SPECIAL COUNCIL MEETING
A G E N D A

OCTOBER 30, 2013 - 6:30 P.M.

CITY HALL COUNCIL CHAMBERS
15 LOOCKERMAN PLAZA
DOVER, DELAWARE

AGENDA ADDITIONS/DELETIONS

1. **Public/Private Partnerships Related to City-Owned Buildings**

2. **Adjournment**

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THE AGENDA ITEMS AS LISTED MAY NOT BE CONSIDERED IN SEQUENCE. THIS AGENDA IS SUBJECT TO CHANGE TO INCLUDE THE ADDITION OR THE DELETION OF ITEMS, INCLUDING EXECUTIVE SESSIONS.

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REPORT OF INSPECTOR GENERAL'S FINDINGS AND RECOMMENDATIONS:

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AN ANALYSIS OF THE LEASE OF THE CITY'S PARKING METERS

June 2, 2009

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EXECUTIVE SUMMARY

INTRODUCTION

In December 2008, the City of Chicago leased its system of 36,000 parking meters to a private company for 75 years in exchange for a payment of $1.157 billion. This type of long-term lease of public assets is known as a "public-private partnership" ("PPP").

The administration announced the agreement on December 2, 2008, revealing for the first time the details of the lease agreement – including the extent of the meter rate increases and the length of the lease. Two days later, on December 4, 2008, the City Council approved the lease agreement by a vote of 40 to 5.

In January 2009, the Inspector General's Office ("IGO") began an independent review of (i) the parking-meter lease from a financial perspective, and (ii) the process used by the City in deciding to enter into the lease.[1] Our analysis and findings are described in the attached report. The IGO's review included interviews of City personnel involved in the parking-meter deal and the City's financial advisor; analysis of documentation and written explanations provided by the City; extensive research into the literature on PPPs; and interviews of government officials and academics around the country.[2]

While PPPs have been regularly used for decades in Europe and Australia, typically for the leasing of toll highways and other transportation infrastructure, there have been relatively few instances of PPPs in the United States. Beginning with the Chicago Skyway in 2004, the City of Chicago has entered into four large, well-publicized PPPs.

In the last few years, PPPs have been the subject of extensive study and commentary in the public-policy community around the country. In particular, the Government Accountability Office (GAO), a federal commission, and state legislatures have issued comprehensive reports on the subject. While they have noted the large potential benefits of PPPs when done properly, they have also noted two serious areas of concern:

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[1] See Chicago Municipal Code § 2-56-030(c) ("In addition to other powers conferred herein, the inspector general shall have the following powers and duties: . . . (c) To promote economy, efficiency, effectiveness and integrity in the administration of the programs and operations of the city government by reviewing programs, identifying any inefficiencies, waste and potential for misconduct therein, and recommending to the mayor and the city council policies and methods for the elimination of inefficiencies and waste, and the prevention of misconduct;").

[2] This review was conducted by Aaron Feinstein, a Special Assistant with the IGO who joined the office in November 2008. From 2006 through 2008, Mr. Feinstein served as a Finance Analyst for the Speaker of the New York City Council, and assisted in authoring an overhaul of the New York City budget presentation to make it more transparent and performance-based. Mr. Feinstein previously worked as an analyst for the Independent Budget Office (IBO) of New York City. Mr. Feinstein has a Master of Public Administration degree from New York University with a specialization in public policy analysis.

* The failure of governments to thoroughly review the costs and benefits of a PPP before deciding to lease public assets. The GAO study recommended following the "best practices" model used in Europe, where governments engage in an advanced, transparent, deliberative process to determine whether leasing a public asset is truly in the public interest.

* The temptation of entering into PPPs in order to receive large, upfront payments that solve short-term financial problems, without properly considering the long-term implications of the deal.

The IGO report finds that both problems identified in these PPP studies occurred here. Because the deal was presented to the City Council with very limited information and because the Council scheduled its vote a very short time later, there was no meaningful public review of the decision to lease the parking-meter system. What is standard in the PPP "best practices" model – informed deliberation, transparency, and full analysis of the public interest considerations – was not present here.

In addition, the driving force behind the decision to lease the parking meters was the City's short-term budgetary need. While we do not question the seriousness of the City's budget problem that was presented in Fall 2008 because of the recession, the hasty, "crisis" nature of the decision-making process meant that the short-term budget problems and the large upfront payment the City was receiving overshadowed all other legitimate, long-term, public-interest issues – the exact concern raised in the best PPP studies.

These failures meant that, among other things, the City did not allow for proper consideration of alternatives to the exact 75-year lease deal it entered into. The IGO report finds that, in fact, there were valid alternatives to this lease deal that could have solved the City's short-term budget problem without (i) raising the meter rates to the same level, and (ii) giving up control of the parking meters for such a long period of time. At the least, these alternatives merited consideration in a regular, democratic, deliberative process.

The report also finds that the City was paid, conservatively, $974 million less for this 75-year lease than the City would have received from 75 years of parking-meter revenue had it retained the parking-meter system under the same terms that the City agreed to in the lease.

It is a momentous decision for a government to give a private company control over a major public asset for three generations. And when this decision has a significant impact on the everyday lives of its citizens (here, through a large increase in parking meter rates), the government's decision is even more important.

There is simply no reason for these types of decisions to be rushed through the City's legislative body, with little time to digest and analyze a complicated transaction, with limited information provided, and with little opportunity for public input and reaction. This has the obvious effect of making informed deliberation, consideration of alternatives, and potential opposition less likely.

The report contains four principal findings regarding the problems with the lease deal and the process used, and recommends that the City Council enact a new PPP ordinance to avoid these problems when potential PPP deals arise in the future. The report recommends an ordinance that would mandate a far more transparent, public, and deliberative process for PPPs – including a far more robust role for the City Council – than the ordinance passed by the City Council's Finance Committee on June 1, 2009. These findings and the recommendations are summarized below.

SUMMARY OF FINDINGS

1. A DUBIOUS FINANCIAL DEAL

First, the report concludes that the parking-meter lease was a dubious financial deal for the City, when the lease payment the City received is compared with the long-term value to the City of 75 years of parking-meter revenue.

The report finds that if the City were to keep control of the parking-meter system and operate it under the same terms as the private company, the system would be worth approximately $2.13 billion to the City over 75 years. In other words, by giving up control of the parking-meter system for 75 years, the City relinquished future parking-meter revenue that has a present value of approximately $2.13 billion. This means that the City received about $974 million less for the parking-meter system than it was worth to the City – or alternatively, that the City leased the system for a price that was 46% lower than its value to the City.

The report's calculations are quite conservative, primarily because of the "discount rate" used in conducting the analysis – the rate that allows one to calculate the present-day value of future revenue. Since one dollar today is worth more than one dollar five years from now, any calculation of how much future revenue is worth today requires that the future revenue be discounted in some way.

When the federal government sells assets, it uses the government's borrowing rate as the discount rate. Here, that would have resulted in a discount rate of 5.0% to 5.5%. Applying that discount rate to calculate the value of the parking-meter system to the City would have resulted in an approximate value of $3.53 billion. Thus, if our report had used the federal-government approach, we would have concluded that the lease payment was $2.37 billion lower (or 67% lower) than the value of the parking-meter system to the City.

However, rather than relying on the federal government's more simplistic approach, our analysis examined the use of PPPs by other governments around the world and found that governments that regularly use and study PPPs have more sophisticated models regarding discount rates for PPPs. Using a leading model, the report concludes that a discount rate of 7.0% is the appropriate, conservative rate. The application of this rate results in the calculation that the parking-meter system was worth $2.13 billion to the City.

2. FAILURE TO CALCULATE VALUE OF PARKING-METER SYSTEM TO THE CITY, TO HELP DETERMINE WHETHER THE DEAL WAS IN THE CITY'S BEST INTERESTS

Second, the report concludes that the City office principally in charge of this deal, the Office of the Chief Financial Officer, failed to calculate how much the parking-meter system would be worth to the City over 75 years if it retained the system rather than leasing it. The CFO's Office therefore failed to take into consideration whether this was a good financial deal for the City in light of the value to the City of the parking-meter system.

As the Government Accountability Office (GAO) concluded in its recent comprehensive report on PPPs for highways, "by leasing existing facilities, the public sector may give up more than it gains if the net present value of the future stream of revenues (less operating and capital costs) given up exceeds the concession [lease] payment received." That is precisely the situation here.

Instead of comparing the amount of the lease payment with the value of the parking-meter system to the City, the City in essence argued to the City Council and the public that leasing the parking-meter system was necessary in order to fill a large budget gap caused by a bad economy and a resulting drop in tax revenue, and therefore the City had to take the best deal the market would offer at the time, whether good or bad.

Even assuming (as we do) that the City needed to fill a very large gap for its 2009 budget, it was incumbent on the City to determine whether selling the parking-meter system *at this price, and under these terms*, was a good financial deal – not solely from the perspective of it being the best deal the City could get in this market at this time, but also from the perspective of the long-term loss to the City when the lease payment is compared to the value of the parking-meter system to the City.

Conducting this analysis, and making this information available to the City Council and the public, may have raised doubts about the prudence of leasing the parking-meter system right away – or at least leasing it under these specific terms. The failure to conduct this analysis strongly suggests that the decision had already been made that the City was going to lease the meters for the best-available price on the market, and that this decision was driven purely by the need to raise revenue for the short-term budget problem. This is precisely the type of pre-ordained, revenue-focused, outcome criticized by recent, comprehensive studies of PPP decision-making.

The City has also argued that it would make no sense to calculate the value of the parking-meter system to the City under the terms of the lease, because the City could never operate the parking meters under the same terms as a private company. Specifically, the City has argued that (a) it would have been impossible for the City to have both kept the parking-meter system and raised the rates to the same extent as the lease, because there was not sufficient political will to do so (the "impossibility argument"); and (b) any private company would be able to operate the parking-meter system more effectively and efficiently than the City could (the "government inferiority argument").

The report finds that neither of these arguments has merit. In brief, the "impossibility argument" is disproven by (among other things) the fact that the City did in fact raise the rates when it approved the lease, and the fact that other cities have kept their parking-meter systems and passed large rate increases. The "government inferiority" argument is disproven by (among other things) the performance of the winning bidder in the first few months of the lease (when governmental intervention was required to fix the problem), and the fact that the increased efficiencies in the system are expected to come from capital improvements that are well within the City's capability and expertise.

3. FAILURE TO CONSIDER LEASE ALTERNATIVES THAT STILL SOLVED BUDGET PROBLEM

Third, the report concludes that even if the only way for the City to close its budget gap was to secure a large one-time payment by leasing its parking-meter system to a private company, there were alternatives to the deal struck by the City, such as a shorter lease with a revenue-sharing provision, which would have plugged the budget gap without having the City suffer a large long-term loss.

A study of PPPs around the world — especially in Europe and Australia where they are more common — shows that shorter leases are more common for public leases of infrastructure assets. As for revenue sharing, it is an aspect of PPPs used by governments around the world, and was recently recommended in a comprehensive report authored by the Texas State Legislature on PPPs.

Had the City entered into a 20-year lease with a 50 percent revenue-sharing provision, for instance, our analysis estimates that a private company would have paid the City between $302 million and $444 million for such a lease. (This analysis makes the same assumptions used by the City's financial advisor to determine how much a private company would likely pay for a 75-year lease – an analysis which was on target with the final offer price.)

Such a payment would have been more than enough to cover the $150 million shortfall that the City said it needed to fill for the remainder of 2008 and for the 2009 budget year. The City said that it planned to use a total of $430 million ($325 million from the upfront payment, $25 million in interest earned on the $325 million, and $80 million in interest earned on a perpetual reserve) for anticipated budget shortfalls in 2008-2012. Even under the most pessimistic revenue scenario, this alternative lease would have likely raised over $430 million to address the City's budget deficits over the next four years ($302 upfront payment, $20 million in earned on the upfront payment, and $110 million in additional parking meter revenue in first four years).

The City also had other alternatives, *including leases with lower rate hikes*. For instance, a 30-year, revenue-sharing lease with rate increases 25% lower than those in the lease would have produced an estimated lease payment of between $268 million and $396 million.

While there are arguments in favor of longer leases (like 75 years) in certain situations – namely, the unavailability of favorable tax-depreciation status; the inefficiency without a longer lease; making capital improvements without a longer lease — they simply do not apply here. In

addition, the City gained very little by leasing the parking meters for such a long period of time, as 93% of the lease payment was to pay the City for the value of the first 50% of the 75-year period (37 years).

Thus, if the City believed it had no option but to lease the parking-meter system in order to raise additional revenue for 2009 and beyond, it did not have to enter into a 75-year lease with these exact terms, including these exact rate increases. At the least, there were solid alternatives that merited meaningful consideration

4. LACK OF ANY MEANINGFUL DELIBERATIVE PROCESS IN THE CITY COUNCIL

Prior to the administration's presentation of the parking-meter lease to the City Council's Finance Committee on December 3, 2009 (one day after publicly announcing the lease), there was virtually no meaningful review of the merits of the lease outside of the CFO's Office and the Mayor's Office. Twenty-four hours later, and following a one-day hearing, the City Council put the matter to a vote.

The administration provided limited information to the City Council. A power-point summary of the City's financial analysis was provided, but no report from the private financial analyst hired by the City. No financial analysis was provided of the value of the parking-meter system to the City if it retained the system, since no such analysis had been done.

The City Council gave itself no time to do a thorough, independent analysis of the value of the parking-meter system to the City. There was no public comment; no testimony from critics or experts; no presentation of recent studies such as the one from the GAO. And there was no discussion of alternative lease terms – such as a shorter lease, a lease with revenue sharing, or a lease with lower rate increases.

As with most issues, limited information and limited consideration means less informed decision-making. In a democracy, it also means less transparency, less public awareness, less involvement by legislative representatives, and less accountability.

By pushing through the lease deal based only on tightly-controlled information and very short deadlines, the City effectively foreclosed the consideration of alternatives. Numerous aldermen stated that they felt obligated to support the lease deal because the City's 2009 budget – passed one month earlier – was enacted with $150 million in revenue from the (potential) lease deal already included. To reject the lease deal in December would have been to jeopardize the entire budget passed in November, they said. While this may be true, it begs the question as to why a budget was enacted with an enormous revenue component that was based on the hope that a potential deal would be completed.

This hurried, high-pressure approach is not how other governments around the country make decisions on PPPs, and it is clearly not a "best practice" when compared with the highly-developed system of PPP decision-making in Europe and Australia.

We believe it is clear that the City can do a better job of deliberating fully and transparently, and considering alternatives thoroughly and knowledgeably, before deciding whether and how to lease its public assets through PPPs. This is an important protection for the public interest and the proper disposition of public assets.

SUMMARY OF RECOMMENDATIONS FOR FUTURE PPPS

Because of the haste and lack of transparency that characterized the decision to lease the parking meters, and to ensure that the failures discussed in the report do not occur in the future, the report recommends a proposed ordinance that would create a new review process for sales or long-term leases of City assets. For instance, this process should be used to review the long-term leases of Midway Airport and the Material Recovery and Recycling Facilities that are likely to come up for City Council review in the near future.

In our view, it is appropriate for the City Council – as the City's legislative body that must approve PPPs – to proactively ensure that it has the opportunity to properly deliberate and consider alternatives before approving the long-term lease of significant public assets. We therefore recommend that the City Council enact a PPP Ordinance mandating sufficient transparency, review, and deliberation in the City Council.

The City Council is scheduled to take up a proposed ordinance that would provide for a 15-day review period (originally 30 days) once the winning bidder has been chosen. We agree that there is a legitimate need for the City Council to have an extensive review period to determine whether it is appropriate to lease public assets under certain terms. However, the problem with mandating an extensive review period after a private company has agreed to a particular price is that it may be important for the City to move quickly to accept that price. In addition, this review period comes too late, because it will be more difficult for the City Council to change the terms of the lease – much less to reject the decision about whether to lease the asset in the first place – once a winning bid for the lease has already been made.

We therefore have a different recommendation. We believe that the critical time to study and assess a PPP is after the administration has decided on the lease terms (other than price), but *before* companies have placed their bids. Requiring that the City Council take a 60-day period to assess and deliberate at this point in the process would strike the right balance between (i) recognizing that it is a momentous decision for a government to decide to effectively "sell" (i.e., lease for multiple generations) public assets, and (ii) not slowing the process down once private companies actually submit bids. A 60-day review period at this point would fit comfortably within the lease-development process typically used by the City.

