COUNCIL REPORT

Subject: Resolution 20-30, Authorizing the City Manager to Sign an Interim Intergovernmental Agreement (IGA) with the City of Portland to Establish Terms as the City Explores the Feasibility of a Public-Private Partnership for a New Wastewater Treatment Plant in the Foothills Area.	
Meeting Date: September 15, 2020	**Staff Member:** Anthony Hooper, Deputy City Manager **Department:** City Manager's Office
Action Required ☐ Motion ☐ Public Hearing ☐ Ordinance ☒ Resolution ☐ Information Only ☐ Council Direction ☐ Consent Agenda	**Advisory Board/Commission Recommendation** ☐ Approval ☐ Denial ☐ None Forwarded ☒ Not Applicable **Comments:**
Staff Recommendation: Adopt Resolution 20-30, which authorizes the City Manager to sign an Interim Intergovernmental Agreement (IGA) with the City of Portland. In addition, direct staff to release a Request for Proposal (RFP) package to seek proposals from 3 shortlisted Public-Private Partnership (P3) Bidders for services to Design, Build, Finance, Operate and Maintain (DFOM) a New Wastewater Treatment Plant.	
Recommended Language for Motion: Move to adopt Resolution 20-30.	
Project / Issue Relates To: ☒Council Goals/Priorities ☐Adopted Master Plan(s) ☐Not Applicable	

ISSUE BEFORE COUNCIL

Decide whether to authorize an interim IGA and allow the release of an RFP package so as to keep moving forward on investigating whether it is in the City's interest to build a brand new Wastewater Treatment Plant that is ultimately owned by Lake Oswego through a P3 partnership or have Portland proceed to invest money to meet environmental regulation requirements by upgrading the existing Tryon Creek Wastewater Treatment Plant that is owned by the City of Portland.

EXECUTIVE SUMMARY

Lake Oswego and Portland have come to terms on an Interim Intergovernmental Agreement (IGA) that sets the parameters for our working relationship until enough information is available in about two years for both Councils to make an official "greenlight" decision. During this time, critical deliverables will be accomplished by the selected P3 team such completing 60 to 70% design, accomplishing DEQ permitting milestones, securing real estate, developing definitive pricing, and more.

A Request for Proposals package is anticipated to be released in mid-October. Staff from Lake Oswego and Portland believe it is in our cities interest to keep moving forward.

BACKGROUND

On July 14, the City Council had a study session, where the Council instructed staff to continue moving the project forward. In mid-August, the cities of Lake Oswego and Portland came to terms on an interim IGA (attachment 2). The interim IGA supplements the existing 1984 IGA, but does not replace it. Instead, this interim IGA provides the various terms for the period of time between the date the IGA is signed and when the Council is asked to give the "greenlight," which is likely around two years from now. If a Council approval is given and staff is told to keep proceeding at various check-ins, the following actions will be covered during this period:

- Request for Proposals package will be released to the 3 shortlisted bidders;
- The top scoring proposer will be selected;
- A predevelopment agreement will be negotiated with the selected proposer;
- 60-70% design will be completed;
- Permit application will be submitted and moved to near completion;
- The cost to demolish and remediate the existing plant will be developed as an option;
- Environmental testing will be conducted on the existing site and the potential new site;
- The location of the new plant will be secured; and
- Definitive pricing will be developed by the selected P3 team.

In the time since the last study session, staff also met with the Department of Environmental Quality (DEQ). At this meeting DEQ staff advised the City that the permitting process would take approximately two years from the date the application is submitted. As a result, the timeline that was given at the last Council Meeting is being re-evaluated to take this extended review period into account.

Timeline Updates

As a tandem course of action, the Portland Council had its first reading of the interim IGA at its September 9 Council Meeting. At the first reading, the Portland Council did not have any questions or suggestions to staff and there wasn't testimony from the public. In addition, Mayor

Wheeler gave a brief statement in support of the project. On September 16, the Portland Council is anticipated to vote to approve the interim IGA.

Since the last Council Meeting, staff decided to push back the anticipated release of the Request for Proposals package from September 17 to October 16. The City decided to move back the release date after consulting with the Department of Environmental Quality (DEQ). The additional month will give DEQ time to provide clarity on permitting requirements, which the bidders will need to take into consideration when preparing their proposals. The revised timeline is shown in table 1.

Table 1: Lake Oswego Wastewater Treatment Plant Project Timeline

Activity	Date
Issue RFP Package	October 16, 2020
Proposal Submittal Date	January 11, 2021
Tour of Existing Wastewater Treatment Plant & Wastewater 101	Late January, 2021
Announcement of Selected Proposer	February 10, 2021
Study Session with Council on the Project	February 16, 2021
Council Meeting to Request Authorization to Sign Predevelopment Agreement	March 16, 2021

There will be a least three new members of the Council starting in January and a major decision on the project will need to be made in March, which is whether or not to enter into a predevelopment agreement with the selected P3 team so they can start doing design work, move the permit forward, work on developing pricing, and a variety of other items. In preparation for this decision, staff would like take the Council on a tour of the existing Wastewater Treatment Plant and provide an overview of the Wastewater system. In addition, staff would like to hold a study session on the project as a whole in February 2021.

DISCUSSION

Interim Agreement with City of Portland

The proposed interim agreement (attachment 2) does not supersede the existing 1984 Intergovernmental Agreement (IGA) with the City of Portland. However, the interim IGA is critical because it gives the three shortlisted P3 teams assurances that there is a shared understanding between our two cities on the roles, responsibilities, process criteria, and terms needed to get to an ultimate “greenlight” decision. The interim agreement also contains the terms should the cities decide to walk away from this project at any time up to the “greenlight” decision, which is likely two years away. If a “greenlight” decision is made, then there will be a new intergovernmental

agreement that will then replace the existing 1984 agreement. The IGA contains a lot of parameters about the project agreement (PA) with the P3 team, which will also be considered at the same time that the replacement IGA is considered in approximately 2 years from now. There are three sections of the Interim IGA:

- RFP Development, Team Selection, and Predevelopment Agreement
- Future IGA and Project Agreement
- Replacement IGA if P3 Project is Not Approved

RFP Development, Team Selection, and Predevelopment Agreement
This is the period from the signing of this interim IGA all the way to the "greenlight" decision. The items in this period include releasing an RFP, selecting the highest-scoring team, entering into a Predevelopment Agreement (PDA) with that team, having the selected team complete between 60% to 70% designs, and having the P3 team submit a Guaranteed Maximum Price (GMP) to our cities. The perimeters for all of this work include the following stipulations:

- Portland and Lake Oswego will work collaboratively in developing deliverables, such as writing the RFP, selecting the winning team, figuring out cash flow, and developing the Predevelopment Agreement (PDA) with the selected team.
- Minimum treatment capacity needs will be identified prior to releasing the RFP.
- Once a PDA is signed with the selected P3 team, the City of Lake Oswego and Portland will share 50% of all costs during the PDA period. If either team decides to walk away for any reason, then 50% of costs incurred during the PDA period will be paid by each city.
- There is a lot of language about how Lake Oswego will complete due diligence during RFP development, predevelopment negotiations, and the development of the Project Agreement.
- The interim IGA also provides for the shared understanding that this project will not move forward if the cost to complete the P3 project is more than the cost to upgrade the existing plant.
- There is language that each party needs to notify the other one in writing if either city disagrees that this project is feasible. If either party finds the project to not be feasible, then Portland retains ownership of the existing plant and Lake Oswego continues to be a customer.
- The interim IGA allows Portland to continue to invest in capital improvements to maintain the minimum operational viability of the existing plant and to comply with existing permit requirements through the period to execute a Project Agreement.
- There are provisions that ultimately allow either City to exit until a Project Agreement is signed.

