**Rob Fisch:** Greetings, everyone. Welcome to P3 – Lessons Learned from Around the World. Why did we choose this title? Because here we are in the states, and frankly, we don’t do P3 too much, at least not in the way we’re about to define it.

The objective of this session is to look at what other countries are doing that I’m going to call mature markets for P3. We’ll take a look at what they’re doing and try to see if there are any lessons learned that can help us to consider importing this model into the US.

As many of you know, there have been some experimental P3 projects, if you want to call it that, and frankly, P3 has many definitions. I want to talk about that a little bit.

My name is Rob Fisch. I’m a Senior Vice President at CGL RicciGreen – a recent merger of CGL and RicciGreen, we are now one firm. I’m a corrections planner by background for 25 years doing feasibility studies and planning and needs assessments, which are often formed as the first step in any P3 project.

On our panel, I have to my immediate left, David Banks. David Banks has worked for 25 years in delivering prison and related custodial services, and previously, I think for 15 years, leading the G4S efforts in the UK, and also working in Australia and South Africa. He has played the role of sponsor, equity investor, and operator in a number of prison facilities, and the operator piece is important here.

To David’s left is Marv Hounjet. Marv is with Plenary Group. Marv is Vice President and director of their US operations, but I think we’re here today to talk about mostly his Canadian experience. He has 35 years experience in social infrastructure, including engineering. He’s an engineer by background. He’s also dealt with the finance and development with P3 projects in Canada and Australia. He’s going to talk a little bit about Australia, too.

To my far left is Robert Borax. Robert is a principal with Parkin Group in Ontario. He is an architect, and after we’ve heard from planners and developers, we’re then going to hear what it’s like to live the life of an architect in the world of P3 development projects.

I will say that our discussions before we got all this together were quite lively, coming from the different perspectives. So I actually hope we’ll have some time when I can ask these gentlemen some questions before I open it up to the audience because, frankly, some of these issues have different and sometimes competing perspectives, depending on where you sit in the P3 process.

I’m going to call this P3-101 only because I don’t want to assume everyone knows what P3 is. In fact, people who do P3 don’t know what it is because there are many definitions of it. We can argue over a lot of them, but in this particular case, here’s a definition that we found that I think most people can agree with. You can find this in the National Council for Public-Private Partnerships. I like this definition because it’s vague enough that everybody can agree that this is what P3 is, but once you drill into some of the specifics, there are a myriad of variations of P3: how these projects come together and what all the moving parts are, and what part is privatized and what part isn’t, and if it’s operated or partially-operated privately.

This is my little chart to a simplistic view of looking from public to private. There are many different versions of this chart on the Internet, but I just wanted to keep it real simple. Most of these architects are familiar with are the top two, working our way down. Today we’re really talking about these two models: Design/Build/Finance/Maintain, which is really the model mostly in Canada, and Design/Build/Finance/Maintain/Operate, which is really the model in the UK. Of course, the operations is a huge distinction between these two models. I do want to point out that this is not privatized jail or prison facilities. These are not private facilities, per se. These are facilities developed in conjunction with the private sector, but it’s not CCA or GO or those kinds of facilities that we’re talking about.

Just some quick milestones of how we got to what we’re calling P3 today. Since World War II, there were a lot of needs for developing new infrastructure. A lot of different approaches were taken, with a different mix of public entities looking to the private sector to help them out.

The Private Finance Initiative in the UK didn’t start in 1992, but that’s when it started to be formalized and institutionalized by government entities actually creating some form of entity that’s in charge of doing P3. So they evolved more organically, and then they became formalized in some of these groups and organizations.

In Canada, we have the Canadian Council for P3s, but I think Ontario was actually doing it before the federal government was, and some of the other provinces were as well. So they were really the leading edge in Canada before the federal government got on board.

In the USA, there’s the Council for PPPs. That’s really an organization that promotes it. There is no government agency that I know of in any part of federal, state or local government that is designed to carry out P3 projects. If I’m wrong, somebody correct me, but I don’t know of any.

In Australia, Partnerships Victoria was on the cutting edge before it spread to other parts of Australia. France is doing it. Other parts of Europe are doing various types of P3s, as well as countries in Latin America and elsewhere.

600 projects have been developed in the UK by some form of P3 method, as well as about 200 in Canada. So these are countries that really have been doing this a long time and know how to do it.

Is it appropriate for every project type? From what I’ve learned from the countries that I’ve been talking about – and we even have a disagreement here on this panel – it seems that Ontario and even the UK originally were looking maybe at $40-60 million as a threshold that makes a P3 process worthwhile because the P3 process is expensive. It’s time-consuming, it’s technically complex, and a lot of these government entities thought it wasn’t worth doing it for small projects.

I think in Canada, maybe they’re even upping that threshold and doing it for more expensive projects but there are also some strategies about bundling smaller projects. Why not take five ten-million dollar projects and do them all as one kind of package deal?

I’m going to explain why these are challenges in the US later. Does it cost more? I’m going to ask these guys at the end of this session because they each have their opinion. I was to thrash this out. But I’m not sure it’s always the best question to ask. It’s certainly hard to measure cost versus benefit, and I think the only way to measure that is for entities that have been doing it to compare their traditionally-delivered projects to their P3 projects, and develop a system of evaluation – qualitative as well as quantitative – to take a look back. Really, it’s only through experience that you can even tell if you’re really getting a better product.

One of the techniques they use is value for money analysis. I think Marv will talk a little bit more about that. In simple terms, you create two models – the traditional model and the P3 model – and you look at 35 years for your life cycle. Frankly, because these are models, there are a lot of assumptions in here. What is it going to cost if you did it the traditional way and you maintain your own building, you operated it, you paid the energy cost, and you did the repairs over 30 years? You have to project what that might be, and then bring it back to today’s dollars because future dollars are cheaper.

In the P3 method, basically you’re signing a contract that has that number. So you can compare the contractor’s signing for all those services that you’re getting and compare it to what you think you would pay as the traditional model. Of course, that modeling has a lot of room for error because of these assumptions, but nevertheless, it’s a tool that a number of these government entities use to try to figure out what they think it should cost them.

These are some of the benefits that not everybody agrees are benefits, but you definitely are transferring risk to a private entity by doing these, and the private entity is the developer, the financial folks, and even the architect. They get a lot of risk dumped in their laps as well.

This is something that I put out there and nobody’s argued with it yet, it ensures an adequate level of design competency. What I mean by that is that the guys from outside the US don’t think about that a lot, but if you work in small counties in the US, we really don’t have much experience. If they want to build a $40 million jail and they haven’t built anything in 50 years, they don’t really have the expertise, and they may not even have the right architect. They may have the architect that’s done the last three projects for the county who may not have correctional expertise. He brings in a consultant and does a mediocre job.

I think the P3 process, if nothing else, vets out the lower competency folks and makes sure through the vetting process that you’re at least getting good, if not great, design. Whether you get great design or not, there starts to be pressures working against that, but I think there are pressures working up to make sure you get good design.