This 60-day period would give the City Council the opportunity to collect the relevant information, consider the alternatives, deliberate, and make an informed decision. The following should occur during this 60-day period:

1. The City Council should receive *an independent analysis* of the costs and benefits of leasing the public asset at issue.

2. The City Council should hold hearings at which it hears more than just the administration's official position. The City Council should hear from those who conducted the independent analysis, and potentially from outside experts and critics. The City Council should also provide an opportunity for the public to comment directly.

3. The full City Council should debate the issue, and vote as to (i) whether the public asset should be leased under appropriate terms, and (ii) if so, what the proper terms of a lease should be. The City Council could choose one set of terms for the lease, or could authorize the City to offer alternative lease terms (e.g., 75 years vs. 30 years, or different rate increase schedules), to determine which alternative might garner the most attractive bids.

If the City Council votes to authorize the lease of the public asset, the City can then move quickly to solicit bids for the lease according to the terms authorized by the City Council. Once the City receives the "winning" bid, the City Council's review of this bid can be, and should be, relatively short. Since the City Council will already have analyzed and decided on the terms of the lease, we believe that a two-week period should be more than enough for the City Council to hold a hearing and debate whether the winning bid is a bid the City should accept. Little or no new analysis will be needed, as the City Council will already have received a full financial analysis during the 60-day review period.

Finally, we recommend that this PPP ordinance prohibit the City from using proceeds from a PPP lease in the City's annual budget *if the PPP deal has not yet been approved by the City Council*. This is what happened here. Before the City had entered into a deal – in fact before the City had received a single bid– it submitted a proposed 2009 budget to the City Council that included $150 million in revenue from a potential deal. The City Council passed the budget with this revenue included, effectively ratifying the decision to lease the parking-meter system without having any information about the amount of the bid or the terms of the lease, including the amount of the rate increase. When the lease deal was subsequently put to a vote in early December 2008, rejecting the deal would have meant rejecting the already-passed budget for 2009.

Putting *potential* revenue in a budget from a huge PPP transaction that has not yet occurred (and might not occur) makes it harder for proper deliberation to take place, since it increases the pressure to approve the deal for reasons having nothing to do with the public interest considerations about leasing public assets.

A. BACKGROUND

1. Public-Private Partnerships in Transportation Infrastructure

(a) DEFINITION

For transportation infrastructure, the basic definition of public-private partnerships (PPPs) is "contractual agreements formed between a public agency and a private sector entity that allow for greater private sector participation in the delivery and financing of transportation projects."[3] One type of PPP is a long-term lease agreement of an existing public sector asset. In this arrangement, a private sector company leases an asset from a public entity and has the right to operate the asset. In the case of a revenue-generating asset, where the private company receives net revenue through the operation of the asset, the private company typically gives the government an upfront payment or revenue sharing during the lease term, or both, in exchange for the lease.[4]

While long-term lease agreements in transportation infrastructure are relatively new to the United States, "long-term lease agreements to operate and maintain transportation facilities while receiving financial compensation (through toll revenues or annual payments) have been widely used in Europe, Asia, Australia, and Latin America."[5] One of the major reasons cited for the use of PPPs is that they can provide large, new sources of financing for infrastructure projects.[6]

(b) THE LEASE OF THE CHICAGO SKYWAY

In October 2004, the City of Chicago leased the Chicago Skyway to a private concessionaire for 99 years in exchange for a payment of $1.8 billion. This was a landmark agreement both in Chicago and the United States for PPPs in highway infrastructure. While PPPs had been used to finance the building of new infrastructure, this was the first major agreement where an existing revenue-generating asset was leased to a private company in exchange for a large upfront payment. Because of its uniqueness and the large payment the City received, the Skyway lease has received significant attention from researchers. After the lease was finalized, some criticized the deal as raising toll rates too aggressively and arguing that the City did not receive a large enough payment.[7] These critics contended that the City could have extracted more value from the Skyway had the City raised the toll rates and kept the revenue. Proponents of the deal responded that these criticisms ignored political realities that prevented

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[3] Federal Highway Administration. "PPPs Defined".
http://www fhwa.dot.gov/PPP/defined_default htm
[4] Federal Highway Administration. "PPPs Defined – Long-term Lease".
http://www fhwa.dot.gov/PPP/defined_longtermlease.htm
[5] Buxbaum, Jeffrey N. and Ortiz, Iris N. "Protecting the Public Interest: The Role of Long-Term Concession Agreements for Providing Transportation Infrastructure". USC Keston Institute for Public Finance and Infrastructure Policy. June 2007.
[6] Ybarra, Shirley. "Public-Private Partnerships in Transportation- Testimony to the Pennsylvania House Transportation Committee". *Reason Foundation*. July 28, 2008
[7] Enright, Dennis. "The Chicago Skyway Sale: An Analytical Review". NW Financial Group, LLC.

the Skyway tolls from being raised while the road was under public control.[8] However, a recent report by the Government Accountability Office lamented that "neither Chicago (in reference to the Skyway) nor Indiana gave serious consideration to the potential toll revenues they could earn by retaining control over their toll roads."[9]

(c) ACCEPTANCE AND REJECTION OF PPPS AROUND THE U.S..

Since the Skyway lease, a number of state and local governments have explored long-term leases of public infrastructure. In June 2006, Indiana leased its toll way to a private concessionaire for 75 years for an initial payment of $3.8 billion.[10] The lease was approved after a contentious debate which featured "TV ads, public meetings and rallies at the Statehouse."[11] Also in 2006, Harris County, Texas considered leasing its toll roads to a private operator. To analyze how the toll road should be operated, Harris County calculated the value of their toll roads under three different scenarios: public ownership, a long-term lease, and an outright sale. "This analysis was used by the county to conclude that it would gain little through a long-term lease and that through a more aggressive tolling approach, the county could retain control of the system and realize similar financial gains to those that might be realized through a lease."[12]

In May 2007, Governor Ed Rendell of Pennsylvania announced that an analysis by the State's financial advisor, Morgan Stanley, had "determined that a lease of the Pennsylvania Turnpike is likely to generate the highest level of funding to repair roads and bridges and avert drastic public transit cuts."[13] In response to this, the Democratic Caucus of the Pennsylvania House commissioned its own analysis of the financing options related to the Turnpike. This study concluded that the Turnpike was more valuable to the State if it maintained control rather than leasing the system to a private operator.[14] This conclusion was challenged by proponents of the turnpike lease, who argued that the Pennsylvania House's study was flawed because "it ignores significant differences between investor-owned toll companies and public toll agencies."[15] In May 2008, Pennsylvania received a winning bid of $12.8 billion from a group led by Abertis and Citi Infrastructure for a 75 year lease of the Turnpike.[16] However, due to limited political support the lease never came up for a vote in the State legislature. On September 30, 2008, the winning bid expired (after being extended once) and the offer was withdrawn by the

[8] Poole, Robert. "Responding to Critics of Long-Term Toll Road Leasing". *Public Works Financing*. May 2006
[9] Government Accountability Office. "Highway Public-Private Partnerships: More Rigorous Up-front Analysis could Better Secure Potential Benefits and Protect the Public Interest". February 2008. pg. 57.
[10] *Id*., pg. 17.
[11] Kim, Theodore. "Toll road lease is a go". *Indianapolis Star*. March 15, 2006.
[12] Government Accountability Office. "Highway Public-Private Partnerships: More Rigorous Up-front Analysis could Better Secure Potential Benefits and Protect the Public Interest". February 2008. pg. 57.
[13] State of Pennsylvania. "Governor Rendell says transportation funding analysis determines highest value likely from long-term lease". Press release. May 21, 2007.
[14] Gray, Gary J. and Cusatis, J. Patrick and Foote, John. "For Whom the Road Tolls: An Analysis of Financial and Strategic Alternatives for the Pennsylvania Turnpike". February 2008. pg. 4
[15] Poole, Jr. Robert J. and Samuel, Peter. "Pennsylvania Turnpike Alternatives: A review and critique of the Democratic Caucus Study". Reason Foundation. April 2008. pg. 14.
[16] State of Pennsylvania. "Pennsylvania Turnpike lease would boost funding for roads, bridges, transit". Press release. May 19, 2008.

investment group. While the lease was ultimately rejected, Governor Rendell vowed to continue to push for the lease in the future.[17]

(d) RECENT STUDIES OF PUBLIC-PRIVATE PARTNERSHIPS

Because of the recent interest in PPPs, the Government Accountability Office issued a report in February 2008 that analyzed highway PPPs in the U.S. including the Skyway and the Indiana Toll Road. The report identified potential benefits of highway PPPs including receiving up-front payments, financing new construction, and transferring risks to the private sector. Some of the potential costs/tradeoffs it identified were higher tolls, giving up long-term value, and loss of control.[18] The GAO warned that "by leasing existing facilities, the public sector may give up more than it gains if the net present value of the future stream of revenues (less operating and capital costs) given up exceeds the concession payment received."[19] The report cited a January 2008 National Surface Transportation Policy and Revenue Study Commission report, commissioned by Congress, that recommended that "there be increased transparency and adequate public participation in the decision to use public-private partnerships, revenue sharing between states and private concessionaires, and a demonstration that private sector financing provides better value for money than if the concession were financed using public funds."[20]

The report's central conclusion was that state and local governments in the U.S. should more carefully consider the public interest before entering into long-term lease agreements and criticized those that had not done so including Chicago. It explained that "governments in other countries, including Australia and the United Kingdom have developed systematic approaches to identifying and evaluating public interest before agreements are entered into, including the use of public interest criteria, as well as assessment tools, and require their use when considering private investments in public infrastructure."[21] However, the GAO found that there has been limited use of "systematic approaches to identifying and evaluating public interest" in highway PPPs in the U.S. and that "not using such tools may lead to certain aspects of protecting public interest being overlooked."[22,23]

The Texas State Legislature recently released an extensive report on PPPs in toll road projects. The report sought to examine "the public policy implications of entering into Comprehensive Development Agreements (CDAs) with private parties to develop new toll project infrastructure" and "selling an existing and operating toll project to a private entity."[24] The report concluded that PPPs are necessary for Texas toll roads because "there are serious limits on relying solely on traditional public-sector financing" and "private capital is necessary

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[17] Barnes, Tom. "Group Withdraws Turnpike Lease Bid". Pittsburgh Post-Gazette. October 1, 2008.
[18] Government Accountability Office. "Highway Public-Private Partnerships: More Rigorous Up-front Analysis could Better Secure Potential Benefits and Protect the Public Interest". February 2008. pg. 19
[19] *Id*., Pg. 7
[20] *Id*., Pg. 5
[21] *Id*., Pg. 8
[22] *Id*., Summary Page
[23] *Id*., Pg. 8
[24] State of Texas. Report of the Legislative Study Committee on Private Participation in Toll Projects. December 2008. pg. 1.

and available for toll road investment."[25] In order to protect the public interests, the report identifies that the "key needs are transparency, expertise in process and transactions, and setting controls over toll rates and/or windfall profits."[26]

The report advocates revenue sharing over single, upfront payments as a better way to protect the public interest and align the incentives of the government and private operator. In revenue sharing, a lease is given to a private operator, not solely in exchange for an upfront payment, but rather the government also shares in the profits over the long-term. The report concludes that "upfront payments may not be in the public's interest" because there is an "ever-present temptation for officials to grab a big headline generating number today at the expense of long-term value."[27] It concludes that "revenue sharing mitigates these problems and is a more financially sound option."[28]

(e) OTHER LONG-TERM LEASES IN CHICAGO

In addition to the Skyway lease, the City has agreed to three other long-term leases of its assets: four Municipal Parking Garages in October 2006, Midway Airport in October 2008 (which has since been cancelled because the concessionaire was unable to raise the capital needed for the upfront payment), and the Metered Parking System in December 2008. The four leases have all been for a period of at least 75 years. In exchange for each lease, the winning private operators have paid one time fees for the rights to the lease. In the Skyway, parking garage, and parking meter leases, the leases have been accompanied by large increases in the fees paid by the users of these assets. The procurement process used to award each lease has been the same for all four assets. For each lease, the City has qualified a group of bidders and then negotiated the lease terms with the qualified bidders. Once a lease agreement has been developed, the City has put out the lease for bid and used only the size of the upfront payment as the bid criteria. Another similarity between these agreements is that they have typically been enacted with little time for the City Council or the public to consider their policy and financial implications.

2. City's Lease of the Parking Meters

(a) PROCESS

On February 8, 2008 the City of Chicago (in coordination with the Chicago Park District) issued a Request for Qualifications (RFQ) for a long-term lease of the Chicago Metered Parking System. The purpose of this RFQ was to "provide an opportunity for prospective bidders to formally express their interest in bidding on the Concession of the Metered Parking System."[29] For the City, the primary goal of the lease was "to maximize the amount of the upfront payment

[25] State of Texas. Report of the Legislative Study Committee on Private Participation in Toll Projects. December 2008. pg. iii.
[26] *Id*., pg. iv.
[27] *Id*., pg. iv.
[28] *Id*., pg. iv
[29] Chicago Metered Parking System: Long Term Concession. Request for Qualifications. pg. 2.

made for the Concession."[30] Ten vendors responded to the RFQ and of those ten, eight were deemed qualified to bid on the lease.[31]

Once the qualified RFQ respondents were identified, the City gave the qualified bidders a Confidential Information Memorandum in late April that among other things set out a proposed schedule of meter rate increases that would be enacted as part of the lease. This meter rate schedule is nearly identical to the meter rates that were eventually approved by the City Council. Over the following months the administration negotiated the terms of the lease and the potential bidders researched the meter system. The remaining points of negotiation were the length of the lease, the hours of operation, the improvements the concessionaire would be required to make, and the powers the City would retain during the lease term. The lease agreement was finalized at the end of September, after which the administration solicited bids from the qualified vendors. After two extensions, the first rounds of bids were due on November 21, 2008. The City received two bids and because they were within 10% of each other, the vendors were asked to submit to a second round of bidding. The City received the final bids on December 1, 2008 and the winning bid of $1.157 billion by a firm led by Morgan Stanley Infrastructure Partners was announced the following day.

Although the administration did not yet know how much it would receive from the lease of the parking meters, the budget it presented to the City Council on October 15, 2008 was balanced with $150 million in projected parking meter lease proceeds.[32] One hundred million dollars in proceeds was dedicated to 2008 and $50 million was allocated to 2009. Despite the fact that the terms of lease agreement were finalized by this time, the administration did not reveal the details of the lease agreement to the City Council during the following month of budget negotiations. Just before the bids were submitted, the City Council adopted the 2009 budget with a reliance on $150 million in lease proceeds.

Once announced on December 2, 2008, the lease agreement was taken up by the City Council's Finance Committee on December 3rd. Prior to the hearing, the aldermen received a ten-page power point presentation that only provided a vague outline of the lease agreement and what would be done with the proceeds. No analysis was produced that examined the public policy and financial implications of the lease agreement. The aldermen did not receive the ordinance that enacted the lease until the morning of the Finance Committee hearing. In addition to the ordinance, they received a flow chart detailing the corporate structure of the private operator who was leasing the parking meters.

The Finance Committee's hearing featured the testimony of the City's then Chief Financial Officer (CFO) Paul Volpe. A majority of the questioning dealt with the increase in rates, the corporate structure of the concessionaire, and the short amount of time the aldermen had been given to approve the agreement. CFO Volpe was asked to produce numbers that demonstrated that the upfront payment was sufficient compensation for the parking meters. He provided the City's conclusion that the payment was sufficient but did not provide documentation to support this conclusion. The CFO also pointed out that if the Council did not

[30] Chicago Metered Parking System: Long Term Concession. Request for Qualifications. pg. 1.
[31] Responses to IG Questions Provided by the Office of the Chief Financial Officer. January 6, 2009.
[32] City of Chicago. 2009 Budget- Overview and Revenue Estimates. Pg. 65

approve the lease agreement, there would be an $150 million shortfall in the budget that would likely need to be filled with tax increases. The Finance Committee approved the lease with one dissenting vote and the next day the full Council approved the lease agreement by a vote of 40-5.[33]

(b) INCREASE IN PARKING METER RATES

Section 7.1 of the lease agreement establishes that the parking meter rates will be set "pursuant to the Metered Parking System Ordinance."[34] This is the ordinance approved by the City Council on December 4, 2008. The ordinance creates three classes of parking meters loosely defined as Loop meters, central business district (but not Loop) meters, and neighborhood meters and establishes different rates for each class. The table below shows the parking meter rates as set forth in the ordinance for the first five years (2009-2013) of the lease as compared to the rates in 2008.