Future IGA and Project Agreement

If the project looks like it will be given a "greenlight" two years from now, then the City of Lake Oswego and Portland will also consider a new Future IGA at that time so as to replace the existing 1984 IGA. The future IGA will have the following perimeters:

- Portland will sell the 13.9 acres of property on which the Existing Plant is located to Lake Oswego for one dollar.
- If Lake Oswego demolishes the Existing Plant, Lake Oswego will pay all costs related to it, including environmental site cleanup costs.
- Portland will transfer to Lake Oswego the lease for the outfall to the Willamette River, which is with the Oregon Division of State Lands.
- The Project Agreement (PA) will cover permitting, financing, operation, maintenance of the new plant for at least 30 years. The PA will also require the P3 to provide adequate risk protections against potential future costs and potential defaults of the P3.
- The new cost share will be based on plant flow utilization between Lake Oswego and Portland.
- The new cost-share arrangement will include all costs allowable under the PA, including, but not limited to, capital improvements, pipe connections, any relocation of the pump station, financing, operations, maintenance, administration, overhead, insurance and security packages, reserve accounts, and all other cost categories set forth in the PA.
- The future IGA will last for 30 years or the duration of the PA (i.e. 32 years) and can be terminated after this period with a 10-years notice.
- On a quarterly basis, Portland will pay Lake Oswego for the cost of treating and disposing of the total volume of wastewater originating from Portland's jurisdiction and there are explicit details on what this means and what is included in this calculation. Most of the details are extracted from the current arrangement between the two cities.
- Both cities will jointly establish obligations for future capital needs in the PA.
- After the future plant has been successfully operated to the satisfaction of DEQ, LO, and Portland, then the existing plant will no longer be maintained or operated.
- The costs and payments attached to the Columbia Boulevard Wastewater Treatment Plant, which currently is used to treat biosolids, will be addressed in the final IGA. The P3 teams will be asked to address biosolid treatment in Foothills as part of the RFP process and both cities will decide if it is more advantageous to treat biosolids on-site or at the Columbia Boulevard Wastewater Treatment Plant.
- Portland will take actions to pay off all outstanding bonds upon transfer of the existing plant to Lake Oswego after the new plant is operation.
- The future IGA will also include some indemnification clauses from Lake Oswego to Portland.

Replacement IGA if P3 Project is Not Approved

If either city decides not to give a "greenlight" decision in about 2 years from now, then the existing 1984 IGA will remain in place. Both cities will agree to negotiate in good faith toward a replacement IGA that will have a longer term than the 1984 IGA. The replacement IGA will, at a minimum, have the City of Portland retain ownership of the existing plant, have Portland proceed with capital efforts, have LO continue to work with Portland to meet development code standards for current and future needs, and have Portland continue to provide periodic updates of facility needs with a target of doing so every 10-years.

- As it stands now, either city can elect to cancel the current 1984 agreement as early as September 26, 2034 as long as a 5-year notice is given on September 26, 2029. However, if both cities mutually agree to cancel and replace it earlier, then the current IGA allows for that to happen.

FISCAL IMPACT

As of September 7, 2020, the City has spent $272,000 of the $450,000 that was authorized by the City Council so as to develop the interim IGA, complete the RFP package, and negotiate a Predevelopment Agreement. The remaining $178,000 will be utilized to support the project up to the March 16, 2021 Council Meeting when the Council will be asked to authorize the City to enter into a Predevelopment Services Agreement with the selected Public-Private Partnership Team.

Consultant	Function	Total Contract Amount	Total Spent Since Council's $450,000 Authorization (as of 9-7-2020)	Total Spent Since the Start of Project
Jones Lang LaSalle: Jill Jamieson (Contract has ended)	Owner's Rep & Financing Advisor	$100,000	$16,000	$88,000
Illuminati Infrastructure Advisors: Jill Jamieson	Owner's Rep & Financing Advisor	$110,000	$12,000	$12,000
West Coast Exchange	Supplemental Owner's Rep	$10,000	$0	$4,000
Carollo Engineers	Technical Advisor	$88,000	$29,000	$50,000
Hawkins, Delafield & McCoy	Legal Advisor	$594,000	$207,000	$247,000
Argent Management (Completed)	2018 Feasibility Study	$150,000	$0	$150,000
FCS Consulting	Wastewater Rate Model Update	$8,000	$8,000	$8,000
	Total	**$1,017,000**	**$272,000**	**$559,000**

RECOMMENDATION

Adopt Resolution 20-30, which authorizes the City Manager to sign an Interim Intergovernmental Agreement (IGA) with the City of Portland. In addition, direct staff to release a Request for Proposal (RFP) package to seek proposals from 3 shortlisted Public-Private Partnership (P3) Bidders for services to Design, Build, Finance, Operate and Maintain (DFOM) a New Wastewater Treatment Plant.

ATTACHMENTS

1. Resolution 20-30, with Exhibit A, Interim Intergovernmental Agreement with the City of Portland
2. July 14, 2020 Council Report

RESOLUTION 20-30

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LAKE OSWEGO AUTHORIZING THE CITY MANAGER TO SIGN AN INTERIM INTERGOVERNMENTAL AGREEMENT WITH THE CITY OF PORTLAND TO COOPERATE ON THE POTENTIAL REPLACEMENT OF THE TRYON CREEK WASTEWATER TREATMENT PLANT VIA A PUBLIC-PRIVATE PARTNERSHIP

WHEREAS, The City of Portland currently owns and operates the Tryon Creek Wastewater Treatment Plant (the "TCWTP"), located within the City of Lake Oswego, which provides wastewater treatment services to City of Lake Oswego and City of Portland residents; and

WHEREAS, Costs and responsibilities relating to operation and maintenance of the TCTWP are governed under an existing Intergovernmental Agreement executed in 1984 between the City of Lake Oswego and the City of Portland; and

WHEREAS, the City of Lake Oswego has been working cooperatively with the City of Portland on assessing options to upgrade or replace the TCWTP; and

WHEREAS, the City of Lake Oswego and City of Portland have identified a potential option for a public-private partnership to design, build, finance, operate, and maintain ("DBFOM") a new treatment plant within the City of Lake Oswego. The objective is for replacement of the TCWTP to be, at minimum, cost neutral to Lake Oswego ratepayers and to provide other cost efficiencies and environmental benefits; and

WHEREAS, the City Council has expressed its interest in and support for a partnership with the City of Portland to proceed with a competitive proposal process for a potential DBFOM public-private partnership arrangement.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Lake Oswego that:

Section 1. The City Manager is authorized to execute an interim Intergovernmental Agreement with the City of Portland in a form substantially similar to Exhibit A to this ordinance.

Section 2. Effective Date. This Resolution shall take effect upon passage.

Considered and enacted at the regular meeting of the City Council of the City of Lake Oswego on the 15th day of September, 2020.

AYES:

NOES:

ABSTAIN:

EXCUSED:

_____

Kent Studebaker, Mayor

ATTEST:

_____

Anne-Marie Simpson, City Recorder

APPROVED AS TO FORM:

_____

David Powell, City Attorney

Tryon Creek Wastewater Treatment Plant
Interim Intergovernmental Agreement

This Interim Intergovernmental Agreement is by and between the City of Lake Oswego ("Lake Oswego") and the City of Portland ("Portland"), is authorized by ORS 190.010, and is effective as of the last date of signature below ("the Effective Date").

