Alternative Funding and Delivery Methods for the Los Angeles Convention Center

Prepared for the CAO of the City of Los Angeles

December 21st, 2015

ARUP

Disclaimer

Pursuant to the FINANCIAL CONSULTING SERVICES AGREEMENT dated December 9, 2015 between Arup Advisory Inc. (Arup) and the City of Los Angeles (the City), enclosed is the Report for the Alternative Delivery Options for the Los Angeles Convention Center (LACC).

Current accepted professional practices and procedures were used in the development of this report. However, as with any forecast, there may be differences between forecasted and actual results. The report contains reasonable assumptions, estimates, and projections that may not be indicative of actual or future values or events and are therefore subject to substantial uncertainty. Future developments cannot be predicted with certainty, and this may affect the estimates or projections expressed in this report, consequently Arup specifically does not guarantee or warrant any estimate or projections contained in this report.

Please note that our findings do not constitute recommendations as to whether or not the City should proceed with the LACC project. This document is intended only for the information of the City. It is not intended for and should not be relied upon by any third party, and no responsibility is undertaken to any third party.

Our findings are based on limited technical, financial, and commercial data concerning the project and its potential delivery options. Arup has relied upon the reasonable assurances of independent parties and is not aware of any facts that would make such information misleading. We envisage that if the LACC project is to be taken forward, further validation of our findings will be undertaken as part of the procurement process.

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List of Abbreviations

A&E: Architecture and Engineering
AP: Availability Payment
CAO: City Administrative Office of Los Angeles
CapEx: Capital Expenditures
CEQA: California Environmental Quality Act
CPI: Consumer Price Index
CSL: Convention, Sport and Leisure
CM/GC: Construction Management/ General Contractor
CTD: Los Angeles Department of Convention and Tourism Development
DBB: Design Bid Build
DB: Design and Build
DBF: Design Build and Finance
DBFOM: Design Build Finance Operate and Maintain (in this report, interchangeably used with P3)
DTLA: Downtown Los Angeles
EIR: Environmental Impact Report
FAR: Floor Area Ratio
GMP: Guaranteed Maximum Price
HQ: Head Quarter
ICT: Information and Communication Technology
IT: Information Technology
LA: Los Angeles
LACC: Los Angeles Convention Center
MCC: Melbourne Convention Center
NCC: Dublin National Convention Center
NFL: National Football League
NPV: Net Present Value
O&M: Operations and Maintenance
OpEx: Operations Expenditures
P3 or PPP: Public Private Partnership (in this report, interchangeably used with DBFOM)
PV: Present Value
QA/QC: Quality Assurance/Quality Control
RFI: Request For Information
RFP: Request For Proposal
RFQ: Request For Quotation/Qualifications
RLV: Residual Land Value
SCAQMD: South Coast Air Quality Management District
SPV: Special Purpose Vehicle (sometimes known as “Concessionaire”)
TOT: Transient Occupancy Tax (also known as “Hotel Tax”)
ULI: Urban Land Institute

1. Executive Summary

1. Executive Summary

The City has an opportunity to deliver an innovative Convention Center that meets the industry's leading requirements. The recommended approach for the LACC's expansion project is to integrate it with a large-scale real estate development that creates a livable, walkable mixed-use district within the campus. This can unlock significant land value to cross-subsidize its construction costs. Combined with other revenue enhancements and using an integrated design-build-finance-operate-maintain (DBFOM) delivery Option, the new revenue sources can be optimized and give confidence that the planned expansion program and quality can be delivered within the City's $470M investment. A DBFOM delivery model is feasible within the City's current procurement schedule and can bring a number of benefits further discussed in this Report.

Background and Objectives

The City of Los Angeles (the City) is pursuing an expansion of the existing Los Angeles Convention Center (LACC) to bring the facility to leading industry standards (the Project).

The purpose of this report is to evaluate at a strategic level alternative financing and delivery Options for the Project. The report defines and evaluates them for best fit with the City s four main objectives:

1. (a) maximize revenue and economic benefit, and (b) expand LACC without impacting the 6% non-voters' approval debt cap and minimize its cost to General Fund over the long term
2. bring innovation to the venue and create a vibrant district
3. ensure cost and schedule certainty
4. ensure long term maintenance and upkeep

Arup conducted a review of the convention industry's requirements and trends in relation to the LACC:

- Diverse meeting room inventory in tandem with large, flexible, contiguous, attractive, and high-tech exhibit spaces
- On-site amenities and a vibrant neighborhood
- Event planners are seeking authentic urban experiences for their user groups
- Development of mixed-use campuses around the US and internationally using innovative delivery models including P3

The 2015 CSL Preliminary Market and Economic Impact Analysis for the Proposed LACC Plan revealed that the LACC currently faces five main shortfalls:

- Lack of the right mix of room/space inventory
- Lack of adequate on-site hotel rooms
- Limited on-site amenities
- Outdated look-and-feel due to deferred maintenance
- Increased competition from other cities

Methodology to Assess Project Delivery Options

Arup developed a set of qualitative and quantitative criteria to identify relevant delivery methods for the

Case Study: Ernest N. Morial Convention Center, New Orleans

To expand the Convention Center and secure a competitive market position for the coming years, New Orleans recently issued a RFP for a P3 procurement for a $175 million expansion of the facility alongside with a $1 billion mixed-use real estate development. The development of a 47-acre vacant land in the immediate vicinity of the Convention Center will include a hotel, retail, offices, and residential uses. The objective is to create a vibrant and entertainment-driven district to increase the attractiveness of Louisiana's largest city as a convention destination.

Project and to evaluate them based on the City's four objectives. Arup also considered the implications on the City's existing development schedule, as defined in the September 2015 LACC White Paper.

#	Objective	Criteria
1	(a) maximize revenue and economic benefit (b) expand LACC without impacting the 6% non-voters' approval debt cap and minimize General Fund impact	– No debt obligation – Additional revenue sources – Fiscal impact
2	Bring innovation to the venue and create a vibrant district	– Design flexibility and room inventory – Enhance destination quality
3	Ensure cost and schedule certainty of the project expansion	– Cost overrun and delay risk transfer
4	Assure adequate long-term maintenance and facility improvements	– Ring-fenced budget – Lowest lifecycle cost
N/A	Compatibility with current procurement schedule	– Begin construction in 2017 – West Hall downtime of maximum 6 months

New Potential Revenue Sources for the Project

The Arup team has analyzed several potential new revenue sources that can be developed in conjunction with the Project. These can significantly reduce the Project's cost to the General Fund, as follows:

- Real estate development: discussed below in the context of a value-optimized LACC
- Other: include signage and naming rights

The estimates are based on a residual land value method for real estate and on comparable benchmarks for other revenues. An appropriately conservative approach has been taken and the analysis does not consider parking nor convention center revenue enhancements. All Projects and delivery Options analyzed include the funding benefit of signage and naming rights.

Delivery Options Analysis

Based on discussions with City staff, Arup identified and evaluated two Project schemes and five delivery Options:

- **2015 Design Competition Scheme for LACC Expansion Project:**
  - **Option 1** CM/GC
  - **Option 2** design-build-finance (DBF)
  - **Option 3** design-build-finance-operate-maintain (DBFOM or P3)
- **Value-Optimized Project Integrating a Mixed-Use Real Estate Development:**
  - **Option 4** P3 for LACC expansion and separate Real Estate Development: City manages two separate procurements and associated risks
  - **Option 5** Integrated P3 for LACC expansion jointly with Real Estate Development: City manages a single procurement and lets development consortia manage the associated integration risks

The delivery models considered have increasing allocation of delivery scope and risk transfer to the private sector. For example, Options 3, 4, and 5 (all

Case Study: Melbourne Convention Center

Procured as a 25-year DBFM in 2006, the Melbourne Convention Center consisted of a $285 million public investment for the facility's renovation, as well as a $1 billion mixed-use real estate development. This innovative mix of government funding and private investment helped unlock land value to cross-subsidize the Convention Center construction. Given that the real estate development represented more than half of the project's total size, significant urban redevelopment took place in the vicinity of the facility, turning Melbourne into a more attractive convention destination.

P3s) involve a long-term life-cycle maintenance contract.

Value-optimized Project Including Mixed-Use Real Estate Development

The Arup team identified an opportunity to introduce a significant mixed-use real estate development that could be integrated within the LACC campus:

- Previous LACC expansion layouts, such as CTD's December 2014 concept or ULI's 2013 scheme, recognized the importance for LACC success and site layout opportunity for a single, large exhibit hall with over 600,000 sq.ft. of contiguous space
- A value-optimized layout can feasibly generate 9 to 14 acres of developable land within the 54 acre LACC campus in close proximity to LA Live!, Staples Center, and providing an opportunity to create a vibrant, walkable 24/7 convention, sports, and entertainment district
- South Park is currently and is expected to continue to experience a real estate boom that supports attractive valuation of significant land parcels

A value-optimized layout and development plan can generate substantial benefits:

- Enhanced attraction to convention user groups in terms of destination quality and doubling the size of the largest contiguous, sub-dividable exhibit space
- Large cross-subsidy from unlocking land value estimated at $176M to $247M (present value) to pay a substantial portion of LACC expansion costs, reducing the cost to the General Fund by around half compared to the current Project without real estate
- Including other new revenue sources such as signage and naming rights, the total feasible cross-subsidy to support LACC expansion is estimated to range between $244M to $353M (present value)
- Increasing Project-related new tax revenues by approximately 50% compared to the current Project

Summary of Assessment of Delivery Options

The qualitative evaluation of Options 1 to 3 indicates that the P3 delivery Option better achieves the City's objectives with respect to a majority of the criteria considered. For this reason both delivery Options considered for the Project integrating Real Estate development are based on a P3 model.

Two key issues when evaluating the choice between Options 4 and 5 are:

- **Optimal management of P3 and Real Estate integration risks:** Arup's assessment is that, with an appropriately structured RFQ/RFP process, the private sector has the expertise and innovation to better manage the risk and to realize more value from the LACC campus, the convention venue, and the mixed-use development
- **Market acceptance:** based on Arup's preliminary sounding of major P3 and real estate industry

Case study: Long Beach Civic Center P3

The DBFOM structured for the Long Beach Civic Center is delivering $400M in civic infrastructure at a lower cost than a conventional approach. Integrated with an additional c. $500M real estate development, the City is leveraging its public investment with a financial plan that unlocks the value of under-utilized land with one Masterplan. The long-term P3 contract gives the City of Long Beach assurance of predictable annual lease payments, fully-funded and performance based O&M, and a guaranteed facility condition hand-back in 40 years. The new development will bring up to 800 new housing units and 45,000 sq.ft. of neighborhood-servicing retail to downtown.

developers, our assessment is that an integrated procurement is feasible in the market provided that certain key deal structuring issues are resolved in the next phase.

Arup's evaluation is that **Option 5** (P3) fits better with the City's four objectives among the five Options considered:

- P3 delivery based on an availability payment from the City to the developer would not be considered a debt obligation and would not impact the 6% debt cap
- An integrated model would maximize the land value cross-subsidy for the LACC expansion, result in a lower cost to the General Fund, and maximize positive fiscal impact
- An integrated model creates substantial financial incentives for the private sector to bring innovation to the site and the LACC, consistent with current US and international trends in the convention center industry, and improving LACC's competitiveness and neighborhood and city-wide economic impacts
- P3 delivery transfers more cost and schedule performance risk to the private sector and puts in place a fully-funded program for effective long-term maintenance and good upkeep of the facilities

Project Schedule

Arup conducted an analysis of the schedule implications of the delivery Options given its importance for the City. The finding is that regardless of the procurement method selected, the overall schedule will be governed by CEQA compliance. Consequently, the EIR and procurement schedule and time-frames to develop a DBFOM procurement is estimated to be comparable to the City's current schedule, as established in the City's September 2015 LACC White Paper. Moreover, Arup's analysis shows that if Option 5 (integrated DBFOM for LACC jointly with Real Estate Development) is chosen, phasing construction so as to first build a new hall before demolishing the West Hall would minimize impacts to the LACC's business continuity. This approach is consistent with the recommendations of the ULI Advisory Panel in 2013.

Delivery Option Evaluation Matrix and Summary Recommendation of Delivery Option

This report considers two Project schemes with new revenue sources and five different procurement methods. The five delivery Options provide the City with a range of choices. The matrix provided overleaf summarizes Arup's evaluation of these five Options. **The evaluation supports Option 5, Integrated P3 for LACC expansion jointly with Real Estate Development, as the recommended Delivery Option.**

Next Steps

Arup recommends the following next steps for the Project. These would be applicable whether a P3 model is selected or not. These initial activities should be managed in parallel.

- Conduct a detailed Business Case
- Prepare a market-tested program or project description to support the procurement and CEQA processes
- Retain a CEQA consultant and an A&E team with their scopes of work tailored appropriately to the delivery Option(s) carried forward
- Launch a community and stakeholder outreach campaign
- Prepare a CEQA framework to kick-off the EIR process: a number of specific "early actions" should be undertaken to streamline the process and achieve an efficient timetable, as outlined above
- Continue with the HQ hotel RFI and initiate an RFI process tailored to the delivery Option carried forward

City's objectives for each of the Delivery Options

Objective	Criteria	2015 Design Competition Scheme			LACC P3 incl. Real Estate development	
		Option 1 CM/CG	Option 2 DB/DBF	Option 3 P3	Option 4 Separated	Option 5 Integrated
(a) maximize revenue and economic benefit (b) expand LACC without impacting the 6% non-voters' approval debt cap and minimize General Fund impact	No debt obligation	🔴	🔴	🟢	🟢	🟢
	Additional revenue sources	🟡	🟡	🟡	🟡	🟢
	Fiscal impact	🔴	🔴	🟡	🟡	🟢
Bring innovation to the venue and create a vibrant district	Design flexibility and room inventory	🟡	🟡	🟡	🟢	🟢
	Enhance destination quality	🔴	🔴	🟡	🟢	🟢
Ensure cost and schedule certainty of the project expansion	Cost overrun and delay risk transfer	🔴	🟡	🟢	🟢	🟢
Assure adequate long-term maintenance and facility improvements	Ring-fenced lifecycle budget	🔴	🔴	🟢	🟢	🟢
	Lowest lifecycle cost	🔴	🔴	🟢	🟢	🟢
Compatibility with current Procurement Schedule	LACC construction started by Q4 2017	🟢	🟢	🟢	🟢	🟢
	West Hall downtime of maximum 6 months	🟢	🟢	🟢	🟢	🟢

🟢 High correlation with indicated criterion 🟡 Medium correlation with indicated criterion 🔴 Low correlation with indicated criterion

2. Methodology

2. Methodology

2.1 Structure of the Report

The approach is to first conduct a qualitative analysis of the delivery Options for the 2015 Design Competition Scheme, and then explore revenue generating options that could increase the overall value of the Project.

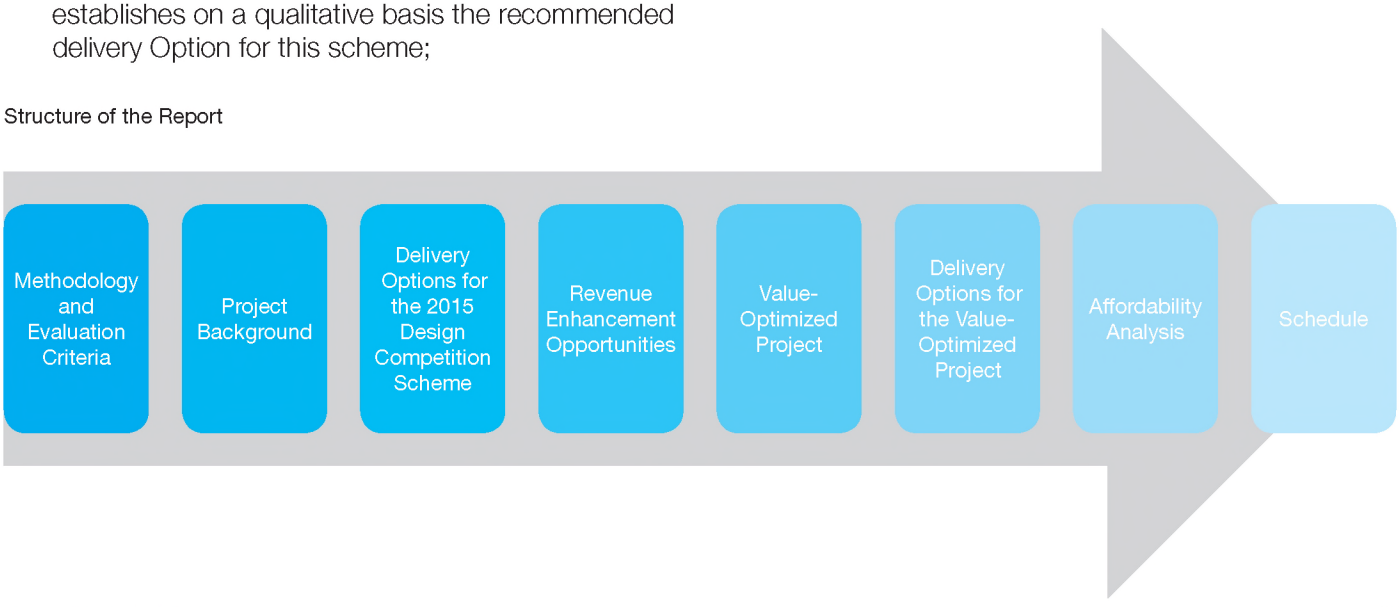
The City of Los Angeles's (City) motivation for exploring different procurement methods to bring the Los Angeles Convention Center (LACC) to leading industry standards via the LACC Expansion and Modernization Project (the Project) relate to the following goals: 1. (a) maximize revenue and economic benefit, and (b) expand LACC without impacting the 6% non-voters' approval debt cap and minimize General Fund impact, 2. encourage innovation both within the venue and create a vibrant district 3. gain cost and schedule certainty, and, finally, 4. transfer facility maintenance responsibilities.

In all Options the objective is to achieve at least the City's desired minimum convention program that has been established to date.

The Alternative Funding and Delivery Methods for the LACC Report (the Report) employs the following methodology in order to recommend a Project delivery/ procurement method that best meets these goals:

1. Establish criteria for evaluation of delivery Options based on City goals;
2. Analyze delivery Options for the 2015 Design Competition Scheme versus the criteria. This step establishes on a qualitative basis the recommended delivery Option for this scheme;
3. Identify convention venue constraints of the 2015 Design Competition Scheme and opportunities to enhance Project value. This step explores the potential benefits of adding a real estate development component to the Project, as well as the revenue enhancement potential from non-real estate items which would be feasible for the 2015 Design Competition Scheme and other schemes incorporating real estate development;
4. Identify and evaluate delivery Options based on the same convention venue program forming the basis for the 2015 Design Competition Scheme that should be considered after the incorporation of potential revenue enhancements;
5. Conduct an affordability analysis to evaluate fiscal impact of all the delivery options considered. This analysis supports, in particular, the evaluation of the potential delivery Options with regards to goal 1. stated above, related to revenue generation and impacts on debt limit and City's overall finances
6. Conduct a schedule analysis for the delivery Options considered. This step is to test whether the delivery Options meet the City's schedule requirements; and,
7. Summarize the evaluation of the delivery Options using the identified criteria and associated metrics

Structure of the Report



2.2 Objectives

The City's alternative delivery Options for the Project are evaluated based on their respective abilities to achieve four main objectives.

Over the last 20 years, the LACC, and especially West Hall, has not benefited from major physical improvements. This has undermined its ability to attract users and, thus, the LACC has not reached its potential to spur local economic development. To bring the facility up to today's industry standards, the Department of Convention and Tourism Development (CTD) is proposing to develop the Project. The City, which has developed conceptual designs for the expansion and modernization, is now developing a financing plan for its construction.

In this context, the City intends to examine available funding and delivery methods to leverage the creativity and the capital of the private sector. Arup was retained to evaluate funding alternatives and assess the feasibility of alternative delivery Options for the Project. As described in section 2.3, the potential Options are evaluated against specific criteria linked to the City's four main objectives.

Objective 1. (a) maximize revenue and economic benefit, and (b) expand LACC without impacting the 6% non-voters' approval debt cap and minimize General Fund impact
The City has typically funded the modernization and expansion of the LACC through issuance of municipal debt. However, the City's policy places a limit on annual debt service on non-voter approved debt to 6% of General Fund revenues. The current ratio of debt service to total projected receipts in fiscal year 2015-2016 is 4.46%, which means that funding the new expansion of the LACC through public debt will increase the debt service ratio and limit the City's ability to fund its many priorities.