Table 1 – Parking Meter Fees by Type of Meter

Parking meter classification	***2008 rate per hour (existing)***	**2009 rate per hour**	**2010 rate per hour**	**2011 rate per hour**	**2012 rate per hour**	**2013 rate per hour**
Neighborhood meters	*$.25 thru $.75*	$1.00	$1.25	$1.50	$1.75	$2.00
Central Business District (but not Loop) meters	*$1.00*	$2.00	$2.50	$3.00	$3.50	$4.00
Loop meters	*$3.00*	$3.50	$4.25	$5.00	$5.75	$6.50
Source: Chicago Metered Parking System Concession Agreement – Exhibit A Metered Parking System Ordinance						

(c) HOURS OF OPERATION

The ordinance standardized and increased the hours of operation of parking meter spaces. The majority of meters will now operate from 8 am to 9 pm, every day of the week.[35] Previously, most meters had not operated on Sundays. Loop meters and meters located in parking lots will operate 24 hours a day seven days a week. However, the rate of the 24 hour meters will be reduced by one-half from 9 pm to 8 am. All together these changes will add 35 million hours of operation to the parking meter system per year. Of these nearly 16 million will be half-price, late night hours (between 9 pm and 8 am).[36] The table below details the increases in the hours of operation by type of meter.

[33] Journal of the Proceedings of the City Council of the City of Chicago, Illinois. Special Meeting – December 4, 2008.
[34] Chicago Metered Parking System Concession Agreement. pg. 55
[35] *Id*., Schedule 10
[36] *Id*., Schedule 10 and IGO Calculations

Table 2 – Total Hours of Operation by Type of Meter

Type of Meter	2009 Hourly Fee	Total Hours per year (2008 – prior to the lease agreement)	Total Hours per year (per lease agreement)
Neighborhood	$1.00	106,523,730	117,356,238
CBD (not Loop)	$2.00	18,732,260	25,984,113
Loop	$3.50	4,085,488	5,143,580
Neighborhood (late-night, half-price)	$0.50	0	11,709,316
CBD (not Loop) (late-night, half-price)	$1.00	0	156,577
Loop (late-night, half-price)	$1.75	0	4,099,273
Total		**129,341,477**	**164,449,097**
Source: Chicago Metered Parking System Concession Agreement - Schedule 10 and IGO Calculations			

(d) CAPITAL IMPROVEMENTS

The lease agreement requires that the concessionaire make improvements to the parking-meter system. Specifically, the lease agreement requires that any space "with a Metered Parking Fee of at least $1.50 per hour must have a payment option at the point of sale other than the cash payment."[37] The Concessionaire must "provide such payment option … no later than 180 days after the first Day that the Metered Parking Fee for such Metered Parking Space is at least $1.50 per hour."[38] The City projected that the cost of this upgrade was $50 million over the first two years of the lease.[39]

B. VALUATION OF THE PARKING METER SYSTEM

1. Valuation to a Private Concessionaire

In order to project the size of the upfront payment the City would receive for the lease, the City tasked its lead financial advisor, William Blair and Company, with valuing what the parking-meter system would be worth to a private concessionaire over the 75-year lease term. To do this, William Blair estimated the net present value of the 75-years of parking meter revenue given the increase in meter rates and hours of operation.[40] This estimation first involved projecting the future revenues and expenses of the parking-meter system. Once the revenue projection was developed, William Blair calculated what this future revenue would likely be worth today to a private concessionaire.

(a) REVENUE PROJECTION

[37] Chicago Metered Parking System Concession Agreement pg. 52
[38] *Id*., pg. 52
[39] William Blair and Company. Chicago On-Street Metered Parking System – Valuation Approach. December 22, 2008
[40] Net Present Value Definition – Value of future receipts less value of future payments discounted to the present. Finkler, Steven. Financial Management For Public, Health, and Non-profit Sector Organizations. pg. 172.

The first step in the projection was to account for the system's operating costs. The operating cost of the parking-meter system (not including enforcement) in 2007 was approximately $4 million. Due to the required upgrade of the system, the operating costs were projected to rise to $5 million in the first year of the lease and then grow at the rate of inflation. In addition to operating costs, the advisor projected that the private concessionaire would have to make a $50 million capital investment in the first two years of the lease in order to upgrade the meter system to fulfill the cashless payment option discussed above.[41] After this initial investment, capital expenditures of $500,000 per year were assumed.[42]

With these operating costs, the majority of the financial advisor's projections "produced free cash flow (net revenue) in year 5 of anywhere from $85 million to $130 million."[43,44] After year 5, the lease agreement provides that the value of the system will keep pace with inflation, either through increases in rates, number of spaces, or hours of operation, and thus it was assumed that the utilization would remain fairly stable for the duration of the lease. Therefore, the net revenue was projected to grow at inflation (assumed to be 3%) for the remaining 70 years of the lease.

(b) INCREASED REVENUE THRU MULTI-SPACE METERING

One of the ways the lease agreement guards against a drop in revenue due to the large increase in meter fees is through the installation of multi-space metering devices. At the time the RFQ was issued, there were 36,161 parking meter spaces with only approximately 1,773 spaces provided through 111 Pay and Display meters representing about 5 percent of the system.[45] The operating standards include a provision that the concessionaire must "reduce the number of Metering Devices on, along and about the street and public way by greater than one-half by the second anniversary of the Closing Date."[46] Coupled with the requirement that the concessionaire provide a cashless payment option, this requirement means that the concessionaire will likely install Pay and Display meters in most of the system in the first two years of the lease. The implementation of Pay and Display boxes is likely to significantly increase the revenue generated because drivers can't "piggyback on a previous parker's time" and by creating more parking spaces because spaces are no longer marked.[47,48] A manufacturer estimates that Pay and Display meters can increase the number of parking spaces by 10 percent.[49] If we assume that the concessionaire will replace all single and double bay meters (this is likely given the cashless payment requirement) with Pay and Display meters, there will be about 3,400 more parking

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[41] William Blair and Company. Chicago On-Street Metered Parking System – Valuation Approach. December 22, 2008
[42] *Id*.
[43] Net Revenue Definition - Total revenues minus operating and capital costs
[44] William Blair and Company. Chicago On-Street Metered Parking System – Valuation Approach. December 22, 2008
[45] Request for Qualifications. pg. 5 and IGO Calculations.
[46] Chicago Metered Parking System Concession Agreement – Schedule 3 pg. 3.
[47] Mohl, Bruce. "New meters raising revenues and hackles". *The Boston Globe.* November 20, 2006.
[48] Shoup, Donald C. "Buying Time at the Curb". The University of California Transportation Center. January 12, 2002
[49] Precise Park Link. "Pay and Display". http://www.preciseparklink.com/pay-display.html

meter spaces in the system, given a 10 percent increase in supply due to the installation of Pay and Display meters.

The City's own experience with Pay and Display meters demonstrates their revenue generating potential. When the City implemented Pay and Display meters in the Loop in late 2004, it saw an immediate increase in revenue in the Loop of 17 percent.[50] Since the City completed the installation of 100 Pay and Display meters in December 2004, revenue from Loop parking meters has grown dramatically. In 2007, revenue from Loop meters had nearly doubled (93 percent increase) compared to the revenue in 2004.[51] During this same period, revenue from the City's other meters only increased slightly.[52] Other Cities experience with Pay and Display boxes show their ability to increase revenue. During a pilot project in San Diego, the installation of Pay and Display meters increased revenue by 24 percent.[53] After Boston installed Pay and Display meters, revenue per space there increased by 34 percent.[54]

(c) PRIVATE CONCESSIONAIRE'S DISCOUNT RATE

Once the future revenue stream was projected, the advisor discounted this future cash flow to its value today to a private concessionaire. "In the private sector the discount rate is based on the cost of capital for the activity in question, namely the weighted cost of the relevant debt and equity financing."[55] The cost of debt is the interest rate that must be paid to the lenders, while the cost of equity is the return that investors expect to make on a given investment. Thus to estimate the value of the upfront payment, William Blair used a discount rate that was based on the likely capital structure, the combination of debt and equity, that would finance the upfront payment.[56] The advisor estimated that a private concessionaire's cost of capital and thus the discount rate for the future revenue would be between 10 and 14 percent.

(d) VALUATION

i. Minimum Acceptable Bid

Using their revenue projection and discount rate, the administration calculated a valuation that predicted what a private concessionaire would likely bid for the parking-meter system. They used the median of this value range, $1 billion, as their threshold for the minimum acceptable bid.[57] Based on this analysis, the City concluded that the $1.157 billion bid was "in the high end of our expectation over the free cash flow that this generates."[58]

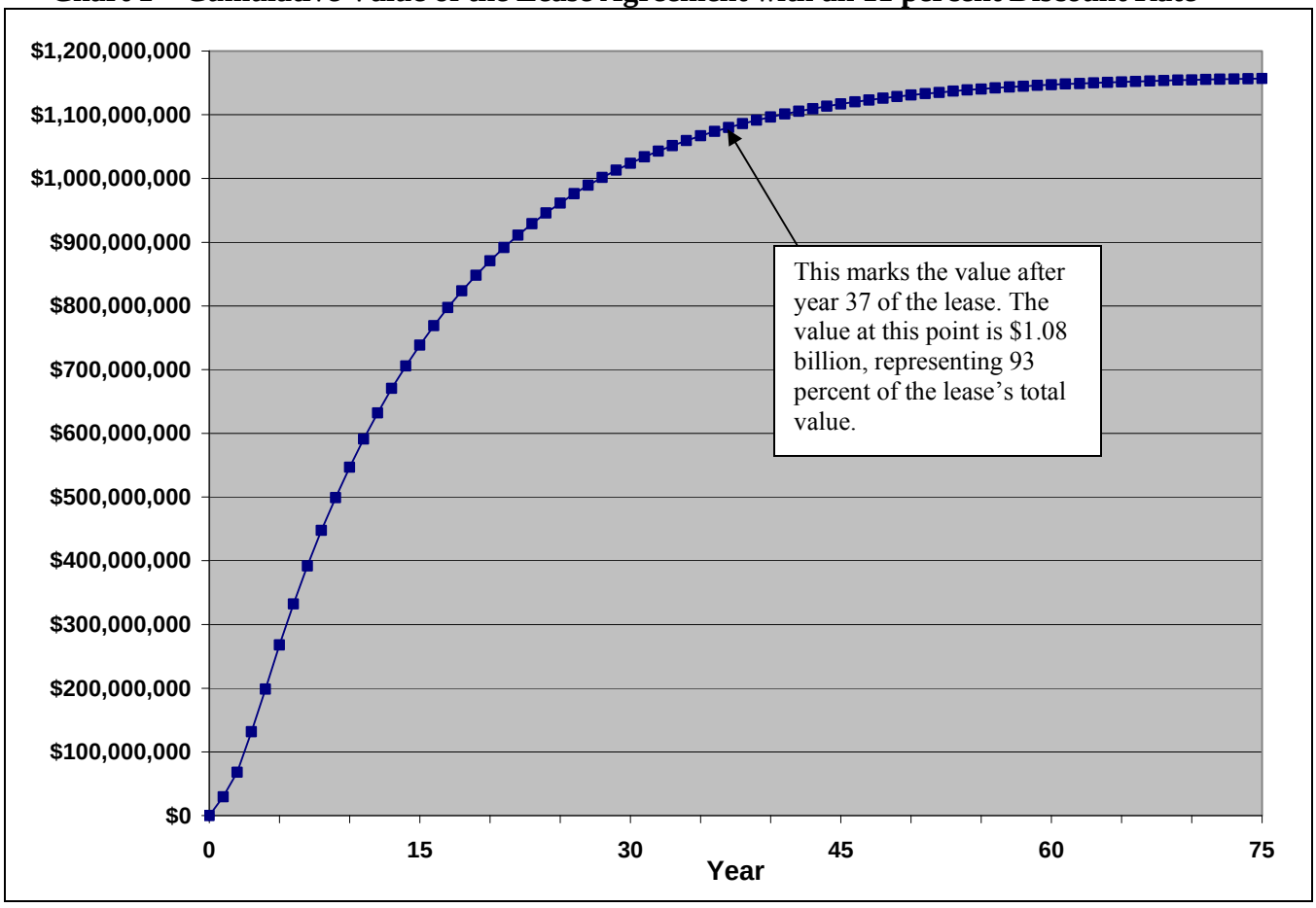
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[50] City of Chicago. "Solar-Powered Parking Meters in the Loop Improve Parking". Press Release. March 16, 2005.
[51] Chicago Metered Parking System Concession Agreement – Schedule 13 and IGO Calculations.
[52] *Id*., Schedule 13
[53] City of San Diego – Revenue Collections Division. "Final Report – Downtown Multi-space Parking Pay Station Pilot Project". April 4, 2007
[54] Mohl, Bruce. "New meters raising revenues and hackles". *The Boston Globe.* November 20, 2006.
[55] Spackman, Michael. "Time Preference, The Cost of Capital and PPPs". Conference on "Discount Rates for the Evaluation of Public Private Partnerships", October 3, 2008. pg.
[56] William Blair and Company. Chicago On-Street Metered Parking System – Valuation Approach. December 22, 2008.
[57] Responses to IG Questions Provided by the Office of the Chief Financial Officer. March 6, 2009.
[58] City Council Finance Committee Transcript. Volpe pg. 51

ii. Relationship between length of the lease and size of the upfront payment

Because of the discount rate that the City projected for a private concessionaire, a concern with the agreement is the length of the lease. Although the stated purpose of the lease was "to maximize the amount of the upfront payment", the vast majority of the value of the lease comes from the revenue generated in the first 37 years of the lease.[59] If we assume that the concessionaire used a discount rate of 11 percent, a rate in the range assumed by the City's financial advisor, the chart below shows the cumulative value of the lease over the 75 year term using an approximation of the slightly optimistic revenue scenario.[60] The present value of this revenue stream is $1.157 billion, which was approximately the upfront payment the City received for the lease.

Chart 1 – Cumulative Value of the Lease Agreement with an 11 percent Discount Rate



Note: Assumes $117 million in net revenue in year 5 and a discount rate of 11 percent.

[59] Chicago Metered Parking System: Long Term Concession. Request for Qualifications. pg. 1.
[60] William Blair and Company. Chicago On-Street Metered Parking System – Valuation Approach. December 22, 2008.

The results in the chart demonstrate that the last 38 years of revenue represent a small portion of the value of the upfront payment. Assuming a discount rate of 11 percent, the value of the first 37 years is approximately $1.08 billion, while the latter 38 years is worth a mere $77 million. Thus, 93 percent of the value of the upfront payment comes from the first half of the lease. Given that the last half of the lease represents such a small portion of the value of the upfront payment, it is highly questionable whether or not the City should have entered into a lease of this length. The extended length of the parking meter lease constrains the options of future City leaders and residents, while providing a small benefit today.

In previous long-term leases, such as the Skyway Concession, the extraordinary length of the lease term was justified on the grounds that it allowed the private concessionaire to claim an accelerated depreciation tax deduction.[61] According to federal tax law, in order to claim accelerated depreciation, the private concessionaire must demonstrate effective ownership of the asset, which requires the lease term to be at least 75 percent of the useful life of the asset.[62] These larger tax deductions allow the private concessionaire to realize a return on its investment faster than it otherwise would. "In the absence of the depreciation benefit, the lease payment to Chicago [for the Skyway] would likely have been less than the $1.8 billion."[63] However, based on available research and a depreciation schedule from another jurisdiction, the useful life of the parking meters is not likely to exceed 10 years.[64,65] Thus, extending the length of the lease to 75 years was not necessary to allow the concessionaire to claim accelerated depreciation and thus increase the size of the upfront payment.

2. Valuation to the City

To determine if the City got sufficient value for the lease, it is essential to compare the value of the parking-meter system to the City with the $1.157 billion upfront payment. The value of the system is the value today of the 75 years of parking meter revenue the City relinquished. To calculate this value, we use the same method that was used by the City's financial advisor discussed above. We first project how much net revenue the City would collect from the parking-meter system if it maintained control of the system and then discount this future revenue to a present value. To discount the future revenue, we must select a discount rate that is appropriate from the government's perspective.

