



# Memorandum

To	Amy Parsons (CSU)	Pages	8
cc	Brett Anderson (CSU) Ginger Graham (CSU)		
Subject	Colorado State University New Football Stadium – Feasibility Study Peer Review		
From	Edward Shaw (ECA)		
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## **Introduction and Assignment**

Colorado State University (CSU) is considering the development of a 42,000 seat, \$246 million on-campus stadium, which would replace Hughes Stadium as the home of the CSU Rams football team in Fort Collins, Colorado. Over the past 7 months, CSU has convened a Stadium Advisory Committee (SAC) to evaluate the market and financial feasibility of the stadium. The SAC hired a group of consultants including ICON Venue Group (owner's representative), Populous (architecture), Parsons Brinckerhoff (infrastructure), and Convention, Sports & Leisure (market and financial feasibility). In August 2012, based on the input and analysis of the consulting team, the SAC found the proposed stadium feasible.

CSU retained Entertainment + Culture Advisors (ECA) to review the "reasonableness" of the methodology and findings in CSL's study "New Football Stadium Feasibility Study, August 30, 2012." Subsequent to the SAC's findings and in advance of the October 4-5, 2012 CSU Board of Governors meeting, CSU wants an external peer review of the CSL study conducted.

## **Peer Review Tasks**

CSU has requested the peer review address the following three areas:

- Review market research methods and process used to identify target audiences, gather data and validate data
- Review the assumptions used to establish premium seating options, prices and "uptakes" of those premium items
- Review CSU's historical data, area population and economic data, competitive venue/event information and other contextual information related to market demand for collegiate sports venues in Northern Colorado

ECA has prepared the following memorandum reviewing the CSL study and addressing the following areas:

1. Assessment of market data and benchmarking methodology and application
2. Review of survey implementation
3. Review of recommended building program and financial projections

The nature of ECA's memorandum is review and advisory. ECA's review is not performed at the feasibility level and does not contain any new research or additional interviews. A new, independent market demand and financial analysis (beyond what has already been performed by CSL) or feasibility of the CSU New Football Stadium is not contemplated under this review assignment.

### **CSU New Football Stadium – Feasibility Study Peer Review**

Based on our review, ECA has outlined a set of findings for the CSU New Football Stadium – Feasibility Study Peer Review. ECA reviewed each section of the CSL report from two lenses. The first lense looks at CSL's research and analysis and comments on how it fits with industry standard methodologies, applications thereof, and, in particular, how it syncs with CSL's scope of services for the Feasibility Study. The second lense assesses what else, if anything, CSL could have considered in its assessment of the CSU New Football Stadium opportunity. Finally, ECA looks at the two lenses in combination to clarify and test the overall reasonableness of the CSL findings.

#### **1. Assessment of market data and benchmarking methodology and application**

The CSL study addresses the feasibility of the proposed CSU New Football Stadium by following a number of steps, including:

- Assessment of competitive facilities within the Northern Colorado market
- Review of Mountain West Conference (MWC) data
- New college football stadium benchmark analysis

#### **Assessment of competitive facilities within the Northern Colorado market (Page 2 of CSL report)**

##### *Lense 1 (CSL's research and analysis)*

The CSL study benchmarks the total seating capacity as well as the premium seating offer, including luxury suites and club seats for the major venues with the Northern Colorado market. For each venue, the CSL study outlined the total potential premium seating annual revenue. The presentation of total potential premium seating revenue is useful in the assessment as it provides a gauge of the supply in the market with which the CSU New Football Stadium will have to compete.

##### *Lense 2 (alternative or additional points of review)*

The CSL study covers the key metrics necessary to assess the existing supply in the Northern Colorado market with regard to sports and event seating capacity and, in particular, premium seating supply and revenue potential. In addition to these metrics, other points of data that could have been considered include the % of tickets sold by price category and premium seating level for each venue, which would show the strength of sales and pricing in the market as well as the capacity of Northern Colorado sports and events consumers to absorb supply. Another interesting test would be the change or growth over time of premium seating pricing and corresponding uptake in order to measure the Northern Colorado market place's appetite for sports and entertainment spending.

***Test of Reasonableness – Assessment of competitive facilities within the Northern Colorado market***

CSL's feasibility report for the CSU New Football Stadium reviewed the key current data on premium seating in the Northern Colorado sports and entertainment market. Other points of information as available that could be instructive might include time series data to show fluctuations in venue performance as well as absorption of premium seating inventory, as is done in the section on the Mountain West Conference (MWC), to indicate the Northern Colorado market's demand for premium seating product. The venues reviewed are comprehensive in terms of premium seating. The Denver Coliseum (10,200 seat multi-purpose arena) could be reviewed, but it has no premium seating, so it is not as relevant given the focus on potential premium demand. Additionally, the Red Rocks Amphitheater and Comfort Dental Amphitheater could have been reviewed to test demand in the concert market. However, the focus of the CSU Study is on the college football market.

