oregon - Bureau of Development Services**

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## Report to Council

July 14, 2010

**TO:** Mayor Sam Adams  
Commissioner Amanda Fritz  
Commissioner Nick Fish  
Commissioner Randy Leonard  
Commissioner Dan Saltzman

**FROM:** Paul L. Scarlett, Director *PLS*  
Bureau of Development Services

**SUBJECT:** Report and Recommendations regarding the Economic Consultant Report of the Bureau of Development Services' Financial Plan

Attached as Exhibit A is the Report from Johnson Reid LLC Land Use Economics regarding Review and Comment on the Five-Year Financial Plan and Requested Fee Increases of the Bureau of Development Services.

### Third Party Review

In March 2010, City Council directed the Office of Management and Finance to contract with a third party to review BDS's Financial Plan. They were asked to:

- Research, test and confirm all programmatic revenue and requirement growth assumptions for the fund in the next five fiscal years, starting with fiscal year 2010-11
- Provide written comments on the fund's Five-Year Financial Plan, including specific recommendations for improvements
- Review the fee structure for all programs in the fund to ascertain that reasonable fee increases are being proposed to recover the cost of services, including a proper level of reserve for each program
- Provide input on the overall economic outlook for residential and commercial development in the City of Portland over the next 24 months.

Johnson Reid (Land Use Economics) has provided their report. They found that "the projections reflect a good faith effort at a very difficult forecasting task" and that "the magnitude of the current correction was greater than anticipated by any model we are aware of." They also stated that the July 1, 2010 changes in the BDS fee schedules are well supported and well designed to address some of the revenue issues that BDS has had.

They stated that "The resulting revenue forecasts appear reasonable and defensible, but we believe that the methodology could and should be improved over time." They believe that BDS could have anticipated our drops in income to a greater extent. They recommend that the bureau should:

- Review information on leading indicators
- Pursue ongoing improvement of BDS's business cycle forecasting model
- Include peer review from agencies such as the State Economist and other public and private forecasters; consider creating a standing review/advisory committee of technical experts
- Develop a parallel forecasting model using real estate cycle data.

We are pleased to receive these recommendations and are always searching for ways to improve our financial forecasting abilities; we are amenable to ideas to improve our modeling techniques.

### **Response from DRAC**

We shared the preliminary findings with the Development Review Advisory Committee (DRAC), although we have not distributed the final report to them. We want the City Council to be aware of DRAC's response to the recommendations, because they were very concerned about the amount of time and money that it would take to develop another forecasting tool. They did not believe that another model would really help the bureau project revenues at this time. DRAC members from the development community strongly stated that the next 2 years would continue to be volatile and unpredictable. One example was that during the 1980s recession homebuilders could still get construction loans, albeit at 20% interest; now no loans are available. DRAC members strongly cautioned that putting effort and money into immediately developing a new forecasting model will take away from other more productive work that the bureau is doing, especially with the reduced number of staff.

### **Budget Note**

City Council approved a budget note for BDS's FY 2010-11 budget regarding replacement of the online permitting system and includes the following provisions:

- Update BDS's Financial Plan to include a cost/benefit analysis of the new system and set aside sufficient resources to meet future debt service requirements (analysis should take into account all bureaus that will use new system)
- Present new Financial Plan to Council; Council must approve before BDS expends additional funding for new system
- Council must separately approve moving forward with new system
- Convene committee with real estate expertise to consider future development activity as it relates to BDS's ability to meet debt service requirements

## **Response to Budget Note and Consultant's Recommendations**

### Current Status:

We are currently working on the cost/benefit analysis, updating Financial Plan projections, and working with other bureaus. We have also have several meetings with the City's Debt Management staff and with the City's bond counsel regarding eligibility for tax exempt financing and financial feasibility. We are currently developing more project details and cost projections and will consult with them again once we have that information available.

### Review Committees:

We propose melding the committees directed by the Budget Note and recommended by the consultant. The committee would be comprised of members with the following backgrounds: real estate expertise, forecasting expertise, State Economist's Office, Small Business Advisory Committee, and Development Review Advisory Committee. We would also appreciate input from the City's Economist and Office of Management and Finance.

### New Financial Model:

Developing a new financial model will take a significant amount of staff time. Therefore, considering the bureau's current resources, we are planning to develop the real estate cycle model over the next several months, have the model reviewed by the "peer/advisory review group", and use the model to produce our next Financial Plan which would be due in January 2011 along with our budget submission.

### Workload Model:

In addition, we have been intending to develop a model using internal data to improve our ability to project workload. This is a high priority for the bureau, because we need to be able to anticipate incoming workload and appropriate staffing levels as the economy strengthens and construction begins to recover. However, considering all of the other mandatory commitments that we have, we can only work on this project as time allows.

We do not want to underestimate the staff effort and time commitment that developing these new models will take, especially considering that resources are limited and that we are focused on diligently monitoring our revenues and expenditures.

## **Next Steps**

The attached Exhibit B: BDS Workplan for Responding to Budget Note and Consultant's Recommendations outlines the steps that we propose to take to satisfy both the Budget Note and the consultant's recommendations. We will return to Council in August with a full package of information regarding the permitting system, including updated Financial Plan, cost/benefit analysis, input from advisory group, input/analysis from debt management and bond counsel, intergovernmental agreement with State of Oregon for software purchase, and request for project staffing (limited term).