(a) REVENUE PROJECTION

It is important not to be overly optimistic when projecting the future revenue that will be generated by the City's parking meters. Given the large increase in parking meter fees, the hours

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[61] Government Accountability Office. "Highway Public-Private Partnerships: More Rigorous Up-front Analysis could Better Secure Potential Benefits and Protect the Public Interest". February 2008.
[62] Peters, Jonathan. "Selling Depreciation for Tax Purposes: Should we be concerned?". *Presented at the 7th National Conference on Transportation Asset Management*. November 7, 2007. pg. 44
[63] Government Accountability Office. "Testimony Before the Subcommittee on Energy, Natural Resources, and Infrastructure, Committee on Finance, U.S. Senate. Highway Public-Private Partnerships: Securing Potential Benefits and Protecting the Public Interest Could Result from More Rigorous Up-front Analysis". July 24, 2008.
[64] British Columbia, CA. Ministry of Community Services. "Guide to the Amortization of Tangible Capital Assets" May 2008. pg. 13.
[65] Blakenship, Bill. "Feeding the meter takes a little more". *The Topeka Capital-Journal.* September 2, 2008.

of operation, and the increased revenue generating potential of multi-space metering devices, the revenue projections developed by William Blair appear relatively conservative. Using its projection, the net revenue projection for the 5th year of the lease was between $85 and $130 million. After year five, the net revenue was assumed to grow at the rate of inflation (assumed to be 3% based on an historical average) because the value of the meter system will grow at inflation and because utilization is assumed to remain stable.

A 75-year revenue projection is imprecise because of the many variables that could affect revenue over the lease term. Recognizing this, we calculated the present value of different revenue scenarios. Using the range of projections that William Blair developed, we have calculated the present value of five different scenarios. The table below shows the different scenarios. In each of these scenarios, we assume that the net revenue will grow at the rate of inflation after year five and for the duration of the 75-year period.

Table 3 – Revenue Projection Scenarios

	Scenario #1 Pessimistic	**Scenario #2 Slightly Pessimistic**	**Scenario #3 Mid-Point**	**Scenario #4 Slightly Optimistic**	**Scenario #5 Optimistic**
Net revenue in Year 5	*$85 million*	*$100 million*	*$107.5 million*	*$115 million*	*$130 million*
Rates and hours of operation as outlined in lease agreement					
Free cash flow grows at inflation (3%) for remaining 70 years of term					
Assumes utilization increase or decrease evenly in first five years of lease					
Assumes utilization increase or decrease evenly across three meter classes					

(b) UTILIZATION PROJECTION

Each of these different revenue scenarios corresponds to a different rate of parking meter utilization. For simplicity, in our modeling we assumed that utilization will increase or decrease at the same rate across all three classes of meters and increase or decrease at the same rate in each of the first five years of the lease. To be conservative, we assumed that there would be no usage of late-night meters and removed them from the utilization rate calculations. We also did not take into account the likely effective increase in parking meter spaces due to the installation of Pay and Display meters. The table below shows the utilization (in number of parking meter hours used per year) and the utilization rate (number of hours used divided by the total hours of operation) for the parking meter system as a whole. The table shows that even in the most optimistic revenue projection, the utilization rate of the parking meter system is projected to drop compared with the utilization rate in 2007. Towards the high end of the range, gross utilization will increase but because of the increase in hours of operation discussed above, the utilization rate will still be lower than the current utilization rate.

Table 4 – Corresponding Utilization of Revenue Projection Scenarios

	2007 Utilization	Scenario #1 Pessimistic Scenario	Scenario #2 Slightly Pessimistic	Scenario #3 Mid-range Scenario	Scenario #4 Slightly Optimistic	Scenario #5 Optimistic Scenario
Free Cash Flow in Year 5		*$85 million*	*$100 million*	*$107.5 million*	*$115 million*	*$130 million*
Gross Utilization (in hours) in 2013	51,721,698	37,337,375	43,483,273	46,556,223	49,629,171	55,775,070
Utilization Rate in 2013	39.99%	25.15%	29.28%	31.35%	33.42%	37.56%
Decline in Utilization Rate between 2013 and 2007		-37.12%	-26.77%	-21.59%	-16.42%	-6.07%
*Source: Concession Agreement - Schedule 10 and IGO Calculations						
Assumes utilization increase or decrease evenly in first five years of lease						
Assumes utilization increase or decrease evenly across three meter classes						
Assumes no utilization of late-night meters						
Utilization rate does not include late-night meters						

(c) THE CITY'S DISCOUNT RATE

In order to determine the value today of the future revenue from parking meters, we must select a discount rate from the City's perspective. As discussed above, the discount rate for a private company is typically based on the company's capital structure. However, the capital structure for a government is not the same as for a private company. Governments do not use equity financing but rather investments are completely financed through borrowing. Additionally governments, unlike private companies, are able to issue tax-exempt debt (the interest paid on the debt is not subject to taxation) meaning that governments can typically borrow at lower rates than private sector companies.

When considering an asset sale, the federal government uses the government's borrowing rate as the basis for its discount rate.[66] A criticism of this method is that basing the discount rate on the government's borrowing rate may bias the analysis in favor of the government keeping the asset. Because the cost of equity is typically more expensive than debt and because of the tax preference associated with government debt, the government's borrowing rate is almost always lower than the cost of capital of a private company.[67] An additional criticism is that the discount rate selected does not take into account the specific risks of the asset.[68] Applying the federal government's guidance to the City of Chicago would yield a discount rate of approximately 5 to 5.5% based on the City's current borrowing rate.

[66] OMB Circular A-94. Discount Rates in Asset Sale Analysis Section
[67] Poole, Jr. Robert J. and Samuel, Peter. "Pennsylvania Turnpike Alternatives: A review and critique of the Democratic Caucus Study". Reason Foundation. April 2008. pg. 14.
[68] Partnerships Victoria. Technical Note on Discount Rate. pg. 10.

When discounting the value of a future revenue stream, an important component is the risk of the future revenue not materializing. Therefore, we believe an approach that incorporates the risk associated with the parking meters into the discount rate is better than simply using the City's borrowing rate. A leading practitioner of PPPs, the State of Victoria, Australia, uses a discount rate that is based on the specific risk of the asset being analyzed based on a Capital Asset Pricing Model (CAPM) calculation. Their model attempts to quantify two factors: the time value of money (the fact that a dollar today is worth more than a dollar tomorrow) and the risk premium that should be attached to the asset being analyzed.[69,70] To calculate specific risk premiums, assets are grouped into three risk classes: very low, low, or medium.[71] Based on stable historic revenues and limited competition, we determined that the parking meters fell in the very low risk class and using Victoria's methodology, calculated a discount rate of 7.06 % for the parking-meter system (see Appendix A for calculation). For simplicity, we use a discount rate of 7%.

(d) VALUATION

Once we have selected our discount rate (7%), we apply it to the 5 revenue scenarios outlined above. Assuming that the value of the meter system after year 5 rises at inflation, the table below shows the value today of the system for the five revenue scenarios. Using the revenue projections developed by William Blair and a discount rate of 7%, we value the parking meter revenue the City relinquished in the lease agreement at $1.7 billion to $2.56 billion today. Using the mid range revenue projection, the value to the City of the parking meter system over 75 years is approximately $2.13 billion in today's dollars. Even in the most pessimistic scenario, the parking meter system is still worth considerably more than the $1.157 billion that the City was paid for the 75-year lease.

Table 5 – Present Value of Net Revenue from Parking-Meter System over 75 years

	Scenario #1 Pessimistic Scenario	**Scenario #2 Slightly Pessimistic**	**Scenario #3 Mid-range Scenario**	**Scenario #4 Slightly Optimistic**	**Scenario #5 Optimistic Scenario**
Net Revenue in Year 5	*$85 million*	*$100 million*	*$107.5 million*	*$115 million*	*$130 million*
Present Value Using 7% Discount Rate	**$1.7 billion**	**$1.99 billion**	**$2.13 billion**	**$2.28 billion**	**$2.56 billion**
Rates and hours of operation as outlined in lease agreement					
Free cash flow grows at inflation (3%) for remaining 70 years of term					
Assumes utilization increases or decreases evenly in first five years of lease					
Assumes utilization increases or decreases evenly across three meter classes					

[69] Definition of CAPM - The rationale behind this approach is that the CAPM is "the most widely accepted theory of the cost of capital" – Partnerships Victoria.
[70] Partnerships Victoria. Technical Note on Discount Rate. pg. 11
[71] *Id*., pg. 18

(e) VALUATION WITH A RANGE OF DISCOUNT RATES

In order to test the sensitivity of our discount rate assumption, we calculated the value of the parking meter system if we increased or decreased the discount rate by two percentage points. The table below shows the sensitivity of the valuation to a percentage point change in the discount rate is quite large. Using the Federal government's guidance yields a discount rate of 5%, which translates to a valuation of between $2.81 billion and $4.25 billion. The midpoint of this range results in an approximate value to the City of $3.53 billion. Thus, if our report had used the federal-government approach, we would have concluded that the lease payment was $2.37 billion lower (or 67% lower) than the value of the parking meter system to the City. On the other hand, increasing the discount rate to 9% results in a valuation of between $1.16 billion and $1.74 billion. The table shows that only by using a discount rate of 9 % and the most pessimistic of the five revenue projections is the value of the parking-meter system to the City less than the $1.157 billion payment the City received.

Table 6 – Discount Rate Sensitivity Analysis - Present Value of Net Revenue from Parking-Meter System over 75 years

	Scenario #1 Pessimistic Scenario	**Scenario #2 Slightly Pessimistic**	**Scenario #3 Mid-range Scenario**	**Scenario #4 Slightly Optimistic**	**Scenario #5 Optimistic Scenario**
Net Revenue in Year 5	*$85 million*	*$100 million*	*$107.5 million*	*$115 million*	*$130 million*
Present Value Using 5% Discount Rate	**$2.81 billion**	**$3.29 billion**	**$3.53 billion**	**$3.77 billion**	**$4.25 billion**
Present Value Using 6% Discount Rate	**$2.15 billion**	**$2.51 billion**	**$2.7 billion**	**$2.88 billion**	**$3.24 billion**
Present Value Using 7% Discount Rate	**$1.7 billion**	**$1.99 billion**	**$2.13 billion**	**$2.28 billion**	**$2.56 billion**
Present Value Using 8% Discount Rate	**$1.39 billion**	**$1.62 billion**	**$1.74 billion**	**$1.85 billion**	**$2.08 billion**
Present Value Using 9% Discount Rate	**$1.16 billion**	**$1.36 billion**	**$1.45 billion**	**$1.55 billion**	**$1.74 billion**
Rates and hours of operation as outlined in lease agreement					
Free cash flow grows at inflation (3%) for remaining 70 years of term					

C. FINDINGS REGARDING VALUATION

1. A Dubious Financial Deal

Using the mid-point of the above calculations, the parking-meter system was worth approximately $2.13 billion to the City over 75 years. In other words, by giving up control of the parking-meter system for 75 years, the City relinquished future parking-meter revenue that

has a present value of approximately $2.13 billion. By accepting a payment of $1.15 billion, City received about $974 million less for the system that it was worth to the City. Expressed in percentage terms, the City leased the system for a price that was 46% lower than its value to the City.

Clearly, this was not a good financial deal for the City when the long-term value of the parking-meter system to the City is taken into account.

If the range of scenarios (from wholly pessimistic to wholly optimistic) is considered, the conclusion is that the City received between $544 million and $1.4 billion less for the system than it was worth to the City (a 32% to 55% loss compared to its value to the City). Thus, even under the most pessimistic scenario, the parking meter system is still worth considerably more than the $1.157 billion that the City was paid for the 75-year lease.

2. Failure to Calculate Value of Parking-Meter System to the City, To Help Determine Whether the Deal Was in the City's Best Interests

It was of critical importance for the City (and the public) to know in advance whether a $1.15 billion payment was a good deal for the City or a bad deal, over the long term. Recent PPP studies have noted this concern explicitly, warning against governments accepting a large, short-term payment that solves immediate financial needs without at least considering the long-term value of keeping the public asset. As the GAO concluded in its report, "by leasing existing facilities, the public sector may give up more than it gains if the net present value of the future stream of revenues (less operating and capital costs) given up exceeds the concession [lease] payment received."[72] And the leading studies of PPPs have called for analysis that compares the value of assets under public provision.[73,74]

The City did not make this comparison. Even assuming (as we do) that the City needed to fill a very large gap for its 2009 budget, it was incumbent on the City to determine whether selling the parking-meter system at this price, and under these terms, was a good financial deal – not solely from the perspective of it being the best deal the City could get in this market at this time, but also from the perspective of the long-term loss to the City when the lease payment is compared to the value of the parking-meter system to the City. This is the only way that the City can know if it is getting sufficient value for an asset.

The countries with the most experience with PPPs have developed standardized approaches to compare public and private provision of services.[75] In order to safeguard the public interest, it is imperative that Chicago do the same if it considers a PPP in the future.

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[72] Government Accountability Office. "Highway Public-Private Partnerships: More Rigorous Up-front Analysis could Better Secure Potential Benefits and Protect the Public Interest". February 2008. pg. 6.
[73] *Id*., pg.57.
[74] State of Texas. Report of the Legislative Committee on Private Participation in Toll Projects". December 2008. pg iv.
[75] Government Accountability Office. "Highway Public-Private Partnerships: More Rigorous Up-front Analysis could Better Secure Potential Benefits and Protect the Public Interest". February 2008. pg. 66?

In addition, as detailed below, there were a variety of lease alternatives that would have allowed the City to meet its short-term budgetary needs without relinquishing the parking-meter system for such a long period of time, or without raising rates to the same degree – or both.

3. City's Arguments in Response

In response to these criticisms, City officials have made two principal arguments in their responses to the IGO and in public statements.

First, they have argued that because of the recession and the serious short-term budget problems, the City needed to bring in a large amount of additional revenue immediately, and the only "valuation" numbers that matter are the actual offers received from private companies. In short, the City has argued that because it had to sell, it had to take whatever was the best deal the market would provide.

Second, they have argued that it would make no sense to use the terms of the lease (including the rate increases) to calculate the long-term value of the parking-meter system to the City, because the City could never operate the parking meters under the same terms as a private company. Specifically, the City has argued that (a) it would have been impossible for the City to have both kept the parking-meter system and raised the rates to the same extent as the lease, because there was not sufficient political will to do so (the "impossibility argument"); and (b) any private company would be able to operate the parking-meter system more effectively and efficiently than the City could (the "government inferiority argument").

Some of these arguments raise fair points; some have little merit, in our view. But none of these arguments establishes that the City should have turned a blind eye to the calculation of the long-term value of the system to the City.

(a) LEASE WAS NECESSARY BECAUSE THE CITY NEEDED THE MONEY

The City in essence argued to the City Council and the public that leasing the parking-meter system was necessary in order to fill a large budget gap caused by a bad economy and a resulting drop in tax revenue, and therefore the City had to take the best deal the market would offer at the time, whether good or bad.

That may be. We understand that even if one were to conclude that a $1.15 billion payment is lower than the long-term value of holding the parking-meter system, there are situations in which it still would make sense to sell or lease the system. This is as true for governments as it is for individuals. Imagine someone who owns a small apartment building that she rents out. She may be facing hard times and may feel the need to sell the building, even if the housing market is bad and the best offer she receives seems low. But still, as a prudent person, she would have to weigh her immediate financial need against the long-term value of the property if she held it (and perhaps sold it later). Fundamentally, she would want to determine whether she would be suffering a loss by selling now at this price – and if so, how much of a loss. And to make this determination, she would have to compare the proposed sale price with the long-term value of the property if she kept it. This determination may reveal that the offer is

much lower than the long-term value to her of the property. Although she may still decide to sell the property for the low price, the comparative analysis would be highly relevant information in her decision.

The City did not make this comparison, even though it would have cost close to nothing to do so. The City should have conducted this analysis so that its decision about whether to lease the parking-meter system now – and if so, under what terms – could be made in the most informed fashion possible. Conducting this analysis, and making this information available to the City Council and the public, may have raised doubts about the prudence of leasing the parking-meter system right away – or at least leasing it under these specific terms. It therefore would have been highly relevant.