Objective 2. Bring innovation to the venue and create a vibrant district
The convention market is highly competitive and demands constant adaptation to new market trends -whether these are peer cities competing for the same businesses, new customers (e.g., Millenials), new sectors, new floor plan requirements, new services (broadband), etc. The City is interested in the delivery Option that best unlocks innovation and creativity, to thus enable the LACC to fulfill its role as a regional economic engine.

Objective 3. Achieve cost and schedule certainty for the Project
Large and complex construction projects have inherent construction and schedule risks and uncertainties that could result in cost overruns. These risks can jeopardize the City's ability to complete the Project within committed resources. Therefore, it is important that the Project achieves the "optimal" risk allocation, where these risks are managed by the party or parties who are best placed to manage them.

Objective 4. Achieve adequate long term maintenance and facility improvements
Putting aside the quality of the location, the quality of the asset depends on both its attractiveness/physical appearance, as well as its operational performance. Adequate preventative maintenance and an effective lifecycle program are imperative to achieve this quality and are, therefore, key for the LACC to maintain a competitive position in the marketplace. The LACC currently faces deferred maintenance that decreases its competitiveness in the market. As a result, addressing these needs now and ensuring that they are continually and proactively addressed over the life-cycle is crucial to achieve a future-proof and attractive venue and sustain that in the long term.

In addition to these objectives, Arup has considered project schedule and LACC business continuity implications of implementing alternative procurement methods. The City estimated construction works commencement in 2017, as well as a 6-months downtime period for the West Hall during the works. Arup's analysis thus considers whether a P3 procurement would impact this timeline.

2.3 Evaluation Criteria

Arup identified ten criteria for evaluating each delivery Option against the City's four key objectives.

The chart below provides a high level overview of the City's objectives and the criteria used to determine if the delivery Options considered in this report meet their corresponding objectives.

To evaluate objective 1., the Report addresses the fit of each delivery Option in terms of new revenue generation, debt issuance for the City, and potential fiscal impact Traditionally, the City's General Fund has allocated the equivalent of 25% of the 14% hotel tax (Transient Occupancy Tax or TOT) to fund the LACC debt service. The 25% of the TOT can be considered an estimation of the City's maximum affordability limit. As a result, the more a delivery Option can lower the share of the TOT needed to fund the Project through additional revenue generation, the more desirable that Option becomes. Additionally, because non-voter approved debt (a financial obligation) is limited to 6% of the General Fund's revenue, additional debt issued against the General Fund will impact this limit. If the City's budgetary obligation towards the Project is not in the form of debt service but in the form of a performance-based "service fee" contract that is treated as a contingent commercial obligation (e.g., an availability payment within a P3 model, or another similar contractual structure), the latter will not be counted toward the City's non-voter approved debt limit.

In order to assess delivery Options in relation to objective 2., the Report qualitatively analyzes the ability of the procurement method to encourage design innovation, which could in turn influence the design's flexibility and room inventory, as well as its capacity to covert the LACC into a top convention destination. The delivery method will substantially impact the convention operator's ability to adapt to the market's changing needs and trends. Similarly, this Report considers the possibility of reprogramming public spaces around the venue to enhance the Project's ability to serve both as a catalyst for development of a more vibrant neighborhood as well as for the convention center.

To measure a delivery Option's ability to satisfy objective 3., the Report evaluates the ability to transfer cost overrun and project delay risk. The Report compares the "Base Case" of Construction Manager/General Contractor (CM/GC) delivery versus alternative procurement methods that entail greater risk allocation from the public to the private sectors. For each of the delivery Options analyzed in this report, we qualitatively evaluate the ability to transfer risk.

Finally, to evaluate a delivery Option in relation to objective 4., Arup evaluates maintenance budget ring-fencing and life-cycle cost management. Under different delivery methods, facility maintenance and lifecycle costs range from a private supplier/provider obligation to an Owner responsibility. Each Option differs in its ability to ensure that a) sufficient budget is set aside for O&M activities, and b) appropriate preventative maintenance is conducted in order to extend the life of the asset and avoid concentrated cost spikes that result from major rehabilitation and replacement activities.

Finally, Arup will evaluate project schedule implications for each delivery Option, so as to ensure that a P3 procurement does not affect the City's schedule regarding construction start date and minimizes impact on business continuity in the West Hall.

Evaluation Criteria

#	Objective	Criteria
1	(a) maximize revenue and economic benefit (b) expand LACC without impacting the 6% non-voters' approval debt cap and minimize General Fund impact	- No debt obligation - Additional revenue sources - Fiscal impact
2	Bring innovation to the venue and create a vibrant district	- Design flexibility and room inventory - Enhance destination quality
3	Ensure cost and schedule certainty of the project expansion	- Cost overrun and delay risk transfer
4	Assure adequate long-term maintenance and facility improvements	- Ring-fenced budget - Lowest lifecycle cost
N/A	Compatibility with current procurement schedule	– Begin construction in 2017 – West Hall downtime of maximum 6 months

3. Background

3. Background

3.1 Trends in the Convention Center Industry

The convention industry increasingly wants large, flexible spaces featuring on-site amenities and located in attractive neighborhoods. Significant trends also are P3 delivery and mixed-use developments.

To set the context for this study, Arup performed a market research on the convention center industry. As a result of this research, Arup identified a number of trends that are relevant to the Project, including an increasing level of private sector participation in the development of convention center projects. Appendix 2 provides summaries of relevant case studies from the US and internationally.

Functional, flexible, and beautiful designs are replacing utilitarian boxes. The architectural and design requirements of convention centers have shifted dramatically since the 1980's. Large spaces remain key for attracting national events, yet exhibit halls need to be flexible, sub-dividable, customizable, and high-tech Successful modern convention centers, such as the Ernest N. Morial Convention Center in New Orleans or the Kay Bailey Hutchison Convention Center in Dallas, display large contiguous spaces of 500,000 sq.ft., or more, that can be broken down into various smaller halls and meeting rooms.

Large modular exhibit halls also need to be complemented with multi-use ballroom(s), which offer more intimate and higher-end settings for smaller-scale events. Finally, aesthetics are as important as functionality, and organizers prefer visually-compelling architectures and decorative features.

On-site amenities enhance the convention experience. Conventions and tradeshows are more and more about meeting new people and networking. On-site amenities, such as restaurants and cafes, enable attendees to meet and share ideas. In the recent years, various facilities, such as the Vancouver or the Melbourne Convention Centers, have brought shopping, entertainment, and dining complexes on-site, to create more mixed-use and lively spaces. Moreover, demand for food and beverage is drifting away from cafeterias to more sophisticated kitchens offering fresh, healthy, and local produce.

Beyond the bricks and mortar, the destination is the selling point. People come to conventions to enjoy the places as much as the events. While facilities used to be located in cities' outskirts, central locations in lively and interesting neighborhoods now constitute a powerful marketing argument for event planners and user groups. Proximity to vibrant urban amenities and walkability from hotels is key, and San Francisco's Moscone Center's and New Orleans' Convention Center's prime locations demonstrate the importance of an animated neighborhood for the facility's success.

According to the 2015 CSL Preliminary Market and Economic Impact Analysis Study for the Proposed LACC Development, national event planners expect walkability between the convention center and nearby hotels, restaurants and nightlife inventory to become one of the most important features when selecting a destination in future years.

Private sector participation. Cities are seeking to rely more on the private sector's expertise to not only operate the convention centers but also to expand them and enhance the location to create a destination.

In the U.S., five cities have recently issued request for proposals for expansion projects including on-site mixed-use real estate developments to enhance the venue's environment. For example, the Ernest N. Morial Convention Center in New Orleans envisions to procure as a Design Build Finance Operate Maintain (DBFOM or P3) a $175M expansion project for the facility in tandem with a $1B new mixed-use real estate development. Similarly, Broward County is seeking to procure an expansion of its convention center in conjunction with the opening of a headquarters hotel and a commercial development by means of a P3. In both cases, creating a sense of place and a vibrant neighborhood around the convention centers are a priority.

3.2 Challenges Faced by the LACC Today

In light of the findings previously highlighted in the 2015 CSL Preliminary Market and Economic Impact Analysis for the Potential LACC Development, Arup identified five main shortfalls of the LACC's current layout that limit the facility's success in an increasingly competitive market.

The 2015 CSL Preliminary Market and Economic Impact Analysis for the Potential LACC Development identified five main shortfalls the LACC's current facility. In this Report, Arup considers the extent to which potential delivery Options can address both the trends identified in the section 3.1 and the challenges listed below. However, we note that not all of these challenges opportunities can be addressed via delivery options, but require some changes to the development program and overall strategy.

Shortfall of flexible space inventory
Trends in the Convention industry suggest that the availability of different space configurations such a ballrooms, meeting rooms, and large contiguous exhibition halls are key to fulfill the needs of different types of events and users.

Because it was originally designed as a trade show facility and not a convention center, the LACC lacks adequate inventory. Indeed, the facility does not offer sufficient meeting rooms nor does it include a ballroom. Moreover, the current layout does not enable the facility to host large simultaneous events: its largest contiguous exhibit space is half the size of its peers (Anaheim, San Diego and San Francisco). All this results in lower occupancy rates and thus limits its potential as a regional economic engine.

Lack of adequate supply of hotels within walking distance to the LACC
According to the same 2015 CSL Study, in order to accommodate 90% of the convention market, the number of hotels rooms within walking distance from the LACC would need to increase from 3,000 to 8,000 rooms. Given current hotel projects in the pipeline in DTLA it is expected that the supply will reach nearly 6,000 rooms over the next 2 to 3 years. More generally, according to a lost business analysis by the LATCB from 2010-2014, inadequate hotel or convention center space contributed to the loss of 16% (271 events) of city-wide events.

Limited amenities within walking distance
While amenities are increasingly important to convention planners and attendees, the LACC does not boast many amenities and retail on site nor in its close vicinity. CSL's 2015 analysis for the LACC demonstrated that walkability to restaurant and nightlife inventory are important factors in planners' destination selection process. As a result, diversifying the retail offerings in the proximity of the venue would increase the LACC's competitiveness in the market.

Deferred maintenance
Convention Centers typically rely on cities' funds to cover their capital and operational expenditures. The pressures on cities' budgets and their multiple competing needs have resulted in Convention Centers' deferred maintenance around the country. Since a Convention Center sells the quality and functionality of its facility, the more neglected it is the lower its ability to attract events and to promote economic growth. Proper lifecycle maintenance is crucial to ensure a venue's good performance and visual amenity.

Increasing competition for the Convention business
Over the last two decades, most large and medium size American cities have experienced a spur in convention center development. According to the Brookings Institution (2005), exhibit hall space in the US grew from 40 million square feet in 1990 to 85 million in 2014 distributed among 400+ facilities. There is a sense in the Convention business that the supply may be exceeding demand.

To attract business, cities are competing via prices, repurposing, expanding, building more appealing spaces, and enhancing and promoting the quality of the location. This includes qualities such as pedestrian friendliness, close-by amenities and restaurants, and efficient transportation. Indeed, being located in a vibrant pedestrian district has become a key competitive advantage for convention venues.

4. Delivery Options for the 2015 Design Competition Scheme

4. Delivery Options for the 2015 Design Competition Scheme

4.1 The 2015 Design Competition Scheme Overview

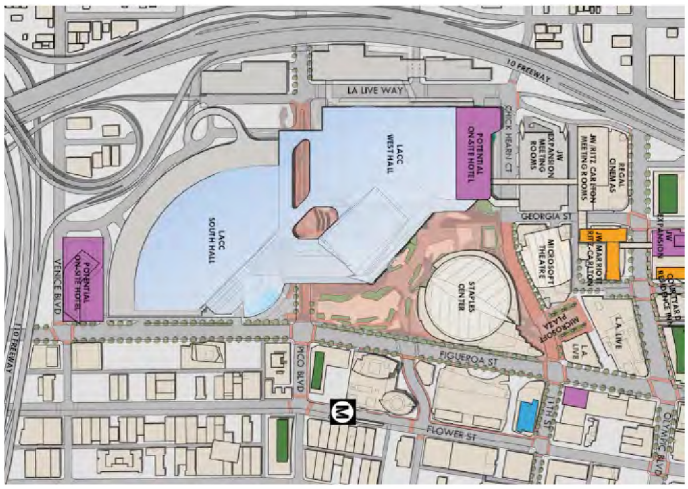
The 2015 Design Competition Scheme refines the LACC's aesthetics, adds room inventory, and works at integrating the South and West Halls. Yet significantly more could be done to fully capitalize on the urban redevelopment opportunity.

The 2015 Design Competition Scheme is primarily oriented at diversifying the LACC's room portfolio. By adding a net 307,400 sq.ft., the winning scheme aims at addressing the LACC's inventory issue. Indeed, the design proposes to diversify the facility's room inventory by rehabilitating the West Hall to expand it to 355,000 sq.ft. and by adding 78,000 sq.ft. of meeting rooms. It also includes a 97,000 sq.ft. ballroom. Strong emphasis was put on the enhanced facility's flexibility and versatility, while also designing a convention center able to host multiple large-scale events simultaneously.

The proposed architecture also significantly enhances the West Hall's visual appeal. By refurbishing the West Hall and bringing together the two Halls with an original open space conceptual plan, the new design helps create a more harmonious and integrated facility. The expanded LACC's civic prominence is a key drive of its success. The large open spaces behind the Staples Center, on the other hand, will likely be lightly used given the absence of ground-floor amenities (retail, etc.) and, in Arup's view, could detract more than enhance the campus.

The design misses the opportunity to maximize the potential size of contiguous exhibit hall space and on-site amenities that can fuel LACC's market appeal. The 2015 Design Competition Scheme does not offer a solution to LACC's main shortfall: the physical discontinuity between the South and West Halls. The proposed design neither makes room for expansive food and beverage facilities nor for significant retail spaces. However, these are important elements that will give the site the liveliness it needs to re-position itself within the market. In Arup's opinion, achieving contiguous exhibit space (e.g., over 600,000 sq.ft.) would result in a much greater event market impact and positioning versus competitors. Creating a 24/7 urban district integrated with the LACC campus would generate the desirable foot traffic depicted in the renderings and result in memorable urban place-making.

Design Competition Scheme for LACC (2015)



Quick design review

- Floor space: no additional contiguous space
- Room inventory: diversified
- On-site amenities: low
- Urban revitalization/district vibe: enhancement of Gilbert Lindsay Plaza
- Community negative impacts: some new bridging over Pico Bld.

4.2 Applicable Delivery Methods

Private sector involvement, in various degrees, affects the level of risks assumed by the Public sector.

Construction Manager/General Contractor (CM/GC) provides more certainty as a delivery method than a Design-Bid-Build (DBB), but leaves significant exposure for the Owner, as during the design development and subcontract bidding phase cost growth and overruns may materialize. CM/GC delivery for large infrastructure projects has been a common form of delivery for some time. This method brings a Construction Manager early into the design process to provide input to the design and provide the Owner with cost estimates as the design develops. The Construction Manager bids on the project based on the completed design and schedule. The Owner then evaluates the Construction Manager's price with the help of an independent cost estimator. If the Owner agrees to the price, it then issues a construction contract, by which the CM becomes the General Contractor.

This method allows the Owner to take an active participation in the project's design and construction. However, it does not offer construction risk protection since the Construction Manager has limited incentives or financial downside to keep the costs capped. Moreover, the construction contracts are such that key risks (i.e. ground and existing conditions as well as long-term risks related to latent defects and lifecycle issues) are retained by the Owner.

There are increasing levels of private sector involvement and degree of risk transfer to drive greater efficiency from better risk management and achieve improved outcomes, especially in construction cost, schedule and lifecycle cost:

- **Design-Build (DB):** public long term finance, private design and construction contracts
- **Design-Build-Finance (DBF):** private short term finance (construction), public long term finance, private design and construction contracts
- **Design-Build-Finance-Operate-Maintain (DBFOM):** private long term finance, private design, construction and O&M (but public ownership of the assets)

Through a workshop held between Arup and the City Administrative Officer (CAO), the following delivery methods were identified for this study: CM/GC, DB or DBF, and DBFOM. The following sections compare the advantages and drawbacks of each of these delivery methods for the Project.

Indicative Risk Matrix for CM/GC, DB or DBF and DBFOM Delivery Options

Item	CM/GC	DB or DBF	DBFOM
Change of Scope	City of LA	City of LA	City of LA
Permits and Licenses	City of LA	Share	Private Sector
EIR	City of LA	City of LA	City of LA
Cost Overrun	City of LA	Shared	Private Sector
Delays	City of LA	Shared	Private Sector
Design & Engineering	City of LA	Private Sector	Private Sector
Unknown Geological & Site Conditions	City of LA	City of LA	Shared
Unknown Environmental Conditions	City of LA	City of LA	Shared
Construction	Private Sector	Private Sector	Private Sector
QA/QC	City of LA	Shared	Private Sector
Operation	City of LA	City of LA	Private Sector
Maintenance and Lifecycle	City of LA	City of LA	Private Sector
Financing	City of LA	City of LA	Private Sector
Force Majeure	City of LA	City of LA	Shared

4.3 CM/GC Delivery Method: Option 1

Procuring the Project under a CM/GC method would not meet the City's objectives in terms of 1. (a) maximizing revenue and economic benefit and (b) minimizing the impact of the financing on the City's 6% debt limit, while 2. bringing limited innovation to the venue and district. Moreover, this method does not ensure 3. cost and schedule certainty nor 4. adequate lifecycle maintenance.

By choosing a CM/GC method for delivering the Project, the City would benefit from additional tax revenue drawn from the enhanced LACC, yet issue non-voter approved municipal debt subject to the 6% ceiling limitation. This method necessarily implies that the City issues debt to fund capital expenditures during the construction period. The City would have to finance all life-cycle investments for the facility with additional debt issuances over time. In this case, it is assumed that the City would continue to nominally allocate up to 25% of the TOT to pay the debt service. This would put significant pressure on other financing needs or priorities since non-voter approved debt is limited to 6% of the General Fund's revenue.

A CM/GC delivery method in practical terms does not guarantee mitigation of cost overrun and schedule delay. A CM/GC delivery method entails a commitment by the GC for construction performance to deliver the Project within a defined schedule and price for a given scope of work, either under a fixed lump sum or a guaranteed maximum price (GMP). In practice the outcomes are frequently not as expected.

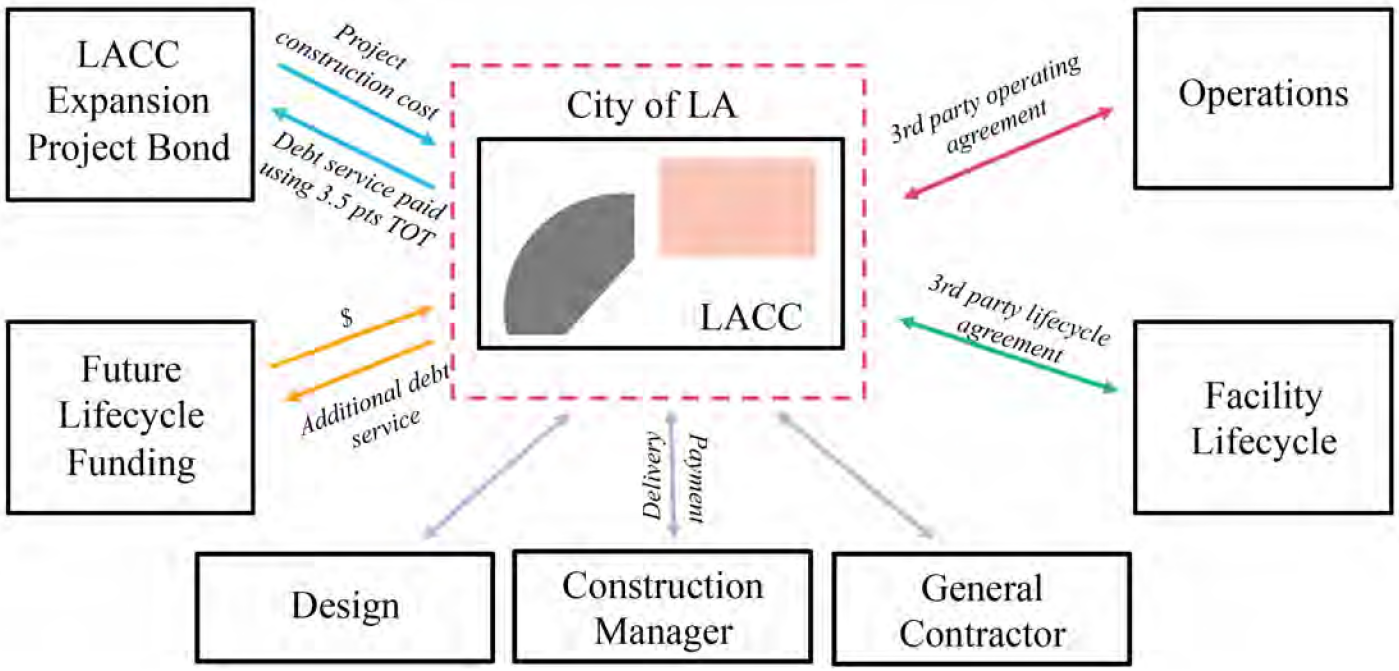
- This delta between expected and actual outcomes is largely driven by a lack of sufficient financial incentives during the design phase, when there is no competitive tension as the budget for the GMP and the scope are being defined, as well as a lack of competitive tension later on when the subcontracts are bid.
- In Arup's experience this often leads to schedule delays, cost increases, and/or trade-offs in program and other desired features through scope reductions or value engineering. These can become inevitable for the Owner, who must manage the often competing priorities of the CM/GC and the designer as the ability to competitively bid the project progressively diminishes.
- The City may specify a cap for the Project budget; however, in general the private sector has greater at risk financial and reputational pressure to control cost and schedule than the public sector.
- Once the construction sub-contracts are awarded, the GC would be paid directly by the City at construction completion. In practice this means that as payments are made (and the City's QA/QC is conducted), the City would become responsible for any issues that may be accruing as work progresses (e.g., quality issues, latent defects, coordination issues, etc.). This method requires a continuous and comprehensive supervision and monitoring of the construction by the City.
- Since the City would contract the design team, it usually retains all design-related risks (including errors and omissions).
- Finally, the construction contract typically allocates site, ground, and existing conditions as owner risks.