Recitals

This agreement is intended to:

A. Establish roles and responsibilities for the procurement process to negotiate, award, and execute a Pre-Development Agreement ("the PDA") between Lake Oswego and a private entity ("the P3") for professional services to locate, design, permit, and plan the development of a new wastewater treatment plant ("the Future Plant") to replace the Portland-owned Tryon Creek Wastewater Treatment Plant ("the Existing Plant");

B. Establish the criteria and process to be used for Lake Oswego and Portland to mutually agree to approve or reject a subsequent Project Agreement ("the PA") between Lake Oswego and the P3 to decommission the Existing Plant, and to design, permit, build, operate, finance, and maintain the Future Plant;

C. Identify and establish certain terms of an intergovernmental agreement ("the Future IGA") between Lake Oswego and Portland, if the parties agree to proceed with the PA and Future Plant, to provide for ongoing treatment and disposal of wastewater and to transfer ownership of the Existing Plant's real estate and improvements; and

D. Establish certain terms for amendment or replacement (collectively, "the Replacement IGA") of the existing 1984 Wholesale Sewage Treatment and Disposal Agreement ("the 1984 IGA") if the parties decide not to proceed with the Future Plant.

Agreement

1. The P3 Procurement. Portland will support a request for proposals for a P3 selection ("the P3 RFP") under the following conditions:

    a. Lake Oswego, at its expense unless otherwise indicated in this sub-section 1.a, will carry out the P3 procurement process from the P3 RFP through completion of the PDA, including but not limited to the following process steps and deliverables:

i. Lake Oswego and its consultants will prepare the P3 RFP.

ii. Portland, at its expense, will provide human resources, data, documents, and support to assist in P3 RFP development.

iii. Lake Oswego will issue the P3 RFP, respond to proposer questions, and receive proposals.

iv. A selection committee, including two members from Portland, will evaluate proposals and select the P3. The costs of each party's participation on the committee will be borne by that party.

v. Lake Oswego will negotiate and execute a PDA with the selected proposer following successful completion of negotiations and approval of the PDA by the Lake Oswego City Council.

vi. Lake Oswego will administer the PDA and direct the work of the P3.

vii. Lake Oswego will provide Portland with review copies of PDA deliverables.

viii. Portland, at its expense, will provide human resources, data, documents, and review of PDA deliverables to support to Lake Oswego and the P3.

ix. Lake Oswego will provide periodic updates to Portland throughout the process to confirm agreement within the terms and conditions identified in this term sheet.

b. Portland and Lake Oswego will collaborate in a process to review the PA proposal to determine whether to proceed with the PA:

i. Lake Oswego will provide estimates, to both parties' written satisfaction, of projected cost impacts to Portland and Lake Oswego, including but not limited to a cost-share structure and the cash flow expected to result from the PA, subject to terms and limitations described in this term sheet.

ii. Lake Oswego agrees to work in good faith with the Oregon Department of Environmental Quality ("DEQ") to obtain DEQ's confirmation that the Future Plant will meet all applicable DEQ requirements, and to confirm that DEQ will issue an outfall permit to Lake Oswego, effective when the P3 takes over operation of the Existing Plant. Lake Oswego agrees to submit all requested permit-related documentation to DEQ and will provide all permit-related information to Portland upon request. Portland

will provide Lake Oswego and DEQ with any required permit-related documents for the Existing Plant.

iii. It is the intent of Portland and Lake Oswego to obtain a PA proposal that each city projects will result in treatment costs that do not exceed the costs each city estimates it would incur if Portland continues to operate and maintain the Existing Plant under the 1984 IGA.

c. If Lake Oswego declines to proceed further with the P3 procurement process, declines to proceed with development of the PDA, terminates the PDA, or declines to proceed with development of a PA with the P3, the parties will proceed as follows ("the Exit Option"):

i. Portland will retain ownership of the Existing Plant and will provide wastewater treatment and disposal services under the terms of the 1984 IGA, or any Replacement IGA agreed to by the parties; and

ii. Lake Oswego and Portland will each pay 50% of any payments due to the P3 under the PDA, plus Portland will pay or reimburse Lake Oswego for 50% of all costs Lake Oswego has incurred after the date of this interim IGA for the activities described in Section 1, including without limitation all reasonable consultant, design and outside legal costs. If this Exit Option applies under the terms of Subsection 1.d below, Portland will also pay or reimburse Lake Oswego for 50% of all costs Lake Oswego has incurred in the negotiation and development of a PA with the P3, also including all reasonable consultant, design and outside legal costs.

d. If Lake Oswego decides to proceed with the PA and develop the Future Plant, Lake Oswego will request Portland's written concurrence that the Future Plant is feasible.

i. If Portland agrees that the Future Plant is feasible, Portland and Lake Oswego will negotiate the Future IGA as provided in Section 2 and Lake Oswego will negotiate the PA with the P3. The PA will provide that the P3 will decommission the existing plant, develop the Future Plant and provide wastewater treatment and disposal services for a period of at least 30 years. Lake Oswego will submit the Future IGA and the negotiated PA to the Lake Oswego City Council for approval.

1) If the Lake Oswego City Council does not approve the Future IGA and the negotiated PA, the Exit Option, as defined in section 1.c above, will apply.

2) If the Lake Oswego City Council approves the Future IGA and the PA, both documents will be submitted to the Portland City Council for approval.

a) If the Portland City Council does not approve the Future IGA or does not approve the terms of the PA, the Exit Option, as defined in section 1.c above, will apply.

b) If the Portland City Council approves the Future IGA, and approves the terms of the PA:

i. Lake Oswego and Portland will execute the Future IGA;

ii. Lake Oswego will execute the PA with the P3; and

iii. Portland will continue to operate and maintain the Existing Plant under the executed Future IGA until the 1984 IGA Termination Date, as defined in section 2.i below.

ii. If Portland disagrees with Lake Oswego's determination of feasibility, Portland will notify Lake Oswego in writing, and the Exit Option, as defined in section 1.c above, will apply.

iii. If, after using their best efforts in good faith to do so, the parties fail to successfully negotiate the Future IGA, the Exit Option, as defined in section 1.c above, will apply.

iv. If Lake Oswego is unsuccessful in negotiating a PA with the P3, the Exit Option, as defined in section 1.c above, will apply.

e. During the development and execution of the P3 RFP and the PDA and through execution of the PA:

i. Portland will continue to invest in capital improvements ("the Interim Projects") to maintain the minimum operational viability of the Existing Plant and to comply with its permit requirements;

ii. Portland will permit the P3 proposers and the selected P3 entity access to the Tryon Creek plant properties; and

iii. Portland and Lake Oswego will work together to identify the necessary permit transfers, easements and other implementation measures needed for

the access to, operation of, and decommissioning of the Existing Plant by the P3, for incorporation into the Future IGA.