The failure to conduct this analysis strongly suggests that the decision had already been made that the City was going to lease the meters for the best-available price on the market, and that this decision was driven purely by the need to raise revenue for the short-term budget problem. This is precisely the type of pre-ordained, revenue-focused, outcome criticized by recent, comprehensive studies of PPP decision-making by the Government Accountability Office (GAO) ("More Rigorous Up-front Analysis could Better Secure Potential Benefits and Protect the Public Interest") and the Texas State Legislature ("upfront payments may not be in the public's interest" because there is an "ever-present temptation for officials to grab a big headline generating number today at the expense of long-term value").

(b) THE CITY'S "IMPOSSIBILITY" ARGUMENT (LACK OF POLITICAL WILL)

In response to requests from the IGO, the Office of the Chief Financial Officer provided written explanations as to why it did not calculate the value of the parking-meter system to the City. One of the key explanations was that it would have been impossible for the City to have held the parking-meter system and raised the rates as in the lease, because there was no "political will" to do so. This is an argument frequently cited in favor of PPPs.

Specifically, the CFO's Office wrote that "accurately evaluating the private lease bid compared to a continued operation of the metered parking system by the city cannot include assumptions that the city would increase rates in the same manner as the lease structure provides."[76] This assertion is based on the belief that there was a demonstrated lack of political will to raise rates if the system is operated by City. The CFO's Office points to the fact that "neighborhood rates at thousands of meter rates have remained at an extremely low rate of 25 cents per hour for more than 20 years."[77] Also, they assert that "generally governments do not increase usage rates for infrastructure assets to keep pace with inflation."[78] The CFO's Office goes on to state that governments often engage in "earthquake pricing", where after not increasing rates for a long time, suddenly rates increase substantially. However, for the parking meters in Chicago, they argued that "there is no evidence of even 'earthquake pricing', given the lack of citywide rate increases."[79] They concluded that "given this history, it seemed unlikely

[76] Responses to IG Questions Provided by the Office of the Chief Financial Officer. February 24, 2009.
[77] *Id*.
[78] *Id*.
[79] *Id*.

that the City Council would enact a comprehensive and standardized schedule of increases in rates, days and hours of operation over a long-term period without the additional benefit of an upfront concession bid."[80]

The administration's assertion that the City's political leadership lacked the political will to raise parking meter rates is contradicted by the fact that the City Council voted for the meter rate increase in order to approve the lease agreement. Also, the recent experience of other major U.S. cities demonstrates that a city can enact large meter increases while maintaining control of its parking meters. Last year, Los Angeles increased the rates on its meter substantially; in some cases rates increased by 300 percent, going from 25 cents to 1 dollar.[81] Earlier this year, Phoenix increased its meter rates from 60 cents to $1.50, representing a 150 percent increase in meter rates.[82] For both cities, these were the first meter rate increases in 17 years. In addition, as the administration stated above, it was generally acknowledged that the rates of most of Chicago's meters were too low. Finally, much of the recent anger over the increase in parking meter rates has been directed at City government which indicates that the parking meter lease has done little to insulate the City's elected officials from the political implications of raising meter rates.[83]

(c) THE CITY'S "GOVERNMENT INFERIORITY" ARGUMENT

The City argues that it may not have been able to extract the same amount of revenue from the parking-meter system as a private operator because it would not be able to make the capital improvements provided for in the lease.

As to capital improvements that would make the parking-meter system more efficient, the administration believes that "the implementation of improvements in meter equipment and technology that the private operator will provide to positively impact system utilization could not likely be made by the city."[84] This is because the City has "more pressing capital needs" and "because government is not motivated like business to increase profitability, government does not (and often cannot) make the substantial investments needed to improve revenues and customer service over the long-term."[85]

However, over the last several years, the City has shown its ability to implement capital improvements (and its "motivation" to "improve customer service") by adopting innovative technologies such as solar-powered pay-and-display meters and in-car payment devices.[86,87] And after Chicago Parking Meters, LLC took control of the system, it was so ill-equipped to

[80] Responses to IG Questions Provided by the Office of the Chief Financial Officer. February 24, 2009.
[81] Lin, Joanna. "Parking rates may increase; L.A. council also votes to extend the meter's hours of operation to generate more money". *Los Angeles Times* July 17, 2008.
[82] City of Phoenix. "Parking Meter Rate Increase Phase-in Nearly Complete". March 11, 2009.
[83] Marin, Carol. "Drivers' anger over meters boiling over in a boycott". *Chicago Sun-Times* March 25, 2009.
[84] Responses to IG Questions Provided by the Office of the Chief Financial Officer. February 24, 2009.
[85] *Id*.
[86] City of Chicago. "Solar-Powered Parking Meters in the Loop Improve Parking". Press Release. March 16, 2005.
[87] City of Chicago. "Revenue Department Announces In-Car Meters". Press Release. October 5, 2007.

handle the maintenance of the meters that City personnel had to step in and address mechanical failures.[88]

Additionally, the $50 million investment over two years required to upgrade the parking meter system represents less than 2 percent of the City's $2.9 billion capital improvement program in 2009 and 2010.[89] Further, the City may have been able to issue a revenue bond on the parking meters to fund the capital improvements, which would have created a dedicated revenue source for the capital improvements.[90] Finally, since this investment would be a net revenue generator it would likely have had broad support among the City's political leadership.

In short, the relatively small investment required and the City's prior adoption of new technologies suggests that there is little evidence for the supposition that the City could not have made these capital improvements.

D. ALTERNATIVES THAT SOLVE SHORT-TERM BUDGET PROBLEM

The administration has consistently stated that one of the prime rationales for the parking meter lease was addressing the City's short-term financial problems.[91] The administration stated that it planned to use at least $430 million ($325 million from the upfront payment, $25 million in interest earned on the $325 million, and $80 million in interest earned on a perpetual reserve) in proceeds from the lease in the first four years of the lease to address budget shortfalls.[92]

We acknowledge that if the City had simply held the parking-meter system and made the changes contemplated by the lease (raising the rates, increasing the hours of operation, and making the capital improvements to the system), the City would not have received sufficient additional revenue in 2009 to eliminate the announced $150 budget deficit. Net revenue generated in the first four years would have been worth between $180 and $238 million today (after spending on capital improvements), but much of this revenue would have been received by the City after 2009.[93]

However, there were alternatives to this particular lease – 75 years with a certain level of rate increases – that would have solved the City's short-term budget problem but under different, arguably more favorable terms.

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[88] Hilkevitch, John. "Chicago parking meters: City rushes to fix meters and bill the company that leased them" *Chicago Tribune.*

[89] City of Chicago. 2008-2012. Capital Improvement Program. Pg. 42.

[90] "Moody's rates unique parking meter revenue bonds; San Francisco receives A rating on first rate meter-only bonds" *Business Wire* November 15, 1994 (San Francisco used its annual parking meter revenue to secure the bonds and then used the proceeds for the construction of parking garages.)

[91] *E.g.,* City of Chicago. "Chicago Receives $1.157 Billion Winning Bid for Metered Parking System". Press Release. December 2, 2008

[92] City of Chicago. Chicago Metered Parking System Concession Agreement – Exhibit A Metered Parking System Ordinance

[93] IGO Calculations.

1. Shorter Lease with Revenue Sharing

A shorter lease with revenue sharing provisions would have likely generated the revenue necessary to address the short-term budget deficit.

Shorter leases, while not employed by Chicago, are commonplace elsewhere. "In other countries, the typical length of concession agreements is 30 to 40 years."[94] For instance, a recent survey of PPPs in other countries by the Federal Highway Administration noted:

> Portugal tends to use a standard period of 30 years for its concessions. While Spain has used concessions as long as 75 years in the past, current arrangements vary from 25 to 40 years….In the United Kingdom, the Highways Agency has set recent contracts at 30 years. In Australia, the contract period is often a bid variable.[95]

Under "revenue sharing" provisions, a lease is given to a private operator, not solely in exchange for an upfront payment, but rather the government also shares in the profits over the long-term. An alternative lease of the parking meters that included revenue sharing would have likely generated an upfront payment that would have allowed the City to address its budget shortfalls. At the same time, it would strengthen the City's long-term financial outlook by producing a larger annual revenue stream than the City currently receives from the parking meters. Finally, a lease with revenue sharing would have meant that the City would not have given up as much present value as it did in the actual lease. Because it provides both short-term and long-term benefits, revenue sharing is a more balanced approach to financing PPPs.

Recent studies at both the state and federal level have recommended revenue sharing. A federal commission charged with studying the nation's transportation needs advocated revenue sharing in PPPs between governments and private operators. In an extensive report on PPPs, the Texas Legislature cautioned that "upfront payments may not be in the public's interest" because there is an "ever-present temptation for officials to grab a big headline generating number today at the expense of long-term value."[96] It concluded that "revenue sharing mitigates these problems and is a more financially sound option."[97] A lease that included revenue sharing for the duration of the lease rather than a single, upfront payment would have been a superior financial approach in the case of the parking meters.

The table below shows the present value of parking meter revenue under a 20-year lease with 50% revenue sharing, assuming a private concessionaire's discount rate of 12 percent (the midpoint of the City's financial advisor's assumption). Such a lease would likely have generated an upfront payment of $302 million to $444 million.

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[94] Buxbaum, Jeffrey N. and Ortiz, Iris N. "Protecting the Public Interest: The Role of Long-Term Concession Agreements for Providing Transportation Infrastructure". USC Keston Institute for Public Finance and Infrastructure Policy. June 2007. pg. 10

[95] Federal Highway Administration "Public-Private Partnerships for Highway Infrastructure: Capitalizing on International Experience". March 2009. pg. 36

[96] State of Texas. Report of the Legislative Study Committee on Private Participation in Toll Projects. December 2008. pg. iv.

[97] *Id*., pg. iv.

Table 7 – Present Value of 50 percent of Net Revenue from Parking-Meter System over 20 years

	Scenario #1 Pessimistic Scenario	Scenario #2 Slightly Pessimistic	Scenario #3 Mid-range Scenario	Scenario #4 Slightly Optimistic	Scenario #5 Optimistic Scenario
Net Revenue in Year 5	*$85 million*	*$100 million*	*$107.5 million*	*$115 million*	*$130 million*
Present Value to City Using 7% Discount Rate	**$462 million**	**$538 million**	**$575 million**	**$613 million**	**$687 million**
Present Value to Private Concessionaire Using 12% Discount Rate	**$302 million**	**$350 million**	**$374 million**	**$397 million**	**$444 million**
Assumes a 20 year lease term					
Assumes 50% of net revenue goes to City and 50% goes to private operator					
Rates and hours of operation as outlined in concession agreement					
Free cash flow grows at inflation (3%) for remaining 15 years of term					

In an abundance of caution, we have used the most "pessimistic" scenario (rather than the midpoint, or most likely, scenario) in analyzing the financial benefits to the City of taking this alternative. Even an upfront payment at the low end of this range – $302 million – would have allowed the City to address its short-term budget deficits. Also, the $302 million payment would have likely produced $20 million in interest over the next four years (using the same assumptions as the City).

In addition, under the revenue-sharing provision the City would have received a significantly larger revenue stream over the next 20 years than the existing meter revenue, and substantially more annual revenue than the actual lease's revenue replacement fund. In the short term (the next four years), this revenue would have amounted to an additional $110 million for the City.

Thus, even under the most pessimistic revenue scenario, a shorter lease with revenue sharing would have likely raised over $430 million to address the City's budget deficits over the next four years ($302 upfront payment, $20 million in earned on the upfront payment, and $110 million in additional parking meter revenue in first four years).

Comparing the upfront payment to the present value of the revenue the City would have foregone if it had retained the parking-meter system ($462 million, given a 7% discount rate), the difference is $160 million. While this means that the upfront payment would be significantly less than the long-term value of the system to the City, this is a much smaller difference than the $974 million difference under the 75-year lease deal the City entered into. The bottom line is

that the cost in future revenue to the City is far less in a shorter lease with revenue sharing provisions.

Thus, if the City's leadership concluded that a lease of the parking meters was necessary to balance the City's budget in the near term, a shorter lease with revenue sharing provisions would likely have accomplished this goal, while ensuring that the City did not forgo nearly as much future revenue.

2. Shorter Lease with Smaller Parking Meter Rate Increases

In addition to a lease with a shorter term, the City could have considered other alternatives, such as a lease with lower rate increases. The table below shows an alternative meter rate schedule, where the meter rates in year five would have been approximately 25 percent lower than the rates in the actual lease.

Table 8 – Alternative Meter Rate Schedule with 25 percent lower rates in year 5

Parking meter classification	***2008 rate per hour***	**2009 rate per hour**	**2010 rate per hour**	**2011 rate per hour**	**2012 rate per hour**	**2013 rate per hour**
Neighborhood meters	*$.25 thru $.75*	$1.00	$1.25	$1.25	$1.50	$1.50
Central Business District (but not Loop) meters	*$1.00*	$2.00	$2.50	$2.50	$3.00	$3.00
Loop meters	*$3.00*	$3.50	$4.25	$4.25	$5.00	$5.00

We then calculated the present value of 30 years of parking meter revenue assuming both 25 percent lower meter rates and a 50% revenue-sharing provision. (Table 9 below.) This value is especially conservative because we assume that the utilization of the meters would remain the same as in the scenarios with larger rate increases (when in fact the utilization would likely be higher). Once again assuming that a private concessionaire would use a discount rate of 11 percent, the payment would have likely been between $268 million and $396 million.

Like the alternative lease discussed above, this lease would have enabled the City to address its short-term budget deficits. Under the most pessimistic scenario, this lease would generate a $268 million upfront payment, $15 million in likely interest earned on the upfront payment, and $97 million in annual revenue in the first four years of the lease. Thus, the lease would have generated at least $380 million to deal with budget deficits over the next four years.

The present value to the City of this parking-meter revenue, assuming a 7 percent discount rate, is approximately $457 million under the most pessimistic scenario, resulting in a difference of $189 million when compared to the likely upfront payment under the pessimistic scenario. However, this is a significantly smaller difference than the $974 million difference in the actual 75-year lease.

Table 9 – Present Value of 50 percent of Net Revenue from Parking-Meter System over 30 years with 25 percent lower meter rates

	Scenario #1 Pessimistic Scenario	Scenario #2 Slightly Pessimistic	Scenario #3 Mid-range Scenario	Scenario #4 Slightly Optimistic	Scenario #5 Optimistic Scenario
Net Revenue in Year 5	*$62 million*	*$74 million*	*$79 million*	*$85 million*	*$96 million*
Present Value to City Using 7% Discount Rate	**$457 million**	**$533 million**	**$571 million**	**$609 million**	**$685 million**
Present Value to Private Concessionaire Using 12% Discount Rate	**$268 million**	**$311 million**	**$332 million**	**$353 million**	**$396 million**
Rates in Year 5 are approximately 25 percent less than in the actual agreement					
Revenue projection assumes the same utilization as in analysis of actual lease agreement					
Assumes a 30 year lease term					
Assumes 50% of net revenue goes to City and 50% goes to private operator					
Hours of operation as outlined in concession agreement					
Free cash flow grows at inflation (3%) for remaining 25 years of term					

Both of these scenarios demonstrate that alternative leases could have addressed the City's short-term budgetary problems without sacrificing as much future revenue.

E. CRITICAL FAILINGS IN THE CITY'S PPP DECISION-MAKING PROCESS

1. Lack of Transparency and Lack of Informed Deliberation by City Council

Once the winning bid for the parking meter lease was announced there were only three days before the City Council approved the agreement. Unfortunately, this is the pattern the City has adopted when it comes to long-term lease agreements. The time between public announcement and City Council approval of the Skyway lease, the lease of the City's parking garages in 2006, and the Midway lease in 2008, was 12, 19, and 9 days respectively.

As many aldermen pointed out, this left little time for public discussion or scrutiny of the parking-meter lease agreement.[98] One City Council Finance hearing and one full Council meeting were devoted to the lease's discussion. There was no public hearing where City residents, civic organizations, or other interested parties could comment on the lease. The ordinance that approved the lease was not completed until one day before the City Council Finance Committee voted on it. The only documents the City Council received were the lease itself, the ordinance enacting the lease, a 10 page PowerPoint presentation that provided a general overview of the lease, and a flow chart detailing the corporate structure of Chicago Parking Meters, LLC. Even after the bid was announced, the full lease agreement was not made readily available to the public. The lease agreement was not put online until after the agreement had been approved.

