



Construction Specifications Canada  
2013 Conference

Public Private Partnerships (P3's)  
May 24, 2013



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Speakers

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- Kees Cusveller, VP Business Development, Graham
- David Clinckett, Assistant Director Construction, Calgary Catholic School District



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Outline

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- What is a P3?
- History of P3's
- Why are P3's used?
- P3 Process – Owner's Perspective
- P3 Process – Contractor's Perspective
- ASAP Schools – Compare ASAP 1 & 2 vs. Traditional Procurement
- The Future of P3's – Opportunities & Challenges



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### What is a P3?

"A form of procurement for the provision of capital assets and associated long term operation that includes a component of private finance. Payment is performance based" (Government of Alberta definition)

#### So what's involved in a P3 Team?

- Integrated team of finance, legal, design, construction and maintenance provider
- Multiple legal agreements
- Major time and \$\$ commitments




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### Alberta's Definition

Government of Alberta defines a P3 as an infrastructure project in which a private contractor:

- Provides some or all of the financing
- Designs and builds
- Operates and maintains (an "extended warranty")
- Receives payments from the government over an extended period of time subject to deductions for failing to meet contractually defined performance standards

A "DBFO" or "DBFM"




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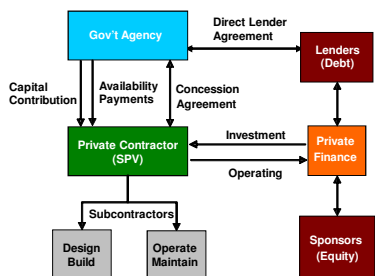
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### Typical P3 Arrangement




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### How are P3's different from Typical Build Projects

Traditional	PPP
Scope evolves through design and construction	Scope resolved at outset
Multiple contracts / complex administration	Single contract
Conflict between consultants and contractors	Cooperation between consultants and contractors
Building operator left with deficiencies	Annual service payment based on performance
Owner exposed to deficiencies	Proponent not paid until project delivered as specified
Owner Takes risk of cost overruns	Budget, schedule and scope certainty

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### History of P3's

- 1960's Spain – Toll Roads
- 1979 Britain – Thatcher "Gov't too involved in economy, need to step down in favor of private capital."
- Early 80's USA – tool for developing inner city infrastructure
- Canadian Confederation Bridge late 80's
- Australia – early 90's
- Provincially – in the last 10 years BC, Ontario, Alberta, Quebec, New Brunswick, & Manitoba all active
- Today – Canada has 153 Projects nationwide

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### Why are P3's used?



Why are governments/institutions doing this?

- It's not about interest rates or financing
- Schedule – typically 1-2 years faster than conventional Design-Bid-Build
- Fixed long term costs
- Common design platforms
- Efficiency/cost reduction in construction
- Life cycle costing/maintenance
- Lack of in-house management staff
- Reduced GoA administration costs
- Risk Transfer\*

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### P3 Project Guiding Principles

- Project must generate value-for-money
- Lowest NPV wins
- Project Agreement is negotiated upfront, no changes after final submissions
- Risk assigned to party who can best manage it
- Open and transparent process
- Competitive process – ideally 3 bidders




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### P3 Process from School District's Perspective

Costs – are we really saving money?

Schedule – are we really saving time?

Performance – do P3's function as well as a school designed and built under the control of the individual School District




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### CCSD P3 Presentation

#### Costs

CCSD Designed and Built Schools	Year Opened	Total Cost Book Value	Area Sq. Meters	Cost Per Sq. Meter
St. Basil	2007	10,361,476	5,367	\$1,931
St. Joan of Arc	2008	10,178,018	5,367	\$1,896
St. Sebastian	2008	8,421,373	4,291	\$1,963
St. Jerome	2008	9,246,155	4,291	\$2,155
Our Lady of Wisdom	2009	12,580,486	4,222	\$2,980
Good Shepherd	2009	11,324,629	4,222	\$2,682
P3 Schools for CCSD		62,112,137	27,760	\$2,237
Christ the King	2010	37,447,624	5,817	\$6,438
Our Lady of the Evergreens	2010	26,281,567	3,323	\$7,909
Light of Christ	2010	37,346,595	5,817	\$6,420
St. Isabella	2012	19,987,456	5,817	\$3,436
		121,063,242	20,774	\$5,828