This is something debatable: will you get higher quality finishes because the private entity is now responsible for maintaining that building as opposed to the public entity? Does that mean they will actually build better finishes and put in better systems because they’re the ones 20 years from now that still have to maintain it.

You can argue yes. Some folks here will argue no because they’ll say that it may be worth doing a lower first cost and worrying about the maintenance cost later, and doing that risk analysis internally.

One of the things I have heard, though, is that the deferred maintenance issue is the first thing that gets cut in any conventional project 20 years down the line. When budgets get tight, they cut maintenance of facilities.

At least the P3 model pretty much locks in that government entity to committing to an annual payment, and the services they get back is that that facility is properly maintained over the life of the project, or at least over the life of the contract.

There are certainly issues about whether you get that service the way you think you should get it, and I think there are mechanism in a lot of these P3 contracts for penalties and withholding of payment if you’re not getting those services, but at least you have a commitment.

Also, there’s a better track record of on time on budget. Usually when a P3 project starts, at least when the contract is signed, I think there’s pretty good evidence that says it’s faster. The question is, is it faster from conception? Because it takes a while to go through the whole P3 procurement process. I think the jury is still out on that one, but at least once you hit go and say go, I think there’s pretty good evidence that more projects get done on time. Even then, not everybody agrees with that.

I want the panel to refute some of the things that I’ve said and each other have said because this is part of the whole debate that’s still going on with P3 in the development community.

Some of the criticisms include that the documentation and structure is complex. That’s why it’s so hard for new entities to do this. But for mature ones, like Ontario or like the UK federal government that have been doing it for so long, they’ve really got the system down. I think they’re actually pretty good at it.

The learning curve is very high in terms of government entities being able to enter into the P3 market in terms of being the owner, but I think once they get there, maybe this complexity issue starts to go away.

Does it take longer to arrange? I think most people would say yes, but it may be faster. If this becomes a way to finance it quicker than a conventional way, then may the project can actually come online faster.

Reducing the competition due to the high cost of complexity, only major companies can afford to bid. I think the evidence shows there is some truth to that, although smaller companies can be parts of teams. But it’s pretty hard for a small company to really compete against a large company when you have to put together such a large financial and technical package. Maybe the panel has some experience and some examples to the contrary.

The flexibility issue keeps coming up. Do you actually have less flexibility as a government entity because this isn’t your facility yet? You may get it in 30 years, but you signed a contract on day one for a certain product, and you can’t change your mind ten years down the line.

But I think there are mechanisms for adapting, whether for new technology or if we’re talking correctional facilities, if we want to change classifications and maybe make some modifications to housing units or programs and services, I don’t see why you can’t pay later to make those changes, whether it’s a P3 project or a traditional project.

Does it require more expertise on the part of the owner? Yes, it does, I think. That’s why these entities have been created by these government agencies. They’ve created these entities with these people with this expertise.

If you don’t do it this way, then you’re going to hire that expertise from the outside, anyway. So either one or the other, you need to the expertise to deliver these projects, so I’m not quite sure it’s any harder on the owner. I just think it’s a different model of where you get that expertise and how much is in-house versus how much should be hired through a traditional program manager or some other mechanism.

So why not in the USA? This is really why I wanted to do this panel. I think the number one bullet here is that the biggest challenge to importing it into the country is that in the UK, you have one client who does correctional facilities: the government.

In Canada, you have a federal government, and you have the provinces. But you don’t have all these local governments that we have in the US. In the US, we have a myriad of counties, municipalities, states and the federal government that developed these kinds of projects. Frankly, a lot of them don’t have the expertise. They do not have those agencies I talked about that have experience in delivering P3. So it’s very hard to import it into this country, especially when we’re talking at the local correctional level. It’s probably easier to do it at the state prison level.

Enabling legislation: this is only new I think only in the past couple years. A lot of states are trying to jump onboard and change their enabling legislation, but right now, half the states don’t have any ability legislatively to allow for these kinds of projects. First you have to create this legislation to allow for it. I think Texas just did it two years go. Maryland is a recent one.

That’s one of the challenges, there’s no history of it here. In other countries, they can just do it. In this country, we have a much messier form of democracy, or I’m going to say more local government control, which makes this thing more difficult.

We still usually require bond referendum as far as in our at least voter approval to do a $200-300 million project, even if you don’t go for traditional bond. Whereas in other countries, they don’t go to the voters, they just do it. They just appropriate it and they just do it.

So there are a lot of challenges to important this model. I want some of the gentlemen next to me to talk about their experiences. I’m just going to close on this because I just saw this last week. It came in my Google Alerts. We’ve all been tracking this project now for I don’t know how many years. This was the California AoC’s Long Beach Courthouse finally opened. This was the bleeding edge for the California court system to try to develop at least one project through the P3 model. I don’t know yet whether this is deemed a success or not. I would love to talk to some of the California folks. I’d love to hear the pros and cons and the lessons learned of this particular project at a future AAJ conference.

**David:** Thank you for the opportunity to speak here today. As Rob has mentioned, I am not an architect. It’s good to get that out of on the table straightaway. I come at it from the perspective of sponsoring the ownership perspective of P3 projects, and indeed the operator perspective. As I go through my presentation, you’ll see how important that’s been through the UK experience.

The UK has been quite an extensive user of P3s in various sectors of infrastructure development. Personally, we’ve been involved in a number of sectors: education, schools, hospitals, and critical national infrastructure. Perhaps our most iconic project was the Government Communications Headquarters in Cheltenham. But if I told you about that, I’d have to kill you, so perhaps we can move on.

Just to answer one of Rob’s points initially, which is one about the number of potential customers – and Rob was absolutely right in a prison’s context, and we’ll cover in that in a minute – we have other sectors where there are multiple customers, particularly education. Our experience in those kinds of areas is that there have been sort of functional groups formed in building schools for the future with a project to actually bring P3s into school to enable smaller customers to work together and actually deliver P3. This may be a bit of learning from that.

Most of my career has been in corrections, so I’m going to talk about the UK prison experience, which has largely been what I would call the full service model. Just to talk a bit about context because we didn’t start with P3s and it didn’t start with an infrastructure development project. It started really as a political initiative in the late 80s. The UK government were interested in the private management of prisons. It was a political motivation. We had a guy who used to work for government and worked for us. Sadly, he’s passed away. He recalled he saw the paper that went to then-Prime Minister Margaret Thatcher about introducing private sector management into the prison system to break the monopoly in terms of the prison service and in terms of the POA. She just wrote three words on the paper: Get it done. So that’s how it started as a political motivation.

The first prison wasn’t a P3 prison. It was a prison that had been built for the prison service to run HMP Wolds, and it was a management only contract. So the UK experience started from the management of prisons. We were asked if we would like to participate. That’s when we started the association with CGL, or Carter Goble, as it was then. We had a word with Steve Carter on how to manage a prison and we went from there. In 1997, the first P3 prison opened, which we called Design/Construct/Manage/Finance, which was HMP, of course, in Liverpool. I’ll talk a bit more about that later on.