[98] City Council Finance Committee Transcript. pg. 100

In other jurisdictions that have explored long-term leases of transportation infrastructure, there has been considerably more transparency throughout the leasing process. Decisions by Pennsylvania, Indiana, and Harris County, Texas about whether to enter into PPPs were preceded by extensive public debates and in some instances comprehensive and dueling reports. A federal commission created by Congress in 2007 to study highway PPPs, among other things, issued a comprehensive report recommending that "there be increased transparency and adequate public participation in the decision to use public-private partnerships, revenue sharing between states and private concessionaires, and a demonstration that private sector financing provides better value for money than if the concession were financed using public funds."[99]

The study referenced above by the Texas legislature identified transparency as a key issue in protecting the public interest in PPPs.[100] And the recent GAO report explained that "governments in other countries, including Australia and the United Kingdom have developed systematic approaches to identifying and evaluating public interest before agreements are entered into, including the use of public interest criteria, as well as assessment tools, and require their use when considering private investments in public infrastructure."[101] The report concluded that "not using such tools may lead to certain aspects of protecting public interest being overlooked."[102]

The decision to enter into long-term leases of the City assets is something that cannot be done behind closed doors if the public is going to have full faith in City government. In order to evaluate the administration's decision-making, both the City Council and the public need time and detailed information to study potential agreements. The lack of transparency that accompanied the Metered Parking Concession prevented a thorough review by the City Council and raised questions about the validity of the agreement and the City's decision-making process.

2. Lack of Independent Analysis

The two days between announcement of the highest bid and Council approval prevented any independent analysis of the City's decision to lease the parking meters. This time frame was simply too short for the City Council or City residents to study and digest the implications of this complex agreement.

This short time period between announcement and approval of both the Midway and parking meter leases came despite a February 2008 GAO report that called for more rigorous analysis of long-term lease agreements. The report specifically pointed out that Chicago had not employed any public interest evaluation of the Skyway lease and that this may have resulted in the public interest being overlooked.[103]

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[99] Government Accountability Office. "Highway Public-Private Partnerships: More Rigorous Up-front Analysis could Better Secure Potential Benefits and Protect the Public Interest". February 2008. pg. 5
[100] State of Texas. Report of the Legislative Committee on Private Participation in Toll Projects". December 2008. pg. IV.
[101] Government Accountability Office. "Highway Public-Private Partnerships: More Rigorous Up-front Analysis could Better Secure Potential Benefits and Protect the Public Interest". February 2008. pg. 8
[102] *Id*., pg. 8
[103] *Id*., pg. 8

During the City Council Finance Committee hearing on the lease agreement, Alderman Scott Waguespack repeatedly asked the City's then Chief Financial Officer Paul Volpe for the City's calculations that demonstrated that the initial payment of $1.157 billion was sufficient value for the parking meters.[104] Volpe did not produce the calculations and only offered vague assurances that "the $1.15 billion is at the high end of our expectation" and "that these assets are only as valuable as the free market will bear."[105] Ultimately, the administration produced no analysis that compared the costs and benefits of the lease agreement.

The discussion between Alderman Waguespack and CFO Volpe illustrates the need for an independent analysis of proposed long-term lease agreements. If the Council is going to adequately analyze proposed agreements, it must be able to independently assess the facts and data surrounding a sale or long-term lease. The Council is at a severe disadvantage if it must rely on information produced by the administration. That the administration did not conduct an analysis of what the parking-meter system would be worth to the City given increased rates and hours of operation, further points to the need for independent analysis. In order to ensure that the City Council and City residents are able to make informed decisions on whether or not to support future sales or long-term leases, they need to be able to rely on objective comparisons of the costs and benefits of any future agreements.

In addition to an independent analysis, some have argued that the administration should share its internal financial analysis with the City Council and the public. One might argue in response that making this internal analysis public would put the administration at a disadvantage when negotiating with potential bidders. While this argument is not entirely persuasive, we would leave it up to the administration to decide whether or not to share its internal analysis.

F. RECOMMENDED PPP ORDINANCE FOR FUTURE LEASES

Based on our analysis, we have developed a review process for the future consideration of long-term leases or sales of City assets. We believe this process should be enacted to ensure more thorough evaluations of proposed agreements that better protect the public interest. It is imperative that there be an open and honest debate about any sale or long term lease agreement. The policy and financial impacts of these transactions deserve a full vetting in public. This process should apply to the sale or long-term lease (defined as more than 10 years) of any asset that involves the delivery of a public service and whose expected value is more than $25 million.

The new process would require the City Council to approve the terms of any proposed agreement once the terms were agreed upon by the administration and the potential bidders, but *before* the agreement is put out to bid. This would give the City Council the power to adjust the terms of an agreement as it sees fit. In order to give the City Council adequate time to review proposed agreements, we would require that the vote could only take place 60 days after the terms have been announced. During this review period, the City Council should commission an independent analysis of the costs and benefits of the proposed agreement and hold hearings that solicit public comment on the proposal. Once the Council approves the terms, the agreement would go out for bid. Once the bidding is complete, the Council will have already had ample

[104] City Council Finance Committee Transcript pg. 159 - 163
[105] *Id*., pg. 162

time to study the agreement and thus should be required to vote on the agreement within one to weeks of receiving the winning bid. The process is further detailed below.

1. City Council 60-Day Review Period For Proposed Leases Before Bids Are Accepted

In the parking meter lease, as in the previous leases the City has entered into, a final lease agreement was developed in consultation with the qualified respondents to the RFQ and then put out for bid. In future leases, if the process remains the same, proposed final agreements should be approved by the City Council before bids are accepted. Instead of only being allowed to vote up or down on a sale or long-term lease, the City Council must have the ability to adjust the terms of the agreements before they consider the price being paid for the asset. City Council approval of sale or lease terms would also ensure that the decision about whether to sell or lease City assets would be conducted more openly and transparently.[106]

We would recommend a 60-day review period because of the complexity typical of these agreements. We would require that the City Council could only vote on the terms of a proposed agreement, 60 days after the terms of the agreement are announced publicly. This announcement must include the publication of the proposed lease agreement on the City's website. The City should also disclose documents related to the lease, including Confidential Information Memoranda that are typically provided to prospective bidders. This review period would ensure that the City Council and the public have time to carefully analyze these complex agreements.

While some might argue that this review period would slow down the lease process, we would argue that there needs to be time for the Council and the public to study and review these agreements. Since this review process would happen before any of the bidders put money on the table there should be less of a need to rush through the review process.

Here, the City identified certain "qualified" companies in February 2008 through its Request for Qualifications process, and began discussing the non-price terms of the lease with them in April 2008. Six months later, in October 2008, the City and the companies agreed on the non-price terms of the lease (including the 75-year term). The companies then participated in two rounds of bidding in November and early December 2008.

It took six months – from April to October –to reach agreement with the qualified bidders on the terms. This was despite the fact that in April, the City already had a detailed document that set out some of the lease's eventual terms (including the parking-meter rate increases included in the final lease). The April-October period was presumably used In addition, there was a significant amount of time in the bidding process between when the lease terms were finalized and when the bids were due. The terms of the agreement were finalized over 50 days

[106] In the City's four long-term leases, the City has used an auction style bidding process where price is the sole bid criteria. If in the future, a sale or lease is conducted differently, and the bids are evaluated based on multiple criteria, not simply price, than the City Council will not be able to approve the terms of the agreement before the bidding process. In the case of the parking meters, this would mean that the bidders could have submitted bids with different lease lengths, parking meter rates, and prices. If the procurement is conducted in this way, than once the winning bid is determined by the administration, the City Council should not be able to approve the bid until 60 days after the bid and terms of the agreement are announced publicly.

before the first round of bids were due. (Initially the bids were due 25 days after the lease terms were finalized, but two extensions pushed the due date back.).

If this 60-day City Council review period was established by law, the City could have stuck to the same decision-making schedule by wrapping up more quickly the discussions with the bidders regarding lease terms. Thus, if the administration had presented its proposed lease terms to the City Council in July, the Council would have had until September to conduct its assessment and then to vote on whether to approve, alter, or reject the terms.

The key question would be – is it a good idea to "sell" these assets in the first place? If the Council's answer was yes, the next question would be – are the administration's lease terms the best, or should we choose an alternative?

2. Independent Analysis of Lease Agreements

For the City Council to assess the benefits and costs of entering into sales or long-term leases of City assets, it needs to independently assess the facts and data surrounding these transactions. If the City Council is to be a full partner in City government, it cannot base its assessment solely on information produced by the administration. Therefore, we recommend that the City Council commission a public policy think tank, an academic, or an independent office of City government to conduct an impartial analysis of any lease agreement and release this analysis publicly before the terms of an agreement are voted upon by the City Council. The question of whether or not to sell or lease public assets is not a simple one. Often the better method of provision (public vs. private) will depend upon the specifics of the proposed concession agreement and the particular characteristics of the asset. Thus, the City needs to use objective tools to compare the cost and benefits of public operation with private operation, so that the City Council and City residents can make an informed decision about whether or not to enter into these types of agreements. This analysis should be provided to the City Council and the public within 30 days of the announcement of the proposed agreement.

Consideration should be given to using the public-interest "assessment tools" identified by the GAO as best practices and used extensively abroad. Here, this would have allowed for an analysis of the length of the lease, and size of the rate increases, among other things. Is 75 years the right length of a lease? What is the appropriate rate increase, balancing fairness to drivers, the desire for greater revenue, the market for parking, the effect on traffic, and other factors? Should there be a transition period? Should there be transparency or oversight requirements regarding the private operator of the meters?

The analysis should also examine the financial benefits, comparing the long-term value of the asset to the City against the likely market value of the asset to a private bidder. These numbers will change depending on the length of the lease, the size of the rate increase, and other variables. A variety of feasible options should be studied to determine different financial outcomes for the City.

3. Hearing that Gives Public a Chance to Comment

Once the independent analysis has been conducted, we recommend that the City Council conduct hearings that solicit public opinion on the proposed transaction. It is important that the public have a chance to comment on long-term leases or sales of City assets. The decision to enter into these types of agreements will have long-term effects on the residents of the City and as such their opinions should be heard by the City's political leaders.

4. Council Vote within 1 to 2 weeks of Receiving Bids

After an agreement has been approved by the City Council, it would then be submitted to the qualified bidders. Once the City received bids, the highest bidder would be declared the winner and announced publicly. Provided the administration believed the winning bid to be sufficient, they would then submit the bid to the City Council for approval. Because the City Council would have had ample time to study the proposed transaction, they should be required to act quickly on the winning bid. We propose that they vote to accept or reject the winning bid within one to two weeks of receiving it from the administration.

5. Do Not Include Lease Proceeds in City Budget Before Leases Are Finalized

The City budget that was passed two weeks before the parking meter lease was announced relied on $150 million in parking meter lease proceeds. Having the budget balanced on lease proceeds made it extremely difficult for the City Council to reject the lease. Given only three days to consider the agreement, the City Council had the unenviable choice of agreeing to the lease with little information about its policy or financial ramifications or rejecting it and leaving a $150 million hole in the City's budget that could likely only have been closed with layoffs or tax increases. Decoupling the budget from future lease decisions would help ensure that there is a thorough evaluation of the policy ramifications of future agreements. Therefore, we propose that the City Council adopt an ordinance that prohibits the City's budget from including revenue from long-term lease proceeds before a lease agreement has been approved by the City Council.

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METHODOLOGY

For this analysis, our research led us to consult a variety of resources. We reviewed documents related to the lease agreement and talked to the City's staff and financial advisor. We reviewed the previously publicized analyses of the parking meter lease done by Alderman Scott Waguespack and DePaul University Professor Woods Bowman. We talked to academics and researchers in the field and reviewed much of the academic literature on Public Private Partnerships (PPPs). We looked outside of Chicago and examined the experiences of other state and local governments that have considered long-term leases of transportation assets. We looked at how other countries with considerable experience in PPPs approach the lease or sale of assets and how they analyze these transactions. From these various sources, we developed a framework to analyze the parking meter lease.

APPENDIX A – DISCOUNT RATE CALCULATION

Capital Asset Pricing Model

Discount rate (d)

Risk free rate (r)

Measure of systematic risk of asset (Beta)

Market risk premium (MRP)

d = r + Beta (MRP)

Risk free rate

The federal government's borrowing rate is typically used as a proxy for the risk free rate. The table below shows the yield on 20-year Treasury Inflation Protected Securities (TIPS) for the past five years. We will use the five year average of 2.19 percent as the risk free rate in our discount rate equation.

Year	Yield on 20 year Treasury inflation protected securities (TIPS)
2004	2.14%
2005	1.97%
2006	2.31%
2007	2.36%
2008	2.18%
Five Year Average	**2.19%**
Source: Federal Reserve	

Nominal risk free rate

Because the revenue projections are in nominal terms (include inflation), we must use a nominal discount rate that includes inflation. In order to keep the inflation assumption consistent in both the revenue projection and the discount rate, we use the same inflation rate of 3%. To convert the real risk free rate into a nominal rate we use the Fisher equation shown below.

r = real discount rate
π = inflation rate
i = inflation-adjusted discount rate
$i = (1 + r)(1 + \pi) - 1$

r= 2.19%

π= 3% (proxy for long-term inflation)
$i = (1 + .0219)(1 + .03) - 1$
$i = (1.0219)(1.03) - 1$
$i = 1.052557 - 1$
$i = .052557$
$i = 5.26\%$

Measure of risk of asset
The State of Victoria classifies assets into three risk bands: very low, low, or medium. Because of the history of stable revenue and the limited competition, we believe that the Metered Parking System falls into the very low-risk class. Based on this risk class and using Victoria's model, we assign it a Beta value of .3.

Market risk premium
The Market Risk Premium is the average return in the market as a whole over the risk-free rate of return. Although, there is broad disagreement on what the market risk premium should be, 6 percent is the value calculated by the leading researcher in the field.[107]

Discount rate calculation
d = r + Beta (MRP)
d = 5.26 + 0.3 x 6.0
d= 5.26 + 1.8
d = 7.06 %

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PFM University: Public-Private Partnerships

The PFM Group

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PFM Advisors

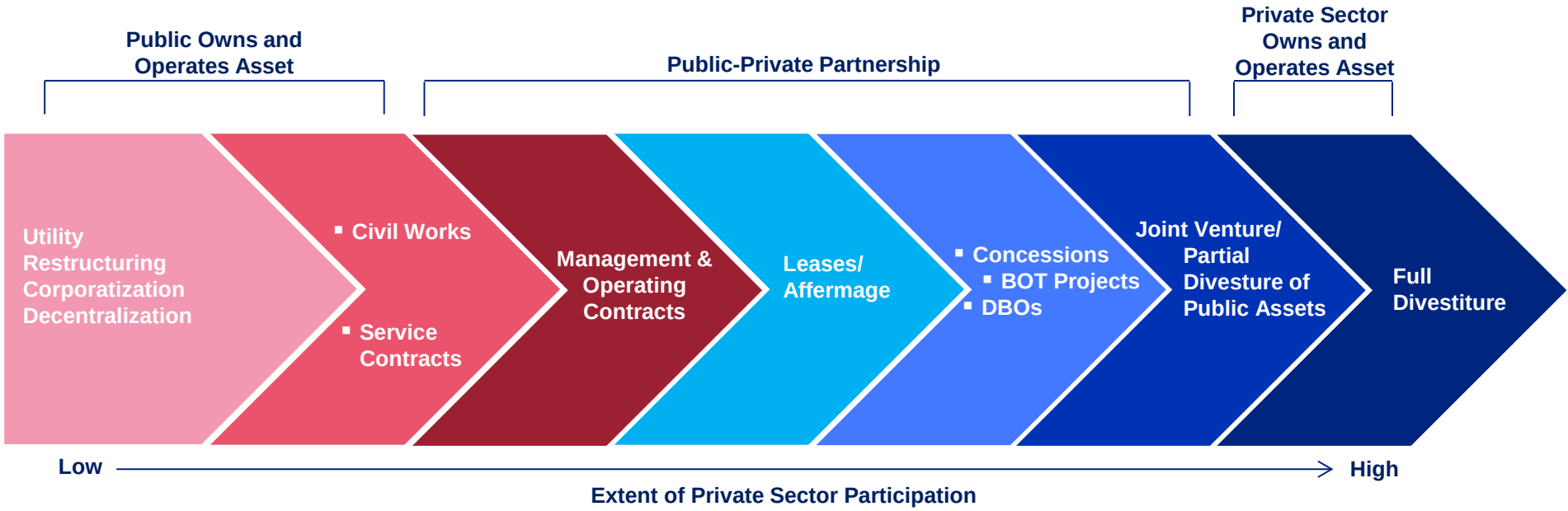
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What are Public-Private Partnerships?