The CM/GC contractor would not have long-term commitment to the Project, and future latent defects and lifecycle costs would be the City's responsibility. After project completion, the CM/GC contractor has liability strictly limited to its specific contract terms and legal framework. In other words, the GM/GC contractor would not be committed to the Project in the long run. As a result, lifecycle costs would be a City responsibility. The City would have to enter into separate operation and lifecycle maintenance contracts and issue new debt in the future to pay for these services.

The CM/GC contractor is not incentivized to introduce innovative designs that maximize site value or minimize life cycle costs. The GM/GC contact structure does not financially reward designs that achieve high performance outcomes, or consider optimizing long-term lifecycle costs. Likewise, it does not allocate downside risk of not achieving such outcomes to the contractor. Thus, this Option would not maximize innovation.

A diagram of the CM/GC delivery Option structure is provided overleaf.

Transaction Structure for CM/GC Delivery Method: Option 1



4.4 DB or DBF Delivery Method: Option 2

Procuring the Project using a Design-Build (DB) or a Design-Build-Finance (DBF) delivery method would not meet the City's objectives in terms of 1. (a) maximizing revenue and economic benefit and (b) minimizing the impact of the financing on the City's 6% debt limit, while 2. bringing limited innovation to the venue and district. Moreover, this delivery methods does not ensure 3. cost and schedule certainty nor 4. adequate lifecycle maintenance.

By choosing a DB or DBF model for delivering the Project, the City would benefit from additional tax revenue drawn from the enhanced LACC, yet issue non-voter approved debt subject to the 6% ceiling limitation. A DB or DBF necessarily implies that the City issues debt to fund capital expenditures either during the construction period for a DB or at the end of construction for a DBF. In this case, the City would continue allocating a nominal 25% of the TOT for debt service. This would exert significant pressure on the City's finances, as non-voter approved debt is limited to 6% of the General Fund's revenue.

In the case of a DBF the contractor becomes responsible for financing during construction of the Project up to completion when a milestone payment from the City would be due. In that case the City would have to issue long term debt securities to fund the milestone payment.
Two benefits of DBF are that since no payments are made until completion of construction:

- Schedule performance highly incentivized compared to pay-as-you-go methods such as DBB, CM/CG, or DB
- The City has greater budget flexibility until construction is complete by allowing the City to defer issuing new debt, potentially until existing LACC debt matures in late 2022

As in the previous case, the City would have to finance the life-cycle needs with additional debt issuance in the future.

A DB or DBF delivery would also expose the City to cost overruns and schedule delays. Although these models provide greater risk transfer than a CM/GC model, there are nevertheless cost implications for the City due to delivery inefficiencies in addition to the lesser extent of risk transfer as compared to a P3 model, for example.

In the case of a DB or DBF, the City would go to the market with an RFP containing a defined reference design and a well-defined project in term of specifications an requirements. It would seek bids to complete and fine tune the design and build the Project. The City may specify a cap for its budget. In this case, projects are usually awarded based on the DB contractor's technical qualifications and past performance, yet, ultimately, the quoted price drives the decision making process.

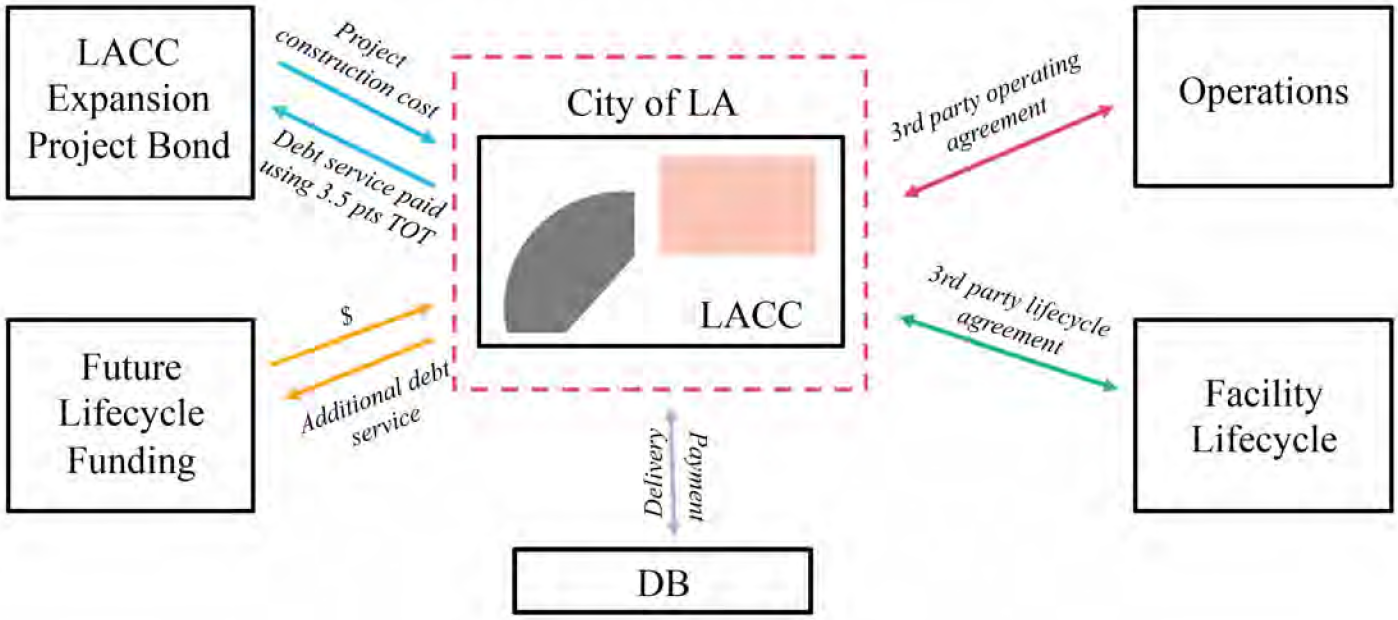
This delivery method would require a continuous and detailed supervision and monitoring of the construction by the City. Any modification of the design or the construction program would translate into a change order, thus increasing costs and delaying the completion date.

The Contractor would not have a long-term commitment to the Project, and latent defects and lifecycle costs would be the City's responsibility. After Project completion, the Contractor has liability strictly limited to its specific contract terms and legal framework. In other words, the DBF contractor would not be committed to the Project in the long run. As a result, lifecycle cost risk would lie with the City. The City would have to enter into separated operation and lifecycle maintenance contracts and issue new debt in the future. As illustrated by the LACC currently facing at least $20 million in deferred maintenance requirements for the South Hall, Arup advises that there is a benefit to transfer lifecycle costs away from the City.

The DBF contractor is not incentivized to introduce innovative designs that provide maximum value for minimum costs on a lifecycle basis. The DB / DBF contact structure does not financially reward designs that achieve high performance outcomes, or consider optimizing long-term lifecycle costs. Likewise, it does not allocate downside risk of not achieving such outcomes to the contractor. Thus, this Option would not maximize innovation.

A diagram of the DB / DBF delivery Option structure is provided overleaf.

Transaction Structure for DB/DBF Delivery Method: Option 2



4.5 DBFOM Delivery Method: Option 3

A DBFOM (or P3) scheme would entail a significant risk re-allocation between the City and the private partner. This would shift the private partner's interest and incentives from a short-term to a long-term focus on optimizing design, construction, and life-cycle / facility maintenance. This would help the City to meet its objectives of 1. (a) revenue and economic impact maximization and (b) impact minimization on the City's 6% debt limit, 2. bringing some innovation to the venue and district, 3. achieving cost and schedule certainty, and 4. achieving adequate funding and performance of lifecycle maintenance.

Under a P3 scheme, the City would benefit from additional tax revenue drawn from the enhanced LACC without issuing debt for the Project. The financial burden would be transferred to the private partner - specifically to the Special Purpose Vehicle (SPV) that would be in charge of designing, building, financing and maintaining the Project. In addition, the scope of the SPV could include venue operations. The Arup team's analysis shows that the City's availability payments, which the private partner will use to cover project expenses and pay for its debt service, would not be considered a debt obligation and therefore would not impact the 6% debt cap (see Appendix 3: Legal Analysis).

Since the majority of a Project's material risks would be transferred to the private sector, empirical experience shows that the Project has a higher likelihood of being delivered on time and within budget. This is particularly the case for risks related to long-term performance and operational functionality. Under this model, the City would first conduct an RFI/RFQ to shortlist bidders based on their technical and financial qualifications and past performance. The City issue an RFP containing a minimum list of non-negotiable programmatic, service, and performance requirements that focus on the provision of the venue's services. The City would specify bidding parameters and selection criteria, while granting a substantial flexibility to the private partner to develop its technical and financial proposals in response to the City's program and specifications This allows the bidders to develop optimized design and engineering, and an efficient construction cost an schedule. The P3 contract would be awarded based on a best value evaluation of the technical and financial proposals.

The City can choose the main bid variable to be:

- **The lowest annual availability payment for a given minimum program, or**
- **The maximum program furnished for a pre-set annual availability payment.**

In the latter case, the availability payment would be set by the City based on its affordability limit. The bidder would then be responsible for sourcing and implementing the financing, including both equity and debt, with no recourse to the City (only to the SPV).

Once the P3 project is awarded, the City negotiates and executes a long-term P3 contract which specifies the service and building performance indicators. The City establishes penalties for non-performance and the formulas for the City's availability payment obligations (the Payment Mechanism). These performance indicators and their associated penalties and incentives are critical to ensure a good upkeep of the asset throughout the P3 contract period.

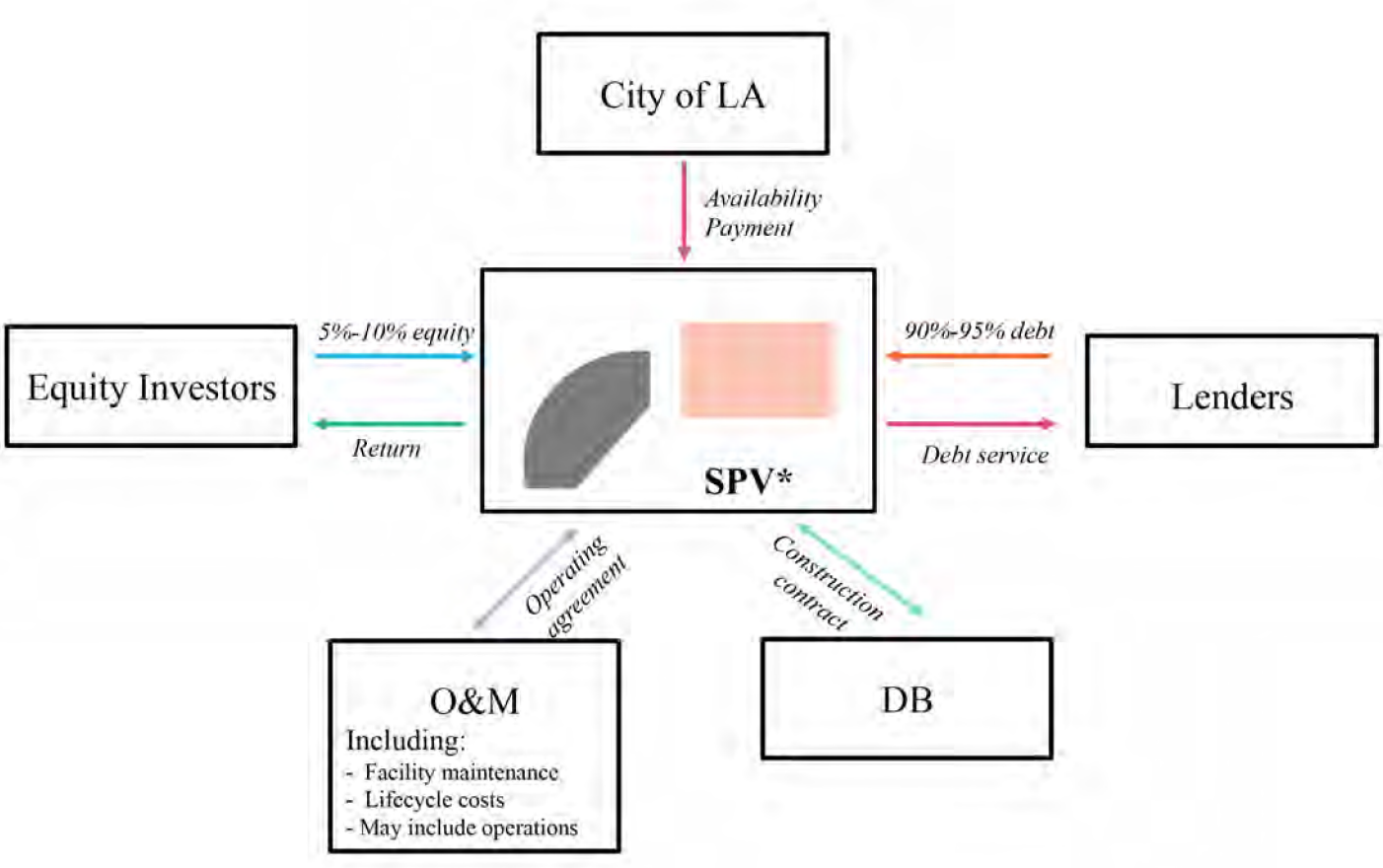
A DBFOM gives assurance that life-cycle costs are adequately funded to maintain the facility in a state that satisfies the P3 contract requirements, which can include market-based performance metrics. Another advantage is that at the end of the P3 contract period the building would be handed back to the City in a condition that meets contractually pre-established performance criteria and facility condition indicators verified by 3rd parties.

The private partners are motivated to find integrate solutions for design, construction, and lifecycle / facility maintenance. The private partner is incentivized to earn an equity return, therefore maximization of revenue throughout the concession term is a strong incentive to design an innovative, market-appealing venue. The SPV (as opposed to the City in the other delivery Options considered) is responsible for arranging contracts with DB contractors and operation and maintenance (O&M) service providers. These contractors and service providers must deliver a work product that is in line with relevant performance specifications included in their respective agreements. Financial incentives are built into these contracts to drive performance.

However, innovation to the venue is constrained by the 2015 Design Competition Scheme's shortfalls discussed in section 4.1. For example, the reprogramming of the Gilbert Lindsay Plaza does not contemplate new uses nor amenities, falling short at creating a local neighborhood vibe.

A diagram of the DBFOM delivery Option structure is provided below.

Transaction Structure for DBFOM Delivery Method: Option 3



4.6 Qualitative Evaluation Matrix of Options 1, 2, and 3

Arup evaluated the advantages and drawbacks of each delivery Option in the matrix below.

Qualitative Evaluation Matrix of Options 1, 2 and 3

Option	Pros	Cons
1 and 2	• City retains full control of the design development at all stages • Delivers the current specified Project program • In the case of a DBF, the City can improve its cashflow management by not making payments to the contractor during the construction period and deferring issuing a bond to fund the milestone payment until all construction is completed	• Debt issued by the City which would impact its 6% debt cap • Private sector innovation limited to the initial design in response to current vs. long-term trends and market standards • Most design and construction schedule and cost risks borne by the City • Substantial supervision and monitoring resources during construction required for the City (staff and consultants) • GC/CM or DB/DBF contractor only has short-term (construction period) commitment and focus on the project • City responsible for long term O&M and lifecycle investments
3	• City commits to an availability payment, which is not a debt obligation • Private partner is incentivized to incorporate innovation in order to minimize its long-term O&M costs and life-cycle investments • Delivers the current specified LACC program and more given long-term financial performance incentives • Greater certainty on schedule and costs via optimal risk transfer • Life-cycle and on-going improvements are fully funded via contractually committed payments and financing arrangements • Good upkeep of the facility subject to performance standards backed by financial incentives	• Financing cost greater than municipal debt cost due to equity investment which requires a rate of return commensurate with the risk it is taking (typical financing costs ~1% more) • The P3 procurement process can be complex and has a learning curve that necessitates appropriate staffing for proactive management

Arup recommends a DBFOM (P3) scheme for the LACC expansion Project. This delivery method enables the City to generate additional tax revenue through the enhanced LACC enables the City to 1. generate additional and finance the Project off balance sheet. In terms of 2. innovation, the private partner is incentivized to operate a market-driven facility, and the long term commitment of the private partner allows for on-going strategic venue reprogramming. This delivery model significantly mitigates 3. cost overrun and delay, while transferring 4. lifecycle maintenance responsibilities.

5. Revenue Enhancement Opportunities

5. Revenue Enhancement Opportunities

5.1 Introduction to Real Estate and Non-Real Estate Revenue Enhancement Opportunities

Based on Arup's review of market trends and demands, an analysis of the current LACC challenges, and features of designs considered in the past, Arup has identified opportunities to enhance the value of the Project. While these revenue sources are independent of delivery method, differences in allocation of responsibilities and inherent incentives can, and in practice do, drive their optimization. These opportunities fall into two categories: 1) Real Estate and 2) Non-Real Estate.

The Delivery Options analysis for the 2015 Design Competition Scheme revealed that the City's goal of bringing innovation to the site and boosting economic development can only partially be achieved by delivering it as a P3. For the Project to reach its full potential, the City should consider alternatives that optimize the venue and the site to take advantage of market opportunities.

Through the analysis of market trends and demands, current LACC challenges, and attractive features of designs considered in the past, Arup has identified opportunities to enhance the value of the Project and optimize its positive impact on the surrounding neighborhood. These opportunities can partially be met with design, construction and operational innovation within the bounds of the 2015 Design Competition Scheme through alternative procurement methods.

Revenue enhancements include:

- **Signage:** the LACC is adjacent to two major highways and provides an ideal location for advertising. The revenue estimates were based on CSL's 2011 Fiscal Analysis of Proposed Downtown Stadium and Convention Center Project, using 2015 prevailing ad sale prices, and incorporating a higher proportion of LA Live!-type digital signage and super-graphics. This revenue source is applicable to all delivery Options considered in this Report.
- **Naming Rights:** while this is a common revenue source among stadiums and arenas, convention centers are increasingly exploring such opportunities. The LACC is no exception. Naming rights revenues for the LACC were estimated based on the average annual revenues of five comparable naming rights deals with sponsorship terms ranging from 10 to 20 years. This revenue source is applicable to all delivery Options considered in this Report.
- **Real Estate:** to unlock the value potential we recommend that the Project be reconfigured and value-optimized to allow for a new mixed-use real estate development to be built adjacent to the LACC. This concept is discussed in more detail in Sections 5.2 and 5.3 below.

An estimate of the total amount of additional revenue that can be generated through real estate development and non-real estate revenue sources is discussed in Sections 7.2 and 7.3.

