Summary of the approach to financing the Simpson Center for Student-Athlete High Performance and the renovated California Memorial Stadium (new IA facilities).

Introduction

The original financing model for the new IA facilities was significantly revised in December 2012. The objective was to have a strong, responsive and reliable financial foundation for the facilities that will secure Intercollegiate Athletics' long-term ability to meet the full debt service falling due without drawing on central campus funds. While we cannot provide absolute certainty with respect to the future, we think the significant revision of the original plan, via increased revenue diversification, puts us in a much better position to meet that goal.

The Overall Financing Approach

The financing plan for the new IA facilities is validated via a comprehensive financial model that allows us to explore different outcomes within a well-defined interconnected framework. The model incorporates all projected revenues, costs and rates of returns on the underlying endowment. Because experience indicates that uncertainty is unavoidable where both expenses and revenues must be projected over a 40-year time frame, it is necessary to examine a wide variety of scenarios. The financial model allows us to do this by allowing us to change assumptions to determine when, and with what probability, we may have a problem.

Given that our crystal ball is no better than anyone else's, there is no doubt that some of our assumptions will prove incorrect. This is why we run scenarios and why the VCAF meets with the IA team every quarter to examine actual results against targets. This meeting is also used to discuss adjustments as warranted or where new opportunities arise.

The Original Financing Model

The new IA facilities were financed using fixed-rate 30-, 40- and 100-year debt issued at historically low interest rates. We have issued $276m in long-term debt for Memorial Stadium and $124m for the Simpson Center and there is approximately $45m that remains to be issued. On the 30- and 40-year debt, interest-only payments are not due until 2032, 2033 or 2038 depending on the underlying bond issuances. The principal on the 100-year debt falls due in the last year. For modeling purposes we have assumed that the unissued debt is financed on the same terms as the existing 40-year debt. The long maturity structure of the debt affords us time to build the endowment corpus and to respond if we perceive a problem - hence the need to be vigilant and adapt.

With predictable annual debt service payments, we are well-positioned to anticipate if the resources available to Intercollegiate Athletics are likely to fall short of need in the years ahead. Before it was revised, the original financial model for the new athletics facilities relied on only three sources of revenue: philanthropy, naming rights, and the Endowment Seating Program (ESP), with the last source accounting for the bulk of anticipated revenue.

ESP is based on selling long-terms rights to premium seats at three different service levels, with escalating amounts of philanthropy built into the price. Buyers can opt to pay in full upfront or pay over time; a decision that is documented through a signed pledge agreement. If, for whatever the reason, a buyer stops payments, the seat returns to the available inventory to be re-sold.

Under both the original and revised financial plan, revenue generated through ESP sales, philanthropy, and naming rights is deposited into investment accounts (endowment). These investment accounts are conservatively invested, generating additional revenue along the way. This, in turn, means that our financial model must also incorporate a range of possible future annual returns on investment so we can assess the model's strength under a variety of scenarios.

Table 1: Summary of Original Model Scenarios

Scenario	Total Philanthropy ($M)	Seats Sold Relative to Goal	Seats Sold Relative to Total Inventory	Incremental Simpson Center Revenue ($M)	Market Return on investments	Projection of when combined balance becomes < 0
1	60	100%	90%	3	8.0%	Never
2	50	94%	84.6%	3	7.5%	Never
3	40	88%	79.2%	3	7.0%	Never
4	30	82%	73.8%	0	6.5%	2044
5	20	76%	68.4%	0	6.0%	2038

The Revised Financing Model

So, what led us to embark on a re-evaluation of the original financing approach? First, it was our assessment there was an increasing probability that we would not reach the original fund raising/ESP sales targets by the anticipated date of June 2013. If we did not take corrective action, this could result in a cash flow problem in future years. Given how different variables are interconnected, this is best explained by looking at different "scenarios."

Table 1 above does this by showing a range of possible outcomes, with scenario 1 representing the "best" outcome and scenario 5 the "worst." Thus, what the old model was telling us was that if we were in the scenario 5 (i.e. we sold 76% of the ESP seats relative to goal, additional philanthropy was $20m in total over the next 10 years, and the return on investment averaged 6%) then IA could not meet its debt related financial obligation from this source in 2038.

Even though ESP sales had reached about 65% of goal and new philanthropy was running ahead of projections, the tempo of sales and rate of return on investments had not kept pace with the original projections. Whether the lower sales figures were due to the economic recession, the football team's challenging seasons, the price of ESP seats or other factors is unclear. And, obviously, the return on the investment should not be assessed over such a short period. However, what was clear was that the original model was over reliant on ESP seat sales. For that reason, it seemed prudent to develop a much more diversified financial model that was less susceptible to the vagaries of economic conditions and team performance.

