

UNLV Campus Improvement Authority Board

Study of the Need for & Feasibility of a New Multi-Purpose On-Campus Stadium

September 25, 2014





September 25, 2014

Mr. Donald D. Snyder
Chairman
Campus Improvement Authority
University of Nevada, Las Vegas
4505 S. Maryland Parkway, Box 456013
Las Vegas, NV 89154-6013

Dear Mr. Snyder:

Conventions, Sports & Leisure International ("CSL") is pleased to present this report regarding the need for and feasibility of a new multi-purpose on campus stadium ("Stadium") in Las Vegas. The attached report summarizes our research and analyses, and is intended to assist the Campus Improvement Authority Board ("CIAB") in finalizing its report for consideration by the 78th Session of the Nevada Legislature in 2015.

The information contained in this report is based on estimates, assumptions and other information developed from research of the market, knowledge of the public assembly facility industry and other factors, including certain information you and other project stakeholders have provided.

All information provided to us by others was not audited or verified, and was assumed to be correct. Because the procedures were limited, we express no opinion or assurances of any kind on the achievability of any estimated information contained herein and this report should not be relied upon for that purpose. Furthermore, there will be differences between estimated and actual results. This is because events and circumstances frequently do not occur as expected, and those differences may be material. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

We sincerely appreciate the opportunity to assist you with this project, and would be pleased to be of further assistance in the interpretation and application of the study's findings.

Very truly yours,

CSL International

Conventions, Sports & Leisure International • 7501 Lone Star Drive, Suite B200 • Plano, Texas 75024





TABLE OF CONTENTS

EXECUTIVE SUMMARY

1) INTRODUCTION.....	1
2) HISTORICAL UNLV VENUE ANALYSIS	4
3) LOCAL & REGIONAL MARKET CHARACTERISTICS	14
4) COMPETITIVE FACILITIES	34
5) COMPARABLE FACILITIES ANALYSIS.....	47
6) REVIEW OF PREVIOUS ECONOMIC IMPACT STUDY.....	101
7) MARKET SURVEYS	109
8) ESTIMATED UTILIZATION	123
9) BUILDING PROGRAM & COST ESTIMATE	145
10) FINANCIAL PROJECTIONS.....	149
11) ECONOMIC & FISCAL IMPACT ANALYSIS.....	155
12) FUNDING ANALYSIS	166
APPENDIX A ECONOMIC & FISCAL IMPACT ASSUMPTIONS.....	178
APPENDIX B DETAILED FUNDING MODELS.....	198
APPENDIX C STADIUM SITE ANALYSIS	129



CITY OF LAS VEGAS

Las Vegas is one of the premier entertainment destinations in the world, serving as host to approximately 40 million visitors annually. As Las Vegas has continued to evolve as a major world entertainment and tourist destination, many of the City's resorts and casinos have begun to develop new and innovative ways of attracting visitors to their properties by building state-of-the-art, on-site entertainment venues capable of hosting a variety of concerts, shows and sporting events.

SITUATION

The vision of UNLV is to become a Tier One – Carnegie Research Very High – institution with athletic, academic and campus experience consistent with its aspirational peers. Tier One universities are research focused with overall academic excellence, attract the brightest and best students and faculty, are committed to student success, receive more federal grants and generate more economic development for the community and the state. UNLV's goals as a university include elevating its academic and student success, research, and athletics programs. A new stadium connected to the campus, or as an extension of the campus, could enhance the experience for students, faculty, and the University community as a whole, as well as enhance the visibility of UNLV and its recruiting of students and faculty.

In addition to the needs of UNLV, there are also needs for a new state-of-the-art facility. Although the City currently offers a number of entertainment venues, in addition to the 18,776-seat Thomas & Mack Center and 36,800-seat Sam Boyd Stadium, it lacks a state-of-the-art major sports and entertainment venue capable of accommodating crowds in excess of 40,000. As such, Las Vegas is currently at a disadvantage when compared to other major US markets, such as Dallas/Ft. Worth, Houston, New York, San Francisco, New Orleans, and Phoenix, in its ability to attract major domestic and international sports and entertainment events. Events such as international soccer, Republican/Democratic National Convention(s), X Games, and NFL Pro Bowl attract visitors from all over the world who serve as drivers of incremental spending and tax revenue generation to an area. As competition for the entertainment dollars of patrons and corporations increases, it is vital that markets develop new ways of attracting visitors to the area.

As an outgrowth of this need, the University of Nevada, Las Vegas ("UNLV") worked with the legislative leadership in the 2013 legislative session to develop and finalize AB335, which called for the creation of a Campus Improvement Authority Board ("CIAB") to study the need for, feasibility of and financing alternatives for a large events center ("Stadium") on the UNLV campus. The CIAB, which consists of 11 members representing UNLV/Board of Regents, Clark County, the hotel/resort industry, and other business interests, engaged the project team consisting of Conventions, Sports & Leisure International ("CSL"), Legends, RCG Economics ("RCG"), Venue Solutions Group ("VSG) and Ted Ferris Consulting ("TFC") in order to address their legislative mandate contained in AB335 and finalize their report to the 78th Session of the Nevada Legislature which commences in 2015.

In order to assess the overall viability of the Stadium project, CSL has developed an approach that will answer a multitude of critical questions related to the development of the proposed Stadium, including but not limited to the following:

- Is there a need for a new Stadium in Las Vegas located on the UNLV campus?
- What is the appropriate Stadium design?
- How large should the Stadium be?
- What number and types of events can be hosted?
- How many premium seats can be supported?
- Is the Stadium project feasible?
- How much will the Stadium project cost?
- What infrastructure improvements are necessary?
- How will the Stadium project be financed?
- What alternate funding sources are available?
- How should the Legislature carry out the Stadium project recommendations?

The remainder of this executive summary presents key findings related to the analysis. The full report should be read in its entirety to obtain the background, methods and assumptions underlying the findings.

HISTORICAL UNLV VENUE ANALYSIS

In order to assess the impacts of a new on-campus multi-purpose stadium at UNLV, it is important to evaluate the current operations of the multiple facilities at UNLV. The following is a summary of key take-aways from an analysis of the historical operations of UNLV venues:

- Approximately one-third of the overall event activity at Sam Boyd Stadium consists of UNLV home football games, with the remaining two-thirds consisting of a variety of concerts, sporting events, motorsports, festivals and other uses.
- UNLV-related events have historically accounted for approximately 27 percent of event activity, 20 percent of total attendance, and 16 percent of total operating income at the Thomas & Mack Center.
- Historically, the Thomas & Mack Center has served as a neutral-site venue that retained and attracted new business to the area, including the NBA Summer League, USA Basketball, the PBR World Finals and the National Finals Rodeo.
- UNLV average home football game attendance of approximately 17,200 per game ranks among the lowest when compared to other Mountain West Conference and Pac-12 Conference peers.

LOCAL & REGIONAL MARKET CHARACTERISTICS / COMPETITIVE FACILITIES

An important component in assessing the potential success of a new stadium at UNLV is the demographic and socioeconomic profile of the local market. The strength of a market in terms of its ability to attract events, attract patrons and generate revenues is measured, to some extent, by the size of the regional market area population, its income characteristics and other demographic and socioeconomic factors. The following is a summary of key characteristics of the local and regional market:

- The Las Vegas CBSA is home to approximately two million residents with median income levels that are comparable to the U.S. as a whole. Although Las Vegas has a slightly higher unemployment rate than the nation as a whole, its cost of living is slightly lower than the national average, and the percentage of households with a median income in excess of \$100,000 is nearly double the national average.
- In general, Las Vegas' population, corporate base and income characteristics rank average or above-average when compared to other Mountain West Conference and Pac-12 Conference markets.
- Known as the "Entertainment Capital of the World", Las Vegas attracts approximately 40 million visitors annually, including 5.1 million convention attendees. Gaming revenue in Clark County totaled approximately \$9.7 billion in 2013.
- There are approximately 151,000 hotel rooms in Las Vegas, which are occupied approximately 84 percent of the time.
- Although there are currently a number of entertainment venues in Las Vegas, the market currently lacks a state-of-the-art venue capable of hosting large-scale events that attract crowds in excess of 40,000.
- It is envisioned that a new stadium would complement the portfolio of existing venues in the Las Vegas area, as there will be minimal competition to host the same type of events.

COMPARABLE FACILITY ANALYSIS

An assessment of the physical, operational and financial characteristics of newly constructed/renovated NFL and collegiate stadiums were reviewed to provide a benchmark from which to assess the market potential for the proposed stadium in Las Vegas. Key characteristics of newly constructed/renovated NFL and collegiate stadiums include the following:

- On average, comparable NFL stadiums opened in 2008, while the average collegiate stadium opened in 2011.
- Overall, the NFL stadiums have a larger average seating capacity (70,017) and total square footage (1.8 million) than collegiate stadiums, which have an average seating capacity and total square footage of 47,353 and 678,000, respectively.
- Given their larger size, generally higher level of finish and larger number that are enclosed/retractable, the cost to construct an NFL stadium can be as much as four-times higher than the average cost to construct a collegiate stadium. It should be noted that the cost to construct new state-of-the-art collegiate stadiums can approximate \$300 million to \$450 million (ie TCF Bank Stadium at the University of Minnesota and a major renovation to Kyle Field at Texas A&M University) excluding site and infrastructure cost.
- On average, NFL stadiums receive a significantly higher level of funding from the public sector (ie tax revenues) than collegiate stadiums, which are generally funded via major fundraising campaigns and other philanthropic endeavors. It should be noted that recent new, state-of-the-art collegiate stadiums have received increasing levels of public participation, including 45 percent (\$136 million) of the funding of TCF Bank Stadium in Minneapolis.
- NFL stadiums have an average of 169 luxury suites that cost approximately \$202,000 annually and approximately 9,800 club seats that cost approximately \$2,700 per year. Collegiate stadiums have an average suite inventory of 40 (\$44,000 annual cost) and club seat inventory of approximately 2,100 (\$1,500 annual cost). Given their large suite inventories, comparable NFL stadiums do not have loge boxes, while collegiate stadiums have an average loge box inventory of approximately 55, four-seat boxes (\$10,200 annual cost). Based on past collegiate stadium experience, loge boxes are the first premium products to sell out, and many universities have indicated that they wish they had built more loge boxes as part of their building programs.
- Although a limited number of NFL stadiums host a significant number of third party events (i.e. AT&T Stadium), the majority host a limited number of major events annually, and are mainly built to accommodate 10 home football games per year. In general, comparable collegiate stadiums also host a very limited number of third party events annually and are generally configured to accommodate between six and seven home football games per year.

MARKET SURVEYS

A total of approximately 2,100 email surveys were completed with UNLV Athletic and University constituents, and Chamber members to determine opinions and potential interest in attending events and purchasing tickets in a new stadium. In addition, approximately 350 email surveys were completed with members of the student body in order to understand how a new stadium could impact their attendance at UNLV home football games. Key findings include:

- Overall, UNLV constituents and Chamber members attend approximately 1.8 home football games each year. The average UNLV student attends approximately three games per year.
- The most commonly cited reason for not attending more UNLV home games by UNLV constituents and Chamber members was an inconvenient stadium location, followed by team performance, living too far away, traffic congestion, and time conflicts. Students most commonly cited an inconvenient stadium location, followed by time/school conflicts, team performance, no interest in football, and traffic congestion.
- Overall, approximately 83 percent of UNLV constituents and Chamber members and 66 percent of students have a positive attitude towards the development of a new stadium.
- Approximately 63 percent of UNLV constituents and Chamber members and 66 percent of students indicated they would attend more UNLV home football games in a new multi-purpose on-campus football stadium.
- Nearly all survey respondents indicated an interest in attending other events at a new stadium. Respondents were most interested in attending concerts, NFL football games, other college football games, and family shows.
- In general, respondents preferred an enclosed stadium (retractable roof or domed) over an open-air stadium.
- Overall, approximately 38 percent of survey respondents indicated an initial interest in premium seating options in a new stadium.
- It is estimated that a new stadium could potentially support 1,500 to 3,000 club seats, 20 to 30 loge boxes, and 50 to 60 luxury suites.

ESTIMATED DEMAND

In order to determine demand for new events that will draw incremental visitors to the area, as well as meeting the needs of existing user groups, an extensive number of interviews were conducted with a variety of external groups representing a wide-variety of events and activities, as well as internal university constituent groups. Based on the analysis conducted, there is a need in the local marketplace for a new state-of-the-art stadium capable of hosting large-scale events in Las Vegas. The following table presents a summary of the potential of three stadium development scenarios (a state-of-the-art collegiate stadium, open-air stadium and enclosed stadium) to host events that draw incremental visitors to the area:

Estimated New Stadium Utilization

YEAR ONE EVENTS

Event Type	Domed Stadium			Open Air Stadium			State-of-the-Art Collegiate Option		
	Total # of Events	Average Attendance	Total Attendance	Total # of Events	Average Attendance	Total Attendance	Total # of Events	Average Attendance	Total Attendance
International Soccer	2	40,000	80,000	1	40,000	40,000	1	40,000	40,000
Concerts	2	40,000	80,000	1	35,000	35,000	1	30,000	30,000
Rugby	4	23,000	92,000	4	23,000	92,000	4	23,000	92,000
Las Vegas Bowl	1	50,000	50,000	1	50,000	50,000	1	45,000	45,000
New Bowl Game	1	50,000	50,000	0	--	--	0	--	--
Neutral Site CFB Game	2	50,000	100,000	1	50,000	50,000	1	45,000	45,000
Catered Events	100	500	50,000	75	500	37,500	75	500	37,500
Motorsports	3	45,000	135,000	3	45,000	135,000	3	40,000	120,000
Combatives (i.e. Boxing, UFC)	2	42,000	84,000	0	--	--	0	--	--
Other	4	45,000	180,000	0	--	--	0	--	--
UNLV Football	6	38,000	228,000	6	38,000	228,000	6	38,000	228,000
TOTAL	127		1,123,000	92		669,000	92		637,500
TOTAL (Excluding catered events/UNLV football)	21		845,000	11		404,000	11		372,000

- It is estimated that a new enclosed stadium could host approximately 127 events drawing 1.1 million attendees for UNLV football, international soccer, concerts, collegiate bowl games, neutral site college football games, motorsports, combative sporting events, and catered events. Excluding catered events and UNLV football, the facility would host 21 events annually, drawing approximately 845,000 attendees.
- A new open-air stadium could host approximately 92 events drawing 669,000 attendees for UNLV football, international soccer, concerts, the Las Vegas Bowl, neutral site college football games, motorsports, combative sporting events, and catered events. Excluding catered events and UNLV football, the facility is projected to host 11 events annually, drawing approximately 404,000 attendees.
- It is estimated that a new state-of-the-art collegiate stadium could host approximately 92 events drawing 638,000 attendees. Excluding catered events and UNLV football, the facility is projected to host 11 events annually, drawing approximately 372,000 attendees.
- It should be noted that the development of a proposed soccer-specific stadium is currently being considered in downtown Las Vegas. A new stadium's ability to host soccer matches and other related events could be negatively impacted should plans to construct the soccer-specific stadium move forward.

BUILDING PROGRAM & COST

Based on the need for a new state-of-the-art stadium in Las Vegas to host large-scale events and the resulting estimated utilization, the following table presents a summary of the total project costs of each potential stadium type:

			
Total Square Footage	860,000	900,000	900,000
Total Seating Capacity	45,000	50,000 - 55,000	50,000 - 55,000
TOTAL PROJECT COSTS (\$MM)			
Hard Construction Costs	\$342.0	\$449.0	\$592.5
Soft Costs	\$80.9	\$106.2	\$140.1
Site & Infrastructure	\$100.0	\$100.0	\$100.0
Total Stadium Project Costs	\$522.9	\$655.2	\$832.6

Note: Total costs presented herein include land and parking costs.

Overall, it is estimated that project costs could total approximately \$522.9 million to construct a state-of-the-art collegiate stadium, approximately \$655.2 million to construct an open-air stadium and approximately \$832.6 million to construct a domed stadium in Las Vegas. Based on additional analyses conducted by the project team it is estimated that upwards of \$50 million in additional costs would need to be added to a new state-of-the-art collegiate stadium, and between \$25 and \$35 million to an open air stadium, to make it efficiently and expeditiously modified at a future date with a fixed roof.

FINANCIAL PROJECTIONS

The following table presents a summary of the estimated operating revenues and expenses associated with the various potential stadium development scenarios in Las Vegas.

Estimated Financial Operations Proposed New Stadium Scenarios						
	State-of-the-Art Collegiate Stadium		Open-Air Stadium		Enclosed Stadium	
	Year 1	Year 5	Year 1	Year 5	Year 1	Year 5
Revenues						
Rentals / Ticket Sales	\$1,813,000	\$2,040,000	\$1,813,000	\$2,040,000	\$3,617,000	\$4,071,000
Naming Rights	2,550,000	3,100,000	3,000,000	3,647,000	3,450,000	4,035,000
Sponsorship	2,550,000	2,983,000	3,000,000	3,509,000	3,450,000	3,883,000
Luxury Suites	2,126,000	2,387,000	2,126,000	2,387,000	5,523,000	6,068,000
Loge Boxes	245,000	318,000	245,000	318,000	524,000	635,000
Club Seats	2,921,000	3,288,000	2,921,000	3,288,000	2,921,000	3,288,000
Food & Beverage	1,214,000	1,366,000	1,272,000	1,375,000	2,459,000	2,698,000
Merchandise	344,000	387,000	362,000	407,000	842,000	948,000
Ticket Fees	1,246,000	1,583,000	1,318,000	1,977,000	3,292,000	4,938,000
Total Revenues	\$15,009,000	\$17,452,000	\$16,057,000	\$18,948,000	\$26,078,000	\$30,564,000
Expenses						
Labor	\$2,028,000	\$2,239,000	\$2,253,000	\$2,487,000	\$2,253,000	\$2,487,000
General & Administrative	407,000	448,000	452,000	498,000	452,000	498,000
Operations	2,709,000	2,984,000	3,010,000	3,316,000	3,285,000	3,619,000
Utilities	1,152,000	1,346,000	1,280,000	1,495,000	3,030,000	3,543,000
Insurance	201,000	213,000	231,000	245,000	384,000	407,000
Total Expenses	\$6,497,000	\$7,230,000	\$7,226,000	\$8,041,000	\$9,404,000	\$10,554,000
NET INCOME / (LOSS)	\$8,512,000	\$10,222,000	\$8,831,000	\$10,907,000	\$16,674,000	\$20,010,000

State-of-the-Art Collegiate Stadium

It is estimated that the proposed state-of-the-art collegiate stadium in Las Vegas could generate revenues of approximately \$15.0 million and incur approximately \$6.5 million in expenses, resulting in net income of approximately \$8.5 million before debt in the first year of operations. In the fifth year of operations, it is estimated that a new state-of-the-art

collegiate stadium in Las Vegas could generate revenues of approximately \$17.5 million and incur approximately \$7.2 million in expenses, resulting in net income of approximately \$10.2 million before debt.



Open-Air Stadium

It is estimated that a new open-air stadium, larger and more elaborate than the state-of-the-art collegiate stadium, in Las Vegas could generate revenues of approximately \$16.1 million and incur approximately \$7.2 million in expenses, resulting in net income of approximately \$8.8 million before debt

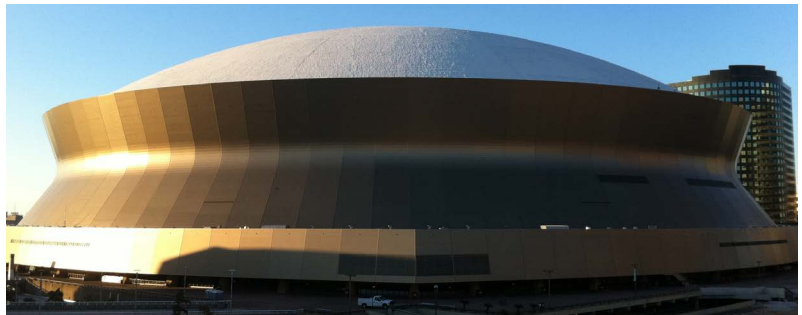
in the first year of operations. In the fifth year of operations, it is estimated that a new open-air stadium in Las Vegas could generate revenues of approximately \$18.9 million and incur approximately \$8.0 million in expenses, resulting in net income of approximately \$10.9 million before debt.



Enclosed Stadium

It is estimated that a new enclosed stadium in Las Vegas could generate revenues of approximately \$26.1 million and incur approximately \$9.4 million in expenses, resulting in net income of approximately \$16.7 million before debt in the first year of operations. In the fifth year of operations, it is

estimated that a new enclosed stadium in Las Vegas could generate revenues of approximately \$30.6 million and incur approximately \$10.6 million in expenses, resulting in net income of approximately \$20.0 million before debt.



ECONOMIC & FISCAL IMPACTS

The construction and annual operations of the proposed stadium in Las Vegas can provide quantifiable benefits to an area.

Construction Period Impacts

The table below summarizes the net new economic impacts anticipated to be generated to Clark County by the construction of an open-air and enclosed stadium.

Construction Period Impacts Stadium Development Scenarios		
Net New Impact	Open-Air Stadium	Enclosed Stadium
Direct Spending	\$341,674,000	\$431,567,000
Total Output	\$587,764,000	\$739,065,000
Employment (FTEs)	4,559	5,708
Income	\$290,046,000	\$366,265,000

The one-time net new economic impacts estimated to be associated with the construction of an open-air stadium in Las Vegas include approximately \$342 million in direct spending, \$588 million in total output and 4,559 full and part-time jobs and \$290 million in personal earnings. Net new impacts associated with the development of an enclosed stadium in Las Vegas include approximately \$432 million in direct spending, \$739 million in total output, 5,708 full and part-time jobs and \$366 million in personal earnings.

Annual Operations Impacts

The table below summarizes the net new combined on-site and off-site economic impacts anticipated to be generated to Clark County by the annual operations of an open-air and enclosed stadium (net of existing Sam Boyd Stadium impacts).

Annual Operations Impacts Stadium Development Scenarios		
Net New Impact	Open-Air Stadium	Enclosed Stadium
Direct Spending	\$174,464,000	\$428,359,000
Total Output	\$275,632,000	\$676,748,000
Employment (FTEs)	2,550	6,267
Income	\$110,075,000	\$270,427,000

Net new impacts from annual operations of an open-air stadium are estimated to generate \$174 million in net new direct spending, \$276 million in total output, 2,550 full and part-time jobs and \$110 million in personal earnings.

Net new impacts from annual operations of an enclosed stadium are estimated to generate \$428 million in net new direct spending, \$677 million in total output, 6,267 full and part-time jobs and \$270 million in personal earnings.




Fiscal Impacts

In addition to the direct spending, total output, employment and income impacts discussed herein, the construction and annual operations of a new stadium in Las Vegas could generate additional benefits to the local area in the form of increased tax revenues. Overall, it is estimated that annual net new fiscal benefits associated with the development of an enclosed and open-air stadium in Las Vegas could total approximately \$37.1 million and \$15.0 million, respectively. The following table provides a detailed summary of the net new fiscal impacts estimated to be generated to the local and regional area on an annual basis by type.

Annual Fiscal Benefits Analysis Stadium Comparison (net of SBS)		
Type of Tax	Open-Air Stadium	Domed Stadium
State Sales Tax	\$1,651,000	\$4,079,000
County Sales Tax	\$5,037,000	\$12,441,000
Proposed CFD Sales Tax	\$743,000	\$1,836,000
Live Entertainment Tax	\$648,000	\$1,629,000
Modified Business Tax	\$4,700	\$4,700
Hotel Tax	\$2,012,000	\$4,971,000
NV General Fund Gaming Tax	\$4,820,000	\$11,906,000
Car Rental Taxes & Fees	\$85,000	\$210,000
TOTAL	\$15,001,000	\$37,077,000

FUNDING ANALYSIS

Based on the analyses conducted herein, the following graphic presents a summary of the annual debt service required to fund construction of each stadium type, as well as the minimum sales tax rate necessary to generate sufficient revenues to cover debt service.

			
TOTAL PROJECT COSTS (\$MM)			
Construction Costs	\$342.0	\$449.0	\$592.5
Soft Costs	\$80.9	\$106.2	\$140.1
Site & Infrastructure	\$100.0	\$100.0	\$100.0
Total Stadium Project Costs	\$522.9	\$655.2	\$832.6
ANNUAL DEBT SERVICE			
Maximum Annual Debt Service for G.O. Bonds	\$33,400,000	\$41,450,000	\$52,600,000
Maximum Annual Debt Service for Revenue Bonds	\$52,200,000	\$67,900,000	\$86,250,000
G.O. BONDS 1.00 COVERAGE			
Minimum Sales Tax Rate if CFD	8.461%	8.552%	8.674%
Minimum Sales Tax Rate if Clark County wide	8.204%	8.230%	8.264%
REVENUE BONDS 1.50 COVERAGE			
Minimum Sales Tax Rate if CFD	8.691%	8.840%	9.041%
Minimum Sales Tax Rate if Clark County wide	8.269%	8.312%	8.370%

Note: Total costs presented herein include land costs as well as on site parking costs.

It is estimated that the maximum annual debt service for general obligation bonds could range between \$33.4 million and \$52.6 million, depending on stadium type. In addition, the maximum annual debt service for revenue bonds could range between \$52.2 million and \$86.3 million, depending on stadium type.

General obligation bonds could require a minimum sales tax rate of between 8.204% and 8.674%, depending on whether the tax applies within the community facilities district or within Clark County. Revenue bonds could require a minimum sales tax rate of between 8.269% and 9.041%, depending on whether the tax applies within the community facilities district or within Clark County.

STUDY CONCLUSION

Based on the extensive research and analyses conducted herein, there is a demonstrated need for a new 45,000-seat, state-of-the-art collegiate stadium in Las Vegas on the campus of UNLV to host large-scale events that would draw incremental visitors to the local area, as well as contribute to the overall mission of UNLV. Given the recommended size and scope of the project, it is estimated that the stadium development could cost approximately \$523 million, and it is envisioned that as much as 80 percent is to be funded with incremental sales tax revenues.

Although the research and analyses has resulted in a demonstrated need for a new stadium in Las Vegas, members of the CIAB recognize the multitude of other needs that currently exist in Las Vegas that also require significant investment from the community and/or state, including:

- Increased public safety, education, healthcare and transportation services and infrastructure;
- UNLV Hospitality Hall;
- Tier One including UNLV Medical School;
- LVCVA Master Plan renovation and expansion of the Las Vegas Convention Center, Las Vegas Global Business District; and,
- Other civic and higher education needs.

Given the existing need in Las Vegas for a multitude of community, state and university resources, the CIAB has adopted the following resolutions:

Resolution A

- 1.0 WHEREAS, in 2013 the Nevada State Legislature adopted Assembly Bill 335 (AB 335) sponsored by the Speaker of the Assembly and approved by the Governor thus creating enabling legislation for the formation of the Campus Improvement Authority Board (CIAB) as a public body to study the need for, feasibility of and financing alternatives for a large events center (stadium) and other required infrastructure and supporting improvements in the Authority area; and
- 2.0 WHEREAS, the Board of Regents of the Nevada System of Higher Education (Board of Regents) appointed its members before the designated deadline, thus creating the CIAB; and
- 3.0 WHEREAS, the CIAB has been meeting as a public body since October of 2013, complying with Nevada's Open Meeting Law requirements, and analyzing the need for, feasibility of and financing alternatives for a stadium and other required infrastructure and supporting improvements.
- 4.0 **NOW, THEREFORE, BE IT RESOLVED**, that the CIAB has approved its final report, complete with specific recommendations and supporting materials, and will submit this report to the Director of the Legislative Counsel Bureau by Sept. 30, 2014, all as required by AB 335.

Resolution B

- 1.0 WHEREAS, the vision of UNLV is to become a Tier One – Carnegie Research Very High – institution with athletic, academic and campus experience consistent with its aspirational peers; and
- 2.0 WHEREAS, Tier One universities are research focused with overall academic excellence, attract the brightest and best students and faculty, are committed to student success, receive more federal grants and generate more economic development for the community and the state; and
- 3.0 WHEREAS, UNLV’s goals as a university include elevating our academic and student success, research, and athletics programs. A large events center (stadium) connected to the campus, or as an extension of the campus, is consistent with this vision and master plan and necessary for the long-term success of UNLV athletics; and
- 4.0 WHEREAS, Sam Boyd Stadium (formerly known as the Silver Bowl) has been an excellent facility to serve the needs of UNLV and Southern Nevada for more than four decades, but is limited by its location and capabilities to fully support the future needs of UNLV, the community and the growth of special events that attract incremental tourists; and
- 5.0 WHEREAS, like the Thomas & Mack Center (T&M) did for UNLV basketball, a new stadium will improve the recruiting and enhance the competitiveness and financial performance of UNLV football and bring all of UNLV’s athletics programs on campus or an extension of campus; and
- 6.0 WHEREAS, the T&M provides a good example of how a neutral site facility for special events benefits both the university and community as a whole; and
- 7.0 WHEREAS, as a stadium is an integral part of the campus and it will enhance the experience for students, faculty, visitors and community as a whole, and
- 8.0 WHEREAS, a sound financial operating model can provide net operating revenue from the stadium to support the academic mission of the university much as the T&M has for the athletic mission of the university; and
- 9.0 WHEREAS, a stadium close to the world famous resort corridor (The Strip) will enhance the visibility of UNLV and its recruiting of students and faculty and will also enhance the community as a whole; and
- 10.0 WHEREAS, Las Vegas attracts 40 million visitors annually with a full range of activities and events; but does not have a state-of-the-art venue to host events requiring more than 40,000 seats.
- 11.0 **NOW, THEREFORE, BE IT RESOLVED**, that there is a clearly established need for a new stadium on the UNLV campus, or as an extension of the campus, and close to The Strip; and
- 12.0 **FURTHER RESOLVED**, that a new stadium will host football games, special events and other activities that benefit UNLV, and the community as a whole.

Resolution C

- 1.0 WHEREAS, a new large events center (stadium) must be a public private partnership that includes UNLV and the community as a whole; and
- 2.0 WHEREAS, the CIAB received input from the tourism industry, the live entertainment industry, and the broader community to understand the potential need for and benefits of a stadium; and
- 3.0 WHEREAS, economic models developed for the stadium take into account any substitution of visitors, as the focus of the facility must be on meeting the needs of UNLV and increasing the number of special events and/or visitors to Las Vegas and Southern Nevada as a whole, as well as retaining any financially beneficial events that may otherwise leave; and
- 4.0 WHEREAS, a new stadium located on the UNLV campus, or as an extension of the UNLV campus, and located in proximity to The Strip capitalizes on the Las Vegas brand and uniqueness of the market; and
- 5.0 WHEREAS, a new stadium will complement the portfolio of existing venues, including privately funded venues, in the Las Vegas area; and
- 6.0 WHEREAS, a new stadium shall be utilized as a neutral site venue to retain and attract special events much the same way the T&M has attracted new business such as the NBA Summer League, USA Basketball, the PBR World Finals and the National Finals Rodeo; and
- 7.0 WHEREAS, a new stadium will provide employment and generate a significant economic benefit for Clark County and the state.
- 8.0 **NOW, THEREFORE, BE IT RESOLVED**, that for a new stadium to be feasible it must bring together the university and community as a whole in the form of a public-private partnership that most effectively serves the needs of all stakeholders.

Resolution D

- 1.0 WHEREAS, the CIAB has the authority to develop recommendations for a large events center (stadium) including without limitation, the type and general design of the center and the approximate number of seats to be included in the center; and
- 2.0 WHEREAS, the CIAB also has authority to calculate a preliminary cost for construction of such a stadium and other required land and infrastructure (including, without limitation, parking and traffic mitigation) and supporting improvements to the extent money is available for this purpose; and
- 3.0 WHEREAS, the CIAB has considered all types of facilities ranging from basic open air stadiums to elaborate, fully enclosed stadiums and stadiums with retractable roofs; and
- 4.0 WHEREAS, members of the CIAB analyzed stadiums that host college and professional football teams and other special events, and
- 5.0 WHEREAS, select members of the CIAB toured recently constructed facilities in Texas to get firsthand experience of the various designs and accompanying features associated with state-of-the art modern stadiums; and
- 6.0 WHEREAS, the CIAB ultimately focused its efforts on a more narrow range of options from a state-of-the-art collegiate stadium, to a larger and more extensive open-air model to a domed or enclosed stadium (even giving some consideration to an open air structure to accommodate a dome at a later date); and
- 7.0 WHEREAS, to meet the current and aspirational needs at UNLV and the needs of the community to host large events at a neutral site, at a minimum, the facility should be a state-of-the-art open air collegiate stadium on campus or an extension of campus and have approximately 45,000 seats, and include a shading system that enhances the fan experience in summer months; and
- 8.0 WHEREAS, the CIAB was provided analysis as to the approximate cost of such a facility and related infrastructure of \$523 million, of which the all-in cost of the stadium is \$423 million and \$100 million is related to the site and infrastructure costs; and
- 9.0 WHEREAS, some members expressed a desire for an enclosed/domed facility; and
- 10.0 WHEREAS, the CIAB was provided analysis of a larger, more extensive open air state-of-the-art collegiate stadium along with a domed or enclosed stadium but both models were deemed to not be feasible at this time.
- 11.0 **NOW, THEREFORE, BE IT RESOLVED**, based on existing conditions that the stadium could be a state-of-the-art, open air collegiate stadium which includes a shading system and has approximately 45,000 seats.

Resolution E

- 1.0 WHEREAS, the CIAB analyzed financing alternatives for a large events center (stadium) and other required infrastructure and supporting improvements; and
- 2.0 WHEREAS, that a state-of-the-art collegiate stadium can be financially viable with a model that includes public financing; and
- 3.0 WHEREAS, private funding, including philanthropy, will be required for the stadium to be financially viable and integrated into the UNLV campus masterplan; and
- 4.0 WHEREAS, UNLV has several significant initiatives and needs as part of its vision to become a Tier One - Carnegie Research Very High - university; and
- 5.0 WHEREAS, the proposed stadium is among those significant initiatives, along with a proposed public medical school, a new academic building for its Hotel College, and other needs being defined under its “Path to Tier One” planning process; and
- 6.0 WHEREAS, the CIAB members clearly recognize that there are many other public needs in Las Vegas and the broader Southern Nevada community; and
- 7.0 WHEREAS, both UNLV’s and the community’s initiatives and needs will require public and private funding and non-financial resources to properly address them; and
- 8.0 WHEREAS, the region’s economy continues to improve from the “great recession,” but it remains challenged; and
- 9.0 WHEREAS, public revenue streams have not fully recovered and there is uncertainty regarding the local and state tax structure; and
- 10.0 WHEREAS, multiple proposals for new sports facilities, with consideration of public funding, add uncertainty to the dialogue concerning these facilities.
- 11.0 **NOW, THEREFORE, BE IT RESOLVED**, that development and funding of a new stadium is not feasible at this time.

Resolution F

- 1.0 WHEREAS, AB 335 restricts the CIAB to study the need for, feasibility of and financing alternatives for a large events center (stadium) within the Authority area with the boundaries defined as Maryland Parkway, Tropicana Avenue, Swenson street and Flamingo Avenue; and
- 2.0 WHEREAS, UNLV officials have determined the original site on the northeast corner of Harmon Avenue and Swenson Avenue is not feasible due to flight operational issues associated with the Federal Aviation Administration and McCarran International Airport; and
- 3.0 WHEREAS, UNLV officials have identified alternative sites with one location on campus and an additional location near the university that could be an extension of the campus; and
- 4.0 WHEREAS, AB 335 provides the CIAB to recommend legislative action that may be required further for the development of a stadium.
- 5.0 **NOW, THEREFORE, BE IT RESOLVED**, the CIAB recommends that the Legislature allow consideration of alternative sites that can be considered an extension to the current UNLV campus.

Resolution G

- 1.0 WHEREAS, the CIAB recognizes that pursuant to AB 335 that the operating authority of the Board expires on or before Sept. 30, 2015; and
- 2.0 WHEREAS, the CIAB recognizes that pursuant to AB 335, the Legislature limited the scope of the CIAB; and
- 3.0 WHEREAS, the CIAB recognizes the need to continue the CIAB with a longer timeline and broader scope to continue work on a new stadium if authorized by the relevant public entities; and
- 4.0 WHEREAS, the work performed by the CIAB provides a strong foundation for consideration of a stadium to be pursued at a later date.
- 5.0 **NOW, THEREFORE, BE IT RESOLVED**, that the CIAB requests the Legislature to enact legislation to continue the CIAB through the 2017 Legislative Session by extending the authorization of the CIAB from the current September 30, 2015 to September 30, 2017; and
- 6.0 **FURTHER RESOLVED**, that the CIAB requests the Legislature to include in the legislation the appointment/re-appointment of members, a mandate for the CIAB's continued work, and a timeline for that work to be completed.



1

INTRODUCTION



INTRODUCTION

Since the opening of the El Rancho Vegas in 1941, the City of Las Vegas established itself as one of the premier entertainment destinations in the world, serving as the home of some of the most legendary entertainers and performers of all-time, including Frank Sinatra, Dean Martin, Liberace, Siegfried & Roy, Wayne Newton, and David Copperfield. Each year, approximately 40 million visitors come to Las Vegas to experience its world-class resorts, gaming, restaurants, shows and attractions.

As Las Vegas has continued to evolve as a major world entertainment and tourist destination, many of the City's resorts and casinos have begun to develop new and innovative ways of attracting visitors to their properties by building state-of-the-art, on-site entertainment venues capable of hosting a variety of concerts, shows and sporting events.

40M
visitors per year

Although the City currently offers a number of new state-of-the-art entertainment venues, in addition to the 18,776-seat Thomas & Mack Center and 36,800-seat Sam Boyd Stadium, it lacks a state-of-the-art major sports and entertainment venue capable of accommodating crowds in excess of 40,000. As such, Las Vegas is currently at a disadvantage when compared to other major US markets, such as Dallas/Ft. Worth, Houston, New York, San Francisco, New Orleans, and Phoenix, in its ability to attract major domestic and international sports and entertainment events. Events such as the NCAA Final Four, Republican/Democratic National Convention(s), X Games, and NFL Pro Bowl attract visitors from all over the world who serve as drivers of incremental spending and tax revenue generation to an area. As competition for the entertainment dollars of patrons and corporations increases, it is vital that markets develop new ways of attracting visitors to the area.

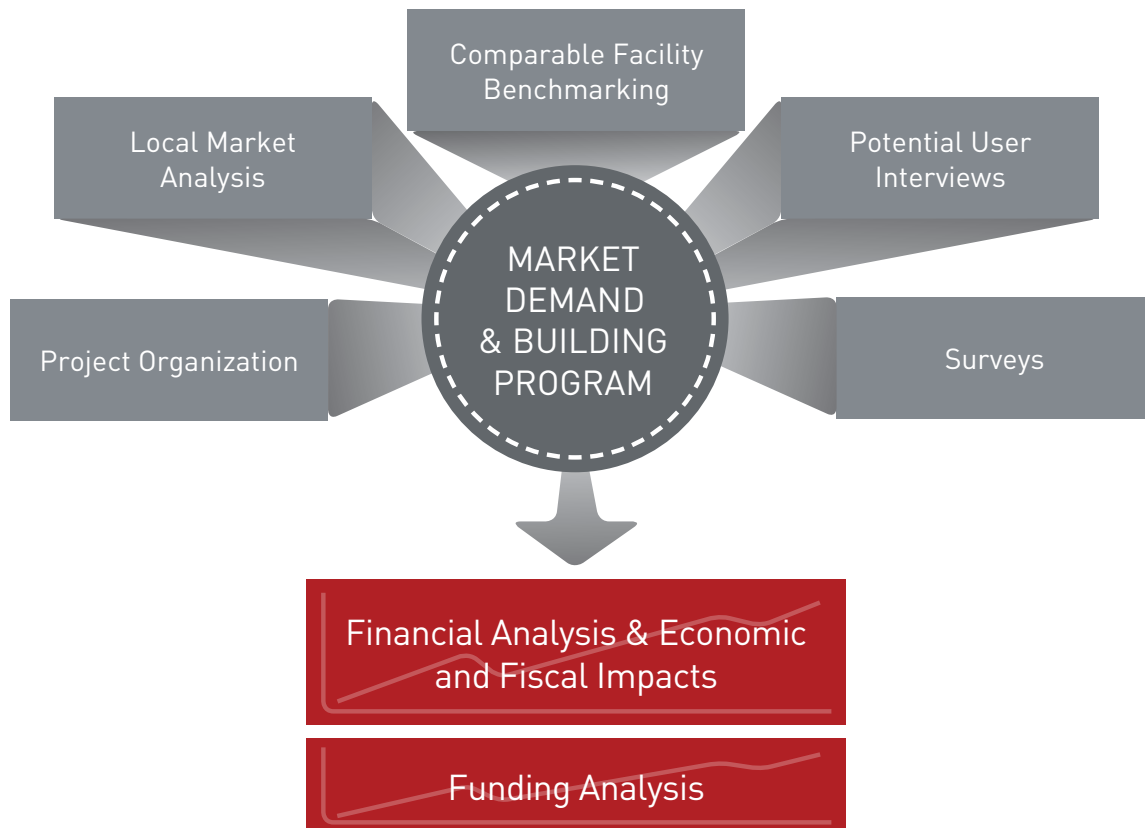
As an outgrowth of this need, the University of Nevada, Las Vegas (“UNLV”) worked with the legislative leadership in the 2013 legislative session to develop and finalize AB335, which called for the creation of a Campus Improvement Authority Board (“CIAB”) to study the need for, feasibility of and financing alternatives for a large events center (“Stadium”) on the UNLV campus. The CIAB, which consists of 11 members representing UNLV/Board of Regents, Clark County, the hotel/resort industry, and other business interests, engaged the project team of Conventions, Sports & Leisure International (“CSL”), RCG Economics (“RCG”), Venue Solutions Group (“VSG”), and Ted Ferris Consulting (“TFC”) in order to address their legislative mandate contained in AB335 and finalize their report to the 78th Session of the Nevada Legislature which commences in 2015.

In order to assess the overall viability of the Stadium project, which is envisioned to attract new/incremental events and tourists to Las Vegas that could provide a significant economic impact on the County, as well as provide significant positive impacts on UNLV and its football program, CSL has developed an approach that will answer a multitude of critical questions related to the development of the proposed Stadium, including but not limited to the following:

- Is the Stadium project feasible?
- How large should the Stadium be?
- What number and types of events can be hosted?
- How many premium seats can be supported?
- How much will the Stadium project cost?
- What infrastructure improvements are necessary?
- How will the Stadium project be financed?
- What alternate funding sources are available?
- How should the Legislature carry out the Stadium project recommendations?



As a means of providing the CIAB with insight and solutions that address these critical issues and others, a study methodology that includes the following components was employed:



The study's findings are presented in the following sections:

1. Introduction
2. Historical Univ Venue Analysis
3. Local & Regional Market Characteristics
4. Competitive Facilities
5. Comparable Facilities Analysis
6. Review Of Previous Economic Impact Study
7. Market Surveys
8. Estimated Utilization
9. Cost Estimate
10. Financial Projections
11. Economic & Fiscal Impact Analysis
12. Funding Analysis

This study is designed to assist the CIAB in addressing their legislative mandate contained in AB335, and finalizing their report to the 78th Session of the Nevada Legislature, which commences in 2015, and should be read in its entirety.



2

HISTORICAL UNLV VENUE ANALYSIS



HISTORICAL UNLV VENUE ANALYSIS

In order to assess the impacts of a new on-campus multi-purpose stadium at UNLV, it is important to evaluate the current operations of the multiple facilities at UNLV. This section provides a review of the historical operations of the current UNLV facilities.

- I. UNLV Venue Overview
 - i. Sam Boyd Stadium
 - ii. Thomas and Mack Center
 - iii. Cox Pavilion
- II. Events and Utilization
- III. Regional Facility Attendance Comparison
- IV. Summary of Historical Operations



SAM BOYD STADIUM

UNLV FOOTBALL, USA SEVENS RUGBY, LAS VEGAS BOWL

YEAR OPENED	1971
LOCATION	LAS VEGAS, NV
SEATING CAPACITY	36,800
TENANTS	UNLV FOOTBALL, USA SEVENS RUGBY, LAS VEGAS BOWL
OWNER	UNLV
OPERATOR	UNLV
PROJECT COST	\$3.5 MILLION

Located approximately seven miles east of the UNLV campus, Sam Boyd Stadium opened in 1971 as a 15,000 seat facility at a cost of \$3.5 million, but has since undergone multiple renovations bringing the stadium to its current capacity of 36,800. The last renovation was completed prior to the beginning of the 1999 season and included an addition of 9,000 seats, a new concourse, upgraded and expanded restrooms, upgraded concession stands and a new playing surface. The stadium includes 16 suites at an average annual cost of approximately \$41,000 and 488 club seats at an average annual cost of approximately \$2,800 per season.

Sam Boyd Stadium serves as the home of the UNLV football program and also hosts the Las Vegas Sevens, the Las Vegas All-American Classic, the AMA Supercross Series Finals, the Monster Jam World Finals, concerts and other events on an annual basis. Event levels at SBS have remained relatively stable in recent years, ranging from 16 to 19 annual events with an average of 18 events per year. Approximately one-third of this utilization has consisted of UNLV football games, with the remainder including a variety of concerts, festivals, high school sports events, motorsports events and other events. Total attendance at SBS has averaged approximately 212,000 per year. In 2013, Sam Boyd Stadium held 23 events with a total attendance of approximately 250,000.



THOMAS AND MACK CENTER

UNLV BASKETBALL, NATIONAL FINALS RODEO

YEAR OPENED	1983
LOCATION	LAS VEGAS, NV
SEATING CAPACITY	18,776
TENANTS	UNLV BASKETBALL, NATIONAL FINALS RODEO
OWNER	UNLV
OPERATOR	UNLV
PROJECT COST	\$30 MILLION

Opened in 1983, Thomas and Mack Center is located on the campus of UNLV, and serves as the home of the athletic department and the National Finals Rodeo. The facility has a capacity of 18,776 for basketball and up to 19,400 for boxing events and center stage concerts, making it the largest indoor sports and entertainment venue in the Las Vegas market. The TMC also has 30 luxury suites that can hold 10 to 20 guests per suite at an average price of \$90,000 per season.

Event levels at the TMC typically range from 90 to 150, with an average of approximately 125 events per year. Average annual attendance in recent years has approximated 640,000. In 2013, the TMC hosted 75 events with a total attendance of 926,758. Factors contributing to the wide fluctuations in event levels include non-recurring family shows and varying levels of meetings, banquets, conventions and other miscellaneous events. UNLV-related events have historically accounted for approximately 27 percent of event activity and 20 percent of total attendance.

Currently, there are plans for a \$47 million renovation to the Thomas and Mack Center that will be funded by state appropriated funds. The renovation will include but not be limited to, restroom upgrades, widening of the concourse, additional escalators outside the stadium, mechanical/electrical work, new arena seating and locker room upgrades.



COX PAVILION

UNLV WOMEN'S BASKETBALL & VOLLEYBALL

YEAR OPENED	2001
LOCATION	LAS VEGAS, NV
SEATING CAPACITY	2,500
TENANTS	UNLV WOMEN'S BASKETBALL & VOLLEYBALL
OWNER	UNLV
OPERATOR	UNLV
PROJECT COST	\$16.8 MILLION

Located adjacent to the Thomas and Mack Center, the 78,300-square-foot Cox Pavilion opened in 2001, has a capacity of approximately 2,500 seats and is owned and operated by UNLV. The Pavilion is capable of hosting a wide variety of events, including basketball, volleyball, boxing, concerts and family shows. The UNLV women's basketball and volleyball programs play the majority of their home schedules at the Pavilion. In 1999, Cox Communications secured the naming rights to the venue as a part of a 10-year, \$5 million agreement.

The Pavilion has hosted an average of 45 events per year, with approximately half of that utilization consisting of UNLV-related events. Non-University event levels have increased steadily over the past three years, due largely to the playing of NBA Summer League games at the facility. Total attendance at Pavilion events has averaged approximately 37,000 per year, of which approximately 31 percent is related to UNLV events. In 2013, the Cox Pavilion hosted 39 events with a total attendance of approximately 70,000.

EVENTS AND ATTENDANCE

The Thomas and Mack Center, Cox Pavilion and Sam Boyd Stadium host a range of sporting events, concerts and other events throughout the calendar year. The following table shows the 2012-2013 events and attendance figures for each of these facilities.

2012-2013 Events and Attendance									
	Thomas and Mack Center			Cox Pavilion			Sam Boyd Stadium		
Event Type	Events	Average Attendance	Total Attendance	Events	Average Attendance	Total Attendance	Events	Average Attendance	Total Attendance
Football	0	0	0	0	0	0	7	10,356	72,493
Basketball	22	15,548	342,065	15	421	6,316	0	0	0
Concerts	2	3,010	6,020	0	0	0	0	0	0
Family shows	16	6,855	109,685	3	1,516	4,547	0	0	0
Other sports	7	16,951	118,658	20	2,862	57,239	11	15,856	174,418
Rodeo Events	15	14,349	215,235	0	0	0	0	0	0
Other UNLV Events	3	11,667	35,000	1	1,095	1,095	0	0	0
Local Events	2	2,018	4,036	0	0	0	0	0	0
Other events	8	12,007	96,059	0	0	0	5	N/A	N/A
Total	75	10,301	926,758	39	1,473	69,197	23	13,106	246,911

Note: Average UNLV attendance figures represent the total turnstile attendance. The NCAA, which reports paid tickets, estimates an average paid attendance of 17,212 in 2013

As shown above, the Thomas and Mack Center hosted 75 events in 2012-2013 with an average attendance of 10,301, while the Cox Pavilion hosted 39 events with an average attendance of 1,473 and Sam Boyd Stadium hosted 23 events with an average attendance of 13,106.

The table below presents events and attendance figures for the Thomas and Mack Center and Sam Boyd Stadium for 2012-2013 by event. Major events hosted at the Thomas and Mack Center in 2012-2013 included UNLV Basketball, National Finals Rodeo, the NCAA Mountain West Basketball Tournament and Professional Bull Riding. In 2012-2013, major events at Sam Boyd Stadium included UNLV Football, USA Sevens Rugby, Monster Jam and Supercross.

13,106
avg event attendance

2012-2013 Events and Attendance

Thomas & Mack Center Events			
Event	Turnstile Attendance	Event	Turnstile Attendance
UNLV Basketball	342,065	UNLV Winter Commencement	12,000
National Finals Rodeo	160,631	Joel Osteen	10,805
MWC Basketball	60,300	WWE Raw	10,729
Professional Bull Riding	54,604	CSN Spring Commencement	7,500
High School Graduations	54,354	Jamfest Cheer Conference	6,000
DOI Dare to Dream	41,932	Harlem Globetrotters	5,134
DOI Treasure Trove	29,765	Hispanic Baccalaureate	5,000
Ringling Brothers Barnum and Baley Circus	25,612	Las Vegas Soul Festival	4,036
UNLV Spring Commencement	21,000	Wiz Khalifa	3,335
NBA Preseason Lakers vs. Kings	16,664	Gymnastics Tour Championships	3,174
Boxing - Chavez vs. Martinez	16,657	Yanni in Concert	2,685
Amway Vision Global	16,000	Mitt Romney Event	2,400
Batman Live	12,376	UNLV Career Day	2,000
Total			926,758

Not Included: KLAS TV 8 Recycling, Tao Group Meeting, Toyota Rav 4 Launch.

Sam Boyd Stadium Events	
Event	Turnstile Attendance
UNLV Football	72,493
USA Sevens Rugby	46,128
Monster Jam	27,152
Supercross	27,050
MAACO LV Bowl	20,466
WCS - Real Madridvs. S. Laguna	18,483
Supercross	15,885
LV Pro Soccer	7,290
NIAA State Football Companioships	4,381
Henderson 5k Color Vibe	4,000
UFL - Las Vegas vs. Virginia	2,434
UFL - Las Vegas vs. Omaha	1,149
Total	246,911

Not Included: Car Control

UNLV FINANCIALS

In addition to understanding the overall annual utilization of current UNLV athletic venues, it is also important to evaluate the overall financial operating performance of these facilities. The table below shows the 2013 financial operations for the Cox Pavilion, the Thomas and Mack Center and Sam Boyd Stadium.

In 2013, The Cox Pavilion generated revenues of approximately \$1.5 million and incurred expenses of approximately \$995,000, resulting in net operating income of approximately \$462,000. The Thomas and Mack Center generated revenues of approximately \$18.2 million and incurred expenses of approximately \$9.1 million, resulting in net operating income of approximately \$9,188,000. Sam Boyd Stadium generated revenues of approximately \$8.3 million and incurred expenses of approximately \$4.1 million, resulting in net operating income of approximately \$4,191,000. Last year, Net Operating Income for the three facilities was approximately \$13.8 million (this included approximately \$10.6 million worth of overhead expenses that were not allocated by venue).

The major operating revenues generated by Sam Boyd Stadium included concessions, rent and reimbursement and corporate sales, while the major expenses that were incurred consisted of cost of concessions, direct event expense and ticketing costs.

UNLV Center Corporation 2013 Combined Financials				
	Cox Pavilion	Thomas and Mack Center	Sam Boyd Stadium	Combined
Operating Revenues				
Rent and Reimbursement	\$603,000	\$3,338,000	\$1,521,000	\$5,462,000
Event Catering	102,000	2,246,000	942,000	3,290,000
Ticket Fees	255,000	2,060,000	1,763,000	4,078,000
Paid Parking	N/A	370,000	115,000	485,000
Concessions	343,000	4,443,000	2,392,000	7,178,000
Corporate Sales	N/A	5,481,000	1,373,000	6,854,000
Novelty	42,000	203,000	103,000	348,000
Interest and Other Income	112,000	112,000	112,000	336,000
Total Operating Revenues	\$1,457,000	\$18,253,000	\$8,321,000	\$28,031,000
Operating Expenses				
Direct Event Expense	\$588,000	\$3,259,000	\$1,042,000	\$4,889,000
Catering Cost of Goods Sold	52,000	1,150,000	482,000	1,684,000
Ticketing	130,000	1,051,000	899,000	2,080,000
Paid Parking	N/A	310,000	96,000	406,000
Concessions	204,000	2,646,000	1,424,000	4,274,000
Corporate Sales	N/A	551,000	138,000	689,000
Novelty	20,000	98,000	49,000	167,000
Total Operating Expenses	\$994,000	\$9,065,000	\$4,130,000	\$14,189,000
Net Operating Income / (Loss)	\$463,000	\$9,188,000	\$4,191,000	\$13,842,000
Other Overhead Expenses not allocated by venue				\$10,578,000
Net Operating Income less Other Overhead				\$3,264,000



REGIONAL FACILITY ATTENDANCE COMPARISON

Along with comparing attendance figures within UNLV facilities, it is also important to compare the statistics to other regional venues.

It is envisioned that the majority of events currently held at Sam Boyd Stadium could transition to a new on-campus multi-purpose stadium. In addition to the wide variety of major events that could potentially be hosted at the proposed stadium, the UNLV football program could serve as the stadium's main tenant.

The table to the right shows the historical reported attendance data from UNLV home football games at Sam Boyd Stadium from 2003 to 2013.

Since 2003, the UNLV football program has reported an average attendance of approximately 21,000 per home football game, ranging from a low of approximately 15,200 in 2012 to a high of approximately 29,300 in 2007. Since 2007, there has been a decrease in average attendance of approximately 41 percent.

UNLV Football Historical Attendance

Year	Number of Games	Total Reported Attendance	Average Attendance
2013	7	120,486	17,212
2012	7	106,456	15,208
2011	5	105,995	21,199
2010	6	123,672	20,612
2009	7	159,423	22,775
2008	7	145,944	20,849
2007	6	175,684	29,281
2006	6	115,442	19,240
2005	5	99,570	19,914
2004	5	109,352	21,870
2003	6	146,191	24,365
Average	6	128,020	21,139



MOUNTAIN WEST Attendance

UNLV is one of the charter members of the Mountain West conference, which formed in 1999. In order to provide a context from which to assess the current football attendance levels at UNLV home games, it is important to consider the attendance data at other Mountain West conference member schools. The table to the right shows the 2013 average reported football attendance for the Mountain West, the stadium capacity and the average attendance to stadium capacity percentage. UNLV ranks 11th among 12 Mountain West schools in

Mountain West Attendance				
Rank	University	Capacity	Average Attendance	Percent to Capacity
1	Boise State	36,387	34,366	94.4%
2	Utah State	25,513	23,263	91.2%
3	Fresno State	41,031	36,917	90.0%
4	San Diego State	39,224	33,224	84.7%
5	Nevada	30,000	24,939	83.1%
6	Air Force	46,692	32,652	69.9%
7	Wyoming	29,181	19,476	66.7%
8	Hawaii	50,000	30,989	62.0%
9	New Mexico	39,224	23,537	60.0%
10	Colorado State	32,500	18,600	57.2%
11	UNLV	36,800	17,212	46.8%
12	San Jose State	70,561	16,362	23.2%
Average		40,028	26,757	71.1%

17,200
2013 avg attendance

average attendance

and is approximately 9,500 below the conference average. In 2013, UNLV's average attendance of approximately 17,200 per game was 47 percent of Sam Boyd Stadium's total capacity of 36,800, ranking second lowest among Mountain West schools and 24 percent below the conference average.

Pac 12 Attendance				
Rank	University	Capacity	Average Attendance	Percent to Capacity
1	Oregon	53,800	57,660	107.2%
2	Stanford	50,424	50,726	100.6%
3	Utah	45,017	45,194	100.4%
4	Washington	70,138	68,769	98.0%
5	Arizona State	66,000	62,689	95.0%
6	Oregon State	45,674	42,964	94.1%
7	Washington State	32,740	29,738	90.8%
8	Arizona	56,037	47,619	85.0%
9	California	62,467	49,329	79.0%
10	USC	93,607	73,126	78.1%
11	UCLA	92,542	70,285	75.9%
12	Colorado	53,613	38,463	71.7%
13	UNLV	36,800	17,212	46.8%
Average		60,172	53,047	89.7%



Attendance

It is also important to compare UNLV to other institutions that are within a similar region.

The NCAA's Pac-12 Conference provides regionally-relevant schools that aid in making this comparison. The table to the left shows how UNLV compares to schools in the Pac-12.

When compared to Pac-12 institutions, UNLV ranks last among Pac-12 schools in average attendance and is approximately 36,000 attendees per game below the conference average. UNLV also ranks last in average attendance as a percent of stadium capacity and is approximately 43 percent below the conference average.



SUMMARY

Overall, the vast majority of event activity at existing UNLV venues derives from a variety of third party events such as concerts, family shows, rodeo and other sporting events among others. In addition, approximately 80 percent of operating revenue came from third party events. The current levels of third party event activity at existing UNLV venues could serve as a positive indicator of the market's ability to host third party events at a new on-campus multi-purpose stadium.

Based on the attendance levels of UNLV football over the past 10 years, as well as the low attendance compared to Mountain West and Pac-12 schools, it is important that the new on-campus multi-purpose has the majority of its attendance come from third party events.



3

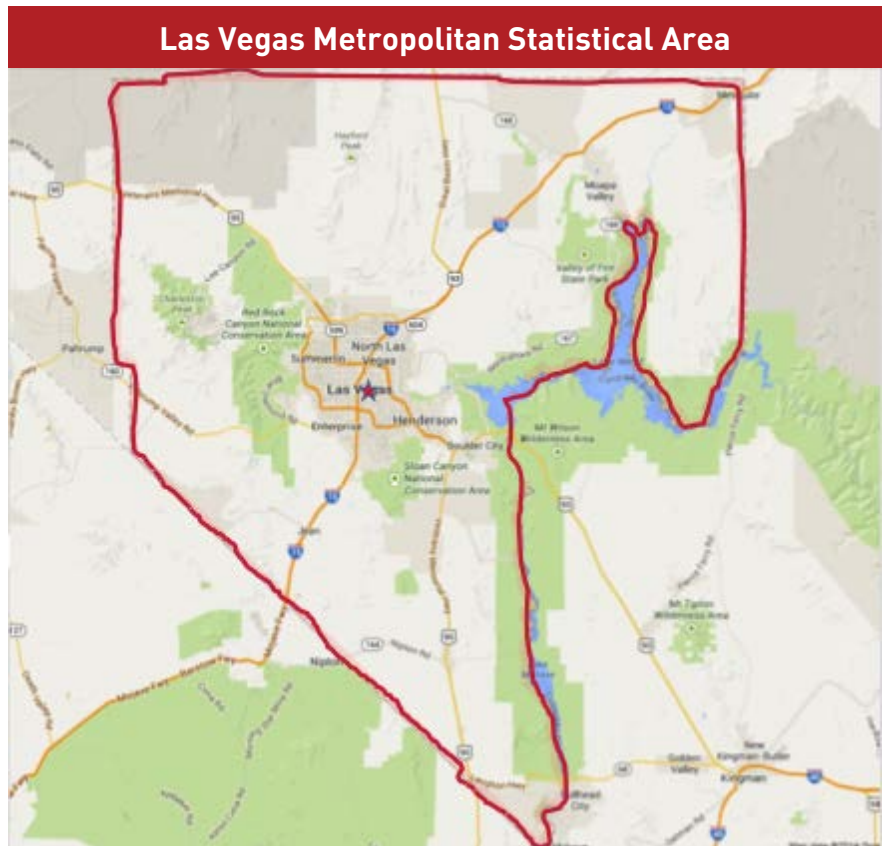
LOCAL & REGIONAL MARKET CHARACTERISTICS

LOCAL & REGIONAL MARKET CHARACTERISTICS

An important component in assessing the potential success of a new stadium at UNLV is the demographic and socioeconomic profile of the local market. The strength of a market in terms of its ability to attract events, attract patrons and generate revenues is measured, to some extent, by the size of the regional market area population, its income characteristics and other demographic and socioeconomic factors. Specific demographic and socioeconomic information that can provide an indication of the ability of a market to support event facilities includes population, median age, age distribution, household income, corporate base, employment, the housing market and cost of living, among others. Event promoters typically consider these factors when selecting the appropriate markets for their events.

The demographic and socioeconomic data presented in this report is based on the Core Based Statistical Area (CBSA). A CBSA is defined by the United States Census Bureau as “a core area containing a substantial population nucleus (of at least 10,000 people), together with adjacent communities having a high degree of economic and social integration with that core.” The Las Vegas CBSA is coextensive with Clark County.

In addition to the CBSA, the analysis presented herein also includes an assessment of the demographic and socioeconomic factors within 150 miles of campus, as it is anticipated that the vast majority of non-visitor attendees will originate from within 150 miles of the proposed stadium.



DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS

Specific demographic and socioeconomic information including population, age distribution, household income and corporate base can provide an indication of a market's ability to support a stadium on the campus of UNLV.

The demographic and socioeconomic data presented in this report is based on the anticipated primary market for a new stadium. The primary market is the geographic area in which it is anticipated that a majority of attendees and corporate partners are expected to originate. The size of the primary market can be influenced by such factors as transportation systems, site accessibility, media coverage and competing entertainment venues in the region. Based on a review of historical attendance and operations, it is anticipated that the primary market would consist of the Las Vegas CBSA.

The following table summarizes key demographic and socioeconomic variables, including population, age, income, and corporate base for the Las Vegas CBSA and the 150-mile area surrounding campus.

Population

The level of population from which to draw will have a direct impact on the potential success of the new stadium. Population represents a key criterion for event promoters and organizations in determining which cities to route their acts. In addition to current year population, past and future population growth has also been assessed.

- The 2013 population for the Las Vegas CBSA is approximately 2.0 million.
- The 2013 population within a 150 mile radius is approximately 2.5 million.



Demographic & Socioeconomic Characteristics Local and Regional Market Areas			
Demographic Variable	Las Vegas CBSA	150 Mile Radius	US
2014 Population	2,034,918	2,526,751	317,199,353
# of Households	742,698	923,582	120,163,305
Median Age	36.4	37.0	37.7
Median Household Income	\$46,704	\$45,461	\$51,579
Percent of HH >\$100k Annual Income	15.9%	14.9%	9.0%
Median Household EBI	\$41,576	\$40,353	\$43,715
Sports Admission Spending per HH	\$151	\$144	\$150
Entertainment Admission Spending per HH	\$56	\$54	\$61
Cost of Living Index	98.8	N/A	100.0
Unemployment Rate	8.6	N/A	6.5
Corporate Inventory (1)	911	2,115	31,865
(1) Includes corporate headquarters with at least 25 employees and \$5 million in sales			

Age

The age characteristics of the local population represent another key demographic variable that is important to the overall operation of a new stadium. In general, the 18 to 54 year old age group is regarded in the spectator events industry as an age group that is most likely to attend sporting events. This age group exhibits higher spending patterns than other age groups, and a young population can also be an indicator of a healthy local economy that retains young professionals.

36.4
median age

- Residents of Las Vegas have a median age of 36.4 years, 1.3 years younger than the US median age of 37.7 years. Approximately 51 percent of the Las Vegas CBSA is between the ages of 18 and 54, which is one percent higher than the US with approximately 50 percent of population being between the ages of 18 and 54.
- The population within 150 miles has a median age of 37.0 years, .7 years younger than the US median age of 37.7 years. Approximately 49 percent of residents 150 miles is between the ages of 18 and 54, which is one percent lower than the US with approximately 50 percent of population being between the ages of 18 and 54.

Income

Household income can be used as a measure of the ability of a market's residents to purchase tickets, concessions, novelties, parking and other such items. Households with annual income above \$150,000 per year can also provide a key indicator of the ability of local residents to purchase seating options such as club seats and loge boxes.

\$46,704
median income

- The Las Vegas CBSA has a median household income of \$46,704, with approximately 6 percent of households with annual income in excess of \$150,000, which is 2.9 percent less than the US with approximately 8.9 percent of households having annual income in excess of \$150,000.
- Households within 150 miles of campus have a median household income of \$45,461, with approximately 5 percent of households with annual income in excess of \$150,000.
- Las Vegas has a median household income of \$46,704 which is approximately 10 percent lower than the US average of \$51,579.



Cost of Living

It should be noted that any discussion of household income should consider the cost of living characteristic of an area. The cost of living indicates how expensive or inexpensive a city is, relative to the nation as a whole.

- The national average is 100 and Las Vegas is 98.8, indicating that cost of living in Las Vegas is slightly lower than the nation as a whole (1.2 percent less).

Effective Buying Income

Household income can also be adjusted to calculate effective buying income, also known as disposable or after-tax income. Effective buying income is defined as personal income less personal tax and certain non-tax payments. Adjusted effective buying income is after tax income divided by the cost of living in a certain area. This socioeconomic variable provides a clearer picture as to the amount of discretionary income the average household has in a given area.

- The Las Vegas CBSA has median effective buying income of \$41,576, approximately five percent lower than the US median effective buying income of \$43,715.
- The Sam Boyd Stadium 150 mile radius has a median effective buying income of \$40,353, approximately eight percent lower than the US median effective buying income of \$43,715.
- The adjusted median effective buying income for the Las Vegas CBSA is \$42,081.
- The adjusted median effective buying income for the Sam Boyd Stadium 150 mile radius is \$40,843.

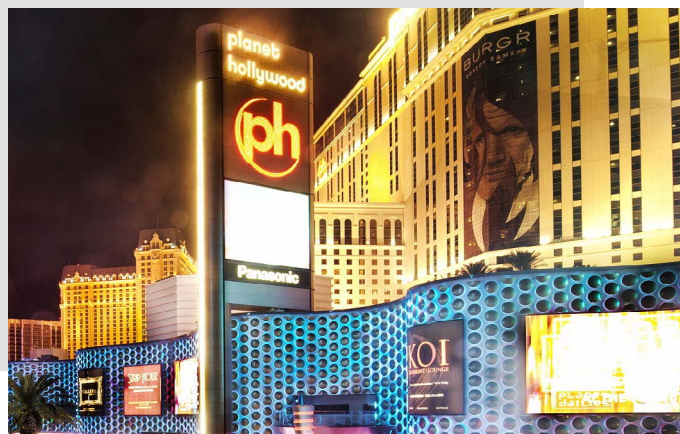
\$41,576
median effective buying income

Corporate Base

The depth and breadth of the local and regional corporate market impacts the new on-campus multi-purpose stadium's operations and programming. Companies purchase tickets, premium seating, advertising, sponsorships, and naming rights at event venues as well as book spaces for meetings, seminars, trade shows, job fairs, team building and other activities. It should be noted that the criteria used to measure a market's corporate base was companies with at least 25 employees and at least \$5 million in annual sales.