We appreciate the Council's interest in our financial condition and the contribution to assist us in improving our technical forecasting tools.

**TO THE COUNCIL:**

The Commissioner of Public Safety concurs with the recommendation of the Director of the Bureau of Development Services, and

**RECOMMENDS:**

That the City Council accept the report as complete and accept the proposed workplan which addresses the consultant's recommendations and the budget note.

FORWARDED



## MEMORANDUM

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**DATE:** May 25, 2010

**To:** Douglas Le  
Senior Financial Analyst  
OFFICE OF MANAGEMENT AND FINANCE

**FROM:** Jerry Johnson  
JOHNSON REID LLC

**SUBJECT:** Review and Common on the Five-Year Financial Plan and Requested Fee Increases of the Bureau of Development Services

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Johnson Reid has been asked to provide a review of the Five-Year Financial Plan for the Bureau of Development Services, as well as requested fee increases. Specific areas of emphasis are as follows:

- Research, test and confirm all programmatic revenue and requirement growth assumptions for the fund in the next five fiscal years, starting with fiscal year 2010-11
- Provide written comments on the fund's Five-Year Financial Plan, including specific recommendations for improvements
- Review the fee structure for all programs in the fund to ascertain that reasonable fee increases are being proposed to recover the cost of services, including a proper level of reserve for each program.
- Provide input on the overall economic outlook for residential and commercial development in the City of Portland over the next 24 months.

This memorandum summarizes our review of the Plan and fee increases.

### Summary of Findings

In general, the projections reflect a good faith effort at a very difficult forecasting task. The Bureau of Development Services workload and revenue stream is directly tied to new real estate development, which is highly cyclical. The recent sharp correction in construction activity was more severe than the BDS model predicted, but they are in no way unique in this respect. While most models anticipated a correction, the magnitude of the current correction was greater than anticipated by any model we are aware of.

While there were sharp drops in income that were unanticipated, in hindsight it is important to understand that these could have been anticipated to a greater extent. This is not to imply that BDS did not follow best practices in its modeling, but that all models should be re-evaluated in light of recent economic events and their failure to adequately predict what happened in the economy and development market.

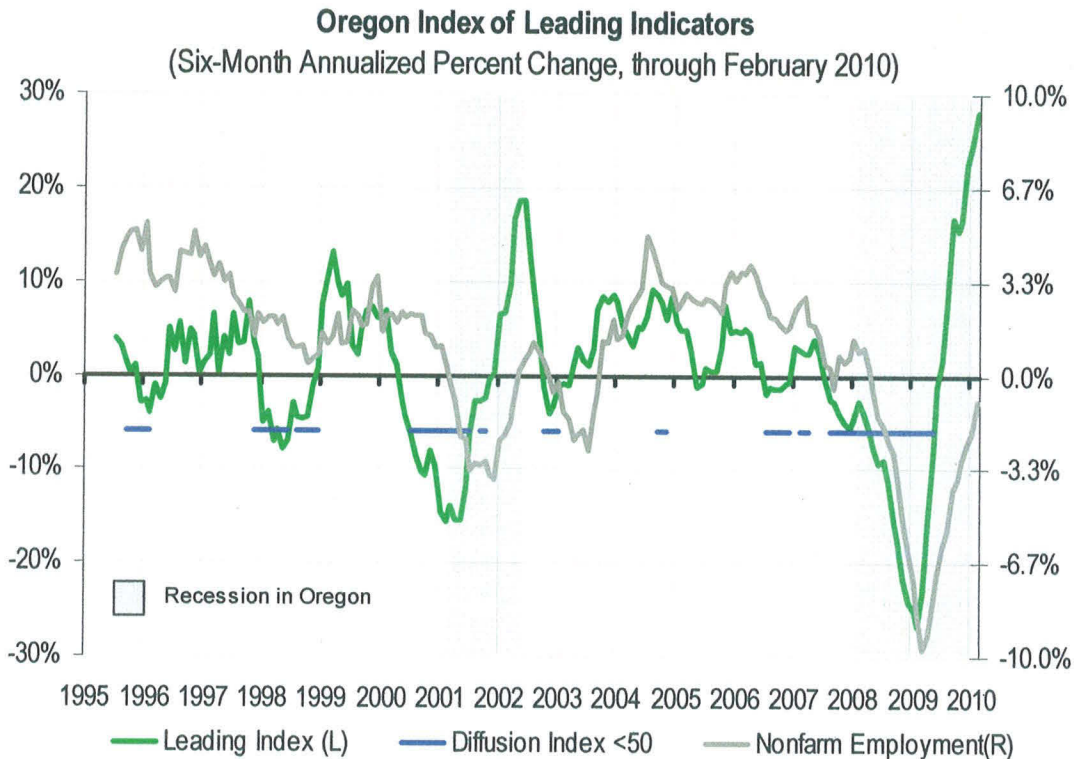
The indicators used to predict development activity appear to be more correlated with business and economic cycles, which are not always synchronized with real estate cycles, particularly for residential uses. During the last residential cycle, a speculative pricing and credit bubble led to sharp



correction in the housing market well before the economic downturn. In this case, the residential correction significantly contributed to the financial sector crash and credit crunch.