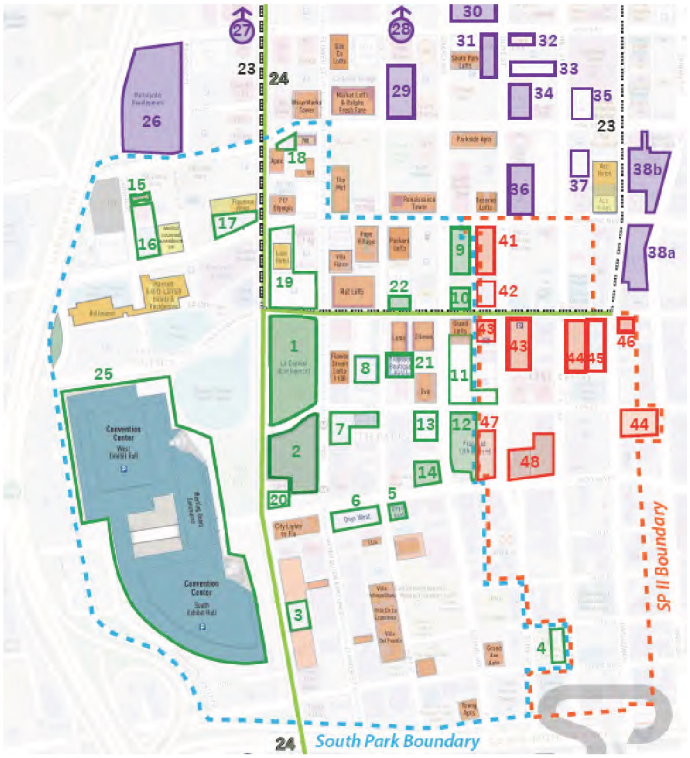
5.2 Real Estate Market Opportunities

DTLA's real estate boom is a unique opportunity to integrate into the Convention Center campus a vibrant mixed-use development benefitting the venue and the local community.

South Park's redevelopment is an unparalleled opportunity to create a more lively LACC campus and neighborhood. With more than 23 new mixed-use developments in the pipeline and, according to the South Park Business Improvement District, an expected 6,500 residential units to come to the market by 2020, South Park is experiencing an unprecedented real estate boom. These projects are fueling neighborhood revitalization by anchoring new residents in the area and offering new amenities, including approximately 3,000 new hotel rooms. Ultimately, these mixed-uses will create a vibrant community around the LACC. The key opportunity is to build on this momentum by extending that urban development into the site and integrating it with the campus.

An enhanced LACC will be a community asset in South Park's revitalization. While these real estate developments will help create a more attractive environment in the LACC's vicinity, the facility should also be viewed as an engine of local economic and community development. In Arup's opinion, the LACC campus should provide both event attendees and local residents and workers with attractive public amenities. This will boost the area's liveliness beyond the facility's regular operating hours, even in those days that there are no major events at the nearby Staples Center and LA Live!. As a result, designing the Convention Center for street-level commercial uses and local happenings is key to integrate the facility in the community. This will enhance the neighborhood experience, thus reinforcing South Park's appeal as a convention destination.

South Park Area Development Map (as of Sept. 2015)



5.3 Site Optimization for Mixed-Use Development

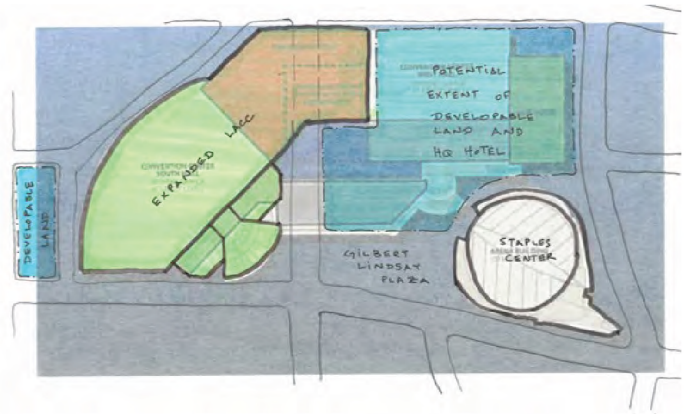
Introducing new mixed-use developments on the site is a once-in-a-generation opportunity to capitalize on South Park's development to achieve long-term success for the LACC and the City's finances.

Building on innovations proposed by all three designs to date by CTD and ULI (see Appendix 1) and proposing a new hall between the South and West venues, Arup envisions a different approach that integrates the desired convention program, civic presence needs, a new mix of on-site amenities, and urban place-making. The extensive market studies, analyses, and designs conducted to date by the Department of Convention and Tourism Development (CTD) and the ULI panel suggest strong potential for introducing significant mixed uses integral with the LACC, and adjacent to LA Live!, Staples Center, and surrounding neighborhoods. The mix of real estate development should be determined by the market in a manner consistent with City and local community aspirations and preferences in terms of density, heights, and other parameters. This would include the needed development of a convention headquarter hotel.

This approach would secure a strong position of the venue in the convention market. According to Arup's estimations, increasing the LACC's exhibit hall contiguity would not compromise a diversification in room inventory. Indeed, a large ballroom as well as additional meeting rooms could be stacked on top of the expansion. This infill between the South and West Hall would also ensure the LACC's business continuity during construction works. In the future, other expansions could be realized either horizontally to the west of South Hall and/or with a stacked design at the South Hall site.

The potential exists to unlock a substantial extent of developable land that can cross-subsidize the LACC expansion project and generate fiscal upside. Preliminary analysis indicates a total in the range of 9 to 14 acres. The mixed-use development would be a new revenue source to off-set the LACC expansion project's capital costs. This would result in a significant reduction in the City's (nominal) commitment of the General Funds to the LACC, in the near and over the long term. The mixed-use development would also generate larger fiscal benefits in terms of property and sales tax revenues.

Example of Alternative Approach for Project with Real Estate Development (overlaid on CTD's Dec. 2014 concept scheme)



- Largest contiguous exhibit hall ~600,000 to 700,000 sq.ft. at the same level as the existing South Hall
- Total exhibit hall space ~850,000 sq.ft.
- Meeting rooms ~200,000 sq.ft. (new rooms stacked over new hall expansion)
- Ballroom > 70,000 sq.ft. (stacked over new hall expansion)
- Assumes demolition and rebuild of West Hall and West Concourse
- "Bridging" over Pico Blvd. is reduced by approx. half compared to ULI, CTD, or Farmer's Fields schemes

Example of potential mixed-use development including HQ hotel totaling 9 to 14 acres of potential developable land

Highlights of the Alternative Approach (Value-Optimized Project):

- Floor space: additional contiguous space
- Room inventory: diversified
- On-site amenities: increased through introduction of mixed uses
- Urban revitalization/district vibe: great enhancement through redevelopment
- Bridging of Pico Blvd. needed, albeit less than ULI, CTD, or Farmer's Field schemes

6. Delivery Options for the Value-Optimized Project

6. Delivery Options for the Value-Optimized Project

6.1 P3 for LACC Expansion with Separate Delivery for Real Estate: Option 4

A DBFOM (P3) for the Value-Optimized Project would entail a significant risk e-allocation between the City and the private partner, thus helping the City to meet its objectives of 1. (a) maximizing revenue and economic benefit , and (b) minimizing the impact of the financing on the City's 6% debt limit, 2. bringing innovation to the venue, 3. ensuring cost and schedule certainty, and 4. ensure adequate lifecycle maintenance. Additionally, unlocking real estate land value by means of a separate procurement will create short term and long term revenue sources that would partially offset a portion of the City's annual availability payment obligations to the LACC Project.

For the Value-Optimized Project, Arup has considered a range of delivery Options similar to those in Section 4 above. Since the outcome of that analysis is a recommendation of a P3, Arup recommends that the Value-Optimized Project be delivered as a P3, for the same reasons in terms of fit with the City's objectives.

A discussion of the qualitative aspects of this assessment and recommendation for P3 delivery are included in section 4.5 above.

There are two delivery Options for the delivery of the Value-Optimized Project:

- **Option 4: P3 for Project with Separate Delivery for Real Estate**
- **Option 5: Integrated P3 delivery for Project and Real Estate.**

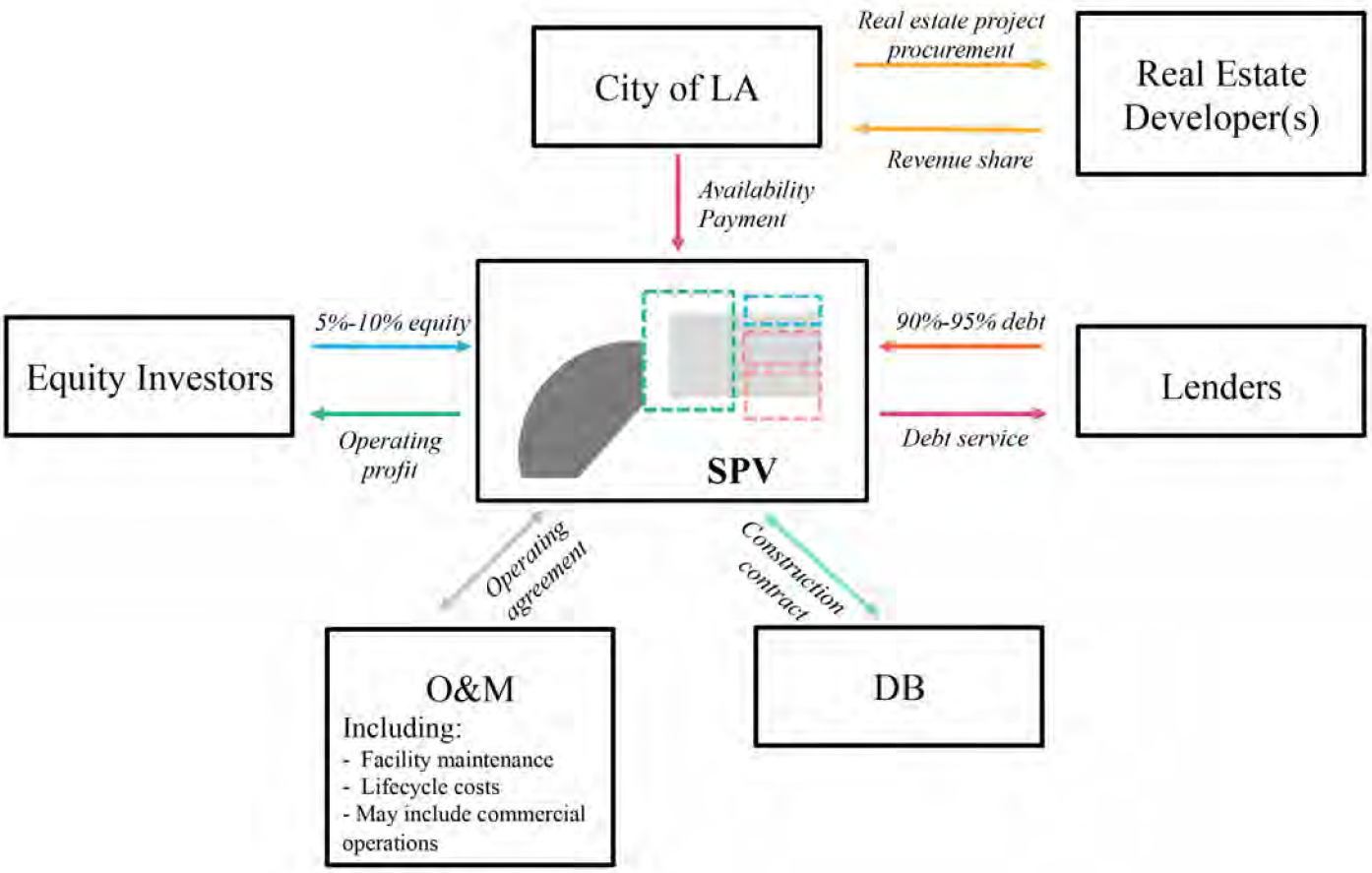
This section evaluates Option 4. The City would procure separately the Real Estate Development Project from the LACC Expansion P3 Project. The real estate development procurement could either be simultaneous or sequential to the Project's P3 procurement.
This alternative would require the City to develop a new site Masterplan to define the area of land that would be made available for development and, conversely, the area that would be part of the Project. This Masterplan would also coordinate and ensure compatibility of the LACC program with the Real Estate project's zoning, massing, and density requirements.

Two key issues when considering this Option are:

- **Management of P3 and Real Estate integration risks:** management of two separate procurements entails for the City process/schedule risk and the risk of not realizing the optimal real estate and land value to support the cross-subsidy of the Project P3. To mitigate this risk the City can use a procurement process that involves the selected P3 private partner in the development of the Masterplan, for example.
- **Market acceptance:** Based on Arup's preliminary sounding of major P3 and real estate industry developers (see Appendix 4), our assessment is that a separated procurement is feasible and would attract a wide field of combined P3 and real estate bidders.

A diagram of the P3 for the Value-Optimized LACC Expansion Project with a Separate Delivery for Real Estate is provided overleaf.

Transaction Structure of P3 for LACC Expansion + Separate Delivery for Real Estate: Option 4



6.2 P3 for LACC and Real Estate: Option 5

A DBFOM (P3) scheme for the LACC jointly with a real estate development component would allow the City to unlock the real estate land value and cross-subsidize the Project while transferring the associated risks. In other words, the City would not have the risk associated with managing two procurements nor the risk associated with realizing optimal land value.

This would help the City to meet its objectives of 1. a) maximizing revenue and economic benefit (b)minimizing the impact of the financing on the City s 6% debt limit and achieving the lowest possible value of the City's annual availability payment obligation, 2. bringing innovation to the venue in particular through a fully integrated site Masterplan, venue design, and real estate product choice and building designs, 3. ensuring cost and schedule certainty, and 4. ensuring adequate lifecycle maintenance.

In Option 5, the City would create a procurement that wraps together the project with the additional real estate development component. Therefore the two components would be procured simultaneously as a P3, notwithstanding that the lead developer would develop a phasing plan for developing individual parcels within the site Masterplan.

In this alternative the City would develop a Program Description in conjunction with a Business Plan. These two documents would be the basis for a program EIR and the RFQ/RFP, respectively. A sounding process would be undertaken to ensure these procurement documents, which would include draft P3 Agreements, are market tested and commercially sound. The RFP process would include the development of competing site Masterplans by each bidder.

Two key issues when considering this Option are:

- **Management of P3 and Real Estate integration risks:** Arup's assessment is that, with an appropriately structured RFQ/RFP process, the private sector has the expertise and innovation to better manage the risk and to realize more value from the Project and the supplemental mixed-use development. This will result in a larger cross-subsidy to support the Project and reduce the cost of the Project to the General Fund.
- **Market acceptance:** Based on Arup's preliminary sounding of major P3 and real estate industry developers (see Appendix 4), our assessment is that an integrated procurement is feasible.

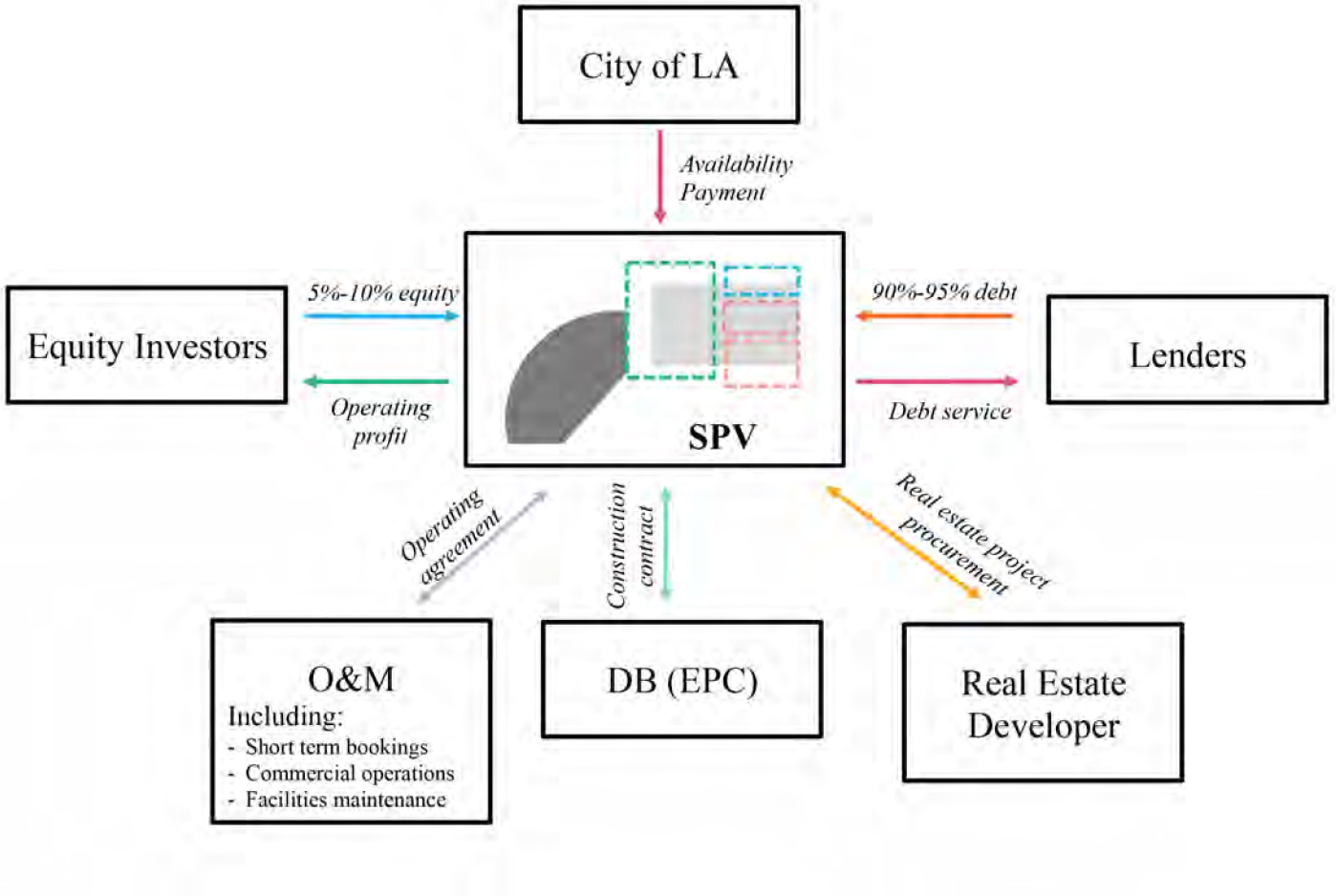
Arup's assessment is that this approach to the Project delivered with a P3 model provides the best fit to the City s objectives among the five deliver Options considered in this Report.
This is primarily driven by:

- The qualitative advantages listed in sections 4.5 above
- Joint development of the LACC expansion with the real estate development by a commercially-motivated developer would drive a more holistic search for synergy and economies of scale
- These synergies and economies of scale would optimize Project costs and maximize the revenue generation potential

The quantitative evaluation of the potential for revenue optimization and its positive impact on the cost of the Project to the General Fund is analyzed in section 7 below.

A diagram of the Integrated P3 for the Value-Optimized LACC Expansion Project with a Real Estate Development is provided overleaf.

Transaction structure of P3 for LACC with Integrated Delivery for Real Estate: Option 5



6.3 Qualitative Evaluation Matrix of Options 4 and 5

The following matrix synthetizes the advantages and drawbacks of both Options for the Project with a real estate development.

Option	Pros	Cons
4	• City commits to an availability payment, which is not a debt obligation of the City • Private partner is incentivized to incorporate innovation in order to minimize its long-term O&M costs and lifecycle investments • Delivers the current specified Project program plus the opportunity for more given long-term financial performance incentives • Greater certainty on schedule and costs via optimal risk transfer • Life-cycle and on-going improvements are fully funded via contractually committed payments and financing arrangements • Good upkeep of the facility subject to performance standards backed by financial incentives	• Financing cost greater than municipal debt cost due to equity investment which requires a rate of return commensurate with the risk it is taking (typical financing costs ~1% more) • The procurement process has a greater learning curve and requires appropriate staffing for proactive management • Risks related to process/schedule of the Project P3 and real estate development, each procured separately, and the realization of the cross-subsidy are retained by the City • Reduced potential for value added enhancement in terms of economies of scale and revenue generation potential given that the City would be standing in between the P3 and real estate developers
5	• Same advantages as Option 4 plus: • The annual availability payments the City is committed to make are reduced by the cross-subsidy from the real estate development • The risks related to process/schedule of the Project P3 and real estate development, and the realization of the cross-subsidy, are transferred to the private partner • Potential for more value added enhancement in terms of economies of scale and revenue generation potential given that a financially incentivized lead developer would coordinate and design both components	• Financing cost greater than municipal debt cost due to equity investment which requires a rate of return commensurate with the risk it is taking (typical financing costs ~1% more) • The procurement process has a greater learning curve and requires appropriate staffing for proactive management • Market acceptance of a more complex joint procurement requires appropriate resolution of key deal structure points by on-going market soundings

As a result, Arup recommends a DBFOM (P3) scheme for the Project jointly with a real estate development component. By leveraging land value to cross-subsidize the Project, the City will not only 1. to the General Fund through revenue generation and finance the Project without impacting the City's 6% limit on debt, but also 2. create a vibrant urban district that maximizes opportunities for private sector innovation to maximize economies of scale and revenue generation. This delivery model significantly mitigates 3. cost overrun and delay, while transferring 4. lifecycle maintenance responsibilities. In Arup's opinion, this procurement achieves not only the improvement and updating of the LACC facilities to industry standard but also by fostering urban redevelopment. This, in turn, will create the amenities within walking distance that will turn the LACC into a world-class destination.