Overall, CSL's assessment of the market data and benchmarks and application thereof is appropriate and sufficient for testing the feasibility of the new CSU New Football Stadium.

**Review of MWC market and CSU historical data  
(Pages 3-6, 18, 21 of CSL report)***Lense 1*

The CSL study provides market data for each of the 12 MWC schools and CSU's relative position in comparison to the other schools. The data includes a review of school and football/athletic specific information (football stadium capacity, average football attendance, average attendance as % of capacity, athletic donation information, total athletic budget, total living alumni base and ticket prices) as well an overview of market data (population, corporate base and median household income). In each instance, CSL compares the relative position of CSU to the rest of the conference.

CSL also reviewed the MWC football facilities' premium seating options in the same way it reviewed the competitive sports/event venues in Northern Colorado. In addition to outlining the potential annual revenue from premium seating, CSL also provided data on the actual annual revenue from premium seating for the MWC stadiums based on interviews with athletic department officials and Revenues from Sports Venues (RSV) College Edition data. This data provides a critical check on the relative spending power and appetite of the MWC alumni and football fan base when it comes to both football in general as well as premium seating in particular. This measure and CSU's relative position within it is critical to the assessment of the feasibility of the CSU New Football Stadium.

CSL provides an overview of the last 10 years of attendance at Hughes Stadium for CSU football games, based on "tickets out."

*Lense 2*

CSL's review of MWC current information and CSU football historical data covers a wide variety of key data points necessary to assess the potential for the CSU New Football Stadium. In each instance, CSL compares the CSU data to the MWC data. In each situation,

the CSU data is compared based on the current 2011 information. An additional lense by which the drawing power of CSU football could have been assessed would be by showing the historical attendance of the other MWC schools in comparison to the historical attendance of the CSU Rams football program matched up against other factors such as changes in market population and income or separately the win-loss record of the respective teams. These tests might provide some additional insight into demand for college football at CSU and other MWC schools relative to factors such as the economy and success on the field.

CSL shows the market data in terms of Core Base Statistical Area (CBSA) as well as 150-mile rings. An alternative way in which to assess the markets, which ECA typically uses in reviewing the market size of sports and entertainment destinations, is via a 1-hour, 2-hour and 3-hour travel time. Due to the fact that certain areas have better or worse transportation infrastructure (roads, rail, other) than others, the travel times give a good assessment of what the market is that could reach the Stadium within a reasonable one day trip.

***Test of Reasonableness – Review of MWC market and CSU historical data***

CSL's report reviews the key current attendance, premium seating inventory and pricing data for CSU and the MWC. Furthermore, the feasibility study covers the key demographic barometers by which to measure CSU as it compares to the rest of the MWC. As such, CSL's review of MWC market and CSU historical data provides the necessary grounding to assess the feasibility of the CSU New Football Stadium.

**New college football stadium benchmark analysis  
(Pages 18-19, 49, 56-63 of CSL report)**

*Lense 1*

CSL reviewed the historical CSU football attendance as well as the the impact of a new stadium on eight universities that recently constructed new college football stadiums. The stadiums reviewed included Rentschler Field (University of Connecticut), Bright House Networks Stadium (University of Central Florida), Papa John's Cardinal Stadium (University of Louisville), Apogee Stadium (University of North Texas), Gerald J. Ford Stadium (Southern Methodist University), Stanford Stadium (Stanford University), TCF Bank Stadium (University of Minnesota), and InfoCision Stadium (University of Akron). For each institution, CSL reviewed the attendance during the last three years at the old stadium and the average reported attendance since the opening of the new or renovated stadium. This is relevant as it is a direct benchmark for the potential attendance performance at the CSU New Football Stadium in comparison to the historical Hughes Stadium attendance.

CSL also provides a listing of recent college football stadium naming rights deals, which serves as a key benchmark for the naming rights potential of the CSU New Football Stadium and which will provide a major source of contractually obligated income for CSU.

Finally, CSL provides individual profiles for all of the stadiums discussed earlier, except for InfoCision Stadium at the University of Akron. The report also profiles Amon G. Carter Stadium, the new home of the Texas Christian University (TCU) Horned Frogs, which opened in 2012.

Each profile illustrates data points relevant to the construction cost, funding and attendance performance of the various venues.