The new financing plan reflects the work done by Intercollegiate Athletics and Finance during 2012 to develop a more diverse and robust approach to revenue generation. This work was undertaken in close consultation with both potential partners and our stakeholders, and is based on relevant market research. While the same three revenue sources remain important, we fundamentally revised the financing plan to enable us to reach a wider group of buyers and add new revenue sources.

1. Changing the way we sell ESP seats:

- <u>Dedicated Sales Force</u>: Whereas ESP had been marketed by the IA Development Staff we now have a dedicated sales staff that is focused on expanding our outreach beyond donors to a corporate market with significant potential.

- Corporate bundles: Offers corporations and specific groups associated with the University shorter, two-year contracts for seat "bundles."
- Perk Pricing: The new sales team also launched an ESP "perk pricing" program, which offers a very limited number of discounted, short-term seat contracts for purchase by current ESP participants as a way to let prospective buyers of long-term contracts get a first-hand feel for the program's amenities and benefits.
- More realistic targets: Whereas the original model anticipated we would sell all of the ESP seats by June 2013 we are now projecting that sales will continue at a rate of 70-120 per year (recent experience) until all available seats are sold. Based on the pace of sales to date, we believe this to be a very conservative and attainable estimate.

2**. Media Rights Revenue:**

- Pac-12 Media Revenue: The allocation of all the additional revenues generated from the new Pac12 media rights deal (approx. $2.5m per annum for UCB) will be dedicated to the financing model. This contract is signed.
- UCB Media Revenue: A fixed proportion of the new revenue that will be generated from the renegotiations of the campus specific media deal will be dedicated to the financing model once our existing contract expires in 2017. We already have an opening bid from the current provider at a level significantly above the existing contract.

3. Rental of Facilities:

- Full-time Rental[1]: Due to budget constraints, some of the space in the new facilities was left unfinished and is now being repurposed and improved as space available for lease or rent to third parties. We already have rental agreements with a number of campus units, which were renting space off campus. We welcome not only the new revenue, but also the increased usage of the buildings by a broader range of our campus community.
- Event Rental: Rent space for events held by the University, corporations and individuals. Based on our experience to date, we are projecting a steady increase in this source of revenue.

4. Naming Rights[2]:

- While naming was part of the original model, a more aggressive approach has resulted in us concluding the most lucrative filed naming rights agreement in the US college space that exceeded the model target. We are actively pursuing other opportunities.

5. Philanthropy:

- Lastly, we will continue to pursue philanthropy specifically designated for the facilities. The last 12 months have yielded commitments of $15m and we are working on a number of additional prospects.

Validation of the New Model and Transparency

While adding new sources of revenue and implementing a new approach to sales is clearly beneficial, it would all be for naught if we fail to model outcomes correctly. For that reason we worked closely with Professors Stanton, Wallace and Fuchs from the Haas School of Business, who all have a very high degree of experience and expertise in financial modeling and are completely independent of IA. Initially we wanted to have them validate the original financial model, which they did. This was because several articles had been written that had the facts wrong and

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[1] For example see: http://newscenter.berkeley.edu/2014/01/08/stadium-fitness-center/

[2] For more information see: http://www.calbears.com/ViewArticle.dbml?DB_OEM_ID=30100&ATCLID=209332506

questioned the mechanics of our model. However, as it became clear that we needed to fundamentally revise our approach to capture a more diversified revenue stream to reduce uncertainty, we asked them to increase their involvement and help us build a new financial model from the ground up. We were very thankful to them for doing so. Obviously, the assumptions remain our responsibility, as does the implementation of the plan. However, we believe that their independent analysis should assure commentators that the model is correct. We are keeping them engaged to ensure we are being realistic with respect to our assumptions, projections and forecasts.