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What are Public-Private Partnerships (P3s)?

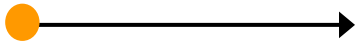
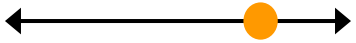
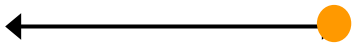
- Contractual agreements between a government agency and a private party for construction, operation and financing of projects and significant government functions
- Provides an alternative financing option for governments
- Concession agreements address key terms between the public and private entity:
  - Scope, duration and exclusivity
  - Allocation of risk and responsibilities
  - Service and performance requirements
  - Financing mechanism



Source: ppp.worldbank.org

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P3s Encompass a Spectrum of Possibilities

Structure	Control/Risk	Description
	Gov't ——— Private	
Public Ownership		Traditional revenue stream – design, construction, O&M, governance… remains with government
Public Ownership / Private Management		Certain elements of above may be contracted
New Development / Availability Payment and Sharing Models		Private entity constructs, operates, maintains and finances a project in return for periodic lease payments based on performance
Concessions		Public owns asset and maintains governance. Private entity responsible for O&M, construction and revenue and cost risk
Private Ownership		All activities controlled by private entity, including rates

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Financially Distressed Governments May Seek Alternate Financing Options



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Financially Distressed Governments May Seek Alternate Financing Options

- Revenue shortages
  - As of the first quarter of 2012, state revenues remained 5.5% below pre-recession levels
  - Require 8.3% compounded annual growth until 2019 to return to pre-recession average growth curve
  - Thirty-one states projected (and in most cases now have closed) budget gaps totaling $55 billion for fiscal year 2013
- Restricted access to debt
  - Rating agencies have updated rating criteria, making it more expensive for many entities to access the bond market
  - Market restructuring has removed bond products such as auctions
  - Recent political events have produced popular opinions highly critical of excess public debt
- Increasing costs and underfunded liabilities
  - Public safety, an already large portion of city budgets, has risen with unemployment, threat increases and growing citizen expectations
  - Over $2.2 trillion is required to meet infrastructure capital improvement needs for municipal and state governments
  - Local and state unfunded pension liabilities exceed $1 trillion
- Budget cuts
  - Total local government employment has dropped 581,000 between July 2008 and October 2012 (U.S. Bureau of Labor Statistics)
  - Public services essential; top public safety including police and firefighters are threatened with budget cuts
- P3s provide an alternative access to capital and private sector expertise to perform public service

Source: Center on Budget and Policy Priorities Survey, revised June 2012 http://www.cbpp.org/cms/index.cfm?fa=view&id=711#_ftn1

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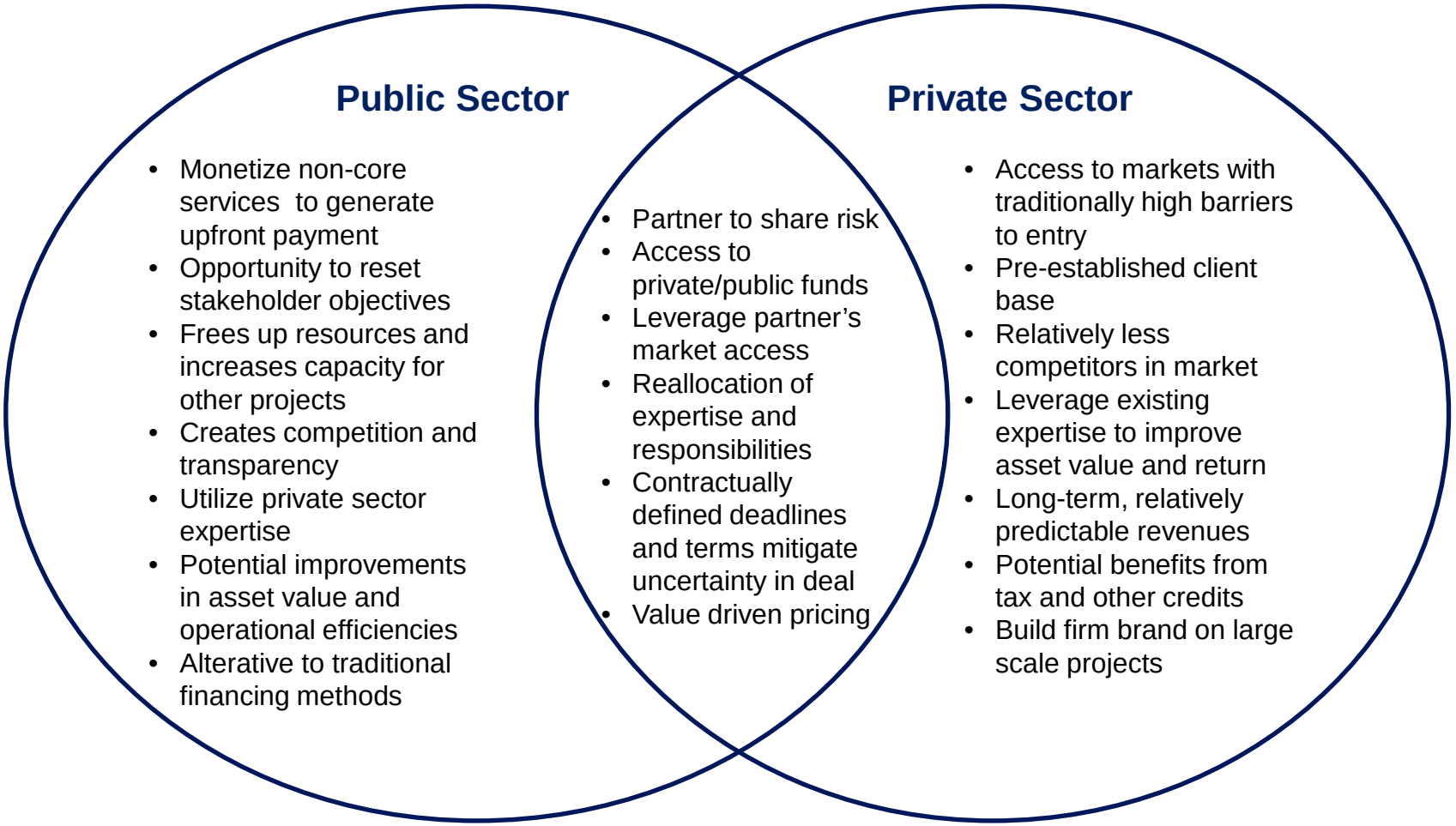
P3s Appeal to a Diverse Investor Base

- Governments looking to pursue P3s will likely find a great deal of interest on the part of investors
- Many market participants have demonstrated the ability to pursue private sector deals in the absence of public sector deals that meet their criteria

- Private equity investor funds and pension funds have designated specific funds for investments in infrastructure assets
  - Assets include transportation, parking, gaming, alcohol, airports, port, utilities, and social infrastructure (i.e. student housing)
  - Each investor or fund will have a different view as to the size of asset, risk tolerance, project requirements, other value driving variables
  - Fund governance and rules may preclude investment in certain types of assets or transactions
  - Certain funds will charge an advisory fee to co-investors
  - Real estate type of assets, for example certain parking assets, will meet investment criteria for certain funds but not for others
  - Infrastructure assets are generally considered safe and stable returns on investment
- Projects that have a well-designed, fair P3 process in place will receive the greatest attention from investors
  - Procurement process ought to be transparent and unbiased
  - All potential conflicts of interest are disclosed
  - Independent transaction advisor
- Political certainty is of paramount importance

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P3s Create Value for Both Public and Private Partners



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Identifying P3 Opportunities

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Project Selection

- P3 opportunities exist across many asset classes, and many specifically address opportunities in:
  - Greenfields
    - New projects that will require design, build, and management services
    - Wish list projects without available funding
    - Political barriers to accessing traditional funding sources
  - Brownfields
    - Improvements to existing facilities or project
    - Deteriorating, underfunded assets
    - Changing demographics and economics subject project to creative reuse
  - Additional services and projects characterized by:
    - User fee revenue stream
    - Expensive construction and maintenance costs
    - Competition with robust private market
    - Operational struggle and inefficiencies
    - Intensive resource and labor allocation
    - Lack of popular support

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Select Sector Trends and P3 Opportunities

Roads and Transit

- Trends
  - Increased government interest in private investment in US infrastructure
  - Urban highway system is particular need of upgrades
  - Transit continues to be underfunded
  - Political challenges remain; significant barriers to completing transaction
- Opportunities
  - Airport privatizations
  - Road maintenance and related companies
  - Parking and facilities operators
  - Transit

Water / Wastewater

- Trends
  - 85% of US water and 98% of US wastewater systems are owned by municipalities, many with capital need for renovation or replacement
  - USEPA regulations driving investments requirements
  - Increased investment in desalination and water recycling/reuse as a method of saving costs long-term
- Opportunities
  - System privatization
  - Fragmented system renovation
  - Service consolidation
  - District water

Port and Rail

- Trends
  - Governments globally are seeking investment in ports as a key catalyst of economic development
  - Record cap ex investment by railroads in rail infrastructure to compete with trucking and maritime shipping
- Opportunities
  - Regional marine terminal operators and port-side services
  - Terminal expansion and redevelopment
  - Short-line rail, rail-oriented logistics and services

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Select Sector Trends and P3 Opportunities

Energy

- Trends
  - Most active and diversified infrastructure asset class
  - Renewables and alternative energy
  - Distribution, transportation, and focus on storage
- Opportunities
  - High level of competition across assets
  - Power generation
  - Natural gas distribution and transportation
  - Storage and energy services companies

Social Infrastructure

- Trends
  - Capital constraints across educational institutions especially those reliant on state and local funding
  - Cost cutting in health care to improve balance sheets
  - Rapidly shifting health care market due to legislative, demographic, and technological changes
  - Exiting non-core businesses (energy, parking, housing)
- Opportunities
  - Privatized non-core businesses (energy, parking, housing)
  - Health care consolidations

Gaming and Alcohol

- Trends
  - Many states rethinking consumer facing businesses like alcohol and gaming
  - 18 control states in wholesale or retail alcohol businesses
  - 43 state lotteries facing increasing competition and regulatory changes (i.e. internet gaming)
  - Expanded and redevelopment of gaming in many states
- Opportunities
  - Private management
  - Wholesale consolidation
  - Services companies

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The P3 Process

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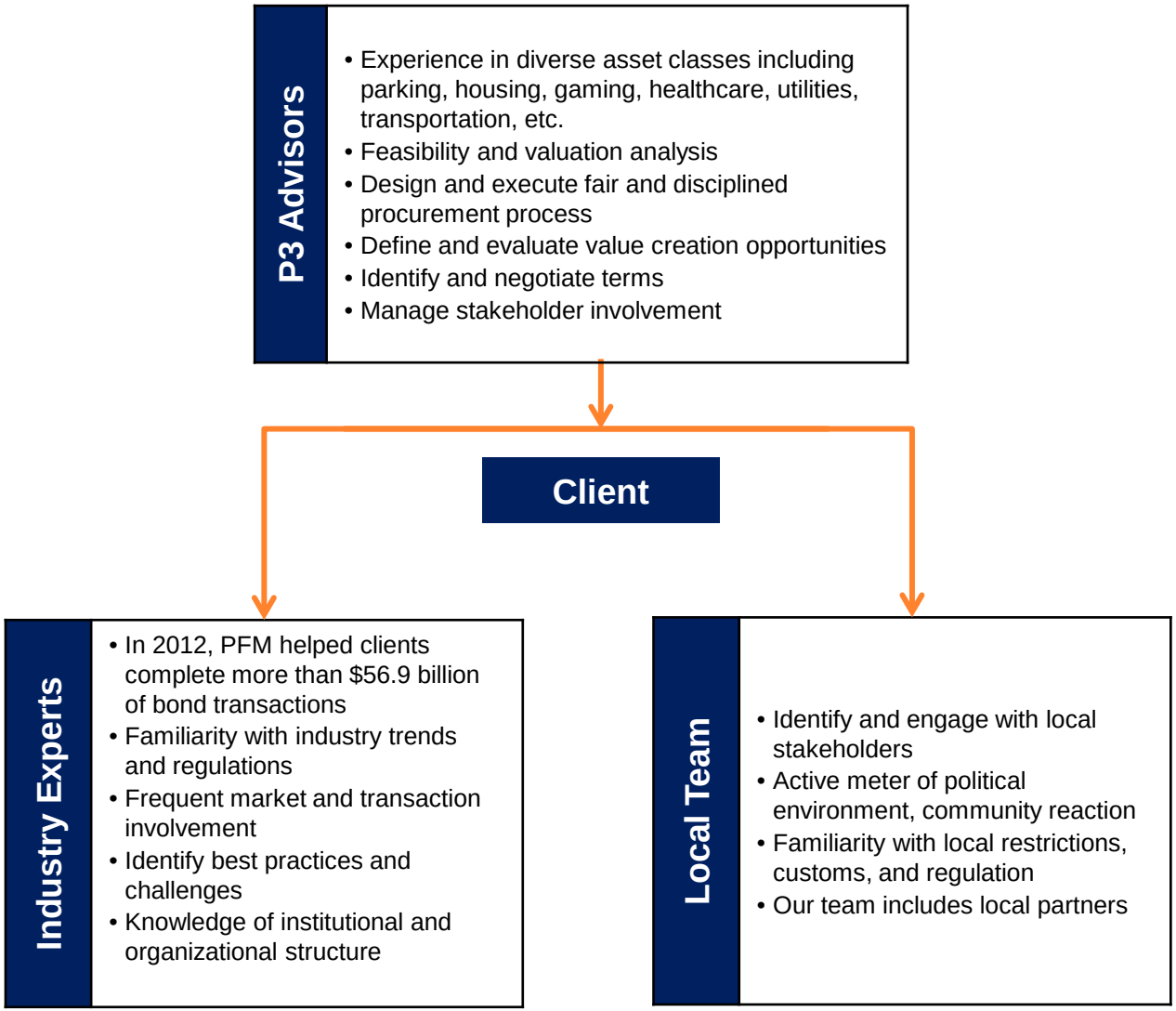
PFM Project Management Approach

	Steps	Detailed Tasks	Milestones	
1	**Assessment & Preparation**	▪ Determine project objectives ▪ Identify policy considerations ▪ Identify legal and legislative hurdles ▪ Confirm project scope ▪ Collect data and build financial model	▪ Form project team ▪ Engage key decision makers	**Feasibility**
2	**Alternative Analysis**	▪ Short list viable structures against criteria ▪ Develop valuation for alternatives ▪ Select preferred alternative ▪ Initiate selection of remainder of advisory team	▪ Perform valuation of alternatives and sensitivity analysis ▪ Selection of preferred alternative	
3	**Communications**	▪ Inform and engage key stakeholders ▪ Inform and engage political and legislative participants ▪ Develop presentation materials	▪ Identify policy issues and workable solutions	
4	**Procurement Process**	▪ Assist in development of transaction documents (RFQ, Confidential Information Memorandum (CIM), RFP, etc.) ▪ Review and provide input on the Concession Agreement ▪ Qualify bidders	▪ Ensure transaction documents meet University objectives ▪ Communicate key document terms to stakeholders	**Procurement**
5	**Transition & Implementation**	▪ Ensure detailed transition plan is in place ▪ Inform stakeholders and educate the public ▪ Contract oversight and management	▪ Closing ▪ Initiate transaction ▪ Review and monitoring	

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Typical P3 Advisory Team

- A typical team involved in a P3 includes:
  - Feasibility or revenue consultants
  - Independent advisor
  - Sell-side advisor
  - Legal advisors
- Depending on the project, PFM may serve as feasibility consultants, independent advisors, and sell-side advisors
- PFM has a dedicated team focused on nationwide P3 and municipal financing opportunities spanning a variety of asset classes



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Identifying Value in a Deal

- Many value drivers transcend asset classes, but the specific considerations may vary according to sector and project