7. Affordability Analysis

7. Affordability Analysis

7.1 Analytical Approach

The approach focuses on estimating the positive impact of the new revenue sources on the five delivery Options described in this Report in relation to the General Fund.

The City's objective 1. is to minimize the cost of the expansion project to the General Fund. The qualitative analysis in the sections above consider the factors that drive other primary objectives, such as achieving a convention center that elevates its status. This section carries out a strategic-level quantitative analysis of the relative cost from the City's perspective of the delivery Options as new sources of revenues are added to each of the five Options considered in this Report.

Historically the City's policy has been and continues to support the LACC with up to a nominal 25% of the 14% TOT collected city-wide. The 25% of the TOT represents, as a matter of policy, the upper limit of what the City is willing to dedicate to the LACC going forward. Our approach is to equate the $470M investment in LACC expansion that the City identifies in its September 2015 LACC White Paper to this nominal level of funding. This is a conservative approach. Rule of thumb metrics indicate that on current trends the tax revenue nominally associated with the 25% of the TOT can potentially provide funding in net present value terms greater than $470M.

At this time, Arup's recommendation is that, given uncertainties such as the effect of the business cycle on long-term expectations for continued growth of TOT revenues and the risk-adjusted costs of the Project, **a more appropriate approach is to quantify the beneficial impact of new revenue sources on the cost of different delivery Options.** The goal is therefore to inform the City's decision-making process in relation to the strategic direction it should take with the Project's funding approach and delivery method.

This approach allows the City to evaluate in relative terms the five Options

- Ranks them from highest to lowest cost
- As additional revenue sources associated with each delivery Option are added, the analysis quantifies the reductions in the Project's cost to the General Fund below the 25% of the TOT

The analysis takes as inputs the following factors:

- Revenue sources other than the General Fund, as each may apply to the different delivery Option
- Additional construction cost of 25% of the convention center expansion for Options 4 and 5 versus Options 1 to 3 – see section 7.5 below

For this strategic-level analysis the basic assumption is that (i) transaction costs, and (ii) financing costs are not considered sufficiently material in the comparative calculation relative to the factors listed above. In the next phase of the Project's development, an extensive, detailed, and comprehensive quantitative evaluation of these factors for each of the Options should be performed based on (a) the in-depth construction, O&M, and life-cycle cost estimates including risk analysis, and (b) the definition of potential capital structures, funding markets, and financing and transaction costs.

In this context, Arup notes that the City currently has approximately $253M of outstanding debt for the most recent LACC renovation, which is scheduled to be paid off by 2022. Over that time frame, this debt reduces the 25% of the TOT to support new debt as part of CM/GC or DB/DBF deal structures (Options 1 or 2), or to support availability payments as part of a P3 deal structure (Options 3, 4 or 5).

Limitations of the analysis:

- Does not estimate the annual or present value dollar cost in absolute terms of each delivery Option
- Does not make a projection of TOT revenues over the long term, consequently it does not quantify the theoretical funding capacity of the General Fund (either gross or net of existing debt obligations)
- As further discussed in Section 7.5, construction cost risks have not been quantified as part of the Report's scope of work – in the absence of risk-adjusted cost data that can be relied on to make long-term financial projections, the quantitative approach is inherently based on estimating the relative cost to the General Fund of the five delivery Options

7.2 Non Real Estate Potential Revenue Sources

The Arup team assessed the following three potential revenue sources to fund the Project's capital expenditures: signage, naming rights, and transient occupancy tax.

Signage: the LACC is adjacent to two major highways and provides an ideal location for advertising. This revenue can generate a significant amount of value toward LACC capital investments, and the appropriate private-sector operator may be able to achieve additional value through real estate-related synergies.

The revenue estimates were based on CSL's 2011 Los Angeles Event Center Signage Analysis, using 2015 prevailing ad sale prices, and incorporating a higher proportion of LA Live!-type digital signage and super-graphics.

Naming Rights: while this is a common revenue source among stadiums and arenas, convention centers are increasingly exploring such opportunities. Naming rights revenues for the LACC were estimated based on the average annual revenues of five comparable naming rights deals in the last 12 years, with values inflated to 2015 dollars, with sponsorship terms ranging from ten to twenty years.

In present value terms, signage and naming rights are estimated to potentially generate between $68M and $106M, which could be used to cross-subsidize expansion costs. This has been conservatively estimated over a 35-year time horizon which is comparable to a typical P3 contract term using a discount rate of 10.1%.

Transient Occupancy Tax (TOT): the TOT is one of the City's General Fund's fastest-growing revenues. Historically, 25% of the 14% TOT tax have been allocated to support the Convention Center costs. However, the General Fund is fully responsible for the LACC's associated costs. Based on the City's TOT information, the Arup team presents the revenue forecast for the nominal 25% of the TOT allocated to LACC.

For more details, see Appendix 5.

Estimated Annual and Present Value Revenue from Signage and Naming Rights

Sources	Low	High
Signage – Annual Revenue 2015$	$6 million	$9 million
Naming rights – Annual Revenue 2015$	$0.4 million	$1 million
Present Value (35 years @ 10.1% discount)	$68 million	$106 million

Annual Net Revenue from TOT (2010-2020)

	Historical Revenues				Est. Rev.	Projected Rev.				
FY	**10-11**	**11-12**	**12-13**	**13-14**	**14-15**	**15-16**	**16-17**	**17-18**	**18-19**	**19-20**
TOT	$134.7	$151.7	$167.8	$184.4	$200.6	$216	$229.2	$240.6	$252.2	$261.8
25% of TOT	33.7	37.9	42.0	46.1	50.2	54.0	57.3	60.2	63.1	65.5

7.3 Real Estate Revenues

The Arup team has conducted a preliminary analysis of the potential range of land value for real estate development on a portion of - and integrated with - the LACC campus.

As a function of the expansion program and potential site reconfiguration, the developable land could reach between 9 and 14 acres out of the 54 acres of the LACC's site. To assess the potential revenue from the developable land, the Arup team identified the more profitable land uses based on pro forma models typically used in the real estate industry to estimate Residual Land Values (RLV), rather than relying on recent comparable sales alone given what may be a high point of the current real estate cycle. The approach taken uses appropriately conservative assumptions for valuation purposes.

Our preliminary estimates suggest that real estate revenues through a long-term ground lease structure could be in the range of $176 million to $247 million in present value terms. The range is a function of the developable area and the product mix and based on reasonably conservative assumptions. These values are roughly similar to the value of fee simple interest in the land, less consideration of risk to the master developer. This has been estimated over a 99-year time horizon which is feasible in ground lease transaction and using a conservative discount rate of 8.8%.

This indicates a substantial capacity to cross-subsidize the LACC expansion project with a real estate development project. The analysis considered phasing of the development an 8 to 12 year time frame, such that land value monetization is spread out over time. The results are preliminary since a full market demand analysis considering absorption rates, project pipeline, etc. was not within the scope of this study. Other potential impacts on land value may include City's requirements such as workforce or affordable housing, as well as disposition structure. These factors should be considered in a next phase as part of a detailed business case.

For more details, see Appendix 5.

In addition to funding considerations, a potential mixed-use development will create a high-energy district that will enhance the LACC's attraction. Indeed, such a large real estate development would create a walkable and vibrant neighborhood 24/7, which would increase the facility's attractiveness for both the local community and the convention industry. By adding much-needed hotel rooms and diversifying the amenities mix in the immediate vicinity of the LACC, this mixed-user development will also better integrate the convention center with the surrounding community and sports and entertainment facilities.

Land Use and Net Revenue from an On-Site Mixed-Use Real Estate Development

	Land Use (acres)		Net Revenue	
	9 acres	14 acres	9 acres	14 acres
Headquarters hotel	Additional parcel		Pending feedback from hotel RFI	
Luxury Hotel §	0.32	0.32	$1 million	$1 million
Condominium †	1.70	2.67	$20 million	$28 million
Apartments and retail §	6.99	10.73	$155 million	$218 million
Total	**9.01 acres**	**13.7 acres**	**$176 million**	**$247 million**

§ Present value of ground lease revenues (99 years at 8.8%), assuming annual ground lease to be 8% of RLV and growth of CPI+1%.
† Present value of land sale revenues (99 years at 8.9%), based on mid-range real estate value assumptions .

7.4 Fiscal Impact Analysis

Arup's preliminary analysis estimates that the integrated DBFOM for the Value-Optimized Project would generate a total investment of over $2.5B which forms the basis for the tax estimates. This could help the City generate a total of between $29 million and $32 million per year in additional key tax revenue.

Depending on the size of the area available for mixed-use development, the City could receive from the mixed-use portion of the integrated project on average an additional $11 million in key taxes (property and vehicle license fee in lieu, sales tax, and TOT). The real estate products that could be developed on the LACC site consists of a mix of hotel, condominiums, apartments, retail, office, and parking. In Arup's findings, these new projects could generate significant additional revenue for the City in key taxes.

Other potential fiscal revenues, including utility user taxes and gross receipts taxes, have not been included in this study.

These fiscal advantages, drawn from the real estate development, complement the expansion cross-subsidies from the real estate and non-real estate revenue sources detailed in sections 6.2 and 6.3 above. The estimated new tax revenue would be in addition to the LACC expansion's fiscal impact previously estimated by the City to be approximately $19 million annually (as per the September 2015 White Paper).

In Arup's view, these fiscal benefits highlight how the inclusion of a substantial real estate development can generate a wide range of social and economic benefits including new tax revenue. This is in addition to potentially lowering the availability payment in the context of a P3 for the Project.

Fiscal impact generated by LACC expansion and under mixed-use development

Fiscal impact generated by:	Annual On-Site Taxes (2015 $ millions)	
	9 acres	14 acres
LACC Expansion	$19 M	$19 M
Key Tax Revenue, Mixed-Use Development: Separate	$9 M	$12 M
Key Tax Revenue, Mixed-use Development: Joint	$10 M	$13 M

Key Tax Revenue from Fiscal impact per delivery method

Delivery Option	Annual On-Site Taxes (2015 $ millions)	
	9 acres	14 acres
1, 2, and 3 *(not including Real Estate development)*	$19 M	$19 M
4 *(including Real Estate development - separate)*	$28 M	$31 M
5 *(including Real Estate development - joint)*	$29 M	$32 M

7.5 Construction Budget

For the purposes of assessing the relative impact of including new sources of revenue, the City's $470M budget indicated in the September 2015 LACC White Paper has been taken as a baseline cost input for Arup's affordability analysis. Risk factors on construction costs are considered qualitatively.

The procurement alternatives that include a real estate development require a reconfiguration of the existing LACC and its site to make land available for development. This results in a cost differential relative to scenarios not including real estate development. This cost differential has been factored in Arup's affordability analysis. Based on a high level review of the City's $470M "baseline" budget, a breakdown of which was included in the 2015 Design Competition documents, Arup estimates that this cost differential is in the order of approximately +20%. A detailed, bottom-up assessment of the "baseline" budget or the additional costs of an alternative scheme is outside the scope of this study.

The affordability analysis indicates that the additional cost of the convention center expansion project is more than offset by the land value generated by the real estate development, even under reasonably conservative assumptions. Furthermore, in Option 5 (integrated P3 + real estate) the same development consortium responsible for delivery of the convention center component would also be responsible for developing the real estate component. Due to the natural financial incentives to optimize the synergies of the two components, we expect that the convention center will benefit significantly in terms of enhancing its own capacity to generate event revenue as well as ancillary revenues.

Noting the limitations of the quantitative aspects of the affordability analysis, Arup recommends that independent of the City's choice of procurement model and/or independent of whether a real estate development component is included, a detailed analysis of the budget should be conducted. This should be based on an industry-standard risk analysis approach to capture the relevant downside risks for design and construction.

Design and construction risk factors: Relevant risks can be categorized as general to all design schemes versus more specific or of particular relevance for certain schemes. Significant risks driving all-in costs that are common to all schemes include:

- Owner-directed changes in scope
- Scope changes and adequacy of the contingency at each stage of design development
- Design development and errors and omissions
- Demolition costs subject to abatement issues and protection of structures to remain
- Bridging work over Pico Blvd.
- Existing conditions of facilities and the site
- Market conditions and inflation

Risk factors specific to the 2015 Design Competition Scheme: In addition to the above, the following specific risk factors should be considered for this scheme during the next phase of development.

- Refurbishment of existing conditions: in particular in relation to the West Hall's age with respect to issues such as potential latent defects, ability to build new floor at higher elevation, abatement issues, building components/system nearing end of their useful lives, code-related upgrades that may be required to comply with current codes, seismic strengthening or retrofitting (if any), and upgrading of existing systems to meet current convention industry standards (e.g. IT, lighting, sound, etc.)
- Work around existing/operating facilities: efficiency of means and methods relative to market pricing data
- Construction cost inflation: current/expected market conditions and expected mid-point of construction
- Program scope: alignment of cost estimates with the program as the design progresses

Risk factors specific to the alternative schemes including real estate development: In addition to the above, the following specific risk factors should be considered for this scheme during the next phase of development.

- Vertical stacking of convention center program
- Extent of demolition and space rebuild
- Work adjacent to existing/operating South Hall

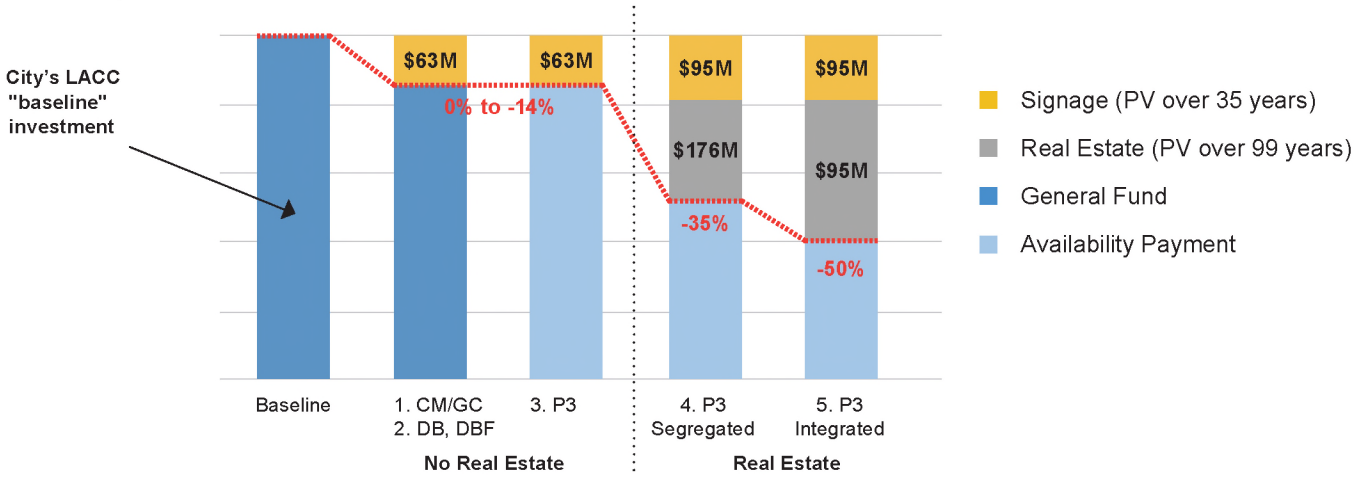
7.6 Relative Affordability of Project Alternatives

The P3 delivery Options are estimated to result in a lower cost to the City's General Fund, not impact the City's 6% debt limit, and to generate a larger positive fiscal impact.

Summary of Affordability Analysis results – Costs to General Fund are in relative terms, with the highest cost Delivery Option pegged to the City's nominal maximum TOT commitment to LACC of 25% of the TOT. *Figures shown are not intended to represent the Project's cost in absolute terms. See Appendix 7 for details of the calculation method and key assumptions.*

Project Scheme		Delivery Option Summary Description	Est. Net Cost to General Fund (2015$ millions)	% Reduction in Cost to General Fund Compared to $470M	Positive Fiscal Impact (2015$, annual tax revenues)	Comments
2015 Design Competition Scheme	1	**CM/GC**	$470M to $402M	0% to 14%	$19M	Includes lower bound signage and naming rights revenue – range indicates extent by which these materialize, per estimates provided above; no real estate included
	2	**DBF**				
	3	**DBFOM** (P3)				
Value-Optimized Project including Real Estate	4	**Separate P3 and Real Estate**	$307M	35%	$28-31M	Includes lower bound real estate revenues; upper bound signage and naming rights revenues
	5	**Integrated P3 with Real Estate**	$325M	50%	$29-32M	Includes upper bound real estate revenues; upper bound signage and naming rights revenues

Reduction in Project's Cost to the General Fund with New Revenue Sources



7.7 Framework of Financing Plan

The following table provides an overview of a framework for the financial plan for the five Options considered in this Report. Based on the City's decision-making for the next phase of the Project, a Business Option analysis should be developed following this framework for the Financing Plan.

Sources of Financing	Uses for the Project
Options 1 and 2: CM/GC, DB or DBF for the 2015 Design Competition Scheme	
(+) City Debt (Up to 25% TOT) (-) Non-Optimized Signage and Naming Revenues	(-) Construction & Soft Costs (-) Transaction Costs (-) Lifecycle Costs†
Option 3: P3 for the 2015 Design Competition Scheme	
(+) Availability Payment (Up to 25% TOT)(-) Optimized Signage and Naming Revenues	(-) Capital Fee (Construction Costs) (-) Service Fee (FM and Lifecycle Costs) (-) Transaction Costs
Option 4: P3 for the Value-Optimized Project and Separate Real Estate Development	
(+) Availability Payment (Up to 25% TOT)(-) Optimized Signage and Naming Revenues (-) Non-Optimized Real Estate Revenue	(-) Capital Fee (Construction Costs) (-) Service Fee (FM and Lifecycle Costs) (-) Transaction Costs
Option 5: Integrated P3 for the Value-Optimized Project with Real Estate Development	
(+) Availability Payment (Up to 25% TOT)(-) Optimized Signage and Naming Revenues (-) Optimized Real Estate Revenue	(-) Capital Fee (Construction Costs) (-) Service Fee (FM and Lifecycle Costs) (-) Transaction Costs

† Life-cycle costs in Options 1 and 2 would be financed with future City debt issuance

8. EIR and Procurement Schedule

8. EIR and Procurement Schedule

The EIR and Project procurement schedule under a P3 delivery would be comparable to the City's anticipated schedule under a CM/GC model.

The P3 procurement schedule will be governed by CEQA compliance. Our indicative EIR and P3 procurement schedule suggests that the overall timeline would be comparable to the schedule under a CM/GC model. The indicative schedule shown in the next page identifies three groups of activities as follows :

- Programmatic activities that encompass both EIR and procurement tasks (shown in green)
  - These include development of the Program Description and of a detailed Business Case
  - The Business Case should include a bottom-up analysis of construction, financing, and O&M costs and risks
- CEQA compliance tasks based on Program EIR approach (shown in blue)
- Procurement tasks to select a development partner and proposal compliant with the Program EIR (shown in orange)
- Milestones are indicated with diamond-shaped bullets
- Dependent activities are shown with red arrows

The RFQ and RFI/market sounding would be in parallel to the development of the Business Case and Program Description to ensure that these procurement documents are commercially sound and market tested.

The proposed process is based on maintaining competitive tension among a shortlist of P3 bidders until Proposal Submission, at which time the City would receive hard-bid proposals containing: (i) full financing plan with equity/lender commitments and real estate development proposals, (ii) fixed-price and date-certain construction bids, (iii) designs and specifications, and (iv) fixed-price O&M bids including lifecycle maintenance (in the case of DBFOM).