- There are 911 companies in the Las Vegas CBSA with at least 25 employees and \$5 million in annual sales out of 75,637 total companies within the Las Vegas CBSA.
- The US has a total of 81,743,326 companies with 191,298 companies having at least 25 employees and \$5 million in annual sales.

75,637
companies in Las Vegas CBSA



COMPARISON TO MOUNTAIN WEST



Below is a chart comparing UNLV and other Mountain West schools in regards to population, corporate base and median household income.

Demographic Comparison Mountain West Conference								
Population in Metro Area			Corporate Base in Metro Area			Median HH Income in Metro Area		
Rank	University	CBSA Population	Rank	University	Corporate Base	Rank	University	Median HH Income
1	San Diego State	3,220,857	1	San Diego State	1,997	1	San Jose State	\$87,582
2	UNLV	2,034,918	2	San Jose State	1,583	2	Hawaii	\$70,816
3	San Jose State	1,932,549	3	UNLV	911	3	San Diego State	\$59,846
4	Hawaii	991,018	4	Hawaii	640	4	Air Force	\$57,755
5	Fresno State	962,271	5	Fresno State	437	5	Colorado State	\$55,333
6	New Mexico	909,344	6	New Mexico	418	6	Nevada	\$49,417
7	Air Force	685,387	7	Boise State	330	7	Wyoming	\$49,061
8	Boise State	652,299	8	Air Force	248	8	Utah State	\$47,321
9	Nevada	439,764	9	Nevada	241	9	UNLV	\$46,704
10	Colorado State	318,125	10	Colorado State	142	10	New Mexico	\$46,203
11	Utah State	130,771	11	Utah State	58	11	Fresno State	\$43,756
12	Wyoming	37,902	12	Wyoming	14	12	Boise State	\$43,357
Average		934,572	Average		555	Average		\$55,495

- UNLV ranks second among Mountain West conference schools in population, and has approximately 1.1 million more people than the Mountain West conference average.
- UNLV ranks third among Mountain West conference schools in corporate base. UNLV has approximately 64 percent more companies than the Mountain West conference average.
- UNLV ranks ninth among Mountain West conference schools in median household income with \$46,704, approximately 19 percent less than the Mountain West conference average.

1.1M
over mountain west avg population





COMPARISON TO PAC 12

It is also important to compare UNLV to other institutions that are within a similar region. The NCAA's Pac-12 Conference provides regionally-relevant schools that aid in making this comparison. The table below compares UNLV to other regional schools that are currently in the Pac-12 Conference.

Demographic Comparison Pac-12 Conference Institutions								
Population in Metro Area			Corporate Base in Metro Area			Median HH Income in Metro Area		
Rank	University	CBSA Population	Rank	University	Corporate Base	Rank	University	Median HH Income
1	UCLA	13,204,080	1	USC	9,672	1	Stanford	\$87,582
2	USC	13,204,080	2	UCLA	9,672	2	California	\$73,821
3	California	4,527,850	3	Arizona State	2,302	3	Colorado	\$69,820
4	Arizona State	4,430,607	4	Washington	2,300	4	Washington	\$66,130
5	Washington	3,606,687	5	Stanford	1,582	5	USC	\$57,580
6	UNLV	2,034,918	6	California	1,218	6	UCLA	\$57,580
7	Stanford	1,932,549	7	UNLV	911	7	Utah	\$56,861
8	Utah	1,143,671	8	Utah	910	8	Arizona State	\$48,884
9	Arizona	999,461	9	Arizona	404	9	UNLV	\$46,704
10	Oregon	357,164	10	Oregon	220	10	Arizona	\$43,922
11	Colorado	311,825	11	Colorado	205	11	Oregon State	\$43,485
12	Oregon State	87,550	12	Oregon State	30	12	Oregon	\$39,480
13	Washington State	48,003	13	Washington State	7	13	Washington State	\$37,607
Average		3,654,461	Average		2,377	Average		\$56,896

- UNLV ranks 12th among Pac-12 schools in population and has approximately 1.7 million less people than the Pac-12 average.
- UNLV ranks seventh among Pac-12 schools in corporate base and has approximately 62 percent less companies than the Pac-12 average.
- UNLV ranks last among Pac-12 schools in median household income with \$46,704, approximately 22 percent less than the Pac-12 average.



COMPARISON TO MARKETS SUPPORTING SIMILAR STADIUM DEVELOPMENT

The following tables show comparisons between the UNLV metropolitan area and metropolitan areas supporting NFL teams who have undergone recent similar stadium developments.

Demographic Comparison NFL Markets								
Population in Metro Area			Corporate Base in Metro Area			Median HH Income in Metro Area		
Rank	University	CBSA Population	Rank	University	Corporate Base	Rank	University	Median HH Income
1	New York Giants/Jets	19,987,109	1	New York Giants/Jets	14,252	1	San Francisco 49ers	\$73,821
2	Dallas Cowboys	6,887,537	2	Dallas Cowboys	4,266	2	New York Giants/Jets	\$64,538
3	Houston Texans	6,352,744	3	Houston Texans	4,250	3	Minnesota Vikings	\$64,304
4	San Francisco 49ers	4,527,850	4	San Francisco 49ers	3,201	4	Dallas Cowboys	\$56,739
5	Arizona Cardinals	4,430,607	5	Detroit Lions	3,198	5	Houston Texans	\$56,545
6	Detroit Lions	4,291,337	6	Minnesota Vikings	3,063	6	Indianapolis Colts	\$49,877
7	Minnesota Vikings	3,459,074	7	Arizona Cardinals	2,288	7	Arizona Cardinals	\$48,848
8	UNLV	2,034,918	8	Indianapolis Colts	1,322	8	Detroit Lions	\$48,514
9	Indianapolis Colts	1,955,766	9	UNLV	911	9	UNLV	\$46,704
10	New Orleans Saints	1,248,999	10	New Orleans Saints	719	10	New Orleans Saints	\$44,615
Average		5,904,558	Average		4,062	Average		\$56,422

- UNLV ranks eighth among these NFL markets in population and has approximately 1.9 million less people than the average.
- UNLV ranks ninth among these NFL markets in corporate base and has approximately 55 percent less companies than the average.
- UNLV ranks ninth among these NFL markets in median household income with \$46,704, approximately three percent less than the average.

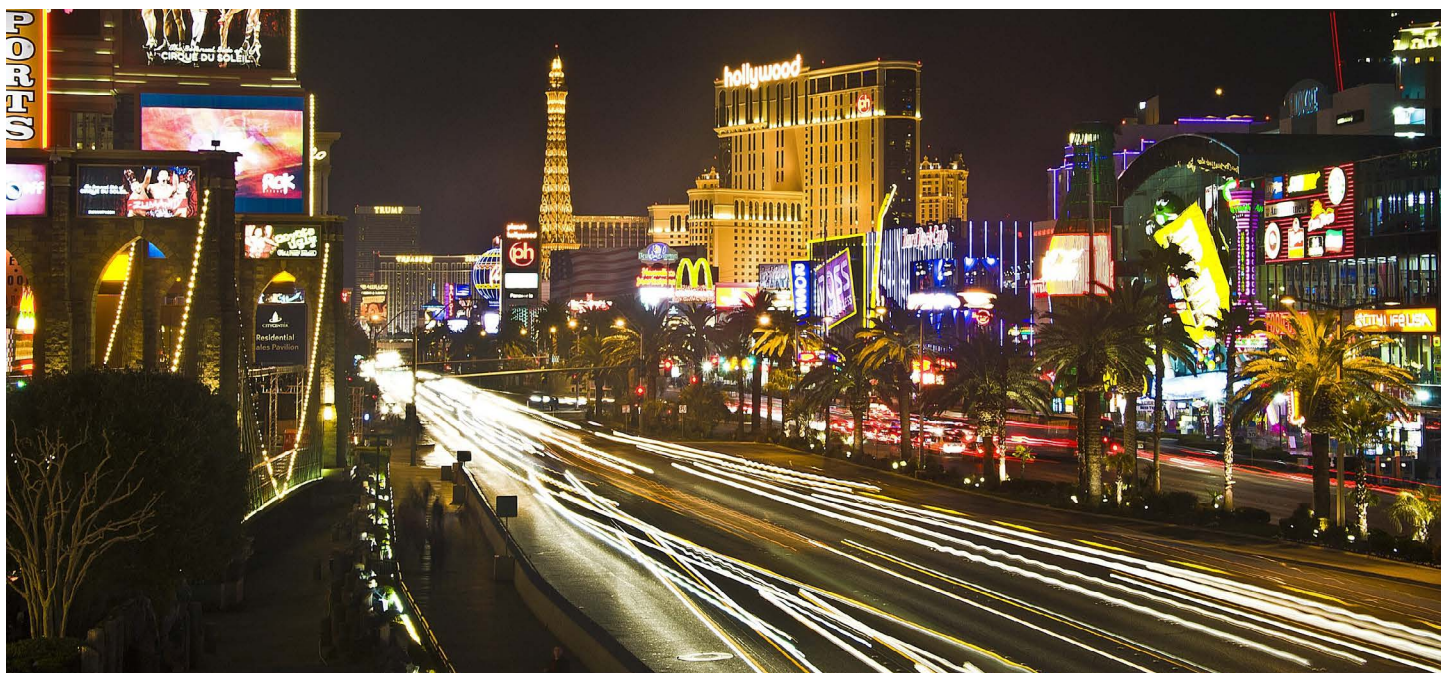


In addition to comparing to NFL markets who underwent recent stadium developments, it is important to compare UNLV to other collegiate venues who have gone through similar improvements. The tables below show comparisons between the UNLV metropolitan area and metropolitan areas supporting NCAA programs who have undergone recent stadium developments.

Demographic Comparison NCAA Markets

Population in Metro Area			Corporate Base in Metro Area			Median HH Income in Metro Area		
Rank	University	CBSA Population	Rank	University	Corporate Base	Rank	University	Median HH Income
1	North Texas	6,887,537	1	North Texas	4,266	1	Minnesota	\$64,304
2	Florida Atlantic	5,860,668	2	Florida Atlantic	3,494	2	North Texas	\$56,739
3	Minnesota	3,459,074	3	Minnesota	3,051	3	UNLV	\$46,704
4	Central Florida	2,277,414	4	Akron	1,699	4	Akron	\$46,431
5	Akron	2,054,146	5	Central Florida	1,205	5	Central Florida	\$45,240
6	UNLV	2,034,918	6	UNLV	911	6	Florida Atlantic	\$44,967
7	Baylor	257,847	7	Baylor	298	7	Baylor	\$42,541
8	Texas A&M	238,590	8	Texas A&M	197	8	Texas A&M	\$36,476
Average		3,005,039	Average		2,030	Average		\$48,100

- UNLV ranks sixth among these NCAA markets in population and has approximately 300,000 less people than the average.
- UNLV ranks sixth among these NCAA markets in corporate base and has approximately 78 percent less companies than the average.
- UNLV ranks third among these NCAA markets in median household income with \$46,704, approximately 17 percent less than the average.



LAS VEGAS ECONOMIC OUTLOOK

The Las Vegas economy continues to heal but with only pockets of strength. Retailers have hired more aggressively over the past six months and industry employment is above its previous peak. Las Vegas' unemployment rate, currently at 9.5 percent, has declined the last three years and is expected to continue to drop to an estimated seven percent by 2017. Transportation, warehousing and business and professional services are contributing positively to the job market as well. Tourism continues to struggle as visitations were unchanged between 2012 and 2013. This is most prevalent in casinos on both the Las Vegas Strip and downtown who posted net losses in 2013.

The lack of a manufacturing presence, depressed house prices, and slow wage trends mean that faster economic growth hinges on more tourists and in-migration. Las Vegas will have to rely on its strength as a desirable tourist location, low cost of living and place to reside. Population growth is anticipated to noticeably rise and drive private service demand. A summation chart of key economic indicators for the Lexington markets is show below:

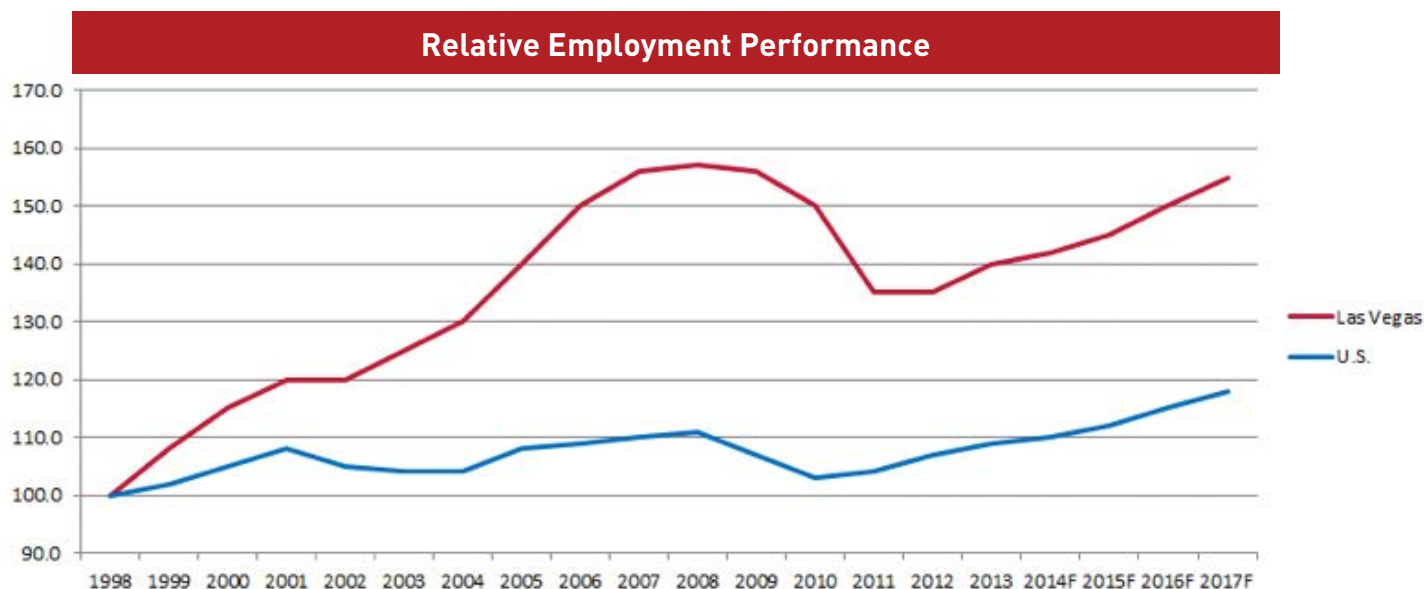
9.5%
unemployment rate

Key Economic Indicators	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Gross Metro Product (C\$B)	85.0	88.8	86.0	78.6	77.8	78.9	80.3	82.5	85.4	89.1	92.6	95.5
% Change	4.9	4.6	-3.2	-8.5	-1.1	1.5	1.8	2.7	3.4	4.4	3.9	3.1
Total Employment (000)	917.3	927.7	912.3	826.7	803.7	808.3	823.5	840.0	853.1	876.6	903.7	927.5
% Change	5.3	1.1	-1.7	-9.4	-2.8	0.6	1.9	2.0	1.6	2.8	3.1	2.6
Unemployment Rate	4.2	4.7	7.0	11.9	14.2	13.5	11.2	9.5	8.4	7.8	7.4	7.0
Personal Income Growth	7.8	5.7	-0.4	-6.7	-0.1	2.2	3.9	2.9	6.1	6.9	6.7	5.6
Population (000)	1803.8	1867.8	1912.3	1939.4	1953.4	1967.9	2008.8	2034.6	2089.0	2155.8	2224.0	2292.8
Single-Family Permits	21,590	13,310	5,840	3,777	4,623	3,817	6,108	7,745	16,914	26,347	26,900	24,190
Multifamily Permits	12,138	10,779	6,697	1,911	851	1,330	1,267	1,472	1,380	2,608	2,914	3,030
Existing-Home Price (\$ ths)	317.1	296.6	219.1	143.8	137.9	124.8	134.3	172.0	181.7	184.5	185.0	190.0
Mortgage Originations (\$ mil)	37,711	24,002	12,294	10,140	7,342	6,003	9,417	6,069	5,217	5,938	5,480	5,356
Net Migration (000)	59.5	45.8	26.9	10.5	-1.3	0.7	19.4	19.4	39.3	50.9	51.9	53.1
Personal Bankruptcies	4,296	8,751	15,401	23,897	23,737	19,431	14,106	11,038	10,507	10,608	11,897	13,471



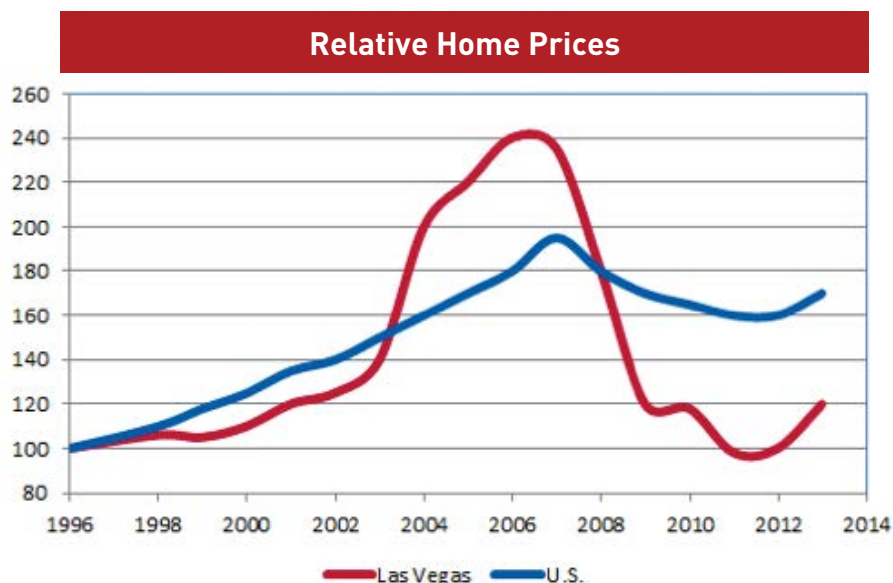
EMPLOYMENT OUTLOOK

Las Vegas employment is steadily increasing year over year. Currently, the unemployment rate is at 9.5 percent and is expected to continue its decreasing trend over the next few years. Las Vegas' relative employment performance is trending almost 40 points higher than the U.S., as shown in the table below.



HOUSING MARKET

After a steady decline following a peak in 2007, the Las Vegas house prices are trending back up. Prices are still at the 2003 levels, signaling that many homeowners are under water on their mortgages. However, the average home price is approximately \$50,000 less than the U.S. average.



TOP INDUSTRIES / EMPLOYERS

In 2013, approximately 40 million people visited Las Vegas and this figure is expected to remain constant in 2014. The accommodations employment industry, mainly at casino hotels, is crucial to Las Vegas, since it employs one in five workers. The table below presents the leading industries in Las Vegas by number of employees.

39.7M
2013 approx. visitors

Top Employers	
MGM Resorts International	52,506
Caesars Entertainment Corp.	24,000
Station Casinos Inc.	13,000
Nellis Air Force Base	12,384
Wynn Las Vegas LLC	11,720
Boyd Gaming Corp.	9,100
Las Vegas Sands Corp.	8,630
Wal-Mart Stores Inc.	6,475
The Valley Health System	5,267
Cosmopolitan of Las Vegas	4,373
SuperValu Inc.	4,024
University Medical Center of S. Nevada	3,800
St. Rose Dominican Hospitals	3,367
Sears Holdings Corp.	2,872
University of Nevada-Las Vegas	2,798
Sunrise Hospital and Medical Center	2,761
Target Corp.	2,683
southwest Airlines Co.	2,620
United Healthcare	2,515
Las Vegas Hotel & Casino	2,450

Sources: Guide to Military Installations, 2011, Las Vegas Business Press,
Book of Lists 2012, Vegas Inc., March 2012

Leading Industries	
NAICS INDUSTRY	EMPLOYEES (000)
7211 Traveler accommodation	164.8
GVSL State & Local Government	81.2
7225 Restaurants and other eating places	68.8
5617 Services to buildings and dwellings	15.6
5511 Management of companies and enterprises	15.4
ML Military Personnel	15.0
6221 General medical and surgical hospitals	14.0
4481 Clothing stores	13.7
4451 Grocery stores	13.5
5613 Employment services	12.6
GVF Federal Government	12.3
6211 Offices of physicians	12.0
2382 Building equipment contractors	10.9
4853 Taxi and limousine service	10.5
4521 Department stores	9.8
High-tech employment	17.9
As % of total employment	2.1

Sources: BLS, Moody's Analytics, 2012

As illustrated in the table above, the top employers in the Las Vegas market. As expected, the top employers are from the casino industry, including MGM Resorts International (53,000), Caesars Entertainment Group (24,000), Station Casinos Inc. (13,000), Wynn Las Vegas LLC (11,720), Boyd Gaming Corp (9,100), Las Vegas Sands Corp (8,630), Cosmopolitan of Las Vegas (4,373) and Las Vegas Hotel & Casino (2,450). Other major employment industries in the Las Vegas area include restaurants, retailers and hospitals.



COMPARISON OF TOP INDUSTRIES IN OTHER MARKETS

The table below shows a comparison of the Las Vegas market industries with other major market areas around the country. Data was provided by the Bureau of Labor Statistics (BLS) and is shown as a percentage of the market's population that currently is employed in that specific industry.

Industry Jobs											
Major Market Area	Population	Mining Logging and Construction	Manufacturing	Trade Transportation and Utilities	Information	Financial Activities	Professional and Business Services	Education and Health Services	Leisure and Hospitality	Other Services	Government
Atlanta	5,574,225	1.8%	2.7%	9.8%	1.5%	2.8%	7.9%	5.4%	4.4%	1.7%	5.7%
Boston	4,694,099	2.1%	4.1%	8.8%	1.7%	3.7%	9.3%	11.5%	5.2%	2.1%	6.6%
Chicago	9,557,430	1.6%	4.3%	9.4%	0.9%	3.0%	8.2%	7.1%	4.5%	2.0%	5.8%
Detroit	4,291,337	1.4%	5.3%	8.1%	0.6%	2.3%	8.4%	7.0%	4.1%	1.7%	4.6%
Dallas/Forth Worth	6,887,537	2.7%	3.8%	9.4%	1.1%	3.7%	7.4%	5.7%	4.6%	1.6%	5.7%
Houston	6,352,744	4.7%	4.0%	9.0%	0.5%	2.2%	6.7%	5.4%	4.2%	1.5%	6.0%
Las Vegas	2,034,918	1.8%	1.0%	8.3%	0.4%	22.2%	5.5%	3.9%	13.1%	1.2%	4.9%
Los Angeles	13,204,080	1.6%	3.9%	7.7%	1.7%	2.5%	6.5%	5.6%	4.8%	1.4%	5.3%
Miami	5,860,668	1.5%	1.3%	9.5%	0.8%	2.9%	6.1%	5.9%	4.8%	1.8%	5.1%
New York	19,985,109	1.6%	1.8%	8.1%	1.4%	3.7%	6.9%	8.4%	3.9%	1.9%	6.2%
Philadelphia	6,049,157	1.7%	3.0%	8.4%	0.8%	3.4%	7.3%	9.9%	4.0%	2.0%	5.5%
San Francisco	4,527,850	2.1%	2.6%	7.5%	1.5%	2.8%	9.1%	5.7%	5.3%	1.7%	6.6%
Washington DC	5,978,220	2.4%	0.8%	6.6%	1.3%	2.6%	11.8%	6.5%	4.9%	3.1%	11.6%
Average	7,746,871	2.1%	3.1%	8.5%	1.2%	3.0%	8.0%	7.0%	4.6%	1.9%	6.2%

Source: Bureau of Labor Statistics 2014

As to be expected, Las Vegas ranks first in the Leisure and Hospitality industry with approximately 13 percent of its employment falling under that category. Las Vegas also ranks first in the Financial Activities sector with approximately 22 percent of the population in that industry. According to the BLS, the Financial Activities industry includes financial transactions and insurance, real estate and rental and leasing sectors.

VISITOR INFRASTRUCTURE

The area's visitor-related infrastructure including overnight accommodations, attractions, retail/shopping, restaurants and other community amenities are important factors impacting the ability of a new on-campus multi-purpose stadium to attract and successfully accommodate events that draw out-of-town visitors.

TRANSPORTATION ACCESS

Transportation access is vital to the success of the on-campus multi-purpose stadium. Ease of access is not only important from the perspective of the on-campus multi-purpose stadium's marketability to external organizations seeking public assembly venues in which to hold their events, but also in the ability of the on-campus multi-purpose stadium to attract attendees and participants on a local and regional basis.

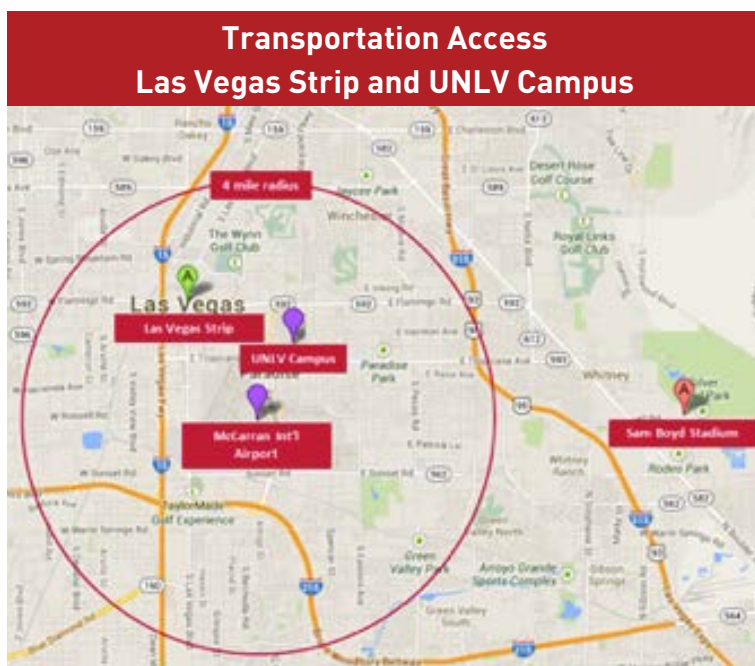


McCarran International Airport is the principal commercial airport serving Las Vegas and Clark County, Nevada. It covers 2,800 acres and has four runways. It ranks as the 24th busiest airport in the world, 9th busiest in the U.S., with approximately 42 million passengers passing through the terminals each year. There are 37 airlines that fly in and out of McCarran International Airport on an annual basis.

The airport is served by number taxicab firms, and RTC Transit, the public bus service of the Las Vegas valley. There is also a rental car facility three miles which is accessed by taxicab, or complimentary bus transportation provided by the airport.

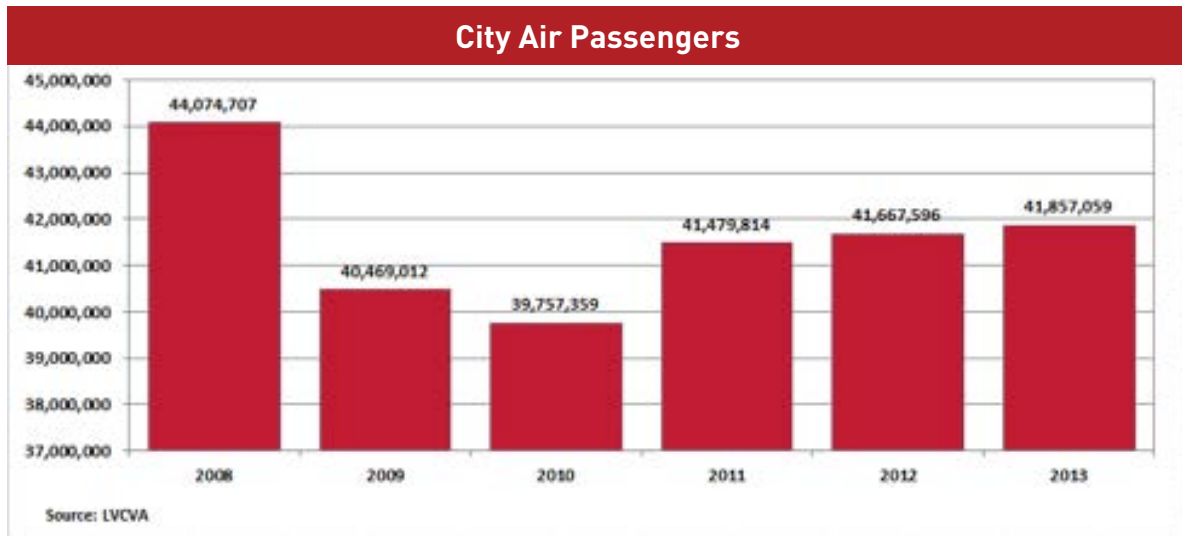
In July 2012, McCarran International Airport opened Terminal 3, a \$2.4 billion terminal to help alleviate foot traffic amongst the other two terminals. The terminal has self-serve check-in kiosks, streamlined security, eight miles of automated baggage-handling and more than 900 video LCD flight, baggage and gate information displays. It also added 14 more gates and an eight-story parking garage.

Overall, the air access into Las Vegas provides visitors with easy and efficient methods of getting to and from their destinations and attractions.



CITY AIR PASSENGERS

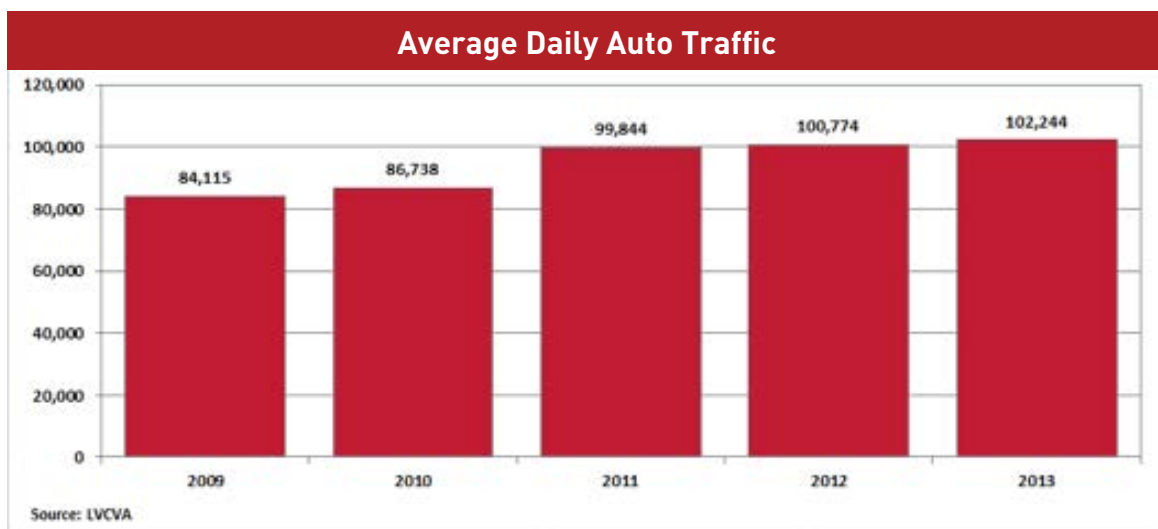
The number of enplaned/deplaned passengers for Las Vegas has risen 3.4 percent since 2009, totaling approximately 42 million passengers in 2013.



AVERAGE DAILY AUTO TRAFFIC

In addition to air traffic, ground transportation is also an important factor in commuting in and out of Las Vegas. Average Daily Auto Traffic is the average volume of vehicle traffic of a highway or road for a year, and is a measurement of how busy the roads are. The average daily auto traffic for Las Vegas has risen 21.6 percent since 2009, and was approximately 102,000 for 2013.

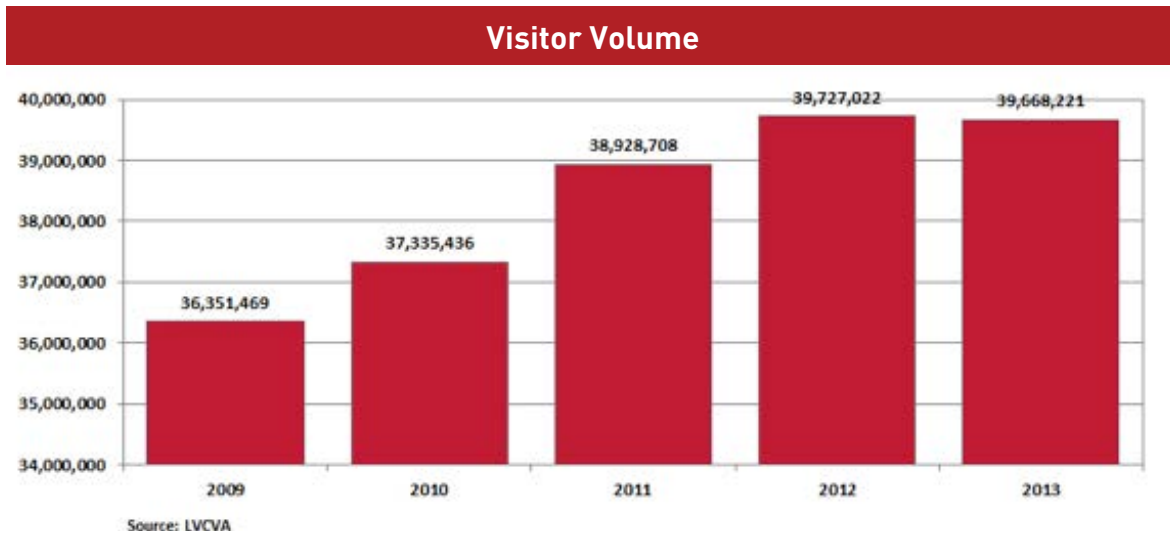
102,000
avg daily auto traffic



VISITOR VOLUME

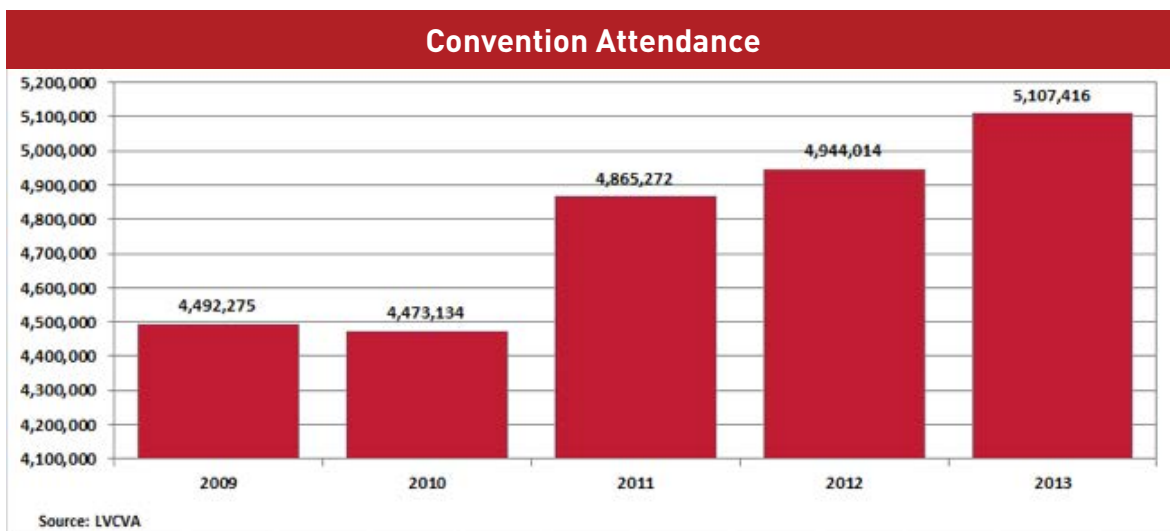
Visitor volume has risen 9.1 percent since 2009, with a total number of visitors of approximately 39.7 million in 2013. With an unparalleled gaming and entertainment infrastructure, Las Vegas has continued to attract a high number of visitors since the 2009 recession. Since 2009, the number of annual visitors has risen by approximately nine percent.

39.7M
2013 approx. visitors



CONVENTION ATTENDANCE

Conventions are important drivers of economic impact, and Las Vegas is one of the top convention destinations in the US. Attendance at conventions has risen 13.7 percent since 2009, with a total of number of convention attendees of 5,107,416 in 2013.



HOTEL INFRASTRUCTURE

One of the main attractions in Las Vegas are its hotels and resorts. As of December 2013, the total number of rooms in Las Vegas is 150,593 rooms. The table to the right shows the hotels with the largest amount of rooms.

Total hotel occupancy represents the total number of rooms sold divided by the total number of rooms available. Since 2009, Las Vegas hotel/motel occupancy has risen 3.4 percent, with an occupancy rate of 84.3 percent in 2013. It should be noted that occupancy rates fluctuate from month to month with some months experiencing higher occupancy rates than others. It is estimated that a portion of events hosted at a new stadium would take place during the traditionally slower summer months when occupancy rates are lowest.

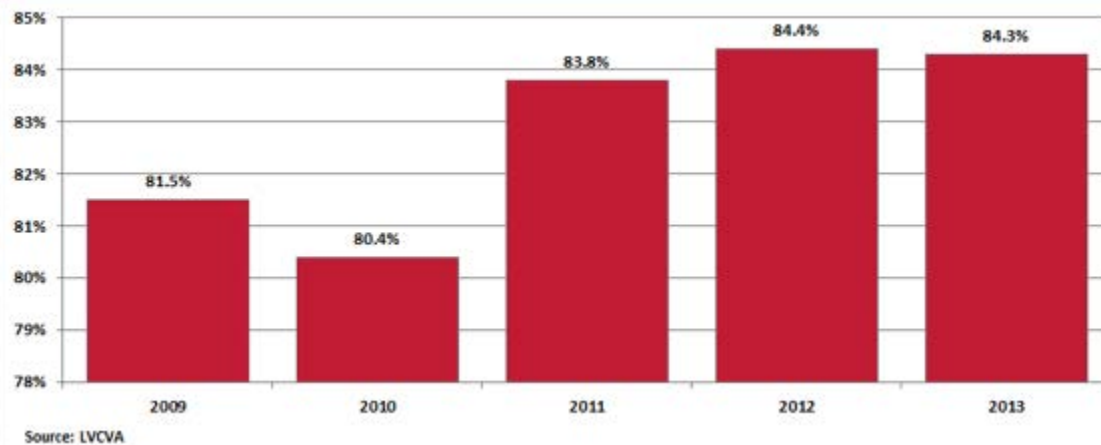
Las Vegas Hotel Information

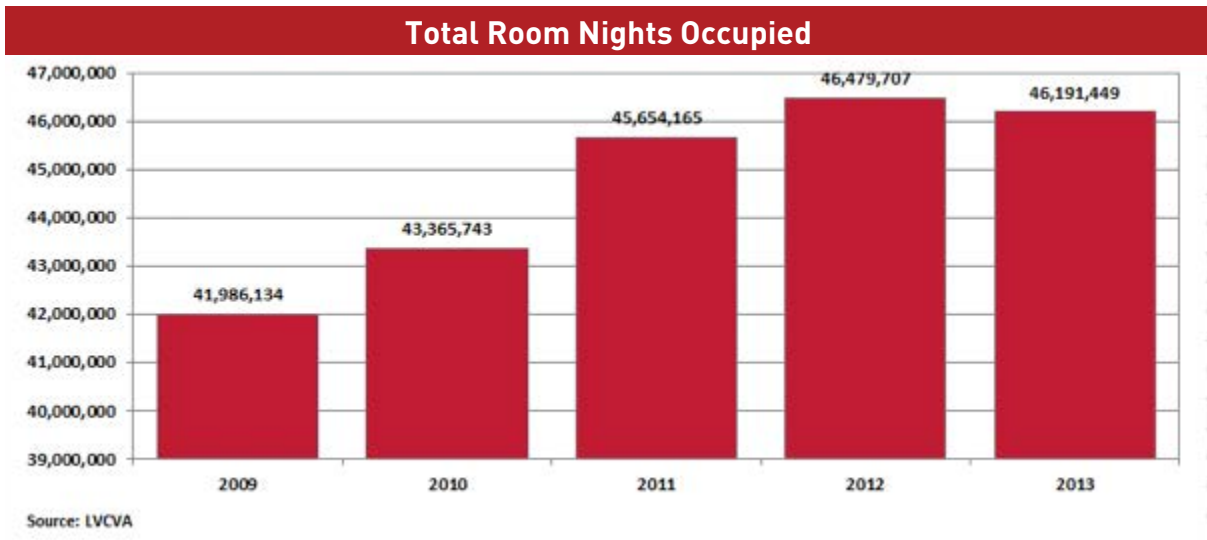
Rank	Hotel	Rooms
1	MGM Grand	6,852
2	Luxor	4,407
3	The Venetian	4,049
4	Excalibur	4,032
5	Aria	4,004
6	Bellagio	3,950
7	Circus Circus	3,770
8	Mandalay Bay	3,700
9	Flamingo	3,642
10	Caesars Palace	3,348

84.3%
hotel/motel occupancy rate

Another way to evaluate hotel occupancy rates is by room nights occupied which is represented as one hotel room being occupied for one night. Las Vegas total room nights occupied has risen 10 percent since 2009, with a total number of 46,191,449 room nights occupied in 2013. This further shows the turnaround from the 2009 recession, and continues to present evidence that visitor volume is increasing.

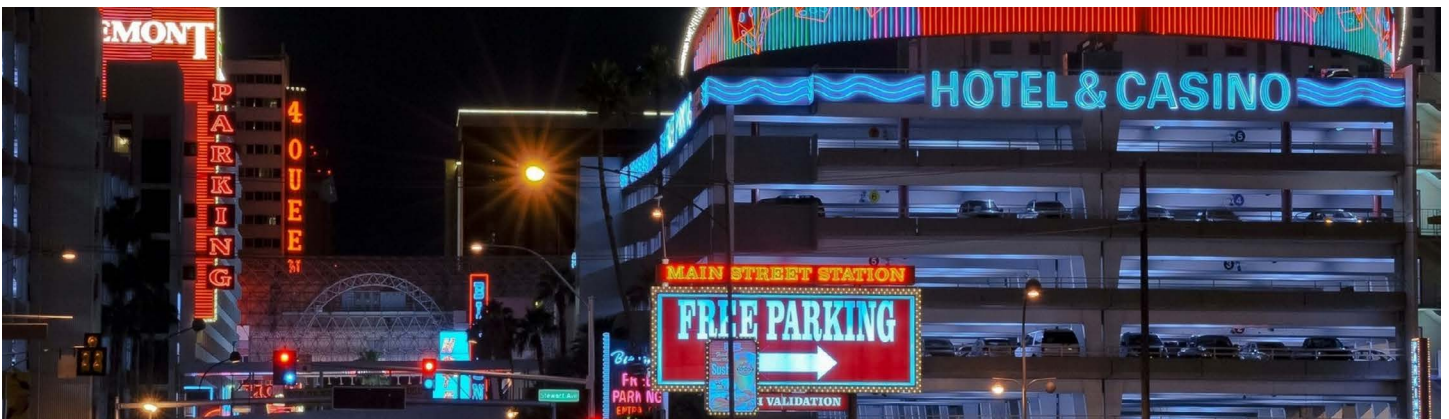
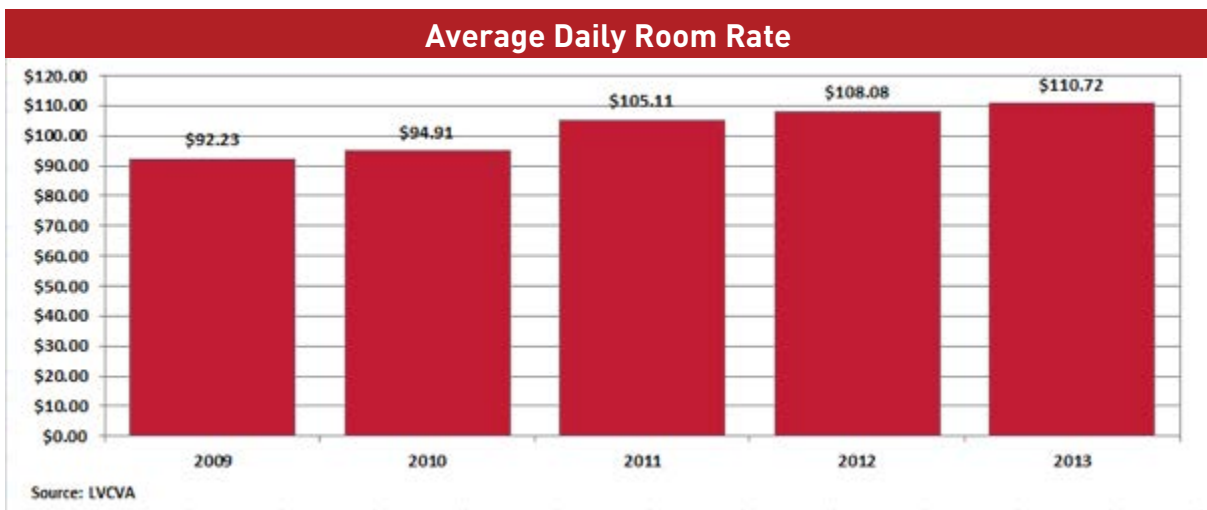
Percentage of Total Hotel Occupancy





\$110.72
avg daily room rate

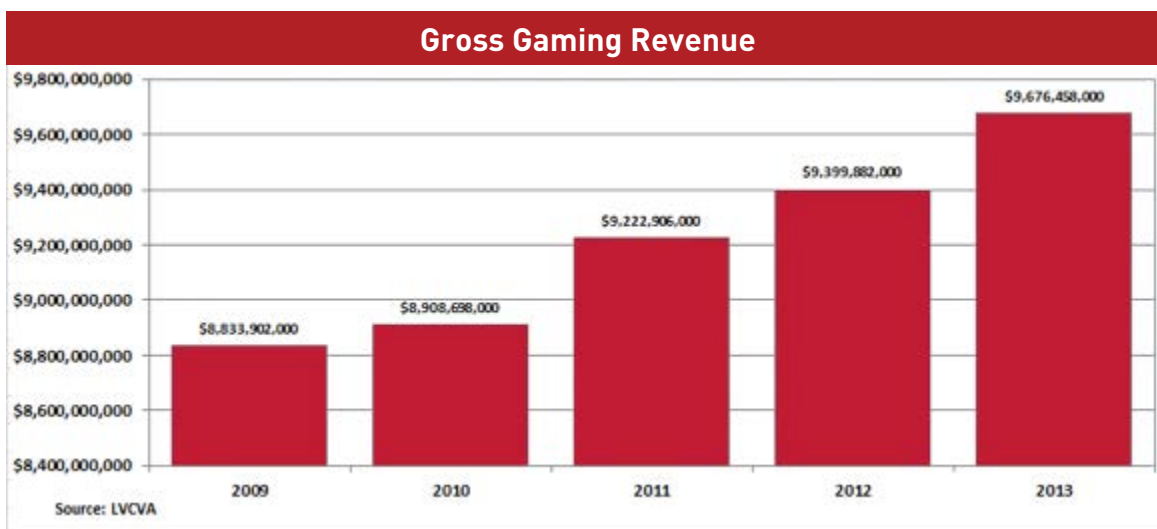
The average daily room rate expresses the average cost of a hotel/motel room is on a given night. Las Vegas' average daily hotel/motel room rate has risen 20 percent since 2009, and had an average daily room rate of \$110.72 in 2013.



GROSS GAMING REVENUE

In addition to hotel figures, gross gaming revenue is a key indicator of what direction Las Vegas' economy is trending. Las Vegas gross gaming revenue has risen 9.5 percent since 2009, and was approximately \$9.7 billion in 2013 (a five-year high). Gaming revenue includes all of Clark County.

\$9.7B
2013 gross gaming revenue



ATTRACTIONS

In addition to the hotel/resorts and casinos that Las Vegas known for, there are numerous attractions that draw visitors out to the city. The following table shows a sampling of the music, sports, entertainment and attractions in the local and regional market that can attract visitors to the Las Vegas area, as well as draw local interest.

Las Vegas Attractions					
Venue	Event	Type	Venue	Event	Type
Bellagio	O Cirque du Soleil	Show	MGM Grand	Cher	Concert
Caesars Palace	Absinthe	Show	MGM Grand	Academy of Country Music Awards	Concert
Caesars Palace	Celine Dion	Concert	MGM Grand	Canelo Alvarez vs. Alfredo Angulo	Sport
Caesars Palace	Elton John	Concert	MGM Grand	Pac 12 Bball Tournament	Sport
Caesars Palace	Shania Twain	Concert	Mirage	Beatles-LOVE Cirque Du Soleil	Show
Caesars Palace	Rod Stewart	Concert	Mirage	Terry Fator	Show
Cosmopolitan	Bruno Mars	Concert	Mirage	Daniel Tosh	Show
Flamingo	Donny and Marie Osmond	Concert	Mirage	Ray Romano & Kevin James	Show
Hard Rock	Lion Fight-MMA	Sport	Mirage	Wayne Brady	Show
Hard Rock	Motley Crue	Concert	Mirage	Jay Leno	Show
Luxor	Criss Angel	Show	Mirage	Boyz II Men	Concert
Luxor	Carrot Top	Show	Monte Carlo	Blue Man Group	Show
Mandalay Bay	Michael Jackson ONE-Cirque du Soleil	Show	Paris Las Vegas	Jersey Boys	Show
Mandalay Bay	UFC 170	Sport	Plant Hollywood	Britney Spears	Concert
MGM Grand	KA Cirque du Soleil	Show	Rio	Penn & Teller	Show
MGM Grand	Pink	Concert	The Orleans Hotel	WCC Bball Tournament	Sport
MGM Grand	Miley Cyrus	Concert	Treasure Island	Mystere Cirque du Soleil	Show
MGM Grand	Lady Gaga	Concert	Venetian	Tim McGraw & Faith Hill	Concert
MGM Grand	George Strait	Concert	Venetian	Rock of Ages	Concert
MGM Grand	The Eagles	Concert	Wynn	Le Reve - The Dream	Show



SUMMARY

The demographic and socioeconomic characteristics of a market are an important component in assessing the success of a new on-campus multi-purpose stadium. The ability to attract potential premium seat buyers and generate incremental revenue is predicated somewhat on the size and population of the regional market and its spending characteristics in the context of competition within the market.

The Las Vegas visitor infrastructure will play a large role in bringing outside tourists into the Las Vegas area for events at a new on-campus multi-purpose stadium. Over the last five years, the Las Vegas visitor infrastructure has been trending upwards with visitor volume, hotel occupancy, convention attendance and gaming revenue all being at five-year highs. Las Vegas' population, age, household income and relatively low cost of living compared to other regional markets also provide a positive outlook for a new on-campus multi-purpose stadium.

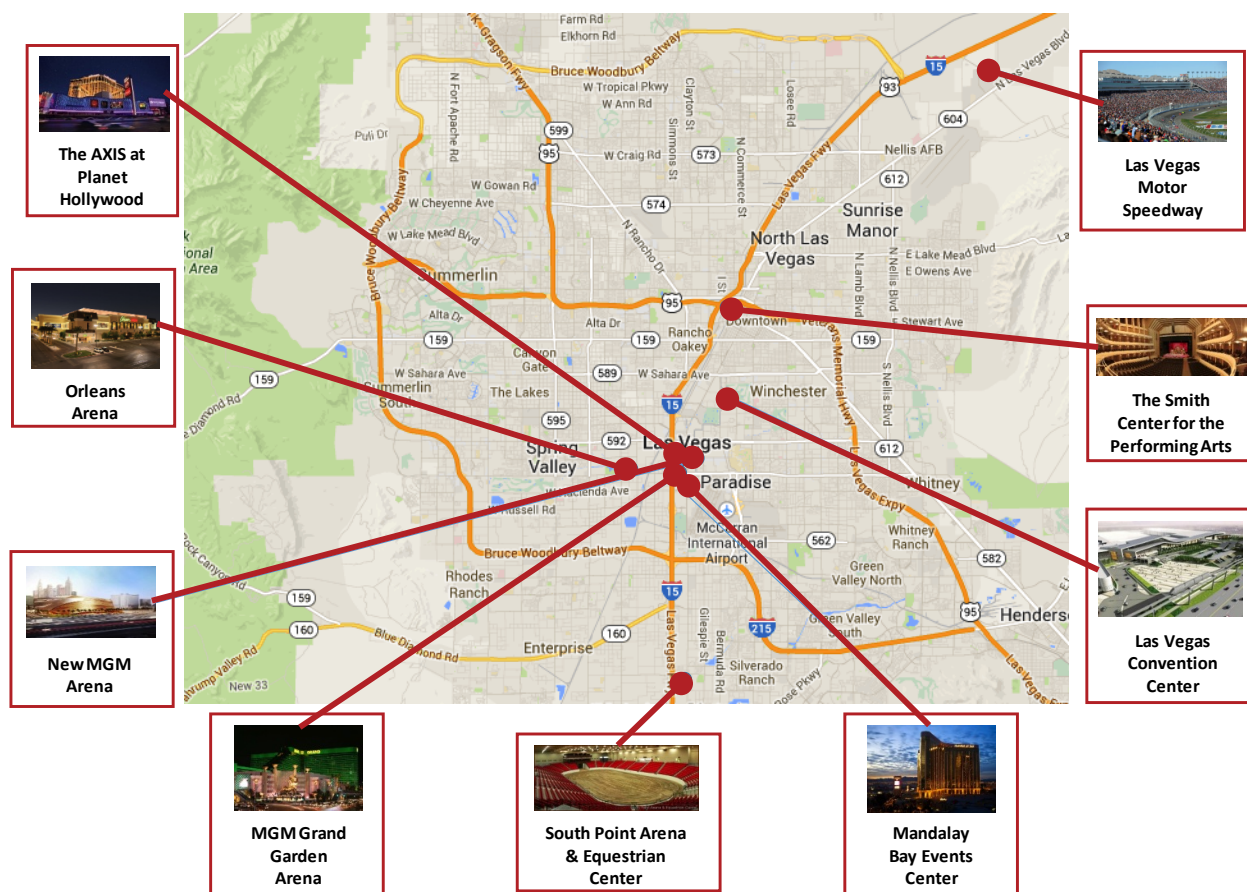


4 COMPETITIVE FACILITIES

COMPETITIVE FACILITIES

The operations of a new stadium are affected, to some degree, by the number and type of local and regional facilities that could compete for the limited supply of events, spectators, attendees and corporate dollars within the marketplace. Within the Las Vegas local and regional areas there are a variety of existing sports and entertainment facilities. Some facilities in the local marketplace serve shared market segments and will compete directly to host the same events, while other facilities are not expected to represent significant direct competition in hosting the same events. Competitive facilities within the local and regional market include but may not be limited to:

1. Orleans Arena
2. The Axis at Planet Hollywood
3. Mandalay Bay Events Center
4. MGM Grand Garden Arena
5. Las Vegas Motor Speedway
6. South Point Arena & Equestrian Center
7. The Smith Center for the Performing Arts
8. The Las Vegas Convention Center
9. New MGM Arena





ORLEANS ARENA

YEAR OPENED	2003
LOCATION	LAS VEGAS, NV
SEATING CAPACITY	9,000
TENANTS	LAS VEGAS WRANGLERS (ECHL), WAC BASKETBALL TOURNAMENT, LAS VEGAS SIN (LFL), LAS VEGAS LEGENDS (PASL-PRO)
OWNER	COAST CASINOS
OPERATOR	COAST CASINOS
PROJECT COST	\$85 MILLION

Opened in 2003, the 9,000-seat Orleans Arena is located adjacent to the Orleans Hotel, approximately one mile from the Las Vegas Strip. The arena was built for a cost of \$85.0 million and funded by private funding. The arena features 22 suites and 220 club seats located on a private concourse level, along with 10,800 square feet of meeting space available for corporate events.

The venue is owned and operated by Coast Casinos, a subsidiary of Boyd Gaming Corporation. Current tenants of the arena include the Las Vegas Wrangles (ECHL), Las Vegas Sin (LFL), and the Las Vegas Legends (PASL-Pro). The arena was also the home of the Las Vegas Gladiators of the Arena Football League which later moved to Cleveland, Ohio in 2008. Recurring events held at the facility include the WCC Men’s Basketball Tournament and the WAC Basketball Tournament.

The arena hosts more than 200 events each year, including concerts, family shows, motorsports, boxing, mixed martial arts and a wide variety of other sports and entertainment events. The Orleans Arena has hosted an average of 10 major concert events per year, with approximately 5,000 attendees at each event and an average concert gross of \$198,614. Musical artists that have played at the venue in the past include Carrie Underwood, Blake Shelton, Billy Joel and Van Halen.

While it is not expected that the new on-campus multi-purpose stadium will compete with the Orleans Arena to host major sporting events, competition for concerts from various major artists could exist. There will also be competition for the entertainment dollars of area residents and sponsorship/advertising dollars of area companies.



AXIS AT PLANET HOLLYWOOD

YEAR OPENED	1976
LOCATION	LAS VEGAS, NV
SEATING CAPACITY	7,500
TENANTS	N/A
OWNER	CAESARS ENT. CORP.
OPERATOR	LIVE NATION
PROJECT COST	\$4 MILLION

The 7,500 seat AXIS at Planet Hollywood (formerly Aladdin Theatre for the Performing Arts and PH Live) opened in 1976. The theater cost approximately \$4.0 million to build in 1976 and has undergone approximately \$45 million of privately funded renovations since 2000. The AXIS is owned by Caesars Entertainment Corporation and operated by Live Nation. Caesars Entertainment redesigned The AXIS to combine the nightclub experience with that of a live entertainment venue. The venue now includes a dance floor and VIP table seating. Additionally, there are 60 ultra-high-definition projectors, 2,220 square feet of Panasonic high-definition 10 millimeter LED walls, 100,000 watts of power, and several subwoofers for optimum sound.

Several kinds of events such as charity benefits, concerts and award shows are hosted at the theater. It is used frequently for Miss Universe, Miss America and Miss USA pageants. Past performers have included Britney Spears, Journey, Justin Bieber, Dave Matthews and Bob Dylan. The theater sells an average of 4,350 tickets per concert with an average of \$271,455 per concert in ticket receipts.

Although the Axis at Planet Hollywood hosts several concerts per year, it is not expected to compete for sporting events with a new on-campus multi-purpose stadium. There will be competition for entertainment dollars of area residents and the sponsorship/advertising dollars of area companies.



MANDALAY BAY EVENTS CENTER

YEAR OPENED	1999
LOCATION	LAS VEGAS, NV
SEATING CAPACITY	12,000
TENANTS	N/A
OWNER	MGM RESORTS INT'L
OPERATOR	MGM RESORTS INT'L
PROJECT COST	\$950 MILLION (COST OF HOTEL, CASINO AND ARENA)

The 12,000-seat Mandalay Bay Events Center opened in 1999 and sits on the property of Mandalay Bay Hotel & Casino. The Events Center was built as a part of the \$950 million construction of Mandalay Bay Hotel & Casino. The arena regularly hosts events, including concerts, awards shows, boxing, wrestling, mixed martial arts, basketball, and family shows. It is owned and operated by MGM Resorts International.

The Latin Grammys have been hosted at the Events Center six times. The facility is becoming a popular location for UFC events, having hosted more than 30 since 2001. It hosts an average of 15 concerts per year, including Taylor Swift, Pink, Katy Perry and Brad Paisley. The Events Center sells an average of 7,000 tickets per concert, and has an average ticket gross of \$572,362.

The Mandalay Bay Events Center will compete with a new on-campus multi-purpose stadium for resident and tourist dollars in regards to major concerts. There will be direct competition for the entertainment dollars of area residents and the sponsorship/advertising dollars of area companies.



MGM GRAND GARDEN ARENA

YEAR OPENED	1993
LOCATION	LAS VEGAS, NV
SEATING CAPACITY	16,800
TENANTS	PAC 12 BASKETBALL TOURNAMENT
OWNER	MGM RESORTS INT'L
OPERATOR	MGM RESORTS INT'L
PROJECT COST	\$1.1 BILLION (COST OF HOTEL, CASINO AND ARENA)

Located inside of the 112-acre MGM Grand Hotel & Casino, the MGM Grand Garden Arena opened in 1993 and has a capacity of approximately 16,800 seats. The arena is owned and operated by MGM Resorts International. The arena hosts a myriad of events, including boxing, mixed martial arts, concerts family shows, volleyball, indoor soccer and hockey, among others.

In 2012, the Pac-12 Conference announced that the facility will host the Pac-12 Men's Basketball Tournament until at least 2015. Additionally, the Garden Arena has hosted the Billboard Music Awards since 1997. It hosts an average of 10 concerts per year including Beyoncé, Bon Jovi, Bruno Mars and The Rolling Stones. The arena sells an average of 13,200 tickets per concert with an average ticket gross of \$1,712,971.

It is anticipated that there will be direct competition for major concerts between the MGM Grand Garden Arena and a new on-campus multi-purpose stadium. Direct competition for the entertainment dollars of area residents and the sponsorship/advertising dollars of area companies will also be prevalent.



LAS VEGAS MOTOR SPEEDWAY

YEAR OPENED	1971
LOCATION	LAS VEGAS, NV
SEATING CAPACITY	142,000
TENANTS	NASCAR, NHRA
OWNER	SPEEDWAY MOTORSPORTS, INC.
OPERATOR	SPEEDWAY MOTORSPORTS, INC.
PROJECT COST	\$350 MILLION

Located approximately 15 miles from the Las Vegas Strip, the Las Vegas Motor Speedway opened in 1971 and consisted of a drag strip and road course. With a change of ownership, a 3/8 mile short track could be added to the complex in the late 1970s. In 1995, a \$72 million project included a significant refurbishment to the existing tracks and the addition of a superspeedway that opened in 1996. In 1998, the Las Vegas Motor Speedway was sold for \$215 million by Richie Clyne and Ralph Englestad to Speedway Motorsports, Inc., ("SMI"). Las Vegas Motor Speedway is currently owned and managed by SMI, which is based in Charlotte, NC and owns and manages nine racing facilities across the country that host NASCAR, IZOD IndyCar Series, NHRA, WoO and other racing series.

The Las Vegas Motor Speedway hosts several major motorsports annually, including: Kobalt Tools 400 (NASCAR Sprint Cup Series), Boyd Gaming 300 (NASCAR Nationwide Series), Smith's 350 (NASCAR Camping World Truck Series), NHRA Mellow Yello Drag Racing Series, Global RallyCross Championship, SummitRacing.com NHRA Nationals and the TOYOTA NHRA Nationals. Other sporting events held at the venue included the RE/MAX World Long Drive Championship in 2013.

In 2012, Insomniac signed a 10-year agreement with the Las Vegas Motorspeedway to host the Electric Daisy Carnival, a three-day electronic dance music festival that attracted approximately 235,000 attendees in 2011, 315,000 in 2012 and 345,000 in 2013.



SOUTHPOINT ARENA AND EQUESTRIAN CENTER

YEAR OPENED	2006
LOCATION	LAS VEGAS, NV
SEATING CAPACITY	4,600
TENANTS	N/A
OWNER	SOUTH POINT CASINO
OPERATOR	SOUTH POINT CASINO
PROJECT COST	\$30 MILLION (RENOVATION)

South Point Arena & Equestrian Center opened in February 2006, and is primarily known as one of the best indoor equestrian centers in the country. It is owned and operated by South Point Casino. The arena has a capacity of 4,600, and is mainly used for rodeos, equestrian shows and horse cutting championships. The complex includes the arena, an indoor practice area and a covered outdoor practice area.

Other events that have been held there in the past include motocross and BMX races, Monster Truck Nationals, Sin City Mixed MMA, the World Salsa Championships, boxing matches and women's college basketball's Holiday Hoops Classic. The arena can also be converted to a concert venue, but have not had any major artists play there.

South Point Arena is currently undergoing a \$30 million renovation which will add an additional 100,000 square feet of space to the arena and seating areas. It is also adding a second floor to the arena which will house a sixty-lane tournament bowling facility. South Point has already secured a twelve year agreement with the United States Bowling Congress and will host several USBC events a year, from Open Championships to TEAM USA trials, beginning in 2016. South Point Arena will also be changing its name to Priefert Pavilion once the renovation is complete.

It is not expected that the South Point Arena will compete with a new on-campus multi-purpose stadium. However, there will be direct competition for the entertainment dollars of area residents and the sponsorship/advertising dollars of area companies.



THE SMITH CENTER FOR THE PERFORMING ARTS

YEAR OPENED	2012
LOCATION	LAS VEGAS, NV
SEATING CAPACITY	2,550
TENANTS	NEVADA BALLET THEATRE, LAS VEGAS PHILHARMONIC
OWNER	CITY OF LAS VEGAS
OPERATOR	THE SMITH CENTER
PROJECT COST	\$320 MILLION

The Smith Center for the Performing Arts opened in 2012 and is owned by the City of Las Vegas. The \$320 million Center was financed by 53 percent public and 47 percent private funding. The Donald W. Reynolds Foundation donated \$100 million through a grant and \$50 million through a lead gift. The City of Las Vegas funded \$105 million via a City/County/State rental car tax and \$65 million through City land, infrastructure and environmental cleanup.

The Center contains Reynolds Hall which is a 2,050-seat multipurpose main hall that has 5-level seating to keep all seats close to the stage, a 300-seat Jazz Cabaret Theater for more intimate performances and a 200-seat flexible studio theater mainly used for rehearsal theater.

The Smith Center is home to resident companies Nevada Ballet Theatre and the Las Vegas Philharmonic. In addition to these tenants, the Center also hosts several Broadway shows including Les Misérables, The Wizard of Oz, Mamma Mia! and Disney's Beauty and the Beast.

It is not expected that The Smith Center for the Performing Arts will compete with a new on-campus multi-purpose stadium. However, there will be direct competition for the entertainment dollars of area residents and the sponsorship/advertising dollars of area companies.



LAS VEGAS CONVENTION CENTER

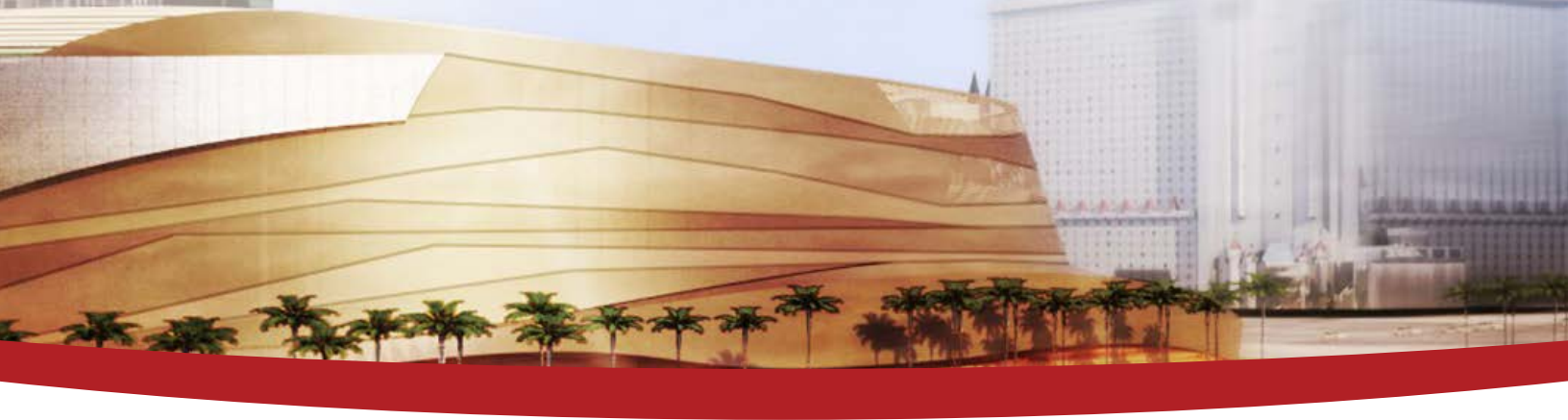
YEAR OPENED	1959
LOCATION	LAS VEGAS, NV
SEATING CAPACITY	2,000 (THEATER STYLE CAPACITY)
TOTAL COST:	\$2.5 BILLION (RENOVATION)
TENANTS	LAS VEGAS CONVENTION CENTER AUTHORITY
OWNER	CITY OF LAS VEGAS
OPERATOR	CITY OF LAS VEGAS
PROJECT COST	\$2.5B (RENOVATION)

Opened in 1959, the Las Vegas Convention Center is the largest single convention center in the world with over 3.2 million square feet of convention space. The Center also has a 2,000-seat theater style capacity, a 900-seat banquet style capacity, 16 exhibit halls, 144 meeting rooms and 5,000 parking spaces.