Driver	Consideration
Length of Lease	• The length of partnership between owner, licenser, and/or operator
Product Line	• Product mix has direct impact on profitability • Clustering of ancillary amenities may generate spillover effect and additional income • Introduction of new technologies and products
Product Distribution	• Costs and benefits of various delivery models • Distribution channels affect market reach • Access to regional, domestic, or international markets
Pricing	• Rate structures and price discrimination • Potential funding from public or other sources • Bargaining power with vendors • Licensing fees and pre-existing large sum contracts for project viability
Maintenance Cost	• Building requires continued upkeep and possibly improvements throughout life time
Capital Costs	• Large upfront construction costs • Equipment and technology upgrades
Demographics	• Trends in customer base • Availability of qualified human capital
Marketing	• Strategies to target desired consumer base
Exclusivity and Competition	• Proximity and availability to competitors • Sell a unique product to avoid substitution in the market
Risk	• Risk allocation between public and private partner
Political Environment	• Communities support and approval of project • Legislative changes and impact on the projected value of the deal

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Valuation Approaches

- Income approach (discounted cash flow)
  - Value of the business is equal to the present value of its future cash flows
  - Anticipated future cash flows are discounted at a rate commensurate with the risk characteristics associated with the cash flows
  - Market data supports the discount rate
  - Ability to reflect different assumptions and factors associated with desired arrangement and time horizons
  - Ability to discretely incorporate various forecasted growth and margin assumptions
- Market comparable approach
  - Estimate value by applying market multiples, from similar businesses that are publicly traded, to the subject company's earnings, sales or other market indicators
  - Market multiples are adjusted for differences between the publicly traded companies and the subject company based upon sustainable growth, profit margins, asset returns, size and leverage
- Market transaction approach
  - Estimate value by applying transaction multiples from ownership interests that have been sold to the subject company's earnings, sales or other market indicators
  - Transaction multiples are adjusted for comparability factors such as profitability and sales terms
- Cost approach
  - Estimate value by determining the market cost to replicate the existing assets of the business
  - Requires detailed appraisal of each asset
  - Does not capture goodwill value of ongoing business

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Successes and Failures

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Best Practices

- Actively model the valuation and public policy considerations
  - Consider revenue sharing to align private and public motivations in the run long
  - Weigh the long-term and short-term value
  - If rate increases are necessary, implement gradually
- Ever-increasing transparency and communications
  - Grant stakeholders ample time to review relevant documents
  - Modify terms for special interests based on rational public debate
  - Form diverse advisory committee to engage stakeholders
  - Engage labor unions and proactively develop solutions
  - Use stakeholder feedback to inform the transaction process
- Comprehensive procurement process
  - Retain financial advisor from beginning to perform independent analysis throughout
  - Develop the same framework to evaluate bids
  - Thoroughly vet operators through bidding process
  - Provide adequate time for transition to new operator and new technologies
- Establish penalties for non-compliance with terms of contract
  - Retain financial advisor from beginning to perform independent analysis throughout
  - Develop the same framework to evaluate bids

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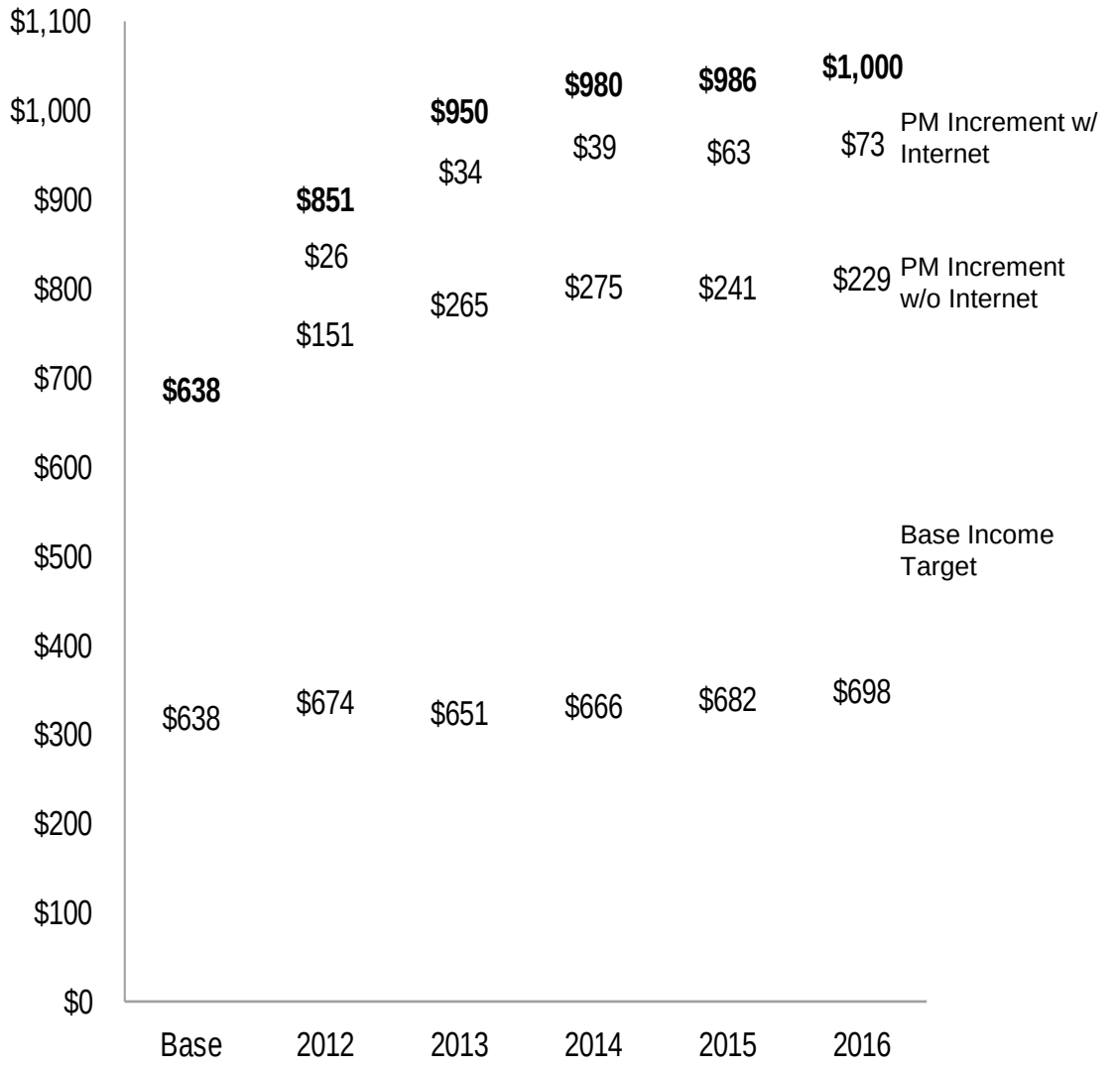
Risks in P3 Transactions

- Financial
  - Not receiving as much proceeds as asset is worth in the public sector
  - Loss of future upside potential
  - Reversion or compensating event risks
  - Proceeds must be protected from unanticipated uses
- Service levels
  - Private operator may not provide service at desired levels, at transition or in future
  - Unexpected events may obstruct service and delivery
  - Transition can be a challenge
  - Monitoring and enforcement will require active oversight for life of the deal
- Political
  - Citizens, elected officials, stakeholders and the press may assess differently
  - Communication plans take time
  - Labor and union contentions
  - Information asymmetry must be carefully managed
- Failure to close!

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Private Management of Illinois lottery

- Past structure placed many "handcuffs" on the Lottery Management in terms of their flexibility
- Private Manager has both the latitude as well as the private sector knowhow to grow the Lottery significantly
- Returns to the State will grow accordingly
- 10-year term
- 5-year net income commitment
  - Backed by a letter of credit
  - Creates in excess of $1.1 billion in net additional value to the State in just 5 years
  - Internet channel is expected to add $235 million in additional net income for the state
- Governor awarded the contract to Northstar on September 15, 2010

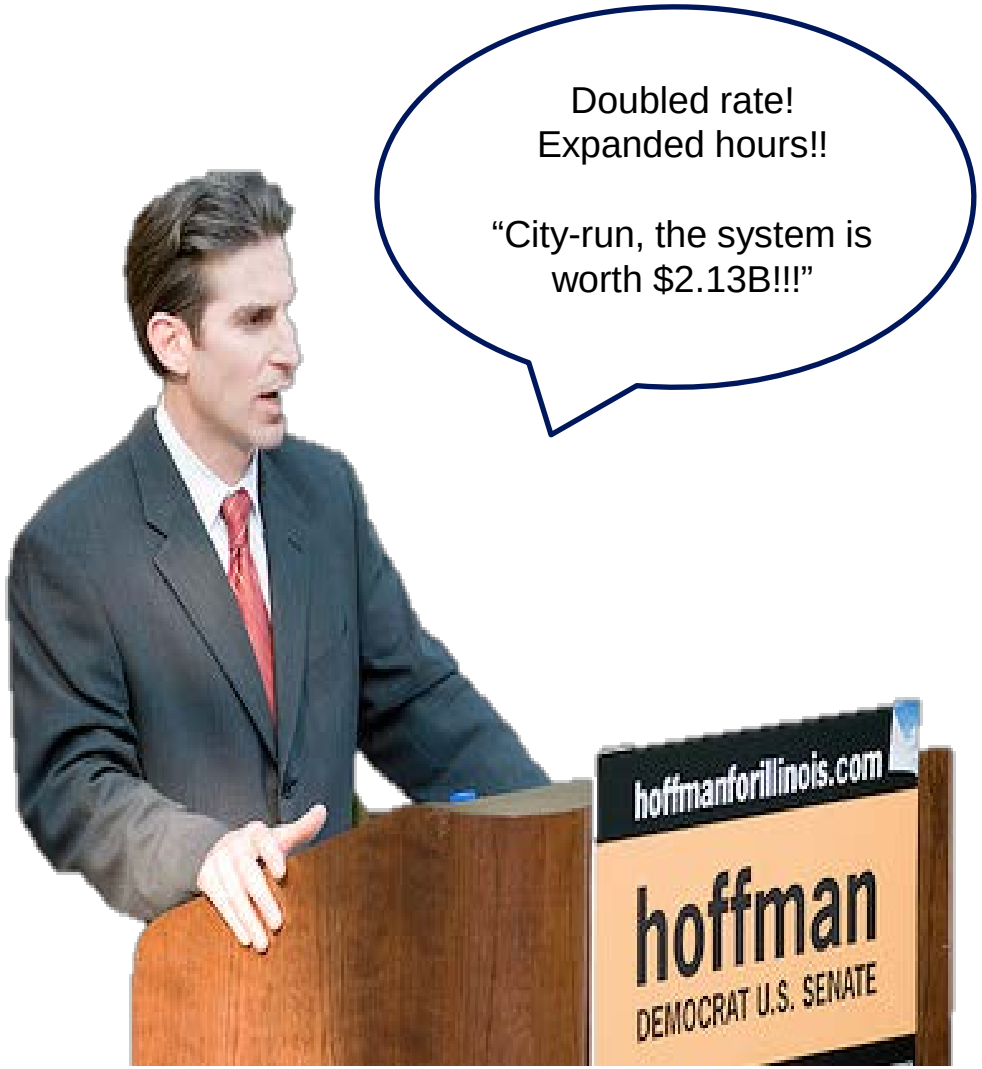


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Parking Privatization in Chicago



- $1.15 billion plugs budget gaps through 2012, funds Meals on Wheels, low-income housing and more
- Strengthened city credit rating
- Drivers now paying more of actual cost of driving



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Indiana Parking Privatization

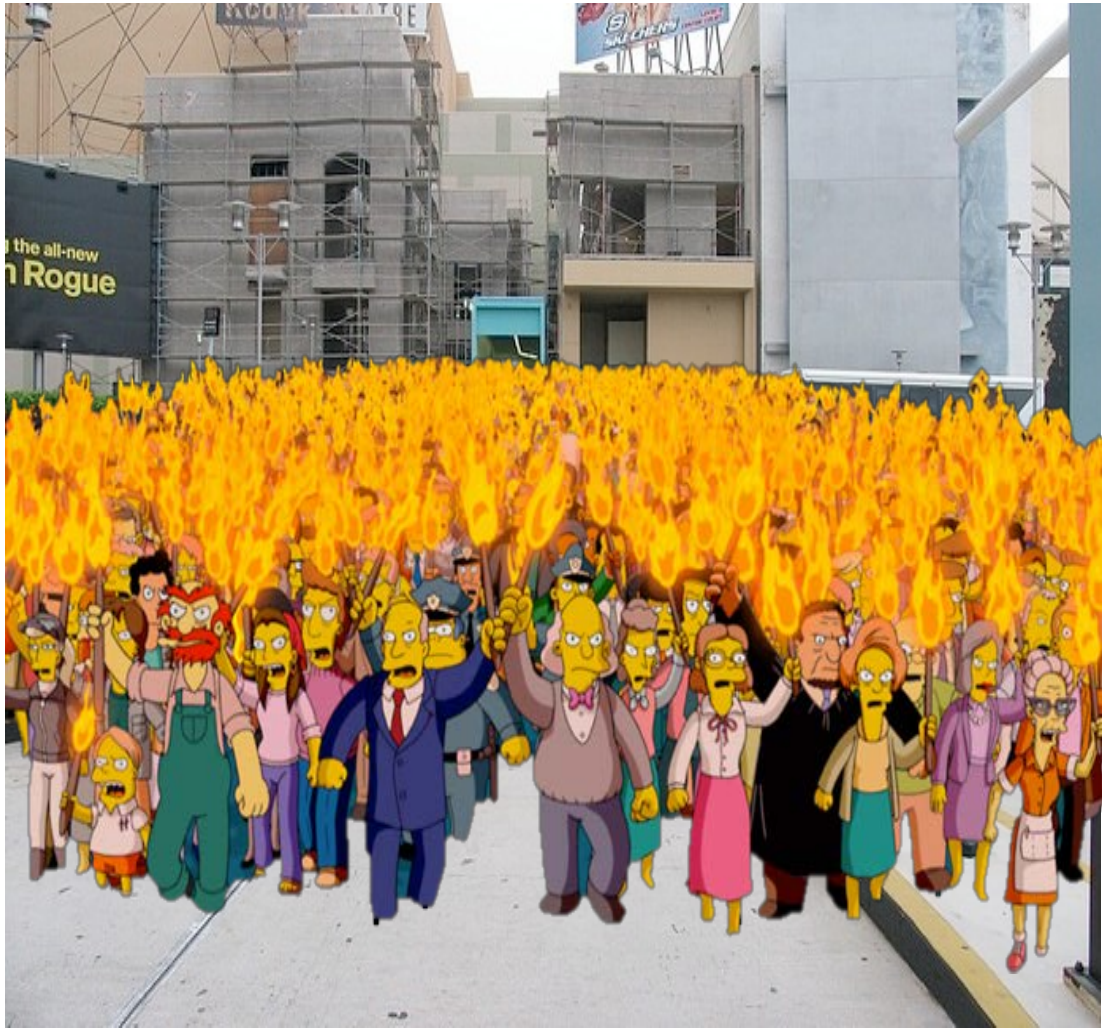
- "Damage control"
  - Public input before closing
  - Delayed Chicago-like outrage
- Upfront payment for sidewalk and road improvements
- Revenue sharing with meters PLUS upfront payment
- Private partner agrees to add 200 jobs in Indy within 2 years
- Rates can raise only after new meters are installed
- Flexibility to terminate the deal every 10 years and remove spaces from deal



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City of Los Angeles Parking Privatization

- Public input over scope of pushed away potential bidders in LA
- Revenues from private operator contract for garages expected to plug $53.2 million budget gap
- City must figure out how to increase city revenues from parking meters now that privatization is off the table



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City of Allentown Water/Wastewater Privatization

- The City faced a large and growing unfunded pension liability related to its fire and police pensions
- To address this dilemma, the City evaluated various funding alternatives, and determined the most efficient way to dramatically reduce its unfunded liability was a concession lease of the City's water and wastewater systems
- Lehigh County Authority, a public entity, was selected as the winning bidder with an upfront consideration of $211.2 million for a 50-year concession lease
- City will receive ongoing revenue share payments to offset costs currently funded by the water fund and has the ability to set operational standards and retain oversight over many important public concerns



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