Indicators used in the analysis used in the FY 2010-15 Financial Plan have been weighted, but the modeling would probably benefit from a more statistically rigorous approach which tracks the indicator variables against past observations, allowing for ongoing refinement of the modeling parameters. This is consistent with the earlier modeling framework used by BDS in previous financial plans, with the new methodology utilized as the older models were unable to adequately account for the magnitude of the recent drop in activity. BDS intends to revert back to the previously used modeling approach in future forecasts, with improvements based on new observations.

The indicators used are not necessarily what we would consider forward looking, in that they have limited ability to anticipate market swings in the future. Groups like the Conference Board, which publishes a National Leading Economic Index, use leading variables such as interest rate spread, average weekly manufacturing hours, supplier deliveries, stock prices, building permits, average weekly initial claims for unemployment insurance (inverted), manufacturers' new orders for consumer goods and materials, real money supply, manufacturers' new orders for non-defense capital goods and the index of consumer expectations. Oregon also has an index of leading indicators generated by the State Economist, which adds variables such as the semi-conductor book to bill ratio and dollar index, which reflect the high tech and export nature of the local economy.



It should be noted that the leading indicator indices are intended to project a change in direction or inflection point, and not magnitude. Nonetheless, these changes in direction are often key variables in a successful forecast for the real estate industry. Leading indicator indices tend to be short-term in nature as opposed to the longer term required for a five year forecast. We would see a series of



accompanying short-term models as providing context that would prove helpful in evaluating the formal five year projection.

The City of Portland's development environment is quite unique within the State of Oregon, and may not follow broader trends in the next development cycle. With almost all new construction within the City limited to infill and redevelopment sites, residential construction activity has been disproportionately condominiums and higher end rental apartments, which have price points that can support the relatively high construction costs associated with mid-rise and high-rise development forms. We expect recover in the condominium market to lag the broader residential market, as the level of standing inventory relative to demand is greater. While rental apartments are expected to represent a viable option at an earlier date, achievable price points will challenge the viability of new development with high development costs.

BDS is expecting to struggle in the next development cycle with a mix of new construction that will be increasingly less cost efficient to serve. This includes a higher proportion of remodel and small-scale infill projects, which are less cost effective to serve in terms of revenue recapture. Large scale projects such as those in the South Waterfront and Pearl Districts are expected to constitute a declining share of overall activity.

We would recommend that BDS continue to pursue ongoing improvement of its forecasting model, evaluating inclusion of more leading indicators. It is our understanding that they are continually working to improve their models, and the new model used in the latest forecast is part of that effort. Peer review from agencies such as the State Economist's office and other public and private forecasters may be able to provide useful input. BDS may also consider creating a standing review/advisory committee of technical experts to provide peer review for future forecasts and ongoing model refinement.

Two models may need to be run simultaneously to better predict episodes such as the recent downturn that are beyond the baseline model's ability to forecast. Most econometric models have difficulties getting magnitudes correct at the extremes, and using multiple models may be useful to trigger more detailed reviews. As the primary predictor of revenues and service needs for BDS is real estate activity, we would recommend that some forward looking models of the real estate cycle as opposed to the business cycle are also developed. This would allow for identification of construction "bubbles" and other types of market imbalance that would fundamentally impact the magnitude and character of construction activity within the City.

The proposed changes in the fee schedule for BDS services is well supported by the documentation provided, and is well designed to address some of the marginal problems BDS has been having and is expected to continue to experience. With the current and projected distribution of projects by size shifting towards smaller projects, these projects will need to bear more of their relatively high cost of inspections. While the proposed fees are substantially higher for lower value construction projects, we don't consider them to be onerous and likely to lead to a significant increase in avoidance.

## **Overall Economic Outlook**

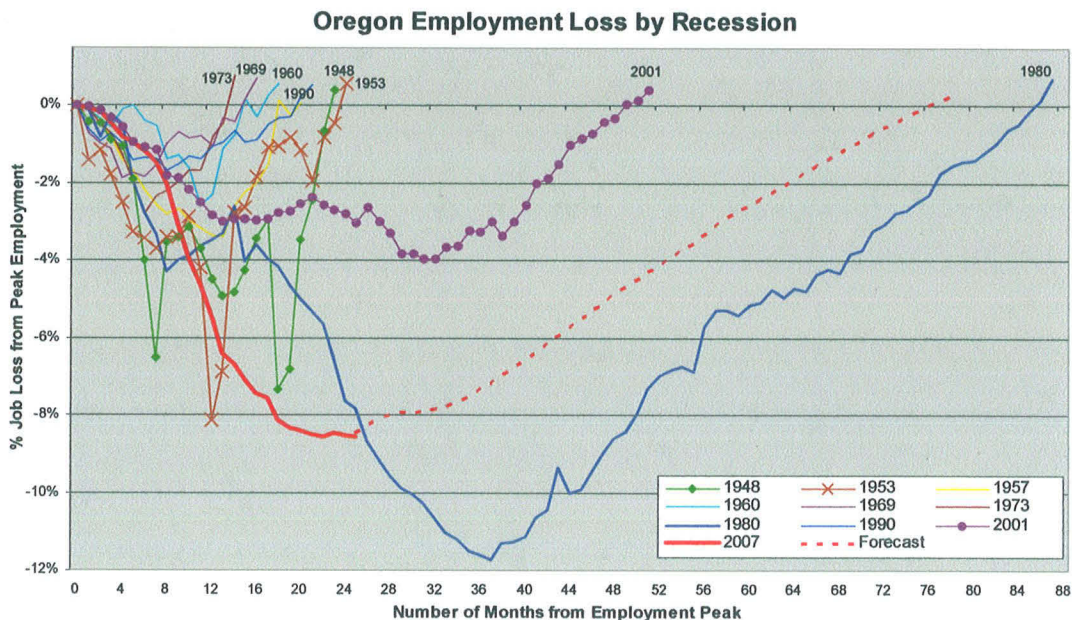
The Economic Outlook assumed in the Financial Plan is generally aligned with our internal projections, as well as the State of Oregon and most major forecasting firms. While the recession appears to have technically ended, recovery in terms that will impact new construction activity is probably a year or two off. While the magnitude of the current economic downturn and associated sharp drop in construction activity was not anticipated by BDS models, their expectation were well within the consensus of economic forecasters. In other words, while many anticipated a correction in