With Design/Construct/Manage/Finance, it’s probably useful for me to talk about what I actually mean by “manage” because there are quite various interpretations of management in a P3 context. But in the UK prison context, it is total management of the facility. As operator, we would appoint the director. We’d be responsible for appointing, recruiting, training, and managing the prison. We would be responsible for providing healthcare, either directly or through an approved subcontractor. We would be responsible for catering, for program work, for provision of industries, and for education. We’d be responsible for the total management of the facility and for the outcomes.

The only government people in the prison would be the monitor, the controller as it’s called under UK legislation. They’re essentially there to make sure that we deliver on our promises.

P3 is a consortium approach. There are actually two organizations in the UK that have one P3. The principle prison service is Her Majesty’s Prison Service, which covers England and Wales. There is a separate system for Scotland, and there is a small system in Northern Ireland. So a national customer essentially, which I think was your point, Rob.

Shareholders or sponsors: which tend to be the operator and the constructor primarily, although in later projects, financial investors have actually come in at the early stage, providing risk funding, and the banks providing debt funding. So it’s a concession company, which is a special purpose company.

There are two main contracts, one for the design and construction of the facility, and one for the operation of the facility. Bidding risks, if you like, before the structure is put in place is largely taken by the shareholders, who are essentially the constructor and the operator, with some of the consultants, architects, and financial advisors, etc. possibly getting paid something but taking a fair bit zt risk.

There’s not architect on that chart, and that’s not an omission. It’s quite deliberate because in this consortium approach, the architect really moves around. Sometimes now the architect is actually appointed by the concession company. Formally when contracts get signed, the architectural work comes under the design and construct contract. But in the bidding phase, the architect is actually more associated it the operator, and it’s a very much team approach.

I sat in on the last session. I think one of the key messages from that was a team approach. So in the bidding, the architect is very much a part of the team and very much a part of the operation.

How does the contract work? No progress payments during the contract – obviously a fixed-price contract – and heavily liquidated damages for late delivery. We get paid with a unitary payment paid on the basis of availability. There is no demand risk assumed by contractors in this. We are part of the system. We are paid for making places available. So if the prison has 600 places, if we make 600 places, we get paid for 600, irrespective of whether there were 400 or 500 prisoners in there.

It’s an index payment over the life of the contract, typically 25 years, indexed according to CPI for an element of it. It’s indexed at CPI Plus, largely to cover wages for another element, which is the K-factor. Items that are covered in availability are really the basic provisions – physical environment, making sure there’s access to exercise, meals, healthcare and clothes. It’s really quite basic. It’s very unusual for availability to be lost.

Performance measures: deduction for poor performance. Those cover the softer areas in terms of program hours, number of assaults, and contraband into the facility, etc. So there are two mechanisms for getting paid or having deductions.

How do you win? Obviously there’s a specification that’s laid down: the category of prisoner, high security – we have categories A, B, C, and D – and prison standards, including some design standards.

There are also expectations. This is very important to actually pick this up. It’s very important in the early contracts where we were building confidence to make sure we weren’t too radical, and to make sure we were taking the customer with us.

Later competitions in the UK introduced a process called “competitive dialogue,” where there is an extensive dialogue between bidders and the authority, so that there is a lot of confidence in the final bid that goes in, which makes the evaluation a lot easier because the evaluation then produces the lowest cost over the 25-year concession. There is a change mechanism in the contract as well.

Where does the architect fit in? Minimizing the risk. There’s a fair bit of risk. Availability risk is really key in this, so how the prison is laid out to ensure that if there is a problem – if we lose availability – it’s contained. Make sure construction materials are sufficiently robust, as well as construction methodology. I’ll talk a bit more about that in a couple of case studies.

The next thing is it complements an effective operating model. This is where the key comes in with the connection between the architect and the operator. In the first contract, of course which I’m going to talk about, the operation cost over the concession life was over two-thirds of the total cost of the concession. That’s really important. That proportion has probably increased. It is a guess at this stage that it’s probably running at about 75% plus at the minute, but it’s certainly increased.

Having operations and everything included in working out the cost means that it’s really important to look. It doesn’t necessarily mean that the cheapest solution actually gives you the best outcome, because if we spend a dollar on the build and save two dollars on the operation, then it obviously makes sense.

A similar thing is complementing efficient maintenance over the concession life, and the most important thing is value engineering. That’s the trade-off. That’s why it’s very much a team approach at the bid stage. We’re continually looking at the impact of design on the overall cost of the project, a key feature in winning. That’s why the architect is very much a member of the team.

A couple of case studies just to finish: HMP Altcourse is the first prison. Status specifications include maximum security and mainly Category B prisoners, which are high-security prisoner, but with up to 50 Category A prisoners. There are about 600 Category A prisoners in the UK, and these are prisoners who constitute a threat to the nation. So when most jurisdictions talk about high-security prisoners, they’re Category B prisoners.

Built-to-service design brief: there was a brief prison service design and it was important to comply with that. There were 600 places, expandable to 900 without loss of regime. Overcrowding is an interesting concept. I have a personal belief that overcrowding should be defined in terms of regime, rather than how many prisoners are in a cell, but that’s another subject.

The context for this prison: it was the first PFI prison. It needed to work. We needed to give the customer confidence. The funders were nervous. It was impossible to get this funded initially. We had to work really hard to get banks interested in actually funding it. It was very new for them.

Campus design included 22 separate buildings, built as two campuses. Immediately, the 600 is divided into two campuses of 300. In each campus, there are three housing units, each containing two cell blocks, essentially, so 50 in each cell block combining two cell blocks to make one unit, enabling unit management.

A central core separates the two campuses, which has the gymnasium, education and healthcare – that can be accessed from either side – and then industries at the front.

In the campus design, there was a lot of pre-cast concrete construction. This was a new concept in the UK. All the cells were produced down in the south of England and brought up on lorries – which was a new concept in the UK – so off-site production was a main element, complementing the effective operating model.

You’ll notice a lot of these things from any good design process, so I’m not suggesting these are particularly unique, but there’s unit management, good site lines, and minimization of areas requiring prisoner escorting. That’s key to the operating model. If we have to waste time – and it is wasting time – escorting prisoners, that’s a costly business. There’s complementing efficient maintenance, the life cycle approach, and the finishing of your specification, which is an interesting one.

Do you put a ten-year life roof on a 25-year concession and change it twice, or do you put a 15-year life on and change it once? I don’t know the answer to that. You find out the answer to that as you actually do the math and go through the numbers.

The site was constructed on about 35 acres and the build cost of that facility was about $72 million. It was completed and opened three months ahead of schedule, which was pretty unique for a prison. Prisons in the UK were always late, usually taking twice the amount of time to construct than planned. It’s never operated with less than 900 prisoners. It was put up to that – it was subsequently extended, it’s about 1200 prisoners now – and delivered a very good quality regime. Her Majesty’s Inspector of Prisons called it “The Jewel is the Crown of the Prison Service.” That’s a quote we’ve used many times, as you can appreciate.