### *Lense 2*

In addition to the data provided in the new collegiate stadium benchmarks, CSL could have also reviewed the ratio of incremental new attendance (within the new stadium as compared to the old stadium) to construction cost across the new venues in order to gauge the relative value of renovating or building a new stadium. It might have also been possible to review the relative change in ticket and premium seating prices (or creation of new revenue streams for those venues that did not previously have premium options) at the new versus old venues in order to test the incremental impact on revenues of the new stadium.

The CSL report covers the majority of the new venues as well as those that have received significant renovation work across major college football in the last decade. There are a number of additional venues that could have also been reviewed including, among others:

- Autzen Stadium, University of Oregon (2003) – \$80 million+ renovation
- Boone Pickens Stadium, Oklahoma State University (2009) – \$260 million+ renovation
- FAU Stadium, Florida Atlantic University (2011) – \$70 million new stadium
- Houchens Industries-L.T. Smith Stadium, Western Kentucky University (2008) – \$40 million+ renovation
- Kinnick Stadium, University of Iowa (2006) – \$89 million renovation
- Lane Stadium, Virginia Tech (2006) – \$52.5 million expansion
- Memorial Stadium, University of Illinois (2008) – \$116 million renovation
- Ross-Ade Stadium, Purdue University (2003) – \$70 million renovation
- High Point Solutions Stadium, Rutgers University (2009) – \$102 million renovation
- Spartan Stadium, Michigan State University (2005) – \$64 million expansion

Lastly, in addition to the new naming rights deals covered, it might have been possible to assess the existing naming rights deals at the other venues in Northern Colorado in order to evaluate the relative corporate base and potential for naming rights deals in the regional market.

#### ***Test of Reasonableness – New college football stadium benchmark analysis***

CSL's report focuses on the new college football stadiums constructed in the past decade that are of a comparable scale, quality and investment to the proposed CSU New Football Stadium. Those new stadiums are the critical benchmarks for a new stadium at CSU. Furthermore, it also includes a selection of venues, which have received significant renovation work over the past decade. It might have been possible to have included other renovation examples as outlined above, but the sample set covered in the CSL report is sufficient to provide the appropriate landscape and overview of potential for CSU. CSL's report completes the necessary steps to assess properly the benchmarks and lay the groundwork for testing the feasibility of the CSU New Football Stadium.

## **2. Review of survey implementation** **(Pages 7-17, 20, 22-45, 47-48, 50, 64-78 of CSL report)**

### *Lense 1*

CSL conducted market surveys with a broad and comprehensive set of stakeholder groups including Ram Club Donors, Non-Ram Club Athletics Donors, Non-Ram Club Football Season Ticket Holders, and Non-Ram Club Occasional Ticket Buyers, as well as CSU faculty and staff, CSU alumni living within a 100-mile radius, University donors living within a 100-mile radius, former student-athletes, Fort Collins corporations with no athletic affiliation to CSU, and alumni association board members. The CSL survey covers a sufficiently deep and diverse group of stakeholders to test the potential for the CSU New Football Stadium based on the wide range of interviewees, number of surveys distributed (140,090) and number of survey responses (6,827).

CSL asks a broad range of questions in order to understand the CSU fan, donor and alumni base with respect to current football attendance, reasons for non-attendance, preferred seat location, rating of experience at Hughes Stadium and other college venues, as well as the appetite for a new CSU stadium.

CSL also investigates in great detail the potential for premium seating within the CSU New Football Stadium. In particular, the study tests the following premium seating concepts – priority seats, field level club seats, club seats, loge boxes, luxury suites, and club suites. This comprehensive list provides ample grounding to test the potential for premium seating revenue from the proposed stadium. In tandem with the testing of premium seating demand, CSL also surveys the potential donor base for capital gifts.

The resulting survey responses are matched up against one another to show scenarios by which CSU can derive the greatest revenue through the optimal combination of premium seat purchases without a capital gift and premium seat sales with a capital gift.

### *Lense 2*

CSL's survey questions are comprehensive in terms of asking the key questions, but there are a few areas that could have been explained in greater depth, such as the percentage increase/decrease in attendance for each survey group on page 17 of the report. It is unclear exactly how the percentage change is arrived at for each of the groups. Additionally, the linkage between the testing of premium seat concepts and the resulting demand on pages 42-45 is unclear.

#### ***Test of Reasonableness – Review of survey implementation***

CSL's methodology, range of questions and application of the surveys is well targeted and comprehensive in order to evaluate the market and financial potential for the CSU New Football Stadium. Additional explanation of the implementation of the survey results as it applies to the premium seating demand could be useful.