the market, no major forecaster anticipated the magnitude and duration of this downturn prior to the event.

The demand for new residential construction is a function of household formation, or net new households. During a downturn with high levels of unemployment, it is not uncommon to find household formation levels to be depressed, even if population growth continues. This reflects a combining of individual households through roommate situations or children returning home, as well as new household formations being deferred by children staying at home for longer. Over a longer term horizon, we would expect the level of new household formation follow previous trends, but this effect may reduce residential demand over the next few years until employment prospects are improved.

Commercial and industrial demand is a function of employment growth, and the demand for these uses is expected to follow economic recovery in the local economy. It should be noted that the State Economist's office doesn't expect the State economy to regain 2007 employment levels until sometime in late 2012. As the demand for office and industrial space is highly correlated to employment levels, there is little reason to believe that substantial new office and industrial construction should be expected, at least for speculative for-lease space.



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We would expect some continued level of new construction related to office and industrial space needs, primarily associated with build-to-suit space for specific tenants. Overall construction levels are expected to remain depressed through 2012-13.

Retail commercial space demand is a function of growth in buying power, and more directly related to population and income growth. The industry has seen a significant restructuring over the last few years, with many retailers ceasing operations. This has sharply reduced the viability of speculative retail construction, or retail that is intended for multi-tenant leasing, as tenants have been reticent to

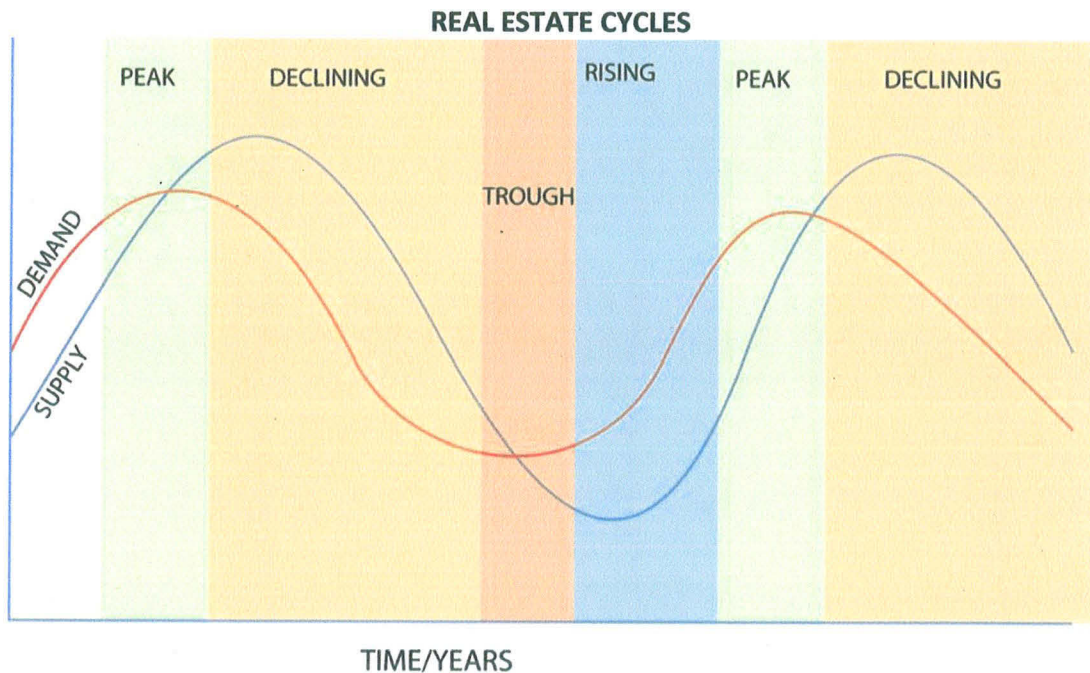
<sup>1</sup> State of Oregon Economist's Office





commit to new space. Over the next few years, retail construction is likely to be largely limited to end-user driven facilities, such as large format retailers. Future market expansion will be reliant upon growth in buying power and availability of financing, which will require employment and wage growth, as well as increased availability of debt to finance new projects.

Development activity is best forecasted in terms of real estate cycles, in which product is delivered into a balanced or under-supplied market at pricing that supports new construction. The level of new supply will expand during these periods, typically overbuilding the market a the latter half of an expansion cycle leading to a sharp correction in new construction until the market absorbs the excess supply and pricing rises to a level that justifies new construction.