At Financial Close the selected P3 developer would put in place all financing commitments for both the Project and of any land value cross subsidy from the real estate development.

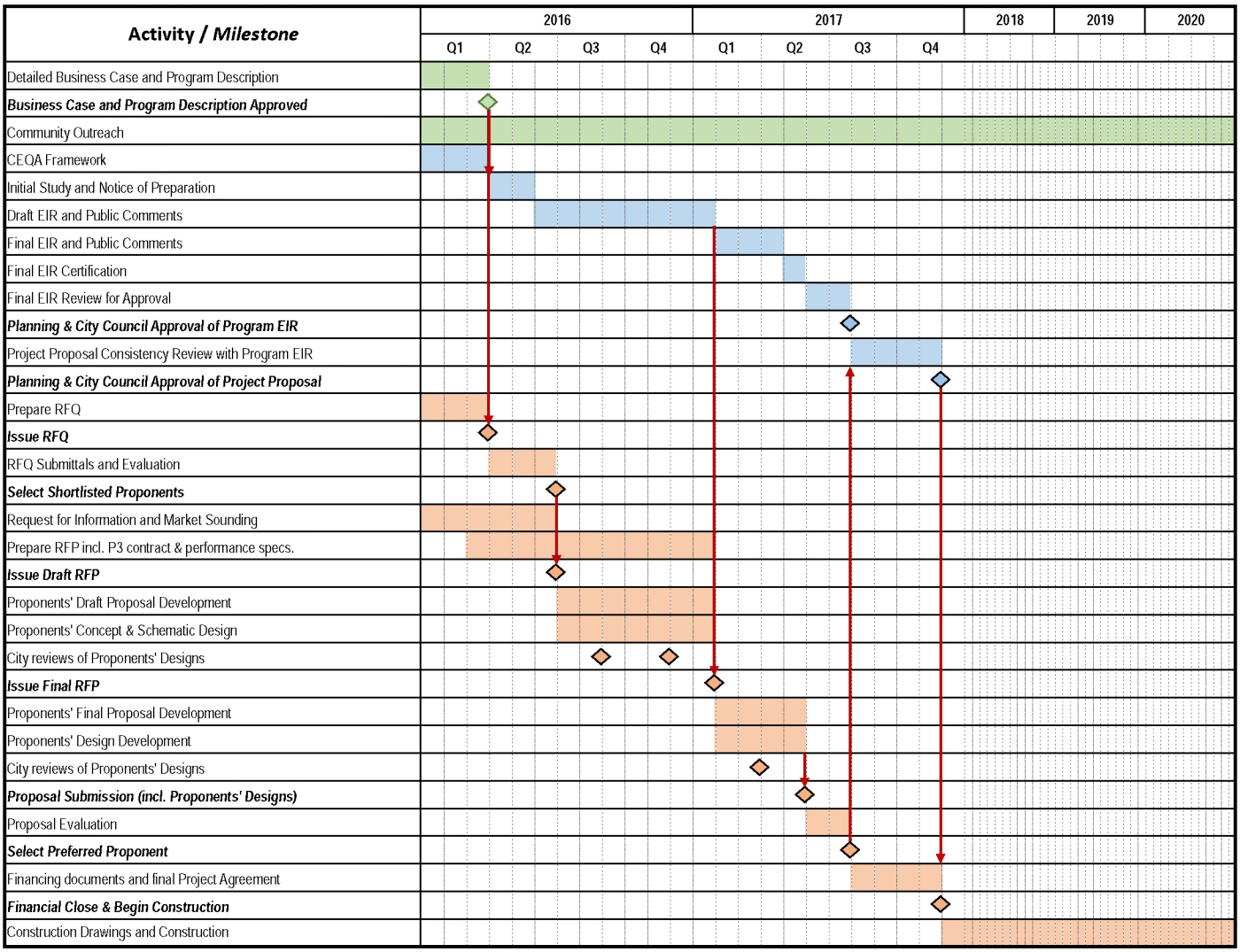
In Arup's experience, certain "early actions" regarding the CEQA compliance program can result in a more efficient process overall. The following is a preliminary list of recommended "early actions" for CEQA compliance:

- Develop and implement a Program Description Process including target land uses, densities, development standards (height, bulk, FAR, etc.) – this may require a meeting(s) with Department of City Planning
- Establish agency coordination and community outreach strategy to support acceptance of the proposed Program
- Meet with Bureau of Engineering to gain an understanding how the EIR will be contracted (e.g., if the current on-call environmental consultant is not to be retained to develop the EIR, a different procurement process may be required)
- Develop an agreement as to what traffic counts will be needed and what traffic model will be use
- Develop an understanding whether additional primary environmental baseline data may be needed – noise measurements, air quality samples, etc.
- Coordinate with South Coast Air Quality Management District (SCAQMD) to establish any new requirements to be incorporated into the proposed Program
- Review the previous certified EIR for the Farmer's Field project to establish what potentially significant impacts related to the previous Specific Plan should be incorporated into the proposed Program to avoid or minimize impacts
- Incorporate avoidance and minimization requirements into the proposed Project Program
- Identify whether measures to demonstrate compliance with other compliance frameworks such as Equator Principles are needed
- Begin development of a Purpose and Needs Statement for the EIR

Moreover, Arup notes that the Value-Optimized Project would not affect the West Hall's business continuity. Indeed, as recommended by the ULI Panel in 2013, phasing of construction would enable building a new Hall before demolishing the West Hall.

√ Release RFQ Spring 2016
√ Release RFP Summer 2016
√ CEQA complete in Summer 2017
√ Bidders concurrent with CEQA
√ Beginning of construction in 2017

Indicative P3 Procurement and CEQA Timeline



9. Summary Evaluation of Alternatives

9. Summary Evaluation of Alternatives

Arup evaluated the five delivery Options assessed in this Report against the City's four main objectives, plus schedule considerations, and the associated criteria. This indicates that a P3 model integrating the LACC expansion with a real estate development best fits with the City s objectives.

City's objectives for each of the delivery Options

Objective	Criteria	2015 Design Competition Scheme			Value-Optimized P3 incl. Real Estate Development	
		Option 1 CM/CG	Option 2 DB/DBF	Option 3 P3	Option 4 Separated	Option 5 Integrated
(a) maximize revenue and economic benefit (b) expand LACC without impacting the 6% non-voters' approval debt cap and minimize General Fund impact	No debt obligation	🔴	🔴	🟢	🟢	🟢
	Additional revenue sources	🟡	🟡	🟡	🟡	🟢
	Fiscal impact	🔴	🔴	🟡	🟡	🟢
Bring innovation to the venue and create a vibrant district	Design flexibility and room inventory	🟡	🟡	🟡	🟢	🟢
	Enhance destination quality	🔴	🔴	🟡	🟢	🟢
Ensure cost and schedule certainty of the project expansion	Cost overrun and delay risk transfer	🔴	🟡	🟢	🟢	🟢
Assure adequate long-term maintenance and facility improvements	Ring-fenced lifecycle budget	🔴	🔴	🟢	🟢	🟢
	Lowest lifecycle cost	🔴	🔴	🟢	🟢	🟢
Compatibility with current Procurement Schedule	LACC construction started by Q4 2017	🟢	🟢	🟢	🟢	🟢
	West Hall downtime of maximum 6 months	🟢	🟢	🟢	🟢	🟢

🟢 High correlation with indicated criterion 🟡 Medium correlation with indicated criterion 🔴 Low correlation with indicated criterion

10. Conclusions and Recommendations

10. Conclusions and Recommendations

Arup concludes that the LACC should be developed to include a mixed-use real estate development. In addition, best fit with the City s objectives can be achieved based on an integrated P3 model to jointly procure the convention center with the real estate project. Should the City decide not to develop a real estate project at the LACC campus, the development of the 2015 Design Competition Scheme based on a P3 model provides the next-best fit with the City's objectives.

1. The LACC and Real Estate approach will be a key engine for the convention center's long-term success and for community development that:

- Unlocks land value in the range of $176M to $247M
- If developed with a P3 model can achieve a future-proof facility that meets the convention industry's requirements and CTD's program is delivered within the $470M investment identified in the City s Sept. 2015 LACC White Paper
- Leverages the City's $470M investment in the LACC to achieve a mixed-use development worth over $2B
- Creates a vibrant, walkable urban district that is attractive for convention center users as well as local residents and workers

2. Alternative approaches to site layout can make available 9 to 14 acres of land for mixed uses, out of the LACC's total of 54 acres. As significantly the alternative layouts better align with convention center market needs for large, subdividable contiguous exhibit space. Future expansion potential for the LACC would be comparable with the expansion options for the 2015 Design Competition Scheme.

3. The P3 delivery model achieves cost and schedule certainty through extensive risk transfer, even as the City retains full ownership and ultimate control of the facility (i.e., short of an outright sale). Experience indicates that a project like this carries significant construction as well as life-cycle risk.

4. The P3 model also achieves a fully-funded life-cycle maintenance of the LACC facilities over the long term via risk transfer. Key benefits include

- Facilities are kept up-to-date, attractive, and functional at all times, incentivized by performance-based financial deductions
- Proactive maintenance reduces total life-cycle cost and for the City avoids surprises from large future investments to address major repairs
- Can include on-going funding for certain future improvements that the City and/or the P3 partner may identify as beneficial for operations or maintenance of the facilities

5. At the end of the P3 contract period, the LACC would be handed back to the City at a contractually pre-defined minimum facility condition. This is achieved with 3rd party condition assessments on a 5-year rolling basis prior to hand-back. To complete improvements to achieve hand-back conditions, a sufficiently sized lock-box reserve fund builds up over time.

6. The integrated LACC project procured as an availability payment P3 would not be a considered a debt obligation for the City and would thus not adversely impact the City's constitutional debt limit.

11. Next Steps

11. Next Steps

11.1 Process Recommendations

Regardless of the choice of delivery method for the Project or whether to include a real estate development, Arup recommends undertaking the following activities to ensure a timely project completion.

Arup recommends the following next-steps for the Project. These would be applicable whether or not a P3 model is selected. These initial activities should be managed in parallel.

- Conduct a Business Case to verify the quantitative analysis of all Project costs and key delivery model structure aspects – see section11.2
- Prepare a market-tested Program Description to support the RFQ/RFP and CEQA processes
- Prepare a CEQA framework to kick-off the programmatic EIR process: a number of specific "early actions" should be undertaken to streamline the process and achieve an efficient timetable, as outline in this report
- Launch a community and stakeholder outreach campaign with the purpose of reaching out to the key stakeholders, main civic groups with an interest in the LACC campus, and related business community members to understand their needs and concerns in relation to the Project and educate them on the advantages and disadvantages of the Project schemes and delivery options outlined in this Report
- Initiate an RFI process with credible participants in the P3 and real estate industries to support the subsequent RFQ/RFP process and obtain robust technical and commercial feedback for the Programmatic EIR process
- Conduct an independent cost review to assess the Project's construction, operations, and life-cycle maintenance risks

Arup recommends that current activities should be continued to maintain momentum in the project's development process.

- A CEQA consultant should be retained as soon as possible
- The A&E design team should be brought on board and their scope of work should be tailored to best fit with the needs of the selected procurement model
  - Starting with the outline of the performance requirements and minimum program, functionality, and capability of the LACC
  - Without compromising the potential for innovation and creative solutions that a private developer will be incentivized to bring into the Project in the case of a P3 procurement
- The HQ hotel RFI can provide valuable market feedback to inform the Business Case and the Program Description

11.2 Business Case Development

An important next step is to conduct a detailed, bottom-up assessment of Project costs that include long-term operations, maintenance, and life-cycle costs, as well as initial construction costs for the expansion projects and for any deferred maintenance needs. These would be critical inputs to conduct a detailed Business Case of the delivery options moving forward. The Business Case would allow the City to quantify the Value for Money and verify the cost to the General Fund and make a definitive decision on the optimal scheme and delivery option

Regarding the abovementioned decision-making process, Arup recommends the City to execute the following next steps for the Project.

Conduct an independent cost review to assess the Project's construction, operations, and lifecycle maintenance risks for both the 2015 LACC Design Competition Scheme and the Value-Optimized LACC integrated with a Real Estate Development. Based on the City's current LACC program requirements, an estimate for each of the delivery options' costs should be developed in order to quantify CapEx and OpEx and evaluate their relevant risk components.

Once this analysis has been prepared, the City should elaborate a detailed Business Case for the delivery option(s) selected by the City, using the CM/GC option as the base case. This would allow the City to quantitatively verify the Value for Money of the selected delivery option(s).

The Business Case is constructed based on the following parameters:

- Revenue streams
- Construction costs
- Operating schedules and costs
- Major maintenance and life-cycle costs
- Financing structure and costs, including leverage, debt and equity rates of return, and other parameters

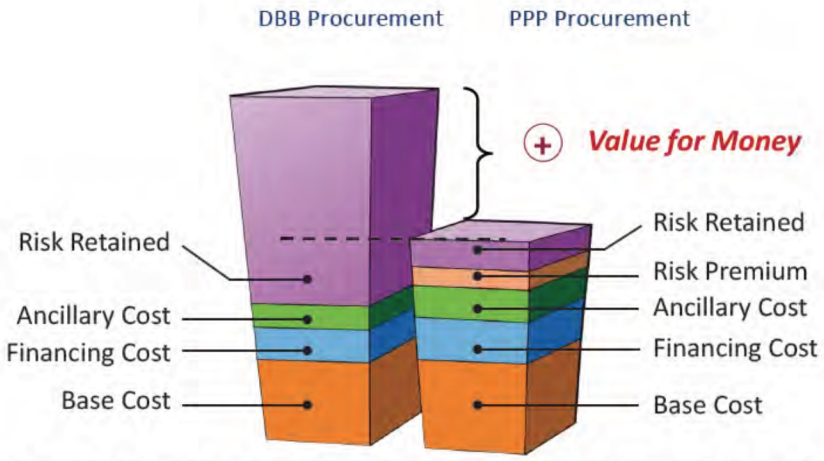
Using this information the Project's risk matrix is constructed:

- Identification of each risk
- Preliminary allocation the risks according to the party that is in the better position to manage them
- Quantification of the risks, estimating the value of the risk retained by the City (the Owner)

Once the risk matrix has been completed the value of the risk transferred to the private sector can be estimated, as well as the value of the acceptable risk premium associated with that risk transfer and consistent with relevant market precedents.

The difference between the total cost of the Project under public procurement (CM/GC, DB/DBF) and the total cost of the Project under a P3 procurement will determine the Value for Money.

Simplified VFM process (source: Infrastructure Ontario, 2012)



Appendices

Appendix 1. CTD and ULI Schemes

Appendix 1. CTD and ULI Schemes

Appendix 1.1 The 2015 Design Competition Scheme Overview

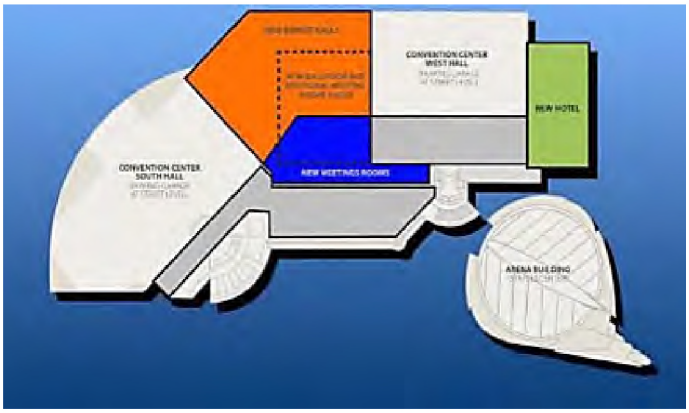
CTD's program and conceptual expansion scheme integrates the South and West Halls by building a new venue between them and diversifies room inventory and maximizes exhibit space contiguity

In its report The Future of the LACC, dated from December 2014, CTD elaborated an alternative conceptual design expanding the LACC to 1,280,000 sq.ft.. This conceptual expansion design for the LACC was an alternative to the Farmers' Field project. By physically connecting the South and West Halls by building a new hall (orange section in the diagram below), this design sought to re-position the LACC into the top five convention centers in the United States. This approach echoed the concepts previously developed by ULI as well. CTD's program specifications included building a 60,000 sq.ft. ballroom, adding 70,000 sq.ft. of meeting rooms, and increasing exhibit space to 1,000,000 sq.ft. for a total floor area of 1,280,000 sq.ft.. This program was primarily based on the CSL 2014 report highlighting the deficiencies of the current LACC venue.

Beyond the expansion of the venue itself, this program proposal was seen as a driver for economic development. Both the NFL stadium and alternative LACC expansion project were seen as catalysts of economic development. As stated by Mayor Garcetti in an LA Wave OpEd, both projects were opportunities to "rebuild [Los Angeles'] Convention Center, revitalize [its] convention industry and continue the revitalization of South Park". In the Farmers' Field alternative scheme, Gilbert Lindsay Plaza was used to interconnect the new Convention Center with all the surrounding venues. Notably, the report called for the expansion project to "Improve urban design and guest experience by creating activation and improved connections to other campus elements, to the surrounding community."

However, this design resulted in impacts on Pico Blvd. During the EIR for the Farmers' Field project, the LACC expansion design faced substantial community opposition. This was due to much wider bridging of Pico Blvd. between Figueroa Bld. and Cherry St., as compared to existing conditions (West Concourse bridge over Pico). This was to a significant extent mitigated by the improvements to the Plaza.

CTD Scheme for LACC (2014)



Quick design review

- Floor space: significant additional contiguous space
- Room inventory: diversified
- On-site amenities: N/A
- Urban revitalization/district vibe: enhancement of Gilbert Lindsay Plaza
- Community negative impacts: heavy bridging over Pico Bld.

Appendix 1.2 2013 ULI Panel Scheme

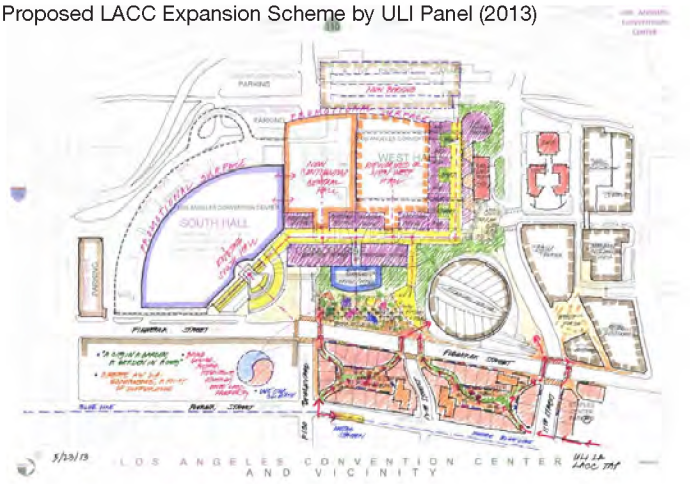
The expansion plan envisioned by the ULI panel primarily focused on adding more contiguous space by creating a new Pico Hall between the South and West Halls, and on redesigning public spaces to create a more vibrant LACC district.

The ULI panel conceived a competitive venue through additional space contiguity, flexibility and technology. The panel recommended designing a facility that is "architecturally significant, technologically advanced, and flexible enough" to host a variety of convention arrangements. The panel thus proposed reconfiguring the space to provide the LACC with the elements and inventory it lacks to position itself as a leading facility. To achieve this objective, a new "Pico Hall" was designed in the immediate adjacent to the South Hall. Additional meeting rooms and improved technology will provide the venue with key success factors such as versatility, flexibility, and creativity.

The expert panel also envisioned a community-focused venue driving innovation and place making. According to the panel, an improved LACC should provide a gathering place for the community. In their design, the venue is foreseen a center where business comes to network and share, but also to work and collaborate. Partnerships between the LACC and local industries and research/academic institutions would help position the venue as a creative facility. As a result, new urban parks, open spaces, retail facilities, and flexible meeting spaces we e integrated in the site plan. The diagrammatic design made an effort to integrate the footprint of the convention center district into the surrounding neighborhood and create a feeling of a village for sports, entertainment, hospitality, and dining.

However, this design also proposed additional bridging over Pico. Despite of promoting site accessibility and walkability, the ULI panel off-set some of these community benefits with tunneling Pico Bld.

Proposed LACC Expansion Scheme by ULI Panel (2013)



Quick design review

- Floor space: additional contiguous space
- Room inventory: diversified
- On-site amenities: N/A
- Urban revitalization/district vibe: enhancement of Gilbert Lindsay Plaza
- Community negative impacts: some bridging over Pico Bld.