2. The Future IGA. If both parties determine that the Future Plant is feasible under section 1.d above, the parties will negotiate the Future IGA, which will include, at a minimum, the following terms and conditions:

    a. The PA will require the P3 to decommission the Existing Plant, and to design and construct the Future Plant to treat and dispose of the minimum quantity of wastewater per day from each of the parties that is stated in the RFP. The parties will agree to the minimum quantities before the RFP is issued.

    b. The PA will require the P3 to permit, finance, operate, and maintain the Future Plant for at least 30 years from the date of execution of the PA.

    c. The PA will also require the P3 to provide adequate risk protection against (A) increased costs related to the Existing Plant if the P3 defaults prior to the Future Plant being placed into operation and (B) increased costs of design, build, finance, operate and maintain programs for the Future Plant if the P3 defaults prior to expiration of the PA.

    d. The terms of the Future IGA for wastewater treatment and disposal services will be the longer of 30 years or the duration of the PA, after which either party may terminate the Future IGA with 10 years' notice.

    e. The new cost-share arrangement will be based on plant flow utilization (total annual volume of flow treated) between Lake Oswego and Portland for all costs allowable under the PA, including, but not limited to, decommissioning the Existing Plant, capital improvements, pipe connections, any relocation of the pump station, financing, operations, maintenance, administration, overhead, insurance and security packages, reserve accounts, and all other cost categories set forth in the PA, together with all costs Lake Oswego has incurred after the date of this Interim IGA for the activities described in Section 1 and for the negotiation and development of the PA with the P3, including, without limitation all consultant, design and outside legal costs.

    f. Portland will provide Lake Oswego, for inclusion in the PA as P3 project costs, a description, including cost estimates, of any necessary relocation, to Portland's standards, of collection system pipelines, fiber optic communications infrastructure, and any necessary modifications to the Tryon Creek Pump Station that are required in order to accommodate development and operation of the Future Plant. Portland will be responsible for the costs of any relocations or modifications not so described and included in the PA.

g. Lake Oswego will bill Portland quarterly for the cost of treating and disposing of the total volume of wastewater originating in Portland's jurisdiction ("Portland's Quarterly Costs").

   i. Portland's Quarterly Costs will be established in the Future IGA based upon flow volumes, subject to a minimum quarterly amount that will be agreed to by the parties as part of the Future IGA terms. Portland's Quarterly Costs may only include:

      1) The full costs of operations, maintenance, administration, and overhead;

      2) The depreciation of, and return on investment for, all assets of the Future Plant that are financed and owned by Lake Oswego; and

      3) The actual costs to Lake Oswego under the PA for the design, construction, and financing, of the Future Plant, and costs incurred by Lake Oswego for purchasing or leasing real estate, plus all costs described in section 2.e other than operations, maintenance, administration and overhead.

   ii. Portland's Quarterly Costs for the items in section 2.g.i.1) will be based upon actual flow volumes. Portland's Quarterly Costs for the items in sections 2.g.i.2) and 2.g.i.3) will be based upon the flow volume projections determined by the parties at the time the Future IGA is negotiated.

   iii. For the avoidance of doubt, and in addition to all other costs not listed in section 2.g.i, Portland's Quarterly Costs may not include:

      1) Return on investment for the acquisition of real property or easements;
      2) Costs not contemplated by the PA or the Future IGA, unless agreed to by Portland in writing.

h. The parties will jointly establish their obligations for additions to or replacement of facilities and will provide projections of future needs and expansion of treatment capacity, infiltration and inflow, industrial source control and pretreatment, and allocations of treatment plant capacity. The parties will jointly prepare an updated facilities plan approximately every 10 years, in accordance with the procedures set forth in the PA.

i. Following a period of successful operation of the Future Plant to the written satisfaction of Portland, Lake Oswego, and DEQ, the Existing Plant will no longer be maintained or operated for wastewater treatment and the 1984 IGA will be terminated. Within 90 days of that date of termination ("the 1984 IGA Termination Date"):

   i. Portland will present Lake Oswego with a final bill for service under the 1984 IGA. Lake Oswego will pay the bill in full or will enter into a separate payment agreement with Portland. The bill will include any balances due from Lake Oswego under the Existing IGA (based upon the undepreciated value of assets at the Existing Plant) on prior capital investments on the 1984 IGA Termination Date, except for the assets allocated for the percent share of treatment and disposal of biosolids generated at the Existing Plant ("the CBWTP Solids Assets"). The issue of whether and how any amount will be paid for the CBWTP Solids Assets will be addressed in the terms of the Future IGA.

   ii. Lake Oswego will pay its share of costs (as calculated under the 1984 IGA) of all capital projects for the Existing Plant that are only partially completed as of the effective date of the Replacement IGA, including the Interim Projects, and that did not result in completed assets meeting Portland's policy for capitalizing assets and therefore are not reflected in the Existing IGA's cost allocation calculation ("the Partially-Completed Asset Costs"). The issue of whether Partially-Completed Asset Costs will include the CBWP Solids Assets will be addressed in the terms of the Future IGA.

   iii. Portland will take actions to pay off all outstanding bonds that, upon transfer of the Existing Plant to Lake Oswego, will no longer finance Portland-owned assets. As of this writing, the estimated cost to pay off those outstanding bonds is $6 million.

j. Final Disposition of Existing Plant Real Estate and Improvements.

   i. Portland will transfer all permits, easements and perform all other conveyances necessary to allow access to, operation of, and demolition of the Existing Plant by the P3.

   ii. Portland will convey the real property on which the Existing Plant is located ("the Property") to Lake Oswego via warranty deed for $1.00 (one dollar). The Property is comprised of the following tax lots:

      - 21E02CB01300 (10.45 acres)
      - 21E02CB01400 (2.37 acres)

- 21E02CB00900 (0.71 acre)
- 21E02CB02700 (0.15 acre)
- 21E02CB02800 (0.20 acre)

iii. Portland will convey to Lake Oswego, with no warranty, all assets and materials located at the Existing Plant or necessary for the operation of the Existing Plant, regardless of location. Portland will also convey copies of all relevant records.

iv. If Lake Oswego demolishes the Existing Plant, Lake Oswego will pay all costs related thereto, including all costs of environmental site cleanup.

v. Lake Oswego will grant perpetual easements to Portland on the Property for the operation, maintenance, and future replacement of Portland's collection system pipelines, fiber optic communications infrastructure, and the Tryon Creek Pump Station.

vi. Portland will transfer to Lake Oswego the Oregon Division of State Lands lease for the outfall to the Willamette River.

vii. Upon removal of current structures, any future use by Lake Oswego of properties previously owned by Portland will comply with then-current environmental regulations, including required setbacks from natural areas.

k. The Future IGA may be amended by mutually acceptable written amendment for any reason.

l. The Future IGA will provide that, except to the extent caused by Portland's negligence or willful misconduct, Lake Oswego will indemnify, defend, and hold Portland harmless from and against all claims arising from or related to the negligent acts or omissions, or the willful misconduct, of Lake Oswego and its consultants, contractors, agents, and private partners in their ownership, operation, or maintenance of the Future Plant, as applicable, and any assets or materials associated therewith, and against all liability arising from sanitary sewer overflows caused by a failure of the Future Plant to satisfy the Minimum Treatment Quantity.

3. The Replacement IGA. If the parties agree that the Future Plant is not feasible, or if either city council does not approve the Future IGA or the PA, the parties will continue to operate under the terms of the 1984 IGA. The parties will negotiate in good faith toward a replacement IGA having a term beyond that of the 1984 IGA, with, at a minimum, the terms and conditions provided in this section, as applicable:

a. The Replacement IGA may be modified by mutually acceptable written amendment for any reason.

b. The Replacement IGA will include the retention of ownership of the Existing Plant by Portland, with the following assumptions:

   i. Portland will proceed with planning efforts and capital reinvestments at the Existing Plant.

   ii. Lake Oswego will continue to work with Portland to adopt development standards for the existing plant to make the Existing Plant an allowed use under both current and future plant zoning under the Lake Oswego Development Code.

   iii. Portland will provide periodic updates of the facilities plan with a target interval of 10 years. The update will include updating flow and load projections, permit requirements, etc.