The Center hosts a range of conventions, conferences, trade shows and other events each year including the International Consumer Electronics show with approximately 155,000 attendees, the National Association for Broadcasters show with approximately 95,000 attendees and the MAGIC Marketplace show with approximately 80,000 attendees. In 2013, there were a total of 613 event days with a total attendance of 1.6 million.

There is currently a \$2.5 billion renovation for the Las Vegas Convention Center scheduled to be completed by 2018. The Las Vegas Convention Center Authority (LVCVA) has already secured the bonding capacity for 25 percent of the financing of the project and is seeking private funding for additional financing. The renovation will include additional meeting rooms, a grand concourse linking all three halls, a signature entrance façade, an enclosed pedestrian access for the Las Vegas Monorail and on-site police and fire facilities.

It is not expected that the Las Vegas Convention Center will compete with a new on-campus multi-purpose stadium. However, there will be direct competition for the entertainment dollars of area residents and the sponsorship/advertising dollars of area companies.



NEW MGM-AEG ARENA

YEAR OPENED	2016 (EST.)
LOCATION	LAS VEGAS, NV
SEATING CAPACITY	20,000
TENANTS	N/A
OWNER	MGM RESORTS INT'L / AEG
OPERATOR	MGM RESORTS INT'L / AEG
PROJECT COST	\$375 MILLION

A new 20,000 seat arena located new the Strip and Tropicana Ave. is slated to open in 2016 with an estimated project cost of \$375 million. The arena will be built with high-end premium seating and hospitality areas, including multiple bunker clubs and eight all-inclusive bunker suites holding a range of 16 to 20 people. In addition, there will also be 42 luxury suites holding 12-16 people each, 22 loge boxes, 24 terrace tables which have access to an outdoor patio, bar, restaurant and night club and 1,900 club seats which have access to two club seat holder only areas. The new arena will also feature in-bowl sponsor zones, VIP drop-off areas with private lobbies, a seven-story atrium and an array of balconies. AEG and MGM are funding the arena with equity contributions and a private third-party debt financing.

While the arena is designed to accommodate NBA and NHL games, it will open without a major league basketball or hockey club as a tenant. It will be most comparable to the Sprint Center in Kansas City, Mo., an AEG-managed arena that is among the busiest in the US, hosting an average of 120 events per year, and is also without an NBA or NHL tenant. The new arena will attempt to host at least 100 concerts, boxing, mixed martial arts, sports, awards shows and other events each year.

The new MGM-AEG Arena will likely directly compete with the on-campus multi-purpose facility for concerts, as well as entertainment dollars of area residents and the sponsorship/advertising dollars of area companies.

CONCERTS

In 2013, Las Vegas had a total concert attendance of 1,316,670 for an average attendance of 4,140 per concert. Top performers included Bruno Mars, Bon Jovi, Justin Bieber and Fleetwood Mac. The table to the right shows the top concerts in Las Vegas for 2013.

Las Vegas ranks third among major comparable markets in number of shows and total attendance in 2013. The table below shows how Las Vegas ranks with other major markets in entertain events.

2013 Las Vegas Top Concerts		
Artist	Venue	Attendance
Life Is Beautiful Festival	Downtown Las Vegas	22,919
Bruno Mars	MGM Grand Garden Arena	14,062
Bon Jovi	MGM Grand Garden Arena	13,782
Justin Bieber	MGM Grand Garden Arena	13,362
Fleetwood Mac	MGM Grand Garden Arena	13,343
The Rolling Stones	MGM Grand Garden Arena	13,327
Justin Timberlake	MGM Grand Garden Arena	12,859
Beyoncé	MGM Grand Garden Arena	12,811
Michael Bublé	MGM Grand Garden Arena	12,474
Andrea Bocelli	MGM Grand Garden Arena	11,940
Joel Osteen	Thomas & Mack Center	11,686
One Direction	Mandalay Bay Events Center	11,165
Kanye West	MGM Grand Garden Arena	10,183

Source: Pollstar

While Las Vegas has the lowest average attendance among major comparable markets it has the third highest total concert attendance.

2013 Show Comparison			
City	Number of Shows	Average Attendance	Total Attendance
New York	1,077	5,495	5,918,007
Los Angeles	493	6,465	3,187,290
Las Vegas	318	4,140	1,316,670
Dallas	164	6,990	1,146,308
Phoenix	110	6,772	744,880
Average	461	6,430	2,749,121

Source: Pollstar

4,140
2013 average concert attendance





SUMMARY

The table below shows a summary of the facilities that could compete with a new on-campus multi-purpose stadium at UNLV. The Mandalay Bay Events Center, the MGM Grand Garden Arena and the New MGM-AEG Arena will likely compete with a new stadium at UNLV for concerts, sporting events and other events as well as entertainment dollars of area residents and the sponsorship/advertising dollars of area companies.

Las Vegas Competitive Facilities				
Venue	Event Focus	Capacity	Major Events ⁽¹⁾	Degree of Competition with New Stadium
Orleans Arena	Sports/Entertainment	9,000	10	None
Axis at Planet Hollywood	Concerts/Award Shows	7,500	5	None
Mandalay Bay Events Center	Sports/Entertainment	12,000	15	Limited
MGM Grand Garden Arena	Sports/Entertainment	16,800	10	Limited
Las Vegas Motor Speedway	Motor Sports	142,000	0	Limited
South Point Arena & Equestrian Center	Equestrian/Motor Sports	4,600	0	None
The Colosseum at Caesars Palace	Theatre	4,100	6	None
The Smith Center for the Performing Arts	Orchestra/Broadway Shows	2,550	0	None
Las Vegas Convention Center	Conventions	2,000 ⁽²⁾	0	None
New MGM-AEG Arena	Sports/Entertainment	20,000 ⁽³⁾	N/A	Limited
Thomas & Mack Center	Sports/Entertainment	19,400	9	None

(1) Events consist of major concerts listed on Pollstar.

(2) Theater style seating capacity.

(3) Estimated capacity.



5

COMPARABLE FACILITIES ANALYSIS

COMPARABLE FACILITIES ANALYSIS

The purpose of this section is to present an overview of newly constructed/renovated NFL and collegiate stadiums to provide a benchmark from which to assess the potential for a new stadium in Las Vegas. For purposes of this study, the physical, operational, financial and other characteristics of newly constructed/renovated NFL and collegiate stadiums capable of hosting major events were analyzed.

This section features case studies on the following stadiums:

NFL Stadiums

- AT&T Stadium – Arlington, TX
- MetLife Stadium – East Rutherford, NJ
- Levi's Stadium – Santa Clara, CA
- New Vikings Stadium – Minneapolis, MN
- Lucas Oil Stadium – Indianapolis, IN
- University of Phoenix Stadium – Glendale, AZ
- Ford Field – Detroit, MI
- NRG Stadium – Houston, TX
- Mercedes-Benz Superdome – New Orleans, LA



Collegiate Stadiums

- McLane Stadium – Waco, TX
- TCF Bank Stadium – Minneapolis, MN
- Kyle Field – College Station, TX
- Apogee Stadium – Denton, TX
- FAU Stadium – Boca Raton, FL
- Bright House Networks Stadium – Orlando, FL
- InfoCision Stadium – Akron, OH



The remainder of this section provides an overview of newly constructed/renovated NFL and collegiate stadiums, including information such as physical attributes, event utilization, financial performance, construction funding sources and other such information.



AT&T STADIUM

YEAR OPENED	2009
CAPACITY	80,000
SQ. FOOTAGE	3.0M sq. ft.
PROJECT COST	\$1,274M
% PRIVATE	64%
% PUBLIC	36%

FUNDING SOURCES	
Cowboys Equity & Seat Revenues (PSL, Suite Sales)	\$557.5
City-Wide Sales Tax	325.0
Debt Financed by Cowboys	175.0
City Admission Tax	115.0
NFL G-3 Financing	76.5
County Cash Appropriation	25.0
Total Sources (\$M)	\$1,274

AT&T Stadium, originally named Cowboys Stadium, opened in 2009 and serves as the home of the Dallas Cowboys of the NFL, as well as the Cotton Bowl Classic. The stadium is owned by the City of Arlington and operated by the Dallas Cowboys. Along with Cowboys games, the facility regularly hosts concerts, international soccer matches, basketball games, college football and high school football, boxing matches, and motorsports events.

Project costs for the stadium totaled over \$1.2 billion. The City of Arlington provided \$325 million in voter-approved City bonds backed by 0.5 percent sales tax increase, 2 percent hotel tax and 5 percent car rental tax. The City also issued \$115 million in revenue bonds that were backed by 10% admission tax, \$3 parking surcharge. Tarrant County contributed \$25 million in cash for infrastructure including roadways and parking lots.

Cowboys equity and revenues from PSL & suite sales generated approximately \$557.5 million in project funding. The Cowboys funded \$175.0 million of their contribution via private debt financing. NFL G-3 funding accounted for \$76.5 million.

In 2013, AT&T reached an agreement with the Cowboys on a multi-year naming rights deal that will reportedly pay between \$17 million and \$19 million annually.



AT&T STADIUM PSL PROGRAM



Seat Option Price				Season Price	
\$150,000	\$5,000	\$5,000	\$5,000	\$3,400	\$990
\$50,000	\$5,000	\$4,000	\$4,000	\$3,400	\$940
\$35,000	\$4,000	\$2,000	\$2,000	\$3,400	\$890
\$16,000	\$2,000	\$2,000	\$2,000	\$3,400	\$790
\$12,000	\$2,000	\$1,000	\$1,000	\$1,250	\$690
\$6,000	\$1,000	No Seat Option Required		\$1,040	\$690
\$5,000	No Seat Option Required			\$1,250	\$620

The Cowboys required PSLs on 56,314 seats in the stadium (86 percent of capacity). Seat license prices ranged from \$1,000 to \$150,000 per seat, with total seat license revenue of approximately \$550 million. Club seat PSL revenue accounted for approximately \$439 million with the remaining \$143 million being generated by non-premium reserved seat PSLs. The average club seat PSL was sold for \$53,000 with an average ticket price of \$322 per game, while the average non-premium PSL was sold for \$4,800 with an average ticket price of \$93 per game.

AT&T Stadium PSLs were purchased on 30-year terms. The PSL pricing model scaled towards higher PSLs and lower annual ticket prices. All PSLs were allowed to be financed at varying rates between 8 percent and 8.8 percent over a 30-year term, with 20 percent due up front from 2007-2009. The Cowboys initially offered a ticket price freeze for both club and reserve seats of five and three years respectively. Additionally, the Cowboys established a monetized season ticket waiting list.



AT&T STADIUM PREMIUM SEATING

SUITES

Total Suites: 320

Average Price Per Suite: \$300,000

Potential Suite Revenue: \$96.0M

CLUB SEATS

Total Club Seats: 14,177

Average Price per Club Seat: \$3,400

Potential Club Seat Revenue: \$48.2M

TOTAL PREMIUM REVENUE: \$144.2M

AT&T Stadium features 320 suites at an average annual cost of around \$300,000. AT&T Stadium also offers over 14,000 club seats sold at an average annual fee of approximately \$3,400. The exhibit on the left summarizes the suite and club seat inventory, pricing and potential annual revenues.



AT&T STADIUM

OTHER EVENT SUMMARY

AT&T Stadium has averaged 15 major third party events annually since opening. The stadium has hosted five NCAA football games on average, which includes neutral site regular season games and the AT&T Cotton Bowl Classic. The stadium also averages slightly over two large-scale concerts annually. Other sporting events held at the facility on regular basis include Monster Jam, SuperCross and PBR, which have all hosted one event annually since 2010. Additionally, at least one international soccer event has been held annually since stadium opened

3RD PARTY STADIUM EVENTS TICKETS SOLD FY2009-FY2013

Event Type	FY2013	FY2012	FY2011	FY2010	FY2009	Average
Number Of Events						
NCAA Football	3	2	7	5	4	4
NCAA Basketball	3	1	1	1	1	1
Cotton Bowl	1	1	1	1	0	1
Concerts	2	2	2	1	5	2
Soccer	1	1	2	1	2	1
Boxing	0	0	0	2	0	0
PBR	1	1	1	1	0	1
Motorsports	2	2	2	2	0	2
HS Sports	0	7	1	3	0	2
Other	0	0	0	3	0	1
Total	13	17	17	20	12	16
Total Attendance	596,107	574,237	766,302	676,741	539,924	629,000



METLIFE STADIUM

YEAR OPENED	2010
CAPACITY	82,566
SQ. FOOTAGE	2.1M sq. ft.
PROJECT COST	\$1,850M
% PRIVATE	86%
% PUBLIC	14%* <small>(excluding public land donation)</small>

FUNDING SOURCES	
Giants Portion of Bonds	\$650.0
Jets Portion of Bonds	650.0
NFL G-3 Financing	300.0
Public infrastructure	250.0
Total Sources (\$M)	\$1,850.0

Opened in 2010, MetLife Stadium is an 82,566-seat stadium located in East Rutherford, New Jersey. MetLife Stadium serves as the home of both the New York Giants and New York Jets of the NFL. The stadium is owned by the New Jersey Sports and Exposition Authority, an independent authority established by the State of New Jersey in 1971 to oversee the Meadowlands Sports Complex. The MetLife Stadium Company, a partnership between the Giants and Jets, operate the stadium.

The stadium was built at a total cost of approximately \$1.6 billion. The State of New Jersey donated land for the project, which is not included in the project costs. Public infrastructure costs of \$250 million were considered outside of stadium costs. The New Meadowlands Stadium Corporation, a 50/50 partnership between the New York Giants and New York Jets, issued \$1.3 billion in taxable bonds that were secured by stadium revenues including seat licenses, premium seating, advertising/sponsorships, and naming rights. The teams also received a \$300 million grant from the NFL's G-3 stadium funds program that allows the visiting team share of club seat premium to be waived and applied to stadium construction.



METLIFE STADIUM PSL PROGRAM



Club Location	PSL	Ticket	Non-Club Location	PSL	Ticket
45-50	\$30,000	\$700	Vis LL 30-45	\$20,000	\$155
35-45	\$25,000	\$700	Home LL 20-30	\$15,000	\$145
25-35	\$20,000	\$700	Home LL 10-20	\$10,000	\$145
Vis 45-50	\$25,000	\$420	Home LL GL-5	\$7,500	\$130
Mezz 40-50	\$15,000	\$295	Home LL TD	\$6,000	\$130
Mezz 5-40	\$15,000	\$255	Home LL EZ Corner	\$5,000	\$125
Mezz GL-5	\$7,500	\$255	LL EZ	\$4,000	\$125
Mezz Corners	\$5,000	\$205	Mezz EZ	\$4,000	\$125
			Mezz EZ Upper Rows	\$2,500	\$125
			Upper NO PSLs	\$-	\$125

The Jets placed PSLs on 47,804 seats (58 percent of the stadium capacity) priced from \$2,500 to \$30,000 per seat, and accounted for approximately \$325.0 million in seat license revenue. Overall, the pricing model scaled towards lower PSLs and higher annual ticket costs. For example, a \$30,000 Coaches Club PSL includes a \$700 per game ticket cost. The average club seat PSL was sold for \$18,000, while the average non-premium PSL was sold for \$8,222.

Jets PSLs are good for the life of the stadium. The Jets experienced sell-through issues due to unbalanced pricing structure. Non-Club PSLs priced greater in lower level sideline areas than their mezzanine club PSLs. PSLs could be financed over a 5 year term at 6.5 percent or a 15 year term at 8 percent. PSL holders were required to pay 20 percent for the down payment with an annual PSL installment due each year following. Currently they have changed to a 10 percent down payment.

Following the 2011-12 season, the Jets reduced PSL and annual ticket pricing in both their club and non-club seating areas. The Jets did not offer a price freeze.



METLIFE STADIUM PSL PROGRAM



Zone	PSL	2013 Ticket	Zone	PSL	2013 Ticket
Coaches Club	\$20,000	\$700	Mezzanine Club C	\$7,500	\$250
Field 1	\$20,000	\$160	Mezzanine	\$4,000	\$120
Field 2	\$10,000	\$140	Loge	\$5,000	\$105
Field 3	\$5,000	\$120	Terrace 1	\$1,000	\$95
Mezzanine Club A	\$12,500	\$500	Terrace 2	\$1,000	\$85
Mezzanine Club B	\$7,500	\$400			

The Giants required PSLs on all general admission seats (91 percent of the stadium capacity), which were priced from \$1,000 to \$20,000 per seat, and accounted for approximately \$400.0 million in revenue. The average club seat PSL was sold for \$12,000, while the average non-premium PSL was sold for \$6,571.

Giants PSLs are good for the life of stadium The Giants utilized an unbalanced pricing structure much like the Jets specifically in the lower bowl. Initially, all PSLs were sold on a cash up-front basis and paid in 3-equal installments; however, the Giants switched to a multi-year payment program on the remaining seats.

The relocation of season ticketholders was done by assigning 10 different zones. Ticket holders chose which zone they wanted to sit in and filled out preference forms for that zone. A formula involving season ticketholder seniority was then produced by the Giants to determine who had the priority within that zone. Along with current season ticketholder, the Giants had a more than a 100,000 person season ticket waiting list.

Like the Jets, the Giants scaled their PSL pricing to include lower PSLs, but higher per game ticket costs. The Giants continue to face the challenge of selling non-sideline club inventory, for example Mezzanine B & Mezzanine C inventory. The Giants offered a 3-year ticket price freeze on their Club PSLs only.



METLIFE STADIUM PREMIUM SEATING

SUITES

Total Suites: 213

Average Price Per Suite: \$494,000

Potential Suite Revenue: \$105.2M

CLUB SEATS

Total Jets Club Seats: 10,041

Avg Price per Club Seat: \$3,888

Potential Jets Club Seat Revenue: \$36.4M

**TOTAL JETS PREMIUM
REVENUE: \$89.0M**

CLUB SEATS

Total Giants Club Seats: 9,236

Avg Giants Price per Club Seat: \$4,761

Potential Giants Club Seat Revenue: \$38.7M

**TOTAL GIANTS PREMIUM
REVENUE: \$91.3M**

MetLife Stadium features 213 suites at an average annual cost of approximately \$494,000. Suite prices are based on a 20-game schedule that includes all home Giants and Jets home games. The Giants and the Jets sell club seats individually, with the Giants offering 9,236 at an average annual fee of \$4,761. The Jets sell 10,041 club seats at an average annual fee of \$3,888.



METLIFE STADIUM OTHER EVENT SUMMARY

MetLife Stadium has hosted 26 major concert/entertainment events since 2010. The stadium averages nine of these events a year with an average paid attendance per event of approximately 50,500. These concert/entertainment events average gross revenue of \$7.1 million per event. Upcoming events at MetLife in 2014 include: Monster Energy Supercross, Portugal vs. Ireland soccer match, Monster Jam, One Direction, "College Classic" Notre Dame vs. Syracuse football



MAJOR PAST EVENTS

2013

Kenny Chesney
Bon Jovi
Taylor Swift
WWE "Wrestlemania"

2012

Bruce Springsteen & The E Street Band
Electric Daisy Carnival NYC

2011

U2
Kenny Chesney

2010

Eagles
Bon Jovi



LEVI'S STADIUM

FUNDING SOURCES

Sources

Initial Loan	\$850.0
NFL G-4 Financing	200.0
Stadium Construction Revenues	201.4
Total Sources (\$M)	\$1,251.4

Uses

Stadium Construction under GMP	\$878.6
Other Construction Costs	280.2
Financing Costs	92.6
Parking	0.0
Land	0.0
Total Uses	\$1,251.4

YEAR OPENED	2014
CAPACITY	68,500
SQ. FOOTAGE	1.9M sq. ft.
PROJECT COST	\$1,251M
% PRIVATE	32%
% PUBLIC	68%

The \$1.2 billion Levi's Stadium opened in 2014, and is owned and operated by the Santa Clara Stadium Authority with the NFL San Francisco 49ers serving as the primary tenant. Levi's Stadium seats 68,500 with the ability to expand capacity to 75,000. Levi Strauss & Co. purchased the naming rights the stadium in 2013 in a deal worth \$220.3 million over 20 years.

Funding sources for the project include approximately \$850.0 million in loans secured by the Santa Clara Stadium Authority. Goldman Sachs, along with 17 lenders, provided the loan, which was the largest loan ever extended to finance a stadium. Other sources include \$201.4 million from stadium revenues and \$200 million from the NFL G-4 loan program.



LEVI'S STADIUM PSL PROGRAM



Levi's Stadium required Stadium Builder's License ("SBL") fees on the majority of seats in the facility, ranging from a low of \$2,000 to a high of \$80,000 per seat. The average SBL required for club seats is approximately \$32,500.



LEVI'S STADIUM PREMIUM SEATING

SUITES

Total Suites: 165

Average Price Per Suite: \$300,000

Potential Suite Revenue: \$49.5M

CLUB SEATS

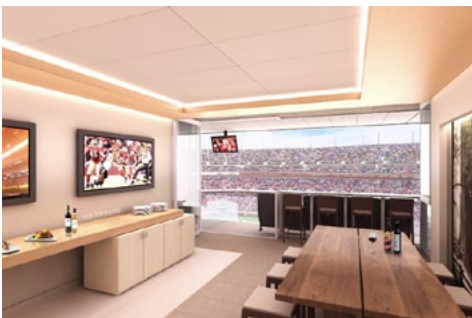
Total Club Seats: 8,805

Average Price per Club Seat: \$3,530

Potential Club Seat Revenue: \$31.1M

TOTAL PREMIUM REVENUE: \$143.7M

Levi's Stadium will feature 165 suites that will cost an average of approximately \$300,000 annually, and 8,805 club seats that will cost an average of \$3,530 annually.





NEW VIKINGS STADIUM

YEAR OPENED	2016
CAPACITY	65,000
SQ. FOOTAGE	1.6M sqft
PROJECT COST	\$1,049M
% PRIVATE	53%
% PUBLIC	47%

FUNDING SOURCES	
State of Minnesota	\$348.0
City of Minneapolis	150.0
NFL G-4 Financing	200.0
Vikings Loan	125.0
Sale of Stadium Builders Licenses	125.0
Other Vikings Contribution	101.0
Total Sources (\$M)	\$1,049.0

New Vikings Stadium is scheduled to open in 2016 and will serve as the home of the NFL's Minnesota Vikings. The 65,000-seat stadium is estimated to feature 125 suites and 7,500 club seats and will be owned and operated by the Minnesota Sports Facilities Authority. The stadium will be multi-purpose in nature and will be able to accommodate MLS soccer, NCAA basketball and baseball, high school sporting events, motocross, concerts, conventions, and marching band competitions, among other events.

Project costs for New Vikings Stadium are estimated to total \$1.049 billion. Public contribution of \$498 million (47 percent) was comprised of \$348 million from the State of Minnesota and \$150 million from the City of Minneapolis.

Private funds will contribute approximately \$551 million of funding (53 percent). Private funding came in the form of a \$200 million loan from the NFL in G-4 funding, estimated \$125 million in net revenues generated by the sale of Stadium Builder Licenses, and approximately \$226 million from other sources, including \$125 million in the form of bank loans financed by Vikings and approximately \$101 million from other team revenues.



NEW VIKINGS STADIUM PSL PROGRAM



The New Vikings Stadium will acquire Stadium Builder's License ("SBL") fees on the majority of seats in the venue, ranging from a low of \$500 in the upper deck corners/end zone to a high of \$9,500 per seat in the Field Club. In total, the Vikings will raise \$125M as part of its SBL program. The stadium will also offer non-SBL seating (shown in white above) in upper deck areas along the corners and end zone.



NEW VIKINGS STADIUM PREMIUM SEATING

SUITES

Total Suites: 125

Average Price Per Suite: \$166,000

Potential Suite Revenue: \$20,750,000

CLUB SEATS

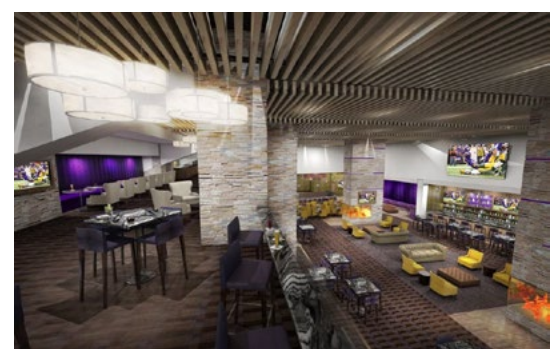
Total Club Seats: 7,500

Average Price per Club Seat: \$3,000

Potential Club Seat Revenue: \$22,500,000

TOTAL PREMIUM REVENUE: N/A

New Vikings Stadium will feature 125 suites that can accommodate 12 to 32 guests. The new stadium will also offer 7,500 club seats ranging in annual price from \$2,000 to \$4,000 in 2016.

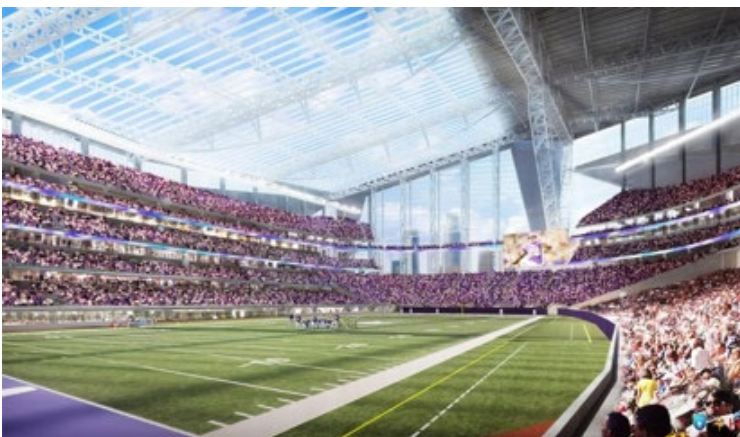


NEW VIKINGS STADIUM OTHER EVENT SUMMARY

The Minnesota Vikings will host two pre-season games and eight regular season games annually as the primary tenant. The stadium will also be configured to potentially host up to 18 University of Minnesota home baseball games.

Along with Vikings and University of Minnesota home baseball games, the stadium will also have the capability of hosting soccer matches. The Vikings have exclusive rights to bring a Major League Soccer (“MLS”) team into the stadium for the first five years. MLS teams have a 34-game regular season schedule and would represent significant potential event utilization for the venue. Other events expected to be held at the new stadium include: Monster Truck Jam, SuperCross motorcycle racing, Minnesota State High School League soccer and football championships, and other sports and entertainment. Minneapolis officials have expressed interest in hosting another national political convention as St. Paul hosted 2008 Republican National Convention

The Vikings have told the league that they intend to host a Super Bowl after the stadium opens, possibly as early as 2018. NFL League owners have exclusive authority over Super Bowl locations, and the league is widely expected to award the game to new stadiums, to encourage host cities to build them. It should be noted that Minneapolis hosted a Super Bowl in 1992. The MSFA also plans to bid for a Final Four in 2017 or 2018. This would mark a return of NCAA basketball tournament play, with previous tournaments being held the Metrodome in 1992 and 2001.





LUCAS OIL STADIUM

YEAR OPENED	2008
CAPACITY	62,421
SQ. FOOTAGE	1.8M sq. ft.
PROJECT COST	\$811.5M
% PRIVATE	11%
% PUBLIC	89%

FUNDING SOURCES & USES

Sources

2005A Bonds	\$400.0
2007A Bonds	211.5
Colts Contribution	100.0
Other Sources	100.0
Total Sources (\$M)	\$811.5

Uses

Construction Costs of Stadium Project	\$661.4
Other Project Costs	60.3
Capitalized Interest	83.0
Costs of Issuance	6.8
Parking	0.0
Land	0.0
Total Uses (\$M)	\$811.5

Lucas Oil Stadium opened in Indianapolis, Indiana in 2008 and serves as the home of the NFL Indianapolis Colts. The stadium is owned by the State of Indiana and operated by the Capital Improvement Board of Managers of Marion County. The 62,421-seat stadium features 140 suites that cost an average of approximately \$127,000 annually. The Colts offer 7,269 club seats that cost approximately \$2,660 per year on average.

Project costs for Lucas Oil Stadium totaled over \$811.5 million. The Indiana Finance Authority issued revenue bonds in the amount of \$611.5 million backed by an increase in Marion County excise taxes (including 3% hotel/motel, 1% food/beverage, 1% admissions and 2% auto rental tax increases), 1% tax on food/beverage in six surrounding counties and sale of special Colts vanity license plates. An additional \$100.0 million was generated from other sources of public sector funding.

The Colts contributed \$100.0 million towards stadium construction that was secured by team/stadium revenues.



LUCAS OIL STADIUM PREMIUM SEATING

SUITES

Total Suites: 140

Average Price Per Suite: \$127,000

Potential Suite Revenue: \$17.8M

CLUB SEATS

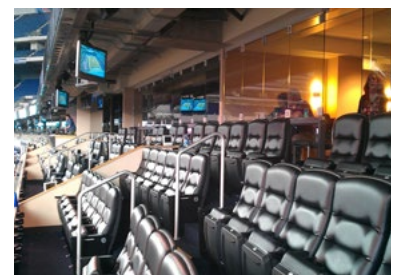
Total Club Seats: 7,269

Average Price per Club Seat: \$2,660

Potential Club Seat Revenue: \$19.4M

TOTAL PREMIUM REVENUE: \$37.1M

Lucas Oil Stadium features 140 suites at an average annual cost of around \$127,000. Annual fees for suites range from \$48,400 to \$302,500. The Colts offer 7,269 at an average annual fee of \$2,660. Annual prices for club seats at Lucas Oil Stadium range from \$2,320 to \$4,060. The exhibit on the left summarizes the suite and club seat inventory, pricing and estimated revenues.



LUCAS OIL STADIUM OTHER EVENT SUMMARY

Lucas Oil Stadium has hosted 4 major concerts since 2008, averaging less than one major concert event per year. The average paid attendance per event 50,500 with average gross revenue per concert of \$2.9 million, Upcoming major events in 2014 include: Supercross, NCAA Midwest Regionals, and DCI World Championships



MAJOR PAST EVENTS

2012

Kenny Chesney / Tim McGraw

2009

Toby Keith
Kenny Chesney

2008

Kenny Chesney



UNIVERSITY OF PHOENIX STADIUM

YEAR OPENED	2006
CAPACITY	62,400
SQ. FOOTAGE	1.7M sq. ft.
PROJECT COST	\$439.7M
% PRIVATE	37%
% PUBLIC	63%

University of Phoenix Stadium opened in 2006 and serves as the home of the NFL Arizona Cardinals, as well as the host of the Fiesta Bowl. The 62,400-seat stadium is owned by the Arizona Sports and Tourism Authority, a municipal corporation based in Phoenix, and is operated by Global Spectrum. The University of Phoenix acquired the naming rights in 2006 shortly after the stadium opened in agreement totaling \$154.5 million over 20 years, or approximately \$7.3 million annually.

Public funding included the Arizona Tourism and Sports Authority contributing \$265.9 million for stadium costs and \$10.3 million for site improvement. Other public funds included the City of Glendale/ADOT which provided an additional \$23.8 million for site improvements.

Private funding were comprised of a contribution from the Cardinals that consisted of \$113.6 million for stadium construction costs along with \$26.3 million dedicated to site improvement.

Funding Sources & Uses	
Sources	
Senior Bonds, Series 2003A	\$220.7
AZ Cardinals Contribution	103.0
Senior Bonds, Series 2005A	12.8
Prior Funding Sources	12.5
Sales Tax Recapture	12.4
Investment Earning	5.1
AZ Cardinals -- additional scope	3.8
AZ Cardinals -- increased Owner direct costs	2.9
AX Cardinals Contribution (to cover AZSTA shortfall)	2.8
AZSTA -- additional scope	2.1
Contingency Funding	1.2
Site Improvement Sources	
Series 2005A Bonds	32.3
City of Glendale/ADOT	23.8
AZ Cardinals	4.2
Total Sources (\$M)	\$439.7
Uses	
Stadium GMP	\$367
Other Fees	12.6
Stadium Improvement	
Site Improvements	41.0
Glendale Roadway Improvements	19.3
Total Uses (\$M)	\$439.7



UNIVERSITY OF PHOENIX STADIUM PREMIUM SEATING

SUITES

Total Suites: 108

Average Price Per Suite: \$99,000

Potential Suite Revenue: \$10.7M

CLUB SEATS

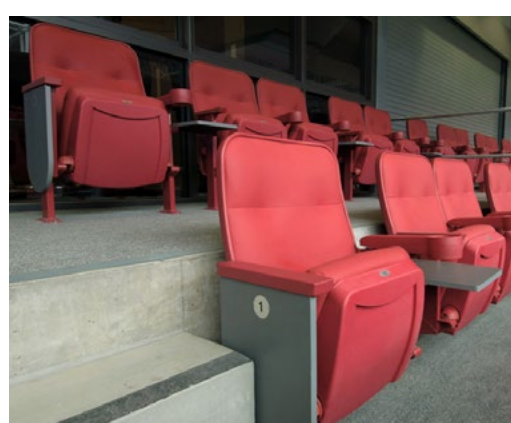
Total Club Seats: 7,357

Average Price per Club Seat: \$2,180

Potential Club Seat Revenue: \$16.1M

TOTAL PREMIUM REVENUE: \$26.8M

University of Phoenix Stadium features 108 suites that cost an average of approximately \$99,000, ranging from a low of \$40,000 to a high of \$131,250. The Cardinals offer 7,357 club seats that cost an average of \$2,180 per year, ranging from a low of \$1,450 to a high of \$7,180.



UNIVERSITY OF PHOENIX STADIUM OTHER EVENT SUMMARY

University of Phoenix Stadium has averaged 129 annual events since 2007. This event total is comprised of an average of three other sporting events annually, which include soccer, gymnastics, NCAA basketball. The stadium hosts approximately two large-scale entertainment events annually including concerts and motorsports events. Smaller events held at the stadium include an average of 23 consumer shows over 64 event days annually and include RV shows, home shows, sports expos, job fairs, etc. University of Phoenix Stadium also serves as the home of five trade shows over nine event days annually, on average. Industry groups represented in these trade shows include food, gifts, tools and travel. Other special events include Cardinals' events, commercial shoots, Ride & Drives, walks and other miscellaneous events

UNIVERSITY OF PHOENIX STADIUM MARKET SEGMENT ANALYSIS FY2007-FY2013								
Event Type	FY2013	FY2012	FY2011	FY2010	FY2009	FY2008	FY2007	Average
Number Of Events								
Football	11	11	12	12	13	11	12	12
Other Sporting Events	3	4	4	2	4	2	2	3
Entertainment	2	1	3	4	1	3	2	2
Consumer	22	18	20	25	24	26	24	23
Trade	2	0	3	3	5	7	12	5
Banquets & Meetings	12	13	22	13	27	51	77	31
Graduations & Proms	24	29	21	26	19	15	21	22
Other Special Events	50	56	25	15	28	17	32	32
Total	126	132	110	100	121	132	182	129
Event Days								
Football	11	11	12	12	13	11	12	12
Other Sporting Events	7	4	6	4	7	5	2	5
Entertainment	2	1	3	4	1	3	2	2
Consumer	68	58	62	66	56	64	71	64
Trade	3	0	7	7	11	14	22	9
Banquets & Meetings	12	13	25	13	39	77	76	36
Graduations & Proms	9	15	9	12	12	9	15	12
Other Special Events	58	67	31	17	63	31	31	43
Total	170	169	155	135	202	214	231	182



FORD FIELD

YEAR OPENED	2002
CAPACITY	65,000
SQ. FOOTAGE	1.9M sq. ft.
PROJECT COST	\$440M
% PRIVATE	76%
% PUBLIC	24%

FUNDING SOURCES	
Detroit Lions Contribution	\$157.0
NFL G-3 Financing	103.0
Detroit Downtown Development Authority	70.0
Naming Rights Revenue	60.0
Sports Authority	20.0
Wayne County	20.0
Stadium Sponsors	10.0
Total Sources (\$M)	\$440.0

The 65,000-seat Ford Field opened in Detroit Michigan, in 2002. The stadium is owned by the Detroit/Wayne County Stadium Authority and operated by the Detroit Lions. Ford Motor Company purchased the naming rights in 2002 for \$60 million over 20 years.

The Downtown Development Authority (DDA) contributed \$70.0 million to the project, of which \$40.0 million was derived from the County purchase of Detroit Tigers facility rights and \$30.0 million in interest installment payments made by the DDA. The County funded \$20.0 million toward the project with proceeds from the sale of land and properties. Another \$20.0 million was obtained from the Sports Authority for parking rights (which were in turn purchased by the Tigers) was used to fund the project.

The Lions contributed \$157.0 million in project costs through various revenues generated from the stadium. A corporate contribution of \$70.0 million, of which approximately \$60.0 million was generated through the sale of facility naming rights and the remaining \$10.0 million from sponsorship revenue, comprised the balance of the private funding. An NFL G-3 loan funded approximately \$103.0 million in project costs secured by the visiting team share of club seat premiums.



FORD FIELD PREMIUM SEATING

SUITES

Total Suites: 127

Average Price Per Suite: \$96,000

Potential Suite Revenue: \$12.2M

CLUB SEATS

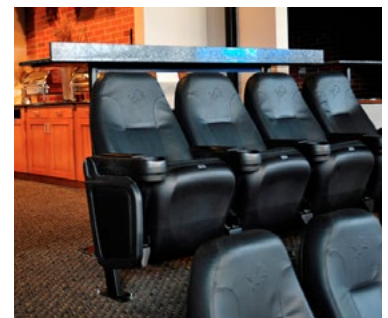
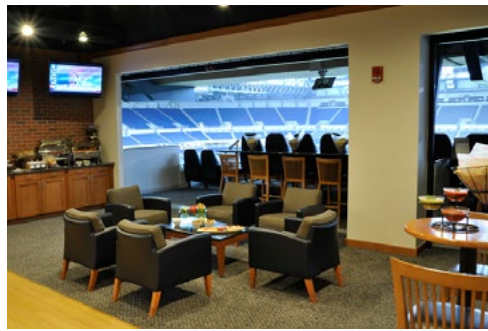
Total Club Seats: 7,312

Average Price per Club Seat: \$1,432

Potential Club Seat Revenue: \$10.5M

TOTAL PREMIUM REVENUE: \$22.7M

Ford Field features 127 suites that cost an average of approximately \$96,000, ranging from a low of \$56,000 to a high of \$200,000 annually. The Lions offer 7,312 club seats at an average annual fee of \$1,432. Annual prices for club seats at Ford Field range from \$1,000 to \$2,000.



FORD FIELD OTHER EVENT SUMMARY

Ford Field has hosted 14 major concerts since 2002, averaging over one concert per year. The average paid attendance per event is 48,963 and generates gross revenue per concert of approximately \$3.9 million. Major upcoming events in 2014 include: Monster Jam, Monster Energy AMA Super Cross, One Direction, and Federation of Electronic Music Festival. Past notable events include college basketball, motorsports events, Super Bowl XL in 2006, WrestleMania in 2007, and the 2009 NCAA Men's Final Four.



MAJOR PAST EVENTS

2013

Kenny Chesney
Jay Z / Justin Timberlake
Taylor Swift

2012

Kenny Chesney / Tim McGraw

2011

Taylor Swift

2010

Kenny Chesney

2008

Madonna



NRG STADIUM

YEAR OPENED	2002
CAPACITY	71,054
SQ. FOOTAGE	1.9M sq. ft.
PROJECT COST	\$449M
% PRIVATE	57%
% PUBLIC	43%

FUNDING SOURCES	
Harris County Sports Authority	\$194.0
User Taxes	140.0
Texans PSL Revenue	50.0
Texans Rent	40.0
Houston Livestock Show & Rodeo Rent	25.0
Total Sources (\$M)	\$449.0

The 71,054-seat NRG Stadium opened in 2002 and is the home of the NFL’s Houston Texans, the Houston Livestock Show and Rodeo, and the Texas Bowl. Other events hosted at the stadium include international soccer matches, concerts, and other sporting events. NRG Stadium is part of a collection of facilities, which are referred to as Reliant Park. Reliant Energy purchased the naming rights to the entire complex in 2000, in a 32-year agreement worth \$300 million. The stadium is owned by Harris County and operated by SMG.

Total project costs for NRG Stadium were approximately \$449.0 million. The Harris County Sports Authority contributed \$194 million that was secured by County hotel/motel tax revenue and short-term car rental taxes. User fees including a 10 percent ticket tax, a \$1.00 parking surcharge and sales tax rebates on in-stadium spending accounted for \$140 million in project funding.

The Houston Texans contributed \$50 million from the sale of personal seat licenses (PSLs). In addition, the team provided \$40 million that was secured from an annual rent payment of \$3.0 million to the Sports Authority. The Houston Livestock Show and Rodeo provided \$25 million secured by annual rent payments of \$1.5 million to the Sports Authority.



NRG STADIUM PSL PROGRAM



OPTION A: SEATS WITH PSL

SECTION	PSL PRICE	PSL DEPOSIT	2007 SEASON TICKET
Field Level Prime	\$4,200	\$2,100	\$890
Field Level Sideline	\$2,100	\$1,050	\$780
Field Level Corner	\$900	\$450	\$660
Field Level Endzone	\$600	\$300	\$560
Bull Pen	\$600	\$300	\$560
Gridiron Midfield	\$1,600	\$800	\$550
Loge I	\$2,700	\$1,350	\$720
Loge II	\$1,200	\$600	\$610
Mezzanine	\$900	\$450	\$610

The Texans required PSLs on 45,420 seats or 67 percent of stadium capacity. Seat license prices ranged from \$600 to \$4,200 per seat, with the Texans generating approximately \$77.0 million in PSL revenue.



NRG STADIUM PREMIUM SEATING

SUITES

Total Suites: 185

Average Price Per Suite: \$156,000

Potential Suite Revenue: \$28.9M

CLUB SEATS

Total Club Seats: 9,436

Average Price per Club Seat: \$2,000

Potential Club Seat Revenue: \$18.9M

TOTAL PREMIUM REVENUE: \$47.7M

NRG Stadium features 185 suites at an average annual cost of around \$156,000. Annual fees for suites range from \$59,400 to \$270,000. The Texans offer 9,436 at an average annual fee of \$2,000. Annual prices for club seats at NRG Stadium range from \$1,430 to \$2,380.



NRG STADIUM OTHER EVENT SUMMARY

NRG Stadium has hosted 27 major third party concert/entertainment events since 2005. The stadium averages nearly four major events per year drawing paid attendance per event of 57,516. Average gross revenue per concert event is approximately \$2.7 million Major upcoming events in 2014 include the Houston Livestock Show and Rodeo (hosted at the stadium annually), One Direction and Sesame Street Live. Past notable events include the Super Bowl (2004), WWE Wrestlemania (2009), Texas Bowl (since 2006), USA National Soccer Team matches, other international soccer matches, among other sports and entertainment events.



MAJOR PAST EVENTS

2013

Houston Livestock Show and Rodeo – George Strait

2012

Kenny Chesney / Tim McGraw

2011

Kenny Chesney
Jay Z / Justin Timberlake
Taylor Swift

2009

U2
George Strait
WWE

2008

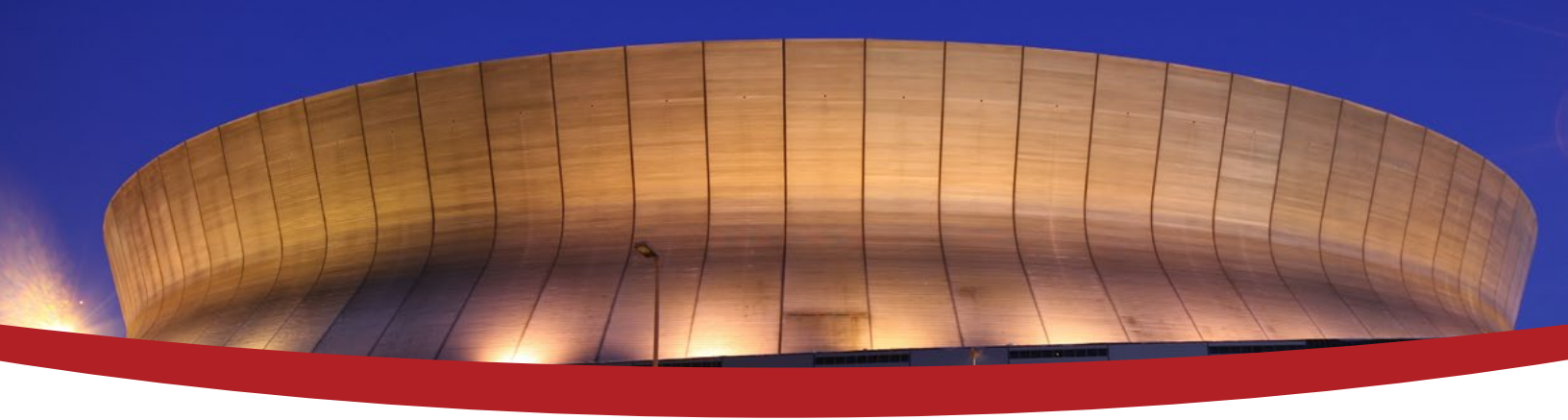
Houston Livestock Show and Rodeo – Alan Jackson

2007

Houston Livestock Show and Rodeo – Tim McGraw

2005

Disney on Ice



MERCEDES-BENZ SUPERDOME

YEAR OPENED	1975
CAPACITY	73,208
SQ. FOOTAGE	1.9M sq. ft.
PROJECT COST	\$336M
% PRIVATE	4%
% PUBLIC	96%

FUNDING SOURCES	
FEMA	\$156.0
State of Louisiana	121.0
Louisiana Stadium & Exposition District	44.0
NFL Non-Reimbursable Funding Grant	15.0
Total Sources (\$M)	\$336.0

Opened in 1975, the Mercedes-Benz Superdome is home of the NFL's New Orleans Saints and the AFL's New Orleans VooDoo. The stadium is owned by the Louisiana Stadium/Expo District and operated by SMG. Mercedes-Benz purchased naming rights to the stadium in 2011 for an estimated \$50 to \$60 million over 10 years.

In early 2006, the Superdome underwent a \$336.0 million renovation that consisted of multiple remodeling phases. Sources of renovation funding included \$156 million from FEMA eligible repairs including roof and aluminum siding, \$121 million from the State of Louisiana (including an \$85 million appropriation for Superdome upgrades in 2010), \$44 million from the Louisiana Stadium and Exposition District ("LSED") from refinanced LSED bonds post Katrina, and \$15 million from a non-reimbursable funding grant from the NFL.

Initially, the stadium was repaired and refurbished from damage suffered during Hurricane Katrina. Between 2008 and 2010, renovations to the roof were made along with new exterior aluminum panels and insulation. Interior enhancements were also made to luxury suites and club lounge areas. In 2011, the lower level plaza concourse was widened, building two bunker club lounges that can accommodate 4,500 fans, and adding additional new restrooms and concession points-of-sale.



MERCEDES-BENZ SUPERDOME PREMIUM SEATING

SUITES

Total Suites: 137

Average Price Per Suite: \$80,000

Potential Suite Revenue: \$11.0M

CLUB SEATS

Total Club Seats: 16,140

Average Price per Club Seat: \$2,270

Potential Club Seat Revenue: \$36.6M

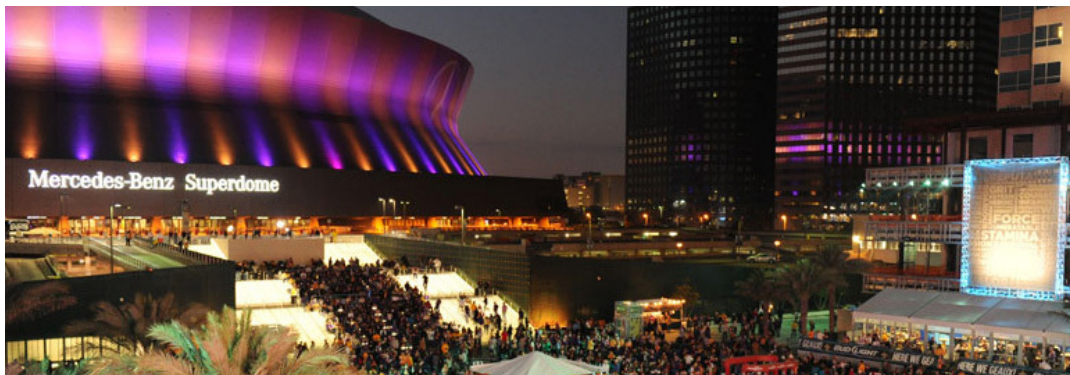
TOTAL PREMIUM REVENUE: \$47.6M

The Mercedes-Benz Superdome features 137 suites that cost an average of approximately \$80,000 per year. The Saints offer 16,140 club seats that cost an average of \$2,270 annually, ranging from a low of \$1,700 to a high of \$2,890.



MERCEDES-BENZ SUPERDOME OTHER EVENT SUMMARY

The Superdome has hosted seven major concerts since 2000, averaging less than one per year. Paid attendance for these concert events has been 28,330 on average, generating average gross revenue of approximately \$2.0 million per concerts. Past notable events held at the Superdome include the Sugar Bowl (hosted annually since 1975), New Orleans Bowl (hosted annually since 2001), multiple Super Bowls, NCAA Men's Final Four, The Rolling Stones, Monster Jam, Supercross, among several other sports and entertainment events. Other events held the Superdome include religious events, trade and consumer shows, conventions, meetings and banquets.





MCLANE STADIUM

YEAR OPENED	2014
CAPACITY	45,000
SQ. FOOTAGE	860,000 sq. ft.
PROJECT COST	\$260M
% PRIVATE	87%
% PUBLIC	13%

FUNDING SOURCES

Baylor Athletics	\$100.0
Baylor Campaign Gifts	82.5
City of Waco TIFF Funds	35.0
Stadium Naming Rights	25.0
Field Naming Rights	17.5
Total Sources (\$M)	\$260.0

Baylor took on a multi-initiative fundraising campaign to develop the \$260 million McLane Stadium along with other facilities on campus. The City of Waco provided \$35 million in TIFF funds for the project. Baylor athletics are paying \$100 million over 20 years to fund the new stadium. The remaining \$125 million to build the stadium was raised from stadium naming rights (\$25.0 million) and included a founders suite, field naming rights (\$17.5 million) and included a founders suite, and capital gift donations required for the purchase of club seats, loge boxes and luxury suites in the new stadium.



MCLANE STADIUM PREMIUM SEATING

SUITES

Total Suites: 42
 Potential Capital Seat Revenue: \$140.0M
 Potential Annual Revenue: \$2.5M

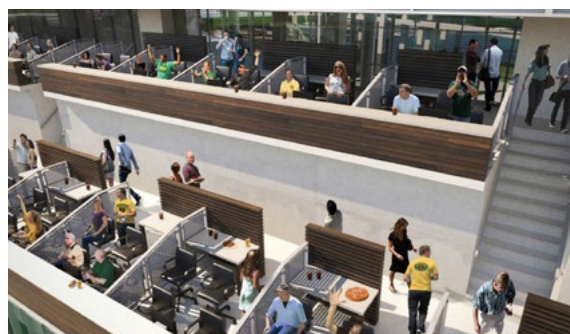
LOGE BOXES

Total Loge Boxes: 79
 Potential Capital Seat Revenue: \$11.0M
 Potential Annual Revenue: \$948,000

CLUB SEATS

Total Club Seats: 1,200
 Potential Capital Seat Revenue: \$11.0M
 Potential Annual Revenue: \$2.1M

TOTAL CAPITAL SEAT REVENUE: \$162.0M
TOTAL ANNUAL REVENUE: \$5.6M



Premium seating at the stadium will include six Founder's Suites, 36 luxury suites, 79 loge boxes, and 1,200 club seats. Founder's Suites required a minimum contribution of \$10.0 million that included 20 years of suite holder benefits. The other 36 luxury suites required a contribution between \$1.0 million and \$3.0 million and gave the suite holder benefits for seven to 15 years. Capital seat gifts tied to the 42 suites generated \$140.0 million, including several donors who gave more than \$10.0 million and received prime naming opportunities throughout the stadium.

In order to obtain priority during the seat selection process, loge boxes required gifts between \$40,000 and \$250,000+, while club seats required gifts from \$5,000 to \$150,000+. Approximately \$22.0 million was generated by loge box and club seat capital gifts. Overall, Baylor generated approximately \$162.0 million in capital seat donations.



TCF BANK STADIUM

YEAR OPENED	2009
CAPACITY	50,805
SQ. FOOTAGE	900,000 sq. ft.
PROJECT COST	\$303M
% PRIVATE	55%
% PUBLIC	45%

FUNDING SOURCES	
25-Year Bonds Secured with State Funds	\$137.0
Bonds funded with Premium Seating/Annual Fund Revenues	50.0
Other Sponsorship and Fundraising	37.5
Stadium Naming Rights	35.0
Bonds Secured with Student Fees	13.0
Bonds Secured with Parking Revenues	13.0
Stadium Club Naming Rights	2.5
Native American Tribal Gift	10.0
Best Buy Contribution	3.0
Target Contribution	2.0
Total Sources (\$M)	\$303.0

The 50,805-seat TCF Bank Stadium opened in 2009 on the campus of the University of Minnesota at a total cost of \$303 MM. The stadium cost approximately \$303.0 million to construct, of which the university will pay 55 percent and the state of Minnesota the remaining 45 percent. The state issued approximately \$137.0 million in bonds to fund their share of the project costs. The university's share of approximately \$166.0 million was comprised of multiple sources including \$50.0 million in bonds secured with premium seating and annual fund revenues. Approximately \$13.0 million in bond funding was secured with parking revenues, an additional \$13.0 million in bonds were funded with student fees.

The university also sold the stadium naming rights to TCF Financial Corporation for \$35.0 million. Other sources include a \$10.0 million Native American tribal gift, corporate donations and other sponsorship and fundraising.



TCF BANK STADIUM PREMIUM SEATING

SUITES

Total Suites: 38

Potential Annual Revenue: \$1.7M

LOGE BOXES

Total Loge Boxes: 54

Potential Annual Revenue: \$675,000

CLUB SEATS

Total Club Seats: 1,545

Potential Annual Revenue: \$3.0M

TOTAL ANNUAL REVENUE: \$5.4M

TCF Bank Stadium includes 38 luxury suites, 250 loge seats (54 boxes) and 1,545 club seats (295 indoor and 1,250 outdoor), which generate approximately \$5.4 million in annual premium seating revenue. Premium seating required no capital seat gift requirement and is available on three-year, five-year and ten-year lease terms.



TCF BANK STADIUM

OTHER EVENT SUMMARY

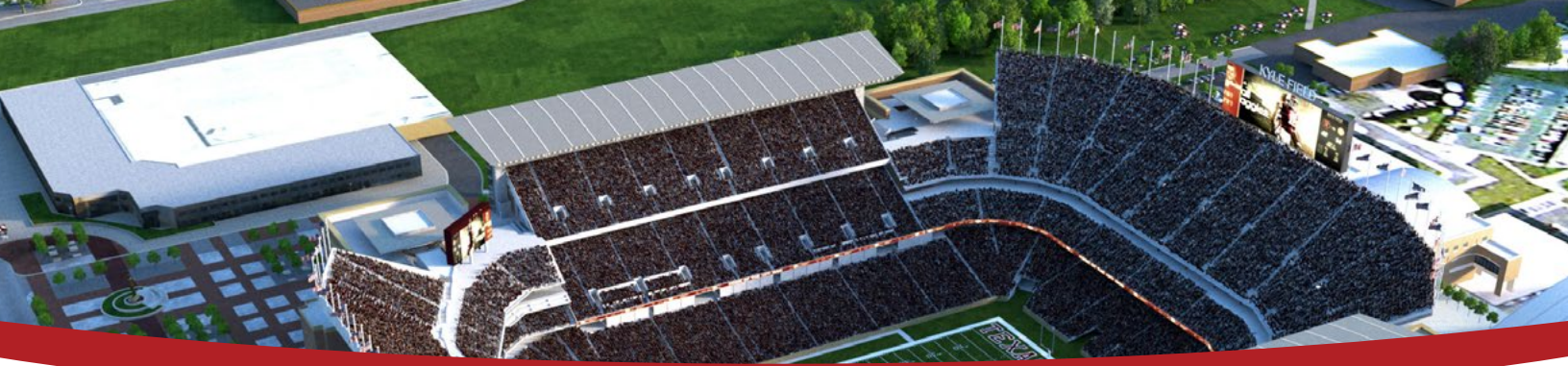
TCF Bank Stadium hosted 334 third party events in 2013, only four of which utilized the playing field/seating bowl. The stadium hosted 330 miscellaneous events in 2013. These events consisted of meetings, banquets, weddings, and other private events. Other events in 2013 included high school band and football competitions

TCF Bank Stadium has hosted two major concerts since opening (2013-Passion Pit, 2011-U2) and average less than one concert per year. The average paid attendance for these concert events is approximately 34,806, generating gross revenue of \$2.7 million per concert. The stadium is expected to host another major concert in 2014.

3RD PARTY STADIUM EVENTS

Event Type	Total	Avg. Attendance	Attendance
Minnesota Hockey	1	44,000	44,000
Concert	1	27,500	27,500
HS Band Competition	1	12,000	12,000
HS Football	1	30,000	30,000
Miscellaneous	330	500	165,000
Total	334	--	278,500





KYLE FIELD

YEAR OPENED	2014
CAPACITY	102,512
SQ. FOOTAGE	n/a
PROJECT COST	\$450M
% PRIVATE	95%
% PUBLIC	5%

FUNDING SOURCES	
Annual Seat Licenses	\$229.5
TAMU Campaign Gifts	121.5
TAMU Student Fund	76.5
Local Government Agencies	22.5
Total Sources (\$M)	\$450.0

Kyle Field is currently undergoing a major renovation scheduled to be completed for the 2015 football season. The renovation will include reconstruction of the East side first deck, an entire replacement of the West sideline to include club seats, suites and loge boxes, and complete reconstruction of the South end. The total cost of the Kyle Field renovation is \$450 million. Approximately 51 percent will be funded by annual seat licenses, 27 percent will be funded by Kyle Field Campaign gifts, 17 percent will be funded by Texas A&M students and 5 percent will be funded by the local government agencies.



KYLE FIELD PREMIUM SEATING

SUITES

Total Suites: 114

Potential Capital Seat Revenue: \$243.0M

Potential Annual Revenue: \$4.9M

LOGE BOXES

Total Loge Boxes: 71

Potential Capital Seat Revenue: \$1.6M

Potential Annual Revenue: \$887,500

CLUB SEATS

Total Club Seats: 4,775

Potential Capital Seat Revenue: \$31.9M

Potential Annual Revenue: \$14.2M

TOTAL CAPITAL SEAT REVENUE: \$275.6M

TOTAL ANNUAL REVENUE: \$20.0M



The reconstruction will include 114 luxury suites, 71 loge boxes, and 4,775 club seats. All new premium seats required a one-time capital gift in addition to the annual donation cost of seating. The majority of capital seat donations are payable over five years and will give the seat holder rights to the seat for 15 years. The stadium includes 12 Founder's Suites that required a capital gift of at least \$10 million and 102 luxury suites required a capital seat gift between \$150,000 and \$2 million. Loge boxes required a capital seat gift between \$14,000 and \$30,000, while club seats required a capital seat donation of between \$1,500 and \$15,000 per seat. New premium seating at a reconstructed Kyle Field is sold out.



APOGEE STADIUM

YEAR OPENED	2011
CAPACITY	30,850
SQ. FOOTAGE	426,300 sq. ft.
PROJECT COST	\$80M
% PRIVATE	100%
% PUBLIC	0%

FUNDING SOURCES

Bonds by Stadium-Related Revenues	\$40.0
Bonds by Student Fees	40.0
Total Sources (\$M)	\$80.0

The 30,850-seat Apogee Stadium opened in 2011 on the campus of the University of North Texas at a total cost of \$80.0 million. Construction of the stadium was funded entirely with private funds, and included \$40.0 million in revenues from student fees and \$40.0 million in stadium-related revenue. Stadium-related revenue is mainly comprised of funds generated from a 20-year, \$20.0 million naming rights deal with Apogee Electronics, the second-largest naming rights deal in terms of annual value in Division I college football, and revenues generated from the addition of 21 luxury suites and 754 club seats.



APOGEE STADIUM PREMIUM SEATING

SUITES

Total Suites: 21

Potential Capital Gift Revenue: N/A

Potential Annual Revenue: N/A

CLUB SEATS

Total Club Seats: 754

Potential Capital Gift Revenue: N/A

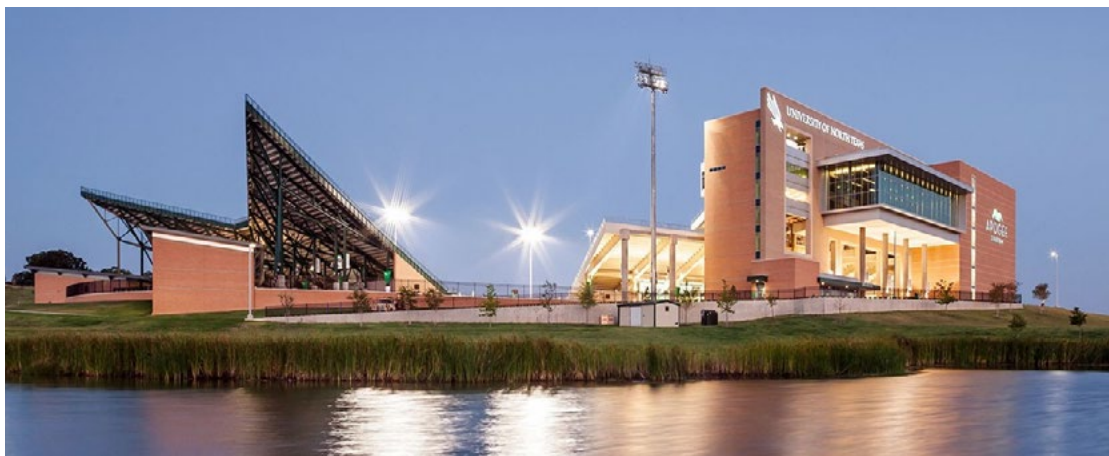
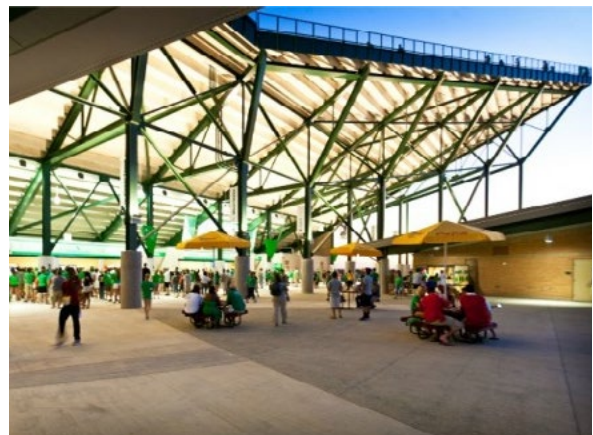
Potential Annual Revenue: N/A



Apogee Stadium features 21 luxury suites, which the athletic department sells for \$20,000 per year plus a one-time six-figure capital donation to the Stadium Fund. The stadium also offers 754 club seats, which can be purchased with a one-time gift of \$3,125 to \$12,500, in addition to an annual \$500 donation to the athletic department and \$350 for season tickets.

APOGEE STADIUM OTHER EVENT SUMMARY

Apogee Stadium is used primarily for UNT football and other university-centered events. The stadium does not host major third party ticketed-events, but UNT has hosted occasional outdoor concerts put on by the university. The stadium has been used primarily for community events, high school football playoff games and band competitions.





FAU STADIUM

YEAR OPENED	2011
CAPACITY	30,000
SQ. FOOTAGE	513,589 sq. ft.
PROJECT COST	\$70M
% PRIVATE	100%
% PUBLIC	0%

FUNDING SOURCES	
Bonds Backed by Stadium Revenues	\$45.0
University & University Foundation Contribution	20.0
Innovation Village Housing Financing	5.0
Total Sources (\$M)	\$70.0

The \$70 million stadium opened in 2011 and seats approximately 30,000. On July 1, 2010, FAU trustees voted to approve a \$45.0 million finance plan from Regions Bank backed by stadium revenues . Other funding sources include \$20.0 million from the University and University Foundation that includes student fees, private donations and naming rights partnerships. The financing plan includes the infusion of approximately \$5.0 million from the financing for the first phase of the Innovation Village development to be used to finance certain shared infrastructure costs. The Innovation Village is a housing, recreation and retail complex that will include student residence halls, shopping and dining establishment.



FAU STADIUM PREMIUM SEATING

SUITES

Total Suites: 23

Potential Capital Seat Revenue: \$2.3M

Potential Annual Revenue: \$684,000

LOGE BOXES

Total Loge Boxes: 32

Potential Capital Seat Revenue: \$400,000

Potential Annual Revenue: \$244,000

CLUB SEATS

Total Club Seats: 4,908

Potential Capital Seat Revenue: N/A

Potential Annual Revenue: \$6.3M

TOTAL CAPITAL SEAT REVENUE: \$2.7M

TOTAL ANNUAL REVENUE: \$7.2M



The stadium includes 23 luxury suites, 164 loge seats (32 boxes) and 4,908 club seat, which have the potential to generate approximately \$7.2 million in annual premium seating revenue. Required annual donation level is based on the length of lease agreement. Luxury suites are priced at \$32,760 for three years, \$29,760 for four years and \$26,750 for five year agreements. Loge boxes are offered for either four or six seats. Four seat loge boxes are priced at \$6,707 for three seasons, \$6,207 for four seasons and \$5,707 for five seasons. Six seat loge boxes are priced at \$9,560 for three seasons, \$9,060 for four seasons and \$8,560 for five seasons. Club seats are offered on one, two, three, four and five year terms and range in price from \$1,480 for one year agreements and \$1,080 for five year agreements.

FAU STADIUM OTHER EVENT SUMMARY

FAU Stadium is used primarily for FAU football and other university-centered events. The stadium frequently hosts US Soccer who average one match at FAU Stadium per year. Attendance at last years match was approximately 7,000. No major concerts are typically held at the stadium, but one major religious gathering is held at the stadium each year. Other events hosted at the facility include corporate events utilized the club spaces available in the stadium.

3RD PARTY STADIUM EVENTS

Event Type	Total	Avg. Attendance	Attendance
Religious Event	1	30,000	30,000
Corporate Event	21	1,000	21,000
Major League Lacrosse	8	2,000	16,000
US Soccer	1	12,000	12,000
HS Football Championship	1	7,000	7,000
Total	32	--	86,000



BRIGHT HOUSE NETWORKS STADIUM

YEAR OPENED	2007
CAPACITY	45,301
SQ. FOOTAGE	1.1M sq. ft.
PROJECT COST	\$59M
% PRIVATE	100%
% PUBLIC	0%

FUNDING SOURCES	
Series 2006A Bonds	\$45.0
Series 2006B Taxable Bonds	14.0
Total Sources (\$M)	\$59.0

The 45,301-seat Bright House Networks Stadium opened in 2007 on the campus of the University of Central Florida at a cost of \$60.0 million. The stadium, which replaced the 70,000-seat Citrus Bowl as the team’s home stadium, has provided the University with many new revenue-producing opportunities, such as food and beverage, parking, advertising/ sponsorship, priority seating, as well as revenue from the stadium’s 24 luxury suites and 800 club seats. In addition to the increases in revenue, the stadium has also served as a catalyst for increased attendance, which has risen by 51 percent since the final three years at the Citrus Bowl.