Appendix 2. Case Studies

Appendix 2. Case Studies

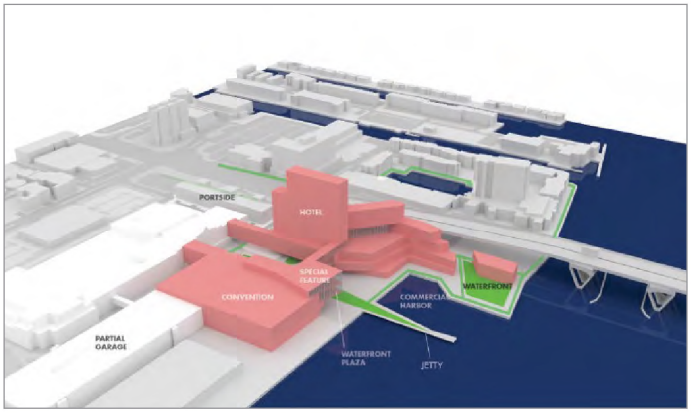
Appendix 2.1 Broward County Convention Center Expansion Plans

Broward County issued a RFP in May 2015 to procure the expansion of its convention center with a headquartered hotel as a P3. Preferred plans emphasize the role of place making for this 40-acre site.

In Spring 2015, the Broward County Board of County Commissioners issued a RFP to expand Fort Lauderdale's convention center and build a 750 room headquarter hotel through private financing. To procure both a social infrastructure project and a real estate project, the County shortlisted five developers in June 2015, and seeks to procure this project as a P3.

One of the County Commissioners' priorities for this project was to transform the city's waterfront into an iconic landmark. The RFP's project description puts great emphasis on the necessity to submit projects that create a strong "sense of place". In the County's view, attaining a distinctive and competitive convention venue depends on a site redevelopment based on "an iconic plan that takes full advantage of the unique waterfront". To revitalize the waterfront, the County envisioned expanding the convention center towards the water, providing a waterfront hotel and outdoor spaces. Community will be engaged by favoring site accessibility through SE 17th Street, and creating a commercial harbor in the waterfront space facing the venue.

Broward County Convention Center Expansion Preferred Plan



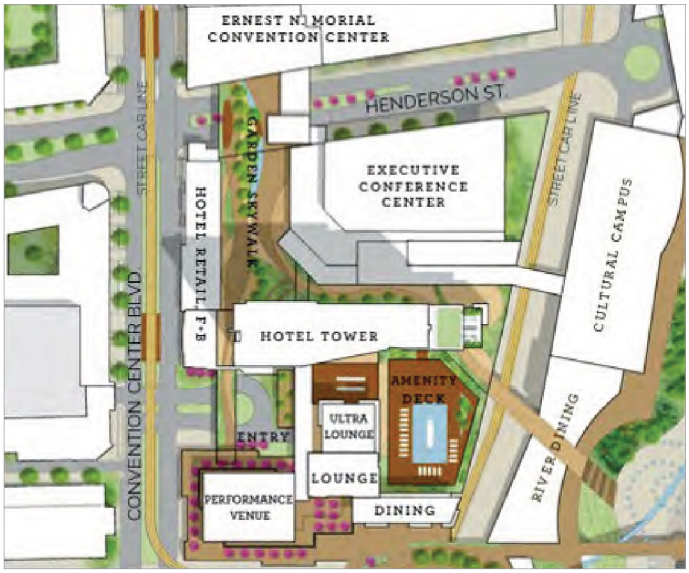
Appendix 2.2 Ernest N. Morial New Orleans Convention Center Expansion Plans

The Ernest N. Morial Convention Center in New Orleans envisions to procure as a P3 a $175M expansion project for the facility in tandem with a $1B new mixed-use real estate development.

To fund a $175 million expansion of its facility, the New Orleans Convention Center team seeks to cross-subsidize this project with a $1 billion mixed-use real estate development. The team is currently exploring process options and timelines to launch a procurement process. To secure additional funds, the projects' sponsors are investigating the benefits of placing the entire area into an economic development district, which imposes special sales taxes to pay for commercial developments.

To increase its competitiveness, the convention center envisions to spur a mixed-use development on a nearby 47-acre vacant land. Sketches show that the envisioned "Trade District" will comprise a convention center extension, a hotel and a waterfront park, and will also diversify the real estate mix with new residential and retail uses. Located in the immediate vicinity of the existing facility, this new neighborhood will hence provide the venue with additional amenities. The goal of this project is ultimately to create an urban vibe in the surroundings of the facility in addition to providing more floor space and hotel rooms for the convention center. While New Orleans already secures a strong position in the convention market, thanks to the venue's proximity with the city center, this project is thought to reinforce its competitiveness.

New Orleans Convention Center Expansion Plans



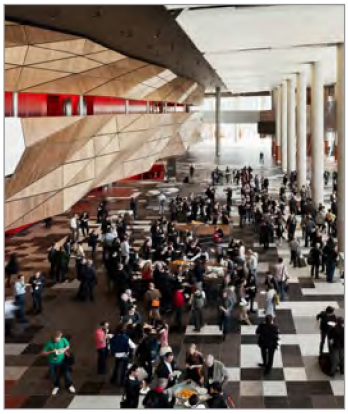
Appendix 2.3 Melbourne Convention Center

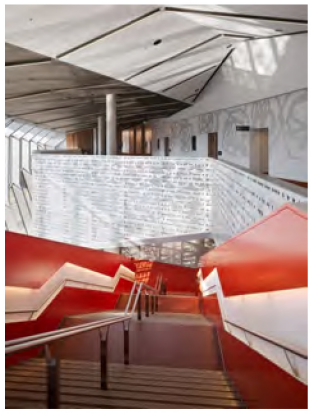
The Melbourne Convention Center (MCC) was procured as a 25-year DBFM in 2006 in which the government's $285M investment in a state-of-the-art facility leveraged a total project development worth $1.2B.

Faced with similar issues to those facing Los Angeles, the Victorian State Government procured the MCC Project through a creative mix of government funding and private sector investment. The State Government faced issues related to inflexible and outdated existing facilities and lack of contiguous exhibit space. In the RFQ/RFP, the Government of Victoria defined a minimum program and performance specifications, leaving the Project in large part open to the bidders to propose an integrated Masterplan with a new convention center and a real estate program. The Government demanded the mandatory full development of the real estate project (based on 99-year ground leases) in conjunction with the venue. As a result, bidders were required to fully underwrite and bear the risk related to their proposed real estate program as part of the deal to deliver the convention center program requirements. The Government retained events operations and bookings for the convention center and required the successful bidder to maintain the facilities and provide support services over the 25-year term, with strict facility condition hand-back requirements at the end of the term.

The real estate component acted a substantial cross-subsidy for the MCC rehabilitation project. The land value for the convention center was $70M, which supplemented a $285M investment from the government (which was set as a strict affordability cap). This $285 investment is the present value of a series of availability payments discounted at a rate given by the government in the RFP. The real estate development included a 400-room hotel, large retail and office developments, a significant restaurant complex, and residential development.

Melbourne Convention Center



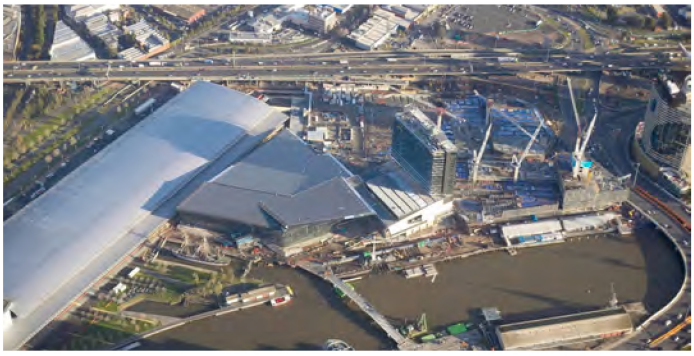


The real estate project accounted for half of the total project size, while the Hotel was 10% and the convention center itself was 40%. The real estate development, especially the hotel and restaurant complex, was designed to be closely integrated with the convention center to mutually support each other. In addition, the developer made other urban infrastructure investments such as road and pedestrian bridge access to integrate the complex with Melbourne's downtown district. The focus was to create a vibrant 24/7/365 district which supports the convention center and contributes to the downtown as an attractive and bustling destination.

Although the Project was integrated, the financing of the different sub-projects was segregated with inter-creditor agreements, particularly for the physically connected hotel and conference center.

The developer focused on value-creation by designing a stacked convention center that frees up land and unlocks value. This approach contrasted with a low-rise venue originally envisioned by the Government, which although would have had a lower cost but consumed more land. In turn, the developer's proposed more attractive urban design and efficient building. The design emphasized maximum flexibility, allowing for events ranging from conventions to concerts to sporting events. It also included high-quality, durable finishes to minimize the facility s lifecycle cost and risk. The design also included allowances for expansion, which are currently under study.

Melbourne Convention Center and associated development



Appendix 2.4 Dublin National Convention Center

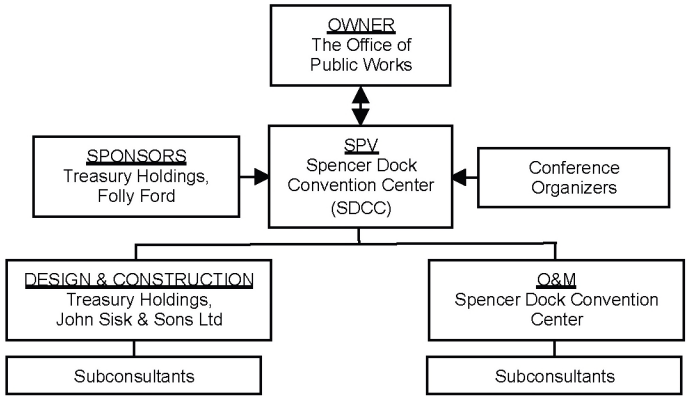
The Dublin National Conference Center (NCC) was procured as a DBFOM in 2007 by means of annual availability payments.

This project was the first convention center to be procured as a DBFOM in Europe. The Concessionaire, Spencer Dock Convention Center, financed the construction of the facility for $271m. As a compensation, the private partner will receive a yearly availability payment of $29m, over the operations phase of the concession period established at 28 years and 3 months. The first disbursement took place only after NCC construction was complete and met the operating to the standards specified in the Project Agreement. The availability payment is sufficiently sized to support the Project's debt service requirement, without accounting for 3rd party revenue sources from convention operations, since the NCC P3 contract does not provide a guaranteed utilization. To mitigate the operating revenue risk from conference and other events, the Owner pays the private partner an additional $22m per year during the first 5 years of the facility's start-up phase.

The Project Agreement defines an innovative cash waterfall to fund the daily operations and lifecycle costs of the facility. The availability payment and revenue from events (i.e. 3rd party income) serves to fund the NCC's lifecycle costs, fixed costs, debt service and reserve accounts, and variable costs from under-budgeted activities. Given the operating revenue risk support provided by the Owner, the P3 contract included an upside sharing mechanism as well: when operating revenues exceed 75% of the base case revenue, the Owner is entitled to 45% of the revenue above this level.

Dublin NCC

Organizational Structure of the DBFOM Deal for the Dublin NCC



Appendix 2.5 Singapore Sports Hub

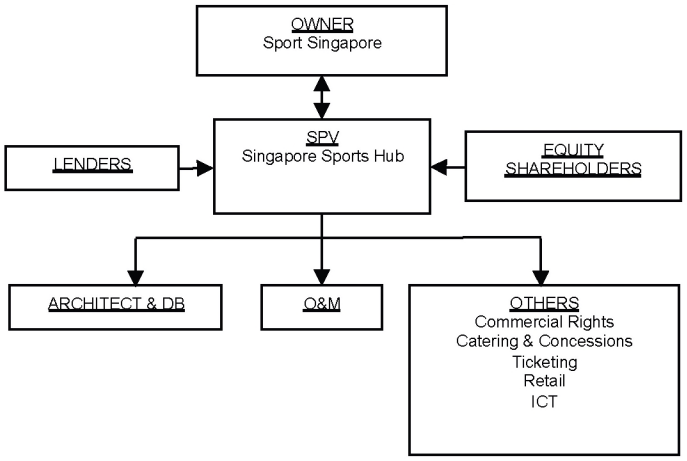
The Singapore Sports Hub was procured as a c. $1B DBFOM in 2010 for a 25-year concession period by means of a hybrid availability payment structure.

The Singapore Sports Hub is a complex sports, retail, and leisure facility integrating new and existing structures funded with private sector debt and equity. The Singapore Sports Hub is comprised of a national stadium, an aquatic center, an indoor stadium, a watersport center, a train station, a visitor center, a sports museums, beach volleyball courts, and a large retail mall. In response to the facility's large size, complex masterplan, and diverse mix of program and their corresponding distinct operations, the project had a unique and innovative procurement structure. A lead developer providing the majority of the equity investment setup a Special Purpose Company with 3 additional equity investors, 14 lenders, and 9 different subcontractors. The subcontractors delivered the following aspects of the project: design and construction, facilities management, venue operations, commercial rights and special events, retail, catering and concessions, ICT, and ticketing.

The DBFOM's business model is based on a revenue-sharing scheme between the Owner and the Concessionaire. The Concessionaire's revenues consist of two streams: Availability Payments (AP) made by the Singapore government, which represent approx. 80% of the revenue, and operating revenues from operation of the sports, retail, and leisure facilities which are subject to market risk and represent the remaining 20%. The Government takes a set percentage of the gross operating revenues up front and participates in any upside if there are excess net revenues after the private partnerpays for O&M, debt service, equity dividends, and funding of a re-investment account. The AP revenue stream was sufficient to fully support the project's debt, which was a critical consideration to achieve a financeable deal structu e. The equity investor's return on capital is generated partially by the AP's, which are also subject to facility O&M performance deductions, and partially by the operating revenues.

Singapore Sports Hub

Organizational Structure of the DBFM Deal for Singapore Sports Hub



Appendix 2.6 Long Beach Civic Center P3

Arup worked as the Grantor's Advisor for the Long Beach Civic Center, which includes a public project consisting of a new City Hall, a HQ for Port of Long Beach, a new main Library and Lincoln Park, as well as a private development comprising up to new 800 housing units, a 200-room hotel, and 45,000 sq.ft. of retail.

The City of Long Beach had several financial objectives for procuring this project as a P3:

- Project should not result in a net on-going fiscal impact on the General Fund relative to current obligations
- First year Availability Payment in 2020 to cost Long Beach $18.5M versus projected cost of keeping seismically unsafe facilities with deferred maintenance of close to $20M/year
- No new taxes or fees to support the project
- No impact on City credit rating
- Transfers the principal risks of delivery of the construction and life-cycle maintenance
- City-owned parcels contributed to the project to subsidize costs via land sales and transfer to the private sector all development risks

As a result, the P3 allows the City to achieve these goals under one integrated procurement and financing.

Long Beach Civic Center P3 was unanimously approved by the City of Long Beach on December 15, 2015

Appendix 3. Legal Analysis

Appendix 3. Legal Analysis

From a legal standpoint, an availability payment is not subject to the City's 6% limitation on non-voter approved debt.

To procure a project as a DBFOM, the City Council needs to put an ordinance up for vote.
As mentioned in Article XI, section 5(a) of the California Constitution, the City may make and enforce all ordinances and regulations in respect to municipal affairs. In addition, section 371(b) of the City Charter states that a "design-build or other appropriate project delivery systems may be used when justified by the type of project and approved by the contracting authority". Hence, to create a long-term DBFOM authority, the City Council needs to pass an ordinance with a least two-thirds vote.

Due to its contingent nature, an availability payment is not subject to State or City debt limits.
Availability payments are deferred unitary payments encompassing capital expenditures, operating expenditures, and financial costs made by the Owner to the Concessionaire. They are made periodically after substantial Project completion, and may be adjusted downwards based on facility's "unavailability" (e.g. unpermitted closures or project faults against contractually-prescribed asset performance standards). As a result, the Owner's obligation to make availability payments is subject to the appropriation of funds needed to make these payments. This entails that availability payments are of a contingent nature, and hence are not subject to the State constitutional debt limit or to the City's 6% limitation on non-voter approved debt.

Appendix 4. Market Sounding

Appendix 4. Market Sounding

Appendix 4.1 Matrix of Feedback from P3 Developers

The following table presents Arup's market sounding findings, based on the feedback received from various P3 developers regarding the Value-Optimized Project.

	Willingness for P3 component	Willingness for convention center operations	Comfort with real estate revenue risk
Developer 1	+	-	-
Developer 2	+	+/-	-
Developer 3	+	-	+/-
Developer 4	+	+/-	+
Developer 5	+	+	+
Developer 6	+	+	+

Appendix 4.2 Matrix of Feedback from Real Estate Developers

The following table summarizes the Arup team's market sounding findings, based on the feedback received from various real estate developers regarding the Value-Optimized Project.

	Willingness to form P3 consortium	Interest in location	Appetite for 9-14 acre
Developer 1	+	+	-
Developer 2	+	+	+
Developer 3	+	+	+/-
Developer 4	+	+	+/-

Appendix 5. Analysis of Real Estate and Other Revenues

HR&A Analyze. Advise. Act.

Los Angeles Convention Center Funding Opportunity Analysis
Real Estate and Non-Real Estate Revenue Assumptions

December 17, 2015

Real Estate Revenue Assumptions

Real Estate Valuation Methodology

HR&A created Excel based "static" pro forma models typically used in the real estate industry to estimate Residual Land Values (RLV) for a variety of real estate asset classes potentially considered for the Los Angeles Convention Center (LACC) site. The models consist of a development budget, profile of net operating income, and estimate of net project value based on stabilized operation of the completed development and value of the project derived by applying appropriate income capitalization rates (cap rates).

These values are expressed in terms of RLV per square foot (PSF) of building area for each prototype at stabilization to develop a "kit of parts" for a series of real estate scenarios at varying scales, assuming only high-density construction. This approach allows for some flexibility in the actual development density and land consumption, assuming the construction typology is constant (Type I/II).To determine the RLV, HR&A estimated the capitalized value (i.e. sale value), for individual asset prototypes. HR&A used RLV as a determinant of land value, rather than relying on recent comparable sales alone, given what may be a high point of the current real estate cycle. The value of each prototype was calculated differently for each prototype.

- *Hotel Prototype*. The value of the hotel prototype is calculated by deriving the net operating income (NOI), based on Smith Travel Research data, divided by a land-use specific cap rate derived from third party data sources, based on Real Estate Research Corp., 2015 Q3 data and recent sales in Downtown LA (DTLA). Cap rates are adjusted to reflect the fact that current market cap rates are at an all-time low, and likely to trend upwards as interest rates rise, lowering real estate values by the time development at the LACC is likely to occur. NOI equals gross room income, plus assumed non-room income, less operating and overhead expenses, a management fee and other fixed expenses.
- *Apartment, Office and Retail Prototypes*. The value of rental prototypes is calculated by deriving the stabilized NOI, which equals gross rental income (based on HR&A's review of DTLA rents via CoStar) less a vacancy allowance, and operating expenses and replacement reserves (for residential). The net operating income for each prototype is then divided by the appropriate cap rate.
- *Condominium Prototypes*. The value of for-sale residential prototypes is calculated by adding the total sales revenue of each unit (based on HR&A's review of Downtown LA sales via Redfin), and subtracting fees for marketing and cost of sale, homeowners' association fees through project absorption for unsold units, and warranties.

Real Estate Valuation Methodology

The development budget for each prototype consists of three primary components: (1) hard costs associated with the construction of each prototype; (2) soft or non-construction costs; and (3) construction financing costs.

- *Hard Costs.* HR&A assumed Type I/II construction (i.e., steel or concrete frame) for all prototypes, with similar characteristics to recent projects in South Park. Prototypical projects have Floor Area Ratios (FAR) between 6:1 and 8:1, and range between 20 to 30 stories, with a mix of structured and subterranean parking. Hard costs per square foot for shell and core construction were derived from Marshall & Swift Commercial Cost Estimator software ("M&S"), with Los Angeles-area values as of November 2015.
- *Soft Costs.* Soft costs include design, engineering, consulting and related professional fees; permits and fees; development, entitlement and project management; real estate taxes, insurance, legal and accounting; and a soft cost contingency. These estimates are based on HR&A's independent research of recent projects in Downtown Los Angeles.
- *Construction Financing Costs.* For the prototypes, we assumed construction periods ranging from 12 months to 30 months, depending on the size and complexity of the prototype. We also assumed an interest-only construction loan equal to 80 percent of hard and soft construction costs, an interest rate ranging from 6.5 to 7.0 percent depending on the land use, an average outstanding loan balance of 65 percent, and a 2.0 percent construction loan fee, as well as an additional 2.0 percent fee associated with a permanent loan for the prototypes which are generally held by the developer beyond the construction phase.