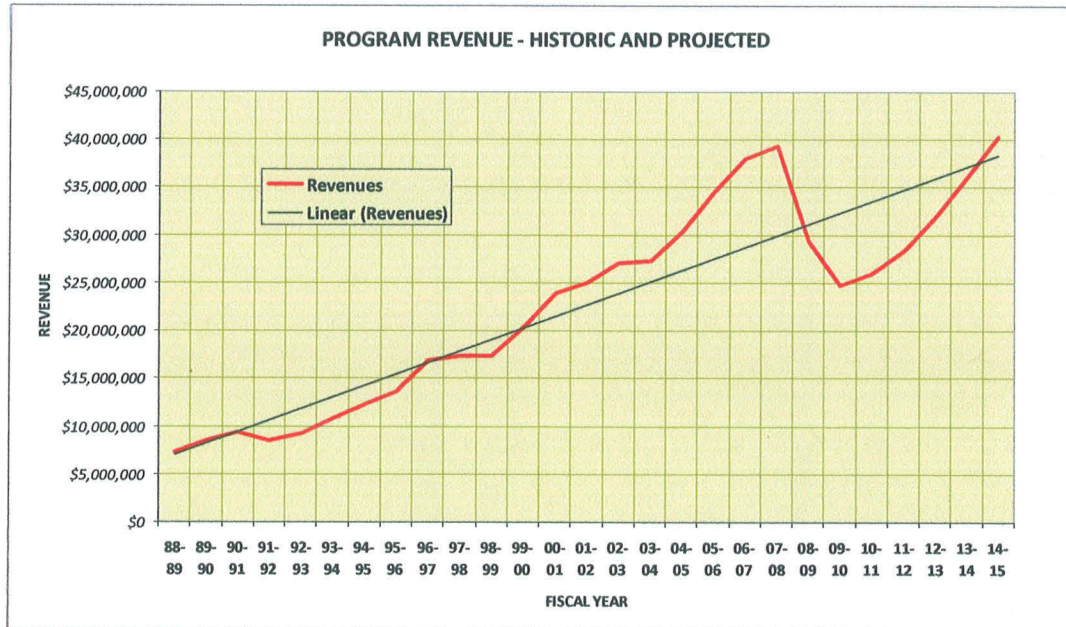


Real estate cycles, which are characterized by periods of under- and over-supply, can be tracked using readily available data on variables such as occupancy rates, days on market and other industry-specific data sets. While real estate cycles are correlated with the broader business cycle indicators used in BDS' current models, they are not identical. Cycles also vary by land use type, with ownership residential on a different cycle than rental residential or office. There is a considerable amount of available data that would allow for a real estate specific modeling framework to accompany the business cycle modeling.



## Revenue and Requirements

Bureau of Development Services revenues have been declining significantly over the last several years, commensurate with the decline in commercial and residential construction activity. Permit revenues experienced a sharp drop in the fall of 2008, which accelerated through FY 2009-2010. The current modeling expects a slow recovery in activity that will remain below the long term trend line until FY 2013-14. Revenue numbers are highly correlated with development activity, but also reflect changes in fee schedules over time.



Forecasts of revenue are predicated on a model developed by BDS staff, which in this case reflects a departure from the previous modeling framework used by the Bureau. The model used for the FY 2010-15 Financial Plan was intended as a "one-time" model, and BDS intends to revert to the previous model in the future, updated and revised based on new economic experience.

Previous revenue forecasts were based on several forecasting techniques, including econometric models, averaging and trending methods, geometric mean growth rates, professional expertise and construction industry input. Two econometric models were used based on their past performance to predict Building/Mechanical program revenue. These used the following variables:

- Oregon Construction Employment
- Interest Rate on 30-year US Treasury Bonds
- Oregon Housing Starts
- Oregon Population
- Gross Domestic Product Price Deflator
- Oregon Repeat Purchase Housing Index

Based on historical trends, these models had explanatory power over 95%. Similar models were used to project revenues for the Electrical and Plumbing programs.