The stadium was funded entirely by the private sector, and included UCF issued \$59 million in certificates of participation (“COPs”), a form of lease revenue bonds. COPs were backed by stadium operating revenues (\$22 million), premium seating revenues (\$8 million), capital gifts (\$15 million), and \$15 million from stadium naming rights sold to Bright House Networks.



BRIGHT HOUSE NETWORKS STADIUM PREMIUM SEATING

SUITES

Total Suites: 24

Potential Annual Revenue: \$750,000

CLUB SEATS

Total Club Seats: 800

Potential Annual Revenue: \$2.0M

TOTAL ANNUAL REVENUE: \$2.8M



UCF offered 24 suites to donors to the university who have made a significant commitment over the years. The stadium features 21 standard suites sold for \$30,000 a year over the course of a five year term. Each standard suite seats 20 and suite holders are issued five VIP parking passes for each game. Catering is available to suite holders and is purchased separately.

The stadium will also has three large suites available for \$40,000 a year over a five year term. Large suites can accommodate 30 guests and suite holder are provided six VIP parking passes. The stadium also offers approximately 800 club seats that are be sold in pairs for \$2,500. The length of the user agreement for club seats is also five years.



INFOCISION STADIUM

YEAR OPENED	2009
CAPACITY	30,000
SQ. FOOTAGE	269,000 sq. ft.
PROJECT COST	\$61.6M
% PRIVATE	100%
% PUBLIC	0%

FUNDING SOURCES

Akron Private Fundraising	\$30.0
Bonds Backed by Stadium Revenues	15.5
Naming Rights Agreements	16.1
Total Sources (\$M)	\$61.6

The 30,000-seat InfoCision Stadium opened in 2009 at a cost of \$61.6 million. Funding for the stadium was provided by a \$30.0 million private fundraising campaign through the university. An additional \$15.5 million in funding was provided via stadium revenue backed bond. Akron's annual debt payment is \$4.3 million for these bonds.

Naming rights accounted for \$16.1 million in funding. InfoCision paid \$10.0 million for stadium naming rights, Summa Health System \$5.0 million for field naming rights, FirstMerit Foundation paid \$1.0 million for the club level and Towpath Credit Union \$100,000 for the press box.



INFOCISION STADIUM PREMIUM SEATING

SUITES

Total Suites: 17

Potential Annual Revenue: \$340,000

LOGE BOXES

Total Loge Boxes: 38

Potential Annual Revenue: \$760,000

CLUB SEATS

Total Club Seats: 522

Potential Annual Revenue: \$391,500

TOTAL ANNUAL REVENUE: \$1.5M

InfoCision stadium features 17 suites, 38 loge boxes and 522 club seats. Luxury suites require annual donations of \$20,000 and loge boxes require annual donations of \$5,000. Both suites and loge boxes are available on three to five-year commitments. Club seats require annual donations between \$500 and \$1,000 and are sold on three-year commitments. No premium seating required a capital gift donation.



INFOCISION STADIUM OTHER EVENT SUMMARY

InfoCision is primarily used to host Akron football but is occasionally utilized throughout the year by third parties. The stadium does not host any “major events” but did host one concert last year with an attendance of around 5,000. The facility hosts approximately 150 meetings/banquets were hosted at the stadium last year, with an average attendance of 225 patrons. Akron, Ohio is the birthplace of Alcoholics Anonymous, and the organization hosts “Founder’s Day” meeting at the stadium once a year with approximate attendance of 30,000. Local and regional marching band competitions are also held at the stadium.

3RD PARTY STADIUM EVENTS

Event Type	Total	Avg. Attendance	Attendance
Meetings/Banquets	150	225	33,750
AA Founders Day	1	12,000	12,000
HS Marching Band Events	3	2,500	7,500
Concerts	1	5,000	5,000
Total	155	--	58,250

SUMMARY

Within this section, the physical and operational characteristics of newly constructed/renovated NFL and collegiate stadiums were reviewed. The following table summarizes key characteristics of the facilities including year opened, capacity, square footage, construction cost, funding sources, premium seating inventory and pricing, and third party event activity.

Comparable NFL and Collegiate Stadium Summary									
	AT&T Stadium	MetLife Stadium	Levi's Stadium	New Vikings Stadium	Lucas Oil Stadium	University of Phoenix Stadium	Ford Field	NRG Stadium	Mercedes-Benz Superdome
Location	Arlington, TX	East Rutherford, NJ	Santa Clara, CA	Minneapolis, MN	Indianapolis, IN	Glendale, AZ	Detroit, MI	Houston, TX	New Orleans, LA
Tenant	NFL	NFL	NFL	NFL	NFL	NFL	NFL	NFL	NFL
Year Opened	2009	2010	2014	2016	2008	2006	2002	2002	2006
Capacity	80,000	82,566	68,500	65,000	62,421	62,400	65,000	71,054	73,208
Total Sq. Ft.	3,000,000	2,100,000	1,900,000	1,600,000	1,800,000	1,700,000	1,900,000	1,900,000	19,000
Total Cost (\$MM)	\$1,274.0	\$1,850.0	\$1,251.0	\$1,049.0	\$811.5	\$439.7	\$440.0	\$449.0	\$336.0
Funding:									
% Public	36%	14%	68%	53%	89%	63%	24%	43%	96%
% Private	64%	86%	32%	47%	11%	37%	76%	57%	4%
Luxury Suites:									
Inventory	320	213	165	125	140	108	127	185	137
Average Price	\$300,000	\$494,000	\$300,000	\$166,000	\$127,000	\$99,000	\$96,000	\$156,000	\$80,000
Loge Boxes:									
Inventory	0	0	0	0	0	0	0	0	0
Average Price	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Club Seats:									
Inventory	14,177	10,041	8,805	7,500	7,269	7,357	7,312	9,436	16,140
Average Price	\$3,370	\$3,888	\$3,530	\$3,000	\$2,660	\$2,180	\$1,432	\$2,000	\$2,270
Third Party Events	13	4	n/a	n/a	1	5	3	4	4

	McLane Stadium	TCF Bank Stadium	Kyle Field	Apogee Stadium	FAU Stadium	Bright House Networks Stadium	InfoCision Stadium	Average NFL-Only	Average NCAA-Only
Location	Waco, TX	Minneapolis, MN	College Station, TX	Denton, TX	Boca Raton, FL	Orlando, FL	Akron, OH	--	--
Tenant	NCAA	NCAA	NCAA	NCAA	NCAA	NCAA	NCAA	--	--
Year Opened	2014	2009	2015	2011	2011	2007	2009	2008	2011
Capacity	42,000	50,805	102,512	30,850	30,000	45,301	30,000	70,017	47,353
Total Sq. Ft.	860,000	900,000	n/a	426,300	513,589	1,100,000	269,000	1,768,778	678,148
Total Cost (\$MM)	\$260.0	\$303.0	\$450.0	\$80.0	\$70.0	\$59.0	\$61.6	\$877.8	\$183.4
Funding:									
% Public	13%	45%	5%	0%	0%	0%	0%	54%	9%
% Private	87%	55%	95%	100%	100%	100%	100%	46%	91%
Luxury Suites:									
Inventory	42	38	114	21	23	24	17	169	40
Average Price	\$100,000	\$45,000	\$62,000	\$20,000	\$32,760	\$30,000	\$20,000	\$202,000	\$44,251
Loge Boxes:									
Inventory	79	54	71	0	32	0	38	0	55
Average Price	\$14,400	\$12,500	\$12,500	n/a	\$6,707	n/a	\$5,000	n/a	\$10,221
Club Seats:									
Inventory	1,200	1,545	4,775	754	4,908	800	522	9,782	2,072
Average Price	\$1,750	\$1,942	\$2,972	\$850	\$1,280	\$1,250	\$750	\$2,703	\$1,542
Third Party Events	n/a	4	n/a	n/a	11	n/a	n/a	5	7

Key characteristics of comparable NFL and collegiate stadiums include the following:

- On average, comparable NFL stadiums opened in 2008, while the average collegiate stadium opened in 2011.
- Overall, the NFL stadiums have a larger average seating capacity (70,017) and total square footage (1.8 million) than collegiate stadiums, which have an average seating capacity and total square footage of 47,353 and 678,000, respectively.
- Given their larger size, generally higher level of finish and larger number that are enclosed/retractable, the average cost to construct an NFL stadium (\$878 million) is over four-times higher than the average cost to construct a collegiate stadium (\$183M). It should be noted that the cost to construct new state-of-the-art collegiate stadiums can approximate \$300 million to \$450 million.
- On average, NFL stadiums receive a significant portion of funding from the public sector (54 percent), whereas collegiate stadiums generally receive a very small level of public sector funding participation (nine percent). It should be noted that recent new, state-of-the-art collegiate stadiums have received increasing levels of public participation, including 45 percent (\$136 million) of the funding of TCF Bank Stadium in Minneapolis.
- NFL stadiums have an average of 169 luxury suites that cost approximately \$202,000 annually and approximately 9,800 club seats that cost approximately \$2,700 per year. Collegiate stadiums have an average suite inventory of 40 (\$44,000 annual cost) and club seat inventory of approximately 2,100 (\$1,500 annual cost). Given their large suite inventories, comparable NFL stadiums do not have loge boxes, while collegiate stadiums have an average loge box inventory of approximately 55, four-seat boxes (\$10,200 annual cost). Based on past collegiate stadium experience, loge boxes are the first premium products to sell out, and many universities have indicated that they wish they had built more loge boxes as part of their building programs.
- Although a limited number of NFL stadiums host a significant number of third party events (i.e. AT&T Stadium), the majority host a limited number of major events annually, and are mainly built to accommodate 10 home football games per year. With the exception of FAU Stadium, comparable collegiate stadiums also host a very limited number of third party events annually and are generally configured to accommodate between six and seven home football games per year.



6

REVIEW OF PREVIOUS ECONOMIC IMPACT STUDY



CSL International and RCG Economics worked together to review “The Economic Value and Importance of a Stadium With Seating for 55,000 or More Spectators for Nevada, Clark County, the Las Vegas Region’s Resorts, and UNLV,” prepared by Dr. Mark S. Rosentraub. The following section provides a review of the key study components, the methodology and research methods utilized, results of the study, and insights developed by our project team.

KEY STUDY COMPONENTS

The primary purpose of the Rosentraub study was to illustrate and quantify the benefits of a new covered mega-event center (“MEC”) for Southern Nevada’s hospitality sector. The study noted the current inability to host large-scale events puts local hospitality industry at a disadvantage over other regions. The Southern Nevada region cannot compete with other regions to host certain mega-events despite having the resort infrastructure and most convenient international airport.

This relative disadvantage is highlighted further by the fact that Las Vegas metropolitan area is one of three urban centers with no large-scale, covered MEC. The report notes the proposed MEC will be large in scale, with 55,000 or more seats, and will be covered to allow the opportunity to host events during summer, which traditionally attracts fewer visitors to the region.

The Las Vegas region & local economy directly benefit from hundreds of millions of dollars in new revenues. UNLV also benefits are considered more intangible, (e.g., anchor to the University Village plan) and its strategic goal of assisting in the development & diversification of the region’s economy.

METHODOLOGY AND RESEARCH METHODS

Building a MEC requires careful measurement of the returns likely to result for the UNLV, hospitality sector, State of NV, local governments, and school district. Rosentraub employed a conservative methodology when measuring the economic value of facilities, determining the economic effects of construction expenses, and when addressing the direct benefits, indirect and induced effects of the development.

Direct Benefits, Indirect & Induced Effects and the Hospitality Sector

Direct benefits represent the spending by visitors to the region because of events held at the new MEC. The vast majority of economic development will occur at/for the region's resorts.

Indirect & induced effects represent the additional effects from the direct benefits as the direct benefits reverberate through the local economy. Measured in terms of increased:

- Jobs (create jobs or additional hours for existing jobs by residents);
- Wages (new or higher salaries for the jobs) (wages and benefits, or "labor income"); and
- Output (demand for services and products from local businesses).

The effects will most likely not accrue to the region's resorts/hospitality sector. Additionally, they are not included in the direct estimate of benefits, but important to note that new jobs and new levels of spending will result from the indirect & induced effects.

Overall, it is appropriate in a study of the economic effects of a new project to include these indirect & indirect effects as new economic development for a region.



Key Assumptions for New Covered MEC for Southern Nevada

The Rosentraub study utilized research-based assumptions to reflect more conservative estimates for the proposed MEC. Considerations were made in determining which mega-events would represent new economic development (held at a covered, 55,000+ MEC). These events include export-based events only, which generate new income and wealth. Not factored into this analysis are: (1) Events that aren't new (already hosted by T&M or existing venues within region), (2) the possibility of increased attendance due to a potential larger MEC; and (3) the possibility of losing local existing events to other regions with these facilities.

The report also notes that Southern Nevada is at a competitive disadvantage, and that without a new MEC, the area cannot compete with regions that have a state-of-the-art facility to host mega-events (ie, Dallas, Los Angeles, New Orleans, Orlando, San Diego, Indianapolis, Charlotte and New York City metro area).

The projected number & type of export-based events requiring a venue for 55,000 or more seats, with the most important element in the measurement of the MEC is the number of new events that would be held each year (with several taking place during summer).

Event levels in the Rosentraub study are based on interviews with leaders from the LVCVA, LVE, consultants and regional experts. The study notes that a MEC could be positioned to attract the 24 specific events, although 17 or more events can be anticipated, though some might be infrequent. However, based on the list of possible events and expectations of those interviewed, a downward adjustment to 15 events was used in the report.

To address whether there is a sufficient supply of events each year to sustain at least 15 events that could be held each year in a new MEC, the Rosentraub project team performed two tasks. First, they measured supply of events across North America produced by sports and entertainment industries held at ballparks/stadia. Second, they determined whether other regions—those without the tourist infrastructure that LV region has—has been able to host 4 to 5 large-scale entertainment and special sports events every year.

As a result, the report determines that it is a realistic estimate and expectation to be able to host 15 new mega-events. This assumption is based on the experience of local organizations that seek to attract events (one that will likely require a new management team working directly with LVE to market the facility); and the resources of the hospitality industry that currently exist (hotels, shows, retail centers, etc.).

Projections for larger set of events are provided for illustrative purposes only, as the real issue is whether or not 15 events would generate enough economic gains to warrant building facility. The methodology used to determine this is based on data from intercept surveys after events conducted for the LVCVA were used. These intercept interviews were with people attending concerts and special athletic events, with approximately 70 percent of these special-event spectators representing visitors/non-residents of the Southern Nevada region. Projections of visitor spending are based on responses by surveyed visitors to special events held in Las Vegas regarding their “gaming levels, expenditures for food and entertainment, the number of hotel rooms rented, retail spending, and other expenditures.”

The report shows adjustments that were made to reflect more conservative estimates:

- Spending levels assume less-than-full capacity attendees (at 82 percent).
- Excludes residents from event attendance (assumes 70 percent are visitors).
- Excludes visitors who would have been visiting anyway without event (assumes 85 percent came only for the event).
- Excludes visitors who did not stay overnight in a local hotel/motel (assumes 95 percent of incremental visitors lodged).



STUDY RESULTS

The following section includes the primary results of the economic impact analysis included in the Rosentraub study.

Direct Economic Impact

The report quantifies the direct economic impact of spending by visitors to the region because of events held at the new MEC. Results if 15 events were held on an annual basis, assuming that 472,500 seats would be sold to visitors (70 percent of total attendance). Estimated total consumption on UNLV Campus by visitors: \$66.1M total

- Tickets @ \$100/visitor: \$47.2M
- Food, beverage, souvenirs @ \$40/visitor: \$18.9M

We believe these spending patterns are reasonable. High level of consumption inside of the MEC on UNLV Campus was anticipated (given at 16.8%), resulting in a more conservative estimate of benefit for resorts and retail centers.

Also, the report notes that, "While it is likely that the purchase of tickets to events would not affect other forms of consumption by visitors, a more conservative approach was taken to insure that the projected benefits are robust even when the possibility of reduced consumption because of ticket prices..." Based on this, it is unclear if or how any adjustments were made to account for the possibility that spending on tickets (to UNLV) may affect budget on other expenditures (lodging, transport, retail, etc to resorts and retail centers).

The vast majority of economic development will occur at/for the region's resorts. Overall, direct benefit for resorts/retail centers is approximately \$327.1 million. The following table verifies the calculations of direct economic benefits from incremental visitors to 15 mega-events.

Category	Direct Spending (15 events)
Lodging	\$84,030,469
Food and Beverage	\$110,322,371
Retail Spending	\$51,946,178
Entertainment (Shows)	\$19,792,080
Gaming	\$97,193,250
Local Transport	\$25,804,406
Sightseeing	\$4,112,640
TOTAL ANNUAL Benefit for the Las Vegas Regional Economy	\$393,201,394
Consumption on UNLV Campus	\$66,150,000
TOTAL ANNUAL Direct Economic Benefit for Resorts, Retail Centers in Metropolitan LV	\$327,051,394

New tax revenues represent the benefits only and do not factor in costs, thus are not representative of net new revenue. Results if 15 events were held on an annual basis would generate \$36.8 million to various government entities in Nevada. This includes live entertainment taxes – plans for tax exemption by UNLV is not explicit in report but is certainly a possibility.



Economic Impact of Construction

The extent to which construction expenditures increase wealth in the region (economic development) economic development depends on the source of funds used to repay bonds, construction spending, impact of potential taxes, etc., which was undetermined.

Its construction will result in new jobs in the construction industry. These jobs “will result in new levels of spending by those who will be employed as a result of the building of the facility and result in real economic gains.”

Project Team Insight

Overall, the Rostentraub study methodology shows a conservative approach was taken. The economic value from the proposed MEC facility’s operations to host events is positive in the report, and shows a conservative measure of potential benefits as it only emphasizes the net/new economic impact. Economic benefits to the region outlined in the study only include direct spending from attracting visitors from outside the area results in net new inflows of spending.



Additionally, our team verified the calculations in the report regarding the economic benefits from incremental visitors to 15 mega-events. There is a lack of information to run a scenario to replicate (e.g., hard v soft costs, industries, spending within the region, etc.) However, a check of the multipliers indicates that estimates may be slightly high but still reasonable.

The report estimates 15 of mega-events resulting in 401,600 incremental visitors on an annual basis. Based on our research, discussions with resort industry representatives, event promoters, and other project representatives a range of 10 to 15 mega-events seems reasonable. While Las Vegas MSA region has a relatively lower population base when compared to other regions, high tourist levels and infrastructure gives it a population-base to serve the market for mega-events and to bring in outside spending. Las Vegas has shown a successful track record of attracting major special events and entertainers and special sporting organizations could be interested in playing a venue in Las Vegas, especially considering. Additionally, the Las Vegas region has the resort infrastructure and amenities to support them

The report indicates that the economic impact of construction will result in real economic gains (positive economic impact) for the regional economy. The primary question moving forward is addressing where the sources of funding to pay for the stadium development. Investment and funding details and partners are not yet established. How the MEC is financed could be a significant factor in determining the economic effect its construction has on the local economy.



7

MARKET SURVEYS



To measure local support for a new stadium, a survey was conducted to determine opinions and potential buying habits of UNLV Athletic and University constituents, and Chamber members. Invitations to participate in the survey were sent via email to databases maintained by UNLV Athletics, the UNLV Alumni Association, and the Las Vegas Metro Chamber of Commerce. A total of approximately 2,100 surveys were completed. Survey topics included:

- Current attendance at UNLV home football games;
- Attitude towards a new stadium;
- Potential attendance and ticket purchases;
- Interest in premium seating options;
- Preferred amenities;
- Interest in attending other events at the stadium; and,
- Other related topics.

It should be noted that a separate, condensed version of the email survey was also sent to the student body to determine current attendance levels, reasons for non or occasional attendance, attitude towards a new stadium, and the impact of a new stadium on future attendance. A total of approximately 350 surveys were completed, and the results of which, will be summarized herein.

Overall, survey respondents reported the following affiliations with UNLV:

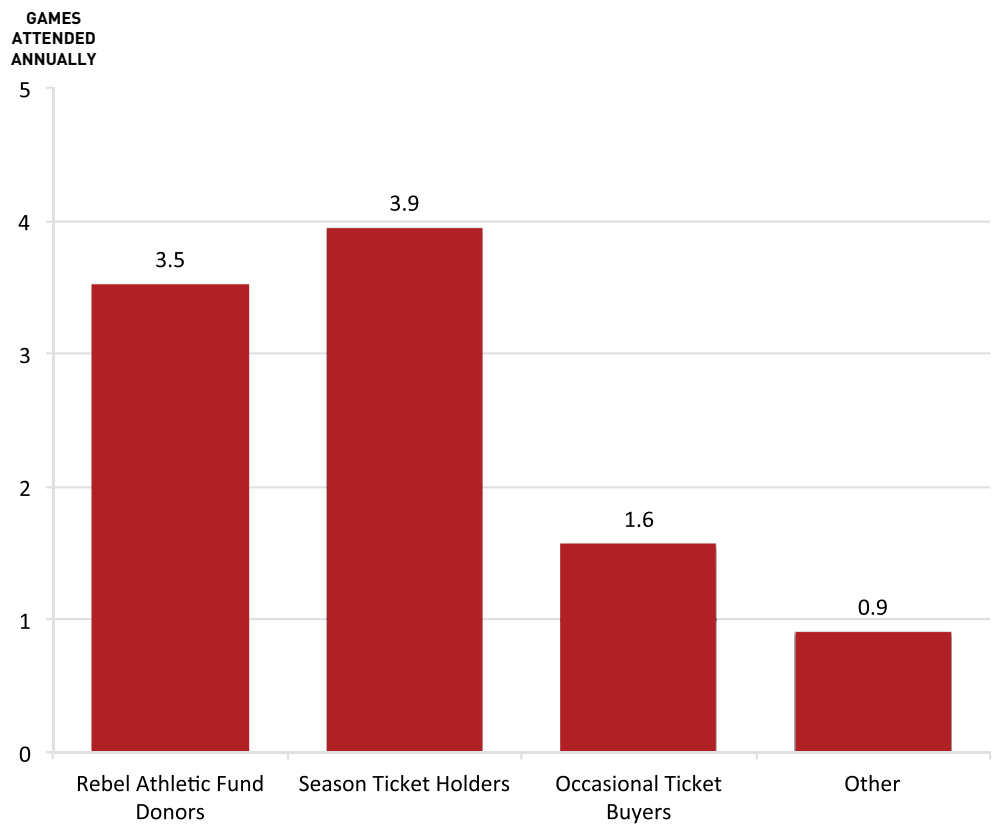
- Alumni (69 percent)
- Other ticket buyer at Thomas & Mack Center (28 percent)
- Men's basketball season ticket holder (23 percent)
- Occasional men's basketball ticket buyer (22 percent)
- Rebel Athletic Fund donor (22 percent)
- Occasional football ticket buyer (21 percent)
- Other ticket buyer at Sam Boyd Stadium (16 percent)
- Faculty/staff (14 percent)
- Football season ticket holder (14 percent)
- University donor (10 percent)
- No affiliation (3 percent)
- Corporate sponsor (2 percent)

Based on current affiliations with UNLV, survey respondents were placed into groups, including Rebel Athletic Fund Donors, Season Ticket Holders (football and men's basketball), Occasional Ticket Buyers (football and men's basketball), and Other, as a means of providing a detailed comparison of respondents' opinions and feedback. These affiliations will also be used as a way of extrapolating demand for premium seating demand, applying higher extrapolation factors to those currently engaged with UNLV and lower extrapolation factors to those that are not currently engaged with UNLV.

UNLV FOOTBALL ATTENDANCE

Respondents were asked to indicate, on average, how many UNLV home football games they attend at Sam Boyd Stadium on an annual basis. The following chart presents a summary of current attendance levels broken out by group.

Current UNLV Home Football Attendance



As shown above, Season Ticket Holders attend approximately 3.9 home football games annually, highest among survey groups. Rebel Athletic Fund Donors attend an average of 3.5 home games per year, while Occasional Ticket Buyers and Other respondents attend approximately 1.6 games and 0.9 games, respectively. Overall, survey respondents attend approximately 1.8 home football games each year. It should be noted that the average UNLV student attends approximately three games per year.

Respondents attending two or fewer home football games per year were then asked to indicate why they do not attend more home football games on an annual basis. Overall, the most commonly cited reason for not attending more UNLV home games was an inconvenient stadium location (49 percent), followed by team performance (39 percent), living too far away (36 percent), traffic congestion (23 percent), and time conflicts (18 percent).

Approximately 47 percent of students indicated that an inconvenient stadium location was a reason they did not attend more UNLV home football games, followed by time/school conflicts (43 percent), team performance (36 percent), no interest in football (31 percent), and traffic congestion (25 percent).

New Stadium Development Attitude

The vast majority of respondents (63 percent) rated their current experience at Sam Boyd Stadium as either “fair” or “poor”. Respondents were then asked to indicate their attitude regarding the development of a new stadium. The following table presents a summary of respondents’ attitude broken out by group.

New Stadium Development Attitude					
New Stadium Development Attitude	Athletic Donors	Season Ticket Holders	Occasional Ticket Buyers	Other	Overall
Very Positive	80%	78%	74%	57%	67%
Somewhat Positive	11%	13%	13%	19%	16%
Neutral	3%	3%	4%	9%	6%
Somewhat Negative	4%	2%	5%	7%	6%
Very Negative	1%	4%	3%	8%	5%
Total Positive Attitude	91%	91%	87%	76%	83%

Overall, approximately 83 percent of respondents have a positive attitude towards the development of a new stadium. Approximately 91 percent of Athletic Donors and Season Ticket Holders have a positive attitude, followed by Occasional Ticket Buyers (87 percent) and Other respondents (76 percent). Overall, approximately 66 percent of students indicated a positive attitude towards new stadium development, while 12 percent are neutral towards a new stadium, and 22 percent have a negative attitude.

New Stadium Attendance Impact

All survey respondents were asked to indicate what impact a new stadium would have on their decision to attend UNLV home football games in the future. The following table presents a summary of their responses

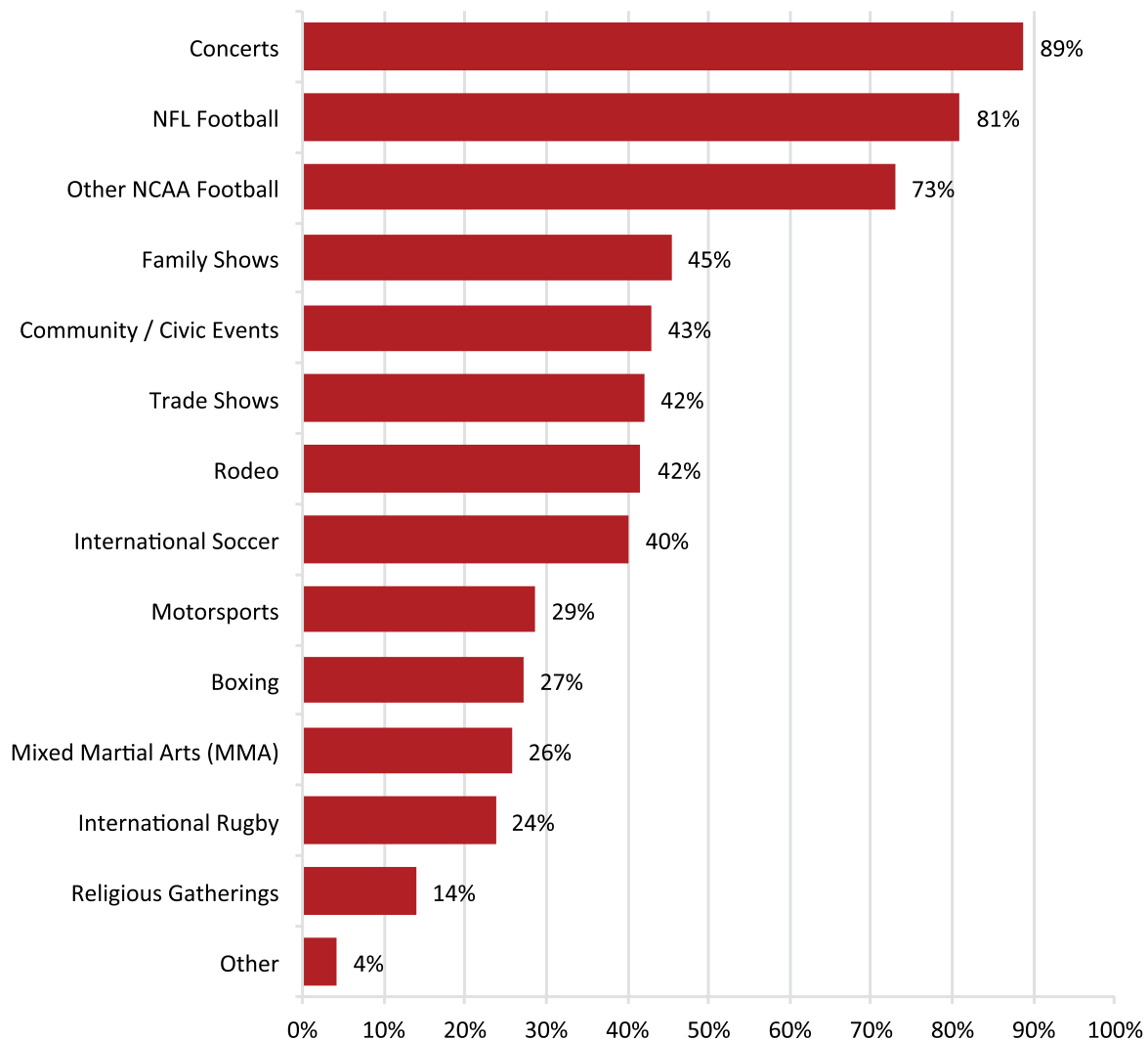
New Stadium Attendance Impact					
New Stadium Attendance Impact	Athletic Donors	Season Ticket Holders	Occasional Ticket Buyers	Other	Overall
Attend MORE UNLV home games	63%	60%	79%	58%	63%
Attend the SAME NUMBER of UNLV home games	34%	33%	15%	18%	22%
Attend FEWER UNLV home games	1%	4%	2%	1%	2%
I would NOT ATTEND any UNLV home games	2%	3%	4%	23%	13%

Overall, approximately 63 percent of survey respondents indicated they would attend more UNLV home football games in a new multi-purpose on-campus football stadium, while only 15 percent of respondents indicated that a new stadium would have a negative impact on their attendance at UNLV home football games. Occasional Ticket Buyers indicated the highest level of impact with approximately 79 percent indicating they would attend more home games, while approximately 58 percent of Other respondents (who are only currently attending an average of one game per season) indicated they would attend more home games in a new stadium.

Approximately 66 percent of students would attend more UNLV home football games in a new stadium, while only 18 percent indicated a new stadium would have a negative impact on their future attendance.

Other Event Interest

In addition to UNLV home football games, all respondents were asked to indicate their interest in attending numerous other types of events in a new stadium. Overall, approximately 89 percent of respondents indicated an interest in attending other events in a new stadium. The chart below presents a summary of their most preferred event types.

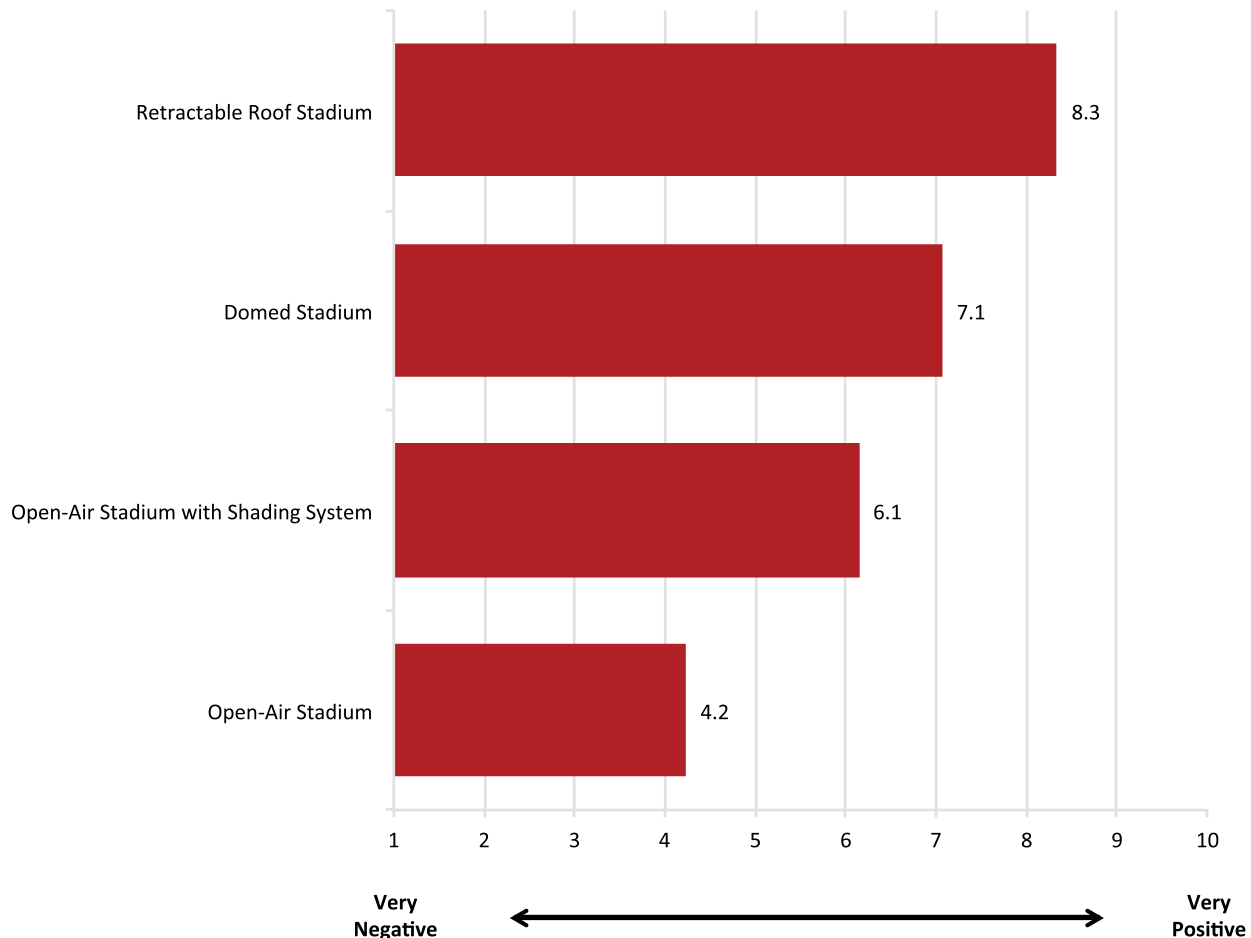


Overall, respondents were most-interested in attending concerts in a new stadium (89 percent), followed by NFL football games (81 percent), other NCAA football games (73 percent), family shows (45 percent) community/civic events (43 percent), trade shows (42 percent), rodeo (42 percent), and international soccer matches (40 percent).

Students were the most-interested in attending concerts (92 percent), followed by NFL football games (78 percent), other NCAA football games (59 percent), international soccer matches (49 percent), and job fairs (44 percent), among others.

Preferred Stadium Roof Configuration

Currently, all potential stadium roof configurations are being analyzed, including open-air, open-air with a shading system, dome, and retractable. Respondents were asked to indicate their feelings towards each potential stadium roof configuration on a scale of 1 to 10, with “1” being “Very Negative” and “10” being “Very Positive”. The following chart presents a summary of respondents preferred stadium roof configuration.



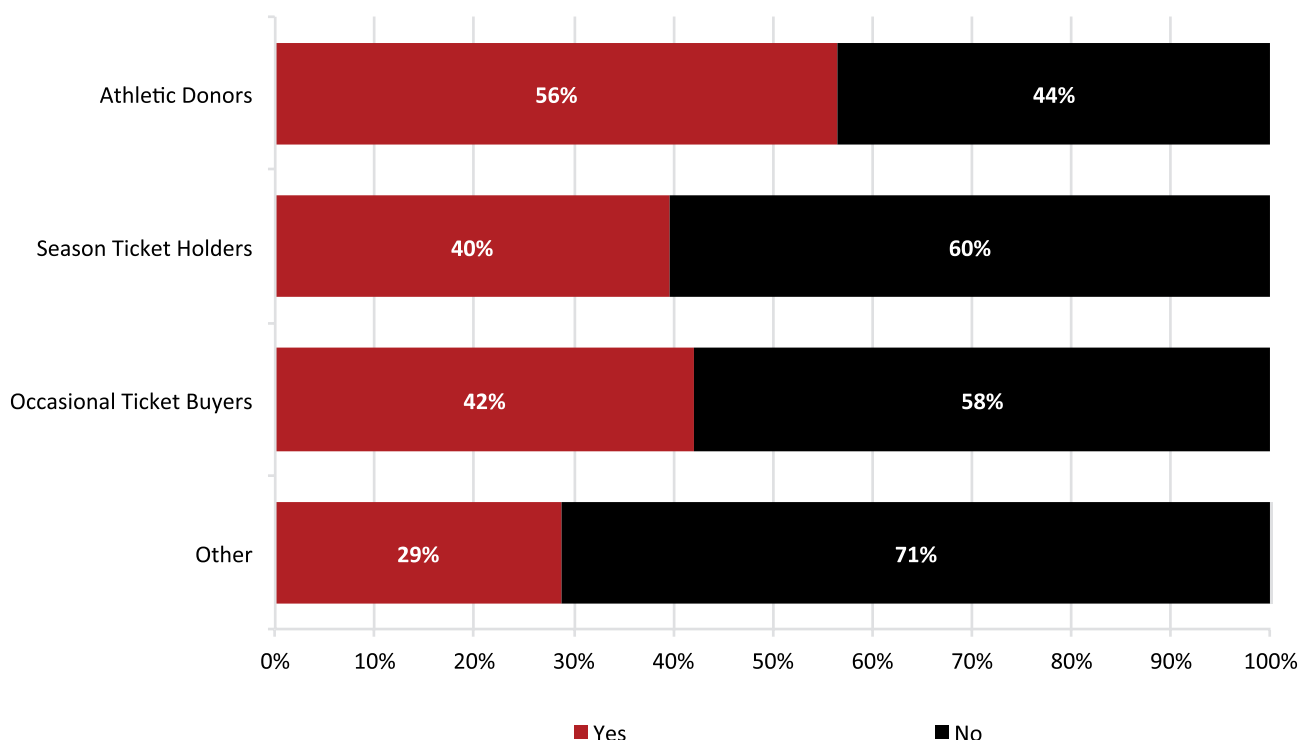
As shown above, respondents have the most positive feelings towards a retractable roof stadium (8.3 out of 10), followed by a domed stadium (7.1 out of 10), an open-air stadium with a shading system (6.1 out of 10), and an open-air stadium (4.2 out of 10). Students shared the same sentiments as other respondents, preferring an enclosed stadium over an open-air stadium. It should be noted that respondents were not provided any information related to the potential costs associated with each stadium type.

Premium Seating

Survey respondents were told that a new stadium could include a variety of premium seating areas such as club seats, loge boxes and luxury suites. New premium seating could be located in prime areas of the stadium and could offer a variety of amenities, including preferred parking, private stadium entrance, and access to a private climate-controlled club lounge with upgraded food and beverage options, private restrooms, and other such amenities. Premium seat holders could also have first right to purchase tickets to all other events hosted at the stadium (i.e. concerts, sporting events, etc.).

INITIAL INTEREST

Prior to any potential pricing, respondents were asked to indicate their initial interest in learning more about potential premium seating areas in a new stadium. Overall, approximately 38 percent of survey respondents indicated an initial interest in learning more about potential premium seating. The following chart presents a breakdown of interest by group.



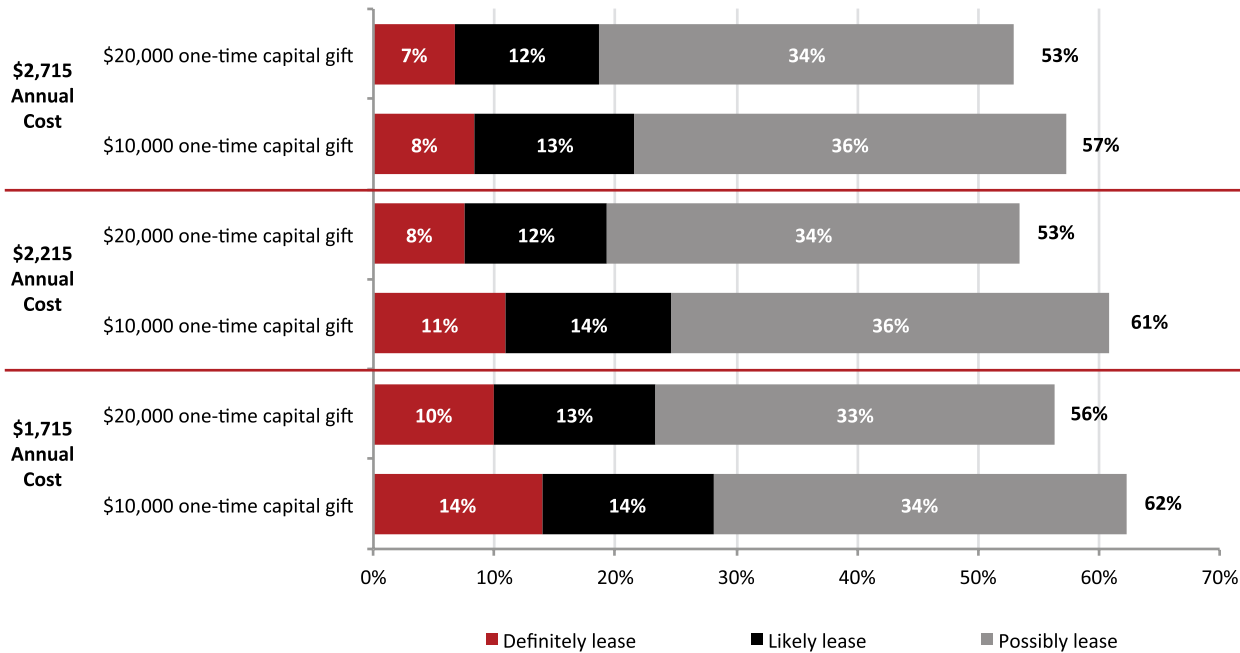
As shown above, Athletic Donors expressed the highest level of interest in premium seating (56 percent), followed by Occasional Ticket Buyers (42 percent), Season Ticket Holders (40 percent), and Other respondents (29 percent).

CLUB SEATS

Following an indication of interest in premium seating, respondents were asked to indicate their potential interest in leasing club seats in a new stadium. Respondents were told that club seats could be located outdoors (covered by a roof overhang) in prime areas of the stadium. Club seats would have a chairback and would be wider and provide more legroom than standard stadium seating. Amenities associated with the purchase of a club seat could include first right to purchase tickets to other stadium events, preferred parking and access to a climate-controlled lounge with private restrooms, TV monitors, upscale food and beverage service, and a private stadium entrance.

Overall, 34 percent of survey respondents indicated an interest in leasing club seats prior to the introduction of price points. Those respondents indicating an initial interest were then asked to specify their interest in club seating at a variety of price points. The following chart presents a summary of their overall price sensitivity.

CLUB SEAT & LOUNGE
EXAMPLE IMAGES



As shown above, approximately 53 percent of interested respondents indicated some level of interest (i.e. “definitely”, “likely” or “possibly”) in leasing a club seat that costs \$2,715 per year and required a one-time capital gift of \$20,000 per seat. This interest level increased to approximately 62 percent at an annual cost of \$1,715 and a required one-time capital gift of \$10,000 per seat. Respondents indicating an interest in leasing club seats at the price points tested would lease an average of 2.7 seats per person.

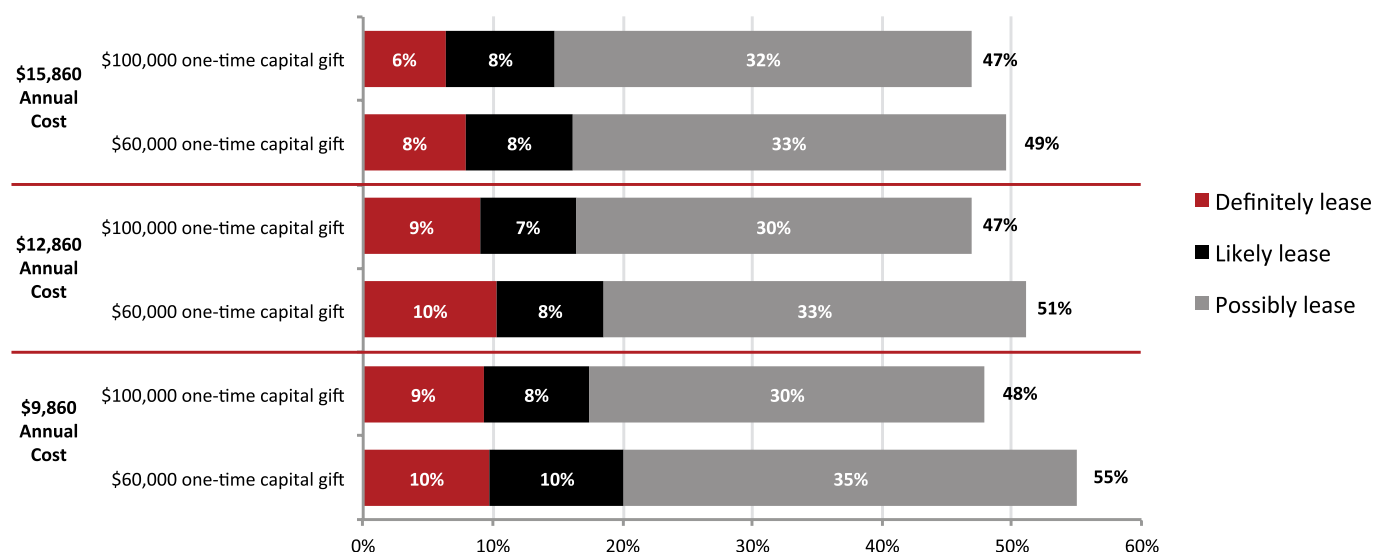
Overall, potential club seat patrons indicated a preference for paying a higher annual club seat price and a lower one-time upfront capital gift.

LOGE BOXES

Respondents interested in premium seating were asked to indicate their potential interest in leasing a loge box in a new stadium. Respondents were told that loge boxes could seat between four to eight people and could be located outdoors (covered by a roof overhang) in prime areas of the stadium. Loge boxes could include either comfortable chairs on casters or fixed seats with dividers between each box. Amenities associated with the purchase of a loge box could include first right to purchase tickets to other stadium events, in-box wait service, preferred parking and access to a climate-controlled lounge with private restrooms, TV monitors, upscale food and beverage service, and a private stadium entrance.

Overall, 18 percent of survey respondents indicated an interest in leasing a loge box prior to the introduction of price points. Those respondents indicating an initial interest were then asked to specify their interest in a loge box at a variety of price points. The chart on the following page presents a summary of their overall price sensitivity.

LOGE BOX & LOUNGE EXAMPLE IMAGES



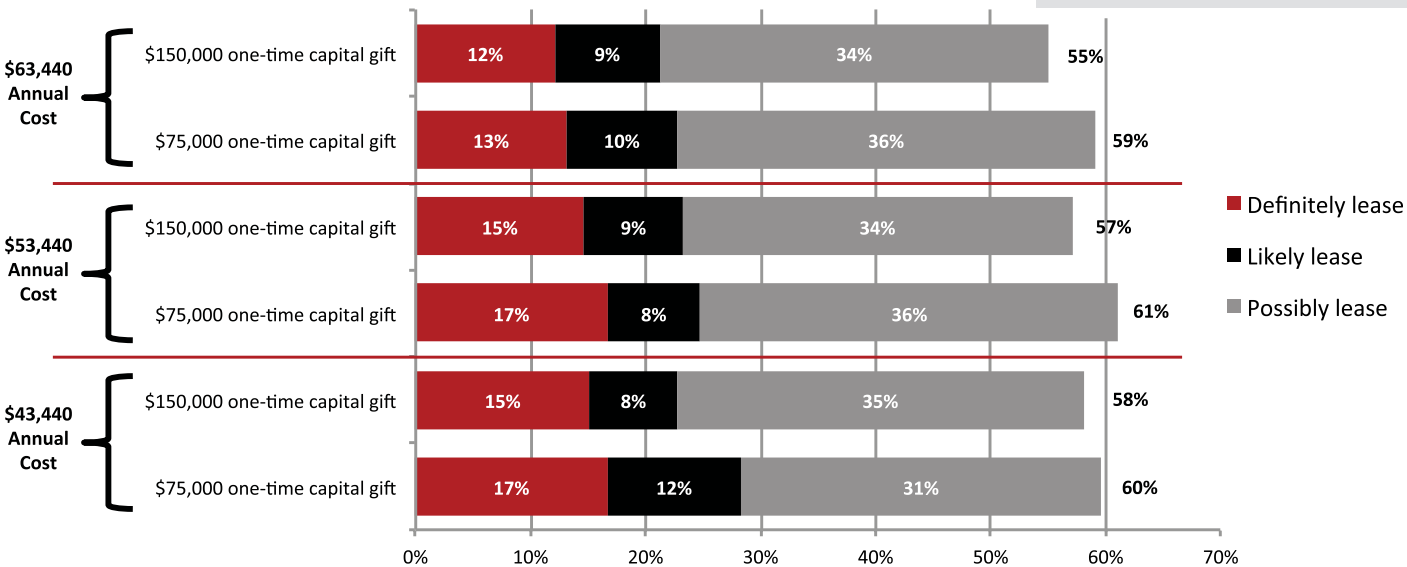
As shown above, approximately 47 percent of interested respondents indicated some level of interest (i.e. “definitely”, “likely” or “possibly”) in leasing a 4-seat loge box that costs \$15,860 per year and required a one-time capital gift of \$100,000 per box. This interest level increased to approximately 55 percent at an annual cost of \$9,860 and a required one-time capital gift of \$60,000 per box. Approximately 77 percent of respondents would want to share the cost of a loge box with other parties, and indicated an interest in purchasing 3.4 seats in a shared box. Although the majority of potential loge box patrons preferred a 4-seat box (57 percent), those wishing to share would most likely prefer a larger box consisting of six to eight seats.

Overall, potential loge box patrons were not as price sensitive as club seat patrons, although they did indicate a slight preference for a higher annual cost and lower one-time upfront capital gift. Given that loge boxes are generally marketing towards small companies and high-income families, it is not surprising that patrons were less price sensitive than club seat patrons, however, there was a small spike in interest at the lowest price point which could indicate that a higher number of individuals would be interested in a 4-seat box that cost approximately \$10,000 annually.

LUXURY SUITES

Respondents interested in premium seating were asked to indicate their potential interest in leasing a luxury suite in a new stadium. Respondents were told that luxury suites could seat approximately 16 people in an upscale, climate-controlled environment. Luxury suites would be located in prime areas of the stadium. Amenities associated with the purchase of a luxury suite could include first right to purchase tickets to other stadium events, in-suite catering, preferred parking and access to a climate-controlled lounge with private restrooms, TV monitors, upscale food and beverage service, and a private stadium entrance.

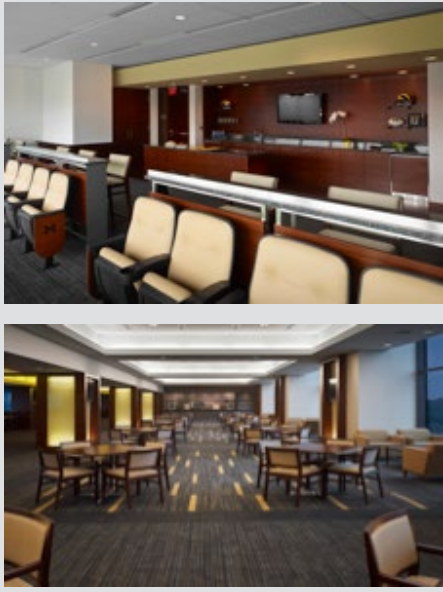
Overall, nine percent of survey respondents indicated an interest in leasing a luxury suite prior to the introduction of price points. Those respondents indicating an initial interest were then asked to specify their interest in a luxury suite at a variety of price points. The following chart presents a summary of their overall price sensitivity.



As shown above, approximately 55 percent of interested respondents indicated some level of interest (i.e. “definitely”, “likely” or “possibly) in leasing a 16-seat luxury suite that costs \$63,440 per year and required a one-time capital gift of \$150,000 per suite. This interest level increased to approximately 60 percent at an annual cost of \$43,440 and a required one-time capital gift of \$75,000 per suite. Approximately 70 percent of respondents would want to share the cost of a luxury suite with other parties, and indicated an interest in purchasing 4.6 seats in a shared suite. Preferred suite capacity was split relatively even among respondents, with 53 percent indicating 12 or more seats and the remaining 47 percent preferring 10 or fewer seats. It is envisioned that the vast majority of suites in a new stadium would offer 12 or 16 seats, with a select number of suites consisting of 20-24 seats to accommodate larger parties. Those patrons preferring suites with 8 to 10 seats would either be ideal candidates to share a larger luxury suite or purchase an 8-seat loge box.

Overall, potential luxury suite patrons were the least price sensitive among potential premium seat patrons. Given the higher cost and larger seat inventory associated with luxury suites, it is envisioned that the vast majority of suites would be marketed to Las Vegas-area corporations interested in entertaining clients and/or rewarding employees.

SUITE & LOUNGE EXAMPLE IMAGES



Recommended Premium Seating Program

The following table presents a summary of the recommended premium seating program for a new stadium based on the results of the market survey, as well as our experience on similar multi-purpose stadium development projects.

Recommended Building Program
New Stadium

Premium Seating:

Club Seats	1,500 to 3,000
Loge Boxes (4 seats)	20 to 30
Luxury Suites (16 seats)	50 to 60

As shown, it is estimated that a new stadium could potentially support 1,500 to 3,000 club seats, 20 to 30 loge boxes, and 50 to 60 luxury suites.



Summary

A total of approximately 2,100 email surveys were completed with UNLV Athletic and University constituents, and Chamber members to determine opinions and potential interest in attending events and purchasing tickets in a new stadium. In addition, approximately 350 email surveys were completed with members of the student body in order to understand how a new stadium could impact their attendance at UNLV home football games. Key findings include:

- Overall, UNLV constituents and Chamber members attend approximately 1.8 home football games each year. The average UNLV student attends approximately three games per year.
- The most commonly cited reason for not attending more UNLV home games by UNLV constituents and Chamber members was an inconvenient stadium location, followed by team performance, living too far away, traffic congestion, and time conflicts. Students most commonly cited an inconvenient stadium location, followed by time/school conflicts, team performance, no interest in football, and traffic congestion.
- Overall, approximately 83 percent of UNLV constituents and Chamber members and 66 percent of students have a positive attitude towards the development of a new stadium.
- Approximately 63 percent of UNLV constituents and Chamber members and 66 percent of students indicated they would attend more UNLV home football games in a new multi-purpose on-campus football stadium.
- Nearly all survey respondents indicated an interest in attending other events at a new stadium. Respondents were most interested in attending concerts, NFL football games, other college football games, and family shows.
- In general, respondents preferred an enclosed stadium (retractable roof or domed) over an open-air stadium.
- Overall, approximately 38 percent of survey respondents indicated an initial interest in premium seating options in a new stadium.
- It is estimated that a new stadium could potentially support 1,500 to 3,000 club seats, 20 to 30 loge boxes, and 50 to 60 luxury suites.



8

ESTIMATED UTILIZATION

Project stakeholders envision the primary purpose of a new stadium would be to attract incremental visitors to the area through the hosting of major events that are currently not accommodated by existing event facilities in Las Vegas, while also serving as a positive asset for UNLV and its football program. In order to determine demand for new events that will draw incremental visitors to the area, as well as meeting the needs of the needs of existing user groups, an extensive number of interviews were conducted with a variety of external groups representing a wide-variety of events and activities, as well as internal university constituent groups. Interviews and meetings were conducted with representatives representing the following local, regional and national organizations and potential event-types:

Local Event & Stakeholder Groups:

- CIAB Board Members;
- Regents;
- Resort industry representatives;
- Las Vegas Convention and Visitors Authority;
- Las Vegas Events; and,
- Other representatives.

Local, Regional & National Events:

- UNLV Football;
- Major League Soccer;
- International Soccer;
- Major Concerts;
- Festivals;
- Rugby;
- Signature events;
- Major non-recurring events;
- Las Vegas Bowl;
- New collegiate bowl game;
- Neutral site collegiate football games;
- Combatives; and,
- Motorsports.

Interviews and meetings were designed to determine interest in bringing major events to the proposed stadium. Discussions addressed the following questions: ideal seating capacity, impressions of Las Vegas market, required building program components, expected event attendance, overall intent on bringing events, and other such issues.

UNLV Football

The UNLV Rebels football program currently competes in the Mountain West Conference, a Division I Football Bowl Subdivision conference of the National Collegiate Athletics Association. The Rebels became an original member of the Mountain West Conference in 1999 following membership in the Western Athletic Conference.

The Rebels football program will serve as the primary anchor in the new stadium. The team has played its games in Sam Boyd Stadium since 1971, and over the past 10 years has averaged six home games per season, with an average attendance of 21,139. During this time, attendance has ranged from a low of 15,208 in 2012, to 29,281 in 2007. In the 2013 season, the Rebels played seven home games at Sam Boyd Stadium, with a total attendance 120,486. Average attendance in 2013 of 17,212 was the second lowest in the past 10 years, and accounted for only 43 percent of total stadium capacity.

When compared to other Mountain West Conference schools, the Rebels have the second-lowest average attendance (conference average of 26,757), and the second-lowest attendance as percentage of stadium capacity (conference average of 71.1 percent). When compared to peers in the Pac-12 Conference, UNLV has the lowest average attendance (conference average of 53,047), and the lowest attendance as percentage of stadium capacity (average of 89.7 percent).

Given its history of average attendance approaching 30,000 per game, as well as the novelty of the stadium and its marketability as a recruiting tool, it is anticipated that the UNLV rebels will see an increase in attendance levels in a new stadium . CSL has assumed an average attendance per game of 38,000 over six games, or approximately 228,000 annual attendees.



Major League Soccer (MLS)

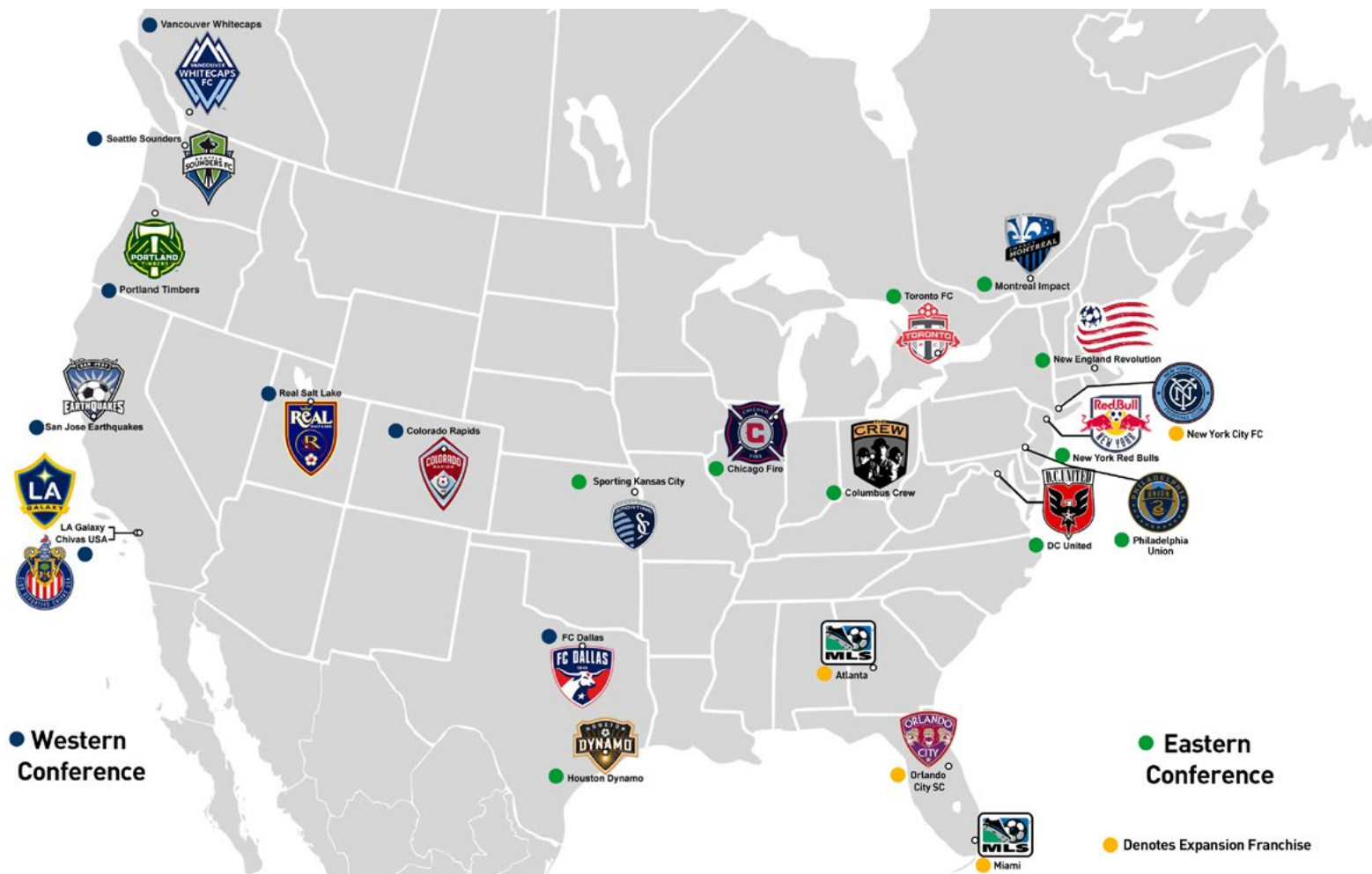
Established in 1996, MLS is in the midst of its 18th season. MLS is currently comprised of 19 teams, nine of which have been added since 2005, playing a 34-game regular season schedule that spans from the beginning of April through mid-to-late October and culminating in the MLS Cup Championship in mid November. The MLS conference structure is outlined below.

WESTERN CONFERENCE

- LA Galaxy
- Chivas USA
- San Jose Earthquakes
- FC Dallas
- Colorado Rapids
- Real Salt Lake
- Seattle Sounders
- Portland Timbers
- Vancouver Whitecaps

EASTERN CONFERENCE

- New England Revolution
- New York Red Bulls
- Houston Dynamo
- Columbus Crew
- Chicago Fire
- FC Toronto
- D.C. United
- Sporting Kansas City
- Philadelphia Union
- Montreal Impact



In 1996, Major League Soccer's original ten teams included; Columbus Crew, D.C. United, New England Revolution, Tampa Bay Mutiny, Colorado Rapids, Dallas Burn, Kansas City Wizards, Los Angeles Galaxy and San Jose Clash.

MLS expanded from its original 10 teams to 12 teams in 1998 with the addition of franchises in Chicago and Miami. In January 2002, MLS contracted the Tampa Bay Mutiny and the Miami Fusion, leaving the league with 10 teams for the 2002 season. According to league officials, the contraction of two teams benefited the league by cutting operating losses by more than \$10 million annually. After the contraction of the fledgling franchises in 2002, the league expanded by two teams in 2005 (Real Salt Lake and Chivas USA), AEG relocated the San Jose Earthquakes before the 2006 season (Houston Dynamo), and the league added an additional team in 2007 (Toronto FC).

In July 2007, MLS announced the award of an expansion franchise for San Jose, bringing the number of MLS teams to 14 by the 2008 season. Over the next four years, the MLS added five more teams, including the Seattle Sounders (2009), Philadelphia Union (2010), Portland Timbers (2011), Vancouver Whitecaps, and the Montreal Impact, which kicked off its inaugural season in April, 2012, bringing the number of MLS teams to 19 at the start of the 2012 season. The MLS has indicated that it would like to expand to 24 teams by 2020. The league has announced four expansion teams to be placed in Orlando, FL, New York City, NY, Miami, FL, and Atlanta, GA, respectively. Both Orlando City Soccer Club and New York City Football Club are scheduled to begin play in 2015, while expansion teams in Atlanta and Miami are expected to begin play in 2017. The recent expansions of the MLS put the league at 23 teams, one shy of the 24-team goal by 2020. Las Vegas has been identified as a potential expansion market, with other potential markets including Minneapolis, Sacramento, San Antonio, and Austin, among others.

Average soccer-specific stadium capacity in the MLS is 22,000, with 15 of 19 teams playing in soccer-specific stadiums. Based on discussions with league representatives, open-air stadiums with natural grass surfaces are preferred to enclosed stadiums with artificial turf. Additionally, a smaller stadium capacity ranging from 25,000 to 30,000 was preferred for MLS play. Current MLS average attendance is approximately 19,000, with a low of 13,000 ranging up to a high of 43,000. Due to the uncertainty of an expansion MLS team coming to Las Vegas, as well as competition from other potential expansion markets, operating and financial assumptions presented herein do not include a permanent MLS team as a tenant in the new stadium.



INTERNATIONAL SOCCER

Las Vegas has a history of hosting soccer events featuring international club and national teams, including past events such as the Las Vegas Pro Soccer Challenge, Colorado Rapids vs. Chivas USA, Club America vs. Chivas, Real Madrid vs. Juventus, and Mexico vs. Venezuela.

The popularity of international soccer is increasing across the country with the introduction of competitions such as the Gold Cup and Guinness International Champions Cup, and it is also becoming increasingly popular for major European soccer clubs such as Real Madrid, Manchester United, and Bayern Munich to conduct international tours following conclusion of the competitive season. In addition, it is also common for national teams from across the globe to conduct a variety of international friendly matches against other nations and teams from MLS.

Based on discussions with Soccer United Marketing, between 25 and 50 major international soccer events are hosted in the United States on annual basis, with approximately 75 percent of these events occur between May and August. The general attendee mix is roughly 75 to 80 percent local and 20 to 25 percent visitors. Soccer event organizers indicated a preference for open-air stadiums with natural grass, noting that an enclosed roof had no impact on their ability to host more events. However, it should be stated that soccer event organizers indicated a greater concern about the field surface type being natural grass, noting difficulties and expense of preparing a turf surface at facilities like AT&T Stadium. Additionally, a preference was noted for stadiums located in downtown areas with easy access to mass transit.

It was assumed that a new stadium in Las Vegas could host between one and two international soccer events. CSL projected two annual events in an enclosed roof scenario and one annual event in an open-air scenario, both with an average attendance of 40,000 per event. It should be noted that the development of a proposed soccer-specific stadium is currently being considered in downtown Las Vegas. A new stadium's ability to host soccer matches and other related events could be negatively impacted should plans to construct the stadium move forward.



MAJOR CONCERTS

Generally, stadiums host a limited number of concerts on an annual basis, primarily during by acts on a stadium tour during the summer months. To this end, representatives from major concert promotion companies were contacted in order to assess the potential of a new stadium in Las Vegas to host concerts.

Representatives stated that there are very few artists/acts that go on stadium tours, citing that artists want to play to a full house and the capacity of stadiums are often too large for their needs and impact their ability to sell-out their concert events. Potential stadium acts include U2, Bruce Springsteen, Pearl Jam, George Strait, Kenny Chesney, Dave Matthews Band, among others. While there are a limited number of acts with the ability to fill stadiums for shows, it was stated by one concert promoter that stadium business is up 300 percent in recent years, noting that Las Vegas would likely be considered for a stop on the circuit. Although Las Vegas would be considered as a site for stadium shows, concert promoters mentioned the competitive nature of the market, in particular the development of the new MGM Arena, as well as the variety of other entertainment option offered in the City that can serve as a deterrent for promoters.