4. Counterparts. This agreement may be executed in one or more counterparts, including by electronic means, and all such counterparts will comprise one and the same agreement.

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For the City of Lake Oswego:	For the City of Portland:
_____	_____
Signature	Signature
_____	_____
Name	Name
_____	_____
Title	Title
_____	_____
Date	Date
APPROVAL AS TO FORM	APPROVAL AS TO FORM
_____	_____
City Attorney	City Attorney

Subject: Study Session on the Public-Private Partnership (P3) Project to Build, Design, Finance, Operate, and Maintain (DBFOM) a New Wastewater Treatment Plant in the Foothills Area.	
Meeting Date: July 14, 2020	**Staff Member:** Anthony Hooper, Deputy City Manager **Department:** City Manager's Office
Action Required ☐ Motion ☐ Public Hearing ☐ Ordinance ☐ Resolution ☐ Information Only ☒ Council Direction ☐ Consent Agenda	**Advisory Board/Commission Recommendation** ☐ Approval ☐ Denial ☐ None Forwarded ☒ Not Applicable **Comments:**
Staff Recommendation: Advance the public-private partnership project for a new wastewater treatment plant and direct staff to return to Council on September 1 to consider adopting an intergovernmental agreement with the City of Portland.	
Recommended Language for Motion: N/A	
Project / Issue Relates To: ☒Council Goals/Priorities ☐Adopted Master Plan(s) ☐Not Applicable	

ISSUE BEFORE COUNCIL

Decide whether to keep moving forward on investigating whether it is in the City's interest to build a brand new wastewater treatment plant that is ultimately owned by Lake Oswego through a P3 team or have Portland proceed to invest money to meet environmental regulation requirements by upgrading the existing Tryon Creek Wastewater Treatment plant that is owned by the City of Portland.

EXECUTIVE SUMMARY

The decision as to whether to move forward with a Public-Private Partnership (P3) and build a brand new wastewater treatment plant (WWTP or plant) is complex, nuanced, and has many interlocking pieces. Staff from Portland and Lake Oswego believe it is in both cities' interest to

continue to explore this project because of the potential to save both agencies money over the life of the new plant and to deliver a higher quality, more environmentally responsible service.

There are three shortlisted teams that have qualified to respond to a RFP, which are shown in Attachment 1. We shortlisted these teams in May 2019 under the project perimeters that they would design, build, finance, operate, and maintain a state-of-the-art wastewater treatment plant that would be built in the Foothills area. All three teams have confirmed that they are still interested in the project.

The City has received financial information from the City of Portland, which allowed us to contract with the FCS group to complete a wastewater rate analysis. Based on their analysis, wastewater rates will need to be increased by 3.9% per year as opposed to 3% in order to account for the increase in payment schedule for wastewater treatment at Portland's Tryon Creek plant when factoring in upcoming and future capital upgrades. The rates for the P3 project will need to be no more than 3.9% to be considered a financially viable project. Figure 1 is included below to provide a detailed look at how much a typical resident would pay for sewer service, on a monthly basis, under the previous 3% annual rate increase assumption as compared to the new proposed 3.9% annual rate. For clarification purposes, a typical monthly sewer fee is based on a single-family home that uses 8 centum cubic feet (CCF) of use with one CCF being equal to 748 gallons of water. Also included is figure 2, which shows the same information as figure 1, but on an annual basis.

Figure 1: **Monthly Sewer Fee for Typical Resident by Comparing 3% and 3.9% Annual Increases**

Monthly Sewer Bill	Baseline: FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32	FY 32-33	FY 33-34	FY 34-35	FY 35-36	15-Year Average
Rate Increase	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Previous Sewer Rate Forecast for Typical Resident	$76.93	$79.24	$81.62	$84.06	$86.59	$89.18	$91.86	$94.61	$97.45	$100.38	$103.39	$106.49	$109.68	$112.97	$116.36	$119.85	$98.25
Rate Increase		3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%
New Sewer Rate Forecast for Typical Resident	N/A	$79.93	$83.05	$86.29	$89.65	$93.15	$96.78	$100.56	$104.48	$108.55	$112.78	$117.18	$121.75	$126.50	$131.44	$136.56	$105.91
Difference		$0.69	$1.43	$2.22	$3.07	$3.97	$4.92	$5.94	$7.02	$8.18	$9.40	$10.69	$12.07	$13.53	$15.07	$16.71	$7.66

Figure 2: **Annual Sewer Fee for Typical Resident by Comparing 3% and 3.9% Annual Increases**

Annual Sewer Bill	Baseline: FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32	FY 32-33	FY 33-34	FY 34-35	FY 35-36	15-Year Average	Cummulative 15-Year Total
Rate Increase	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	N/A
Previous Sewer Rate Forecast for Typical Resident	$923.16	$950.85	$979.38	$1,008.76	$1,039.02	$1,070.20	$1,102.30	$1,135.37	$1,169.43	$1,204.51	$1,240.65	$1,277.87	$1,316.21	$1,355.69	$1,396.36	$1,438.25	$1,178.99	**$17,684.87**
Rate Increase		3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	N/A
New Sewer Rate Forecast for Typical Resident	N/A	$959.16	$996.57	$1,035.44	$1,075.82	$1,117.78	$1,161.37	$1,206.66	$1,253.72	$1,302.62	$1,353.42	$1,406.20	$1,461.04	$1,518.03	$1,577.23	$1,638.74	$1,270.92	**$20,334.72**
Difference		$8.31	$17.19	$26.68	$36.79	$47.58	$59.07	$71.29	$84.29	$98.10	$112.77	$128.33	$144.84	$162.33	$180.87	$200.49	$91.93	**$2,649.85**

Since your last meeting, City staff has been negotiating toward an interim intergovernmental agreement (IGA) with the City of Portland. The resulting document will be attached to the report that is scheduled to go to Council on September 1. As an overview, the interim IGA will stipulate what is to be included in a Project Agreement (PA) with a P3 team on a new site (two alternative future WWTP sites are being considered for P3 team investigation of suitability) and what would be needed in a future IGA with Portland when a third and final "go" decision is made in September 2021.

This project does not consider the effect on other Foothills area redevelopment opportunities in its scope, as it is important that the new WWTP make sense on its own. Staff believes this is the case.

BACKGROUND

Over the last two years, the City has explored whether it is more financially beneficial to build a new wastewater treatment plant in the Foothills area through a Public-Private Partnership or to continue the existing partnership with the City of Portland and invest in the existing 1965 wastewater treatment plant to meet necessary DEQ requirements.

The existing plant, strategically located at the confluence of Tryon Creek and the Willamette River, was constructed in 1964 and expanded in 1976. The plant is owned by the City of Portland and operated by the Portland Bureau of Environmental Services (BES). Currently, wastewater treatment operations and maintenance costs are split between Portland and Lake Oswego.

Under the existing 1984 intergovernmental agreement (IGA), the City of Lake Oswego and Portland share the costs for all future capital upgrades in a 50/50 split. For ongoing operations and maintenance costs, the city pays Portland on a quarterly basis according to the amount of sewage (affluent) that is treated. The amount of sewage treated can fluctuate and can be attributed to things like rain seeping into the ground and infiltrating into cracks in pipes or the amount of irrigation use during the summer. The City of Lake Oswego is typically responsible for 65% to 70% of the total amount of sewage that is treated at the plant whereas the City of Portland accounts for about 30% to 35% of treated sewage.

