Relationships: A P3 Design-Build Case Study
TRACEY ABEL
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Larz Lock
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Senior Project Manager
AGENDA

- PROJECT OVERVIEW
- P3 & PROCESS FOR TMI
- OVERVIEW OF DESIGN & CONSTRUCTION PHASE
  - P3 CASE STUDY – A/V – V/R – IMMERSIVE TEACHING
- O&M COORDINATION & IMPLEMENTATION
- LESSONS LEARNED
- WRAP-UP
- Q&A
C. Wayne McIlwraith
Translational Medicine Institute
Goals and Objectives

- **Vision:** Leading the way in discovery and implementation of the body's therapeutics to improve the lives of animals and their humans.

- **Mission:** To improve the lives of animals and humans through biologic therapies created via the collaborative work of leading scientists and clinicians; to expedite the availability of these therapies, and to promote education related to these goals.
C. Wayne McIlwraith  
Translational Medicine Institute  
Funding Sources

<table>
<thead>
<tr>
<th>Project Summary</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Translational Medicine Institute Proper:</td>
<td>$65.6M</td>
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<tr>
<td>Support Research Barn:</td>
<td>7.8M</td>
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<td>Infrastructure:</td>
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<tr>
<td>Total</td>
<td>$77.8M</td>
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<table>
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<tr>
<th>Funding Sources</th>
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<tr>
<td>Donor:</td>
<td>$56.0M</td>
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<tr>
<td>Colorado State University:</td>
<td>14.4M</td>
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<td>State of Colorado:</td>
<td>7.4M</td>
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</table>
The Immersive Classroom uses 8 high-end projectors to form one 270 degree image spanning 3 walls.
PROJECT OVERVIEW

P3 & PROCESS FOR TMI

OVERVIEW OF DESIGN & CONSTRUCTION PHASE
  - P3 CASE STUDY – A/V – V/R – IMMERSIVE TEACHING

O&M COORDINATION & IMPLEMENTATION

LESSONS LEARNED

WRAP-UP

Q&A
Public/Private Partnerships

- Medium to long-term arrangements between the public and private sectors, whereby some service or capital improvement obligations of the public sector are provided by the private sector.
- A clear agreement of shared objectives and sharing of risks.
- Capital investment typically made by the private sector.

Simply defined, a P3 involves leveraging the private sector to provide the capital and expertise to partner with the public sector to develop and/or operate and maintain infrastructure and facilities on publicly owned land.

Source: Bob Hunt, Managing Director, JLL
Drive value to institution through private sector expertise or assistance in the “DBFOM” spectrum

- D – Design
- B – Build
- F – Finance
- O – Operate
- M – Maintain
There are many contractual P3s and new variations emerge continuously as each P3 contract responds to very precise needs. Each project requires careful analysis and planning to structure appropriately. There is no “one-size-fits-all” solution.

Source: Bob Hunt, Managing Director, JLL
5000 PAGES OF RFP & ADDENDUM MATERIAL
» PROPOSED BUILDING FORM
CONCEPT STUDIES
- Meet RFP requirements
- O&M considerations
- Attractive Design

TRADE PARTNER INVOLVEMENT
- Trades critical to schedule
- Trades critical to O&M

Concept Option Matrix

<table>
<thead>
<tr>
<th>Option 01</th>
<th>Option 02</th>
<th>Option 03</th>
<th>Option 04</th>
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</thead>
<tbody>
<tr>
<td>A: 12 stories minimal massing articulation precast skin/structure parking in building podium</td>
<td>B: 7 stories articulated massing precast skin/structure separate parking structure</td>
<td>C: 7 stories minimal massing articulation precast skin/structure</td>
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</table>
The linear atrium extends the axis of the existing street, creating a central, shared experience.
1. Agree on Overall Project Target Cost
2. Divide Target Costs Into Clusters
3. Work in Multi-disciplinary Teams to Design Under Target Costs
4. Status of Clusters Reported Weekly – Transparent Costs
5. Target Costs are Never Exceeded
3. PROJECT MANAGEMENT APPROACH: BIM

- Cost Integration

DESIGN | TMI P3 PROCESS

- Graphic Master Schedule
Schedule acceleration to save cost
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INNOVATIVE FEATURES | DESIGN & CONSTRUCTION
Balancing Budget with Scope
- Technology
- Surgical Systems
- Imaging Suites
- General Equipment
Balancing Budget with Scope

- Technology
- Surgical Systems
- Imaging Suites
- General Equipment
CREATIVE ENVIRONMENTS

- Immersive education
CREATIVE ENVIRONMENTS

- Immersive education
CREATIVE ENVIRONMENTS

- Immersive education
CREATIVE ENVIRONMENTS

- Filming studio
PROJECT OVERVIEW
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OVERVIEW OF DESIGN & CONSTRUCTION PHASE
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O&M CONTRACT AND PARTNERSHIP APPROACH
- Project Development Agreement (PDA) contract that established responsibilities and payment structure

SERVICES
- Routine preventative maintenance
- Capital renewal

FINANCIAL
- Fixed fee for service
- Annual escalation

ACCOUNTABILITY
- Key performance indicators (KPIs)
- Monthly janitorial and building systems audits
- Energy performance monitoring with “pain share” / “gain share” agreement
O&M KEY STAFF AND SERVICE APPROACH

- In-House relationship manager
  - Daily interface with users
  - Responsible for reporting and addressing issues
- On-site dedicated facility engineer
  - Small projects and janitorial touch-ups
  - First customer service interface
- Building Engineer
  - Mechanical and BAS background
  - Alarm trouble shooting and trend analysis
- 3rd party outsourcing
  - Specific expertise
  - Labor support
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- WRAP-UP / Q&A
Lessons Learned

- Due Diligence & Timing
- Expectations
- Flexibility
- Relationships
- Common purpose
- Value
- Long range view
Lessons Learned

The most important Part....... Partnership
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