When asked about roof preference, concert promoters strongly preferred enclosed stadiums to open-air. Representatives cited the extra expenses associated with hosting a concert in an open-air facility that is not built to host concerts. A lack of rigging structures and other logistical capabilities make hosting a concert in a stadium much more difficult and costly than in an arena or enclosed stadium facility.

Overall, the competitive nature of the Las Vegas market, a limited number of annual stadium shows, and the added expense of hosting concerts in stadiums will limit the concert potential at a new stadium in Las Vegas. It is estimated that a new stadium in Las Vegas could host between one and two major concerts. CSL projected two annual events in an enclosed roof scenario and one annual event in an open-air scenario, both with an average attendance of 27,000 per event.

FESTIVALS

Music festivals are generally held over multiple days and involve multiple concert acts. Electronic Dance Music (EDM) is a growing genre of popular music that is well suited for musical festival formats. Las Vegas is the home of Electronic Daisy Carnival, one of the largest EDM festivals in the world with over 250,000 attendees over 3 days. Other major music festivals include Insomniac, Nocturnal Wonderland, Crossroads, Lollapalooza, and ACM Weekend, among others.

There is potential to host music festivals in a new stadium in Las Vegas. Music festivals need a large amount of space and the potential for multiple stages to accommodate acts running concurrently. While a stadium could accommodate these elements, based on discussions with concert industry professionals, a stadium would not be the ideal venue to accommodate music festivals. Noting that festivals are traditionally held in larger, more open spaces and do not require the use of stadium stands. Additionally, the Las Vegas festival market is already accommodated by the Las Vegas Motorspeedway and the planned City of Rock venue being built by MGM.

The Rock in Rio festival is scheduled to be hosted in Las Vegas in 2015 and 2017 at the City of Rock site owned by MGM Resorts International. The 30-year-old festival is one of the largest in the world, drawing approximately 85,000 attendees per day. Past performers include Justin Timberlake, Beyoncé, Metallica, Bruce Springsteen and David Guetta. Rock in Rio has partnered with Cirque du Soleil, MGM Resorts International and Ron Burkle (The Yucaipa Companies) to produce the festival in 2015 and in 2017, and also to construct the necessary venue for the four-day event to take place.

MGM is constructing the City of Rock venue near Circus Circus, which will allow the event to be hosted every two years, and other events in between. Spain, Portugal and Brazil have their own Cities of Rock, with Las Vegas marking the fourth site. The venue space will be: able to accommodate approximately 80,000 people per day, with three streetscapes (that represent the U.S., United Kingdom and Brazil), and amusement park rides such as a Ferris wheel, zip line and roller coaster. The open-air spot will feature five stages, including a main stage and EDM stage.

Based on discussions with representatives, and the competitive landscape of existing venues and facilities scheduled to be built in the coming years, it is not expected that a new stadium in Las Vegas would be well-positioned to host any major music festivals on an annual basis. CSL has not assumed any festival events in the operating and financial projections presented later in this report.





RUGBY

The USA Sevens is a rugby sevens tournament held annually during the second weekend of February at Sam Boyd Stadium in Las Vegas in the United States. The USA Sevens is the largest annual rugby competition in North America, drawing over 60,000 fans, and is broadcast live in the United States by NBC and NBC Sports. The USA Sevens was introduced in 2004, and has been held at its current home, Sam Boyd Stadium in Las Vegas every February since 2010. The USA Sevens tournament features 16 teams representing countries from every continent, including the host, the U.S. national team. The tournament has been extremely competitive, with no team able to win the tournament in consecutive years.

The tournament has continued to gain in popularity since its inception in 2004. The tournament has seen a dramatic increase in attendance over the past 10 years, from a low of 15,800 fans over two days in 2004 to a high of approximately 67,000 fans over three days in 2014, and a single-day attendance record of 31,228. In addition, a number of recent events have accelerated the surge in the popularity of the sport of rugby, including the announcement in 2009 that rugby would return to the Summer Olympics, as well as the improved performance of the U.S. national rugby team on an international level, and NBC's decision to begin televising the Rugby Sevens tournament in 2011.

Based on discussions with rugby event organizers, there is significant potential for expansion of events in a new stadium in Las Vegas. Preferences for the new stadium include: open-air stadium with shading system, natural grass, and field length/width meeting IRB regulations. Currently, Sam Boyd Stadium is not wide enough to meet these regulations, prohibiting the venue from attracting international test matches and other rugby events that must meet IRB regulations. Additionally, it was noted that no international test matches are held on turf.

Rugby event organizers indicated that 40,000 seats are suitable for most of their needs but 50,000 seats are needed for some matches. There is also a need for ancillary fields around stadium for practice/ warm-ups, as well as access to 50% to 60% of hospitality areas in stadium as the rugby business model centers on keeping people at the site for three to five hours at a time. Potential events at the new stadium include the Rugby VII's tournament, Rugby XV's neutral site matches, international test matches, Rugby VII's World Cup 2018, Rugby VII's regional / Olympic qualifiers. CSL projected four annual rugby events in an enclosed roof scenario and four annual events in an open-air scenario, both with an average attendance of 23,000 per event, generating approximately 92,000 total annual attendees.

OTHER EVENTS

Other events that could be held at a new stadium in Las Vegas include major non-recurring events and signature events. A signature event is an event that is held annually, attracts a large contingent of out-of-town visitors, includes advanced media elements that support ticket sales and has the potential to grow and include spin-off events that can be bundled and promoted throughout the destination.

Signature events could include major championship games (i.e. Mountain West Conference Football Championship), Miss Universe Pageant, Las Vegas Marathon, Academy of Country Music Awards, Armed Forces Classic, Champions Classic and other major annual events that could be brought to a new stadium in Las Vegas.

Based on discussions with representatives from this event category, an enclosed stadium is preferred in order to host events year-round. The MWC Conference championship game is currently played outdoors and attracts approximately 31,000 fans per game, however, most signature events require 50,000 to 60,000 seats. Additionally, It is important for these events to be held in a venue located close to the strip so fans have easy access to the various hotels, casinos and other entertainment options.

Major Non-Recurring Events include events that either rotate sites on an annual basis or do not occur every year. Examples of this type of event include the NCAA Final Four, the NFL Pro Bowl, Republican/Democratic National Convention, X Games or the SEMA Show. Of the events listed, it was cited that political conventions could work well in a stadium due to an abundance of unobstructed sightlines. Based on discussions with event organizers, several key stadium elements were identified. It was noted that an enclosed stadium is heavily preferred to an open-air facility because a roof would allow events to be held year-round in a climate-controlled space, protected from the elements. Event organizers also indicated that stadium would require 50,000 to 60,000 seats to accommodate most events of this type. Another key element for these event types is location in close proximity to the Strip, for easy transportation of event-goers staying at nearby hotel/casinos.





ROYAL PURPLE LAS VEGAS BOWL

The Royal Purple Las Vegas Bowl is an NCAA-sanctioned post-season college football game that has been played annually at Sam Boyd Stadium since 1992. Since 2001, the Mountain West and Pac-12 Conferences have sent representatives to compete in the Las Vegas Bowl, most recently matching the Mountain West Conference champion versus the Pac-12's fifth or sixth place team. The 2014 game will place the Pac-12's sixth ranked team against the winner of the Mountain West Conference Football Championship Game, provided the winner of the game does not qualify for the College Football Playoff's six bowls as the highest-ranking member of the "Group of Five".

Royal Purple was announced as the new title sponsor for the game in 2013, in an agreement lasting three years. Royal Purple replaced Maaco, which had been the sponsor from a period of three years starting in 2009. In 2013, ESPN Plus, a regional subsidiary of ESPN, was the owner of the bowl, which is broadcast on the parent network of ESPN. Over the past eight years, average attendance for the event has hovered around 40,000 and ranged from a low of 33,000 in 2012 and a high of 45,000 in 2006.

Based on discussions with representatives from the Las Vegas Bowl, several stadium preferences were identified. Climate was identified as a major issue for the bowl operators. A strong preference was indicated for an enclosed roof stadium to avoid climate issues that can occur in Las Vegas in December. Additionally, an enclosed roof could allow the game to be played later in the bowl season, a benefit identified by event representatives. While an enclosed roof was identified as a primary concern, it was indicated by representatives that the game would still be played in an updated open-air stadium.

Other elements identified by bowl representatives include a need for enhanced technology (i.e. scoreboard, ribbon boards, Wi-Fi, etc.), more premium seating and overall seating capacity. Sam Boyd Stadium limits the potential of the bowl currently, and an increased capacity could allow event organizers to expand the size and scope of the event. Event representatives indicated that the current premium seating available at Sam Boyd Stadium is "tough on them" and it is an important area to address in a new facility. Additionally, more club seats and private luxury suite inventory would allow the event to better cater to sponsors and host teams and ultimately make the event better as a whole.

NEW COLLEGIATE BOWL GAME

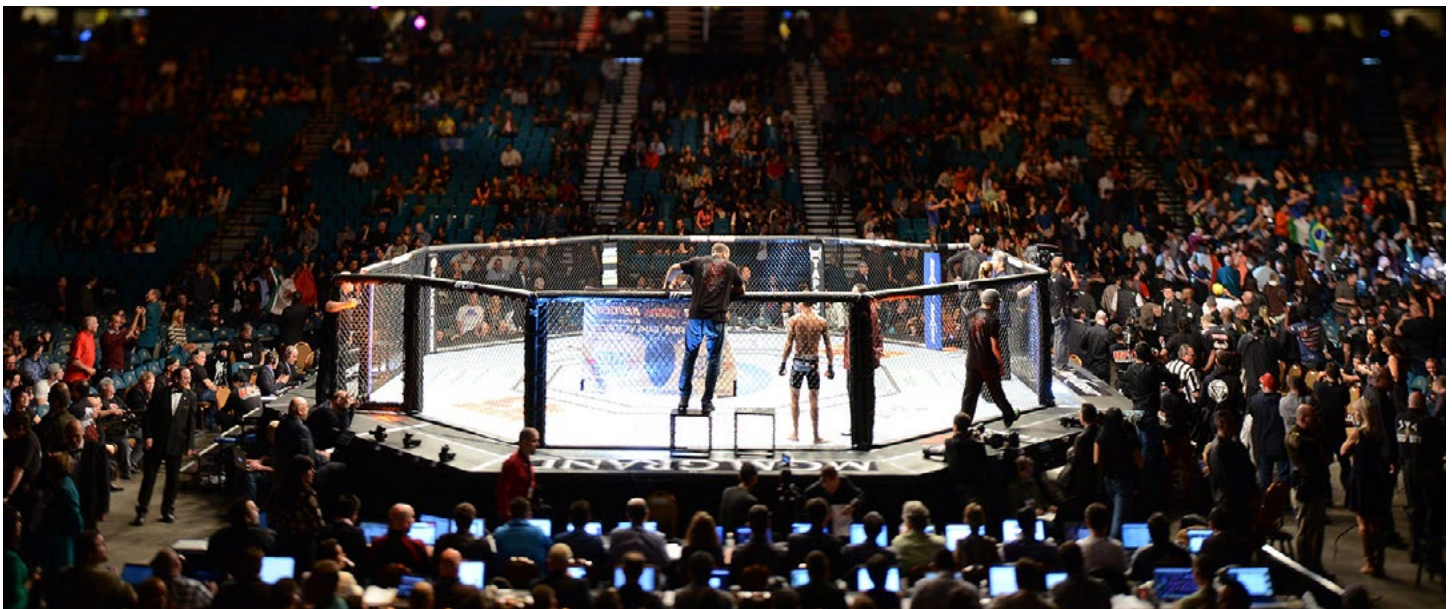
Along with the Royal Purple Las Vegas Bowl, there is potential for a new stadium in Las Vegas to host an additional collegiate bowl game, as there are several markets, including Orlando, Dallas / Ft. Worth, San Diego, Phoenix, Miami and New Orleans that host multiple bowl games on an annual basis.

Representatives from ESPN, current owner/operator of the Royal Purple Las Vegas Bowl were interviewed to discuss the possibility of a new collegiate bowl game being hosted at the proposed stadium in Las Vegas. Based on this discussion, the potential exists to host a new bowl game in addition to the Las Vegas Bowl, with an enclosed roof stadium providing the ideal configuration in order to host the bowl game later in the bowl season. Representatives indicated a preferred seating capacity of 50,000 to 60,000, along with enhanced technology and premium seating spaces. Overall, it is believed that a new collegiate bowl game in Las Vegas would not impact attendance or viability of Las Vegas Bowl, and could be a possibility with a new, state-of-the-art stadium facility in Las Vegas.

NEUTRAL SITE COLLEGIATE FOOTBALL GAMES

The potential exists for a new stadium in Las Vegas to also host neutral site collegiate football games. Currently, neutral site games have been hosted in markets such as Dallas/Fort Worth, Houston, Chicago, New York, Atlanta, Kansas City, Orlando and Jacksonville. Based on our discussions with representatives involved in collegiate football events, Las Vegas is viewed as a prime destination that is in need of a new stadium with a larger seating capacity. It was also added that an enclosed stadium would be ideal for the hosting of these neutral site collegiate football games. AT&T Stadium in Arlington, TX, was listed as an example of an enclosed stadium that is perfectly suited to host major neutral site collegiate football matchups. While an enclosed roof is preferred, representatives also indicated that an open-air stadium could also be utilized. In regard to seating capacity, event organizers indicated a preferred capacity of 50,000 to 60,000 seats. It was estimated by representatives that a new stadium in Las Vegas could potentially host two neutral site games over the same weekend, one weekend per year.





COMBATIVES

Combative events include fighting sports such as mixed-martial arts and boxing. Ultimate Fighting Championship (“UFC”) is the most prominent organization hosting mixed-martial arts in the United States. UFC has popularized the sport of mixed-martial arts and has begun expanding into stadiums. Las Vegas is the site of major UFC events at facilities like the MGM Grand Garden Arena, Mandalay Bay Events Center, and the Thomas & Mack Center, among others.

Based on discussions with representatives from UFC, it was indicated that the stadium would need to be enclosed in order to account for the weather and other climate concerns. It is projected that an enclosed stadium could host a very limited number of UFC fights annually. UFC International Fight Week was identified as a potential event that could be hosted at an enclosed stadium. UFC International Fight Week is a six-day event, and could be hosted at multiple facilities around Las Vegas with the main event drawing large enough crowds to fill the proposed stadium for the final event.

Over the past several decades, Las Vegas has served as one of the primary hubs for major boxing events in the United States and the world. The vast majority of fights are held at venues inside casinos (i.e. MGM Garden Arena, Mandalay Bay Event Center). While it is expected that fights will largely continue to be accommodated at these venues, the proposed new multi-purpose stadium in Las Vegas could be utilized to host a limited number of boxing events anticipated to draw in excess of 30,000 attendees. The proposed venue could offer a larger seating capacity than venues currently hosting boxing events in Las Vegas, and could be ideal for “super-fights” that expect a high demand for tickets.

Based on our discussions with industry representatives, boxing matches would require an enclosed stadium in Las Vegas. While boxing can be hosted outdoors, potential weather issues would be a major factor. The following stadiums have hosted boxing matches in recent years: AT&T Stadium (Dallas / Ft. Worth), Yankee Stadium (New York City), Gillette Stadium (Foxboro, MA), and Wembley Stadium (London). There is potential for a new enclosed stadium to host approximately one major boxing match a year with projected attendance of approximately 42,000.



MOTORSPORTS

In addition to the events listed herein, a new stadium in Las Vegas has the potential to host a limited number of motorsports events on an annual basis. Currently, Sam Boyd Stadium is the home of the Monster Supercross Finals and Monster Jam Finals, among others. As such, representatives of Feld Entertainment, promoters of the Advance Auto Parts Monster Jam and AMA Supercross events, were contacted in order to determine their potential interest in hosting motorsports events at a new stadium in Las Vegas. Representatives indicated that the majority of their motorsports events are held from January to May, and they currently host Monster Jam and AMA Supercross events at AT&T Stadium in Arlington. Officials were interested in the potential of a new stadium in Las Vegas that offered a larger seating capacity to host their events

Representatives indicated that hosting an event is generally a weeklong process, whereby the event is loaded in on a Tuesday and moved-out on a Sunday or Monday. In addition to the actual event day, several pre-event parties and other such functions are hosted in the days leading up to the event. Average attendance levels for the Advance Auto Parts Monster Jam and AMA Supercross events range from 25,000 to 75,000, while the average ticket price costs anywhere from \$25.00 to \$35.00 per person.

Representatives stated that field turf works better than grass, due to the potential damage that the vehicles and equipment can inflict on a grass field. Finally, representatives stated that there are several elements of the contract that would have to be negotiated, including ticketing, merchandise and other consumer product revenue splits, and pit rights.

WORK SESSION

In addition to the detailed interviews conducted with various local and national event promoters, a work session was conducted at the CIAB meeting on April 24, 2014, with a sampling of event promoters, executives and other project stakeholders in order to gather additional information related to the potential of a new stadium to host events and accommodate various user needs. The work session was moderated by CSL and included participation by the various CIAB members in attendance. Local and regional and stakeholder groups represented at the work session included:

- MGM Resorts;
- Live Nation;
- Las Vegas Events;
- Las Vegas Convention & Visitors Authority;
- ESPN Events;
- Rugby Sevens;
- Caesars Entertainment;
- Boyd Gaming;
- Top Rank;
- Ultimate Fighting Championship;
- UNLV Athletics;
- Campus Improvement Advisory Board;
- Other University Stakeholders;
- Current & Former Las Vegas Entertainment Executives; and,
- Other Stakeholders.

The remainder of this section is a summary of the opinions, feedback, and other information obtained during the work session.

Existing Las Vegas Event Market

At the out-set of the work session, participants were asked to provide information and feedback regarding the existing Las Vegas event market, the level at which events are being accommodated by existing venues, and whether there is a need for a new venue capable of hosting large-scale events.

- A member of Las Vegas Events indicated that one of the main criteria they use in determining whether or not an event will be beneficial to the community is whether four to five major hotel properties will benefit from the influx of visitors, and whether the event can generate at least 30,000 hotel room nights. City-wide, neutral-site events that can be promoted for an extended period of time (i.e. Las Vegas Bowl, NFR, etc.) provide the greatest benefit to the community because a variety of hotel properties will support the event and won't worry that their guests are patronizing a competitor. Hotel properties prefer events that bring in visitors during times of the year when there is not already a large influx of visitors. The representative stated that hotels do not want to lose guests in order to bring in new guests.
- The LVE representative went on to state that the City should play offense when it comes to the stadium and attracting major events. The City should identify what events it wants, and then go after them so that it does not lose out to other communities with similar stadium developments. The stadium should be designed so that it can be configured in a variety of ways in order to maximize its ability to host a wide variety of events. The stadium should also be designed in order to keep its existing events, as well as provide a means for its existing events to grow.
- Maintaining existing events and providing them opportunities to grow was also very important for the Rugby Sevens. A member of Rugby Sevens indicated that Sam Boyd Stadium, in its current condition, does not have a field width that meets the guidelines of the International Rugby Board. Rugby is a sport on the rise, given its recent inclusion in the Olympics and its various new TV sponsorship agreements, and although Las Vegas is an extremely important market for rugby, they would be forced to move their events if a new stadium is not built. The representative also indicated that given rugby's increased popularity, there is potential to grow their presence in Las Vegas by hosting additional tournaments and international matches in a new stadium.
- A representative of Top Rank stated that Las Vegas is a "tent pole town", which he defined as a place that has the ability to host the largest and best events. He indicated that everyone needs to work together to bring large-scale events to the area that benefit everyone and not just one property.
- The Top Rank official went on to state that Las Vegas is special, and even when he has hosted large-scale boxing matches at AT&T Stadium, many people left the event saying "it wasn't Las Vegas". Las Vegas should strive to have the best venue in the world because there isn't another market like it, and it has the ability to charge a premium for tickets. He stated that outside of Las Vegas there are not many other markets that can hold a robust ticket cost. For example, he stated that he was able to generate \$13 million in ticket sales from the Oscar De La Hoya versus Felix Trinidad fight in Las Vegas from 11,000 seats because all of the hotels properties came together and wrote checks.

Stadium Location

Following the discussion about the existing Las Vegas event market and the need for a new venue, participants were asked to indicate their preferences regarding the potential stadium location.

- Expanding on his previous statements, the representative from Las Vegas Events indicated that the proximity of the stadium to the Strip is vital. The goal is to bring people to the event, and to then immediately bring them back to the Strip.
- A member of the LVCVA agreed, indicating that placing the stadium as close to the more than 150,000 hotel rooms as possible will be extremely important in order to gain the support of the resort industry.
- The representative of Rugby Sevens expanded on these points by also stating that the current location of Sam Boyd Stadium results in additional costs for promoters and attendees, in the form of shuttles, taxis, and other such transportation costs.
- A representative of Live Nation reiterated the importance of proximity to the Strip, stating that a location close to the Strip could result in major acts such as Beyonce, Jay-Z, and the Rolling Stones having an increased interest in playing at the venue.
- A member of the CIAB stated that the current site envisioned for the stadium makes sense, but more needs to be done by way of public transportation in order to connect the Strip to other local and regional areas. She indicated that a light rail system should be considered as a means of moving people from one end of the Strip to the other. She also stated that although a new light rail system would result in additional transportation options, the area will always need buses and taxis in order to serve everyone.
- Another CIAB member countered her point by stating that many events require patrons to walk greater distances, including NFL games and the NFR, yet are still very successful.

Stadium Building Program

In addition to the potential location, participants were asked to provide their feedback and insights on a variety of stadium building program elements, including size, capacity, open-air versus enclosed, and technology, among others.

- The representative of Live Nation stated that he does not have a strong preference when it comes to an open-air stadium versus an enclosed stadium, however, he indicated that weather will be a factor in Las Vegas. The stadium should be designed to be as flexible as possible in order to accommodate a wide variety of events. The proximity of the stadium to the Strip is obvious, but the stadium should also be approachable, accessible, and workable. He would consider using the stadium if it can appropriately accommodate shows of 30,000 to 50,000 attendees.
- The representative of Top Rank indicated that it is very expensive to set up boxing, UFC and concerts outdoors. For example, he indicated that it cost \$1 million to cover the playing field at Yankee Stadium. In addition, he indicated that just because you have 50,000 seats in a stadium does not mean that you can generate revenue from all of them for a boxing match. Most likely, he would be able to sell the 25,000 seats in the lower bowl and the 7,000 seats on the floor, leaving a significant number of non-revenue generating seats. Although a larger capacity would allow for more people to see the event at a lower cost (i.e. \$50 for a ticket in the least-desirable seats, he could generate the same revenue at a smaller venue because of the market's ability to support higher prices and he wouldn't have to pay those large upfront costs to host the event.
- The Top Rank representative also stated that a large JumboTron would be necessary in a new stadium because people have come to expect it, and it can add to the overall experience of those sitting in non-preferred seats.
- A member of UFC concurred with the statements of the Top Rank representative, and indicated that if an open-air stadium is built, a canopy should be included in order to hang things and cover the ring. This is another cost that is extremely expensive for a promoter.
- Overall, when asked to indicate their preference for an open-air versus enclosed stadium, participants were split down the middle.
- A member of the CIAB indicated that all of the individuals who preferred an enclosed stadium were also the ones who would not have to contribute towards the funding of the facility. He indicated that everyone needs to take into the account the significant cost difference associated with an enclosed stadium (approximately 23 percent higher), and whether or not the benefits associated with it could justify the cost.

Potential Competition with Existing / Planned Venues

Following discussions of preferred stadium building program elements, participants were asked to opine on the potential of a new stadium to compete with existing/planned Las Vegas venues to host events.

- When asked whether a new stadium would compete with existing/planned venues to host events, a representative from MGM indicated that approximately three-quarters of the potential events presented would be incremental to the area and would not compete with other venues, particularly the sporting events. The other quarter of events, including concerts, boxing, UFC, and award shows, would be a shift of existing events. He indicated that although he supported a new stadium to bring new large-scale events, events such as concerts, boxing, UFC, and award shows are better accommodated in an arena. Given that MGM is planning to build a 20,000-seat arena, they will do everything they can to book a large number of events in order to pay for the building.
- A member of the CIAB responded to the MGM representative's comments by stating that she did not believe that a new stadium should compete with the private sector, and private sector dollars should not go towards a public facility.
- The representative of the UFC indicated that he did not believe that a new stadium would take away events from existing venues, but worried that he may not be able to create an event capable of drawing 50,000. If the event can only draw 20,000 attendees, there are several existing venues that are better-equipped to accommodate the event. For example, he stated that if they could generate 50,000 attendees for UFC Fight Week they would host it in an enclosed stadium, however, 20,000 attendees would work perfectly at MGM or Mandalay Bay.
- The representative of Top Rank echoed the sentiments of the UFC representative, indicating that it is just a matter of whether or not he could create an event that makes sense in such a large venue.
- Live Nation's representative indicated that stadium concerts are different than arena concerts. The amount of stadium concerts ebb and flow from year to year, and Las Vegas is currently an afterthought for stadium shows with Sam Boyd Stadium. A new stadium located near the Strip would make Las Vegas a top destination for stadium concerts. He went on to state that an artist on a stadium concert tour would not cancel one stadium show at 45,000 attendees in order to play three arena shows at 15,000 attendees.

Final Recommendations

Prior to the completion of the work session, all participants were asked to provide any final recommendations or feedback regarding the new stadium. The following are paraphrased summaries of their comments.

- **MGM** – Although the majority of events envisioned to be hosted at the new stadium will be incremental to the area, an open-air stadium will complete to host certain events such as music festivals, while an enclosed stadium could compete to host a larger number of events such as boxing, UFC, and award shows. Careful consideration should be given to the cost/benefit of each potential facility.
- **Former Entertainment Executive** – Special events will be key to the success of the facility. If given a facility, LVE and the LVCVA will make it successful.
- **Las Vegas Events** – A 50,000-seat venue located close to the Strip will allow us to compete for the largest events in the country.
- **Live Nation** – The venue should be as flexible as possible in order to accommodate a wide range of events.
- **Top Rank** – The entire community needs to work together to make the stadium happen. Las Vegas is the most unique market in the world.
- **ESPN Events** – We are currently unable to grow our events in Las Vegas without a state-of-the-art stadium. The stadium needs to be flexible and have the ability to neutralize the weather. An enclosed stadium would the City to bring in any event it wanted.
- **Rugby Sevens** – Las Vegas is a top four destination in the world for rugby, and there is a lot of potential for additional international matches in Las Vegas. The stadium should be flexible and easily accessible.
- **LVCVA** – The stadium is another amenity that would be incredible for the destination. We should not lose sight of the fact that the convention center needs expansion as well.

- **Las Vegas Entertainment Executive** – There is a lot of potential for event growth in Las Vegas. Sam Boyd Stadium has reached its maximum in terms of ticket price (around \$50.00), and the market needs more flexibility for its large-scale events.
- **Boyd Gaming** – We are committed to UNLV Athletics and providing it with a new venue. Neutral site events are important, but many of the events envisioned to be hosted at the stadium may have to be “bought” and have a chance of not making money.
- **UNLV Athletics** – A new on-campus stadium would be a huge asset for Athletics by changing the dynamics of the program, assisting with recruiting, and improving the experience for student-athletes. A new stadium would also encourage more student involvement with the program and increase the overall level of campus pride.
- **Caesars Entertainment** – It will be very important to drill down on the percentage of visitors that will patronize stadium events in order to truly understand the impact on the resort industry.
- **Las Vegas Event Executive** – We all need to have faith and make the stadium happen. Many people thought that building the Mirage was crazy at the time and there was no financial model that would have said it was going to work, but it was an extremely successful development. Initially, the Speedway’s model did not include the EDC, but they made it happen and it is a huge success. If you build it, they will come.

ESTIMATED NEW STADIUM EVENT UTILIZATION

Based on the analysis conducted herein, the table on the following page presents a summary of the estimated utilization of a new stadium in Las Vegas, including the number of events by type, average attendance levels, and total annual attendance. It should be noted that the estimated utilization for both open-air and closed roof scenarios, along with the proposed state-of-the-art collegiate stadium have been presented herein.

Estimated New Stadium Utilization

YEAR ONE EVENTS

Event Type	Domed Stadium			Open Air Stadium			State-of-the-Art Collegiate Option		
	Total # of Events	Average Attendance	Total Attendance	Total # of Events	Average Attendance	Total Attendance	Total # of Events	Average Attendance	Total Attendance
International Soccer	2	40,000	80,000	1	40,000	40,000	1	40,000	40,000
Concerts	2	40,000	80,000	1	35,000	35,000	1	30,000	30,000
Rugby	4	23,000	92,000	4	23,000	92,000	4	23,000	92,000
Las Vegas Bowl	1	50,000	50,000	1	50,000	50,000	1	45,000	45,000
New Bowl Game	1	50,000	50,000	0	--	--	0	--	--
Neutral Site CFB Game	2	50,000	100,000	1	50,000	50,000	1	45,000	45,000
Catered Events	100	500	50,000	75	500	37,500	75	500	37,500
Motorsports	3	45,000	135,000	3	45,000	135,000	3	40,000	120,000
Combatives (i.e. Boxing, UFC)	2	42,000	84,000	0	--	--	0	--	--
Other	4	45,000	180,000	0	--	--	0	--	--
UNLV Football	6	38,000	228,000	6	38,000	228,000	6	38,000	228,000
TOTAL	127		1,123,000	92		669,000	92		637,500
TOTAL (Excluding catered events/UNLV football)	21		845,000	11		404,000	11		372,000

As shown above, it is estimated that a new domed stadium could host approximately 127 events drawing 1.1 million attendees for UNLV football, international soccer, concerts, collegiate bowl games, neutral site college football games, motorsports, combative sporting events, and catered events. Excluding catered events and UNLV football, the facility would host 21 events annually, drawing approximately 845,000 attendees. Other event attendance is estimated to total approximately 68,000 per year. It should be noted that the total estimated events and attendance presented herein are not reflective of any potential internal University events that could be hosted at the stadium.

The proposed open-air stadium option would draw fewer major events than an enclosed facility. It is estimated that without a roof, the proposed stadium would lose the ability to attract a new collegiate bowl game, combative sporting events, and other events (i.e. major non-recurring and signature events). The open-air stadium would also attract fewer concerts and international soccer events on an annual basis. It is estimated that a new open-air stadium could host approximately 92 events drawing 669,000 attendees for UNLV football, international soccer, concerts, the Las Vegas Bowl, neutral site college football games, motorsports, combative sporting events, and catered events. Excluding catered events and UNLV football, the facility is projected to host 11 events annually, drawing approximately 404,000 attendees.

Similar to the open-air stadium scenario, a state-of-the-art collegiate stadium would draw fewer major events than the domed stadium due to the lack of a roof and ability to host events year-round. Additionally, the state-of-the-art collegiate stadium is expected to be smaller in capacity the open-air stadium scenario, and thus attract fewer annual visitors than the proposed open-air stadium. It is estimated that a new state-of-the-art collegiate stadium could host approximately 92 events drawing 638,000 attendees. Excluding catered events and UNLV football, the facility is projected to host 11 events annually, drawing approximately 372,000 attendees.



9

BUILDING PROGRAM & COST ESTIMATE

The purpose of this section is to present an estimated cost for the development of a new stadium in Las Vegas. Stadium cost estimates are based on the following assumptions:

State-of-the-Art Collegiate Stadium

- 45,000 total seats (41,650 general admission seats)
- 50 luxury suites (800 seats)
- 2,500 club and loge seats

Open-Air Stadium

- 50,000 total seats (46,700 general admission seats)
- 50 luxury suites (800 seats)
- 2,500 club and loge seats

Enclosed Stadium

- 50,000 total seats (46,600 general admission seats)
- Five (5) founder's suites (120 seats)
- 45 luxury suites (720 seats)
- 2,500 club and loge seats

ESTIMATE OF DEVELOPMENT COSTS

This section provides a comprehensive estimate of the anticipated development costs necessary to design and construct a new stadium in Las Vegas. The detailed construction cost estimates presented herein were initially developed as a baseline for an open-air stadium (non-collegiate stadium). Other costs associated with a fabric roof, dome, enclosed/retractable roof were developed in addition to the construction costs presented below and are summarized later in this section.

New Las Vegas Stadium Preliminary Cost Estimate		
System	Cost	\$\$/SF
Demolition	by Others	
Site Clearing	\$400,000	\$0.44
Site Utilities	\$2,450,000	\$2.72
Excavation & Foundation	\$14,192,700	\$15.77
Structural Frame	\$76,500,000	\$85.00
Roofing & Waterproofing	\$2,962,500	\$3.29
Exterior Wall	\$36,855,000	\$40.95
Interior Finishes	\$31,500,000	\$35.00
FF&E	\$3,000,000	\$3.33
Scoreboard	\$7,685,000	\$8.54
Playing Field	\$1,100,000	\$1.22
Equipment and Specialties	\$3,150,000	\$3.50
Food Service Equipment	\$9,000,000	\$10.00
Seating	\$9,818,900	\$10.91
Vertical Transportation	\$3,400,000	\$3.78
Plumbing	\$10,800,000	\$12.00
Fire Protection	\$2,700,000	\$3.00
HVAC	\$23,400,000	\$26.00
Electrical	\$27,000,000	\$30.00
Audio Visual	\$9,000,000	\$10.00
Site Work	\$5,400,000	\$6.00
General Requirements	\$16,818,800	\$18.69
	Direct Work Subtotal	\$297,132,900
	Insurance, Bonds, Staff, & Fee	\$44,570,000
	Construction Contingency	\$10,251,000
	Design Contingency	\$17,598,000
	Additional Contingency	\$1,864,290
	Total Construction Cost	\$371,416,000
Notes		
Owner Soft Costs NOT included		
Current market pricing. Add 3% per year for escalation		
Excludes Costs for Preconstruction Services		

CSL made assumptions for soft costs to provide a more accurate estimate of total project costs. Soft costs were assumed to represent approximately 25 percent of total stadium construction costs. Along with general stadium construction costs, estimated premiums for the addition of a shading system, domed roof, and retractable roof scenarios were also made. Not included in estimated project costs are potential added costs of approximately \$10.0 to \$20 million for lowering the playing field 25 feet below grade. Additional costs to be determined include parking, site improvements/infrastructure, and transportation enhancements.

The table below outlines the projected costs for the proposed state-of-the-art collegiate stadium scenario, open-air stadium scenario, and the proposed domed stadium scenario. Both total construction costs and soft costs are included in the estimate below, along with estimated costs of roof structures.

Estimated Stadium Project Costs			
Costs	State-of-the-Art Collegiate Stadium	Open-Air Stadium	Enclosed Stadium
Hard Construction	\$341,958,000	\$449,024,000	\$592,477,000
Soft Costs	80,894,000	106,221,000	140,157,000
Site & Infrastructure	100,000,000	100,000,000	100,000,000
Total Project Costs	\$522,852,000	\$655,245,000	\$832,634,000

Note: Total costs presented herein include land and parking costs.

The total project costs for a state-of-the-art collegiate stadium in Las Vegas are estimated to approximate \$522.9 million. Included in this cost is an approximate \$342 million in hard construction costs, \$80.9 million in soft construction costs, and \$100 million in site and infrastructure costs. Based on additional analyses conducted by the project team it is estimated that upwards of \$50 million in additional costs would need to be added to a new state-of-the-art collegiate stadium to make it efficiently and expeditiously modified at a future date with a fixed roof.

Overall, project costs for the construction of a 50,000-seat open-air stadium in Las Vegas is estimated to total approximately \$655.2 million, including \$449 million in hard construction, \$106.2 million in soft costs and \$100 million in site and infrastructure costs. It is also estimated that upwards of \$25 million to \$35 million in additional costs would need to be added to a new open-air stadium to make it efficiently and expeditiously modified at a future date with a fixed roof.

Project costs for the construction of a 50,000-seat enclosed stadium in Las Vegas are estimated to total approximately \$832.6 million, including \$592.5 million in hard construction, \$140.2 million in soft costs and \$100 million in site and infrastructure costs.



10

**FINANCIAL
PROJECTIONS**

The purpose of this section is to present estimated operating revenues and expenses for a new stadium. Since facility design and configuration have not yet been completed, the assumptions used in this analysis are based on the results of the market analysis, industry trends, knowledge of the marketplace and financial results from comparable facilities. Additional physical development planning must be completed before more precise estimations of the proposed stadium's operating costs can be made. Also, upon completion of preliminary planning, revenue and expense assumptions should be updated to reflect changes to the assumptions made herein. These changes could significantly influence the analysis of future operating results.

This presentation is designed to assist project representatives in estimating the financial attributes of a new stadium in Las Vegas and cannot be considered to be a presentation of expected future results. Accordingly, this analysis may not be useful for any other purpose. There will be differences between estimated and actual results that may be material.

Key assumptions used to estimate the potential financial operations of a new stadium in Las Vegas include, but are not limited to the following. The assumptions disclosed herein are not all-inclusive, but are those deemed to be significant.

- The domed stadium scenario will contain approximately 50,000 to 55,000 total seats, including five founder's suites (120 seats), 45 luxury suites (720 seats), and 2,500 club and loge seats;
- The open-air stadium scenario will contain approximately 50,000 to 55,000 total seats, including 50 luxury suites (800 seats), and 2,500 club and loge seats;
- The state-of-the-art collegiate stadium scenario will contain approximately 45,000 total seats, including 50 luxury suites (800 seats), and 2,500 club and loge seats;
- Net rental income is based upon industry standards, project team experience in similar markets/facilities, and market research;
- Merchandise is assumed to be handled in-house, with net profit margin assumed to be 10 to 15 percent (based upon industry averages);
- No parking assumptions have been included in this financial analysis;
- Facility fees are assumed to be \$2.00 per ticket for all events;
- Revenues are grown at three percent annually;
- All operating expenses are based upon project team experience in similar facilities, and assume most services handled on an in-house basis or sub-contracted;

- Insurance expenses are based on project team's industry clout and leverages policy rates, and are grown at three percent annually;
- Utilities are assumed to grow at four percent annually;
- Expenses are grown at 2.5 percent annually;
- Payroll burden is assumed to represent 30 percent of all expenses and is grown at 2.5 percent annually;
- The stadium would be owned by a public entity, such as UNLV or the LVCVA, and would be exempt from property taxes;
- The stadium will be managed by a competent, professional management team;
- The stadium will be aggressively marketed, providing competitive guarantees and, where applicable, rental rates;
- The market will generate spending on tickets, concessions, merchandise, advertising, sponsorships and premium seating that is consistent with the recent history of other comparable new stadiums;
- No assumptions have been made regarding revenues that could be generated should the stadium host any events outside of those presented herein;
- There are no significant or material changes in the supply or quality of existing venues in the marketplace; and,
- The revenues and expenses presented herein are inclusive of revenues generated by the stadium, tenant events and other events as previously outlined.

It should be noted that the revenue and expense estimates presented herein are presented in 2014 dollars.

SUMMARY OF OPERATING REVENUES AND EXPENSES

The following table presents a summary of the projected events and attendance for a new stadium in Las Vegas. These projections are based upon analyses of the local market in Las Vegas and the operations of other recently built stadiums. It should be noted that the estimated utilization for the state-of-the-art collegiate, open-air and closed roof scenarios have been presented herein.

Estimated New Stadium Utilization

YEAR ONE EVENTS

Event Type	Domed Stadium			Open Air Stadium			State-of-the-Art Collegiate Option		
	Total # of Events	Average Attendance	Total Attendance	Total # of Events	Average Attendance	Total Attendance	Total # of Events	Average Attendance	Total Attendance
International Soccer	2	40,000	80,000	1	40,000	40,000	1	40,000	40,000
Concerts	2	40,000	80,000	1	35,000	35,000	1	30,000	30,000
Rugby	4	23,000	92,000	4	23,000	92,000	4	23,000	92,000
Las Vegas Bowl	1	50,000	50,000	1	50,000	50,000	1	45,000	45,000
New Bowl Game	1	50,000	50,000	0	--	--	0	--	--
Neutral Site CFB Game	2	50,000	100,000	1	50,000	50,000	1	45,000	45,000
Catered Events	100	500	50,000	75	500	37,500	75	500	37,500
Motorsports	3	45,000	135,000	3	45,000	135,000	3	40,000	120,000
Combatives (i.e. Boxing, UFC)	2	42,000	84,000	0	--	--	0	--	--
Other	4	45,000	180,000	0	--	--	0	--	--
UNLV Football	6	38,000	228,000	6	38,000	228,000	6	38,000	228,000
TOTAL	127		1,123,000	92		669,000	92		637,500
TOTAL (Excluding catered events/UNLV football)	21		845,000	11		404,000	11		372,000

As shown above, it is estimated that a new domed stadium could host approximately 127 events drawing 1.1 million attendees for UNLV football, international soccer, concerts, collegiate bowl games, neutral site college football games, motorsports, combative sporting events, and catered events. Excluding catered events and UNLV football, the facility would host 21 major events annually, drawing approximately 845,000 attendees. Other event attendance is estimated to total approximately 68,000 per year. It is estimated that a new open-air stadium could host approximately 92 events drawing 669,000 annually. Excluding catered events and UNLV football, the facility is projected to host 11 major events annually, drawing approximately 404,000 attendees. Additionally, a state-of-the-art collegiate stadium is expected to be smaller in capacity the open-air stadium scenario, and thus attract fewer annual visitors than the proposed open-air stadium. It is estimated that a new state-of-the-art collegiate stadium could host approximately 92 events drawing 638,000 attendees. Excluding catered events and UNLV football, the facility is projected to host 11 major events annually, drawing approximately 372,000 attendees.

Based upon the estimated events and attendance, and revenue/expense assumptions discussed previously, the following table summarizes the estimated operating revenues and expenses associated with the various potential stadium development scenarios in Las Vegas.

Estimated Financial Operations
Proposed Multi-Purpose On-Campus Stadium Scenarios

	State-of-The-Art Collegiate Stadium		Open-Air Stadium		Enclosed Stadium	
	Year 1	Year 5	Year 1	Year 5	Year 1	Year 5
Revenues						
Rentals / Ticket Sales	\$1,813,000	\$2,040,000	\$1,813,000	\$2,040,000	\$3,617,000	\$4,071,000
Naming Rights	2,550,000	3,100,000	3,000,000	3,647,000	3,450,000	4,035,000
Sponsorship	2,550,000	2,983,000	3,000,000	3,509,000	3,450,000	3,883,000
Luxury Suites	2,126,000	2,387,000	2,126,000	2,387,000	5,523,000	6,068,000
Loge Boxes	245,000	318,000	245,000	318,000	524,000	635,000
Club Seats	2,921,000	3,288,000	2,921,000	3,288,000	2,921,000	3,288,000
Food & Beverage	1,214,000	1,366,000	1,272,000	1,375,000	2,459,000	2,698,000
Merchandise	344,000	387,000	362,000	407,000	842,000	948,000
Ticket Fees	1,246,000	1,583,000	1,318,000	1,977,000	3,292,000	4,938,000
Total Revenues	\$15,009,000	\$17,452,000	\$16,057,000	\$18,948,000	\$26,078,000	\$30,564,000
Expenses						
Labor	\$2,028,000	\$2,239,000	\$2,253,000	\$2,487,000	\$2,253,000	\$2,487,000
General & Administrative	407,000	448,000	452,000	498,000	452,000	498,000
Operations	2,709,000	2,984,000	3,010,000	3,316,000	3,285,000	3,619,000
Utilities	1,152,000	1,346,000	1,280,000	1,495,000	3,030,000	3,543,000
Insurance	201,000	213,000	231,000	245,000	384,000	407,000
Total Expenses	\$6,497,000	\$7,230,000	\$7,226,000	\$8,041,000	\$9,404,000	\$10,554,000
NET INCOME / (LOSS)	\$8,512,000	\$10,222,000	\$8,831,000	\$10,907,000	\$16,674,000	\$20,010,000



State-of-the-Art Collegiate Stadium

It is estimated that the proposed state-of-the-art collegiate stadium in Las Vegas could generate revenues of approximately \$15.0 million and incur approximately \$6.5 million in expenses, resulting in net income of approximately \$8.5 million before debt in the first year of operations. In the fifth year of operations, it is estimated that a new state-of-the-art collegiate stadium in Las Vegas could generate revenues of approximately \$17.5 million and incur approximately \$7.2 million in expenses, resulting in net income of approximately \$10.2 million before debt.



Open-Air Stadium

It is estimated that a new open-air stadium in Las Vegas could generate revenues of approximately \$16.1 million and incur approximately \$7.2 million in expenses, resulting in net income of approximately \$8.8 million before debt in the first year of operations. In the fifth year of operations, it is estimated that a new open-air stadium in Las Vegas could generate revenues of approximately \$18.9 million and incur approximately \$8.0 million in expenses, resulting in net income of approximately \$10.9 million before debt.



Enclosed Stadium

It is estimated that a new enclosed stadium in Las Vegas could generate revenues of approximately \$26.1 million and incur approximately \$9.4 million in expenses, resulting in net income of approximately \$16.7 million before debt in the first year of operations. In the fifth year of operations, it is estimated that a new enclosed stadium in Las Vegas could generate revenues of approximately \$30.6 million and incur approximately \$10.6 million in expenses, resulting in net income of approximately \$20.0 million before debt.



11

ECONOMIC & FISCAL IMPACT ANALYSIS

While many of the perceived benefits of the proposed stadium in Las Vegas are intangible including providing UNLV student-athletes an enhanced competition experience and UNLV coaches a unique tool from which to recruit top talent to the football program, as well as stimulating community pride among other qualitative benefits, the construction and annual operations of the proposed stadium in Las Vegas can provide quantifiable benefits to an area.

Typically, quantifiable effects are characterized in terms of economic impacts and fiscal impacts. Economic impacts are conveyed through measures of direct spending, total output, personal earnings, and employment. Fiscal impacts denote changes in tax revenues.

The focus of this analysis is to estimate the potential net new impacts generated from the construction and operation of the proposed stadium in Las Vegas. The following key issues have been addressed in this section:

- Overview of Economic Impacts;
- Construction Period Impacts;
- Annual Operations Impacts;
- Fiscal Impacts; and,
- Non-Quantifiable Benefits.

The assumptions underlying the estimates of economic and fiscal impacts are based on the results of a market and financial analysis presented previously in this report. The results presented are for the construction period and cumulative 30-year operations impacts.

OVERVIEW OF ECONOMIC IMPACTS

Economic impacts are typically conveyed through measures of direct spending, total output, personal earnings and employment. Each of the measures of economic impact is defined below:

- **Direct spending** represents spending generated by the proposed stadium in Las Vegas including construction-related spending on labor and materials as well as spending during annual operations consisting of in-facility expenditures on tickets and rentals, premium seating, concessions, sponsorships, etc.; out-of-facility spending on hotels, food and beverages, retail, transportation, entertainment and other expenditures.
- **Total output** represents the total direct, indirect and induced spending effects generated by the proposed stadium in Las Vegas.
- **Personal earnings** represent the wages and salaries earned by employees of businesses involved with the proposed stadium in Las Vegas.
- **Employment** is expressed in terms of person years of employment and is based on project spending. Person years are defined as one year of employment, or 2,080 annual hours, and may be full- or part-time.

DIRECT SPENDING

The operation of a multi-purpose stadium can impact the local economy in a variety of ways. As outlined in the exhibit below, initial direct spending is generated during construction on materials and labor and during operations at events on tickets and rentals, premium seating, concessions, sponsorships, etc., as well as before and after events throughout local hotel, restaurant, retail and other establishments.

In order to estimate the incremental economic and fiscal impact benefits generated to the local economy, certain adjustments must be made to initial direct spending to reflect the fact that all spending is not likely to impact the local economy. The following exhibit summarizes the adjustments made to initial direct spending in order to determine net new direct spending impacting the local economy.

DIRECT SPENDING - ADJUSTMENTS



As illustrated in the exhibit, adjustments must be made to account for the fact that a certain amount of spending associated with the proposed stadium in Las Vegas will be made by local residents and, therefore, likely represents money already spent in the economy in another form. This is called displacement and reduces the overall net new impacts. This type of spending is not considered net new to the local economy. Additionally, not all spending associated with the proposed stadium in Las Vegas will take place in the local economy. A portion of this spending is likely to occur outside the immediate area. This is called leakage and reduces the overall impact. The economic and fiscal impacts presented in this section represent the estimated net new impacts associated with the proposed stadium in Las Vegas.

MULTIPLIER EFFECTS

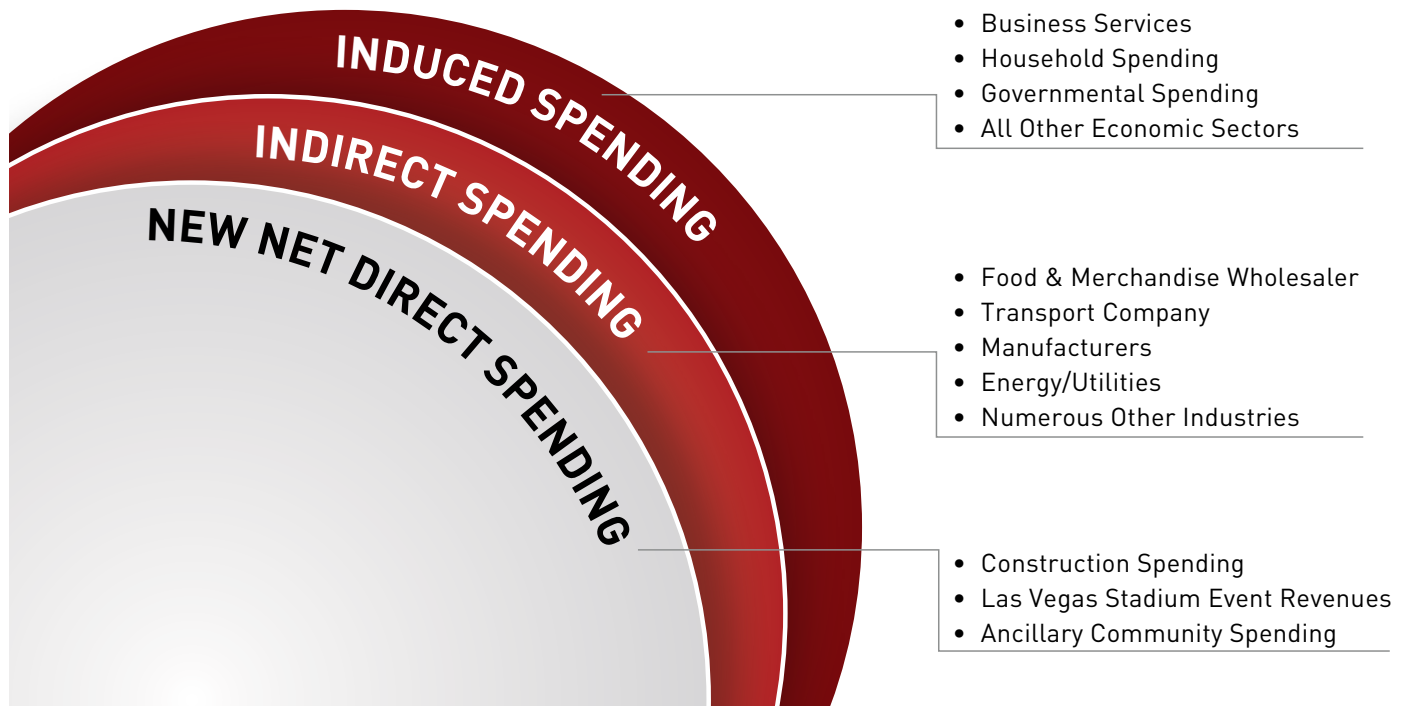
Economic impacts associated with the proposed stadium in Las Vegas will likely be further increased through re-spending of the net new direct spending. The total impact is estimated by applying an economic multiplier to initial direct spending to account for the total economic impact. The total output multiplier is used to estimate the aggregate total spending that takes place beginning with the direct spending and continuing through each successive round of re-spending.

Successive rounds of re-spending are generally discussed in terms of their indirect and induced effects on the area economy. Each is discussed in more detail as follows:

- Indirect effects consist of the re-spending of the initial or direct expenditures. These indirect impacts extend further as the dollars constituting the direct expenditures continue to change hands. This process, in principle, could continue indefinitely. However, recipients of these expenditures may spend all or part of it on goods and services outside the market area, put part of these earnings into savings, or pay taxes. This spending halts the process of subsequent expenditure flows and does not generate additional spending or impact within the community after a period of time. This progression is termed leakage and reduces the overall economic impact. Indirect impacts occur in a number of areas including the following:
 - o wholesale industry as purchases of food and merchandise products are made;
 - o transportation industry as the products are shipped from purchaser to buyer;
 - o manufacturing industry as products used to service the sports complex, vendors and others are produced;
 - o utility industry as the power to produce goods and services is consumed; and,
 - o other such industries.
- Induced effects consist of the positive changes in spending, employment, earnings and tax collections generated by personal income associated with the operations of a sports complex. Specifically, as the economic impact process continues, wages and salaries are earned, increased employment and population are generated, and spending occurs in virtually all business, household and governmental sectors. This represents the induced spending impacts generated by direct expenditures.

The concept of direct, indirect and induced spending is further illustrated below.

THE MULTIPLIER EFFECT



The appropriate multipliers to be used are dependent upon certain regional characteristics and also the nature of the expenditure. An area which is capable of producing a wide range of goods and services within its border will have high multipliers, a positive correlation existing between the self-sufficiency of an area's economy and the higher probability of re-spending occurring within the region. If a high proportion of the expenditures must be imported from another geographical region, lower multipliers will result.

The multiplier estimates used in this analysis are based on the IMPLAN system. IMPLAN, which stands for Impact Analyses and Planning, is a computer software package that consists of procedures for estimating local input-output models and associated databases. Input-output models are a technique for quantifying interactions between firms, industries and social institutions within a local economy.

IMPLAN was originally developed by the U.S. Forest Service in cooperation with the Federal Emergency Management Agency and the U.S. Department of the Interior's Bureau of Land Management to assist in land and resource management planning. Since 1993, the IMPLAN system has been developed under exclusive rights by the Minnesota Implan Group, Inc. which licenses and distributes the software to users. Currently, there are hundreds of licensed users in the United States including universities, government agencies, and private companies.

The economic data for IMPLAN comes from the system of national accounts for the United States based on data collected by the U. S. Department of Commerce, the U.S. Bureau of Labor Statistics, and other federal and state government agencies. Data are collected for 440 distinct producing industry sectors of the national economy corresponding to the Standard Industrial Categories (SICs).

FISCAL IMPACTS

In addition to the economic impacts generated by the proposed stadium in Las Vegas throughout the market area, the public sector also benefits from increased tax revenues. In preparing estimates of fiscal impacts, total tax revenues attributable to the direct spending generated by the development were estimated. In addition, estimates of the effect of total output and earnings on the tax collections have been estimated. Tax revenues are based on the current applicable tax rates. Future changes in these rates would have an impact on the resulting tax collections. The sources of tax revenue focused on in this report are outlined below:

- State of Nevada Sales Tax;
- Clark County Sales Tax;
- Proposed Community Facilities District Sales Tax;
- Live Entertainment Tax;
- Modified Business Tax;
- Hotel Tax;
- Nevada General Fund Gaming Tax; and,
- Car Rental Taxes & Fees.

CONSTRUCTION PERIOD IMPACTS

The table below summarizes the net new economic impacts anticipated to be generated to Clark County by the construction of an open-air and enclosed stadium.

Construction Period Impacts Stadium Development Scenarios		
Net New Impact	Open-Air Stadium	Enclosed Stadium
Direct Spending	\$341,674,000	\$431,567,000
Total Output	\$587,764,000	\$739,065,000
Employment (FTEs)	4,559	5,708
Income	\$290,046,000	\$366,265,000

Project costs associated with the development of an open-air stadium in Las Vegas are estimated to total \$655.2 million, while project costs associated with the development of an enclosed stadium are estimated to total \$832.6 million. It is estimated that these costs will consist of roughly 60 percent materials and 40 percent labor. Further, it is estimated that 60 percent of materials spending and 80 percent of labor spending would occur in Clark County.

As a result, the one-time net new economic impacts estimated to be associated with the construction of an open-air stadium in Las Vegas include approximately \$342 million in direct spending, \$588 million in total output and 4,559 full and part-time jobs and \$290 million in personal earnings. Net new impacts associated with the development of an enclosed stadium in Las Vegas include approximately \$432 million in direct spending, \$739 million in total output, 5,708 full and part-time jobs and \$366 million in personal earnings.

In his study titled “The Economic Value and Importance of a Stadium with Seating for 55,000 or more Spectators for Nevada, Clark County, the Las Vegas Region’s Resorts, and UNLV”, Dr. Mark Rosentraub estimated that construction of an \$800 million enclosed stadium would result in approximately \$425 million in direct spending, \$729 million in total output and 5,058 full and part-time jobs and \$308 million in personal earnings.

ANNUAL OPERATIONS IMPACTS

The table below summarizes the net new combined on-site and off-site economic impacts anticipated to be generated to Clark County by the annual operations of an open-air and enclosed stadium (net of existing Sam Boyd Stadium impacts).

Annual Operations Impacts Stadium Development Scenarios		
Net New Impact	Open-Air Stadium	Enclosed Stadium
Direct Spending	\$174,464,000	\$428,359,000
Total Output	\$275,632,000	\$676,748,000
Employment (FTEs)	2,550	6,267
Income	\$110,075,000	\$270,427,000

Net new impacts from annual operations of an open-air stadium are estimated to generate \$174 million in net new direct spending, \$276 million in total output, 2,550 full and part-time jobs and \$110 million in personal earnings. Net new impacts from annual operations of an enclosed stadium are estimated to generate \$428 million in net new direct spending, \$677 million in total output, 6,267 full and part-time jobs and \$270 million in personal earnings. Dr. Mark Rosentraub estimated that the net new impacts from annual operations of a 55,000-seat enclosed stadium included \$393 million in direct spending and \$603 million in total output.

FISCAL IMPACTS

In addition to the direct spending, total output, employment and income impacts discussed herein, the construction and annual operations of a new stadium in Las Vegas could generate additional benefits to the local area in the form of increased tax revenues. Overall, it is estimated that annual net new fiscal benefits associated with the development of an enclosed and open-air stadium in Las Vegas could total approximately \$37.1 million and \$15.0 million, respectively. The following table provides a detailed summary of the net new fiscal impacts estimated to be generated to the local and regional area on an annual basis by type.

Annual Fiscal Benefits Analysis		
Stadium Comparison (net of SBS)		
Type of Tax	Open-Air Stadium	Domed Stadium
State Sales Tax	\$1,651,000	\$4,079,000
County Sales Tax	\$5,037,000	\$12,441,000
Proposed CFD Sales Tax	\$743,000	\$1,836,000
Live Entertainment Tax	\$648,000	\$1,629,000
Modified Business Tax	\$4,700	\$4,700
Hotel Tax	\$2,012,000	\$4,971,000
NV General Fund Gaming Tax	\$4,820,000	\$11,906,000
Car Rental Taxes & Fees	\$85,000	\$210,000
TOTAL	\$15,001,000	\$37,077,000

NON-QUANTIFIABLE IMPACTS

In addition to the more quantifiable benefits, some benefits related to the construction and operations of an open-air or enclosed stadium in Las Vegas cannot be quantitatively measured. Potential qualitative benefits for the City of Las Vegas, UNLV and the surrounding regional area could include:

- enhanced athletic facility for the UNLV football program;
- unique recruiting tool to attract top-level student-athletes to campus;
- increased opportunities for philanthropic giving to UNLV and the Athletics Department;
- tool to attract prospective students to attend UNLV;
- enhanced university community pride, self-image, exposure and reputation;
- enhanced spectator event opportunities for local citizens;
- new advertising/sponsorship opportunities for local area businesses;
- synergy with other entertainment facilities leading to increased tourism activity;
- enhanced international exposure;
- enhanced economic growth and ancillary private sector development spurred by the operation of the proposed stadium in Las Vegas; and,
- other such benefits.



12

FUNDING ANALYSIS

It is estimated that the total cost to construct a new stadium could approximate between \$523 million and \$833 million, depending upon the stadium type. The purpose of this section is to identify potential sources that could be used to fund construction of a new stadium, as well as quantify the possible sources based on a variety of factors, including the unique characteristics of the local market, the local political environment, past funding of local sports and entertainment facilities, and the estimated net operating income of the proposed facility, among others. The funding analysis is presented in the following sections:

- Comparable Stadium Funding;
- Potential Public & Private Funding Sources; and,
- Funding Philosophy & Approach.

Funding Comparison - Public & Private Sector Participation Newly Constructed NFL & NCAA Stadiums								
Stadium	Location	Tenant	Year Opened	Total Project Cost	Amount		Percentage	
					Public	Private	Public	Private
<u>NFL Stadiums:</u>								
New Vikings Stadium	Minneapolis, MN	NFL	2016	\$1,049.0	\$551.0	\$498.0	53%	47%
Levi's Stadium	Santa Clara, CA	NFL	2014	\$1,251.0	\$850.7	\$400.3	68%	32%
MetLife Stadium	East Rutherford, NJ	NFL	2010	\$1,850.0	\$259.0	\$1,591.0	14%	86%
AT&T Stadium	Arlington, TX	NFL	2009	\$1,274.0	\$458.6	\$815.4	36%	64%
Lucas Oil Stadium	Indianapolis, IN	NFL	2008	\$811.5	\$722.2	\$89.3	89%	11%
University of Phoenix Stadium	Glendale, AZ	NFL	2006	\$439.7	\$277.0	\$162.7	63%	37%
Mercedes-Benz Superdome	New Orleans, LA	NFL	2006 ⁽¹⁾	\$336.0	\$322.6	\$13.4	96%	4%
Ford Field	Detroit, MI	NFL	2002	\$440.0	\$114.4	\$325.6	26%	74%
NRG Stadium	Houston, TX	NFL	2002	\$449.0	\$193.1	\$255.9	43%	57%
<u>NCAA Stadiums:</u>								
McLane Stadium	Waco, TX	NCAA	2014	\$260.0	\$33.8	\$226.2	13%	87%
Kyle Field	College Station, TX	NCAA	2014 ⁽¹⁾	\$450.0	\$22.5	\$427.5	5%	95%
Apogee Stadium	Denton, TX	NCAA	2011	\$80.0	\$0.0	\$80.0	0%	100%
FAU Stadium	Boca Raton, FL	NCAA	2011	\$70.0	\$0.0	\$70.0	0%	100%
TCF Bank Stadium	Minneapolis, MN	NCAA	2009	\$303.0	\$136.4	\$166.7	45%	55%
InfoCision Stadium	Akron, OH	NCAA	2009	\$61.6	\$0.0	\$61.6	0%	100%
Bright House Networks Stadium	Orlando, FL	NCAA	2007	\$59.0	\$0.0	\$59.0	0%	100%
Average - All			2009	\$574.0	\$246.3	\$327.7	34%	66%
Average - NFL-Only			2008	\$877.8	\$416.5	\$461.3	54%	46%
Average - NCAA-Only			2011	\$183.4	\$27.5	\$155.9	9%	91%
(1) Indicates year of major renovation. Note: Sorted by year opened								

Overall, newly constructed NFL and NCAA stadiums have been funded with an average of 34 percent public participation and 66 percent private participation. When analyzing stadiums constructed for a NFL tenant, public funding participation totals an average of 54 percent of project costs, with the private sector funding the remaining 46 percent. Although the majority of collegiate stadium projects are privately financed through capital fundraising campaigns and private donations, several recent major stadium projects have received a level of public funding, including projects at the University of Minnesota (TCF Bank Stadium – 45 percent public funding), Baylor University (McLane Stadium – 13 percent public funding), and Texas A&M University (Kyle Field – five percent public funding).

Although a review of the sources utilized to fund the cost of newly constructed NFL and collegiate stadiums can be useful in identifying various sources of funds that could be used to fund the construction of a new stadium in Las Vegas, it does not take into consideration the uniqueness of the Las Vegas market that is absent in the above-mentioned examples. The majority of the stadiums discussed herein were constructed primarily to accommodate six to 10 tenant football events annually, with only a select few (i.e. AT&T Stadium and University of Phoenix Stadium) hosting a significant number of third party events that draw incremental visitors to the local economy. Conversely, the Las Vegas market has been built around the visitor and tourism industry, attracting approximately 40 million visitors annually to its casinos, resorts, shows and attractions. As such, project stakeholders envision the primary purpose of a new stadium is to host large-scale events that draw incremental visitors to the local area, in addition to UNLV home football games.

Based on the vision for a new Las Vegas stadium, an alternative funding structure that reflects the facility's anticipated benefit to the local economy should be considered. This type of funding structure is not new to the Las Vegas market. The Thomas & Mack Center, opened in 1983 on the campus of UNLV, has served as the home of the University's men's basketball program, but also hosts a variety of other events through its collaboration with the LVCVA, LVE, and the resort industry. The Thomas & Mack Center serves as the home of major events such as the National Finals Rodeo, PBR World Finals, NBA Summer League, USA Basketball, and a variety of other concerts, family shows and sporting events. In fact, UNLV basketball events make-up only 37 percent of the total number of attendees that visit the arena annually. As a means of modernizing the Thomas & Mack Center and increasing its attractiveness to host events, the arena will undergo an approximate \$47 million renovation financed with State appropriated funds supported by the slot tax.

POTENTIAL PUBLIC & PRIVATE FUNDING SOURCES

The development and financing of sports and entertainment facilities throughout the country in recent years has largely relied on a combination of both public and private sector financing. The enhanced revenue-generating capabilities of new facilities have encouraged more public/private partnerships whereby public sector financing vehicles are supplemented with private sector revenue streams. In many cases, a public sector entity will issue some form of bond to wholly or partially finance the construction of the facility. The annual debt service required to retire the bonds is then sourced from a general fund and/or from various tax revenues including sales, hotel/motel, restaurant, entertainment and other taxes, as well as other revenue sources such as facility-related revenues. Potential public and private funding sources include, but are not limited to the following:

PUBLIC SOURCES:

1. Sales Tax Increment In The Tourist Corridor
2. Sales Tax in Clark County
3. Incremental Internet Sales Tax
4. Room Tax
5. Auto Rental Tax
6. Live Entertainment Tax
7. Property Tax
8. Business Tax
9. Slot Tax
10. Gaming Tax

PRIVATE SOURCES:

1. Naming Rights
2. Advertising / Sponsorship
3. Premium Seating
4. Equity
5. Seat Licenses
6. Donations / Philanthropy
7. Net Operating Income

A variety of public and private funding sources could potentially be available to finance construction of a new stadium in Las Vegas.

Based on the financial analysis presented earlier in this report, it is estimated that a new stadium could generate between \$8.5 million and \$16.7 million in net operating income before debt service annually, depending upon stadium type. Total project costs associated with each stadium development type include approximately \$100 million in site and infrastructure costs, and it is envisioned that net operating income would be contributed to the overall capital requirements for the stadium, specifically in the form of funding the capital reserves (that would otherwise need to be funded by other sources). As a result, the net operating income of a new stadium is not expected to be sufficient to service debt related to total project costs. Based on the anticipated allocation of net operating income towards site and infrastructure costs, it is estimated that additional private sources would not be available to fund construction of a new stadium, resulting in the need for public sector revenue sources.

Based on the need for public sources of revenue, a review of funding sources and options was conducted and all current and several conceptual funding sources were considered. Criteria for the consideration of various public funding sources included:

- The revenue source must be sufficient and adequate enough to contribute in a material manner to the funding needs. Given the scope and magnitude of this project, significant revenue is needed to secure and service the debt required to build the facility;
- The revenue source must be of high credit quality. Revenues with lower credit quality require more revenue to be produced to meet coverage requirements;
- The revenue source should have some degree of nexus to the project;
- The revenue source should have an element of exportation, insuring that users of the facility are carrying a material share of the project funding needs;
- The revenue source should be transparent, easy to understand, and easy to administer; and,
- The revenue source must meet tests of horizontal and vertical equity, economic neutrality, and other measures of reasonable forms of taxation.