Let’s move onto another case study, HMP Rye Hill. This opened in 2000, so it was down. Specifications include that it’s a 600-place male prison, capable of expanding to 660 without loss of regime – so not quite the expansion capability – and long-term prisoners.

The context, though, is actually quite important to this. It was the fifth PFI prison. The customer was confident. There is the concept of a program here, so you can talk about P3s, but as the customer gets used to it, and as we get used to it as contractors, then the process actually moves forward. So the customer is more confident, with greater focus on outcomes are more open to radical proposals.

Funders were more comfortable with the risk. We were running competitions. Every bank in the land wanted to fund this. There was a greater focus on cost. Rye Hill was constructed on 13 acres at a build cost of about 40 million.

Comparing the two, they have a similar operating model. We hadn’t really changed our operating model. That’d been in place since we did Wolds in principle. There was a far smaller footprint: 13 acres versus 35. There are fewer buildings. There are eight housing units, with Central Services, and industries and regime along the front. So there are some similarities, but far fewer buildings.

We used the appropriate materials. We still used pre-cast for the bits that need to be robust, but industrial-style units for the ancillary buildings. That wouldn’t have been possible at Altcourse. Where prisoners are effectively supervised during industries, you need an industrial unit. You don’t need something with pre-cast concrete walls that are there. It’s also lower cost: 55% the cost of Altcourse.

What has the full-service model achieved in the UK? It’s transferred the risk to the private sector with the exception of demand risk, which is the key thing. Actually, there is one other risk that isn’t transferred, and that’s that in the UK, the site is provided. The site with outline planning is provided. The planning risk that is transferred is the detail planning. There’s a 40-50% reduction in bill costs, a 15-20% reduction in operating costs, and a 50% improvement in procurement timescales.

The most important one, which really isn’t done to P3 – it’s actually done to private sector management – is that it’s challenging the status quo, going back to those initial objectives. We talked to individuals who have led the prison service, who have been really quite against, ideologically, the concept of the private sector managing prisons. They would absolutely say it’s one of the best things that happened to them and enabled them to achieve change in their own system.

It’s not without its critics. In regards to being a complex contract and procurement process, it is complex. We’ve got around that with a large amounts of clients, as I said earlier. The challenges of providing a clear specification that will test the time is a really important one. You need a really sophisticated customer to be able to do this. They’re actually making some really quite long-term commitments, so that’s quite important.

The long-term nature of the concession makes it difficult to change the operator – not impossible, but difficult. Contracts are being perceived as being difficult to change. There are change mechanisms, but they’re seen as being quite difficult, and changes are perceived to be expensive. There are mechanisms in place that maybe make that not the case, but these are the perceptions.

It’s fair to say that the current UK government is slightly moving away from what we call PFIs, and are possibly looking at different ways of infrastructure development. There haven’t been new prisons in a while, so it’s really not been tested. I suspect we’re going to see some changes to this model.

The full-service model was adopted in the UK, Australia, and South Africa. It’s a limited service model and it addresses a number of concerns that may be there – ideological concerns about the management to prisons by government staff. It’s easier to make changes. The limited service model, which excludes the direct management of inmates, is in place in places like France and Chile. Most of the places that are looking to introduce P3s are actually looking for the limited service model.

There are difficulties, however, in achieving the full value engineering, as the operator is not key to the process. The operator inevitably will be involved in the process, but not absolutely key to the process, and you don’t get the rigor of actually taking onboard all of the operator costs when doing the evaluation.

I’m looking forward to discussion and perhaps exploring the area of what the UK experience I’ve described actually brings to the US.

**Marv:** Thanks very much. I think Rob started us and gave us a little bit of history with the P3 and the P3-101 and what it was, and David I think gave us a good synopsis of how these things come together from the client’s perspective.

I want to take it down another level to show how the lessons were learned in terms of how the teams worked together, and how you pull one of these things off. What size should the projects be, and so on. I think we’re going to save that for some questions because it could make for a little bit of interesting conversation as we get through.

From a lessons learned perspective, these are quite similar to a Design-Build delivery model and the Butt**[?].** When you think about the whole Design-Build process that is obviously very advanced in the US, there’s something called an innocent little payment mechanism that really drives how the teams work together, and does some of the things that David was talking about with the architect moving from one box to another because he has to serve multiple purposes.

This payment mechanism sets the performance criteria all the way through, not just for the design period, but for the next 25, 30, or 40 or whatever number of years that this concession agreement will go on for.

The payment mechanism really speaks to how you get paid, and more appropriately, how you get reduced payments for non-performance, all the way up to potentially non-availability with no payment, the total payment being withheld. I’m going to walk through an example of one and what that means.

The team really has to think hard before they put pencil to paper and say, “We’re going to design this building and it’s going to have certain operating characteristics and it’s going to have a cost of operations of X,” because somebody on this team is going to be held accountable for X, whatever that may be. Now, will it be the architect? Maybe. Maybe not. Will it be the constructor? Maybe. Will it be the facility manager? Maybe.

I think we’ve all seen pie charts that look like this and it’s trying to allude to some of things that David was talking about. This happens to be a healthcare example. I’ve got it for K-12, but unfortunately I don’t have it specific to justice facilities. It speaks to where the spend is, in this case, in the 40-year cost of operating that facility. David was alluding to what was two-thirds originally, which is now more like 75% per program.

Recognize that this only facility operations, not program in this case. The actual cost of construction over the term is a very small piece, and dare I even say this in this room, the architect and design is like 0.9% of the 40-year cost of operations over the term of the building. It’s very significant on the operating side.

What does that do? That really drives the value proposition in terms of how the team integrates itself. You can go and squeeze the capital expenditure down in that building, but the money is going to go somewhere else. In the roof example that was just used – do I replace it every ten years? Do I replace it every 20 years? – someone has to do those calculations to really work out what’s the best, because you’re competing amongst other teams based on the size of the availability payment, the amount you’re going to get paid every year for the next 30 or 40 years.

Driving down this construction cost can have a very adverse impact on long-term cost. But maybe that’s the right thing to do. It may be cheaper in the long-term to replace something every few years, rather than building something that’s going to last a longer period of time. So the whole of life construction costs need to be considered. It is really those good decisions that are made during the design process that are going to drive the competitiveness of the team to win the deal.

This results in a lower whole of life cost, and provides outcomes that are guaranteed. Then it’s those financing returns or that availability payment that are a vehicle for the client or the sponsor to enforce the guarantees that were made during that design and proposal phase, because when those numbers are put upfront when the final proposal is submitted, that’s what you’re going to live with for the next 30 years, subject of course to indexation and so on.

Here’s some documented project savings. This is a slice of the Canadian experience. I took all of the justice projects that were done in Canada. It’s based on this value for money approach that was discussed earlier on when Rob kicked us off.

You have this public sector comparator. It’s a calculation that the client goes through with their advisors to determine what the cost is if they did the project traditionally. I’d like to say it’s a bit of the idiot’s game because you only build it one way – you don’t build it both – so will you ever know?