For each prototype, Residual Land Value was derived by subtracting the total development cost and an allowance for developer profit from the estimated capitalized or sale value, as discussed on the previous page.

- *Developer Profit.* HR&A assumed a developer profit of 12.5 percent of capitalized value for all prototypes, which in our experience is a typical return threshold for Los Angeles development projects (i.e., midpoint of a 10-15 percent range).

Hotel Prototype Valuation Assumptions

The hotel development prototype analyzed is highly sensitive to market variables, including room rates and cap rates. Cap rates are at an all-time low, and likely to trend upwards as interest rates rise, lowering real estate values. HR&A conducted sensitivity of RLV to cap rates and rents/prices, and assumed a mid-point for the scenario analysis, as shown below. Key construction cost assumptions are described at left, with the effect of market variations on residual land value per square foot shown below.

Hotel Development Cost Assumptions[1]

High-End Boutique Hotel

- Development Cost PSF: $675
- Gross Area per Room: 700 SF

[1]Includes hard, soft and financing costs.

Scenario Valuation

Residual Value per Square foot of Built Area

High-End Boutique Hotel (75% Occupancy)

		Cap Rate		
		6.00%	*6.50%*	*7.00%*
ADR	*$375*	$118	$56	$3
	$350	$64	**$7**	-$43
	$325	$11	-$43	-$88

Residential Prototype Valuation Assumptions

Residential development prototypes analyzed are highly sensitive to market variables, including rents, sale prices and cap rates. Cap rates are at an all-time low, and likely to trend upwards as interest rates rise, lowering real estate values. HR&A conducted sensitivity of RLV to cap rates and rents/prices, and assumed a mid-point for the scenario analysis, as shown below. Key construction cost assumptions are described at left, with the effect of market variations on residual land value per square foot shown below.

Residential Development Cost Assumptions[1]

Condominium Tower
- Development Cost PSF: $600
- Gross Area per Room: 1,150 SF

Apartment Tower
- Development Cost PSF: $375
- Gross Area per Room: 1,100 SF

[1]Includes hard, soft and financing costs.

Scenario Valuation

Residual Values per Square foot of Built Area

Condominium Tower

	Price PSF		
	$820	*$870*	*$930*
	$14	**$46**	$83

Apartment Tower (7.5% Vacancy)

		Cap Rate		
		4.50%	*5.00%*	*5.50%*
Rent PSF	*$3.95*	$122	$75	$37
	$3.70	$92	**$49**	$13
	$3.45	$63	$22	-$11

Commercial Office and Retail Prototype Valuation Assumptions

Commercial office and retail development prototypes analyzed are highly sensitive to market variables, including rents and cap rates. Cap rates are at an all-time low, and likely to trend upwards as interest rates rise, lowering real estate values. HR&A conducted sensitivity of RLV to cap rates and rents/prices, and assumed a mid-point for the scenario analysis, as shown below. Key construction cost assumptions are described at left, with the effect of market variations on residual land value per square foot shown below.

Commercial Development Cost Assumptions[1]

Office Tower
- Development Cost PSF: $525

Retail
- Development Cost PSF: $350

[1]Includes hard, soft and financing costs.

Scenario Valuation

Residual Values per Square foot of Built Area

Office Tower (10% Vacancy)

Rent PSF	Office Cap Rate 5.00%	5.50%	6.00%
$3.75	$76	$23	-$21
$3.50	$37	**-$13**	-$54
$3.25	-$2	-$48	-$87

Retail (10% Vacancy)

Rent PSF	Retail Cap Rate 6.50%	7.00%	7.50%
$4.00	$114	$78	$48
$3.75	$83	**$50**	$21
$3.50	$52	$21	-$5

Real Estate Revenue Potential Summary

	RLV per Building SF	Annual City Property, TOT & Sales Taxes per Built SF[1]	Risk
High-End Boutique Hotel	$7	$20.60	Medium-High
Condominium	$46	$2.13	Medium
Apartment	$49	$1.63	Low-Medium
Retail	$50	$3.10	Medium
Office	$(13)	$2.03	High

A summary of the "scenario valuations" per SF of built area is shown above, as well as an estimate of key City tax revenue that could be generated by each prototype. HR&A's valuations are based only on a supply-side analysis of DTLA real estate metrics, and do not reflect market demand, consider the effect of pipeline projects or include requirements for affordable housing, which could affect feasibility. Density assumptions reflect recent prototypical projects in DTLA, not site feasibility. A high-level evaluation of the risk associated with each project is shown above, and reflects expected changes in cap rates and the unprecedented amount of construction in DTLA, which could outpace demand and affect project feasibility.

Estimates of annual tax revenue to the City of Los Angeles, as shown above, are not net of subventions or subsidies that may be required. There are other sources of revenue that could generate a positive fiscal impact to the City including the Gross Receipts Tax; Utility Users' Tax; Sales Tax on construction materials; various one-time licenses, permits, impact fees and fines; and Real Estate Transfer Fees.

- *Property Tax*. City's share of the annual 1% tax on capitalized value (as proxy for assessed value). Includes Vehicle License Fee in-lieu of property tax.
- *Transient Occupancy Tax (TOT)*. 14% of room revenue.
- *Sales Tax*. City's 1% share of sales tax, assuming gross rent is equal to roughly 30% of retail sales.

[1] As applicable.

Real Estate Absorption Assumptions

Downtown Los Angeles Market-Rate Residential Development 1999-2017

	Under Construction	New Construction	Adaptive Reuse	Total	Annual Growth[1]	Apartments	Condos
South Park	4,134	2,100	207	6,441	**358**		
Other DTLA	6,235	10,672	9,724	26,631	1,480		
Total	10,369	12,772	9,931	33,072	1,837	25,366	7,706
Share						***77%***	***23%***

[1] Includes expected deliveries 2015-2017, but unadjusted for adaptive reuse. Does not account for or reflect future development capacity in South Park.

To determine an illustrative absorption pattern for new residential development at the LACC site, HR&A reviewed recent and pipeline development in South Park and in Downtown Los Angeles. HR&A assumed that annual South Park residential delivery patterns from 2018 onward, the earliest year that any development at the LACC site would be likely delivered, will be roughly similar to the recent annual average, and will grow by roughly 5% per year. HR&A did not analyze capacity in South Park to accommodate this growth or perform a residential market demand analysis at this stage.

The rental-condominium residential development mix on the LACC site is also expected to mirror recent deliveries. Property values are assumed to grow at a real growth (net of inflation) rate of roughly 2.5% annually, or roughly 5.5% when including inflation.

9-Acre Real Estate Scenario Assumptions

LACC Land Disposition Phasing (SF Built Area)[1]

	Total Units	SF/Unit	Year 1	Year 5	Year 8	FAR	Land (Ac)
Boutique Hotel	150	750		112,500		8	0.32
Condominium	455	1,300	149,500	247,000	195,000	8	1.70
Apartment	1,875	1,300	617,500	975,000	845,000	8	6.99
Retail[2]	60,000		20,000	20,000	20,000	2	0.00
Total			787,000	1,354,500	1,060,000		9.01

[1] Assumes ground lease or land sale initiated roughly three years before delivery/absorption of asset.

[2] Retail space is assumed to be incorporated into the base of other land uses or LACC, and therefore does not affect total land utilization.

Scenarios were developed to maximize RLV, and assume major reconfiguration of the LACC site. Residential phasing reflects the capture of 50 percent of average South Park recent absorption, assuming that development patterns continue, growing at an annual rate of five percent.

In any scenario, the timing of land disposition will be critical to both maximize revenue and ensure real estate asset feasibility so that land is developed at the desired point in the real estate market and density. Variations in overall revenue potential should be expected based on actual disposition strategy.

13.7-Acre Real Estate Scenario Assumptions

LACC Land Disposition Phasing (SF Built Area)[1]

	Total Units	Year 1	Year 5	Year 8	Year 12	FAR	Land (Ac)
Boutique Hotel	150		112,500			8	0.32
Condominium	715	149,500	247,000	195,000	338,000	8	2.67
Apartment	2,875	617,500	975,000	845,000	1,300,000	8	10.73
Retail[2]	80,000	20,000	20,000	20,000	20,000	2	0.00
Total		787,000	1,354,500	1,060,000	1,658,000		13.72

[1] Assumes ground lease or land sale initiated roughly three years before delivery/absorption of asset.

[2] Retail space is assumed to be incorporated into the base of other land uses or LACC, and therefore does not affect total land utilization.

Scenarios were developed to maximize RLV, and assume major reconfiguration of the LACC site. Residential phasing reflects the capture of 50 percent of average South Park recent absorption, assuming that development patterns continue, growing at an annual rate of five percent.

In any scenario, the timing of land disposition will be critical to both maximize revenue and ensure real estate asset feasibility so that land is developed at the desired point in the real estate market and density. Variations in overall revenue potential should be expected based on actual disposition strategy.

Non-Real Estate Revenue Assumptions

Signage Revenue Assumptions

Annual Funding Potential (2015 $)

$6 - $9 million

Potential signage revenue range is based on CS&L's "Los Angeles Event Center Signage Analysis" (2011), using 2015 prevailing ad sale prices, and incorporating a higher proportion of digital signage and supergraphics similar to LA Live. Revenue projections assume private operation and in-house ad sales without the participation of a third-party media selling partner. Projections are net of operating and capital expenses.

Key Assumptions

- Low scenario includes 30 regular signs, 2 digital signs, and 5 large signs (including 1 supergraphic).
- High scenario includes 30 regular signs, 16 digital signs, and 5 large signs (including 1 supergraphic).
- Regular signs are defined as traditional billboards with an area of 1,100 SF; large signs are defined as traditional signage with an area of 3,300 SF; and supergraphics are defined as traditional signage with an area in excess of 150,000 SF; digital signs are defined as high-definition LED video screens with at least 250 SF per screen.
- Value based on the industry standard unit of Cost Per Thousand (CPM), as determined by publicly available rate cards from major Los Angeles outdoor advertising operators and interviews media sales company representatives.
- Weekly DEC (daily effective circulation), an industry metric used in determining the number of views that an ad can capture, is based on the CS&L report, which HR&A reviewed against current traffic estimates, and is roughly 5,200,000 for signage facing I-10 and I-110 and 250,000 for all other faces.
- Capital and operating expenses based on industry standard revenue/expense ratios.

Naming Rights Revenue Assumptions

Annual Funding Potential (2015 $)

$0.4 - $1 million

Naming rights revenue projection is based on the average annual revenues of five comparable naming rights deals for convention centers, plazas and a ballroom with sponsorship terms ranging from five to twenty years. Given the small pool of comparable naming rights deals completed in the past five years, projections are based on deals originating between 2003 and 2015. Total funding potential reflects the sum of potential naming rights revenue for three components: the overall convention center, a ballroom within the convention center, and an open-air public plaza.

Key Assumptions

- Naming rights revenue is assumed to be collected on an annual basis from the sponsor, as is the case with the majority of naming rights deals reviewed.
- Low scenario based on annual naming rights revenue for lower-profile venues without significant visitation or proximity to venues with nationally-televised events. Individual components generate between $10,000 and $300,000 in annual revenue.
- High scenario based on annual naming rights revenue for higher-profile venues with annual visitation over 4 million. Individual components generate between $180,000 and $500,000 in annual revenue.
- No major convention centers have been able to achieve naming rights revenues exceeding $500,000 annually.
- Typically, venues do not achieve significant naming rights revenue without a program of major sports, entertainment or other events that are widely-televised or advertised. There is precedent for package deals for complexes that include convention centers, event arenas and sports stadiums.

General Fund Transient Occupancy Tax (TOT) Revenue Assumptions

City of Los Angeles Annual Transient Occupancy Tax Revenue

	Actual Revenues ($ millions)[1]						Est. Rev	Projected Revenues ($ millions)				
	'08-09	'09-10	'10-11	'11-12	'12-13	'13-14	'14-15	'15-16	'16-17	'17-18	'18-19	'19-20
Total TOT	$134.8	$122.6	$134.7	$151.7	$167.8	$184.4	$200.6	$216.0	$229.2	$240.6	$252.2	$261.8
LACC 3.5%	$33.7	$30.7	$33.7	$37.9	$42.0	$46.1	$50.1	$54.0	$57.3	$60.2	$63.0	$65.4
CAGR '08-'19												**6.6%**

[1]In current dollars, not inflation-adjusted

Revenue estimates and forecasts are prepared by the City Controller, as shown in the City of Los Angeles Comprehensive Annual Financial Report, Fiscal Year 2015-2016, with minor updates to FY 2015-16 revenue forecasts. Per the City Controller, FY 2015-16 assumes an a growth of 7.7 percent over FY 2014-2015, as well as an assumed additional $5.0 million in revenue from tax collection agreements with short-term rental websites like AirBnB, which may be directed to fund specific initiatives. Annual 3.5 percent share of TOT for LACC debt service is not indicative of City-wide debt service capacity, which is constrained at six percent of total City revenues.

Key Terms and Definitions

Key Terms and Definitions[1]

- *Absorption*[1]. The annual rate at which a real estate product or land is sold.
- *Average Daily Rate (ADR)*. A metric used by the hospitality industry to reflect the average nightly price for occupied rooms. ADR is calculated by dividing total annual room revenue by room nights sold. Typically lower than a hotel's published rates (or "rack rates") and reflects actual realized room revenue after discounts and concessions.
- *[Income] Capitalization Rate (Cap Rate)*. A metric used by the real estate industry to determine the value of income producing properties (hotels, apartments, retail, etc.) based on the annual income that the property is expected to achieve. A cap rate is the ratio of a property's net operating income (income less expenses) and it's market value.
- *Capitalized Value*. The current value of an real estate asset based on expected income over the asset's life span. Capitalized value can be calculated by dividing net operating income by the appropriate cap rate.
- *Compound Annual Growth Rate (CAGR)*. Mean annual growth rate over a specified period of time.
- *Cost Per Thousand (CPM)*. A metric used by the advertising industry to reflect the cost that an advertiser will pay for 1,000 impressions (or views).
- *Daily Effective Circulation (DEC)*. The average number of persons above the age of 18 who are exposed to an advertisement.
- *Floor Area Ratio (FAR)*. The ratio between total square footage of a building and by the total square footage of land upon which it is built.
- *Static Pro Forma Model*. A financial model used in the real estate industry to calculate the potential returns from the construction and operation of a property and evaluate feasibility. A static pro forma evaluates the cash flow in stable year of operation to determine the value of a property.
- *Residual Land Value (RLV)*. A metric used in the real estate industry to determine the maximum value of land that a development could support. The residual land value equal to the value of a property (capitalized value or sale value) less development costs and an allowance for developer profit.

[1] These definitions are in the context of HR&A's LACC funding opportunity analysis.

HR&A Analyze. Advise. Act.

Los Angeles Convention Center Funding Opportunity Analysis
Real Estate and Non-Real Estate Revenue Assumptions

December 17, 2015

Appendix 6. Fiscal Impact Analysis

City of Los Angeles Key On-Site Tax Revenues (9 and 13.7-Acre Scenarios)

Scenario 1 - 9.0 Acres - Key Annual On-Site Taxes to the City of Los Angeles at Full Buildout (2015 $ '000s)[1]

	Built SF	Parking		Property & VLF In Lieu		Sales		Transient Occupancy		Total	
		Low	*High*	*Low*	*High*	*Low*	*High*	*Low*	*High*	*Low*	*High*[2]
Luxury Hotel	112,500			$275	$300			$2,000	$2,000	$2,275	$2,300
Condominium	591,500			$1,200	$1,300	$0	$10			$1,200	$1,310
Apartment	2,437,500			$3,700	$3,900	$0	$60			$3,700	$3,960
Retail	60,000			$100	$100	$75	$80			$175	$180
Office											
Exisiting LACC Parking	5,400 pp	$800	$900							$800	$900
Proposed Add'l Parking	3000 pp	$1,000	$1,300							$1,000	$1,300
Total	**3,201,500**	**$1,800**	**$2,200**	**$5,275**	**$5,600**	**$75**	**$150**	**$2,000**	**$2,000**	**$9,150**	**$9,950**

Scenario 2 - 13.7 Acres - Select Annual On-Site Taxes to the City of Los Angeles at Full Buildout (2015 $ '000s)[1]

	Built SF	Parking		Property & VLF In Lieu		Sales		Transient Occupancy		Total	
		Low	*High*	*Low*	*High*	*Low*	*High*	*Low*	*High*	*Low*	*High*[2]
Luxury Hotel	112,500			$275	$300			$2,000	$2,000	$2,275	$2,300
Condominium	929,500			$1,850	$1,950	$0	$25			$1,850	$1,975
Apartment	3,737,500			$5,500	$6,000	$0	$110			$5,500	$6,110
Retail	80,000			$125	$150	$100	$115			$225	$265
Office											
Exisiting LACC Parking	5,400 pp	$800	$900							$800	$900
Proposed Add'l Parking	3000 pp	$1,000	$1,300							$1,000	$1,300
Total	**4,859,500**	**$1,800**	**$2,200**	**$7,750**	**$8,400**	**$100**	**$250**	**$2,000**	**$2,000**	**$11,650**	**$12,850**

[1] Includes only select City of Los Angeles tax revenues associated with new real estate development and existing parking at the LACC site. Does not include potential parking tax revenues associated with retail or hotel uses.

[2] High scenarios are reflective of "LACC Benchmark Disposition Revenue" shared with Arup on 12/4/2015.

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Appendix 7. Affordability Analysis Calculations and Assumptions

Appendix 7. Affordability Analysis

Key results and assumptions for Options 1, 2, and 3

Key Results – Upper Bound

Item	Uses/Sources (2015$)
Construction Cost	$470.0 million
Less Naming Rights Sources (PV over 35 years) Φ †	N/A
Less Sign Sources (PV over 35 years) Φ †	N/A
Net Cost to General Fund	**$470.0 million**

Key Results – Lower Bound

Item	Uses/Sources (2015$)
Construction Cost	$470.0 million
Less lower bound Naming Rights Sources (PV over 35 years) Φ †	($4.2 million)
Less lower bound Signage Sources (PV over 35 years) Φ †	($63.4 million)
Net Cost to General Fund	**$402.4 million**
% Reduction in Cost to General Fund Compared to $470M	**14%**

Assumptions

Escalation	Annual Rate
Φ General Escalation (CPI)	2.4%
Discount Rate	**Annual Rate**
† Non Real Estate (Signage and Naming Rights)	10.0%

Key results and assumptions for Option 4 (P3 with Separate Delivery for Real Estate)

Key Results

Item	Uses/Sources (2015$)
Construction Cost (25% higher than Construction Cost for Options 1, 2, and 3)	$587.5 million
Less lower bound Real Estate Sources (PV over 99 years) Φ § Ψ	($175.3 million)
Less upper bound Naming Rights Sources (PV over 35 yrs)Φ†	($10.6 million)
Less upper bound Signage Sources (PV over 35 years) Φ †	($95.1 million)
Net Cost to General Fund	**$306.5 million**
% Reduction in Cost to General Fund Compared to $470M	**35%**

Assumptions

Escalation		Annual Rate
Φ General Escalation (CPI)		2.4%
§ Real Estate	Short-Term Real Appreciation	2.5%
	Long-term Real Appreciation	1.0%
Discount Rate		**Annual Rate**
Ψ Real Estate Draft – December 13th, 2015	Rental	8.8%
	Non-rental	10.1%
† Non Real Estate (Signage and Naming Rights)		10.0%

Key results and assumptions for Option 5 (P3 with Integrated Delivery for Real Estate)

Key Results

Item	Uses/Sources (2015$)
Construction Cost (25% higher than Construction Cost for Options 1, 2, and 3)	$587.5 million
Less upper bound Real Estate Sources (PV over 99 years) Φ § Ψ	($246.6 million)
Less upper bound Naming Rights Sources (PV over 35 years) Φ †	($10.6 million)
Less upper bound Signage Sources (PV over 35 years) Φ †	($95.1 million)
Net Cost to General Fund	**$235.2 million**
% Reduction in Cost to General Fund Compared to $470M	**50%**

Assumptions

Escalation		Annual Rate
Φ General Escalation (CPI)		2.4%
§ Real Estate	Short-Term Real Appreciation	2.5%
	Long-term Real Appreciation	1.0%
Discount Rate		**Annual Rate**
Ψ Real Estate Draft – December 13th, 2015	Rental	8.8%
	Non-rental	10.1%
† Non Real Estate (Signage and Naming Rights)		10.0%