A broad array of funding sources were considered, including gaming fees and taxes, live entertainment tax, room taxes and fees, property tax, sales tax, and other sources. Further, the CIAB considered variations of the tax sources, including the creation of taxing zones to target the impact of the tax. The CIAB also considered competing needs for funding within the community. The table on the following page presents a summary of the various revenue sources considered, estimated levels of revenue production and statutory citations.

Revenue Source	Legislative Action Required	Increment	Estimated Annual Revenue Potential
Room Tax Transient Lodging Rental Tax	Yes	1 percent	\$44,000,000
Room Tax Transient Lodging Rental Tax	Yes NRS 244	\$1 per room night occupied	\$49,700,000
Live Entertainment Tax	Yes NRS 368A	5%	\$35,000,000
Gross Gaming Revenue Fee	Yes NRS 463.370	0.5 % increase to all tiers	\$41,500,000
Slot Machine Excise Tax	Yes NRS 463.385	\$50 per slot machine	\$10,000,000
Car Rental Tax	Yes NRS 244A.860	2%	\$7,750,000
Increment District	Yes	LET and Sales Tax on Stadium Events	\$500,000 (During Construction) \$400,000 - \$900,000 (Operating)
Sales Tax - County	Yes	0.25%	\$79,000,000
Sales Tax within Resort Corridor	Yes	0.90%	\$83,000,000

Based on the nuances related to each potential revenue source, it was determined that the revenue source that best satisfied the needs of the project while also best meeting the various criteria is the sales tax. Though the CIAB believes and recognizes that there is no perfect tax, and that there is no revenue source that can be considered without reservation, it is believed that the sales tax best minimizes the downsides and negative impacts accompanying the various other revenue sources considered. For example, the LVCVA receives a large portion of its funding from revenues generated from the existing room tax, and it is believed that any allocation of existing or future room tax revenues could have adverse effects on the LVCVA, the resort industry and planned expansion of the convention center.

FUNDING PHILOSOPHY & APPROACH

Based on the analyses conducted herein, the following philosophy and approach has been developed as a means of funding the costs associated with the stadium project.

1 DIRECT COST

Sales Tax Increment



2 SITE WORK & INFRASTRUCTURE

Contractually Obligated Income
Net Operating Income
Funding via Tax Exempt Financing



3 SITE INTEGRATION TO UNLV CAMPUS & OTHER COMPLIMENTARY DEVELOPMENT

Philanthropy & Other Outside Funding



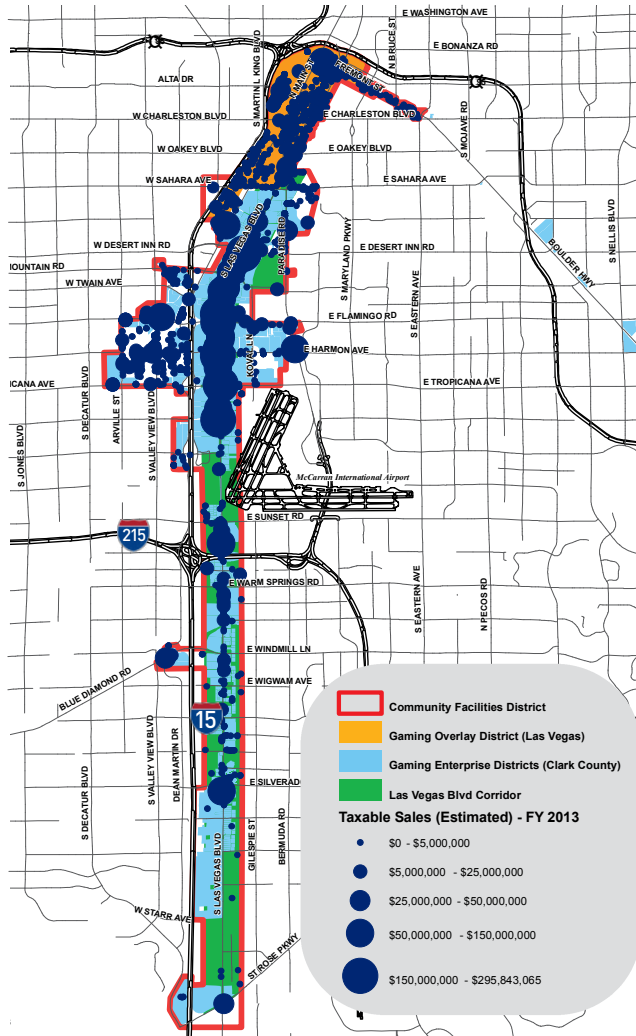
It is envisioned that direct costs associated with the construction of a new stadium would be funded via revenues generated from a sales tax increment. Site work and infrastructure would be financed from capital reserve funds (from contractually obligated income and net operating income), while site integration to the UNLV campus and other complementary development would be funded via philanthropy and other outside funding sources.

Community Facilities District

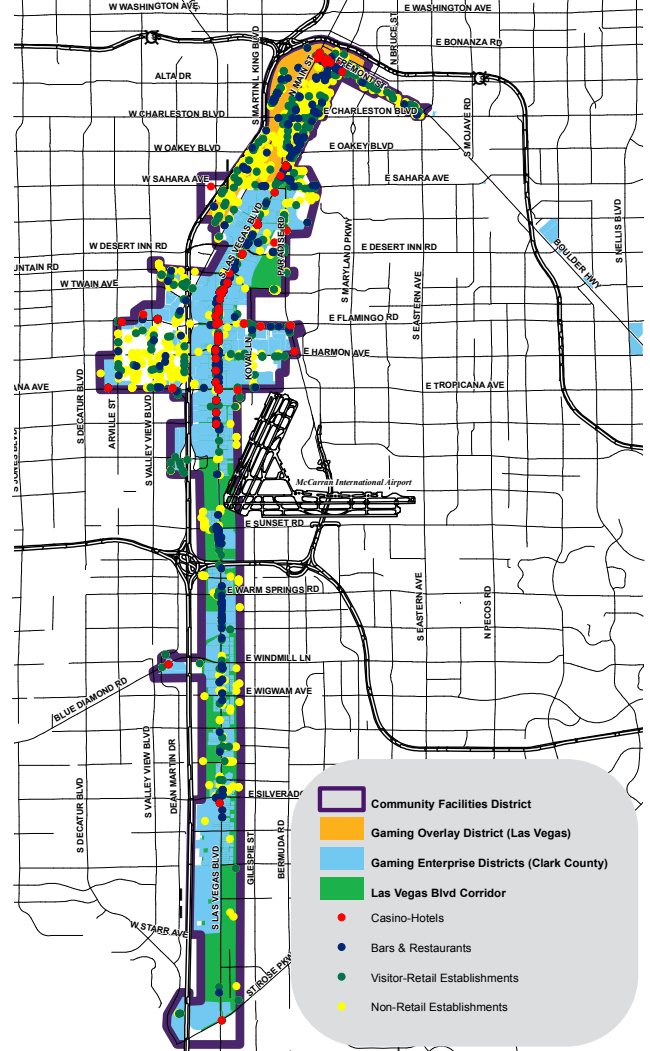
As a means of generating a sufficient level of revenue to fund construction of the stadium project, while also insuring that users of the facility are carrying a material share of the project funding needs, the CIAB established the boundaries of a Community Facilities District (CFD), which includes The Strip and Downtown Las Vegas, that could capture incremental sales tax revenue that could be utilized towards the funding of stadium construction. The graphic on the following page illustrates the boundaries of the CFD, as well as the location of establishments by type and estimated annual taxable sales within the CFD. It should be noted that the creation of a special sales tax district likely would require authorizing legislation from the State to the County.

COMMUNITY FACILITIES DISTRICT

LOCATIONS BY TAXABLE SALES



LOCATIONS BY TYPE



Note: Creation of a special sales tax district would likely require authorizing legislation from the state to the county.

Calculation of Impacts

It is estimated that approximately 50 percent (\$10.8 billion) of the approximate \$21.5 billion in total annual taxable sales occurring in Clark County take place within the boundaries of the proposed CFD. The following table presents a summary of the annual taxable sales occurring within the CFD and Clark County by retail industry.

Industries Included in Taxable Sales Estimate

Number	Traditional Retail Industries	Community Facilities District	Clark County	% Total Taxable Sales (100%)	CFD as % of Clark County
1	Food Services and Drinking Places	\$3,787,268,415	\$8,622,170,525	35.1%	43.9%
2	Accommodation	\$3,126,537,362	\$68,620,049	29.0%	4556.3%
3	Clothing and Clothing Accessories Stores	\$2,601,454,121	\$3,501,557,238	24.1%	74.3%
4	General Merchandise Stores	\$367,481,057	\$3,107,645,372	3.4%	11.8%
5	Food and Beverage Stores	\$64,412,668	\$1,115,008,244	0.6%	5.8%
6	Electronics and Appliance Stores	\$261,016,139	\$1,104,955,113	2.4%	23.6%
7	Building Material & Garden Supply Stores	\$49,187,076	\$1,091,591,198	0.5%	4.5%
8	Health and Personal Care Stores	\$146,936,230	\$716,897,766	1.4%	20.5%
9	Miscellaneous Store Retailers	\$167,106,720	\$582,983,604	1.5%	28.7%
10	Furniture and Home Furnishings Stores	\$36,530,500	\$578,263,043	0.3%	6.3%
11	Sporting Goods/Hobby/Book/Music Stores	\$84,460,823	\$535,360,262	0.8%	15.8%
12	Gasoline Stations	\$18,772,469	\$279,182,883	0.2%	6.7%
13	Amusement, Gambling & Recreation Ind	\$29,371,841	\$155,778,513	0.3%	18.9%
14	Performing Arts and Spectator Sports	\$46,938,618	\$84,432,851	0.4%	55.6%
15	Museums, Parks and Historical Sites	\$273,885	\$2,040,460	0.0%	13.4%
	TOTAL	\$10,787,747,924	\$21,546,487,121	100%	50.1%

Downward
Contingency
Adjustment-Risk

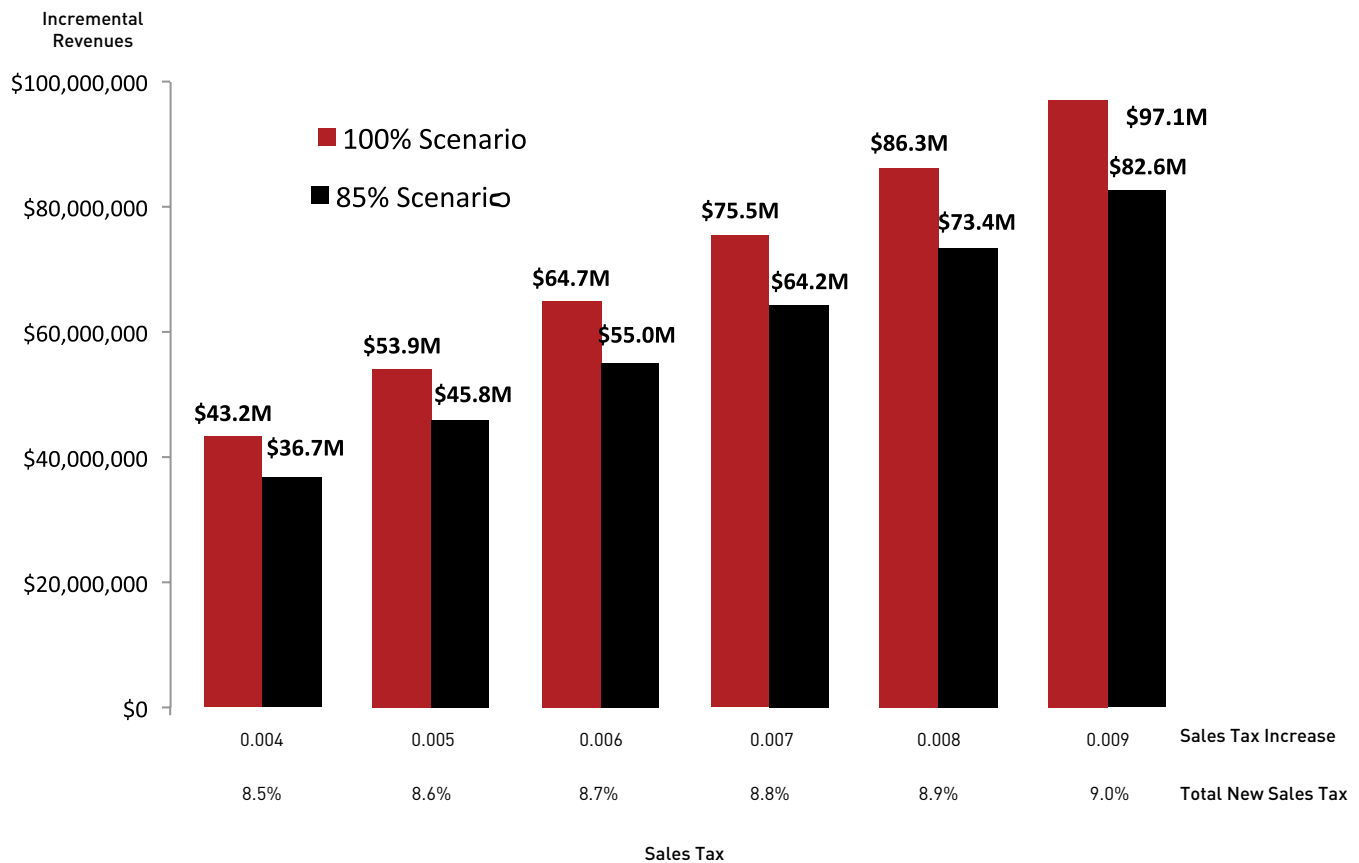
85%

\$9,169,585,736

As shown, of the approximate \$10.8 billion in estimated annual taxable sales occurring within the CFD, approximately \$9.5 billion (88 percent) takes place in the food service and drinking places, accommodation, and clothing and clothing accessories store industries. These retail industries are the establishments most likely to be patronized by tourists and visitors to the area in conjunction with events hosted at the proposed stadium.

Estimated CFD Sales Tax Increment

Based on the estimated levels of taxable spending occurring within the CFD on an annual basis, the following table presents a summary of the potential revenues that could be generated by various incremental sales tax increases within the CFD.

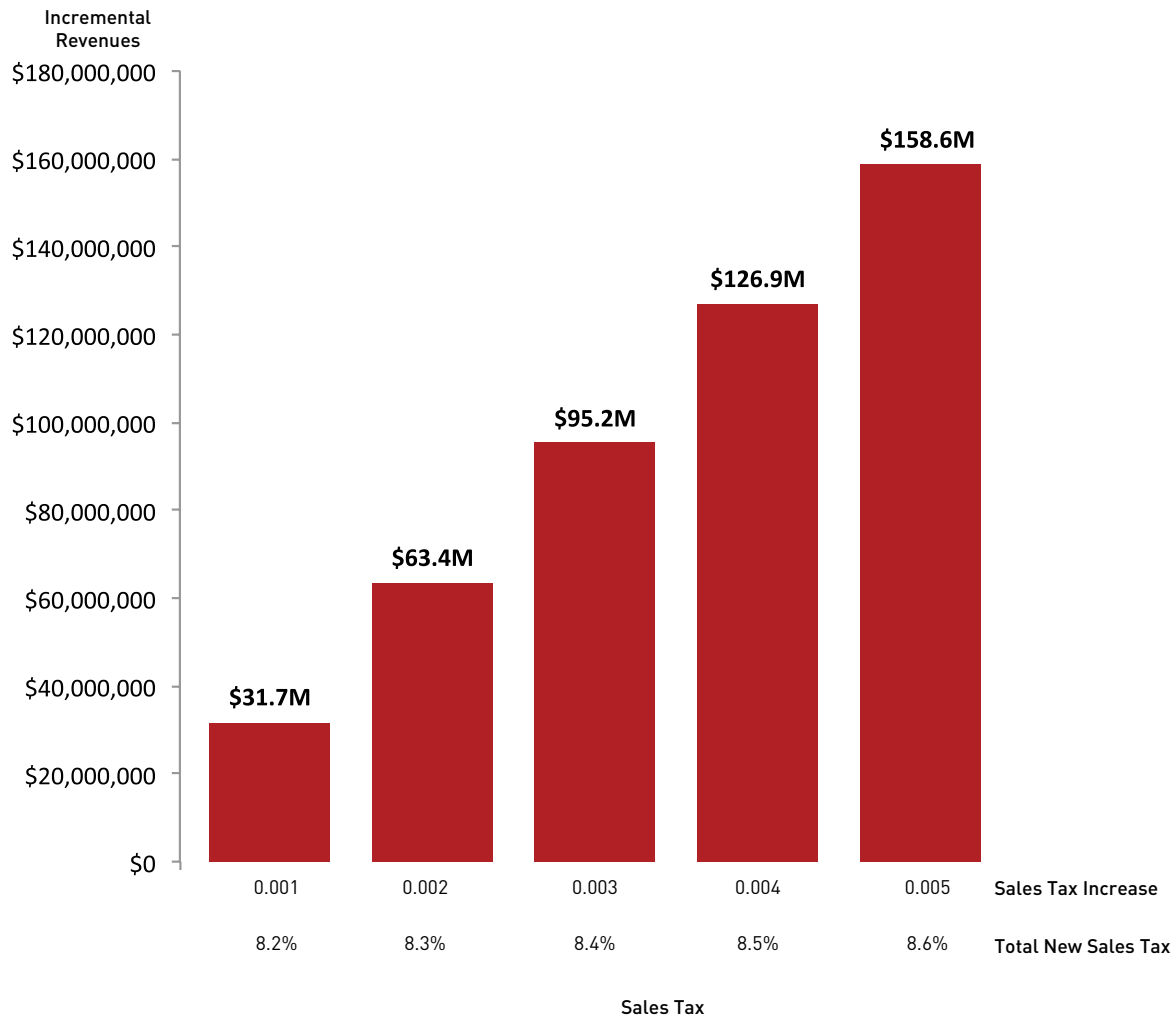


Note: Existing sales tax is 8.1%, the revenues shown include only those from the incremental tax increase

As shown above, it is estimated that an incremental sales tax increase of 0.4 percent (8.5 percent total sales tax) could generate approximately \$43.2 million in incremental revenue on an annual basis. It is estimated that for every 0.1 percent increase in the sales tax an additional \$10.8 million in incremental sales tax revenue could be generated. Should the sales tax be increased by 0.9 percent (9.0 percent total sales tax), it is estimated that incremental sales tax revenue of approximately \$97.1 million could be generated within the CFD.

ESTIMATED COUNTY-WIDE SALES TAX INCREMENT



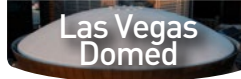
Should incremental sales tax increases apply to the total taxable sales occurring in all of Clark County (\$21.5 billion), it is estimated that a 0.1 percent incremental sales tax increase (8.2 percent total sales tax) could generate approximately \$31.7 million annually, increasing to approximately \$158.6 million with a 0.5 percent incremental sales tax increase (8.6 percent total sales tax).



Note: Existing sales tax is 8.1%, the revenues shown include only those from the incremental tax increase

FUNDING SUMMARY

Based on the analyses conducted herein, the following graphic presents a summary of the annual debt service required to fund construction of each stadium type, as well as the minimum sales tax rate necessary to generate sufficient revenues to cover debt service.

			
TOTAL PROJECT COSTS (\$MM)			
Construction Costs	\$342.0	\$449.0	\$592.5
Soft Costs	\$80.9	\$106.2	\$140.1
Site & Infrastructure	\$100.0	\$100.0	\$100.0
Total Stadium Project Costs	\$522.9	\$655.2	\$832.6
ANNUAL DEBT SERVICE			
Maximum Annual Debt Service for G.O. Bonds	\$33,400,000	\$41,450,000	\$52,600,000
Maximum Annual Debt Service for Revenue Bonds	\$52,200,000	\$67,900,000	\$86,250,000
G.O. BONDS 1.00 COVERAGE			
Minimum Sales Tax Rate if CFD	8.461%	8.552%	8.674%
Minimum Sales Tax Rate if Clark County wide	8.204%	8.230%	8.264%
REVENUE BONDS 1.50 COVERAGE			
Minimum Sales Tax Rate if CFD	8.691%	8.840%	9.041%
Minimum Sales Tax Rate if Clark County wide	8.269%	8.312%	8.370%

Note: Total costs presented herein include land and parking costs.

It is estimated that the maximum annual debt service for general obligation bonds could range between \$33.4 million and \$52.6 million, depending on stadium type. In addition, the maximum annual debt service for revenue bonds could range between \$52.2 million and \$86.3 million, depending on stadium type.

General obligation bonds could require a minimum sales tax rate of between 8.204% and 8.674%, depending on whether the tax applies within the community facilities district or within Clark County. Revenue bonds could require a minimum sales tax rate of between 8.269% and 9.041%, depending on whether the tax applies within the community facilities district or within Clark County.



A

APPENDIX- ECONOMIC & FISCAL IMPACT ASSUMPTIONS

INTRODUCTION

RCG Economics prepared the Economic Benefit Analysis (“EBA”) for the proposed UNLV Football Stadium/Mega Events Center (“the Project”) as a subcontractor to CSL. The economic benefits in the analysis are the positive effects on the level of economic activity in the local economy as a result of the Project. A development project’s economic benefits are typically broken down into two phases: Phase 1 estimates the potential impact that a project’s construction has on the local economy (considered one-time benefits). Construction-related benefits can be very significant but are generally considered short-run since project will eventually be completed. Phase 2 benefits are related to the annual economic benefits resulting from the Project’s operations (considered ongoing benefits). These operations result in recurring benefits to a community across several important dimensions such as jobs and labor income.

The economic benefits presented are the following:

- Output – the dollar value of the economic activity produced by a specific economic event like the Project (referred to as spending or business revenue).
- Employment – the number of new jobs generated (created or supported) by the economic event, and includes part-time, full-time and temporary jobs.
- Labor Income – the gross payroll cost of employees generated by the subject economic event (i.e. wage and salary, benefits, and employer-paid payroll taxes).

For both phases, these economic benefits will occur in several ways. The portion of the Project’s construction and ongoing operations spending staying in the local economy, as well as the jobs and income generated is known as the “**Direct Benefits**”. In this analysis, along with the spending occurring during the Project’s operations, we have included the Offsite spending by the “incremental” visitors on related expenses, such as hotel rooms, restaurants, etc., are also included the direct benefits analysis. It is assumed in our analysis that this spending is “new” because these visitors would not have come to Las Vegas if not for the Project. A series of re-spending associated with the direct benefits further increases the region’s economic benefits in the form of “**Indirect Benefits**” and “**Induced Benefits**”.

The Indirect Benefits are the result of supplier purchases made by the Project during both phases. For example, this represents inter-industry purchases from manufacturing (to produce products to service the stadium), wholesale (e.g. purchases of food and merchandise), transportation (between vendors and buyers), construction (development and maintenance of buildings), utility (energy to produce products) and other such industries needed in order to support the Project’s development and operations.

The Induced Benefits are the result of purchases made by construction-phase and operations-phase employees because of the labor income received from directly and indirectly affected businesses in the regional economy. For example, as the Project’s employees (direct) and suppliers (indirect) purchase goods and services, the spending cycles through the economy and induces additional economic activity.

For the construction-phase EBA, RCG used construction costs provided by CSL. For the operations EBA, RCG used attendance levels and revenue estimates provided by CSL, as well as average visitor spending from the Las Vegas Convention and Visitors Authority (“LVCVA”) *2013 Visitor’s Profile*.

RCG used the IMPLAN (Impact Analysis for Planning) model to estimate the benefits outlined above on Southern Nevada stemming from the Project.

Las Vegas Regional Share of Ticket Revenue

When calculating economic impacts for stadiums/event centers, research has shown that several factors can cause an overstatement of the economic benefits these types of facilities generate to a region.

One reason some economic benefits analyses can overstate local economic activity is an assumption that all of the revenue from a stadium’s ticket sales is projected to stay in a region’s economy. Often times the event promoter, along with the artist, performer or athletes keep the vast majority of the ticket revenue. This is money that immediately leaves the local economy.

CSL provided RCG with the assumption that an estimated 5% share of the Project’s total ticket revenues will stay within the local economy, based on CSL’s previous experience in with other similar facilities and venues in other markets. Additionally, we would like to note that the projected \$2.00 per ticket stadium fee used in the Project’s funding model is also included in the EBA.

The Substitution Effect

The second reason some economic impact analyses overstate new economic activity is if there is a failure to consider the “substitution effect” regarding the visitors and local residents attending a stadium’s events. When preparing an economic benefit analysis only the net increase in new economic activity should be reported. The substitution effect occurs when visitors and residents do not spend any “new” money at the new facility but merely substitute spending on events occurring at the facility for spending on other local activities that otherwise would have occurred but for the new facility.

Therefore, RCG used only incremental visitor spending in the Project’s economic benefit analysis. This means that only new visitors, which would not have visited Las Vegas, but for the existence of the Project’s events, were included in our analysis. By excluding local residents and those visitors that would have already visited Las Vegas from the analysis, RCG is confident that only new (aka net or incremental) economic activity at the Project is being considered.

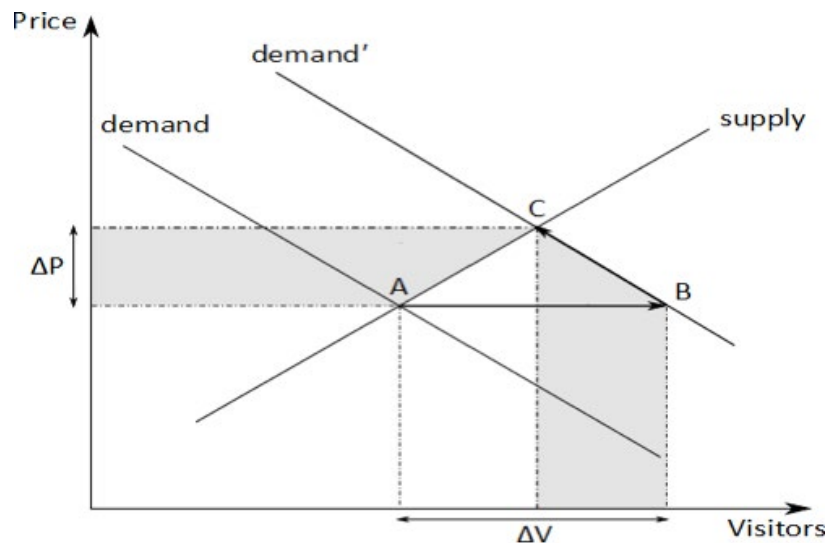
The Crowding-Out Effect

Another reason economic impact studies can potentially overstate regional economic activity is when the “crowding-out effect” is not considered. The crowding-out effect is generally defined as any reduction in spending/consumption that occurs, due to increased demand and/or supply limitations. In the case of the Project, the crowding-out effect is related to net new events added to the market, that cause room supply shortages that lead to higher room rates. For example, if hotels in the host region are operating at or near capacity, there are not likely to be enough hotel/motel room-capacity to accommodate all of the visitors wanting to come to the market, including the “new” visitors exclusively coming, because of new events coming to the area as result of a new venue like the Project.

The crowding-out effect can be illustrated as follows: Where Price is the average room rate during the time of the event, and Visitors is the total number of visitors wanting to come to the Las Vegas area during that weekend.

Crowding-Out Effect

As the Project’s events push the demand, or total number of visitors wanting to come to Las Vegas, from point A to point B (ΔV), the average room rate will rise from point A to point C. As room rates rise, the number of visitors wanting to come to Las Vegas when prices are at point B will then fall to a level that matches the inventory of available rooms at the higher room rate, point C. It is assumed herein that the maximum market size is 100% occupancy, because additional rooms can be only rented to visitors up to the point when no more hotel and motel rooms are available. When this happens certain visitors are priced out, or “crowded-out” of the market due to the combination of price increases and simple unavailability of rooms at 100% occupancy.



In the case of the Project, the crowding-out effect only measures those visitors that are **not** interested in attending events at the Project, but would have visited Las Vegas for other reasons. RCG is basing its EBA only on the “net-new” visitors that would not have visited Las Vegas but for the Project. If a visitor who wants to come to Las Vegas **only** because of the Project is “crowded-out” (decides not to come) due to higher room rates, it is assumed that this visitor would not have come to Las Vegas to begin with. Accordingly, this visitor is not viewed as being crowded-out in our analysis.

RCG prepared a crowding-out analysis that estimates the amount of visitors that would potentially be prevented from coming to Las Vegas because of “new” visitors coming to town exclusively because of the Project’s events. Data on room inventory, visitors per room, and occupancy rates were provided by LVCVA. As construction of the Project will most likely not be completed until 2019, RCG used the 2017 projected room inventory levels from the LVCVA (the furthest out forecast year). The calendar of events and projected number of visitors were provided to RCG by CSL. RCG also used the LVCVA’s 2014 “citywide” occupancy rates for January-April of 2017 and 2013 average for May-December to account for seasonality.

To estimate the number of potential Las Vegas visitors lost due to the crowding-out effect, RCG first compared how many new rooms would potentially be needed to support the events at the Project to the projected available room inventory when those events are likely to occur. For example, a Motorsport event may demand 6,000 rooms (see Table 1), but if the event takes place in March, when only 5,000 (see Table 2, calculation method is explained below) rooms are available, there will be a shortage of approximately 1,000 rooms (6,000 rooms demanded - 5,000-room supply = 1,000-room shortage). On the other hand, a new college football Bowl Game may generate a demand for 10,000 rooms, but occurs in January when 20,000 rooms are available in Las Vegas region. In this case, no visitors will be crowded-out due to this event (20,000 available rooms - 10,000 rooms demanded by football game = 10,000-room surplus).

The number of rooms potentially demanded by events at the Project was calculated by dividing the number of new visitors expected to stay in a hotel/motel, by the number of people that are expected to stay in each room. According to the 2013 LVCVA Visitor Profile, an average of 2.2 visitors will share a room per trip. However, according to discussions with LVCVA staff, visitors that come to Las Vegas for the purpose of seeing a special event usually come in larger parties and often include additional persons per room. While as many as four (4) persons can share a room per night (per the LVCVA), RCG, to be conservative, assumed that three (3) persons attending the special event will stay in the same room.

Table 1: Visitors and Rooms per Event

Event Type	# of Events	Incremental Visitors (in Hotel/Motel)	Visitors per Event	Rooms per Event
International Soccer	2	32,526	16,263	5,421
Concerts	2	21,686	10,843	3,614
Rugby	4	55,178	13,794	4,598
Las Vegas Bowl	1	30,507	30,507	10,169
New Bowl Game	1	30,385	30,385	10,128
Neutral Site CFB Game	2	60,769	30,385	10,128
Signature	2	58,288	29,144	9,715
Motorsports	3	54,779	18,260	6,087
Boxing	1	23,651	23,651	7,884
UFC	1	27,347	27,347	9,116
Major Non-Recurring	2	72,923	36,461	12,154
UNLV Football	6	18,713	3,119	1,040

Source: CSL and LVCVA.

The number of available rooms was calculated by multiplying the total room inventory by the LVCVA's estimated 2013 and YTD-2014 weekend and midweek occupancy rates, by month. If there were more rooms than the event demands, no crowding-out occurs. RCG only estimated visitors being crowded-out of the market if more hotel rooms were demanded than were available.

It is important to note that the LVCVA does not break-out weekend and midweek occupancy rates for Strip resort-hotels from other hotels and motels. Instead, it just gives the combined/average lodging occupancy rate in Clark County. So for any given weekend, certain hotels, such as those on the Strip, may be 100% booked, forcing some visitors to stay at another less-preferred hotel or motel. This may cause individual hotels to see some of their customers being "crowded-out", but on a County-level, which is what our EBA assumes, those visitors will still be able to find substitute hotel and motel rooms in the market. A limitation of our analysis (because of the lack of readily available data and time constraints) is that the market's entire inventory is "created equal", which obviously is not the case. This limitation is somewhat mitigated by the "time-shifting effect", which is discussed toward the end of this report.

Table 2: Monthly Weekend and Midweek Occupancy, 12-Months Ending April, 2014

Month	January, 2014	February, 2014	March, 2014	April, 2014	May, 2013	June, 2013
Weekend Occupancy	87.5%	91.7%	96.9%	96.0%	93.6%	93.2%
Midweek Occupancy	81.7%	82.6%	89.7%	87.5%	83.3%	84.9%

Month	July, 2013	August, 2013	September, 2013	October, 2013	November, 2013	December, 2013
Weekend Occupancy	95.0%	91.7%	92.7%	96.0%	89.1%	82.9%
Midweek Occupancy	84.2%	80.7%	82.5%	84.9%	78.3%	70.1%

Source: LVCVA.

Based on historical trends, the months with the highest occupancy rates (fewest available rooms) are March, April, September and October. While some visitors are potentially crowded-out any time there is a large event at the Project, these are the four (4) months when the visitors specifically coming to the Project's events have the highest likelihood of crowding-out other visitors to Las Vegas.

It is important to note that during two of these months, September and October, UNLV will be using the Project for its regular season college football home games. Because these games do not draw a high volume of out-of-town visitors, they are not expected to cause any visitors to be crowded-out of the market. This further reduces the potential number of weekends during the year that the Project will cause Las Vegas visitors to be crowded-out of the market.

According to the calendar of events provided by CSL, the following events will occur that could potentially cause visitors to be crowded-out:

Table 3: # of Visitors Crowded-Out- Domed Stadium

Event	# of Visitors Crowded-Out
Motorsports (March)	1,139
Signature (April)	3,330
UFC (July)	1,135

Source: CSL and RCG Calculations.

Table 4: # of Visitors Crowded-Out- Open-Air Stadium

Event	# of Visitors Crowded-Out
Motorsports (March)	1,443
Motorsports (October)	7

Source: CSL and RCG Calculations.

After estimating the number of hotel rooms demanded above the available room capacity, RCG then estimated how many visitors would have stayed in those rooms. As noted, according to the LVCVA 2013 Visitor Profile, 2.2 visitors stay in a room each night. As previously noted, the crowding-out effect only pertains to those visitors that would have visited Las Vegas for reasons other than attending an event at the Project, and are now **not** coming because of the higher room rates caused by the event's increased demand for rooms. For this reason, the 2.2 people-per-room figure reported by the LVCVA (explained above) because it represents the "without Project" condition. This is opposed to the 3.0 persons-per-room figure that we are estimating for the attendees of the events at the Project.

Time-Switching Effect

Although visitors can be potentially impacted by the crowding-out effect, this impact can be offset by what is known the "time-switching effect". Time-switching can occur two ways. First, when the event organizers work with local agencies, such as the LVCVA, to book the event at an optimal room-supply time, such as when there is a large amount of available rooms in an off-season. Second, time-switching can also minimize the crowding-out effect when visitors self-select and book their visit on a different weekend than when a major event occurs, i.e. when demand and room rates are lower than special event-driven peak levels.

In order to estimate the time switching effect, RCG made several assumptions. The first is that the event calendar provided by CSL is an accurate portrayal of when many of the events will potentially occur on an annual basis. The other assumptions are related to the types of visitors and their ability to reschedule their visit.

The LVCVA categorizes visitors into four categories: Convention Visitors, Package Purchasers, General Tourists and Casino Guests. RCG made the following assumptions as to what percentage of each visitor type will and won't time-switch:

The convention visitors are coming to attend a specific convention held during a set time frame. If their budget does not allow for them to attend the convention then that trip is lost. For this reason RCG assumed **none** of the Convention Visitors will time-switch.

The Package Purchasers are considered by the LVCVA to be the most value-oriented of the visitor types. While those visitors are the most likely to be crowded-out of the market during times when room rates are high, they also have a certain amount of freedom as to when they can book their trip. RCG assumed that **50%** of the Package Purchasers will be able to reschedule to a different weekend, while the other half will not.

The General Tourists are considered to be less "value-oriented" than the package visitors. They are more likely to afford the higher room rates caused by the event's increased demand. Also, because the timing of their trip is not limited to when package deals are available, or when a convention occurs, they are more likely to time-switch; however, a certain percentage of them may only be able to take their vacation during the weekend of the event and therefore, if crowded-out of the Las Vegas market, will take their vacation somewhere else. For this reason, RCG estimated that **75%** of these visitors will time-switch and **25%** of them will not.

The last category of visitors is the Casino Guests visitor type. These are the guests that are coming to Las Vegas at heavily discounted, or even completely comped, room-rates. These visitors earned these promotions through their high amount of gambling. The casinos offering these promotions will make every effort to ensure their gaming customers attend during the weekend of the event, or any other weekend, to keep these guests happy. For this reason RCG assumed that 100% of these visitors will be able to time-switch their visit.

The following table shows the share of total visitors is in each category, as reported in the *2013 Visitor Profile*, and RCG's estimates of what percentage of those visitors are able to time-switch:

Table 5: % of Visitors that Will/Won't Time-Switch, by Visitor Type

Visitor Type	% of Total Visitors (LVCVA)	% That Will Time-Switch (RCG)	% That Won't Time-Switch (RCG)	Total % of Visitors that will Time-Switch
Convention Visitors	7%	0%	100%	0%
Package Purchasers	12%	50%	50%	6%
General Tourists	56%	75%	25%	42%
Casino Guests	25%	100%	0%	25%
Total	100%			73%

Source: RCG Assumptions.

Based on these assumptions, RCG estimates that 73% of total visitors are able to reschedule their trip to another weekend, while 27% of the visitors crowded-out by the Project's events will not be able to reschedule their trip.

The following table shows the total annual visitors crowded-out, because of the Project's new events, the number of those visitors that are able to reschedule their trips and the visitors that will not be able to visit due to the crowding-out effect.

Tables 6: Final Annual Crowding-Out Results- Domed Stadium

Event	# of Visitors Crowded-Out	Will Time-Switch	Won't Time Switch
Motorsports (March)	1,139	831	307
Signature (April)	3,330	2,431	899
UFC (July)	1,135	829	307
Total	5,604	4,091	1,513

Tables 7: Final Annual Crowding-Out Results- Open-Air Stadium

Event	# of Visitors Crowded-Out	Will Time-Switch	Won't Time Switch
Motorsports (March)	1,443	1,054	390
Motorsports (October)	7	5	2
Total	1,450	1,059	392

As these results show, RCG is predicting 485,297 "new" visitors would potentially stay in hotel and motel rooms in Las Vegas as a result of the Dome option's new events, while only 1,513 existing visitors will be potentially crowded-out. In the case of the Open-Air option, the new visitors are estimated to be 217,268, and the crowded-out number is only 392, because of the nature and smaller number (17) of new events. Due to the large inventory of hotel and motel rooms in the market and time-shift effect we expect that the crowding-out effect will have a minimal impact on visitation levels.

The key to our analysis are our assumptions regarding the ability of the different types of visitors (see page 9) to time-shift. Obviously, the results of this analysis will change if different factors are used. Additionally, a limitation of this analysis is that the market's room inventory is of the same quality although this factor is partially mitigated by the time-sharing effect.

EBA Drivers

Using the above steps, we obtained the final drivers of the offsite EBA, which represents total incremental visitors, total incremental visitors in lodging, total incremental gamblers and total incremental room-nights of demand.

Table 8: Annual Offsite Visitor Calculations

Total Annual Attendance	Domed Stadium	Open-Air Stadium
# of Events	27	17
Total Attendance	1,047,399	623,122
Total Overnight Visitors	596,508	266,721
Incremental (Net/New) Visitors	507,031	226,713
Minus Visitors Crowded Out	1,513	392
Total Incremental Visitors (Offsite)	505,518	226,321
Total Incr. Visitors in Lodging (Offsite) ⁽¹⁾	485,297	217,268
Total Incremental Gamblers	358,918	160,688
(1) 96% of Total Incremental Visitors		
Visitors & Room Nights	Domed Stadium	Open-Air Stadium
Average Length of Stay (Nights)	3.3	3.3
Average Visitors Per Room	3.0	3.0
Total Incremental Room-Nights of Demand	533,827	238,995

Off-Site EBA Employment Levels

The Economic Benefits Analysis (“EBA”) that RCG Economics (“RCG”) prepared for the proposed UNLV football stadium includes two facility options: domed stadium and open-air stadium. It also includes an adjustment for future events that would continue to occur at the existing Sam Boyd Stadium regardless of whether new stadium is built. The Sam Boyd Stadium results were then subtracted from the domed and open-air results to give a better representation of what will be the “new” economic activity resulting from the two new stadium options. These events include:

1. Six Regular-season UNLV Football Games
2. The Las Vegas Bowl
3. One Motorsports Event

Our EBA identifies potential economic activity occurring both on-site (from the stadium’s events) and off-site (economic activity occurring elsewhere in Clark County as result of incremental visitor spending, because of the existence of the new facility).

Our estimates of incremental visitors and their off-site spending for the two facility options are illustrated in Table 3 below. Table 4 shows how this spending activity has been entered into the IMPLAN model used in this EBA. Note: IMPLAN is one of the most widely used and widely accepted economic impact models in applied and academic regional research and analysis.

The off-site employment estimated in our research, and included in the EBA, represents the total number of jobs “supported” (IMPLAN term) by the level of spending projected to occur per IMPLAN under the two options. The off-site job numbers include both full-time and part-time jobs, and are on an annualized basis. The employment results, after subtracting the Sam Boyd Stadium’s events note above are as follows (A table of all results is shown in Table 6 herein):

TABLE 1: OFF-SITE EMPLOYMENT AND LABOR INCOME ESTIMATES: CLARK COUNTY

	Dome Stadium, Net Sam Boyd* Employment	Open-Air Stadium, Net Sam Boyd* Labor Income	Employment	Labor Income
Direct	4,333	\$180,112,000	1,756	\$72,972,000
Indirect	719	\$36,948,000	291	\$14,970,000
Induced	1,094	\$49,064,000	443	\$19,878,000
Total	6,146	\$266,124,000	2,490	\$107,820,000

*Clark County-wide benefits related to the two facility options. Source: IMPLAN.

For the Domed stadium, the new incremental economic activity it generates **throughout Clark County**, assuming 27 events, will potentially generate 4,333 “direct” jobs. These jobs are estimated to be in the Retail, Transportation and Leisure & Hospitality industries, because these are the sectors that RCG has determined are most **directly** affected by the stadium. **Again, these are county-wide jobs.**

Through this economic activity, an additional 1,813 indirect and induced jobs will potentially be supported in Clark County, resulting in the total of 6,146 jobs. The 1,813 indirect and induced jobs are not limited to the three industries noted above; they include jobs in all other sectors in the Clark County economy. For example, because of the increased economic activity, and the commensurate increase in wages, employees in the Leisure & Hospitality sector will potentially spend (induced) additional income on home renovations, or any other type of product or service. A detailed breakdown of the other Clark County industries affected by indirect and induced spending can be found on Table 7.

Table 2 below shows the total number of jobs in the Retail, Transportation, and Leisure & Hospitality industries in Clark County as of June, 2014. Additionally, the number of **county-wide** direct, indirect and induced jobs in those industries potentially supported by the two stadium options is shown in the table below:

TABLE 2: EMPLOYMENT IN THE RETAIL, TRANSPORTATION, AND LEISURE & HOSPITALITY INDUSTRIES: CLARK COUNTY					
	Clark County (June, 2014)	Domed Stadium	% of Total	Open-Air Stadium	% of Total
Retail	104,100	621	0.6%	252	0.2%
Transportation	30,300	350	1.2%	142	0.5%
Leisure & Hospitality	274,400	3,921	1.4%	1,589	0.6%
Total	408,800	4,892	1.2%	1,983	0.5%
% of Total Employment ⁽¹⁾		79.5%		79.6%	

Sources: Nevada DETR, IMPLAN.

(1) The % of Total Direct, Indirect and Induced employment from Table 1.

It is important to note that, while the new economic activity in Clark County potentially generated off-site by the proposed stadium options is “supporting” these levels of jobs, it does not necessarily mean that these are “new” jobs being created in the local economy. For example, certain companies may be able to handle the extra volume without adding to their existing workforce by shifting schedules, other firms may increase the hours of existing employees, while other companies will hire additional employees.

TABLE 3: OFF-SITE SPENDING ESTIMATES

	Domed Stadium	Open-Air Stadium	Future Sam Boyd Events
Number of Events ¹	27	17	8
Total Annual Attendance ¹	1,047,399	623,122	129,000
Total Overnight Attendees	596,508	266,721	42,825
Total Incremental Visitors ²	505,518	226,321	36,401

Estimated Trip Spending³

Average/Trip for Lodging (per night)	\$83.62	\$83.62	\$83.62
Average/Trip for F&B	\$278.95	\$278.95	\$278.95
Average/Trip for Local Transport	\$59.68	\$59.68	\$59.68
Average/Trip for Shopping	\$140.90	\$140.90	\$140.90
Average/Trip for Shows	\$38.45	\$38.45	\$38.45
Average/Trip for Sightseeing	\$9.29	\$9.29	\$9.29
Average/Trip Gambling Budget	\$529.57	\$529.57	\$529.57
Total Average Trip Spending	\$1,140.46	\$1,140.46	\$1,140.46

Estimated Total Spending⁴

Room Nights	\$44,638,629	\$19,984,783	\$3,214,329
F&B	\$141,014,291	\$63,132,315	\$10,154,129
Local Transport	\$30,169,324	\$13,506,853	\$2,172,427
Shopping	\$71,227,509	\$31,888,665	\$5,128,936
Shows	\$19,437,173	\$8,702,052	\$1,399,628
Sightseeing	\$4,696,264	\$2,102,524	\$338,168
Gaming	\$190,072,150	\$85,095,593	\$13,686,677
Total Expenditures	\$501,255,340	\$224,412,785	\$36,094,294

**Minus On-Site Spending-
All Incremental Visitors¹**

Total Ticket Revenue	\$15,210,941	\$6,801,386	\$1,092,038
Food & Beverage	\$1,211,323	\$521,708	\$190,670
Novelty Income	\$535,930	\$230,606	\$153,446
Total On-Site Expenditures	\$16,958,194	\$7,553,700	\$1,436,154

**Estimated Off-Site Spending-
All Incremental Visitors⁵**

Room Night	\$44,638,629	\$19,984,783	\$3,214,329
F&B	\$139,802,969	\$62,610,607	\$9,963,459
Local Transport	\$30,169,324	\$13,506,853	\$2,172,427
Shopping	\$70,691,579	\$31,658,059	\$4,975,490
Shows	\$4,226,232	\$1,900,667	\$307,591
Sightseeing	\$4,696,264	\$2,102,524	\$338,168
Gaming	\$190,072,150	\$85,095,593	\$13,686,677
Total Incremental Visitor Spending	\$484,297,146	\$216,859,085	\$34,658,140

1 Number of events, total visitors and on-site spending provided by CSL.

2 Total incremental visitors equates to net new visitors. 3 The estimated trip expenditures figures are from the LVCVA 2013 Visitors Profile.

4 The estimated total expenditures are computed by multiplying Total Incremental Visitors by Total Estimated Trip Expenditures.

5 The estimated total off-site expenditures are computed by subtracting On-Site Spending from the Estimated Total Expenditures.

TABLE 4: TOTAL INCREMENTAL TOURIST SPENDING: IMPLAN INPUTS USED TO ESTIMATE OUTPUT, WAGES AND LABOR INCOME: CLARK COUNTY

IMPLAN Model Inputs	Domed Stadium	Open-Air Stadium Spending	Future Sam Boyd Events
320 Motor Vehicle and Parts Dealers	\$732,915	\$328,224	\$51,585
321 Furniture and Home Furnishings Stores	\$673,001	\$301,392	\$47,368
322 Electronics and Appliance Stores	\$4,808,696	\$2,153,495	\$338,451
323 Building Material & Garden Supply Stores	\$906,173	\$405,815	\$63,779
324 Food and Beverage Stores	\$1,186,674	\$531,432	\$83,522
325 Health and Personal Care Stores	\$2,707,004	\$1,212,287	\$190,527
326 Gasoline Stations	\$345,845	\$154,881	\$24,342
327 Clothing and Clothing Accessories Stores	\$47,926,549	\$21,463,115	\$3,373,217
328 Sporting Goods/Hobby/Book/Music Stores	\$1,556,020	\$696,838	\$109,517
329 General Merchandise Stores	\$6,770,098	\$3,031,877	\$476,500
330 Miscellaneous Store Retailers	\$3,078,605	\$1,378,702	\$216,682
336 Transit and Ground Passenger Transportation	\$30,169,324	\$13,506,853	\$2,172,427
338 Scenic and sightseeing transportation	\$4,696,264	\$2,102,524	\$338,168
402 Performing Arts Companies	\$4,226,232	\$1,900,667	\$307,591
409 Amusement parks, arcades, and gambling industries	\$190,072,150	\$85,095,593	\$13,686,677
411 Hotels and motels, including casino hotels	\$44,638,629	\$19,984,783	\$3,214,329
413 Food services and drinking places	\$139,802,969	\$62,610,607	\$9,963,459
TOTAL INCREMENTAL TOURIST SPENDING	\$484,297,146	\$216,859,085	\$34,658,140

Source: RCG Economics.

Note: In order to determine the IMPLAN model inputs, the total incremental visitor spending calculated in Table 3 was allocated to the appropriate IMPLAN industry codes. For example, the LVCVA Room Night, Food & Beverage, Local Transportation, Sightseeing, and Gaming Trip expenditures/spending, each, had a corresponding IMPLAN industry code as shown in Table 4 above. For example, the LVCVA's Food & Beverage trip expenditures were completely allocated to the IMPLAN code 413, "Food services and drinking places".

Table 4 shows the estimated spending levels RCG used in the IMPLAN model for the Domed, Open-Air and Sam Boyd stadiums. Retail/shopping has multiple IMPLAN industry codes. The total incremental visitor spending was allocated into the different industry codes, based on the actual spending that was occurring in the proposed Las Vegas Strip and Downtown Community Facilities District ("CFD"), requested by UNLV. For example, of the total retail spending occurring in the CFD, 67.8% of it was for clothing and clothing accessories. Therefore, the IMPLAN industry code 327, "Clothing and Clothing Accessory Stores", received 67.8% of the total incremental visitor spending on retail shopping.

While we understand the resort corridor/downtown CFD is no longer being considered by the CIAD (instead a County-wide CFD is preferred), it is our opinion that the former CFD's spending allocation is a more reasonable portrayal of what visitors purchase when shopping in Las Vegas. That's why the Off-Site spending estimates used herein and generated by the two stadium options still remain valid. For example, on a County-wide basis, IMPLAN code 320, "Motor Vehicle and Parts Dealers" accounts for approximately 21% of all retail spending. In the CFD this type of spending only accounts for approximately 1% of all retail spending. This is because visitors are not as likely as locals to purchase car parts from a retail store.

TABLE 5A: IMPLAN OUTPUTS: INITIAL OFFSITE BENEFITS

Domed Off-Site

Impact Type	Spending/Output	Employment	Labor Income
Direct Benefit	\$454,006,000	4,667	\$194,016,000
Indirect Benefit	\$105,178,000	775	\$39,802,000
Induced Benefit	\$157,839,000	1,178	\$52,852,000
Total Benefits	\$717,023,000	6,620	\$286,670,000
Multipliers	1.58	1.42	1.48

TABLE 5B: IMPLAN OUTPUTS: INITIAL OFFSITE BENEFITS

Open-Air Off-Site

Impact Type	Spending/Output	Employment	Labor Income
Direct Benefit	\$203,307,000	2,090	\$86,876,000
Indirect Benefit	\$47,101,000	347	\$17,823,000
Induced Benefit	\$70,678,000	528	\$23,666,000
Total Benefits	\$321,086,000	2,964	\$128,365,000
Multipliers	1.58	1.42	1.48

Sam Boyd Off-Site

Impact Type	Spending/Output	Employment	Labor Income
Direct Benefit	\$32,544,000	334	\$13,904,000
Indirect Benefit	\$7,537,000	56	\$2,854,000
Induced Benefit	\$11,312,000	84	\$3,788,000
Total Benefits	\$51,393,000	474	\$20,546,000
Multipliers	1.58	1.42	1.48

It should be noted that the direct spending in Tables 5B and 5B do not match the total incremental visitor spending shown in Table 4. For example, in Table 4, the Dome stadium is projected to have a total incremental visitor spending of \$484.3M (gross), while IMPLAN is reporting a direct benefit of only \$454M. The difference between the two estimates of approximately \$30M is the result of “leakage”, and represents the amount of money that does not stay within the Clark County local economy.

After calculating the benefits of the Domed, Open-Air and Sam Boyd Stadium options, at the request of UNLV, RCG then removed the Sam Boyd stadium's economic benefits from the Domed and Open-Air options. This was done to ensure that only the net new economic activity resulting from a new stadium was reported. These results are shown in Tables 6A and 6B below:

TABLE 6A: IMPLAN OUTPUTS: FINAL OFFSITE BENEFITS

Domed Off-Site net Sam Boyd

Impact Type	Spending/Output	Employment	Labor Income
Direct Benefit	\$421,461,000	4,333	\$180,112,000
Indirect Benefit	\$97,641,000	719	\$36,948,000
Induced Benefit	\$146,527,000	1,094	\$49,064,000
Total Benefits	\$665,629,000	6,146	\$266,124,000
Multipliers	1.58	1.42	1.48

TABLE 6B: IMPLAN OUTPUTS: FINAL OFFSITE BENEFITS

Open-Air Off-Site net Sam Boyd

Impact Type	Spending/Output	Employment	Labor Income
Direct Benefit	\$170,763,000	1,756	\$72,972,000
Indirect Benefit	\$39,564,000	291	\$14,970,000
Induced Benefit	\$59,365,000	443	\$19,878,000
Total Benefits	\$269,692,000	2,490	\$107,820,000
Multipliers	1.58	1.42	1.48

Source: IMPLAN.

Note: It is these numbers in Tables 6A and 6B that were ultimately used to represent the "net" Off-site economic benefits for the two facility options. And these are the amounts used in the most recent CSL presentation before the CIAB.

TABLE 7: OTHER CLARK COUNTY INDUSTRIES AFFECTED BY THE OFF-SITE SPENDING GENERATED BY THE TWO STADIUM OPTIONS: INDIRECT AND INDUCED JOBS

DOME: 1,813 JOBS

OPEN-AIR: 734 JOBS

Sector	Description
360	Real estate establishments
388	Services to buildings and dwellings
367	Legal services
394	Offices of physicians, dentists, and other health practitioners
382	Employment services
319	Wholesale trade businesses
356	Securities, commodity contracts, investments, and related activities
397	Private hospitals
381	Management of companies and enterprises
377	Advertising and related services
39	Maintenance and repair construction of nonresidential structures
400	Individual and family services
368	Accounting, tax preparation, bookkeeping, and payroll services
425	Civic, social, professional, and similar organizations
386	Business support services
421	Dry-cleaning and laundry services
355	Nondepository credit intermediation and related activities
396	Medical and diagnostic labs and outpatient and other ambulatory care services
398	Nursing and residential care facilities
427	US Postal Service
387	Investigation and security services
414	Automotive repair and maintenance, except car washes
393	Other private educational services
419	Personal care services
340	Warehousing and storage
354	Monetary authorities and depository credit intermediation activities
369	Architectural, engineering, and related services
395	Home health care services
358	Insurance agencies, brokerages, and related activities
374	Management, scientific, and technical consulting services
426	Private household operations
351	Telecommunications
399	Child day care services
389	Other support services
348	Radio and television broadcasting
422	Other personal services
380	All other miscellaneous professional, scientific, and technical services
339	Couriers and messengers
383	Travel arrangement and reservation services
357	Insurance carriers
401	Community food, housing, and other relief services, including rehabilitation services
391	Private elementary and secondary schools

390	Waste management and remediation services
31	Electric power generation, transmission, and distribution
417	Commercial and industrial machinery and equipment repair and maintenance
346	Motion picture and video industries
341	Newspaper publishers
372	Computer systems design services
379	Veterinary services
432	Other state and local government enterprises
415	Car washes
113	Printing
416	Electronic and precision equipment repair and maintenance
362	Automotive equipment rental and leasing
40	Maintenance and repair construction of residential structures
375	Environmental and other technical consulting services
424	Grantmaking, giving, and social advocacy organizations
392	Private junior colleges, colleges, universities, and professional schools
376	Scientific research and development services
363	General and consumer goods rental except video tapes and discs
359	Funds, trusts, and other financial vehicles
418	Personal and household goods repair and maintenance
352	Data processing, hosting, ISP, web search portals and related services
373	Other computer related services, including facilities management
62	Bread and bakery product manufacturing
385	Facilities support services
32	Natural gas distribution
365	Commercial and industrial machinery and equipment rental and leasing
314	Sign manufacturing
342	Periodical publishers
420	Death care services
350	Internet publishing and broadcasting
366	Lessors of nonfinancial intangible assets
378	Photographic services
370	Specialized design services
58	Ice cream and frozen dessert manufacturing
371	Custom computer programming services
384	Office administrative services
163	Other concrete product manufacturing
429	Other Federal Government enterprises
423	Religious organizations
70	Soft drink and ice manufacturing
344	Directory, mailing list, and other publishers
317	All other miscellaneous manufacturing
353	Other information services
69	All other food manufacturing
349	Cable and other subscription programming
161	Ready-mix concrete manufacturing
347	Sound recording industries

364	Video tape and disc rental
187	Ornamental and architectural metal products manufacturing
345	Software publishers
19	Support activities for agriculture and forestry
55	Fluid milk and butter manufacturing
162	Concrete pipe, brick, and block manufacturing
97	Engineered wood member and truss manufacturing
166	Cut stone and stone product manufacturing
53	Frozen food manufacturing
164	Lime and gypsum product manufacturing
142	Plastics packaging materials and unlaminated film and sheet manufacturing
150	Tire manufacturing
33	Water, sewage and other treatment and delivery systems
111	Sanitary paper product manufacturing
149	Other plastics product manufacturing
295	Wood kitchen cabinet and countertop manufacturing
87	Cut and sew apparel contractors
68	Seasoning and dressing manufacturing
107	Paperboard container manufacturing
14	Animal production, except cattle and poultry and eggs
100	Wood container and pallet manufacturing
343	Book publishers
430	State and local government passenger transit
59	Animal (except poultry) slaughtering, rendering, and processing
51	Confectionery manufacturing from purchased chocolate
67	Flavoring syrup and concentrate manufacturing
89	Womens and girls cut and sew apparel manufacturing
133	Pharmaceutical preparation manufacturing
20	Extraction of oil and natural gas
26	Mining and quarrying sand, gravel, clay, and ceramic and refractory minerals
99	Wood windows and doors and millwork manufacturing
54	Fruit and vegetable canning, pickling, and drying
312	Doll, toy, and game manufacturing
309	Dental laboratories manufacturing
25	Mining and quarrying stone
64	Tortilla manufacturing
83	Curtain and linen mills
85	All other textile product mills
3	Vegetable and melon farming
146	Polystyrene foam product manufacturing
431	State and local government electric utilities
63	Cookie, cracker, and pasta manufacturing
102	Prefabricated wood building manufacturing
313	Office supplies (except paper) manufacturing
271	Primary battery manufacturing
296	Upholstered household furniture manufacturing
186	Plate work and fabricated structural product manufacturing

73	Distilleries
76	Broadwoven fabric mills
169	Miscellaneous nonmetallic mineral product manufacturing
159	Glass product manufacturing made of purchased glass
11	Cattle ranching and farming
148	Plastics bottle manufacturing
195	Machine shops
136	Paint and coating manufacturing
283	Motor vehicle parts manufacturing
276	Automobile manufacturing
202	Other fabricated metal manufacturing
30	Support activities for other mining
65	Snack food manufacturing
196	Turned product and screw, nut, and bolt manufacturing
10	All other crop farming
114	Support activities for printing
6	Greenhouse, nursery, and floriculture production
93	Footwear manufacturing
260	Lighting fixture manufacturing
300	Office Furniture
193	Hardware manufacturing
141	All other chemical product and preparation manufacturing
282	Travel trailer and camper manufacturing
143	Unlaminated plastics profile shape manufacturing
78	Nonwoven fabric mills
171	Steel product manufacturing from purchased steel
306	Surgical appliance and supplies manufacturing
250	Automatic environmental control manufacturing
147	Urethane and other foam product (except polystyrene) manufacturing
303	Mattress manufacturing
275	All other miscellaneous electrical equipment and component manufacturing
302	Showcase, partition, shelving, and locker manufacturing
167	Ground or treated mineral and earth manufacturing
108	Coated and laminated paper, packaging paper and plastics film manufacturing
304	Blind and shade manufacturing
74	Tobacco product manufacturing
214	Air purification and ventilation equipment manufacturing
308	Ophthalmic goods manufacturing
152	Other rubber product manufacturing
299	Institutional furniture manufacturing
294	All other transportation equipment manufacturing
197	Coating, engraving, heat treating and allied activities
27	Mining and quarrying other nonmetallic minerals
84	Textile bag and canvas mills
297	Nonupholstered wood household furniture manufacturing
29	Support activities for oil and gas operations

Source: IMPLAN.



B

APPENDIX- DETAILED FUNDING MODELS

APPENDIX B- DETAILED FUNDING MODELS

The information presented in the following pages contains the detailed funding models developed by the project team for each potential stadium option.