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### CCSD P3 Presentation

#### Schedule

CCSD Designed and Built Schools	Alberta Education School Funding Announcement	School Opening For Students	Months to Design Tender and Build School
St. Sebastian	2004/05	2007/08	39
St. Jerome	2004/05	2008/08	51
St. Joan of Arc	2004/05	2008/01	43
St. Basil	2005/09	2008/08	35
Our Lady of Wisdom	2006/08	2009/08	36
Good Shepherd	2006/08	2009/08	36
		Average	40
P3 Schools for CCSD			
Christ the King	2007/06	2010/08	38
Our Lady of the Evergreens	2007/06	2010/08	38
Light of Christ	2007/06	2010/08	38
St. Isabella	2008/01	2012/08	56
		Average	42.5


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#### P3 Process from Contractor's Perspective

- P3s are not for every project
- Right size and scope
- Defined Parameters:
  - Design
  - Build
  - Finance
  - Operation
  - Revenue Risk
- Political will


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#### P3's vs. Traditional Procurement

Do P3's function as well as a school designed and built under the control of an individual School District?


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**CCSD P3 Presentation**

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**Performance**

- Prototypical Design
  - Construction
  - Commissioning
  - Operations

**GRAHAM** 

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**CCSD P3 Presentation**

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**Prototypical Design**

Site issues

The site: is fixed and bounded on all sides with streets and homes and there is no possibility to modify the site to conform to the school design.

Grading: large footprint building and all grading issues have to be dealt with by contouring the soft landscaping.

Drainage: is designed to address City standards. There is no thought given to how the school operates and where students will be. Drainage around the portables is surface onto play areas.

**GRAHAM** 

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**CCSD P3 Presentation**

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Transportation interface:  
cars/buses/bicycles/pedestrians all these create havoc around schools at least twice a day.

Portables that aren't: the way that the modular classrooms are designed and connected to the core building is contrary to the cost effective movement of the classrooms and challenges the intent of the portable classrooms.

**GRAHAM** 

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**CCSD P3 Presentation**

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The owner has limited user input into the design

- Basketball Back stops
- Gym Game Lines
- Sprinkler's in Portables
- Washrooms
- Handicap washroom
- Hardware

**GRAHAM**



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**CCSD P3 Presentation**

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**Construction**

The Bid All or Nothing

When you package so many schools together at once you can win or lose depending on timing, whereas if you tender multiple packages over a time frame you mitigate your risk. Look at the cost between the first package and the second.

We had three schools in the first package with the same standards. We have three different interpretations of the standards for low voltage wiring none of which conform to our standard which is constant in our other 100 schools.

**GRAHAM**



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**CCSD P3 Presentation**


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There was no common wiring system or interpretation on the 18 schools. We had to rewire at our cost.

Limited oversight of construction.

Changes: any changes that the owner would like to make from the prototypical design are cost prohibitive.

**GRAHAM**



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## CCSD P3 Presentation

### Commissioning

Three architectural firms are involved in the design and commissioning of the facility. The prototypical design architect, the builders architect and then the third architect is hired by the Province to review the completed school, who bears what responsibility.

What is the Contractor responsible for and what is the responsibility of the School District  
Dust collection system  
Smartboard and teaching surfaces installations



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## CCSD P3 Presentation

### Operations

Any changes or revisions are controlled by individuals (accountants and lawyers) in San Francisco USA and London England.

Creative Playgrounds

Penetration Permits

High abuse environment



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### Lessons Learned from Owner's Perspective

- P3's not a panacea for all projects
- P3's complement conventional and other delivery methods – less than 7% of GoA Capital Budgets
- "Made in Alberta" P3's can provide value to Albertans for the right type of projects
- Social infrastructure offers many interesting challenges and opportunities



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### Lessons Learned from Contractor's Perspective

- Political will to proceed
- Third party control over finances
- Need the right partners
- Major risk transfer to private sector
- Economies of scale vs. risk management
- Steep learning curve
- Importance of life cycle costing



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### The Future of P3's - Opportunities

- Creates cost-effective projects
- Lifecycle costs can be included
- Strong teams
- Improved commissioning process
- Many success stories
- Cost/time/scope certainty



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### The Future of P3's – Challenges

- Ineffective transfers of risk
- Owner's staff need to understand the process
- Allow the teams to do their work in the procurement stage
- Managing Owner/User expectations
- 4<sup>th</sup> "P" is politics



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Introduction to P3's

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Questions??



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