In November 2017, the City of Lake Oswego and City of Portland were approached by SunCal (a national real estate development company) with some preliminary interest in redeveloping the Foothills area consistent with the adopted 2012 Foothills District Framework Plan and with an alternative replacement plant design for the existing Tryon Creek Wastewater Treatment Plant (TCWTP) that is owned and operated by Portland. The alternative design was proposed to fully enclose the treatment plant area, reduce the facility's overall (upgraded) footprint, and result in higher water quality that is discharged into the Willamette River. A high-level study commissioned by Lake Oswego looked at the technical and financial feasibility of a new plant. The study found that a new replacement plant may cost the same or less than upgrading the existing plant.

The City Council directed staff to work with Portland to amend the intergovernmental agreement (IGA) on wastewater treatment and develop a process for a public- private partnership for design, construction, and operation of a new wastewater treatment plant.

In conjunction with the efforts to amend the IGA, during the December 18, 2018 City Council meeting, City Council adopted resolution 18-55, which authorized staff to move toward the use of a Design, Build, Finance, Operate and Maintain (DBFOM) alternative procurement method rather than the standard design, bid, build method for construction of a new wastewater treatment plant. The alternative procurement method would include a competitive process through a Request for Qualifications (RFQ) and Request for Proposals (RFP).

Staff returned to Council for a study session on March 19, 2019 to provide for a project update and an opportunity for Council discussion prior the RFQ being published. The study session presentation was for informational purposes only and Council instructed staff to keep going on this project.

The RFQ, closed on April 9, 2019, resulted in staff selecting three viable teams of firms as based on the criteria outlined in the RFQ.

The Council last discussed this on January 21, 2020. At that meeting Council authorized staff to spend $450,000 in consulting services to move forward with releasing a Request for Proposal (RFP) package to seek a public-private partnership to design, build, finance, operate and maintain a new wastewater treatment plant in lieu of upgrading the existing Tryon Creek Wastewater Treatment Plant (TCWTP) and instructed staff to develop an interim IGA with the City of Portland. Individual Councilors also had a number of specific questions for staff, and the answers to those questions are covered in this Council report and in its attachments.

Figure 3 shows a comparison between the P3 project to build a new plant and the requirement to upgrade the existing plant. Figure 4 outlines the past actions that have been taken over the last two years with the last Council action in bold.

Figure 3: New vs. Existing Overview

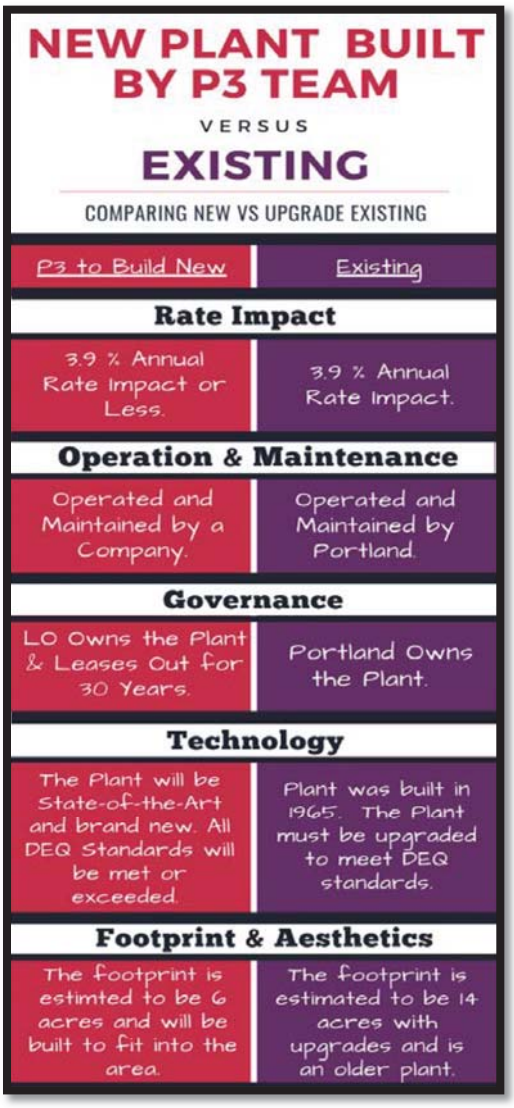


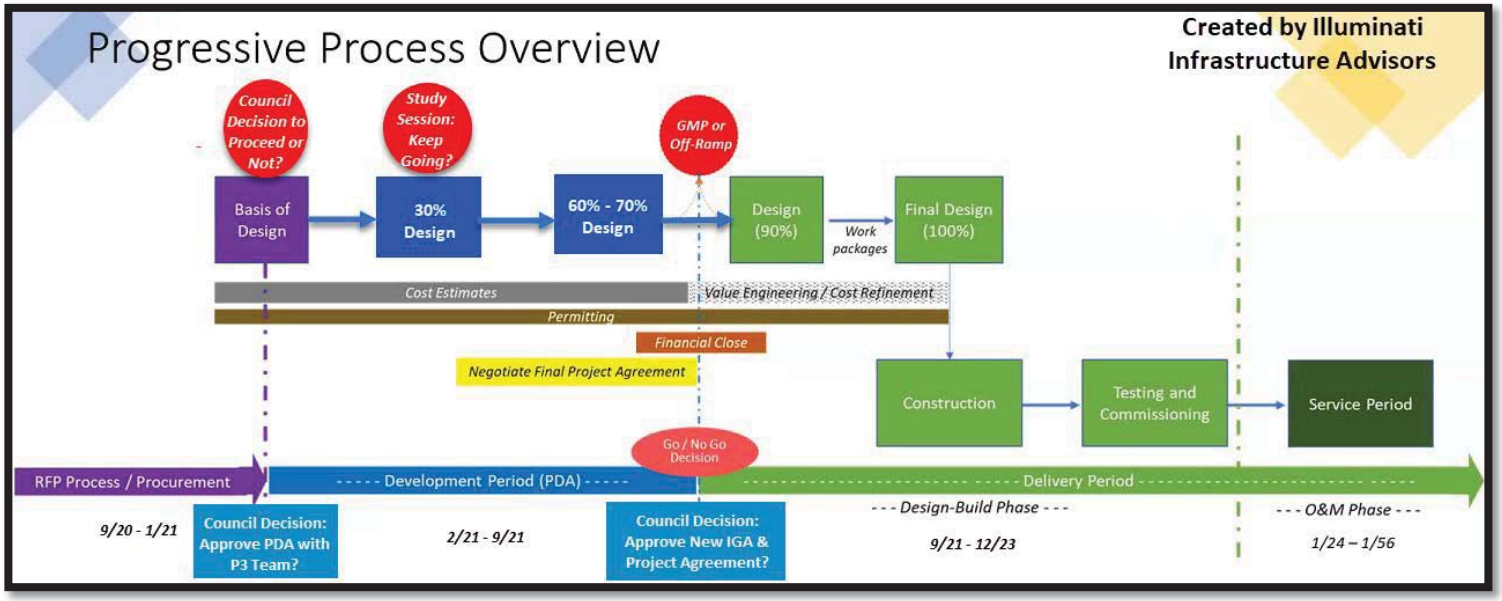
Figure 4: Timeline for Past Actions

#	Action	Date
1	Feasibility Study Completed.	June 2018
2	Council Authorized P3 Procurement Process.	Dec. 2018
3	Request for Qualifications (RFQ) was Released.	Feb. 2019
4	Council Study Session.	March 2019
5	Council Approved a Contract for Legal Services.	May 2019
6	Three World-class P3 Teams were Shortlisted.	May 2019
7	City of Portland Places a Hold on Upgrading the Existing Plant.	May 2019
8	**Council Authorizes $450,000 in Consulting to Develop RFP.**	**January 2020**
9	FCS Completed Wastewater Fund Rate Study	June 2020
10	Interim IGA in Final Stage of Completion	July 2020