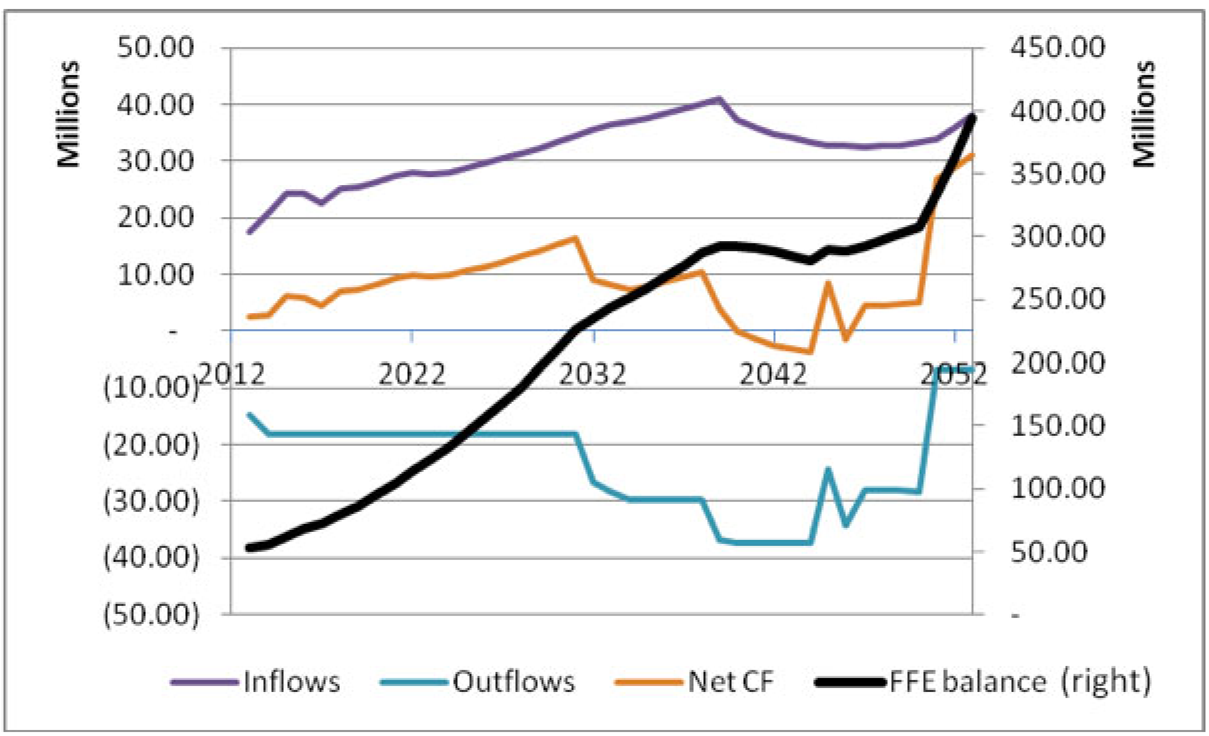
In an effort to educate commentators and be as transparent as possible, we publish a full report on our progress on the IA and VCAF websites on a quarterly basis. It is our experience that very few commentators read or understand these reports, despite many hours spent walking them through the information.

Lastly, we continue to work with Professor Calvin Moore (math), who was involved in the original financial model and Professor Alex Bell (who represents the UCB faculty senate).

The Current State of Play:

The result of everything described above is captured in the graph provided below. In contrast to the old approach, which showed there was a risk that Intercollegiate Athletics could face financing difficulties under some scenarios in the mid-2030's, the new approach indicates that the department will be able to meet its financial obligations under a range of scenarios. For example, under the new base case, which assumes that the invested funds have an annual return of 6%, the financial projections show a modest surplus, where available funds exceed obligations every year until the debt and principal is fully paid off.

Base Case Scenario



Note: *In 2053, Cal will still have $75M in bonds outstanding, which are due to be paid in 2112. If we choose to pay off this debt, the balance in the investment fund would decline from $400M to $325M under the base case scenario.*

Using input and guidance from the aforementioned finance professors, we tested the model against other more challenging scenarios that, for example, incorporated lower rates of return on investments. As the table below indicates, under these more pessimistic scenarios Intercollegiate Athletics will be able to meet its financial obligations under most circumstances. For example, even if we assume a 4% average return on the endowment and we decide to pay-off the principal of the $75m in outstanding 100 year bonds in 2053, which is not a requirement, we would face a deficit of $6 million in 2053. Further commentary on the downside vulnerability is capture in the footnote below[3]

Assumed Earnings Rate	4%	5%	6%	7%
Ending balance	$(-6,012,716)	$123,013,918	$319,141,487	$612,019,346
When balance goes negative	2053	Never	Never	Never

If we are in the upper end of the range of outcomes, we will retire the debt early and use that debt capacity for other campus-wide priorities. If we are at the low end of the range of outcomes, IA will adopt new revenue measures to protect campus. The important point is that we will remain vigilant in terms of monitoring actual outcomes against targets and adapting to new opportunities and/or challenges. We are committed to do exactly that and will not lose sight of the fact that reality will, in one way or another, certainly differ from these projections.

[3] The Fuchs, Stanton, Wallace Report states: "However, it is important to note that even under the worst set of assumptions (an extremely pessimistic combination of no further ESP sales at all after 2012, combined with an annual return of 2% per year for 40 years), the FFE balance does not go negative until 2034, leaving at least 20 years to work out how to deal with this eventuality." and "On the positive side, our sensitivity analyses show that quite large deviations from these forecasts can be sustained without the fund balance going negative, and that even in states of the world where the balance does go negative, this does not happen for at least 20 years."