The thing you will know, however, is what the cost they’ve actually contracted for, because that number is set contractually and contracting teams put their balance sheet on the line.

On average you can see the numbers range from 12% to 6% and so on. The Long Beach Courthouse that was put up actually shows the value for money somewhere in the range. It depends what discount range is used of course, but it’s in the 10.6% or anywhere down to the 6%, depending on how it’s calculated and discounted.

Lest we get into the discussion about them costing more or not, these savings are not based on construction cost. These are based on the 30 or 40-year contracted cost for that term.

Here a few examples of where this worked. The Durham Consolidated Courthouse, one of the early ones in Canada, was a facility that was bringing together six different courthouses under one roof with 20-odd courtrooms. It was a very successful project. In fact, it set the standard for courts designed going forward with the province of Ontario.

The low-price did not win. Based on how the calculation was done in terms of how you scored points, the lowest availability price did not win the project because there was a lot of technical merit to how this one was pulled together.

The payment mechanism drove quite a different behind-the-scenes design. Let’s take an example of this room. If this room was too warm and you were going to deem that it wasn’t available, there would be a penalty assessed. Total unavailability for this courthouse was deemed to be $77,000 per session.

Now the question is, when is a courthouse not available? So the government deemed that a courthouse wouldn’t be available if 40% of the restrooms were unavailable. It makes sense. Can’t use the restroom, can’t use the courthouse.

So then what do you do to fix that? The team came together and came up with a concept in terms of how you can bring in additional water because what’s going to cause a restroom to go unavailable? It’s going to be a lack of water.

They just came up with a different scenario in terms of piping, like a stand-pipe system, an external part of the building, for almost no cost, but it drove innovation and design.

It’s similar with the cooling systems and similar with backup power systems. For instance, if the utility went down on this building, it would also be deemed unavailable, even though it had nothing to do with the team that built the project. It could have been the utility company that couldn’t provide power. It’s deemed unavailable. Now you have to think twice about how you’re doing your backup systems and what happens if the backup systems fail. So it just drives some different design.

Southwest Detention Center is another one. It’s just about complete construction. I think it’s scheduled for completion this month. This is interesting from an architect’s perspective. The whole design team has pressures that take place when you’re putting your proposal together, you have some very tight timelines. You try to minimize your pursuit expenditures. You have a contractor who’s driving a low cost and a developer who’s driving a low cost, and the architect of course has to do their diligence to meet the mandate of the program.

There’s a fair bit of push-pull that takes place, and this particular one, the owner changed the whole group of user folks who had got involved with the process after the bid were submitted. There was a union issue that took place, and a bunch of other folks were introduced into the process. That made it interesting for the design team, and it made it interesting for the developer, because we have to commit a cost at this point. The bottom line is, make sure that you have the right user groups in the meeting for something like this.

The risk transfer to the team members is based on their ability to control and/or mitigate, and that’s true for all of these projects. So you download the risks to the person who’s most able to handle it. That’s the real context here. Then there are those who would say the risk gets downloaded to those who can least refuse it. It’s just something you want to be cognizant of. The contracts are complex. You need to understand what you’re signing up for.

Here’s an example of team integration synergies. The way the indicative design was set up was there was going to be a central utility plant separate from the building, and just the cost of operations was significantly higher than it needed to be. So the team resigned that and integrated central utility plant into the facility. It save a lot of footsteps for the facility operations folks and ended up with a positive NPV. Energy efficiency components were some other things that were looked at.

With Southwest Australia police and courts, I think David alluded to multiple facilities. If you have a lot of small facilities, you can run them as a program. A bunch of five- or seven-million dollar facilities can be wrapped into one project. That’s proven to work quite well in Canada as well. You have school projects where a bundle of 18 schools were done as a P3 as an example. These were seven justice facilities.

We learned here that police people are quite different from court people in terms of how they treat their facilities. I’ll leave that comment at that. I think with the smiles I’m getting, I think people understand what I’m saying.

P3 is evolving. When you start taking the complete program cost of operations, it’s significantly more and it literally dwarves any of the facility-related. So now in Canada, we’re seeing that you’re awarded additional points, if you will, when you pursue a project for how you can impact the cost of operations for the client. Mechanisms are put in place to start scoring that as well. So we are seeing that evolve over time.

**Rob Borax:** I’m the token architect here. I’m with the firm called Parkin Architects. We’re a privately owned firm of about 125 people. Most of our work is focused on justice and healthcare.

We’re been on this P3 train since its inception in Canada. We’ve done more P3 pursuits than any other firm in the country. We’ve won more P3 pursuits than any other firm, and we’ve lost more P3s than any other firms. So you get quite an understanding from being on all these perspectives.

P3 is changing the way we do architecture. It’s not for everybody. There are a lot of risks, some benefits, and some experiences.

In Canada, the P3 market we’ve talked about is getting quite mature. These are vertical P3s, so not roads not sewers– things above grade. There are about 200 P3s project that have been built for under system right now. Ontario is the most developed by about 104, but it’s growing. It’s growing quickly in Canada. Is that a good thing? I’m not sure. I should say that P3s can also be very profitable, even for architects, believe it or not. They actually represent 65% of our income stream in my firm right now. But that’s because we have no choice because all the buildings we do are a P3 model. But it can work.

There are about 20 justice and corrections projects built across the country. I have to say though, while it’s growing in Canada, it’s now shrinking Quebec. All of a sudden, they’re finding, “No, this is not so good for us.” So the jury is out.

Type of projects include schools, hospitals, justice facilities and recreation. Somebody said that P3s are complex. They’ve all got nuanced differences, and each of these nuanced differences has an effect on the architect. So it varies in quite a few different models. Build/Finance is traditional step sum, where the constructor brings in financing. It goes all the way down to Design/Build/Finance/Maintain, and that’s what we talked about before. It’s interesting that there are 18 correctional facilities have been brought under that model. That’s the preferred model for justice and corrections.

So things are changing for architects. We have to see this world as a whole new brave world – maybe not so brave. We have to look at capital cost and project cost. Risk transference is a big issue. There is qualitative construction design and scheduling. These are elements we have to adjust to.

In regards to traditional model versus P3, the government made a theoretical model saying, “Here’s how much it would have cost, and here’s the money we’re saving for the taxpayers.” When you look at the numbers, what’s interesting is the actual cost of construction made it higher under P3. These are government numbers. The financing cost is higher. Ancillary costs are higher. Ancillary costs are actually quite high.

What’s the big difference? Risk transference. The basis of this whole process is this idea that, “Yes, less risk on the taxpayers is a better way to go.”

For the Southwest Detention facility that Marv talked about, the government listed the construction costs, and construction here means construction and life cycle over 30 years. You also combine financing, and lo and behold, they said on the traditional model, it’s $133 million. Under P3, it’s $203 million. The actual ancillary cost – the cost of doing the process – is actually quite high. Government figures show it as 9% of the construction cost. That’s a fair bit, actually.

So what’s the big delta? Risk. They’re seeing, “Jeez, we’ve saved so much money – $14.3 million,” which represents 5.9% on Marv’s scale.