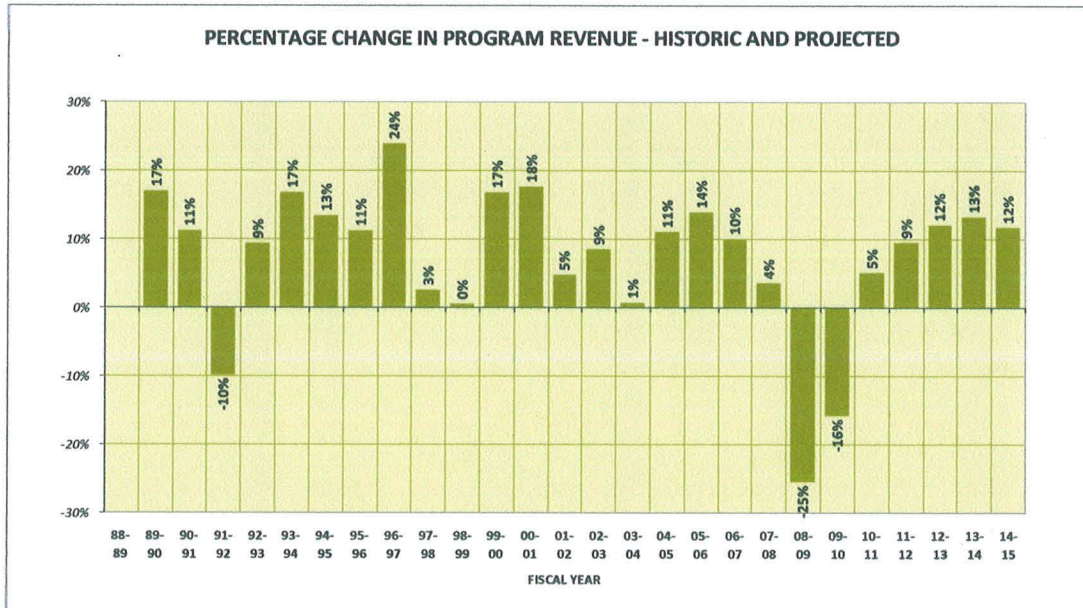


The current revenue forecasts reflect a new modeling approach, which uses a series of weighted average growth rates for a combination of variables. This new framework was instituted based on the poor performance of the previous approach during the recent downturn. The model is intended as a one-time solution, and an improved version of the previous model will be used again in the next forecast. Variables in the current model include:

- Consumer Price Index (Portland/Salem) – OEA
- Oregon House Price Index – OEA
- Oregon Housing Starts – OEA
- Population Portland-Vancouver-Beaverton (7 counties) – Metro
- Total Employment Portland-Vancouver-Beaverton (7 counties) – Metro
- 30-year Fixed Mortgage Rate - OEA
- Rate on 30-year Government Bonds - OEA
- Gross Domestic Product Deflator - OEA
- Real Gross Domestic Product – OEA

The resulting revenue forecasts appear reasonable and defensible, but we believe that the methodology could and should be improved over time. It is not inconsistent for econometric models to require manual overrides of outcomes, as they often perform quite poorly with respect to short term fluctuations. This reflects an inability to identify variables that will have a short term yet profound impact on revenue likely to impact local trends, such as standing inventories of vacant space/units. It should also be noted that econometric models such as the ones used by BDS rely upon forecasts that are not necessarily short-term in nature, and often don't adequately address financing shocks and other short-term phenomenon.

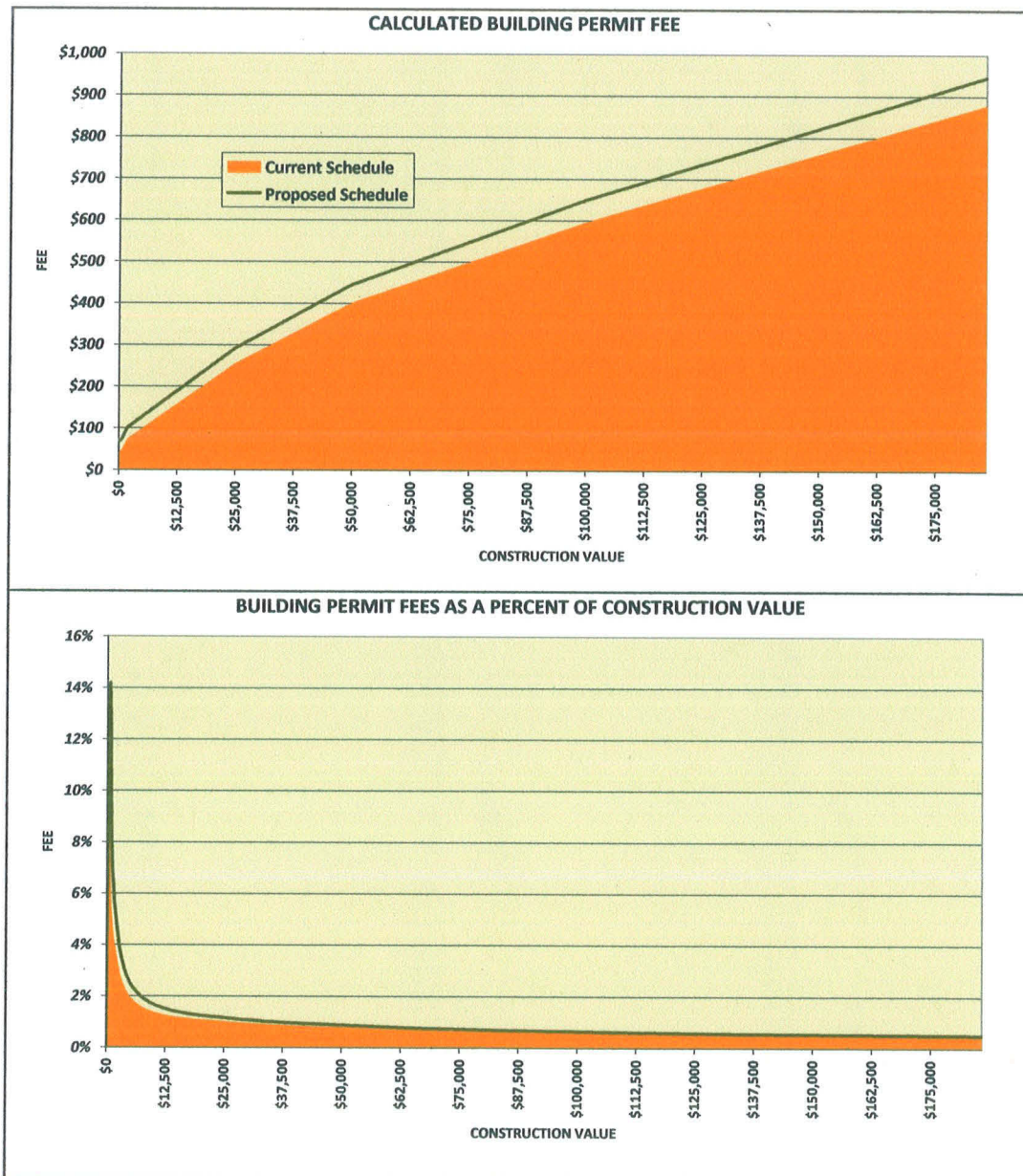
On a percentage basis, revenues are expected to begin increasing again in FY 2012-13. These percentages reflect a series of assumed projected fee increases, as well as underlying growth in demand.