The City's primary objectives in delivering the Project are to:

- Keep costs at a level equal to or below the cost of upgrading the TCWTP.
- Maximize financial stewardship by deferring the upfront financial outlays associated with the Project, instead tying payments to performance over the life cycle of the new plant.
- Optimize risk transfer to the private developer.
- Obtain a reliable plant design that is more compact, requiring a smaller footprint, and that would be a better neighbor to the existing and future development through odor control and a more visually appealing design.
- Achieve the earliest date of operations that is consistent with reliable and high-quality design and construction.
- Achieve reliable operations and effective maintenance.
- Minimize life cycle costs, consistent with the above objectives.

Figure 5: Visual of the P3 Project Timeline and Process



Overview of Upcoming Milestones

- Ask the Council to approve the interim IGA with the City of Portland on September 1.
- The Portland City Council is anticipated to consider approving the interim IGA at a first reading on August 26 and a second reading on September 2.
- Release the RFP to the three shortlisted P3 teams on September 3 pending approvals from the Council and Portland City Council.
- Select the highest scoring P3 team and negotiate a Predevelopment Agreement (PDA) with the selected P3 team by the end of January 2021.
- Present to Lake Oswego City Council in February 2021 a request to authorize the PDA. If the Council votes no, then the Council can cancel the project. If the Council votes yes at this first

"go / no go" point, then selected P3 team begins design of new plant and related infrastructure (i.e. connecting pipes and pump station needs).

- P3 team expected to complete design to a 30 percent level in summer of 2021. Council reviews design and information for the second "go / no go" decision.
- Council makes a third and final "go/no go" decision in September 2021 by authorizing (or not) a Project Agreement (PA) with the selected P3 team and approval of a new IGA with Portland to replace the existing 1984 IGA. At this point, the design for the new plant will be at the 60% - 70% level and the P3 team will provide a Guaranteed Maximum Price (GMP) / Firm Fixed Price (FFP) for the project. The Portland City Council will also be asked to approve both the PA and future IGA. If either city decides not to approve, then the project will be canceled. If the Lake Oswego and Portland Councils decide to proceed, then this third and final "go / no go" decision is made and the P3 team, per the PA, will proceed to fully complete the design, finalize real estate purchases, obtain land use approval and permitting authorizations, and start construction.
- The P3 team is expected to complete construction, testing, and commissioning of the new plant at the end of 2023 with the operations and maintenance (O&M) period beginning by the P3 team in 2024 and continuing for 30 to 32 years.
- Decommissioning of the existing plant and any necessary remediation would occur approximately a year after the new plant begins operation, and disposition of the real property occurs per the future IGA.

DISCUSSION

At the Lake Oswego City Council meeting on January 21, 2020, three specific deliverables were requested:

1) Complete a rate study for the Wastewater Fund.
2) Provide a discussion on the pros and cons of hiring a company vs. hiring staff to operate and maintain the new plant.
3) Provide information on public vs. private financing.

Rate Study

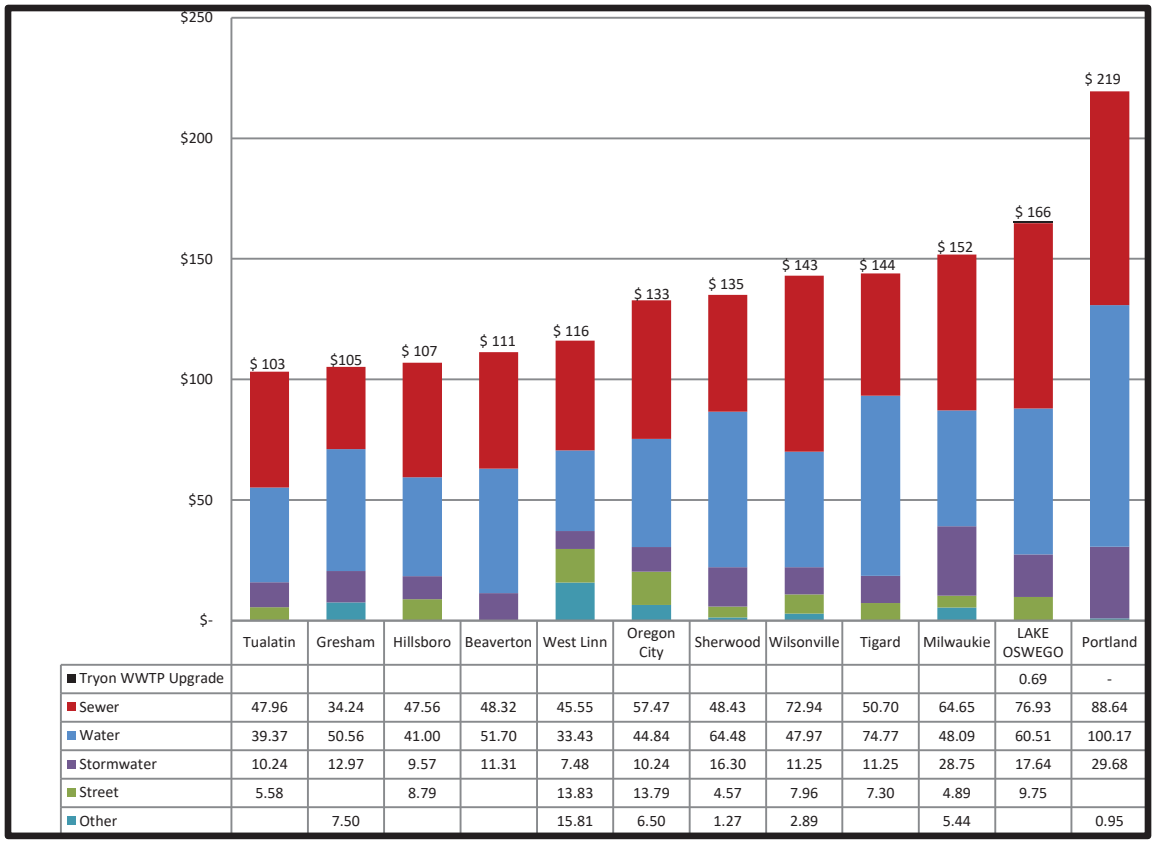
In May, Portland provided staff with an updated payment schedule on what Lake Oswego's annual payments would need to be per year over the next 30 years to pay for the upcoming capital investments required to meet anticipated DEQ requirements for the existing plant, as well as an estimate of ongoing O&M and future capital costs. FCS Group updated the City's Wastewater Fund model based on Portland' updated payment schedule and estimated costs.