Why is this traditional model so risky? Again, there are numbers. These are the things that the government considers to be a risk, starting with policy strategic. They’re saying, “We’re going to assign a value for risk just in case the project doesn’t go forward. We’re going to stay under the traditional model that has a 20.4% premium. Under P3, we’re a lot more likely to get it, it’s only 5.6%.” That’s a part of this number they’re always comparing value for money.

I’m not an accountant, so I’ll look at the stuff that I know as an architect. That’s risk due to design changes and construction changes. They’re saying, under the traditional model, we’re getting cost premiums of 19% and 16%. Under P3, a lot lower only 1.7% and 1.4%. I’m just a dumb architect, but I’m asking, “Where are they getting these numbers from?” because for me, the risk is quite clear: change orders. There’s a mistake with the design or construction or whatever, it’s a change order.

I know in our shop and most shops, with these types of buildings, our change orders will usually be 5-6%, and that includes owner changes, which represent half of those, and on-site conditions. So usually the screw-ups by architects and engineers represent 25% of change orders on 6%. That’s 1.5%.

So I’m really confused, but it’s not just me. The Auditor General of Ontario, when they did an analysis of one of the hospital we did, William Osler Hospital, they’re asking, “What’s going on here? When you did your value for money, you’re saying there’s a 13% risk on change orders? We’re doing other buildings at 5%.” That’s sure enough. So we’re getting some funny numbers here as to how we measure value for money.

The Auditor General of Quebec is also asking, “What’s going on here? We’re not convinced that P3 is the way to go.” So to my good friends – and they are good friends – that’s probably for discussion. We really have to think, “Where is this model coming from, and does it really work in all cases?”

Big question: does the quality of the design go down? Sometimes that’s good. In fact, tonight there’s an award being given to the Waterloo Courthouse to my colleagues at NORR for a citation for excellence, and it’s a P3. So it is possible to have good design. But largely, it’s a basis of what the incentive is of a good design. If the terms of reference are that cost is really important, guess what happens? Design goes to the lowest common denominator, not the highest. What do we need to get that price down? Very often, in my opinion, design goes down.

With scheduling, for a fact that’s true, virtually all P3 projects come in on time during construction. They have to because liquidative damages are so high. At least in the Canadian experience for hospitals and prisons, most come on time, as well. I just closed a substantial performance on Tuesday for an $80 million hospital in Ottawa. That date was set three years ago. It was a traditional project that came in on time because there is an incentive for the constructor to build on time.

If you have good constructors, usually schedule is not an issue. However, during the design and documentation schedule, it’s appreciably longer in my experience to get through this whole system to get the P3 process.

Believe it or not, there is more work for architects, based on the Canadian experience under the P3 model – in fact, maybe too much work when I think about it. Before, one architect could do all these things. Now it’s so segmented that Her Majesty will hire the master planning architect and then bring him in. Once the master plan is approved, the compliance architect comes in. He has the bridging documents that we follow during the P3 process. Of course, to reduce risk, they’ll hire another architect to peer review the compliance architect.

Then when that’s about to out, there are three teams, and each time has an architect. So we have three teams of architects working on these things. One wins, and they become the contracting architect.

So actually, there’s a lot of work for architects. Whether it’s useful or not is another question. But there’s a lot of work for architects.

Are there risks and rewards? Absolutely. They’re so intense, we age a lot quicker.

There is a lot of work, at least in the Canadian experience. There actually are respectful profit margins when you win. We wouldn’t be doing this game if we didn’t make money, and we do make money.

We’re fairly lucky. Of the 28 project pursuits we did, we’ve been on 13 successful ones. That’s about a 46% average, so that’s good. We’re doing okay for the moment.

The projects are also really exciting because they’re so huge. The possibility of getting on large projects that are exciting is really quite wonderful. I’ve worked on a $2.2 billion hospital with 19 stories and 20 **[1:03:36 inaudible]** and on and on. And I’ve worked on airports in the Artic. It truly is exciting because P3 does allow some of these projects, rightly or wrongly, to move forward.

The networking is fantastic. We’re getting to know people from all across the world: financiers and accounts and lawyers, etc. It’s really quite amazing, the opening of the flower that occurs. There really is an adrenaline rush, so if you’re a junkie like me, you’d actually love it. It’s tough – tough on the wife – but there is really a lot of excitement as you move towards that submission date. When you win, great. When you lose, shit. You’ve just spent six months focused like crazy and all of a sudden it’s STOP! The comedown is quite dramatic. That’s one of risks.

Another risk is there’s a high reliance on senior architects. These teams, rightly so, want the top guys with a lot of money on the stake. But we know as senior architects, we lose money for firms. We make money when we have a lot of juniors coming up. So that’s a problem to the bottom line.

But there are dismal profits if you lose the pursuits. Some people wonder how much money we lose. We lose no money because we refuse to do any project unless we get paid. There is so much effort going into these things. So we get a reduced rate. We’ll cover our costs. That’s okay. That keeps the wolves away from the door, but we can’t buy our Lamborghinis.

The bigger cost is the foregone pursuit opportunities because you’re so focused on these things, and you’re not going after all these other jobs that are more reality-based. Then you lose the job, and you have all these people asking, “What are we doing next, coach?” “Uh…what do I do?” which results in fluctuating staff levels. That’s a problem too because I hate laying people off.

Do we get the best design? I’m not sure. The big thing here is liquidated damages. Liquidated damages are cost to the project due to unforeseen circumstances. I’m supposed to have a hospital that’s opening on September 30th. It’s not open. I have 300 nurses sitting at home doing this. Who’s paying the nurses wages? The hospital isn’t. They’re going to the team saying, “You’re paying for that.” So my good friends, Marv and Dave, are going to the contractor saying, “You’re paying for that.” The contractor is going to the architect, “You’re paying for that.” So this liquidated damage thing is trying to work its way down. We’re fighting hard not to get involved.

P3s are quickly evolving. When we first started there were a lot of folks and innovation. There was significant risk for the proponent. They had to cover the cost of owner changes and onsite conditions. But the cost to the projects were so high. There was less risk aversion. All of a sudden now, the owners don’t have to pay for owner changes. So we’re actually coming back the traditional models very closely because the only risk they’re caring on the design-construction side is architect screw-ups.

There is a creation of this massive P3 industry. Who would have thought ten years ago that our industry would be run by accountants and lawyers? That’s shocking. They all know better how to do it. Everyone is thinking, “Oh my God.” You go to all these P3 meetings and conferences, I swear to God 75% are accountants, lawyers, and financial people. The guys who actually do this stuff are kind of pushed to this side. So this industry of guys who know how to do it better really has grown tremendously, and there’s lots of writing.

A very quick case study: Southwest Detention Center has 315 beds and is 200,000 square feet. Under traditional cost, that would be $350 a square foot. I know it’s more expensive in Canada, but it’s about $350. Under the P3 model – I’m not sure what your team had for construction costs – but we were at about mid-90s for the actual construction. The identified cost was $203 million. Mind you, that did include a life cycle and financing. But that’s a lot of money. I have to tell you, as a dumb architect, I don’t get it.