UNLV Funding Model-Collegiate Stadium 30 Year Projections From RCG

Year	Construction Year 1 2015	Construction Year 2 2016	Construction Year 3 2017	Construction Year 4 2018	Construction Year 5/ Operations Year 1 2019	Operations Year 2 2020
Inflation Rate						3%
Event Programming - Total Events						
Total # of Events					9	17
Total Annual Attendance					373,708	636,584
<u>Naming Rights & Sponsorship</u>						
Stadium Naming Rights					\$1,350,000	\$2,550,000
Advertising					\$1,350,000	\$2,550,000
Interest Income					\$0	\$0
Other Miscellaneous					\$0	\$0
Net Advertising Income					<u>\$2,700,000</u>	<u>\$5,100,000</u>
<u>Premium Seating</u>						
Suites					\$1,125,424	\$2,125,800
Loge Boxes					\$129,600	\$244,800
Club Seating					\$1,546,544	\$2,921,250
Net Premium Seating Income					<u>\$2,801,568</u>	<u>\$5,291,850</u>
Total Contractually Obligated Income					<u>\$5,501,568</u>	<u>\$10,391,850</u>
<u>Event Related Ticket Fees:</u>						
Facility Fee per ticket					\$2.00	\$2.00
Facility Fees					\$747,416	\$1,273,168
Total Other Event Related					<u>\$747,416</u>	<u>\$1,273,168</u>
Total COI & Ticket Fees					<u>\$6,248,984</u>	<u>\$11,665,018</u>
<u>Event Income</u>						
Rental Income					\$337,500	\$1,052,500
Suite Ticket Revenue					\$230,000	\$760,000
Actual Expenses					\$0	\$0
Net Rental Income					<u>\$567,500</u>	<u>\$1,812,500</u>
<u>Ancillary Income</u>						
Non UNLV Games F&B					\$398,827	\$1,213,540
Novelty Income					\$97,656	\$343,884
Parking Income					\$0	\$0
Total Ancillary					<u>\$496,483</u>	<u>\$1,557,424</u>
Total Facility Income					<u>\$7,312,967</u>	<u>\$15,034,943</u>
<u>Indirect Expenses</u>						
Labor Costs					\$1,073,721	\$2,028,139
General & Administrative					\$215,365	\$406,800
Operations					\$1,434,176	\$2,709,000
Utilities					\$609,882	\$1,152,000
Insurance					\$106,160	\$200,524
Total Indirect Expenses					<u>\$3,439,304</u>	<u>\$6,496,463</u>
Capital Reserve Contribution					\$0	\$0
Operating Reserve Contribution					\$0	\$0
UNLV Transferred Revenue					\$3,500,000	\$3,605,000
Site and Infrastructure Repayment					\$0	\$1,720,000
Net Operating Income/(Loss) (UNLV & LVCVA)					<u>\$373,663</u>	<u>\$3,213,479</u>

	Construction Year 1	Construction Year 2	Construction Year 3	Construction Year 4	Construction Year 5/ Operations Year 1	Operations Year 2
Year	2015	2016	2017	2018	2019	2020
Construction Expenses						
Design Phase Expenses	\$7,970,827	\$49,532,994	\$14,731,796	\$5,123,129	\$3,534,959	
Construction Phase Expenses	\$177,129	\$531,388	\$82,589,720	\$159,386,244	\$99,273,437	
Site Cost	\$50,000,000	\$50,000,000				
Total Construction Expenses	\$58,147,956	\$100,064,383	\$97,321,516	\$164,509,373	\$102,808,397	\$0
Public Funding and Debt Service						
Community Facilities District Revenue	\$11,041,792	\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375
Pay-Go Construction Payments	\$0	\$0				
CFD Bond Debt Service	\$9,678,625	\$25,357,250	\$33,123,125	\$33,124,625	\$33,125,125	\$33,123,625
Remaining Revenues	\$1,363,167	\$7,768,125	\$2,250	\$750	\$250	\$1,750
Capital Reserve Contribution	\$0	\$0	\$0	\$0	\$0	\$0
Operating Reserve Contribution					\$250	\$1,750
Revenue Towards Early Redemption	\$1,363,167	\$7,768,125	\$2,250	\$750	\$0	\$0
Early Redemption Account						
Beginning Balance	\$0	\$1,363,167	\$9,131,292	\$9,133,542	\$9,134,292	\$9,134,292
Early Redemption Contribution	\$1,363,167	\$7,768,125	\$2,250	\$750	\$0	\$0
Bond Redemption Payments	\$0	\$0	\$0	\$0	\$0	\$0
Early Redemption Fund Ending Balance	\$1,363,167	\$9,131,292	\$9,133,542	\$9,134,292	\$9,134,292	\$9,134,292
Capital Reserve Account						
Beginning Balance	\$0	\$0	\$0	\$0	\$0	\$0
Capital Reserve Contribution from Site and Infrastructure Repayment	\$0	\$0	\$0	\$0	\$0	\$1,720,000
Capital Reserve Contribution from Sales Taxes	\$0	\$0	\$0	\$0	\$0	\$0
Capital Reserve Contribution from Operations	\$0	\$0	\$0	\$0	\$0	\$0
Excess Early Redemption Fund Transfer	\$0	\$0	\$0	\$0	\$0	\$0
Capital Expenses	\$0	\$0	\$0	\$0	\$0	\$0
Capital Reserve (accumulated)	\$0	\$0	\$0	\$0	\$0	\$1,720,000
Operating Reserve (accumulated)					\$0	\$0
Recommended Operating Account = 50% of Total Operating Expenses						

* In Year 2037 the Operating Reserve Contribution is lowered as the Operating Account reaches approx. 50% of Total Indirect Expenses

Operations Year 3	Operations Year 4	Operations Year 5	Operations Year 6	Operations Year 7	Operations Year 8	Operations Year 9	Operations Year 10	Operations Year 11	Operations Year 12
2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
17	17	17	17	17	17	17	17	17	17
636,584	636,584	636,584	636,584	636,584	636,584	636,584	636,584	636,584	636,584
\$2,677,500	\$2,811,375	\$2,951,944	\$3,099,541	\$3,192,527	\$3,288,303	\$3,386,952	\$3,488,561	\$3,593,217	\$3,701,014
\$2,677,500	\$2,811,375	\$2,895,716	\$2,982,588	\$3,072,065	\$3,164,227	\$3,259,154	\$3,356,929	\$3,457,637	\$3,561,366
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$5,355,000	\$5,622,750	\$5,847,660	\$6,082,129	\$6,264,593	\$6,452,530	\$6,646,106	\$6,845,489	\$7,050,854	\$7,262,380
\$2,250,000	\$2,250,000	\$2,317,500	\$2,387,025	\$2,458,636	\$2,532,395	\$2,608,367	\$2,686,618	\$2,767,216	\$2,850,233
\$300,000	\$300,000	\$309,000	\$318,270	\$327,818	\$337,653	\$347,782	\$358,216	\$368,962	\$380,031
\$3,008,888	\$3,099,154	\$3,192,129	\$3,287,893	\$3,386,529	\$3,488,125	\$3,592,769	\$3,700,552	\$3,811,569	\$3,925,916
\$5,558,888	\$5,649,154	\$5,818,629	\$5,993,188	\$6,172,983	\$6,358,173	\$6,548,918	\$6,745,385	\$6,947,747	\$7,156,179
\$10,913,888	\$11,271,904	\$11,666,289	\$12,075,316	\$12,437,576	\$12,810,703	\$13,195,024	\$13,590,875	\$13,998,601	\$14,418,559
\$2.00	\$2.00	\$3.00	\$3.00	\$3.00	\$3.00	\$4.00	\$4.00	\$4.00	\$4.00
\$1,273,168	\$1,273,168	\$1,909,752	\$1,909,752	\$1,909,752	\$1,909,752	\$2,546,336	\$2,546,336	\$2,546,336	\$2,546,336
\$1,273,168	\$1,273,168	\$1,909,752	\$1,909,752	\$1,909,752	\$1,909,752	\$2,546,336	\$2,546,336	\$2,546,336	\$2,546,336
\$12,187,056	\$12,545,072	\$13,576,041	\$13,985,068	\$14,347,328	\$14,720,455	\$15,741,360	\$16,137,211	\$16,544,937	\$16,964,895
\$1,084,075	\$1,116,597	\$1,150,095	\$1,184,598	\$1,220,136	\$1,256,740	\$1,294,442	\$1,333,276	\$1,373,274	\$1,414,472
\$782,800	\$806,284	\$830,473	\$855,387	\$881,049	\$907,480	\$934,705	\$962,746	\$991,628	\$1,021,377
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$1,866,875	\$1,922,882	\$1,980,568	\$2,039,985	\$2,101,185	\$2,164,220	\$2,229,147	\$2,296,021	\$2,364,902	\$2,435,849
\$1,249,946	\$1,287,445	\$1,326,068	\$1,365,850	\$1,406,826	\$1,449,030	\$1,492,501	\$1,537,276	\$1,583,395	\$1,630,897
\$354,201	\$364,827	\$375,771	\$387,044	\$398,656	\$410,615	\$422,934	\$435,622	\$448,691	\$462,151
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$1,604,147	\$1,652,271	\$1,701,839	\$1,752,895	\$1,805,481	\$1,859,646	\$1,915,435	\$1,972,898	\$2,032,085	\$2,093,048
\$15,658,078	\$16,120,225	\$17,258,448	\$17,777,948	\$18,253,994	\$18,744,321	\$19,885,942	\$20,406,130	\$20,941,924	\$21,493,792
\$2,078,843	\$2,130,814	\$2,184,084	\$2,238,686	\$2,305,847	\$2,375,022	\$2,446,273	\$2,519,661	\$2,595,251	\$2,673,108
\$416,767	\$426,977	\$437,438	\$448,156	\$461,600	\$475,448	\$489,712	\$504,403	\$519,535	\$535,121
\$2,775,371	\$2,843,367	\$2,913,030	\$2,984,399	\$3,073,931	\$3,166,149	\$3,261,133	\$3,358,967	\$3,459,736	\$3,563,528
\$1,197,662	\$1,245,139	\$1,294,506	\$1,345,836	\$1,386,211	\$1,427,797	\$1,470,631	\$1,514,750	\$1,560,192	\$1,606,998
\$206,501	\$212,696	\$212,696	\$212,696	\$219,077	\$225,649	\$232,418	\$239,391	\$246,573	\$253,970
\$6,675,142	\$6,858,993	\$7,041,753	\$7,229,772	\$7,446,665	\$7,670,065	\$7,900,167	\$8,137,172	\$8,381,287	\$8,632,726
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$3,713,150	\$3,824,545	\$3,939,281	\$4,057,459	\$4,179,183	\$4,304,559	\$4,433,695	\$4,566,706	\$4,703,707	\$4,844,819
\$1,755,000	\$1,795,000	\$2,090,000	\$2,130,000	\$2,170,000	\$2,215,000	\$2,515,000	\$2,560,000	\$2,605,000	\$2,655,000
\$3,514,786	\$3,641,687	\$4,187,414	\$4,360,717	\$4,458,146	\$4,554,698	\$5,037,080	\$5,142,252	\$5,251,930	\$5,361,248

Operations Year 3	Operations Year 4	Operations Year 5	Operations Year 6	Operations Year 7	Operations Year 8	Operations Year 9	Operations Year 10	Operations Year 11	Operations Year 12
2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375
\$33,124,000	\$33,125,000	\$33,125,375	\$33,123,875	\$33,124,125	\$32,668,125	\$32,667,375	\$32,668,750	\$32,670,500	\$32,670,875
\$1,375	\$375	\$0	\$1,500	\$1,250	\$457,250	\$458,000	\$456,625	\$454,875	\$454,500
\$0	\$0	\$0	\$0	\$0	\$157,250	\$158,000	\$156,625	\$154,875	\$154,500
\$1,375	\$375	\$0	\$1,500	\$1,250	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$9,134,292	\$9,134,292	\$9,134,292	\$9,134,292	\$9,134,292	\$4,292	\$4,292	\$4,292	\$4,292	\$4,292
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$9,130,000	\$0	\$0	\$0	\$0	\$0
\$9,134,292	\$9,134,292	\$9,134,292	\$9,134,292	\$4,292	\$4,292	\$4,292	\$4,292	\$4,292	\$4,292
\$1,720,000	\$3,475,000	\$5,270,000	\$7,360,000	\$9,490,000	\$10,691,036	\$12,350,406	\$15,023,406	-\$20,528,489	-\$17,768,614
\$1,755,000	\$1,795,000	\$2,090,000	\$2,130,000	\$2,170,000	\$2,215,000	\$2,515,000	\$2,560,000	\$2,605,000	\$2,655,000
\$0	\$0	\$0	\$0	\$0	\$157,250	\$158,000	\$156,625	\$154,875	\$154,500
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$968,964	\$712,880	\$0	\$38,268,520	\$0	\$5,616,473
\$3,475,000	\$5,270,000	\$7,360,000	\$9,490,000	\$10,691,036	\$12,350,406	\$15,023,406	-\$20,528,489	-\$17,768,614	-\$20,575,587
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
				\$3,723,333	\$3,835,033	\$3,950,084	\$4,068,586	\$4,190,644	\$4,316,363

Operations Year 13	Operations Year 14	Operations Year 15	Operations Year 16	Operations Year 17	Operations Year 18	Operations Year 19	Operations Year 20	Operations Year 21	Operations Year 22
2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
17	17	17	17	17	17	17	17	17	17
636,584	636,584	636,584	636,584	636,584	636,584	636,584	636,584	636,584	636,584
\$3,812,044	\$3,926,406	\$4,044,198	\$4,165,524	\$4,290,490	\$4,419,204	\$4,551,780	\$4,688,334	\$4,828,984	\$4,973,853
\$3,668,207	\$3,778,253	\$3,891,600	\$4,008,349	\$4,128,599	\$4,252,457	\$4,380,031	\$4,511,432	\$4,646,775	\$4,786,178
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$7,480,251	\$7,704,659	\$7,935,798	\$8,173,872	\$8,419,089	\$8,671,661	\$8,931,811	\$9,199,765	\$9,475,758	\$9,760,031
\$2,935,740	\$3,023,812	\$3,114,526	\$3,207,962	\$3,304,201	\$3,403,327	\$3,505,427	\$3,610,589	\$3,718,907	\$3,830,474
\$391,432	\$403,175	\$415,270	\$427,728	\$440,560	\$453,777	\$467,390	\$481,412	\$495,854	\$510,730
\$4,043,693	\$4,165,004	\$4,289,954	\$4,418,653	\$4,551,212	\$4,687,749	\$4,828,381	\$4,973,233	\$5,122,430	\$5,276,102
\$7,370,865	\$7,591,991	\$7,819,750	\$8,054,343	\$8,295,973	\$8,544,852	\$8,801,198	\$9,065,234	\$9,337,191	\$9,617,307
\$14,851,116	\$15,296,649	\$15,755,549	\$16,228,215	\$16,715,062	\$17,216,514	\$17,733,009	\$18,264,999	\$18,812,949	\$19,377,338
\$5.00	\$5.00	\$5.00	\$5.00	\$6.00	\$6.00	\$6.00	\$6.00	\$7.00	\$7.00
\$3,182,920	\$3,182,920	\$3,182,920	\$3,182,920	\$3,819,504	\$3,819,504	\$3,819,504	\$3,819,504	\$4,456,088	\$4,456,088
\$3,182,920	\$3,182,920	\$3,182,920	\$3,182,920	\$3,819,504	\$3,819,504	\$3,819,504	\$3,819,504	\$4,456,088	\$4,456,088
\$18,034,036	\$18,479,569	\$18,938,469	\$19,411,135	\$20,534,566	\$21,036,018	\$21,552,513	\$22,084,503	\$23,269,037	\$23,833,426
\$1,456,906	\$1,500,613	\$1,545,632	\$1,592,001	\$1,639,761	\$1,688,954	\$1,739,622	\$1,791,811	\$1,845,565	\$1,900,932
\$1,052,018	\$1,083,579	\$1,116,086	\$1,149,569	\$1,184,056	\$1,219,578	\$1,256,165	\$1,293,850	\$1,332,665	\$1,372,645
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$2,508,924	\$2,584,192	\$2,661,718	\$2,741,569	\$2,823,817	\$2,908,531	\$2,995,787	\$3,085,661	\$3,178,230	\$3,273,577
\$1,679,823	\$1,730,218	\$1,782,125	\$1,835,588	\$1,890,656	\$1,947,376	\$2,005,797	\$2,065,971	\$2,127,950	\$2,191,789
\$476,016	\$490,296	\$505,005	\$520,155	\$535,760	\$551,833	\$568,388	\$585,439	\$603,003	\$621,093
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$2,155,839	\$2,220,514	\$2,287,130	\$2,355,744	\$2,426,416	\$2,499,209	\$2,574,185	\$2,651,410	\$2,730,953	\$2,812,881
\$22,698,800	\$23,284,276	\$23,887,317	\$24,508,449	\$25,784,798	\$26,443,757	\$27,122,485	\$27,821,574	\$29,178,220	\$29,919,884
\$2,753,302	\$2,835,901	\$2,920,978	\$3,008,607	\$3,098,865	\$3,191,831	\$3,287,586	\$3,386,214	\$3,487,800	\$3,592,434
\$551,175	\$567,710	\$584,741	\$602,284	\$620,352	\$638,963	\$658,132	\$677,876	\$698,212	\$719,158
\$3,670,434	\$3,780,547	\$3,893,964	\$4,010,782	\$4,131,106	\$4,255,039	\$4,382,690	\$4,514,171	\$4,649,596	\$4,789,084
\$1,655,208	\$1,704,864	\$1,756,010	\$1,808,691	\$1,862,951	\$1,918,840	\$1,976,405	\$2,035,697	\$2,096,768	\$2,159,671
\$261,589	\$269,437	\$277,520	\$285,845	\$294,421	\$303,253	\$312,351	\$321,721	\$331,373	\$341,314
\$8,891,708	\$9,158,459	\$9,433,213	\$9,716,209	\$10,007,695	\$10,307,926	\$10,617,164	\$10,935,679	\$11,263,749	\$11,601,662
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$4,990,163	\$5,139,868	\$5,294,064	\$5,452,886	\$5,616,473	\$5,784,967	\$5,958,516	\$6,137,271	\$6,321,389	\$6,511,031
\$2,960,000	\$3,010,000	\$3,060,000	\$3,115,000	\$3,430,000	\$3,485,000	\$3,545,000	\$3,605,000	\$3,925,000	\$3,985,000
\$5,856,929	\$5,975,949	\$6,100,040	\$6,224,354	\$6,730,631	\$6,865,864	\$7,001,805	\$7,143,624	\$7,668,082	\$7,822,192

Operations Year 13	Operations Year 14	Operations Year 15	Operations Year 16	Operations Year 17	Operations Year 18	Operations Year 19	Operations Year 20	Operations Year 21	Operations Year 22
2031	2032	2033	2034	2035	2036	2037	2038	2039	2040

\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375
\$32,668,125	\$32,670,250	\$32,670,125	\$32,670,625	\$32,669,500	\$32,669,375	\$32,667,750	\$32,667,000	\$32,669,250	\$32,671,500
\$457,250	\$455,125	\$455,250	\$454,750	\$455,875	\$456,000	\$457,625	\$458,375	\$456,125	\$453,875
\$157,250	\$155,125	\$155,250	\$154,750	\$155,875	\$156,000	\$157,625	\$158,375	\$156,125	\$153,875
\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

\$4,292	\$4,292	\$4,292	\$4,292	\$4,292	\$4,292	\$4,292	\$4,292	\$4,292	\$4,292
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$4,292	\$4,292	\$4,292	\$4,292	\$4,292	\$4,292	\$4,292	\$4,292	\$4,292	\$4,292

-\$20,575,587	-\$17,458,337	-\$15,484,915	-\$38,922,957	-\$36,556,262	-\$32,970,387	-\$29,329,387	-\$25,626,762	-\$78,375,064	-\$75,759,583
\$2,960,000	\$3,010,000	\$3,060,000	\$3,115,000	\$3,430,000	\$3,485,000	\$3,545,000	\$3,605,000	\$3,925,000	\$3,985,000
\$157,250	\$155,125	\$155,250	\$154,750	\$155,875	\$156,000	\$157,625	\$158,375	\$156,125	\$153,875
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$1,191,703	\$26,653,292	\$903,056	\$0	\$0	\$0	\$56,511,676	\$1,465,645	\$6,469,774
-\$17,458,337	-\$15,484,915	-\$38,922,957	-\$36,556,262	-\$32,970,387	-\$29,329,387	-\$25,626,762	-\$78,375,064	-\$75,759,583	-\$78,090,482

\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$4,445,854	\$4,579,229	\$4,716,606	\$4,858,105	\$5,003,848	\$5,153,963	\$5,308,582	\$5,467,839	\$5,631,875	\$5,800,831

Operations Year 23	Operations Year 24	Operations Year 25	Operations Year 26	Operations Year 27	Operations Year 28	Operations Year 29	Operations Year 30	Operations Year 31
2041	2042	2043	2044	2045	2046	2047	2048	2049
3%	3%	3%	3%	3%	3%	3%	3%	3%
17	17	17	17	17	17	17	17	17
636,584	636,584	636,584	636,584	636,584	636,584	636,584	636,584	636,584
\$5,123,069	\$5,276,761	\$5,435,064	\$5,598,116	\$5,766,059	\$5,939,041	\$6,117,212	\$6,300,729	\$6,489,750
\$4,929,763	\$5,077,656	\$5,229,986	\$5,386,885	\$5,548,492	\$5,714,947	\$5,886,395	\$6,062,987	\$6,244,876
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$10,052,832	\$10,354,417	\$10,665,049	\$10,985,001	\$11,314,551	\$11,653,987	\$12,003,607	\$12,363,715	\$12,734,627
\$3,945,389	\$4,063,750	\$4,185,663	\$4,311,233	\$4,440,570	\$4,573,787	\$4,711,000	\$4,852,330	\$4,997,900
\$526,052	\$541,833	\$558,088	\$574,831	\$592,076	\$609,838	\$628,133	\$646,977	\$666,387
\$5,434,386	\$5,597,417	\$5,765,340	\$5,938,300	\$6,116,449	\$6,299,942	\$6,488,941	\$6,683,609	\$6,884,117
\$9,905,826	\$10,203,001	\$10,509,091	\$10,824,363	\$11,149,094	\$11,483,567	\$11,828,074	\$12,182,916	\$12,548,404
\$19,958,658	\$20,557,418	\$21,174,140	\$21,809,364	\$22,463,645	\$23,137,555	\$23,831,681	\$24,546,632	\$25,283,031
\$7.00	\$7.00	\$8.00	\$8.00	\$8.00	\$8.00	\$9.00	\$9.00	\$9.00
\$4,456,088	\$4,456,088	\$5,092,672	\$5,092,672	\$5,092,672	\$5,092,672	\$5,729,256	\$5,729,256	\$5,729,256
\$4,456,088	\$4,456,088	\$5,092,672	\$5,092,672	\$5,092,672	\$5,092,672	\$5,729,256	\$5,729,256	\$5,729,256
\$24,414,746	\$25,013,506	\$26,266,812	\$26,902,036	\$27,556,317	\$28,230,227	\$29,560,937	\$30,275,888	\$31,012,287
\$1,957,960	\$2,016,699	\$2,077,200	\$2,139,516	\$2,203,701	\$2,269,812	\$2,337,907	\$2,408,044	\$2,480,285
\$1,413,825	\$1,456,239	\$1,499,927	\$1,544,924	\$1,591,272	\$1,639,010	\$1,688,181	\$1,738,826	\$1,790,991
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$3,371,785	\$3,472,938	\$3,577,126	\$3,684,440	\$3,794,973	\$3,908,823	\$4,026,087	\$4,146,870	\$4,271,276
\$2,257,542	\$2,325,268	\$2,395,027	\$2,466,877	\$2,540,884	\$2,617,110	\$2,695,623	\$2,776,492	\$2,859,787
\$639,726	\$658,917	\$678,685	\$699,045	\$720,017	\$741,617	\$763,866	\$786,782	\$810,385
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$2,897,268	\$2,984,186	\$3,073,711	\$3,165,923	\$3,260,900	\$3,358,727	\$3,459,489	\$3,563,274	\$3,670,172
\$30,683,798	\$31,470,630	\$32,917,650	\$33,752,399	\$34,612,191	\$35,497,777	\$37,046,514	\$37,986,031	\$38,953,735
\$3,700,207	\$3,811,213	\$3,925,550	\$4,043,316	\$4,164,616	\$4,289,554	\$4,418,241	\$4,550,788	\$4,687,312
\$740,733	\$762,955	\$785,843	\$809,419	\$833,701	\$858,712	\$884,474	\$911,008	\$938,338
\$4,932,756	\$5,080,739	\$5,233,161	\$5,390,156	\$5,551,861	\$5,718,417	\$5,889,969	\$6,066,668	\$6,248,668
\$2,224,461	\$2,291,195	\$2,359,931	\$2,430,729	\$2,503,651	\$2,578,760	\$2,656,123	\$2,735,807	\$2,817,881
\$351,554	\$362,100	\$372,963	\$384,152	\$395,677	\$407,547	\$419,773	\$432,367	\$445,338
\$11,949,712	\$12,308,203	\$12,677,449	\$13,057,773	\$13,449,506	\$13,852,991	\$14,268,581	\$14,696,638	\$15,137,537
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$6,706,362	\$6,907,553	\$7,114,779	\$7,328,223	\$7,548,069	\$7,774,512	\$8,007,747	\$8,247,979	\$8,495,419
\$4,055,000	\$4,120,000	\$4,450,000	\$4,520,000	\$4,595,000	\$4,670,000	\$5,005,000	\$5,085,000	\$5,170,000
\$7,972,725	\$8,134,874	\$8,675,421	\$8,846,404	\$9,019,616	\$9,200,274	\$9,765,186	\$9,956,414	\$10,150,779

Operations Year 23	Operations Year 24	Operations Year 25	Operations Year 26	Operations Year 27	Operations Year 28	Operations Year 29	Operations Year 30	Operations Year 31
2041	2042	2043	2044	2045	2046	2047	2048	2049
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375	\$33,125,375	\$0	\$0	\$0	\$0
\$32,670,750	\$32,668,875	\$32,667,500	\$32,668,000	\$23,769,750	\$0	\$0	\$0	\$0
\$454,625	\$456,500	\$457,875	\$457,375	\$9,355,625	\$0	\$0	\$0	\$0
\$154,625	\$156,500	\$157,875	\$157,375	\$2,688,356	\$0	\$0	\$0	\$0
\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$6,367,269	\$0	\$0	\$0	\$0
\$4,292	\$4,292	\$4,292	\$4,292	\$4,292	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$6,367,269	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$4,292	\$4,292	\$4,292	\$4,292	\$6,371,561	\$0	\$0	\$0	\$0
-\$78,090,482	-\$73,880,857	-\$78,756,068	-\$108,318,393	-\$103,641,018	-\$89,986,101	-\$85,316,101	-\$80,311,101	-\$75,226,101
\$4,055,000	\$4,120,000	\$4,450,000	\$4,520,000	\$4,595,000	\$4,670,000	\$5,005,000	\$5,085,000	\$5,170,000
\$154,625	\$156,500	\$157,875	\$157,375	\$2,688,356	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$6,371,561	\$0	\$0	\$0	\$0
\$0	\$9,151,711	\$34,170,200	\$0	\$0	\$0	\$0	\$0	\$0
-\$73,880,857	-\$78,756,068	-\$108,318,393	-\$103,641,018	-\$89,986,101	-\$85,316,101	-\$80,311,101	-\$75,226,101	-\$70,056,101
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$5,974,856	\$6,154,101	\$6,338,725	\$6,528,886	\$6,724,753	\$6,926,495	\$7,134,290	\$7,348,319	\$7,568,769

**UNLV Funding Model-Collegiate Stadium
GO & Sales Tax Bond Debt Schedule**
Provided by PFM and Hobbs, Ong and associates

Net Debt Service Schedule

Dates	General Obligation Bonds Funding \$543 Million of \$615 Million Project	General Obligation Bonds for \$735 Million Project	Sales Tax Revenue Bonds Funding \$543 Million of \$615 Million Project (1)	Sales Tax Revenue Bonds for \$735 Million Project ⁽¹⁾
12/1/2016				
2017	\$40,237,250	\$48,889,750	\$44,709,000	\$54,325,750
2018	40,239,000	48,893,500	44,711,500	54,327,000
2019	40,237,750	48,891,000	44,711,750	54,327,000
2020	40,236,750	48,890,250	44,707,750	54,323,250
2021	40,239,000	48,893,750	44,707,500	54,323,250
2022	40,237,250	48,888,750	44,708,500	54,324,000
2023	40,239,500	48,893,000	44,708,250	54,327,500
2024	40,238,250	48,893,250	44,709,250	54,325,500
2025	40,236,250	48,891,750	44,708,750	54,325,000
2026	40,236,000	48,890,500	44,709,000	54,322,500
2027	40,234,750	48,891,250	44,712,000	54,324,500
2028	40,234,750	48,890,500	44,709,500	54,327,000
2029	40,238,000	48,889,750	44,708,500	54,326,000
2030	40,236,250	48,890,250	44,710,500	54,322,500
2031	40,236,500	48,893,000	44,711,750	54,327,250
2032	40,235,250	48,888,750	44,708,500	54,325,250
2033	40,239,000	48,893,500	44,712,000	54,327,000
2034	40,238,750	48,892,250	44,707,750	54,327,250
2035	40,235,750	48,890,500	44,711,750	54,325,750
2036	40,236,000	48,893,250	-3,000	-500
2037	0	0	0	0
2038	0	0	0	0
2039	0	0	0	0
2040	0	0	0	0
2041	0	0	0	0
2042	0	0	0	0
2043	0	0	0	0
2044	0	0	0	0
2045	0	0	0	0
2046	0	0	0	0
Total	\$804,742,000	\$977,828,500	\$849,480,500	\$1,032,182,750

**UNLV Funding Model-Collegiate Stadium
GO & Sales Tax Bond Debt Schedule**
Provided by PFM and Hobbs, Ong and associates

2.25 DSC Bond Debt Service Schedule

Dates	30 Year DS	20 Year DS	Revenues	DSC
7/1/2015				
2016	5,493,300	5,495,050	12,370,742	2.252
2017	5,497,900	5,495,650	12,370,742	2.250
2018	5,493,650	5,494,250	12,370,742	2.252
2019	5,495,900	5,495,500	12,370,742	2.251
2020	5,493,950	5,493,700	12,370,742	2.252
2021	5,497,800	5,493,500	12,370,742	2.250
2022	5,496,750	5,494,200	12,370,742	2.251
2023	5,495,800	5,495,100	12,370,742	2.251
2024	5,494,600	5,495,500	12,370,742	2.251
2025	5,492,800	5,494,700	12,370,742	2.252
2026	5,495,050	5,497,000	12,370,742	2.251
2027	5,495,650	5,496,350	12,370,742	2.251
2028	5,494,250	5,497,050	12,370,742	2.252
2029	5,495,500	5,493,050	12,370,742	2.251
2030	5,493,700	5,493,650	12,370,742	2.252
2031	5,493,500	5,497,450	12,370,742	2.252
2032	5,494,200	5,498,050	12,370,742	2.252
2033	5,495,100	5,494,400	12,370,742	2.251
2034	5,495,500	5,495,450	12,370,742	2.251
2035	5,494,700	5,494,450	12,370,742	2.251
2036	5,497,000	0	12,370,742	2.250
2037	5,496,350	0	12,370,742	2.251
2038	5,497,050	0	12,370,742	2.250
2039	5,493,050	0	12,370,742	2.252
2040	5,493,650	0	12,370,742	2.252
2041	5,497,450	0	12,370,742	2.250
2042	5,498,050	0	12,370,742	2.250
2043	5,494,400	0	12,370,742	2.252
2044	5,495,450	0	12,370,742	2.251
2045	5,494,450	0	12,370,742	2.251
Total	\$164,856,500	\$109,904,050		

TIC

7.0496%

7.0639%

Bond Par	68,190,000	58,215,000
Total Sources	68,190,000	58,215,000
Construction Fund	67,349,050	57,423,925
Cost of Issuance	500,000	500,000
Underwriter's Discount	340,950	291,075
Total Uses	\$68,190,000	\$58,215,000

UNLV Funding Model- Open-Air Stadium 30 Year Projections From RCG

	Construction Year 1 2015	Construction Year 2 2016	Construction Year 3 2017	Construction Year 4 2018	Construction Year 5/ Operations Year 1 2019	Operations Year 2 2020
Year						
Inflation Rate						3%
Event Programming - Total Events						
Total # of Events					9	17
Total Annual Attendance					386,774	658,942
<u>Naming Rights & Sponsorship</u>						
Stadium Naming Rights					\$1,588,235	\$3,000,000
Advertising					\$1,588,235	\$3,000,000
Interest Income					\$0	\$0
Other Miscellaneous					\$0	\$0
Net Advertising Income					<u>\$3,176,471</u>	<u>\$6,000,000</u>
<u>Premium Seating</u>						
Suites					\$1,125,424	\$2,125,800
Loge Boxes					\$129,600	\$244,800
Club Seating					\$1,546,544	\$2,921,250
Net Premium Seating Income					<u>\$2,801,568</u>	<u>\$5,291,850</u>
Total Contractually Obligated Income					<u>\$5,978,038</u>	<u>\$11,291,850</u>
<u>Event Related Ticket Fees:</u>						
Facility Fee per ticket					\$2.00	\$2.00
Facility Fees					\$773,548	\$1,317,884
Total Other Event Related					<u>\$773,548</u>	<u>\$1,317,884</u>
Total COI & Ticket Fees					<u>\$6,751,586</u>	<u>\$12,609,734</u>
<u>Event Income</u>						
Rental Income					\$337,500	\$1,052,500
Suite Ticket Revenue					\$230,000	\$760,000
Actual Expenses					\$0	\$0
Net Rental Income					<u>\$567,500</u>	<u>\$1,812,500</u>
<u>Ancillary Income</u>						
Non UNLV Games F&B					\$432,190	\$1,272,271
Novelty Income					\$108,716	\$361,913
Parking Income					\$0	\$0
Total Ancillary					<u>\$540,906</u>	<u>\$1,634,183</u>
Total Facility Income			\$8,829,712		<u>\$7,859,992</u>	<u>\$16,056,417</u>
<u>Indirect Expenses</u>						
Labor Costs					\$1,193,023	\$2,253,488
General & Administrative					\$239,294	\$452,000
Operations					\$1,593,529	\$3,010,000
Utilities					\$677,647	\$1,280,000
Insurance					\$122,409	\$231,218
Total Indirect Expenses					<u>\$3,825,903</u>	<u>\$7,226,706</u>
Capital Reserve Contribution					\$0	\$0
Operating Reserve Contribution					\$0	\$0
UNLV Transferred Revenue					\$3,500,000	\$3,605,000
Site and Infrastructure Repayment					\$0	\$2,290,000
Net Operating Income/(Loss)					<u>\$534,089</u>	<u>\$2,934,712</u>
(UNLV & LVCVA)						\$5,224,712

Year	Construction Year 1 2015	Construction Year 2 2016	Construction Year 3 2017	Construction Year 4 2018	Construction Year 5/ Operations Year 1 2019	Operations Year 2 2020
Construction Expenses						
Design Phase Expenses	\$10,466,468	\$65,041,623	\$19,344,276	\$6,727,165	\$4,641,744	
Construction Phase Expenses	\$232,588	\$697,765	\$108,448,310	\$209,289,590	\$130,355,647	
Site Cost	\$50,000,000	\$50,000,000				
Total Construction Expenses	\$60,699,056	\$115,739,388	\$127,792,586	\$216,016,756	\$134,997,392	\$0
Public Funding and Debt Service						
Community Facilities District Revenue	\$13,817,083	\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250
Pay-Go Construction Payments	\$0	\$0				
CFD Bond Debt Service	\$12,864,625	\$31,729,250	\$41,450,000	\$41,448,750	\$41,451,250	\$41,451,125
Remaining Revenues	\$952,458	\$9,722,000	\$1,250	\$2,500	\$0	\$125
Capital Reserve Contribution	\$0	\$0	\$0	\$0	\$0	\$0
Operating Reserve Contribution					\$0	\$125
Revenue Towards Early Redemption	\$952,458	\$9,722,000	\$1,250	\$2,500	\$0	\$0
Early Redemption Account						
Beginning Balance	\$0	\$952,458	\$10,674,458	\$10,675,708	\$10,678,208	\$10,678,208
Early Redemption Contribution	\$952,458	\$9,722,000	\$1,250	\$2,500	\$0	\$0
Bond Redemption Payments	\$0	\$0	\$0	\$0	\$0	\$0
Early Redemption Fund Ending Balance	\$952,458	\$10,674,458	\$10,675,708	\$10,678,208	\$10,678,208	\$10,678,208
Capital Reserve Account						
Beginning Balance	\$0	\$0	\$0	\$0	\$0	\$0
Capital Reserve Contribution from Site and Infrastructure Repayment	\$0	\$0	\$0	\$0	\$0	\$2,290,000
Capital Reserve Contribution from Sales Taxes	\$0	\$0	\$0	\$0	\$0	\$0
Capital Reserve Contribution from Operations	\$0	\$0	\$0	\$0	\$0	\$0
Excess Early Redemption Fund Transfer	\$0	\$0	\$0	\$0	\$0	\$0
Capital Expenses	\$0	\$0	\$0	\$0	\$0	\$0
Capital Reserve (accumulated)	\$0	\$0	\$0	\$0	\$0	\$2,290,000
Operating Reserve (accumulated)					\$0	\$0
Recommended Operating Account = 50% of Total Operating Expenses						

* In Year 2037 the Operating Reserve Contribution is lowered as the Operating Account reaches approx. 50% of Total Indirect Expenses

Operations Year 3	Operations Year 4	Operations Year 5	Operations Year 6	Operations Year 7	Operations Year 8	Operations Year 9	Operations Year 10	Operations Year 11	Operations Year 12
2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
17	17	17	17	17	17	17	17	17	17
658,942	658,942	658,942	658,942	658,942	658,942	658,942	658,942	658,942	658,942
\$3,150,000	\$3,307,500	\$3,472,875	\$3,646,519	\$3,755,914	\$3,868,592	\$3,984,649	\$4,104,189	\$4,227,315	\$4,354,134
\$3,150,000	\$3,307,500	\$3,406,725	\$3,508,927	\$3,614,195	\$3,722,620	\$3,834,299	\$3,949,328	\$4,067,808	\$4,189,842
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$6,300,000	\$6,615,000	\$6,879,600	\$7,155,446	\$7,370,109	\$7,591,212	\$7,818,948	\$8,053,517	\$8,295,122	\$8,543,976
\$2,250,000	\$2,250,000	\$2,317,500	\$2,387,025	\$2,458,636	\$2,532,395	\$2,608,367	\$2,686,618	\$2,767,216	\$2,850,233
\$300,000	\$300,000	\$309,000	\$318,270	\$327,818	\$337,653	\$347,782	\$358,216	\$368,962	\$380,031
\$3,008,888	\$3,099,154	\$3,192,129	\$3,287,893	\$3,386,529	\$3,488,125	\$3,592,769	\$3,700,552	\$3,811,569	\$3,925,916
\$5,558,888	\$5,649,154	\$5,818,629	\$5,993,188	\$6,172,983	\$6,358,173	\$6,548,918	\$6,745,385	\$6,947,747	\$7,156,179
\$11,858,888	\$12,264,154	\$12,698,229	\$13,148,633	\$13,543,092	\$13,949,385	\$14,367,866	\$14,798,902	\$15,242,869	\$15,700,156
\$2.00	\$2.00	\$3.00	\$3.00	\$3.00	\$3.00	\$4.00	\$4.00	\$4.00	\$4.00
\$1,317,884	\$1,317,884	\$1,976,826	\$1,976,826	\$1,976,826	\$1,976,826	\$2,635,768	\$2,635,768	\$2,635,768	\$2,635,768
\$1,317,884	\$1,317,884	\$1,976,826	\$1,976,826	\$1,976,826	\$1,976,826	\$2,635,768	\$2,635,768	\$2,635,768	\$2,635,768
\$13,176,772	\$13,582,038	\$14,675,055	\$15,125,459	\$15,519,918	\$15,926,211	\$17,003,634	\$17,434,670	\$17,878,637	\$18,335,924
\$1,084,075	\$1,116,597	\$1,150,095	\$1,184,598	\$1,220,136	\$1,256,740	\$1,294,442	\$1,333,276	\$1,373,274	\$1,414,472
\$782,800	\$806,284	\$830,473	\$855,387	\$881,049	\$907,480	\$934,705	\$962,746	\$991,628	\$1,021,377
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$1,866,875	\$1,922,881	\$1,980,568	\$2,039,985	\$2,101,184	\$2,164,220	\$2,229,147	\$2,296,021	\$2,364,902	\$2,435,849
\$1,286,130	\$1,314,870	\$1,344,473	\$1,374,963	\$1,416,212	\$1,458,698	\$1,502,459	\$1,547,533	\$1,593,959	\$1,641,778
\$372,677	\$383,857	\$395,373	\$407,234	\$419,451	\$432,035	\$444,996	\$458,346	\$472,096	\$486,259
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$1,658,807	\$1,698,728	\$1,739,846	\$1,782,198	\$1,835,664	\$1,890,733	\$1,947,455	\$2,005,879	\$2,066,055	\$2,128,037
\$16,702,454	\$17,203,647	\$18,395,469	\$18,947,642	\$19,456,766	\$19,981,164	\$21,180,236	\$21,736,570	\$22,309,594	\$22,899,809
\$2,309,825	\$2,367,571	\$2,426,760	\$2,487,429	\$2,562,052	\$2,638,914	\$2,718,081	\$2,799,623	\$2,883,612	\$2,970,120
\$463,074	\$474,419	\$486,043	\$497,951	\$512,889	\$528,276	\$544,124	\$560,448	\$577,261	\$594,579
\$3,083,745	\$3,159,297	\$3,236,700	\$3,315,999	\$3,415,479	\$3,517,943	\$3,623,481	\$3,732,186	\$3,844,151	\$3,959,476
\$1,330,735	\$1,383,488	\$1,438,339	\$1,495,373	\$1,540,234	\$1,586,441	\$1,634,034	\$1,683,056	\$1,733,547	\$1,785,554
\$238,111	\$245,254	\$245,254	\$245,254	\$252,612	\$260,190	\$267,996	\$276,036	\$284,317	\$292,846
\$7,425,490	\$7,630,029	\$7,833,096	\$8,042,006	\$8,283,266	\$8,531,764	\$8,787,717	\$9,051,348	\$9,322,889	\$9,602,575
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$3,713,150	\$3,824,545	\$3,939,281	\$4,057,459	\$4,179,183	\$4,304,559	\$4,433,695	\$4,566,706	\$4,703,707	\$4,844,819
\$2,290,000	\$2,290,000	\$2,290,000	\$2,355,000	\$2,425,000	\$2,500,000	\$2,575,000	\$2,655,000	\$2,730,000	\$2,815,000
\$3,273,814	\$3,459,074	\$4,333,092	\$4,493,177	\$4,569,317	\$4,644,842	\$5,383,824	\$5,463,516	\$5,552,998	\$5,637,415

Operations Year 3	Operations Year 4	Operations Year 5	Operations Year 6	Operations Year 7	Operations Year 8	Operations Year 9	Operations Year 10	Operations Year 11	Operations Year 12
2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250
\$41,447,125	\$41,447,750	\$41,446,375	\$41,446,375	\$41,450,875	\$40,914,375	\$40,917,500	\$40,914,500	\$40,913,375	\$40,916,750
\$4,125	\$3,500	\$4,875	\$4,875	\$375	\$536,875	\$533,750	\$536,750	\$537,875	\$534,500
\$0	\$0	\$0	\$0	\$0	\$236,875	\$233,750	\$236,750	\$237,875	\$234,500
\$4,125	\$3,500	\$4,875	\$4,875	\$375	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$10,678,208	\$10,678,208	\$10,678,208	\$10,678,208	\$10,678,208	\$3,208	\$3,208	\$3,208	\$3,208	\$3,208
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$10,675,000	\$0	\$0	\$0	\$0	\$0
\$10,678,208	\$10,678,208	\$10,678,208	\$10,678,208	\$3,208	\$3,208	\$3,208	\$3,208	\$3,208	\$3,208
\$2,290,000	\$4,580,000	\$6,870,000	\$9,160,000	\$11,515,000	\$12,971,036	\$14,995,031	\$17,803,781	-\$17,572,989	-\$14,605,114
\$2,290,000	\$2,290,000	\$2,290,000	\$2,355,000	\$2,425,000	\$2,500,000	\$2,575,000	\$2,655,000	\$2,730,000	\$2,815,000
\$0	\$0	\$0	\$0	\$0	\$236,875	\$233,750	\$236,750	\$237,875	\$234,500
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$968,964	\$712,880	\$0	\$38,268,520	\$0	\$5,616,473
\$4,580,000	\$6,870,000	\$9,160,000	\$11,515,000	\$12,971,036	\$14,995,031	\$17,803,781	-\$17,572,989	-\$14,605,114	-\$17,172,087
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
				\$4,141,633	\$4,265,882	\$4,393,858	\$4,525,674	\$4,661,444	\$4,801,288

Operations Year 13	Operations Year 14	Operations Year 15	Operations Year 16	Operations Year 17	Operations Year 18	Operations Year 19	Operations Year 20	Operations Year 21	Operations Year 22
2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
17	17	17	17	17	17	17	17	17	17
658,942	658,942	658,942	658,942	658,942	658,942	658,942	658,942	658,942	658,942
\$4,484,758	\$4,619,301	\$4,757,880	\$4,900,616	\$5,047,635	\$5,199,064	\$5,355,036	\$5,515,687	\$5,681,157	\$5,851,592
\$4,315,537	\$4,445,003	\$4,578,354	\$4,715,704	\$4,857,175	\$5,002,891	\$5,152,977	\$5,307,567	\$5,466,794	\$5,630,797
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$8,800,295	\$9,064,304	\$9,336,233	\$9,616,320	\$9,904,810	\$10,201,954	\$10,508,013	\$10,823,253	\$11,147,951	\$11,482,389
\$2,935,740	\$3,023,812	\$3,114,526	\$3,207,962	\$3,304,201	\$3,403,327	\$3,505,427	\$3,610,589	\$3,718,907	\$3,830,474
\$391,432	\$403,175	\$415,270	\$427,728	\$440,560	\$453,777	\$467,390	\$481,412	\$495,854	\$510,730
\$4,043,693	\$4,165,004	\$4,289,954	\$4,418,653	\$4,551,212	\$4,687,749	\$4,828,381	\$4,973,233	\$5,122,430	\$5,276,102
\$7,370,865	\$7,591,991	\$7,819,750	\$8,054,343	\$8,295,973	\$8,544,852	\$8,801,198	\$9,065,234	\$9,337,191	\$9,617,307
\$16,171,160	\$16,656,295	\$17,155,984	\$17,670,663	\$18,200,783	\$18,746,807	\$19,309,211	\$19,888,487	\$20,485,142	\$21,099,696
\$5.00	\$5.00	\$5.00	\$5.00	\$6.00	\$6.00	\$6.00	\$6.00	\$7.00	\$7.00
\$3,294,710	\$3,294,710	\$3,294,710	\$3,294,710	\$3,953,652	\$3,953,652	\$3,953,652	\$3,953,652	\$4,612,594	\$4,612,594
\$3,294,710	\$3,294,710	\$3,294,710	\$3,294,710	\$3,953,652	\$3,953,652	\$3,953,652	\$3,953,652	\$4,612,594	\$4,612,594
\$19,465,870	\$19,951,005	\$20,450,694	\$20,965,373	\$22,154,435	\$22,700,459	\$23,262,863	\$23,842,139	\$25,097,736	\$25,712,290
\$1,456,906	\$1,500,613	\$1,545,632	\$1,592,001	\$1,639,761	\$1,688,954	\$1,739,622	\$1,791,811	\$1,845,565	\$1,900,932
\$1,052,018	\$1,083,579	\$1,116,086	\$1,149,569	\$1,184,056	\$1,219,577	\$1,256,165	\$1,293,850	\$1,332,665	\$1,372,645
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$2,508,924	\$2,584,192	\$2,661,718	\$2,741,569	\$2,823,816	\$2,908,531	\$2,995,787	\$3,085,660	\$3,178,230	\$3,273,577
\$1,691,031	\$1,741,762	\$1,794,015	\$1,847,836	\$1,903,271	\$1,960,369	\$2,019,180	\$2,079,755	\$2,142,148	\$2,206,412
\$500,847	\$515,872	\$531,349	\$547,289	\$563,708	\$580,619	\$598,037	\$615,979	\$634,458	\$653,492
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$2,191,878	\$2,257,635	\$2,325,364	\$2,395,125	\$2,466,978	\$2,540,988	\$2,617,217	\$2,695,734	\$2,776,606	\$2,859,904
\$24,166,673	\$24,792,831	\$25,437,775	\$26,102,067	\$27,445,230	\$28,149,977	\$28,875,867	\$29,623,533	\$31,052,572	\$31,845,771
\$3,059,224	\$3,151,001	\$3,245,531	\$3,342,897	\$3,443,184	\$3,546,479	\$3,652,873	\$3,762,460	\$3,875,333	\$3,991,593
\$612,416	\$630,789	\$649,713	\$669,204	\$689,280	\$709,959	\$731,257	\$753,195	\$775,791	\$799,065
\$4,078,260	\$4,200,608	\$4,326,626	\$4,456,425	\$4,590,118	\$4,727,821	\$4,869,656	\$5,015,746	\$5,166,218	\$5,321,204
\$1,839,120	\$1,894,294	\$1,951,123	\$2,009,656	\$2,069,946	\$2,132,044	\$2,196,006	\$2,261,886	\$2,329,742	\$2,399,635
\$301,632	\$310,681	\$320,001	\$329,601	\$339,489	\$349,674	\$360,164	\$370,969	\$382,098	\$393,561
\$9,890,653	\$10,187,372	\$10,492,993	\$10,807,783	\$11,132,017	\$11,465,977	\$11,809,957	\$12,164,255	\$12,529,183	\$12,905,058
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$4,990,163	\$5,139,868	\$5,294,064	\$5,452,886	\$5,616,473	\$5,784,967	\$5,958,516	\$6,137,271	\$6,321,389	\$6,511,031
\$2,900,000	\$2,985,000	\$3,075,000	\$3,165,000	\$3,260,000	\$3,360,000	\$3,460,000	\$3,565,000	\$3,670,000	\$3,780,000
\$6,385,857	\$6,480,591	\$6,575,718	\$6,676,398	\$7,436,740	\$7,539,033	\$7,647,395	\$7,757,007	\$8,531,999	\$8,649,682

Operations Year 13	Operations Year 14	Operations Year 15	Operations Year 16	Operations Year 17	Operations Year 18	Operations Year 19	Operations Year 20	Operations Year 21	Operations Year 22
2031	2032	2033	2034	2035	2036	2037	2038	2039	2040

\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250
\$40,917,250	\$40,912,625	\$40,915,250	\$40,917,250	\$40,915,875	\$40,913,250	\$40,916,125	\$40,916,125	\$40,914,875	\$40,913,750
\$534,000	\$538,625	\$536,000	\$534,000	\$535,375	\$538,000	\$535,125	\$535,125	\$536,375	\$537,500
\$234,000	\$238,625	\$236,000	\$234,000	\$235,375	\$238,000	\$235,125	\$235,125	\$236,375	\$237,500
\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

\$3,208	\$3,208	\$3,208	\$3,208	\$3,208	\$3,208	\$3,208	\$3,208	\$3,208	\$3,208
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$3,208	\$3,208	\$3,208	\$3,208	\$3,208	\$3,208	\$3,208	\$3,208	\$3,208	\$3,208

-\$17,172,087	-\$14,038,087	-\$12,006,165	-\$35,348,457	-\$32,852,512	-\$29,357,137	-\$25,759,137	-\$22,064,012	-\$74,775,564	-\$72,334,833
\$2,900,000	\$2,985,000	\$3,075,000	\$3,165,000	\$3,260,000	\$3,360,000	\$3,460,000	\$3,565,000	\$3,670,000	\$3,780,000
\$234,000	\$238,625	\$236,000	\$234,000	\$235,375	\$238,000	\$235,125	\$235,125	\$236,375	\$237,500
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$1,191,703	\$26,653,292	\$903,056	\$0	\$0	\$0	\$56,511,676	\$1,465,645	\$6,469,774
-\$14,038,087	-\$12,006,165	-\$35,348,457	-\$32,852,512	-\$29,357,137	-\$25,759,137	-\$22,064,012	-\$74,775,564	-\$72,334,833	-\$74,787,107

\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$4,945,326	\$5,093,686	\$5,246,497	\$5,403,892	\$5,566,008	\$5,732,989	\$5,904,978	\$6,082,128	\$6,264,591	\$6,452,529

Operations Year 23	Operations Year 24	Operations Year 25	Operations Year 26	Operations Year 27	Operations Year 28	Operations Year 29	Operations Year 30	Operations Year 31
2041	2042	2043	2044	2045	2046	2047	2048	2049
3%	3%	3%	3%	3%	3%	3%	3%	3%
17	17	17	17	17	17	17	17	17
658,942	658,942	658,942	658,942	658,942	658,942	658,942	658,942	658,942
\$6,027,140	\$6,207,954	\$6,394,193	\$6,586,018	\$6,783,599	\$6,987,107	\$7,196,720	\$7,412,622	\$7,635,000
\$5,799,721	\$5,973,713	\$6,152,924	\$6,337,512	\$6,527,637	\$6,723,467	\$6,925,171	\$7,132,926	\$7,346,913
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$11,826,861	\$12,181,667	\$12,547,117	\$12,923,531	\$13,311,236	\$13,710,574	\$14,121,891	\$14,545,547	\$14,981,914
\$3,945,389	\$4,063,750	\$4,185,663	\$4,311,233	\$4,440,570	\$4,573,787	\$4,711,000	\$4,852,330	\$4,997,900
\$526,052	\$541,833	\$558,088	\$574,831	\$592,076	\$609,838	\$628,133	\$646,977	\$666,387
\$5,434,386	\$5,597,417	\$5,765,340	\$5,938,300	\$6,116,449	\$6,299,942	\$6,488,941	\$6,683,609	\$6,884,117
\$9,905,826	\$10,203,001	\$10,509,091	\$10,824,363	\$11,149,094	\$11,483,567	\$11,828,074	\$12,182,916	\$12,548,404
\$21,732,687	\$22,384,668	\$23,056,208	\$23,747,894	\$24,460,331	\$25,194,141	\$25,949,965	\$26,728,464	\$27,530,318
\$7.00	\$7.00	\$8.00	\$8.00	\$8.00	\$8.00	\$9.00	\$9.00	\$9.00
\$4,612,594	\$4,612,594	\$5,271,536	\$5,271,536	\$5,271,536	\$5,271,536	\$5,930,478	\$5,930,478	\$5,930,478
\$4,612,594	\$4,612,594	\$5,271,536	\$5,271,536	\$5,271,536	\$5,271,536	\$5,930,478	\$5,930,478	\$5,930,478
\$26,345,281	\$26,997,262	\$28,327,744	\$29,019,430	\$29,731,867	\$30,465,677	\$31,880,443	\$32,658,942	\$33,460,796
\$1,957,960	\$2,016,699	\$2,077,200	\$2,139,516	\$2,203,701	\$2,269,812	\$2,337,907	\$2,408,044	\$2,480,285
\$1,413,825	\$1,456,239	\$1,499,926	\$1,544,924	\$1,591,272	\$1,639,010	\$1,688,180	\$1,738,826	\$1,790,991
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$1
\$3,371,784	\$3,472,938	\$3,577,126	\$3,684,440	\$3,794,973	\$3,908,822	\$4,026,087	\$4,146,869	\$4,271,275
\$2,272,605	\$2,340,783	\$2,411,006	\$2,483,336	\$2,557,837	\$2,634,572	\$2,713,609	\$2,795,017	\$2,878,868
\$673,096	\$693,289	\$714,088	\$735,511	\$757,576	\$780,303	\$803,712	\$827,824	\$852,658
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$2,945,701	\$3,034,072	\$3,125,094	\$3,218,847	\$3,315,412	\$3,414,875	\$3,517,321	\$3,622,841	\$3,731,526
\$32,662,766	\$33,504,271	\$35,029,964	\$35,922,717	\$36,842,252	\$37,789,374	\$39,423,851	\$40,428,652	\$41,463,597
\$4,111,341	\$4,234,682	\$4,361,722	\$4,492,574	\$4,627,351	\$4,766,171	\$4,909,157	\$5,056,431	\$5,208,124
\$823,037	\$847,728	\$873,159	\$899,354	\$926,335	\$954,125	\$982,749	\$1,012,231	\$1,042,598
\$5,480,841	\$5,645,266	\$5,814,624	\$5,989,062	\$6,168,734	\$6,353,796	\$6,544,410	\$6,740,743	\$6,942,965
\$2,471,624	\$2,545,772	\$2,622,146	\$2,700,810	\$2,781,834	\$2,865,289	\$2,951,248	\$3,039,785	\$3,130,979
\$405,368	\$417,529	\$430,055	\$442,957	\$456,245	\$469,933	\$484,031	\$498,551	\$513,508
\$13,292,210	\$13,690,976	\$14,101,706	\$14,524,757	\$14,960,500	\$15,409,315	\$15,871,594	\$16,347,742	\$16,838,174
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$6,706,362	\$6,907,553	\$7,114,779	\$7,328,223	\$7,548,069	\$7,774,512	\$8,007,747	\$8,247,979	\$8,495,419
\$3,895,000	\$4,010,000	\$4,130,000	\$4,255,000	\$4,385,000	\$4,515,000	\$4,650,000	\$4,790,000	\$4,935,000
\$8,769,194	\$8,895,742	\$9,683,479	\$9,814,737	\$9,948,683	\$10,090,547	\$10,894,510	\$11,042,931	\$11,195,004

Operations Year 23	Operations Year 24	Operations Year 25	Operations Year 26	Operations Year 27	Operations Year 28	Operations Year 29	Operations Year 30	Operations Year 31
2041	2042	2043	2044	2045	2046	2047	2048	2049
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250	\$41,451,250	\$0	\$0	\$0	\$0
\$40,913,875	\$40,916,125	\$40,916,250	\$40,914,875	\$30,509,125	\$0	\$0	\$0	\$0
\$537,375	\$535,125	\$535,000	\$536,375	\$10,942,125	\$0	\$0	\$0	\$0
\$237,375	\$235,125	\$235,000	\$236,375	\$2,898,356	\$0	\$0	\$0	\$0
\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$7,743,769	\$0	\$0	\$0	\$0
\$3,208	\$3,208	\$3,208	\$3,208	\$3,208	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$7,743,769	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$3,208	\$3,208	\$3,208	\$3,208	\$7,746,978	\$0	\$0	\$0	\$0
-\$74,787,107	-\$70,654,732	-\$75,561,318	-\$105,366,518	-\$100,875,143	-\$85,844,809	-\$81,329,809	-\$76,679,809	-\$71,889,809
\$3,895,000	\$4,010,000	\$4,130,000	\$4,255,000	\$4,385,000	\$4,515,000	\$4,650,000	\$4,790,000	\$4,935,000
\$237,375	\$235,125	\$235,000	\$236,375	\$2,898,356	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$7,746,978	\$0	\$0	\$0	\$0
\$0	\$9,151,711	\$34,170,200	\$0	\$0	\$0	\$0	\$0	\$0
-\$70,654,732	-\$75,561,318	-\$105,366,518	-\$100,875,143	-\$85,844,809	-\$81,329,809	-\$76,679,809	-\$71,889,809	-\$66,954,809
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$6,646,105	\$6,845,488	\$7,050,853	\$7,262,378	\$7,480,250	\$7,704,657	\$7,935,797	\$8,173,871	\$8,419,087

**UNLV Funding Model- Open-Air Stadium
GO & Sales Tax Bond Debt Schedule**
Provided by PFM and Hobbs, Ong and associates

Net Debt Service Schedule

Dates	General Obligation Bonds Funding \$543 Million of \$615 Million Project	General Obligation Bonds for \$735 Million Project	Sales Tax Revenue Bonds Funding \$543 Million of \$615 Million Project (1)	Sales Tax Revenue Bonds for \$735 Million Project ⁽¹⁾
12/1/2016				
2017	\$40,237,250	\$48,889,750	\$44,709,000	\$54,325,750
2018	40,239,000	48,893,500	44,711,500	54,327,000
2019	40,237,750	48,891,000	44,711,750	54,327,000
2020	40,236,750	48,890,250	44,707,750	54,323,250
2021	40,239,000	48,893,750	44,707,500	54,323,250
2022	40,237,250	48,888,750	44,708,500	54,324,000
2023	40,239,500	48,893,000	44,708,250	54,327,500
2024	40,238,250	48,893,250	44,709,250	54,325,500
2025	40,236,250	48,891,750	44,708,750	54,325,000
2026	40,236,000	48,890,500	44,709,000	54,322,500
2027	40,234,750	48,891,250	44,712,000	54,324,500
2028	40,234,750	48,890,500	44,709,500	54,327,000
2029	40,238,000	48,889,750	44,708,500	54,326,000
2030	40,236,250	48,890,250	44,710,500	54,322,500
2031	40,236,500	48,893,000	44,711,750	54,327,250
2032	40,235,250	48,888,750	44,708,500	54,325,250
2033	40,239,000	48,893,500	44,712,000	54,327,000
2034	40,238,750	48,892,250	44,707,750	54,327,250
2035	40,235,750	48,890,500	44,711,750	54,325,750
2036	40,236,000	48,893,250	-3,000	-500
2037	0	0	0	0
2038	0	0	0	0
2039	0	0	0	0
2040	0	0	0	0
2041	0	0	0	0
2042	0	0	0	0
2043	0	0	0	0
2044	0	0	0	0
2045	0	0	0	0
2046	0	0	0	0
Total	\$804,742,000	\$977,828,500	\$849,480,500	\$1,032,182,750

TIC (2):	4.07%	4.07%	4.36%	4.36%
Bond Par	\$501,445,000	\$609,295,000	\$557,180,000	\$677,015,000
Premium/Discount	45,066,566	54,756,237	34,319,785	41,701,038
Total Sources	\$546,511,566	\$664,051,237	\$591,499,785	\$718,716,038
Construction Fund	\$543,000,000	\$660,000,000	\$543,000,000	\$660,000,000
Debt Service Reserve Fund			44,712,000	54,327,500
Cost of Issuance	1,000,000	1,000,000	1,000,000	1,000,000
Underwriter's Discount	2,507,225	3,046,475	2,785,900	3,385,075
Rounding	4,341	4,762	1,885	3,463
Total Uses	\$546,511,566	\$664,051,237	\$591,499,785	\$718,716,038

(1) Net of Debt Service Reserve Release

(2) Assumed true interest cost based on G.O. scale of MMD plus 11-50 bps, revenue bond scale of MMD plus 13-77 bps, plus add. 100 bps spread for potential market rate movements until the sale date.

Prepared by PFM and Hobbs, Ong and Associates

5/8/2014

UNLV Funding Model- Open-Air Stadium
GO & Sales Tax Bond Debt Schedule
 Provided by PFM and Hobbs, Ong and associates

2.25 DSC Bond Debt Service Schedule

Dates	30 Year DS	20 Year DS	Revenues	DSC
7/1/2015				
2016	5,493,300	5,495,050	12,370,742	2.252
2017	5,497,900	5,495,650	12,370,742	2.250
2018	5,493,650	5,494,250	12,370,742	2.252
2019	5,495,900	5,495,500	12,370,742	2.251
2020	5,493,950	5,493,700	12,370,742	2.252
2021	5,497,800	5,493,500	12,370,742	2.250
2022	5,496,750	5,494,200	12,370,742	2.251
2023	5,495,800	5,495,100	12,370,742	2.251
2024	5,494,600	5,495,500	12,370,742	2.251
2025	5,492,800	5,494,700	12,370,742	2.252
2026	5,495,050	5,497,000	12,370,742	2.251
2027	5,495,650	5,496,350	12,370,742	2.251
2028	5,494,250	5,497,050	12,370,742	2.252
2029	5,495,500	5,493,050	12,370,742	2.251
2030	5,493,700	5,493,650	12,370,742	2.252
2031	5,493,500	5,497,450	12,370,742	2.252
2032	5,494,200	5,498,050	12,370,742	2.252
2033	5,495,100	5,494,400	12,370,742	2.251
2034	5,495,500	5,495,450	12,370,742	2.251
2035	5,494,700	5,494,450	12,370,742	2.251
2036	5,497,000	0	12,370,742	2.250
2037	5,496,350	0	12,370,742	2.251
2038	5,497,050	0	12,370,742	2.250
2039	5,493,050	0	12,370,742	2.252
2040	5,493,650	0	12,370,742	2.252
2041	5,497,450	0	12,370,742	2.250
2042	5,498,050	0	12,370,742	2.250
2043	5,494,400	0	12,370,742	2.252
2044	5,495,450	0	12,370,742	2.251
2045	5,494,450	0	12,370,742	2.251
Total	\$164,856,500	\$109,904,050		

TIC

7.0496%

7.0639%

Bond Par

68,190,000

58,215,000

Total Sources

68,190,000

58,215,000

Construction Fund

67,349,050

57,423,925

Cost of Issuance

500,000

500,000

Underwriter's Discount

340,950

291,075

Total Uses

\$68,190,000

\$58,215,000

UNLV Funding Model- Enclosed Stadium 30 Year Projections From RCG

	Construction Year 1	Construction Year 2	Construction Year 3	Construction Year 4	Construction Year 5/ Operations Year 1	Operations Year 2
1 Year	2015	2016	2017	2018	2019	2020
2 Inflation Rate						3%
3						
4 Event Programming - Total Events						
5 Total # of Events					11	27
6 Total Annual Attendance					439,884	1,097,399
7						
8 <u>Naming Rights & Sponsorship</u>						
9 Stadium Naming Rights					\$1,277,778	\$3,450,000
10 Advertising					\$1,277,778	\$3,450,000
11 Interest Income					\$0	\$0
12 Other Miscellaneous					\$0	\$0
13 Net Advertising Income					<u>\$2,555,556</u>	<u>\$6,900,000</u>
14						
15 <u>Premium Seating</u>						
16 Suites					\$2,045,581	\$5,523,070
17 Loge Boxes					\$194,000	\$523,800
18 Club Seating					\$1,081,944	\$2,921,250
19 Net Premium Seating Income					<u>\$3,321,526</u>	<u>\$8,968,120</u>
20						
21 Total Contractually Obligated Income					<u>\$5,877,081</u>	<u>\$15,868,120</u>
22						
23 <u>Event Related Ticket Fees:</u>						
24 Facility Fee per ticket					\$2.00	\$2.00
25 Facility Fees					\$879,769	\$2,194,798
26 Facility Fees - TM					\$439,884	\$1,097,399
27 Total Other Event Related					<u>\$1,319,653</u>	<u>\$3,292,197</u>
28						
29 Total COI & Ticket Fees					<u>\$7,196,735</u>	<u>\$19,160,317</u>
30						
31 <u>Event Income</u>						
32 Rental Income					\$466,667	\$2,150,000
33 Suite Ticket Revenue					\$288,000	\$1,467,000
34 Actual Expenses					\$0	\$0
35 Net Rental Income					<u>\$754,667</u>	<u>\$3,617,000</u>
36						
37 <u>Ancillary Income</u>						
38 Non UNLV Games F&B					\$570,535	\$2,458,586
39 Novelty Income					\$145,711	\$842,189
40 Parking Income					\$0	\$0
41 Total Ancillary					<u>\$716,246</u>	<u>\$3,300,775</u>
42						
43 Total Facility Income					<u>\$8,667,648</u>	<u>\$26,078,093</u>
44						
45 <u>Indirect Expenses</u>						
46 Labor Costs					\$834,625	\$2,253,488
47 General & Administrative					\$167,407	\$452,000
48 Operations				\$16,673,515	\$1,216,667	\$3,285,000
49 Utilities					\$1,122,222	\$3,030,000
50 Insurance					\$142,255	\$384,090
51 Total Indirect Expenses					<u>\$3,483,177</u>	<u>\$9,404,578</u>
52						
53 Capital Reserve Contribution					\$0	\$0
54 Operating Reserve Contribution					\$0	\$0
55 UNLV Transferred Revenue					\$3,500,000	\$3,605,000
56						
57 Site and Infrastructure Repayment					\$0	\$2,290,000
58						
59 Net Operating Income/(Loss)					<u>\$1,684,471</u>	<u>\$10,778,515</u>
60 (UNLV & LVCVA)						

UNLV Funding Model- Enclosed Stadium 30 Year Projections From RCG

1 Year	Construction Year 1 2015	Construction Year 2 2016	Construction Year 3 2017	Construction Year 4 2018	Construction Year 5/ Operations Year 1 2019	Operations Year 2 2020
62						
63 Construction Expenses						
64 Design Phase Expenses	\$13,810,274	\$85,820,990	\$25,524,346	\$8,876,347	\$6,124,679	
65 Construction Phase Expenses	\$306,895	\$920,685	\$143,095,156	\$276,153,005	\$172,001,406	\$0
66 Site Cost	\$50,000,000	\$50,000,000				
67 Total Construction Expenses	<u>\$64,117,169</u>	<u>\$136,741,675</u>	<u>\$168,619,502</u>	<u>\$285,029,352</u>	<u>\$178,126,085</u>	<u>\$0</u>
68						
70 Public Funding and Debt Service						
71 Community Facilities District Revenue	\$17,534,708	\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125
72 Pay-Go Construction Payments						
73 CFD Bond Debt Service	<u>\$17,133,500</u>	<u>\$40,267,000</u>	<u>\$52,600,750</u>	<u>\$52,602,000</u>	<u>\$52,600,000</u>	<u>\$52,603,000</u>
74 Remaining Revenues	<u>\$401,208</u>	<u>\$12,337,125</u>	<u>\$3,375</u>	<u>\$2,125</u>	<u>\$4,125</u>	<u>\$1,125</u>
75						
76 Capital Reserve Contribution	\$0	\$0	\$0	\$0	\$0	\$0
77 Operating Reserve Contribution					\$4,125	\$1,125
78 Revenue Towards Early Redemption	<u>\$401,208</u>	<u>\$12,337,125</u>	<u>\$3,375</u>	<u>\$2,125</u>	<u>\$0</u>	<u>\$0</u>
79						
80 Early Redemption Account						
81 Beginning Balance	\$0	\$401,208	\$12,738,333	\$12,741,708	\$12,743,833	\$12,743,833
82 Early Redemption Contribution	\$401,208	\$12,337,125	\$3,375	\$2,125	\$0	\$0
83 Bond Redemption Payments	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
84 Early Redemption Fund Ending Balance	<u>\$401,208</u>	<u>\$12,738,333</u>	<u>\$12,741,708</u>	<u>\$12,743,833</u>	<u>\$12,743,833</u>	<u>\$12,743,833</u>
85						
87 Capital Reserve Account						
88 Beginning Balance	\$0	\$0	\$0	\$0	\$0	\$0
Capital Reserve Contribution from Site and						
89 Infrastructure Repayment	\$0	\$0	\$0	\$0	\$0	\$2,290,000
90 Capital Reserve Contribution from Sales Taxes	\$0	\$0	\$0	\$0	\$0	\$0
91 Capital Reserve Contribution from Operations	\$0	\$0	\$0	\$0	\$0	\$0
92 Excess Early Redemption Fund Transfer	\$0	\$0	\$0	\$0	\$0	\$0
93 Capital Expenses	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
94 Capital Reserve (accumulated)	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$2,290,000</u>

Operating Reserve (accumulated)

Recommended Operating Account = 50% of Total Operating Expenses

\$4,125 \$5,250

Debt Service Coverage (Sales Tax Bonds)

1.00 1.00 1.00 1.00

* In Year 2037 the Operating Reserve Contribution is lowered as the Operating Account reaches approx. 50% of Total Indirect Expenses

** Revenue from potential tax district is currently being analyzed. The projected revenues may exceed the approx. \$61.4 M shown.