## Fee Increases and Reserves

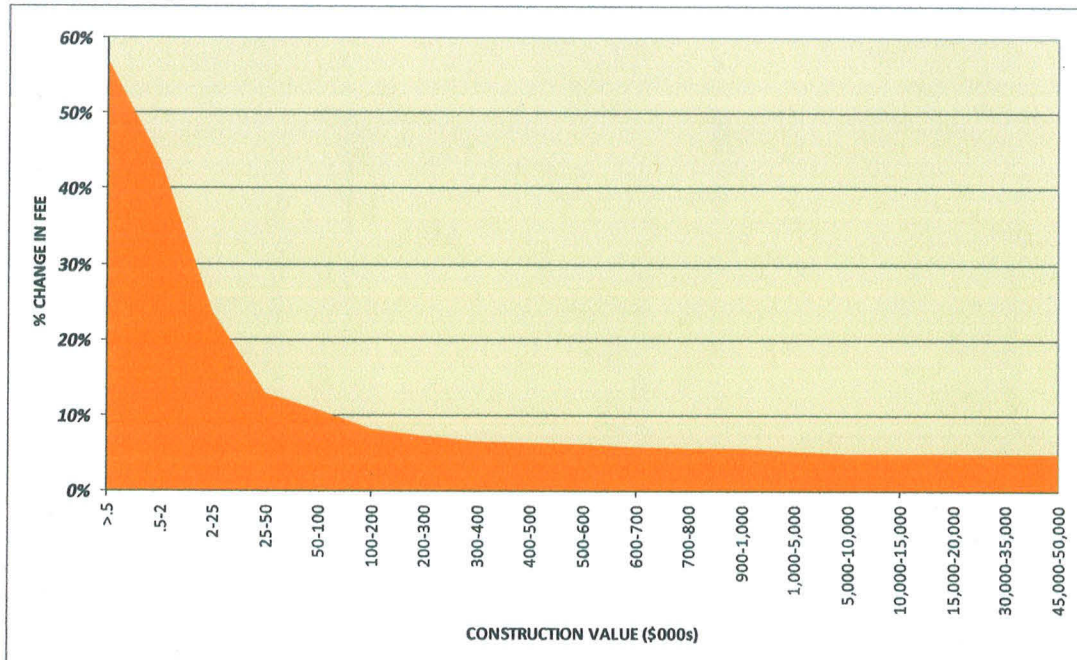
The Bureau of Development Services has proposed a proposed a fee increase to better reflect costs incurred as part of their program services. Based on the composition of permits reported in fiscal year 2009-10 through February 28, 2010, the new schedule would reflect a weighted average revenue increase of 7.99%. Building permit fees would rise under the new schedule for all construction values.





The new fee schedule would significantly increase fees for smaller construction projects, particularly for those under \$2,000, while modestly increasing fees for larger projects. While on a percentage increase basis this seems substantial, the absolute dollar value is not that significant, with the actual fee for a \$2,000 project increasing from \$74.75 to \$101.65.

#### PERCENTAGE CHANGE IN BUILDING PERMIT FEE – PROPOSED NEW SCHEDULE



The shift in fee burden towards lower value projects is consistent with the observed relatively poor cost recovery for these types of inspections. The new schedule would also provide for a maximum number of allowable inspections, with additional inspections charged as additional services. Both the increased fees and maximum inspections will address the Bureau's endemic problem with cost recovery for lower value projects.

A wider range of fee increases are also proposed. These include:

- Development Services Fee – Commercial and Residential
- Miscellaneous Fees
- Electrical Permit Fees
- Mechanical Permit Fees
- Plumbing Permit Fees
- Land Use Fees
- Noise Variance Fees
- Sign, Awning Permit and Registration Fees
- Site Development Fees

Increases in fees may lead to a greater level of avoidance, which has not been assumed in the revenue forecasts. The marginal shift appears to be modest enough to not substantively impact assumptions though. If fee avoidance is increased, through a greater proportion of improvements not applying for permits, this may have an impact on life/safety issues that is difficult to quantify. There is public benefit associated with assurance of correct installations, particularly for specialties such as



electrical that can entail fire danger. From a fiscal perspective, a reduced work load of smaller inspections would probably be favorable for BDS.