### **3. Review of recommended building program and financial projections** **(Pages 20, 46, 52-55, Appendix)**

#### *Lense 1*

The CSL Feasibility report outlines the recommended building program for the CSU New Football Stadium based on the report's assessment of CSU historical performance, CSU market data, comparable facility information, and an overview of benchmarks. In addition, CSL conducted extensive market surveys and coordinated with the ICON Venue Group and Populous teams in order to test and assess the appropriate scale and mix of general and premium seats for the proposed stadium.

Subsequently, the CSL report implements an industry standard financial model, which provides a clear and logical layout of the various line items of the operating model and covers the key areas of revenue including ticket sales, donations, concessions, merchandise, parking, tailgating, facility fees, stadium naming rights, advertising/sponsorship, other event revenue and non-game day club rental revenue. The inflation rate of 3% and range of costs of goods for food and beverage, merchandise and parking are within industry standards. The assumed individual ticket prices, which range from \$40-55 in the low, medium and high scenarios, are reasonable given the survey results, which indicate a consumer capacity to absorb a price increase in the new stadium of \$7-10 over the current individual ticket prices, which range from \$30-45, at Hughes Stadium.

CSL outlines an operating expense profile for the CSU Stadium that falls within industry standards for scale and cost.

#### *Lense 2*

The CSL building program and resulting financial model are solid and adhere to industry standards for collegiate athletics and sports and entertainment venues, based on ECA's industry knowledge and review of the CSL market and survey data.

Although the overall level of donations, uptake of club seats, and increase in individual ticket prices seem reasonable given the strength of the survey responses, the steps taken to reach the season ticket price increase are not clear. Currently, season tickets are \$150-199. The CSL financial model implements a season ticket price range of \$225-300 for the new stadium.

The attendance estimate is relatively conservative and follows the logic provided by the surveys to indicate the increase in the opening year. However, the subsequent annual increase of 4% in attendance during the first five years of operation followed by stabilization could be viewed as aggressive. Often new stadiums experience a halo effect in the opening year or two followed by a slight decline in attendance towards stabilization as the initial positive impact of the new venue subsides.

Additionally, in arriving at the projected attendance, one additional methodology could have been implemented. CSL uses the estimated increase in attendance (22%) with the new stadium as derived by the survey responses (page 17) in order to estimate potential attendance at the CSU New Football Stadium and, subsequently, estimate the appropriate seating capacity. In addition to the survey method, CSL could have also utilized the average



(32%) or median (4%) change in attendance as exhibited at the benchmark new stadiums (page 19). This historical, market demand driven methodology could provide an alternative check for the survey methodology.

CSL's estimation of CSU New Stadium attendance relies on the 22% increase in "tickets out" from the survey data applied to a low, medium and high scenario. The low scenario averages the last three years of CSU performance (22,637). The base scenario averages "tickets out" over the last 10 years (25,263). The high scenario uses the highest year of attendance (30,631 in 2003) in the last 10 years. Another methodology to provide consistency across the scenarios would be to take either the lowest year (21,008 in 2008) and the highest year (30,631 in 2003) for the low and high scenarios or the average of the lowest three years (21,556) and the average of the highest three years (30,146) for the low and high scenarios. This would provide slightly more consistency so that the low scenario is not overly flattened and the high scenario not overly increased.

It is not clear why the estimate for non-paid attendees found in the concession revenue calculation in all three scenarios (low, medium, high) jumps from 30,000 per year or 5,000 per game to 60,000 per year or 10,000 per game between the opening year (2014) and year 2 (2015). If it is a miscalculation, it only makes a difference of approximately \$130,000, so it is relatively nominal in the larger picture of the financial.

Finally, the study solely focuses on the core CSU Football program (6 annual home games) and a marginal number of other non-game day events to supplement the financial projections. This conservative approach is good in that it does not overinflate the findings. However, it might be possible to show in other scenarios the potential for other events, primarily major concerts, which could drive revenue to the building and CSU.

***Test of Reasonableness - Review of recommended building program and financial projections***

CSL's outline of the CSU New Football Stadium building program, construction of the financial model, and application of the market and survey findings is sound and falls within industry standards. Additional explanation of the market data to arrive at the inputs for the building program and financial model could be useful, but the use and application of the survey data and review of market data is reasonable and sufficient to support the financial outputs derived in the feasibility analysis.

**CSU New Football Stadium - Feasibility Study Peer Review Conclusion**

ECA's assessment of the CSL study, "New Football Stadium Feasibility Study, August 30, 2012," finds the work to be within industry standards, exhibiting strong grounding in the survey data with efficient application of the market data. Based on ECA's review of the CSU historical data, the competitive set, benchmark facilities, and survey data conducted by CSL, we find that the building program and resulting financial projections are not overly aggressive and present reasonable projection of the new venue's operating profile and potential.