Operations Year 3	Operations Year 4	Operations Year 5	Operations Year 6	Operations Year 7	Operations Year 8	Operations Year 9	Operations Year 10	Operations Year 11	Operations Year 12
2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
27	27	27	27	27	27	27	27	27	27
1,097,399	1,097,399	1,097,399	1,097,399	1,097,399	1,097,399	1,097,399	1,097,399	1,097,399	1,097,399
\$3,553,500	\$3,660,105	\$3,843,110	\$4,035,266	\$4,156,324	\$4,281,013	\$4,409,444	\$4,541,727	\$4,677,979	\$4,818,318
\$3,553,500	\$3,660,105	\$3,769,908	\$3,883,005	\$3,999,496	\$4,119,480	\$4,243,065	\$4,370,357	\$4,501,467	\$4,636,512
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$7,107,000	\$7,320,210	\$7,613,018	\$7,918,271	\$8,155,819	\$8,400,494	\$8,652,509	\$8,912,084	\$9,179,446	\$9,454,830
\$5,720,087	\$5,719,940	\$5,891,538	\$6,068,284	\$6,250,332	\$6,437,842	\$6,630,978	\$6,829,907	\$7,034,804	\$7,245,848
\$598,146	\$598,090	\$616,033	\$634,514	\$653,550	\$673,156	\$693,351	\$714,151	\$735,576	\$757,643
\$3,008,888	\$3,099,154	\$3,192,129	\$3,287,893	\$3,386,529	\$3,488,125	\$3,592,769	\$3,700,552	\$3,811,569	\$3,925,916
\$9,327,120	\$9,417,184	\$9,699,700	\$9,990,691	\$10,290,411	\$10,599,124	\$10,917,097	\$11,244,610	\$11,581,949	\$11,929,407
\$16,434,120	\$16,737,394	\$17,312,718	\$17,908,962	\$18,446,231	\$18,999,617	\$19,569,606	\$20,156,694	\$20,761,395	\$21,384,237
\$2.00	\$2.00	\$3.00	\$3.00	\$3.00	\$3.00	\$4.00	\$4.00	\$4.00	\$4.00
\$2,194,798	\$2,194,798	\$3,292,197	\$3,292,197	\$3,292,197	\$3,292,197	\$4,389,596	\$4,389,596	\$4,389,596	\$4,389,596
\$1,097,399	\$1,097,399	\$1,646,099	\$1,646,099	\$1,646,099	\$1,646,099	\$2,194,798	\$2,194,798	\$2,194,798	\$2,194,798
\$3,292,197	\$3,292,197	\$4,938,296	\$4,938,296	\$4,938,296	\$4,938,296	\$6,584,394	\$6,584,394	\$6,584,394	\$6,584,394
\$19,726,317	\$20,029,591	\$22,251,013	\$22,847,257	\$23,384,526	\$23,937,913	\$26,154,000	\$26,741,088	\$27,345,789	\$27,968,631
\$2,214,500	\$2,280,935	\$2,349,363	\$2,419,844	\$2,492,439	\$2,567,212	\$2,644,229	\$2,723,556	\$2,805,262	\$2,889,420
\$1,511,010	\$1,556,341	\$1,603,031	\$1,651,122	\$1,700,655	\$1,751,675	\$1,804,225	\$1,858,352	\$1,914,103	\$1,971,526
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$3,725,510	\$3,837,275	\$3,952,394	\$4,070,966	\$4,193,094	\$4,318,887	\$4,448,454	\$4,581,908	\$4,719,365	\$4,860,946
\$2,506,463	\$2,568,532	\$2,632,463	\$2,698,312	\$2,779,261	\$2,862,639	\$2,948,518	\$3,036,974	\$3,128,083	\$3,221,926
\$867,455	\$893,479	\$920,283	\$947,891	\$976,328	\$1,005,618	\$1,035,787	\$1,066,860	\$1,098,866	\$1,131,832
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$3,373,918	\$3,462,011	\$3,552,746	\$3,646,203	\$3,755,590	\$3,868,257	\$3,984,305	\$4,103,834	\$4,226,949	\$4,353,758
\$26,825,746	\$27,328,877	\$29,756,153	\$30,564,426	\$31,333,210	\$32,125,057	\$34,586,759	\$35,426,830	\$36,292,103	\$37,183,334
\$2,309,825	\$2,367,571	\$2,426,760	\$2,487,429	\$2,562,052	\$2,638,914	\$2,718,081	\$2,799,623	\$2,883,612	\$2,970,120
\$463,074	\$474,419	\$486,043	\$497,951	\$512,889	\$528,276	\$544,124	\$560,448	\$577,261	\$594,579
\$3,365,483	\$3,447,937	\$3,532,411	\$3,618,955	\$3,727,524	\$3,839,350	\$3,954,530	\$4,073,166	\$4,195,361	\$4,321,222
\$3,150,735	\$3,276,288	\$3,406,851	\$3,542,626	\$3,648,904	\$3,758,371	\$3,871,123	\$3,987,256	\$4,106,874	\$4,230,080
\$395,612	\$407,481	\$407,481	\$407,481	\$419,705	\$432,296	\$445,265	\$458,623	\$472,382	\$486,553
\$9,684,729	\$9,973,696	\$10,259,546	\$10,554,441	\$10,871,075	\$11,197,207	\$11,533,123	\$11,879,117	\$12,235,490	\$12,602,555
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$3,713,150	\$3,824,545	\$3,939,281	\$4,057,459	\$4,179,183	\$4,304,559	\$4,433,695	\$4,566,706	\$4,703,707	\$4,844,819
\$2,290,000	\$2,290,000	\$2,290,000	\$2,355,000	\$2,425,000	\$2,500,000	\$2,575,000	\$2,655,000	\$2,730,000	\$2,815,000
\$11,137,867	\$11,240,637	\$13,267,326	\$13,597,526	\$13,857,952	\$14,123,292	\$16,044,941	\$16,326,007	\$16,622,905	\$16,920,961

Operations Year 3	Operations Year 4	Operations Year 5	Operations Year 6	Operations Year 7	Operations Year 8	Operations Year 9	Operations Year 10	Operations Year 11	Operations Year 12
2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125
\$52,604,125	\$52,601,625	\$52,603,500	\$52,602,625	\$52,601,875	\$51,966,875	\$51,964,250	\$51,964,500	\$51,964,875	\$51,967,500
\$0	\$2,500	\$625	\$1,500	\$2,250	\$637,250	\$639,875	\$639,625	\$639,250	\$636,625
\$0	\$0	\$0	\$0	\$0	\$337,250	\$339,875	\$339,625	\$339,250	\$336,625
\$0	\$2,500	\$625	\$1,500	\$2,250	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$12,743,833	\$12,743,833	\$12,743,833	\$12,743,833	\$12,743,833	\$3,833	\$3,833	\$3,833	\$3,833	\$3,833
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$12,740,000	\$0	\$0	\$0	\$0	\$0
\$12,743,833	\$12,743,833	\$12,743,833	\$12,743,833	\$3,833	\$3,833	\$3,833	\$3,833	\$3,833	\$3,833
\$2,290,000	\$4,580,000	\$6,870,000	\$9,160,000	\$11,515,000	\$12,971,036	\$15,095,406	\$18,010,281	-\$17,263,614	-\$14,194,364
\$2,290,000	\$2,290,000	\$2,290,000	\$2,355,000	\$2,425,000	\$2,500,000	\$2,575,000	\$2,655,000	\$2,730,000	\$2,815,000
\$0	\$0	\$0	\$0	\$0	\$337,250	\$339,875	\$339,625	\$339,250	\$336,625
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$968,964	\$712,880	\$0	\$38,268,520	\$0	\$5,616,473
\$4,580,000	\$6,870,000	\$9,160,000	\$11,515,000	\$12,971,036	\$15,095,406	\$18,010,281	-\$17,263,614	-\$14,194,364	-\$16,659,212
\$5,250	\$7,750	\$8,375	\$9,875	\$12,125	\$312,125	\$612,125	\$912,125	\$1,212,125	\$1,512,125
				\$5,435,537	\$5,598,603	\$5,766,561	\$5,939,558	\$6,117,745	\$6,301,277
1.00	1.00	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01

Operations Year 13	Operations Year 14	Operations Year 15	Operations Year 16	Operations Year 17	Operations Year 18	Operations Year 19	Operations Year 20	Operations Year 21	Operations Year 22
2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
27	27	27	27	27	27	27	27	27	27
1,097,399	1,097,399	1,097,399	1,097,399	1,097,399	1,097,399	1,097,399	1,097,399	1,097,399	1,097,399
\$4,962,868	\$5,111,754	\$5,265,107	\$5,423,060	\$5,585,752	\$5,753,324	\$5,925,924	\$6,103,702	\$6,286,813	\$6,475,417
\$4,775,607	\$4,918,875	\$5,066,441	\$5,218,435	\$5,374,988	\$5,536,237	\$5,702,324	\$5,873,394	\$6,049,596	\$6,231,084
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$9,738,475	\$10,030,629	\$10,331,548	\$10,641,494	\$10,960,739	\$11,289,561	\$11,628,248	\$11,977,096	\$12,336,408	\$12,706,501
\$7,463,224	\$7,687,120	\$7,917,734	\$8,155,266	\$8,399,924	\$8,651,922	\$8,911,479	\$9,178,824	\$9,454,188	\$9,737,814
\$780,372	\$803,783	\$827,897	\$852,734	\$878,316	\$904,665	\$931,805	\$959,759	\$988,552	\$1,018,209
\$4,043,693	\$4,165,004	\$4,289,954	\$4,418,653	\$4,551,212	\$4,687,749	\$4,828,381	\$4,973,233	\$5,122,430	\$5,276,102
\$12,287,289	\$12,655,908	\$13,035,585	\$13,426,653	\$13,829,452	\$14,244,336	\$14,671,666	\$15,111,816	\$15,565,170	\$16,032,125
\$22,025,764	\$22,686,537	\$23,367,133	\$24,068,147	\$24,790,191	\$25,533,897	\$26,299,914	\$27,088,911	\$27,901,579	\$28,738,626
\$5.00	\$5.00	\$5.00	\$5.00	\$6.00	\$6.00	\$6.00	\$6.00	\$7.00	\$7.00
\$5,486,995	\$5,486,995	\$5,486,995	\$5,486,995	\$6,584,394	\$6,584,394	\$6,584,394	\$6,584,394	\$7,681,793	\$7,681,793
\$2,743,498	\$2,743,498	\$2,743,498	\$2,743,498	\$3,292,197	\$3,292,197	\$3,292,197	\$3,292,197	\$3,840,897	\$3,840,897
\$8,230,493	\$8,230,493	\$8,230,493	\$8,230,493	\$9,876,591	\$9,876,591	\$9,876,591	\$9,876,591	\$11,522,690	\$11,522,690
\$30,256,256	\$30,917,029	\$31,597,625	\$32,298,639	\$34,666,782	\$35,410,488	\$36,176,505	\$36,965,502	\$39,424,268	\$40,261,316
\$2,976,103	\$3,065,386	\$3,157,347	\$3,252,068	\$3,349,630	\$3,450,119	\$3,553,622	\$3,660,231	\$3,770,038	\$3,883,139
\$2,030,672	\$2,091,592	\$2,154,339	\$2,218,970	\$2,285,539	\$2,354,105	\$2,424,728	\$2,497,470	\$2,572,394	\$2,649,566
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$5,006,774	\$5,156,977	\$5,311,687	\$5,471,037	\$5,635,168	\$5,804,223	\$5,978,350	\$6,157,701	\$6,342,432	\$6,532,705
\$3,318,583	\$3,418,141	\$3,520,685	\$3,626,306	\$3,735,095	\$3,847,148	\$3,962,562	\$4,081,439	\$4,203,882	\$4,329,999
\$1,165,787	\$1,200,760	\$1,236,783	\$1,273,887	\$1,312,103	\$1,351,467	\$1,392,011	\$1,433,771	\$1,476,784	\$1,521,087
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$4,484,370	\$4,618,901	\$4,757,468	\$4,900,192	\$5,047,198	\$5,198,614	\$5,354,573	\$5,515,210	\$5,680,666	\$5,851,086
\$39,747,401	\$40,692,908	\$41,666,780	\$42,669,869	\$45,349,149	\$46,413,326	\$47,509,428	\$48,638,413	\$51,447,366	\$52,645,106
\$3,059,224	\$3,151,001	\$3,245,531	\$3,342,897	\$3,443,184	\$3,546,479	\$3,652,873	\$3,762,460	\$3,875,333	\$3,991,593
\$612,416	\$630,789	\$649,713	\$669,204	\$689,280	\$709,959	\$731,257	\$753,195	\$775,791	\$799,065
\$4,450,859	\$4,584,384	\$4,721,916	\$4,863,573	\$5,009,481	\$5,159,765	\$5,314,558	\$5,473,995	\$5,638,215	\$5,807,361
\$4,356,983	\$4,487,692	\$4,622,323	\$4,760,992	\$4,903,822	\$5,050,937	\$5,202,465	\$5,358,539	\$5,519,295	\$5,684,874
\$501,150	\$516,184	\$531,670	\$547,620	\$564,049	\$580,970	\$598,399	\$616,351	\$634,842	\$653,887
\$12,980,632	\$13,370,050	\$13,771,152	\$14,184,287	\$14,609,815	\$15,048,110	\$15,499,553	\$15,964,539	\$16,443,476	\$16,936,780
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$4,990,163	\$5,139,868	\$5,294,064	\$5,452,886	\$5,616,473	\$5,784,967	\$5,958,516	\$6,137,271	\$6,321,389	\$6,511,031
\$2,900,000	\$2,985,000	\$3,075,000	\$3,165,000	\$3,260,000	\$3,360,000	\$3,460,000	\$3,565,000	\$3,670,000	\$3,780,000
\$18,876,606	\$19,197,990	\$19,526,564	\$19,867,697	\$21,862,861	\$22,220,249	\$22,591,359	\$22,971,602	\$25,012,501	\$25,417,295

Operations Year 13	Operations Year 14	Operations Year 15	Operations Year 16	Operations Year 17	Operations Year 18	Operations Year 19	Operations Year 20	Operations Year 21	Operations Year 22
2031	2032	2033	2034	2035	2036	2037	2038	2039	2040

\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125
\$51,964,500	\$51,967,750	\$51,964,000	\$51,964,875	\$51,966,625	\$51,965,500	\$51,962,625	\$51,963,750	\$51,964,375	\$51,964,875
\$639,625	\$636,375	\$640,125	\$639,250	\$637,500	\$638,625	\$641,500	\$640,375	\$639,750	\$639,250
\$339,625	\$336,375	\$340,125	\$339,250	\$337,500	\$338,625	\$341,500	\$340,375	\$339,750	\$339,250
\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

\$3,833	\$3,833	\$3,833	\$3,833	\$3,833	\$3,833	\$3,833	\$3,833	\$3,833	\$3,833
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$3,833	\$3,833	\$3,833	\$3,833	\$3,833	\$3,833	\$3,833	\$3,833	\$3,833	\$3,833

-\$16,659,212	-\$13,419,587	-\$11,289,915	-\$34,528,082	-\$31,926,887	-\$28,329,387	-\$24,630,762	-\$20,829,262	-\$73,435,564	-\$70,891,458
\$2,900,000	\$2,985,000	\$3,075,000	\$3,165,000	\$3,260,000	\$3,360,000	\$3,460,000	\$3,565,000	\$3,670,000	\$3,780,000
\$339,625	\$336,375	\$340,125	\$339,250	\$337,500	\$338,625	\$341,500	\$340,375	\$339,750	\$339,250
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$1,191,703	\$26,653,292	\$903,056	\$0	\$0	\$0	\$56,511,676	\$1,465,645	\$6,469,774
-\$13,419,587	-\$11,289,915	-\$34,528,082	-\$31,926,887	-\$28,329,387	-\$24,630,762	-\$20,829,262	-\$73,435,564	-\$70,891,458	-\$73,241,982

\$1,812,125	\$2,112,125	\$2,412,125	\$2,712,125	\$3,012,125	\$3,312,125	\$3,612,125	\$3,912,125	\$4,212,125	\$4,512,125
\$6,490,316	\$6,685,025	\$6,885,576	\$7,092,143	\$7,304,908	\$7,524,055	\$7,749,776	\$7,982,270	\$8,221,738	\$8,468,390

1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
------	------	------	------	------	------	------	------	------	------

Operations Year 23	Operations Year 24	Operations Year 25	Operations Year 26	Operations Year 27	Operations Year 28	Operations Year 29	Operations Year 30	Operations Year 31
2041	2042	2043	2044	2045	2046	2047	2048	2049
3%	3%	3%	3%	3%	3%	3%	3%	3%
27	27	27	27	27	27	27	27	27
1,097,399	1,097,399	1,097,399	1,097,399	1,097,399	1,097,399	1,097,399	1,097,399	1,097,399
\$6,669,679	\$6,869,770	\$7,075,863	\$7,288,139	\$7,506,783	\$7,731,986	\$7,963,946	\$8,202,864	\$8,448,950
\$6,418,016	\$6,610,557	\$6,808,873	\$7,013,140	\$7,223,534	\$7,440,240	\$7,663,447	\$7,893,350	\$8,130,151
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$13,087,696	\$13,480,327	\$13,884,736	\$14,301,278	\$14,730,317	\$15,172,226	\$15,627,393	\$16,096,215	\$16,579,101
\$10,029,949	\$10,330,847	\$10,640,772	\$10,959,996	\$11,288,795	\$11,627,459	\$11,976,283	\$12,335,572	\$12,705,639
\$1,048,755	\$1,080,218	\$1,112,624	\$1,146,003	\$1,180,383	\$1,215,795	\$1,252,268	\$1,289,836	\$1,328,532
\$5,434,386	\$5,597,417	\$5,765,340	\$5,938,300	\$6,116,449	\$6,299,942	\$6,488,941	\$6,683,609	\$6,884,117
\$16,513,089	\$17,008,482	\$17,518,736	\$18,044,298	\$18,585,627	\$19,143,196	\$19,717,492	\$20,309,017	\$20,918,287
\$29,600,785	\$30,488,808	\$31,403,473	\$32,345,577	\$33,315,944	\$34,315,423	\$35,344,885	\$36,405,232	\$37,497,389
\$7.00	\$7.00	\$8.00	\$8.00	\$8.00	\$8.00	\$9.00	\$9.00	\$9.00
\$7,681,793	\$7,681,793	\$8,779,192	\$8,779,192	\$8,779,192	\$8,779,192	\$9,876,591	\$9,876,591	\$9,876,591
\$3,840,897	\$3,840,897	\$4,389,596	\$4,389,596	\$4,389,596	\$4,389,596	\$4,938,296	\$4,938,296	\$4,938,296
\$11,522,690	\$11,522,690	\$13,168,788	\$13,168,788	\$13,168,788	\$13,168,788	\$14,814,887	\$14,814,887	\$14,814,887
\$41,123,474	\$42,011,498	\$44,572,261	\$45,514,365	\$46,484,732	\$47,484,211	\$50,159,772	\$51,220,118	\$52,312,275
\$3,999,633	\$4,119,622	\$4,243,211	\$4,370,507	\$4,501,623	\$4,636,671	\$4,775,771	\$4,919,045	\$5,066,616
\$2,729,053	\$2,810,924	\$2,895,252	\$2,982,110	\$3,071,573	\$3,163,720	\$3,258,632	\$3,356,391	\$3,457,082
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1	\$1
\$6,728,686	\$6,930,546	\$7,138,463	\$7,352,617	\$7,573,195	\$7,800,391	\$8,034,403	\$8,275,435	\$8,523,698
\$4,459,899	\$4,593,696	\$4,731,506	\$4,873,452	\$5,019,655	\$5,170,245	\$5,325,352	\$5,485,113	\$5,649,666
\$1,566,720	\$1,613,722	\$1,662,133	\$1,711,997	\$1,763,357	\$1,816,258	\$1,870,746	\$1,926,868	\$1,984,674
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$6,026,619	\$6,207,417	\$6,393,640	\$6,585,449	\$6,783,012	\$6,986,503	\$7,196,098	\$7,411,981	\$7,634,340
\$53,878,779	\$55,149,461	\$58,104,363	\$59,452,430	\$60,840,940	\$62,271,104	\$65,390,272	\$66,907,534	\$68,470,313
\$4,111,341	\$4,234,682	\$4,361,722	\$4,492,574	\$4,627,351	\$4,766,171	\$4,909,157	\$5,056,431	\$5,208,124
\$823,037	\$847,728	\$873,159	\$899,354	\$926,335	\$954,125	\$982,749	\$1,012,231	\$1,042,598
\$5,981,582	\$6,161,029	\$6,345,860	\$6,536,236	\$6,732,323	\$6,934,293	\$7,142,321	\$7,356,591	\$7,577,289
\$5,855,420	\$6,031,083	\$6,212,015	\$6,398,376	\$6,590,327	\$6,788,037	\$6,991,678	\$7,201,428	\$7,417,471
\$673,504	\$693,709	\$714,520	\$735,955	\$758,034	\$780,775	\$804,198	\$828,324	\$853,174
\$17,444,883	\$17,968,230	\$18,507,277	\$19,062,495	\$19,634,370	\$20,223,401	\$20,830,103	\$21,455,006	\$22,098,656
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$6,706,362	\$6,907,553	\$7,114,779	\$7,328,223	\$7,548,069	\$7,774,512	\$8,007,747	\$8,247,979	\$8,495,419
\$3,895,000	\$4,010,000	\$4,130,000	\$4,255,000	\$4,385,000	\$4,515,000	\$4,650,000	\$4,790,000	\$4,935,000
\$25,832,534	\$26,263,679	\$28,352,307	\$28,806,713	\$29,273,500	\$29,758,192	\$31,902,422	\$32,414,548	\$32,941,238

Operations Year 23	Operations Year 24	Operations Year 25	Operations Year 26	Operations Year 27	Operations Year 28	Operations Year 29	Operations Year 30	Operations Year 31
2041	2042	2043	2044	2045	2046	2047	2048	2049
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125	\$52,604,125	\$0	\$0	\$0	\$0
\$51,965,375	\$51,965,750	\$51,965,625	\$51,964,375	\$39,544,500	\$0	\$0	\$0	\$0
\$638,750	\$638,375	\$638,500	\$639,750	\$13,059,625	\$0	\$0	\$0	\$0
\$338,750	\$338,375	\$338,500	\$339,750	\$2,898,356	\$0	\$0	\$0	\$0
\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$9,861,269	\$0	\$0	\$0	\$0
\$3,833	\$3,833	\$3,833	\$3,833	\$3,833	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$9,861,269	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$3,833	\$3,833	\$3,833	\$3,833	\$9,865,103	\$0	\$0	\$0	\$0
-\$73,241,982	-\$69,008,232	-\$73,811,568	-\$103,513,268	-\$99,258,268	-\$85,008,165	-\$80,493,165	-\$75,843,165	-\$71,053,165
\$3,895,000	\$4,010,000	\$4,130,000	\$4,255,000	\$4,385,000	\$4,515,000	\$4,650,000	\$4,790,000	\$4,935,000
\$338,750	\$338,375	\$338,500	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$0	\$0	\$0	\$0	\$9,865,103	\$0	\$0	\$0	\$0
\$0	\$9,151,711	\$34,170,200	\$0	\$0	\$0	\$0	\$0	\$0
-\$69,008,232	-\$73,811,568	-\$103,513,268	-\$99,258,268	-\$85,008,165	-\$80,493,165	-\$75,843,165	-\$71,053,165	-\$66,118,165
\$4,812,125	\$5,112,125	\$5,412,125	\$5,712,125	\$6,012,125	\$6,012,125	\$6,012,125	\$6,012,125	\$6,012,125
\$8,722,442	\$8,984,115	\$9,253,638	\$9,531,247	\$9,817,185	\$10,111,700	\$10,415,051	\$10,727,503	\$11,049,328
1.01	1.01	1.01	1.01	1.33	n/a	n/a	n/a	n/a

**UNLV Funding Model- Open-Air Stadium
GO & Sales Tax Bond Debt Schedule**
Provided by PFM and Hobbs, Ong and associates

Net Debt Service Schedule

Dates	General Obligation Bonds for \$853 million project	Sales Tax Revenue Bonds for \$853 million project ⁽¹⁾
12/1/2016		
2017	\$17,133,500	\$22,006,750
2018	20,133,500	22,006,750
2019	20,133,500	22,006,750
2020	32,783,500	35,836,750
2021	19,817,250	21,661,000
2022	33,117,250	36,201,000
2023	19,484,750	21,297,500
2024	33,464,750	36,582,500
2025	19,135,250	20,915,375
2026	33,835,250	36,980,375
2027	18,767,750	20,513,750
2028	34,222,750	37,403,750
2029	18,381,375	20,091,500
2030	34,626,375	37,846,500
2031	17,975,250	19,647,625
2032	35,055,250	38,317,625
2033	17,548,250	19,180,875
2034	35,503,250	38,805,875
2035	17,099,375	18,690,250
2036	35,974,375	39,320,250
2037	16,627,500	18,174,500
2038	36,472,500	39,864,500
2039	16,131,375	17,632,250
2040	36,991,375	40,432,250
2041	15,609,875	17,062,250
2042	37,539,875	41,032,250
2043	15,061,625	16,463,000
2044	38,116,625	41,663,000
2045	14,485,250	15,833,000
2046	38,725,250	42,328,000
Total	\$779,953,750	\$855,797,750

TIC (2):	4.07%	4.59%	4.36%	4.86%
Bond Par	\$501,445,000	\$813,790,000	\$557,180,000	\$898,225,000
Premium/Discount	<u>45,066,566</u>	<u>44,281,193</u>	<u>34,319,785</u>	<u>18,701,451</u>
Total Sources	\$546,511,566	\$858,071,193	\$591,499,785	\$916,926,451
Construction Fund	\$543,000,000	\$853,000,000	\$543,000,000	\$853,000,000
Debt Service Reserve Fund			44,712,000	58,432,750
Cost of Issuance	1,000,000	1,000,000	1,000,000	1,000,000
Underwriter's Discount	2,507,225	4,068,950	2,785,900	4,491,125
Rounding	<u>4,341</u>	<u>2,243</u>	<u>1,885</u>	<u>2,576</u>
Total Uses	\$546,511,566	\$858,071,193	\$591,499,785	\$916,926,451

(1) Net of Debt Service Reserve Release

(2) Assumed true interest cost based on G.O. scale of MMD plus 11-50 bps, revenue bond scale of MMD plus 13-77 bps, plus add. 100 bps spread for potential market rate movements until the sale date.

UNLV Funding Model- Open-Air Stadium
GO & Sales Tax Bond Debt Schedule
 Provided by PFM and Hobbs, Ong and associates

2.25 DSC Bond Debt Service Schedule

Dates	30 Year DS	20 Year DS	Revenues	DSC
7/1/2015				
2016	5,493,300	5,495,050	12,370,742	2.252
2017	5,497,900	5,495,650	12,370,742	2.250
2018	5,493,650	5,494,250	12,370,742	2.252
2019	5,495,900	5,495,500	12,370,742	2.251
2020	5,493,950	5,493,700	12,370,742	2.252
2021	5,497,800	5,493,500	12,370,742	2.250
2022	5,496,750	5,494,200	12,370,742	2.251
2023	5,495,800	5,495,100	12,370,742	2.251
2024	5,494,600	5,495,500	12,370,742	2.251
2025	5,492,800	5,494,700	12,370,742	2.252
2026	5,495,050	5,497,000	12,370,742	2.251
2027	5,495,650	5,496,350	12,370,742	2.251
2028	5,494,250	5,497,050	12,370,742	2.252
2029	5,495,500	5,493,050	12,370,742	2.251
2030	5,493,700	5,493,650	12,370,742	2.252
2031	5,493,500	5,497,450	12,370,742	2.252
2032	5,494,200	5,498,050	12,370,742	2.252
2033	5,495,100	5,494,400	12,370,742	2.251
2034	5,495,500	5,495,450	12,370,742	2.251
2035	5,494,700	5,494,450	12,370,742	2.251
2036	5,497,000	0	12,370,742	2.250
2037	5,496,350	0	12,370,742	2.251
2038	5,497,050	0	12,370,742	2.250
2039	5,493,050	0	12,370,742	2.252
2040	5,493,650	0	12,370,742	2.252
2041	5,497,450	0	12,370,742	2.250
2042	5,498,050	0	12,370,742	2.250
2043	5,494,400	0	12,370,742	2.252
2044	5,495,450	0	12,370,742	2.251
2045	5,494,450	0	12,370,742	2.251
Total	\$164,856,500	\$109,904,050		

TIC 7.0496% 7.0639%

Bond Par	68,190,000	58,215,000
Total Sources	68,190,000	58,215,000
Construction Fund	67,349,050	57,423,925
Cost of Issuance	500,000	500,000
Underwriter's Discount	340,950	291,075
Total Uses	\$68,190,000	\$58,215,000



C

APPENDIX- STADIUM SITE ANALYSIS

[illegible]

Site Cost Assessment - UNLV Stadium		8/25/2014		
Site Options and Related Estimated Costs - All Sites				
	Site Southwest of Thomas and Mack	Site Southwest of Thomas and Mack	Site east of Koval Lane on Tropicana	Notes
	<u>Option A - Swenson Relocation, At-Grade</u>	<u>Option A-1 - Swenson Relocation, Elevated</u>	<u>Option B - Tropicana East of Koval</u>	
<u>Scope Item</u>				
Swenson Relocation and Tropicana Widening/Utility Impacts	\$9,000,000	\$17,000,000	\$0	Estimated Project Cost
Tropicana and adjacent street improvements, utility relocations, signal improvements	\$0	\$0	\$10,800,000	Estimated Project Cost
Utility allowance - relocation of existing on site and providing service to limits of site (does not include connection fees)	\$3,000,000	\$3,000,000	\$0	Estimated Project Cost
Provide utility services to limits of site	\$0	\$0	\$4,500,000	Excludes connection fees
Site Preparation, Demo, etc to provide a site ready for development	\$1,000,000	\$1,000,000	\$0	Estimated Project Cost
Additional traffic, off-site, off-site utility improvements.	\$11,500,000	\$11,500,000	\$3,200,000	Allowance, Estimated Project Cost
Remove and replace impacted UNLV campus facilities, (i.e. Campus Services Building)	\$10,000,000	\$10,000,000	\$0	Allowance, Estimated Project Cost
2,500 Structured Parking Spaces (replacement of UNLV campus lost spaces related to stadium)	\$50,000,000	\$50,000,000	\$0	Estimated Project Cost. Replacement of UNLV lost parking from stadium footprint. Includes 2,000 spaces of lost parking from stadium footprint and 500 lost spaces from the structured parking footprint for the 2,000 replacement spaces. This is UNLV replacement parking and does not include stadium parking.
3,500 On-Site Surface Parking Spaces	\$0	\$0	\$14,000,000	Estimated Project Cost
3,200 surface parking spaces at Clark County land west of Paradise Road for stadium related parking, north of the RPZ.	\$12,800,000	\$12,800,000	\$12,800,000	Estimated Project Cost
10% Contingency Factor	\$9,730,000	\$10,530,000	\$4,530,000	Allowance
<u>Total, Excluding Property Acquisition</u>	<u>\$107,030,000</u>	<u>\$115,830,000</u>	<u>\$49,830,000</u>	
			Providing overhead crossings over Swenson Street and Paradise Road to access the stadium is est. at \$4M - \$6M per overhead crossing, or \$8m - \$12M total for both. Both overhead crossings would likely be required to have escalators and elevators to meet code and to provide an acceptable level of service. The maintenance activities/expense for the	



Figure 1 – Alternative A



Figure 1 – Swenson Street Realignment Alternative A-1

1. Alternative A-1

Alternative A-1, shown in **Figure 1**, modifies the Tropicana Boulevard/Paradise Road and Swenson Street intersections and relocates the north section of Swenson Street by directing thru movements onto a grade separated bypass, to create more contiguous land for the UNLV campus. The major East to North left turn movement from Tropicana Avenue to Swenson Street is proposed to be relocated to the intersection of Paradise Road.

The following summarizes the opinion of probable construction cost for Alternative A-1:

- The Opinion of Probable Construction Cost is approximately **\$13,300,000***

** Does not include utility relocations and adjustment, demolition of existing structures and roadways, or right of way acquisition.*



Figure 1 – Swenson Street Realignment Alternative A-1

DESIGN CONSIDERATIONS

- Design Speed = 40 mph
- Posted Speed = 30 mph
- R_{min} (no super) = 762'
- R_{min} ($e_{max} = 4\%$) = 533'
- $K_{crest} = 44$
- $K_{Sag} = 64$
- Required Vertical Clearance = 16.5'
- Top of Elevated Section = 22'
- Max Grade = 6% (5% preferred)
 - 4% max preferred downgrade
- Shoulder width = 12' min.
 - 2-4' Left
 - 8-10' Right
- Elevated Section = 38'
 - 2 - 12' through lanes
 - 14' shoulder

SUMMARY

- Structural Elements = 1,200' (Approach Ramping)
- Bridge = 400'
- Grade Separated Opinion Of Probable Cost = \$13.3 Million (Alternative A-1)
- Compare with on-grade option - Opinion of Probable Cost = \$7.3 Million (Alternative A)



PRELIMINARY UTILITY AND ACCESS EVALUATION

UNLV EVENT STADIUM PLANNING UPDATE

CLARK COUNTY, NEVADA

A.P.N. 162-21-802-001, 162-21-802-002, 162-21-802-003,
162-21-802-004, 162-21-802-005, 162-21-810-008,
162-21-810-009

Prepared for:
University of Nevada Las Vegas
c/o Mr. David Frommer
4505 S. Maryland Parkway
Box 451027
Las Vegas, Nevada 89154

Prepared by:

Kimley»Horn

July 2014
09751003
2014© Kimley-Horn and Associates, Inc.



1. UTILITY REVIEW

Kimley-Horn conducted a preliminary review of the existing utility infrastructure for a proposed 60,000 seat stadium generally located at the northeast corner of Koval Lane and Tropicana Avenue. **Figure 1** summarizes the utility infrastructure surrounding the site.

1.1 Potable Water System

Kimley-Horn met with Las Vegas Valley Water District (LVVWD) to obtain record drawings, and to identify any constraints in the existing potable water system or potential conflicts with the proposed development. The existing offsite potable water system in Tropicana Avenue consists of 12", 60", and 90" diameter pipelines running along the southernmost side of Tropicana Avenue. The major lines for connection to the site are the 12" and 60" pipelines from LVVWD system at South Las Vegas Boulevard and East Tropicana Avenue, to Paradise Road and East Tropicana Avenue. Service to the site of interest includes a 2" service lateral to parcel 162-21-802-001, a 12" ACP service lateral to parcel 162-21-802-005, and two (2) 8" service laterals to parcel 162-21-810-005.

The existing offsite potable water system in Deckow Lane includes a 10" diameter pipeline with service potential. Private road, Kelch Drive, contains a 16" PVC pipeline (public) with two (2) 8" service laterals to parcel 162-21-810-005, two (2) 8" service laterals and fire access (hydrant) to parcel 162-21-810-009, and two (2) 8" service laterals to parcel 162-21-810-008. The 16" main line connects to the 12" system in Tropicana Avenue via 16"x12" reducer.

Although LVVWD staff was unaware of any major issues in the existing system, under existing demands, they did indicate that a comprehensive water network analysis would be required for the project. The previous site system was serviced from the 12" ACP lateral to parcel 162-21-802-005, and fed from an existing 6'x3' FMCT combination fire and domestic meters on Tropicana Avenue. Later development removed the existing vault and installed a meter vault per UDACS DWG C-475. It appears the remaining laterals are stubbed and do not currently have meters or backflow devices installed. Further coordination with LVVWD and an in-field analysis should be conducted to confirm the status of these existing utilities. Knowing that FMCT's are no longer manufactured, one consideration is that any outdated meters and backflow devices may have to be replaced with new equipment.

Kimley-Horn recommends that if the proposed site plan advances, Kimley-Horn will complete a comprehensive water network analysis for the proposed utility layout. Data from this analysis, along with meetings and coordination with the LVVWD will define what improvements will be required to the water system in accordance with the site plan. Please refer to the attached existing utilities exhibit for preliminary reference.

1.2 Sanitary Sewer System

The existing offsite sanitary sewer system in Tropicana Avenue consists of an 18" and 24" (upsized to 27" at parcel 162-21-802-005) diameter pipelines running along the northern side of Tropicana Avenue. The major line for existing points of connection to the site is the 18" sewer line from the Clark County Water Reclamation District (CCWRD) system at South Las Vegas Boulevard and East Tropicana Avenue, to Paradise Road and East Tropicana Avenue. Service to the site of interest includes an 8" stub to parcel 162-21-802-004, and an 8" stub to parcel 162-21-810-005. The existing offsite sanitary sewer system in private road, Kelch Drive, contains an 8" PVC pipeline (public) with single, 8" service laterals stubbed to parcels 162-21-810-005, 162-21-810-009, and 162-21-810-008. Currently there is no sanitary sewer system access in Deckow Lane.

Kimley-Horn estimated a peak daily flow of approximately 500,000 GPD for a 60,000 seat stadium (based on previous Stadium Master Plan size). With this estimate, Kimley-Horn met with the Clark County Water Reclamation District (CCWRD) to address any capacity issues, and to identify any major conflict with regards to potentially tapping into the existing system. CCWRD indicated that the existing system in East Tropicana Avenue and Kelch Drive does NOT have the available capacity to support the proposed development. The nearest point of connection for the proposed development is at CCWRD manhole TRU1 located at the Harmon Avenue 60" crosstown interceptor, located approximately 1,600 feet north of the proposed site. Since the existing 12" sewer line in Kelch Drive and LaMar Circle does not have the available capacity to accommodate the estimated demand, this connection would require the installation of a separate sewer line in Kelch Drive and LaMar Circle to E Harmon Avenue in accordance with CCWRD design standards. The estimated cost of the sewer system installation is on the order of \$450,000 - \$500,000.

Further sewer analysis will be required to determine a feasible solution for necessary improvements. Please refer to the attached existing utilities exhibit for preliminary reference.

1.3 Storm Drain System

The existing offsite storm drain system in Tropicana Avenue consists of a 48" diameter pipeline along the southern side of Tropicana Avenue, and a 36" diameter pipeline along the northern side of Tropicana Avenue. The 36" pipeline serves a series of catch basins intercepting street flow and site runoff. There are no existing storm drain systems in Deckow Lane or Kelch Drive. There are no existing on-site storm drain systems.

Upon further design development, Kimley-Horn recommends a thorough Technical Drainage Study be completed to analyze the upstream and downstream flows, the existing storm drain pipe and inlet system, the impact the proposed project will have on the existing system, and any recommendations (if any) related to the replacement of existing pipes and construction of new pipes and inlets.

In addition, it should be noted that the Regional Flood Control District Master Plan has identified a proposed detention basin (TRMC 0033) located near the northwest corner of Tropicana Avenue and Paradise Road. Attached, Figure F-37 (**Appendix A**) and the following data in Table 1 regarding the proposed detention basin have been provided by Clark County Regional Flood Control District (CCRFCD).

Table 1 – Detention Basin Data (CCRFCD Provided)

CCRFCD ID	TRMC0033
Status	Proposed
Name	Tropicana Wash – McCarran Airport Detention Basin
Description	120 ac-ft offline detention basin; peak discharge at approx. 109 ac-ft
Depth	13 ft, peak flow discharge occurs at approx. 11.5, so 1.5 ft freeboard
Tributary Area	4.32 sq. miles
HEC-1 Flow	2075 CFS
Design Cost	\$97,000
ROW Cost	\$77,000
Construction Cost	\$607,000
Total Cost	\$782,000
Design Year	Not Given
Construction Year	Not Given

Additional drainage Future analysis will be required to determine the mitigation improvements required for development within this area. Please refer to the attached existing utilities exhibit for preliminary reference.

1.4 Natural Gas System

The prospective stadium location and size was presented to Southwest Gas (SWG) for preliminary availability and capacity assessment. SWG provided as-builts delineating the size and location of off-site gas utilities. Existing utilities include a 2” PE and 20” high-pressure STL line residing along the northern side of Tropicana Avenue, a 2-inch PE in Koval Lane, and a 2”- 6” main in Kelch Drive. Based on conservative load estimates from similar-sized stadium projects, SWG advised that the available system would be able to handle the additional load requirements at this time; however, noted the caveat that MGM Grand Hotel and Casino was also considering upgrades which would require significant demand from the existing system. Additionally, SWG emphasized that any potential connection or crossing to the high-pressure gas line in Tropicana Avenue would require potholing prior to construction.

SWG advised further coordination throughout the design phase to verify the available capacity of the system in coordination with MGM Grand Hotel and Casino, and to ensure all service requirements are met appropriately. Please refer to the attached existing utilities exhibit for preliminary reference.

1.5 Electrical System

According to as-builts we have received from the County, underground telecommunication lines exist along the northern side of Tropicana Avenue. At this time, as-built and record drawing requests have been submitted to NV Energy, and requests to engage in a preliminary study of the existing dry utility system have been made.

2. TRANSPORTATION ACCESS

The proposed stadium location north of Tropicana Avenue as shown in **Figure 2** has vehicle access from three existing driveways on Tropicana Avenue. Deckow Lane borders the property on the west side and Lamar Court borders the property on the east side. Access to both Deckow Lane and LaMar Circle/Kelch Drive are recommended to be provided to the proposed site. It is also recommended that access to Tompkins Avenue (northwest of the site) be provided to provide access to Koval Lane. For improved site access and circulation, consideration should be given to developing a roadway connection between Deckow Lane and Koval Lane to the existing traffic signal on Koval Lane at the MGM Grand exit/entrance.

The major access to the site is from Tropicana Avenue, an eight-lane arterial roadway that currently carries approximately 90,000 vpd (NDOT 2012 counts). This roadway serves as a major access to McCarran Airport from the Las Vegas Strip. The transportation element of the Clark County Master Plan includes the future designated roadway from Tropicana Avenue to Flamingo Road. LaMar Circle/Kelch Drive is a part of this alignment (see **Appendix B** - Page 32 of the Clark County Transportation Element).

It should also be noted that a signalized intersection has been approved by NDOT at Tropicana Avenue and Kelch Drive for the proposed County Roadway Master Plan; although to date, the signal has not been constructed. **Figure 2** also illustrates possible roadway improvements and street connections.

APPENDIX A

Facility Inventory from 2013 Las Vegas Valley Flood Control Master Plan Update (Figure F-37)

ID / River Mile	Status	Facility Description	Length (ft)	Flow (cfs)	HEC-1 Node	HEC-1 Model	Tributary Area (sq.mi.)	Channel Slope (%)	ID / River Mile	Status	Facility Description	Length (ft)	Flow (cfs)	HEC-1 Node	HEC-1 Model	Tributary Area (sq.mi.)	Channel Slope (%)	ID / River Mile	Status	Facility Description	Length (ft)	Flow (cfs)	HEC-1 Node	HEC-1 Model	Tributary Area (sq.mi.)	Channel Slope (%)		
0000	E	BLUE DIAMOND CHANNEL MOHAWK	570	460	USACE	USACE	0.37	0.70	FLWA	0623	E	FLAMINGO WASH	2610	2589	CPW13	FLAMGB	4.19	0.83	TRMC	0216	E	TROPICANA WASH - MCCARRAN AIRPORT	930	2137	CMC9	FLAMDA	3.24	1.42
0000	E	2nd Chnl 10W 6D 0.1 SS							0674	E	2 16" X 8" RCB	360	2185	CPW12	FLAMGB	3.67	0.82	0233	E	2 8" X 6" RCB @ Dewey	40	1709	CMC9*	FLAMDA	3.24	1.00		
FLFA	0000	FLAMINGO - FASHION	2050	747	CPW17N	FLAMDA	0.72	0.28	0884	E	Gabion Chnl 100W 3.5D 3.1 SS	320	1763	CPW11	FLAMGB	3.12	0.60	0234	P0	Add 2 8" X 6" RCB @ Dewey	40	432*	CMC9*	FLAMDA	3.24	1.00		
0007	E	8" X 5" RCB	3060	526	FW14	FLAMDA	0.44	0.45	0891	E	7 Span Bridge 84W 5.5D @ UPRR	90	1763	CPW11	FLAMGB	3.12	1.30	0235	E	Conc Chnl 12W 5D 1.5:1 SS	1170	2137	CMC9	FLAMDA	3.24	0.80		
FLFL	0000	FLAMINGO WASH - FLAMINGO STORM DRAIN							0892	E	Earth Chnl 60W 10D 3:1 SS (Replace w/ FLWA0893)	140	1763	CPW11	FLAMGB	3.12	0.84	0236	E	2 10" X 6" RCB	1500	1793	CMC8	FLAMDA	2.72	1.28		
0000	E	54" RCP	1370	681	CPW4	FLAMGB	0.68	1.70	0893	P1	Gabion Chnl 20W 7D 2:1 SS (Replace w/ FLWA0892)	140	1763	CPW11	FLAMGB	3.12	0.84	0239	E	Riprap Chnl 30W 2D 4:1 SS	2440	283	MC8	FLAMDA	0.51	0.70		
0026	E	57" RCP	1370	681	CPW4	FLAMGB	0.68	1.14	0895	E	Earth Chnl 60W 10D 3:1 SS (Replace w/ FLWA0896)	560	1121	CPW11S	FLAMGB	13.54	0.84	TRNB	0000	E	TROPICANA WASH - NORTH BRANCH							
0051	E	51" RCP	1330	375	FW3	FLAMGB	0.37	0.96	0896	P1	Gabion Chnl 20W 6D 3:1 SS (Replace w/ FLWA0895)	560	1121	CPW11S	FLAMGB	13.54	0.84	0000	E	Conc Chnl 17W 5D 0.1 SS	110	748	CTW8W	FLAMGB	1.78	1.19		
0077	E	42" RCP	1160	375	FW3	FLAMGB	0.37	1.68	0901	E	4 12" X 10" RCB @ Flamingo Industrial Connector	180	1121	CPW11S	FLAMGB	13.54	0.60	0015	E	2 15" X 4" RCB @ Industrial	180	748	CTW8W	FLAMGB	1.78	0.20		
0101	E	45" RCP	1250					3.54	0902	E	Earth/Conc Chnl 30W 15D 1:1 SS (Replace w/ FLWA0903)	1000	1121	CPW11S	FLAMGB	13.54	0.72	0020	E	Conc Chnl 30W 5D 0.1 SS	170	748	CTW8W	FLAMGB	1.78	4.22		
0123	E	39" RCP	790					0.83	0903	P1	Gabion Chnl 30W 4D 1:1 SS (Replaces FLWA0902)	1000	1121	CPW11S	FLAMGB	13.54	0.72	0030	E	Earth/Conc Chnl 15W 8D 2:1 SS (Replace w/ TRNB0031)	1190	748	CTW8W	FLAMGB	1.78	1.10		
0139	E	53" RCP	430					0.83	0923	E	3 20" X 5" RCAC @ Valley	80	1121	CPW11S	FLAMGB	13.54	1.00	0031	P1	Conc Chnl 12W 6D 0.1 SS (Replaces TRNB0030)	1190	748	CTW8W	FLAMGB	1.78	1.10		
0147	E	57" RCP	1260					1.19	0924	E	Earth Chnl 60W 14D 1:1 SS (Replace w/ FLWA0925)	1600	1121	CPW11S	FLAMGB	13.54	1.00	0040	E	20" X 4.5" RCAP	1041	748	CTW8W	FLAMGB	1.78	1.00		
FLJO	0000	FLAMINGO DIVERSION - JONES BRANCH	3310	1100	USACE	USACE	1.46	1.00	0925	P1	Gabion Chnl 20W 6D 2:1 SS (Replace w/ FLWA0924)	1600	1121	CPW11S	FLAMGB	13.54	1.00	0042	E	3 9" X 5" RCB	115	673	TNDB	FLAMGB	1.50	1.00		
0076	E	12" X 6" RCB	2640	780	CTD9	FLAMDA	0.79	1.00	0940	E	Earth Chnl 60W 14D 1:1 SS (Replace w/ FLWA0941)	1900	938	CPW2	FLAMGB	12.91	1.00	0047	E	20" X 4.5" RCAP	284	673	TNDB	FLAMGB	1.50	0.77		
FLJA	0000	FLAMINGO WASH - LATERAL (FLAMINGO RAINBOW)							0941	P1	Gabion Chnl 20W 5D 2:1 SS (Replaces FLWA0940)	1900	938	CPW2	FLAMGB	12.91	1.00	0067	P1	Gabion Chnl 12W 5.5D 2:1 SS	1190	673	TNDB	FLAMGB	1.50	1.32		
0000	E	2nd Chnl 20W 6D 0.1 SS	2180	1141	CLF32	FLAMGB	2.44	0.75	0990	E	7 12" X 5" RCB	130	898	LWFLDB	FLAMGB	8.91	1.50	0089	E	10" X 7" RCB	89	673	TNDB	FLAMGB	1.50	0.55		
0041	E	2 14" X 8" RCB	626	1141	CLF32	FLAMGB	2.44	0.06	0991	E	3 10" X 8" RCB	1970	898	LWFLDB	FLAMGB	8.91	1.00	0000	E	104" RCP (hoist)	93	673	TNDB	FLAMGB	1.50	0.55		
0053	E	2nd Chnl 20W 6D 0.1 SS	1130	1141	CLF32	FLAMGB	2.44	0.75	1025	E	7 10" X 5" RCB	100	898	LWFLDB	FLAMGB	8.91	1.10	0002	E	10" X 5" RCB Outlet	389	673	TNDB	FLAMGB	1.50	0.25		
0074	E	24" X 10" RCB @ Private Street	40	996	CLF31	FLAMGB	2.21	0.55	1026	E	2 24" X 9" RCB	450	898	LWFLDB	FLAMGB	8.91	0.43	0003	E	14,000 cfs PMF Spillway	14000	CTW6	FLAMDA	1.50				
0075	E	Earth Chnl 20W 6D 0.1 SS	160	996	CLF31	FLAMGB	2.21	0.75	1033	E	3 12" X 10" RCAP	680	898	LWFLDB	FLAMGB	8.91	0.43	0004	E	85 ac-ft Tropicana North Branch Detention Basin	1305	CTW6	FLAMDA	1.50				
0076	E	114" RCP	1490	996	CLF31	FLAMGB	2.21	0.89	1039	E	3 12" X 10" RCB @ Decatur	90	898	LWFLDB	FLAMGB	8.91	1.60	0105	E	Conc Chnl 30W 5D 0.1 SS	55	1305	CTW6	FLAMDA	1.50	1.19		
0104	E	114" RCP	5340	797	CLF29	FLAMGB	1.31	0.89	1048	E	28,950 cfs PMF Spillway	28950	CLF33	FLAMGB	8.91		0106	E	2 14" X 6" RCB @ Schriels	55	878	CTW7	FLAMDA	1.07	1.00			
FLRG	0000	FLAMINGO WASH - ROCHELLE	4350	294	FW1	FLAMDA	0.29	1.30	1049	E	2 72" RCP Outlet	90	898	LWFLDB	FLAMGB	8.91		0107	E	Conc Chnl 30W 5D 0.1 SS	220	878	CTW7	FLAMDA	1.07	1.19		
0000	E	36" CMP							1050	E	222 ac-ft Lower Flamingo Detention Basin	294	CLF33	FLAMGB	8.91		0113	E	Conc Chnl 36.5W 7D 0.1 SS	259	878	CTW7	FLAMDA	1.07	1.19			
FLTR	0000	FLAMINGO - TROPICANA DIVERSION CHANNEL							1111	E	222 ac-ft Lower Flamingo Detention Basin	294	CLF33	FLAMGB	8.91		TRSW	0000	P1	TROPICANA WASH - SWENSEN AVENUE	1925	222	TRMCD8	FLAMDA	4.32	0.50		
0000	E	2nd Chnl 26W 19.5D 0.1 SS	1480	3400	USACE	USACE	4.86	0.11	1149	E	Riprap Chnl 40W 5D 2:1 SS	2470	1986	CLF20A	FLAMGB	5.06	1.35	0036	P1	72" RCP	2380	222	TRMCD8	FLAMDA	4.32	0.40		
0014	E	26" X 18" RCB @ Decatur Blvd	980	3400	USACE	USACE	4.86	0.11	1151	E	4 10" X 8" RCB @ Jones	100	1885	CLF20	FLAMGB	5.06	1.70	TRWA	0000	E	TROPICANA WASH							
0015	E	2nd Chnl 26W 18D 0.1 SS	205	3400	USACE	USACE	4.43	0.11	1152	E	Earth Chnl 50W 8D 3:1 SS (Replace w/ FLWA1153)	2600	1885	CLF20	FLAMGB	5.06	0.44	0034	E	Conc Chnl 80W 8.5D 0.1 SS	264	3208	CTW11	FLAMGB	6.93	0.95		
0020	E	2nd Chnl 13W 18D 2:1 SS	610	3400	USACE	USACE	4.43	0.11	1153	P1	Gabion Chnl 50W 6D 2:1 SS (Replaces FLWA1152)	2600	1885	CLF20	FLAMGB	5.06	0.44	0039	E	8 12" X 6" RCB	40	3208	CTW11	FLAMGB	6.93	1.20		
0025	E	2nd Chnl 26W 16.5D 0.1 SS	500	3400	USACE	USACE	4.43	0.11	1202	E	4 10" X 8" RCB @ Torrey Pines	90	1885	CLF20	FLAMGB	5.06	1.00	0041	E	Conc Chnl 80W 5.5D 0.1 SS	842	3208	CTW11	FLAMGB	6.93	0.95		
0044	E	36" X 16.5" RCB @ Russell	160	3400	USACE	USACE	4.43	0.11	1203	E	Earth/Conc Chnl 40W 10D 2:1 SS (Replace w/ FLWA1204)	1640	1885	CLF20	FLAMGB	5.06	1.40	0056	E	8 12" X 4" RCB	900	2891	CTW10	FLAMGB	6.51	1.21		
0046	E	Conc Chnl 13W 16.5D 2:1 SS	920	3400	USACE	USACE	4.43	0.11	1204	P1	Conc Chnl 40W 4D 2:1 SS (Replaces FLWA1203)	1640	1885	CLF20	FLAMGB	5.06	1.40	0074	E	10 10" X 4" RCB @ Paradise	120	2891	CTW10	FLAMGB	6.51	1.10		
0055	E	Conc Chnl 19.5W 18D 0.1 SS	740	3400	USACE	USACE	4.43	0.11	0025	P1	10" X 10" RCB	2665	1006	CRAC1	SW3	1.74	0.30	0075	E	3 21" X 6" RCB	820	2891	CTW10	FLAMGB	6.51	0.70		
0076	E	19.5" X 18" RCB @ Lindel	120	3300	USACE	USACE	4.06	0.11	0050	P1	8" X 6" RCB	7785	712	DFW5	SW3	1.34	1.50	0092	E	Grass Chnl 30W 5D 4:1 SS	210	2891	CTW10	FLAMGB	6.51	0.90		
0078	E	Conc Chnl 13W 11.5D 2:1 SS	2410	3300	USACE	USACE	4.06	1.25	NBSC	0000	E	TROPICANA WASH - NORTH BRANCH SCHIRLLS						0096	E	2 25" X 10" RCAC	30	2891	CTW10	FLAMGB	6.51	0.90		
0125	E	19.5" X 16.5" RCB @ Snake	150	3150	USACE	USACE	4.06	1.25	0000	E	36" RCP	1350	477	TYW6	FLAMDA	0.43	0.80	0097	E	Grass Chnl 30W 5D 4:1 SS	300	2891	CTW10	FLAMGB	6.51	0.90		
0127	E	Conc Chnl 19.5W 11.5D 0.1 SS	2770	3150	USACE	USACE	2.61	1.25	TRBD	0000	E	BLUE DIAMOND CHANNEL						0103	E	3 16" X 7" RCAP	808	2891	CTW10	FLAMGB	6.51	0.44		
0180	E	19.5" X 15" RCB @ Torrey Pines Drive	120	2850	USACE	USACE	2.61	0.96	0000	E	Conc Chnl 10W 10D 2:1 SS	1700	4850	USACE	USACE	8.62	0.70	0121	E	3 10" X 6" RCB	1760	2891	CTW10	FLAMGB	6.51	1.27		
0181	E	Conc Chnl 13W 11.5D 2:1 SS	2530	2850	USACE	USACE	2.61	0.96	0014	E	22" X 10" RCB @ Decatur	130	4850	USACE	USACE	8.62	0.70	0150	E	21" X 7" RCB	120	1796	CTW9	FLAMGB	1.69	1.27		
FLVW	0000	FLAMINGO - VALLEY VIEW							0015	E	Conc Chnl 10W 10D 2:1 SS	3070	4750	USACE	USACE	8.37	0.90	0192	E	3 8" X 7" RCB	100	1796	CTW9	FLAMGB	1.69	1.50		
0000	E	10" X 5" RCB	290	577*	CPW6*	FLAMDA	2.14	0.37	0075	E	Conc Chnl 19.5W 12D 0.1 SS	400	4750	USACE	USACE	8.37	0.48	0152	E	2 12" X 7" RCB	2714	1796	CTW9	FLAMGB	1.69	0.92		
0001	P0	Add 1 30" RCP	290	354*	CPW6*	FLAMDA	2.14	0.37	0083	E	2 14" X 11" RCB @ Sunset	120	4750	USACE	USACE	8.06	0.48	0192	E	2 12" X 6" RCB	381	1796	CTW9	FLAMGB	1.69	1.23		
0005	E	54" & 60" RCP	1200	374*	CPW6*	FLAMDA	2.14	0.67	0084	E	Conc Chnl 19.5W 12D 0.1 SS	550	4750	USACE	USACE	8.06	0.48	0210	E	4 10" X 6" RCB	200	1796	CTW9	FLAMGB	1.69	0.50		
0007	P0	Add 1 36" RCP	1200	557*	CPW6*	FLAMDA	2.14	0.67	0096	E	Conc Chnl 20W 5D 0.1 SS	760	4750	USACE	USACE	7.70	1.00	0218	E	3 9.5" X 5.5" & 1 10" X 5.5" RCB	1100	1796	CTW9	FLAMGB	1.69	0.45		
FLWA	0672	FLAMINGO WASH	1230	3925	CPW18W	FLAMGB	5.82	0.80	TRMC	0001	E	TROPICANA WASH - MCCARRAN AIRPORT	450	1222	CTW10S	FLAMDA	4.82	0.30	0234	E	4 8" X 7" RCB	1920	1796	CTW9	FLAMGB	1.69	0.86	
0673	P1	Earth Chnl 25W 4D 2.5:1 SS (Replace w/ FLWA0673)	1230	3925	CPW18W	FLAMGB	5.82	0.80	0011	E	2 16" X 4" RCB	80	1222	CTW10S	FLAMDA	4.82	0.26	0278	E	Conc Chnl 17W 7D 0.1 SS	310	1248	CTW3	FLAMGB	1.17	1.23		
0695	E	8 12" X 8" RCB	70	3925	CPW18W	FLAMGB	5.82	0.36	0112	E	Earth Chnl 18W 5D 2:1 SS (Replace w/ TRMC0013)	925	800	DTMRC	FLAMDA	4.32	0.45	0314	E	15" X 6.5" RCB	130	955	CTW2	FLAMGB	0.87	1.39		
0696	E	10																										



2013
LAS VEGAS VALLEY
FLOOD CONTROL
MASTER PLAN UPDATE

FIGURE F- 37
FLOOD CONTROL FACILITIES

LEGEND

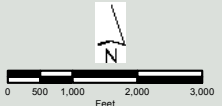
- Ultimate Development Boundary
- Existing Facilities
- Category A Proposed Facilities
- Category B Proposed Facilities
- Local Existing Facilities
- Local Proposed Facilities
- Detention Basin

- Stormdrain
- Lined Channel
- Unlined Channel
- Levee/Dike
- Natural Wash/Floodway
- ID-Mile Separator

- Remove & Replace/Parallel Facilities
- | Category A | Category B |
|------------|------------|
| Channel | Channel |
| Stormdrain | Stormdrain |

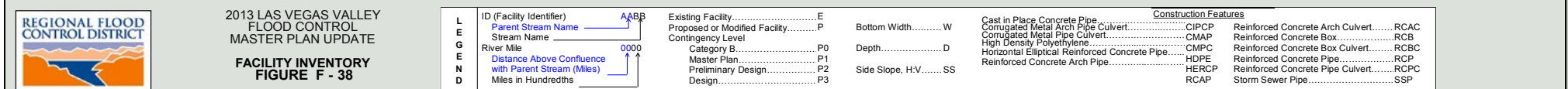
Proposed
Detention Basin

Proposed Site



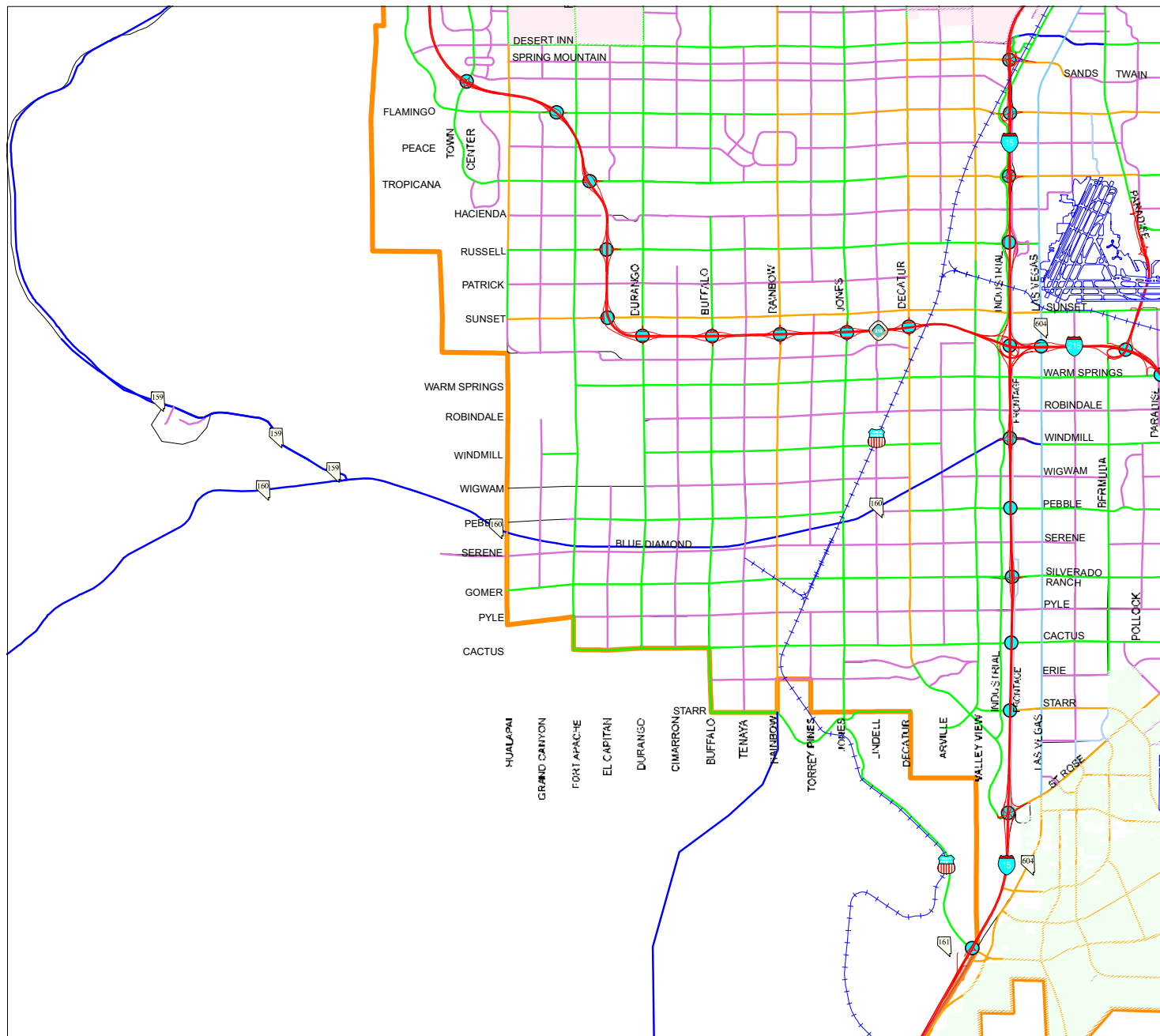
US95			I-15		
1	2	3	A1	A2	
4	5	6	A3	A4	
7	8	9	10	A5	A6
11	12	13	14	15	16
17	18	19	20	21	22
23	24	25	26	27	28
29	30	31	32	33	34
35	36	37	38	39	40
41	42	43	44	45	46
47	48	49	50	51	52
53	54	55	56	57	58
59	60				

* The HEC-1 node shown identifies the controlling concentration point for the associated facility and is located upstream of this facility due to decreasing peak flow with increasing tributary area caused by storm distribution transitions, depth area reduction factors, or attenuation of flow from routing.



APPENDIX B

Clark County Transportation Element – Page 32 from Appendix 1 Maps



Transportation Element

Map 1.3 Las Vegas Valley (SW) Clark County, Nevada

- Las Vegas Blvd (300+ ft R-O-W)
- Las Vegas Blvd (200+ ft R-O-W)
- Interstates/State Hwys (200+ ft R-O-W)
- Arterials (120+ ft R-O-W)
- Arterials (100+ ft R-O-W)
- Collectors (80+ ft R-O-W)
- Collectors (60+ ft R-O-W)
- Local Streets (R-O-W Varies)
- Railroads
- Interchanges
- Disposal Boundary
- Boulder City
- Las Vegas
- Henderson
- North Las Vegas

NOTES:

- Routes as Planned by Incorporated Cities. (To be determined)
- For detailed right-of-way information see:
"Uniform Standard Drawings for Public Works Construction of
Offsite Improvements, Clark County Area, Nevada."
- The following minimum right-of-way widths shall be required on all grid line streets:
Township and Range Lines 120 foot right-of-way width
Section Lines 100 foot right-of-way width
Quarter Section Lines 80 foot right-of-way width
In addition to these requirements, minimum right-of-way requirements for new development shall be required as shown on the Standard Drawings for the various functionally classified streets shown on this map and shall apply to non-grid line streets and highways, curvilinear alignments, tangential alignments, special design configurations and off-grid jogs and segments of grid line streets and highways.
- Right-of-way widths may be wider at intersections than as shown on map.
- Classification of proposed streets as collector or arterial roadways shall be determined by the County Engineer and may have greater or less right-of-way widths than shown.
- Right-of-way in incorporated cities is general and for informational use only. Consult the individual plans of each city for specific right-of-way requirements



SCALE IN FEET

Map Created On: February 23, 2009

This information is for display purposes only.
No liability is assumed as to the accuracy
of the data delineated hereon.



\\ccgis1\gisdata\prcomp\projects\vt\TransportationElement\transportation-01.3.mxd

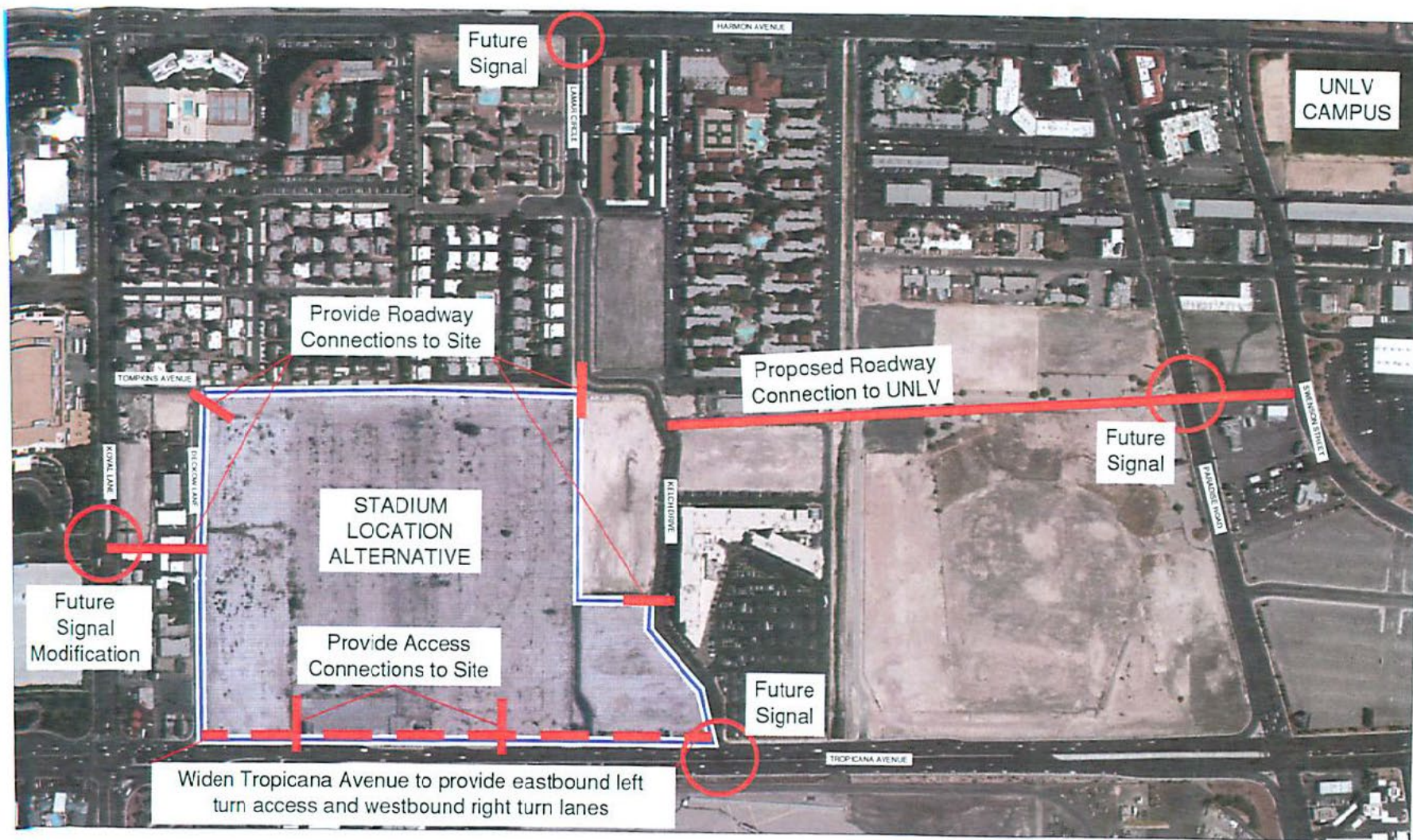


FIGURE 2. SITE ACCESS OPTIONS