**Bureau of Development Services**  
**Report to Council on Economic Consultant Review**

**AGENDA**

July 14, 2010  
2:00 - 3:00 pm

**Paul L. Scarlett, BDS Director**

- Introductions
- Background
- Current financial status
- Overview

**Jerry Johnson, Economist, Johnson Reid**

- Scope of work for contract to review BDS' financial plan
- Comments on financial model
- Comments on fee structure
- Overall economic outlook
- Recommendations

**Denise Kleim, BDS Administrative Services Manager**

- Response to budget note & consultant recommendations
- Cost benefit analysis
- New Financial Plan model
- Review Committee

**Hank McDonald, BDS IT Replacement Manager**

- Update on the IT project
- Status of Bond Council and Debt Management review of funding
- Status of contract review with City and State
- Update on developments with Accela

**Paul Scarlett, BDS Director**

- Next Steps
- Attached Exhibit B: BDS Workplan for Responding to Budget Note and Consultant's Recommendations

**Andrew Scott, Financial Planning Division Manager**

- Input from Financial Planning

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**Council Action**

*TO THE COUNCIL:*

The Commissioner of Public Safety concurs with the recommendation of the Director of the Bureau of Development Services, and

*RECOMMENDS:*

That the City Council accept the report as complete and accept the proposed workplan which addresses the consultant's recommendations and the budget note.

**Bureau of Development Services  
Workplan for Responding to Budget Note and Consultant's Recommendations  
Summary to Fall 2010**


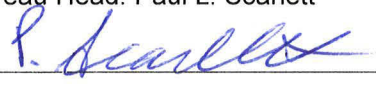
July 14, 2010

Date	Task	Comment
<b>Financial Plan</b>		
June	Begin preliminary update of revenue and expenditure forecast	Need actual data through June 30, 2010 to conduct analysis/update
July	Complete update of current financial forecasting model	Include review of leading economic indicators
<b>Cost/benefit analysis of IT project</b>		
July	Update cost estimates	
July/ August	Develop cost/benefit model	
<b>Other bureaus</b>		
June	Determine which bureaus are involved	
June/ July	Contact other bureaus	
July/ August	Develop cost estimates for other bureaus	
<b>Advisory committee</b>		
July	Make suggestions for membership	BDS proposal: combine both peer/advisory review groups
Early August	Schedule meetings	BDS proposal: CAO schedules 1 <sup>st</sup> meeting to give input to BDS; BDS schedules subsequent meetings for ongoing input (act as subcommittee of DRAC)
<b>Real estate cycle forecasting model</b>		
Fall 2010	Develop real estate cycle forecasting model	Have model ready for FY 11-12 to 15-16 Financial Plan
<b>Council presentation</b>		
Late August	Make presentation to Council on full proposal for replacement of permitting system	Include: Updated Financial Plan Cost/benefit analysis Input from peer/advisory review groups request for project staffing (limited term positions) Input/analysis from Debt Management/Bond Counsel Intergovernmental agreement with State of Oregon for purchase of software



Agenda No.  
**REPORT NO.**  
 Title

Accept the Report and Recommendations regarding the Economic Consultant Report of the Bureau of Development Services' Financial Plan (Report)

<p style="text-align: center;"><b>INTRODUCED BY</b>                  Commissioner/Auditor:  <b>Randy Leonard</b></p>	CLERK USE: DATE FILED <u>JUL 09 2010</u>
<p style="text-align: center;"><b>COMMISSIONER APPROVAL</b></p> <p>Mayor—Finance and Administration - Adams</p> <p>Position 1/Utilities - Fritz</p> <p>Position 2/Works - Fish</p> <p>Position 3/Affairs - Saltzman</p> <p><del>Position 4/Safety - Leonard</del> <b>FOR RANDY LEONARD</b></p>	<p style="text-align: center;">LaVonne Griffin-Valade                  Auditor of the City of Portland</p> <p>By: <u></u> Deputy</p>
<p style="text-align: center;"><b>BUREAU APPROVAL</b></p> <p>Bureau: Bureau of Development Services                  Bureau Head: Paul L. Scarlett</p> <p><u></u></p>	<p><b>ACTION TAKEN:</b></p> <p style="font-size: 24px; font-weight: bold;">JUL 14 2010    ACCEPTED</p>
<p>Prepared by: Leanne Torgerson                  Date Prepared: 7/8/10</p> <p>Financial Impact Statement</p> <p>Completed <input type="checkbox"/>      Amends Budget <input type="checkbox"/>                  Not Required <input checked="" type="checkbox"/></p> <p>Council Meeting Date                  7/14/10, 2:00 TC</p>	
<p><b>City Attorney Approval</b></p>	

NO VOTE TAKEN. PM

<b>AGENDA</b>
<p><b>TIME CERTAIN</b> <input checked="" type="checkbox"/></p> <p><b>Start time: 2:00</b></p> <p><b>Total amount of time needed: 45-60 minutes</b>                  (for presentation, testimony and discussion)</p>
<p><b>CONSENT</b> <input type="checkbox"/></p>
<p><b>REGULAR</b> <input checked="" type="checkbox"/></p> <p><b>Total amount of time needed: 45-60 minutes</b>                  (for presentation, testimony and discussion)</p>

FOUR-FIFTHS AGENDA	COMMISSIONERS VOTED AS FOLLOWS:	
	YEAS	NAYS
1. Fritz	1. Fritz	
2. Fish	2. Fish	
3. Saltzman	3. Saltzman	
4. Leonard	4. Leonard	
Adams	Adams	