I’ll quickly go through the roles of what the architect did. We were the master planners for this project, and this where we set the standards for working with the client on site lines, two-stories or four-stories. We went through quite a few different types of master planning exercises. We started moving towards this direction and started feeling more comfortable. That was the final master plan: efficient, worked well, good site lines, and very good staff, etc. That was the end of our role as master planners.

Then the compliance architect came in, Stantec, who made the bridging documents. Except for slight changes in some of the housing units, there were very few changes from the master planning to the compliance document.

Then it was given to three teams. We managed one of the teams and figured, “We’re going to lose if we just design what we designed before.” Because probably the winner’s going to be the guy who’s made too many mistakes and doesn’t realize how complex it is. So we took the silly decision, in that respect – we lost. Marv won – to try to be even more efficient and bring lots of innovation in – yeah! They want innovation! So this was part of our design submission. We stocked up a little bit higher and had nice finishes going inside and out. We did such things as put in solar panels. We were going to bring a lot of power into our own facility. In fact, we went way further.

I’m not sure you know this, Marv, but our concessionaire had a lease for the adjacent25 acres. We brought in a co-generation plant because we wanted enough gas to create electricity on top of the solar panels. We wanted to create heat and carbon monoxide so we could change that to carbon dioxide, because we had 25 acres of greenhouses to produce food and we were selling the heat, power, and carbon dioxide to this wealth-creating, job-creating element. We got a big cash payment from the farmers for 30 years, and that went to the construction cost. We brought it down, and the government decided to reject all those innovations.

We thought, “This is going to move! It’s a stable prison design.” They said, “Nope. Ignore it.” Why is that? Because the procurement system is so rigid. Lawyers are so scared of giving somebody advantage here or there, saying, “That’s a qualified bid. We don’t like qualified bids,” because we said, “We’ll give you this saving if we can use your roof.”

“We’re not going to allow that.”

“We’ll give you this saving if we can co-gen.”

“Nope. Qualified bid.”

So there’s an example of how rigid it can be. It actually stifles innovation.

This is the project that won. In this case, we did get a debrief. The lies they told us, “We won the design portion, but yours cost less.” That was the big element. So on this case, I would suggest that it was cost, not design, that drove it. That’s what’s constructed.

**Rob Fisch:** I want to ask the question that I said you shouldn’t ask, which is: Does P3, in your view, cost more or less? The reasons is because for any perspective client that we might have in the US who hasn’t done this before and is thinking of doing it, that’s the first question they’re going to ask, before they ask about design and some of the other good stuff. Does it cost more or does it cost less?

**Marv:** It really depends what you’re including into the P3. There are a number of things. When you’re doing the value for money analysis, it’s a very sensitive model. I have the example of the California Long Beach Courthouse project. Depending on the discount rate that you use to calculate your savings, the savings might have gone from about, for the all-in cost for 30 years, 10.6% down to I think 4.6%, just on the base of a different discount rate because of when the cost starts to flow.

So it really depends on how you’re looking at it, but I would almost guarantee you that your construction costs will be more because you know you’re going to be held accountable for the long term, and you’re going to spend the money. From our perspective, you’re going to spend the money wisely. You’re going to end up with a higher-quality building, typically, than you would under traditional.

The other thing is, how do you put a price – I know it goes into the risk analysis that’s done as part of the value for money – to what the handback conditions are going to look like? What’s going to take place at expiree transition? What’s going to be the cost to refit this building that, under the P3 model, you end up with effectively a 30-year warranty for the building, and you have to hand it back in pre-defined conditions?

So does it more or does it cost less? It depends on what you put in the equation.

**David:** I can tell you precisely what a P3 project costs. You evaluate that however you want, but I can tell you precisely how much it’s going to cost.

What we don’t know is what it costs in the public sector. We have this public sector comparator, which Marv put a few question on, but the fact is there are an awful lot of assumptions made in that.

In the case of prisons, the prison service tends not to maintain its prisons. There are well over a billion pounds worth of backlog maintenance in prison. How do you evaluate that? They don’t pay for certain elements of risk, so they don’t insure their prison. So the insurance is an assumption.

In regards to penalties, why would you reckon you’re going to fail, and what do you actually put on the penalty? You don’t know that.

Another one is pensions. UK’s public servant pensions are actually paid out of revenue, essentially. We know that it costs us about 30% to provide a public sector pension. I’m appreciate this might not be that comfortable over this side of the water, but that’s what it costs to provide a public sector pension.

The public sector comparator reckons 18% is actually what it costs. What do you attribute for overheads, a huge central department?

I think it’s very difficult to understand what the public sector comparator is. You can look at certain elements, like overall construction costs. You can actually look at the process of competition that brings it down.

So mine’s a guess. It probably does cost less, but I really don’t know.

**Rob Fisch:** Everybody’s is going to be a guess. I just want to see who has the most persuasive guess.

**Rob Borax:** I’ll try. Let’s put it this way. We have to ask ourselves, “What is the risk, and what is the cost of risk aversion, and is the cost of risk aversion greater than the risk?” I think that’s a fundamental question we have to ask. Are using a torpedo to kill a fly when we could use a flyswatter?

I get the impression we’re using torpedoes more than flyswatters these days. I’m not a socialist, but the reality is that, under the private model, the private sector has a goal, and their main goal is to create a profit. That profit is at the expense of something or somebody else.

Theoretically, I’d take into account maybe incompetence or lack of maintenance, but within the public sector, we don’t have a profit-required methodology to go forward.

When I look at the numbers, they’re staggering. My firm has worked on $10 billion of P3 pursuits. There are just ones that we’ve been shortlisted on in the last ten years. It’s a billion dollars of construction per year, either in pursuit or actual construction. That’s huge numbers.

The cost of a prison? I believe Southwest should have been $70 million under the traditional model. But the project cost, at the end of the day, was $240 million. So we’re talking about four times that. Granted, the life cycle costs are in there. So there’s a cost that has to be added, but that’s a huge amount of money. The cost just to administer the process of the Southwest Detention facility was 8%. Remember what the risk was – 1.5%. The risk and change orders that the architects had was 1.5%. The administration of that risk, let alone the construction costs was 8.5%.

I could have built a lot more cells. This is a level of administration that didn’t exist before. Are we doing it better? I’m not convinced, guys. I’m sorry. I make my living from it. That’s the only way I can do it. But I’m not convinced.

**Marv:** I just want to make one more comment on that. This is why want to go last on this particular item. I don’t have this information for justice facilities, but I do have it for schools. How do you put a price on the impact on the kids and the teachers and the studies that are done about absentee and lower-marked test scores and so on as a result of living, or going to school, for example, in substandard facilities with windows you can’t see through because they’re boarded up?

On the P3, you will not have that, or a whole bunch of folks are going to go broke and a whole bunch of lenders will be **[1:18:12 inaudible]**

**Rob Fisch:** You’re leading on to my next question. Are P3-delivered facilities any better or any worse in terms of whether we’re looking at recidivism rates or employee absenteeism or any other more qualitative measures of a successful correctional facility?

**David:** I think so. I’m going to come out with the answer you’d get from the government because it’s probably true to a certain extent. Because you’re only dealing with a part of a system, it’s actually hugely difficult to look at it in terms of recidivism rates. So you can only look at what actually happens within the facility, and that’s not really a good measure. So I think it’s very difficult to tell.

In terms of what happens within prisons, I have to say a lot of it’s down to the operation, and there are good and bad in both public and private. I’m not going to sit here and say, “Private good. Public bad,” because that’s patently not the case. There are wonderful establishments in both, so that’s not really the determining factor.

What you do get in a P3 is that you can’t compromise. In a P3, however many prisoners we have, we get hugely penalized if we don’t provide the regime. If I’m a governor in the prison system, if I come under pressure, I can lock people up for longer and reduce the regime, and that tends to be the actual natural reaction. I think there are some protections in that.

But in answer to the straight question in the case of prisons, it’s really quite difficult. If in a prison, I’m suffering from maybe lack of staff or overcrowding, then I’ll probably lock the prisoners up for longer, and I’ll maybe only give them a four-hour regime day rather than an eight-hour regime day. That isn’t open under a P3 because that’s the terms of the contract. We do it. So it’s actually quite difficult, but I would certainly say that if you’re only giving an inmate four hours of program work a day rather than eight hours, then unless you got your programs badly wrong, you’re not having as good an impact.

**Rob Fisch:** The other question that I thought to ask is: Is there an optimal size or a minimal size or a range of size that is appropriate of a P3 delivery model in terms of scale or cost?

**Marv:** It can be a pretty wide-ranging range. Typically, the more complex the project, the more value there is in the project. The other thing we look at is how experienced the client is on the other side of the table.

For instance, if we’re dealing with Infrastructure Ontario that has done some 200 projects, we’re pretty comfortable we know what our costs will be to pursue it and so on. Contrast this to maybe a city that decides to go forward with a $100 million project, we may very well say, “That’s just too small,” because they don’t have the experience and it would just cost that much more to pursue.

**Rob Borax:** Yes, there was a minimum threshold because the bureaucracy to make this system work is so expensive you need a minimum size, clearly. In Ontario, it was $100 million, but as the province got more sophisticated, that number’s starting to come down. We’ve seen projects of $60 million where that line is starting.

Is there a maximum? Obviously not. But even that’s depressing. The biggest project I’ve worked on is a $2.2 billion project. Guaranteed price? Yes, it’s good. I think it’s up to $3.2 billion right now because all the changes. The $1.2 billion hospital I was working on is up to $2.2 billion.

The operators will say, “It wasn’t our fault. It was scope change.” But they were unable to get that scope changed during the actual pursuit process. It was too inflexible because the procurement process was so convoluted.

Ultimately, the cost is huge. Isn’t it better to take some money and put it into health prevention, or in the case of recidivism, putting it into better housing, better schooling and better food? That’s what we’re finding, because that’s where we get the recidivism where people go back into the lousy situation that they’d be coming out of.

I think we have to look at holistically. Yes, we have to look at it holistically in terms of the building. It has to be looked at holistically in terms of society. I think we’re missing that in our calculations.

**David:** We have a number of small PFI projects in the UK, but they’re characterized by one of two things. One is where there is a confederation and you have multiple or a group of projects. The other is we’ve done a number of smallish juvenile facilities, but they have very much piggybacked on the back of some of the larger prisons in terms of the form of the contracts, so there have been some savings in the process that have actually made them viable.

So I think the answer probably is yes, but I think there are ways around it by grouping and piggybacking off of it.

**Rob Fisch:** So those small facilities would be given to the same concessionaire as a large prison, and basically that’s how they package it?

**David:** Yes.

**Participant:** I like the concept of **[1:24:31 inaudible]** In today’s society what we’ve all gone through in the last five years, all of us in this room are old enough to stop believing that we’re bulletproof and we’re going to live forever. In the day, especially in America when people are forming ILCs with a bunch of partners, how do you know that somebody is going to be around in 40 years? I mean, **[1:24:48 inaudible]** the numbers were wrong and it’s ten years in and they say “This was a money blooper,” and file bankrupt and walk away.

**Marv:** It’s a very good question. I’ve seen projects. Like in the one put up right up front – the Durham Consolidated Courthouse project – the developer did go under. But it’s transparent to the project. You can think of the highway – I think it’s the SR-91 – in California, where the P3 team went broke. But it really doesn’t matter because from the client’s perspective, they still have the asset. What happens is the equity gets lost. So the poor developers who put money in are hurt. Depending on how bad the project gets, the lenders may be hurt as well.

But at the end of the day, the asset is still there. You hear about the Indiana toll road examples. You heard there’s a prison in Australia, I think, where the contractor went broke. The lenders took a big haircut, but the project still proceeds.

**Participant:** So it’s slightly like financing a house.

**Marv:** Exactly.

**Participant:** There’s a physical asset there that has some **[1:26:00 inaudible]**

**Marv:** Absolutely. Just hopefully you don’t have to relive what we lived in the housing market.

**Rob Borax:** But if you’ve paid four times that amount from the start, yes you have an asset, but **[1:26:14 inaudible]** So that has to be taken into consideration.

**Participant: [1:26:17 inaudible]**

**Participant 2:** First of all, I need to point something out in the graph **[1:26:18 inaudible]**

My question is – and I’ve had the unfortunate pleasure of being involved with the projects that you’ve shown – the way the debt works currently is it lumps everything and in your graphics you did show that the greatest portion is in the maintenance. What shows more subtlety is the financing is at least twice the cost of the construction. So those two together are huge. What separates the architect, who has the greatest influence over what the owner wants, and his operating budget and his staffing. Why haven’t we separated out the design and construction on design-build and then bid the financing and the maintenance separately?

**Marv:** That’s a very good question about doing all the design-build and then throwing it out the markets for the financing. Frankly, that’s what happens. That’s what the developer does. But what really drives the value proposition and makes the team work together is really the financier that’s there, because without the financier, who’s going to guarantee this? If some operator or a designer says, “I’m going to design this and it’s going to have a 40% reduction in energy compared to the standard,” and if it doesn’t happen, someone needs to be on the hook. That’s usually the financier as the last resort. The buck stops there.

Granted, they will download that risk to the extent they can, and if they can’t, ultimately the private sector finance is holding it. So that’s what drives the equation: the value proposition.

**Rob Borax:** You asked a good question, and that question needs answers. We work within a paradigm, and that paradigm is, “Does P3 make sense?” If we decide P3 make sense, I think it’s a really great question with a great answer. Us having difficulty doesn’t make sense. When I look at the numbers, they don’t add up. The Auditor General says they don’t add up. So we’re spending a lot of time and energy, and for some reason we think it’s better for society. But the numbers don’t add up. But if we say it makes sense, yes, great question.

**Rob Fisch:** I told you it was an interesting group. Thank you very much.