Under previous rate assumptions, the wastewater rates were anticipated to be increased by 3.0% per year for the indefinite future to cover capital and maintenance costs and to keep up with inflation. Based upon Portland's updated estimate of capital costs for Plant upgrades and maintenance costs, FCS Group concluded rates would instead need to be increased by an additional 0.9%, to 3.9% per year for the next 15 years. As a reference point, if the increase of 0.9% were

applied to the current year, then the marginal impact of the Plant upgrade would equate, for an average residential statement, to an additional $0.69 per month as shown in the table that compares the utility bill of neighboring cities (Figure 6). As a result of compounding, the 0.9% ends up becoming $16.71 per month more in wastewater charges in FY 2035-36 for a typical residential statement. In terms of overall impact, the 0.9% annual differential has a total cumulative cost of $2,649.85 to the typical single-family home at the end of the 15-year period, which is the cost differential for every month starting in July 2021 until the end of June 2036.

Currently, the typical monthly residential statement for the entire utilty bill is $164.83. Of this total, $76.93 per month is for sewer only. Figure 6 below shows the comparison of utility bills between 11 neighboring cities. The table shows that Lake Oswego has the second highest utility bill when compared to the 11 other cities. The $0.69 additional monthly increase is included in the table for illustrative purposes only and is not actually proposed for this year. This increase would bring the monthly total to $165.52 if it were applied this year. The 0.9% increase to wastewater rates will likely be proposed to be included in the Master Fees & Charges updates that will come to the Council in late fall, with the increase slated to begin on July 1, 2021. Staff recommends that the next wastewater fee rate increase be 3.9% even if we proceed with a P3 team for a new plant. If Council elects not to continue with the P3 project, then staff would still recommend the next wastewater fee rate increase be 3.9% to account for the upgrades to the existing Tryon Creek Plant.

Figure 6: Comparison of Neighboring Cities' Typical Monthly Utility Bills with Tryon Creek Impact



	Tualatin	Gresham	Hillsboro	Beaverton	West Linn	Oregon City	Sherwood	Wilsonville	Tigard	Milwaukie	LAKE OSWEGO	Portland
Tryon WWTP Upgrade											0.69	-
Sewer	47.96	34.24	47.56	48.32	45.55	57.47	48.43	72.94	50.70	64.65	76.93	88.64
Water	39.37	50.56	41.00	51.70	33.43	44.84	64.48	47.97	74.77	48.09	60.51	100.17
Stormwater	10.24	12.97	9.57	11.31	7.48	10.24	16.30	11.25	11.25	28.75	17.64	29.68
Street	5.58		8.79		13.83	13.79	4.57	7.96	7.30	4.89	9.75	
Other		7.50			15.81	6.50	1.27	2.89		5.44		0.95

The P3 method of construcing and operating a new plant would need to be no more than the rate impact than these anticipated rates in order for the project to be viable. In short, the financial expectation for a new Plant under a P3 method would be that the rates resulting for the costs of design, finance, construction, operation and maintenance, with a functional plant at the end of the term, would be not higher than the rates estimated for the existing plant in the same 30 year period. Current financial projection is that this is the case, but until we are further in the P3 process we will not know for certain. We will have a lot more information after issuing the RFP and receiving proposals from the three shortlisted P3 teams in late 2020/early 2021. If the project continues, there will be a lot more rate forecast certainty in September 2021, when we anticipate having 60% - 70% designs completed and Guaranteed Maximum Price (GMP) / Firm Fixed Price (FFP) submitals are received from our selected P3 team.

The Wastewater Fund rate model has been updated annually by the Finance Department; it was last updated by FCS Group in 2014. Most of the same assumptions were carried forward in the 2014 update, with a couple of exceptions:

- There was a $2 million per year assumption for delivery for future capital. In the current CIP, there are $32 million of improvements scheduled between FY 2019-20 and FY 2024-25, which equates to $5.3 million in annual improvements. These numbers were incorporated into this model update. After FY 2024-25, the rate model reflects capital delivery of $2 million per year.

- Wastewater maintenance contracting increased by $500,000 to $600,000 per year starting in FY 2017-18 to meet a significant backlog of maintenance needs, which has caused the O&M budget to be more than double. In addition, one wastewater utility worker position was added back in FY 2017-18 that was previously eliminated in FY 2010-11. The overall Public Works Department's FTE count did not change because there was a rearrangement of positions. These costs were not incorporated into the previous rate model.

- The final major difference between the FCS Group 2014 rate model update and this 2020 update is due to a very favorable change in interest rates. The Finance Director refinanced the debt from the Lake Oswego Interceptor Sewer (LOIS) Project a few years ago to a lower rate, saving millions of dollars in future interest rate payments. This savings has helped mitigate the rise in capital delivery, increases in O&M costs, and the increase in cost from the plant, which helped allow the wastewater rate increase to only be 0.9% per year.

In-House vs. Company Providing O&M Services

At the last Council meeting, Councilor LaMotte requested a financial analysis of removing private operation and maintenance by the P3 team from the scope of the current DBFOM P3 project basis.

Two attachments are provided to respond to the request. Attachment 2 is by our Owner's Representative, Jill Jamieson of Illuminati Infrastructure Advisors. The overview details the value proposition in including operations and maintenance within the scope of the P3 project. Attachment 3 is by Carollo Engineering, our engineering consultant. This provides an overview of

the operations and maintenance approaches generally applied by the private sector industry under P3 project delivery methods. These two attachments are as specific as we can get at this stage, given that the City has not received proposals from the shortlisted firms and does not know what type of plant will ultimately be proposed.

Public vs. Private Financing

Private financing is another key life-cycle element to making the overall P3 project viable. Attachment 4, provided by Jill Jamieson of Illuminati Infrastructure Advisors, details the benefits of private financing.

Given that proposals from the P3 teams have not yet been received, we do not know what kind of private financing they are offering, and it is not possible to quantify at this time what the dollar difference is between private and public private financing without more information. We will have that information as the project progresses, before the last "go / no go" decision point and entering into a PA with the P3 team.

Interim IGA with City of Portland

The interim IGA negotiations are not completed. Here are the City's key goals in the negotiation:

- The proposed interim IGA will not supersede the existing 1984 IGA with Portland. Instead, the interim IGA is intended to give the three shortlisted P3 teams' assurances that there is a shared understanding between the two cities on the roles, responsibilities, process criteria, and terms needed to get to the third "go / no go" decision on the PA and the future IGA in September 2021.

- The interim IGA will contain the terms should the cities decide to walk away from this project at any time up to the third and final "go / no go" decision, which is about 14 months away. If a "go" decision is made then, the future IGA will then replace the existing 1984 IGA. It is expected that the interim IGA will establish certain parameters for the PA with the P3 team, which will also be considered by the Councils at the same time that the future IGA is considered. These terms are meant to govern the work that leads up to both cities getting enough information to decide.

- The interim IGA will also address activities during the RFP Development, Team Selection, and the Predevelopment Agreement period, extending from the signing of the interim IGA all the way to the third and final "go" decision, which, again, is anticipated to be in September 2021. The items in this period include releasing an RFP, selecting the highest-scoring team, entering into a Predevelopment Agreement (PDA) with that team, having the selected team complete between 60% - 70% designs, and having the P3 team submit a price to the cities. One of the overarching themes in the interim IGA for all of this work is the two cities will work collaboratively.

- Finally, there will be terms pertaining to the future IGA and the parameters for a project agreement, which range from cost sharing arrangements to the costs that are allowed to be in the project agreement for the selected P3 team.

Other Important Issues to Consider

Breakage Fees during the Predevelopment Period (PDA)
One issue that needs to be flagged is that the City would be responsible for compensating a P3 team for design work and other studies during the PDA period -- if a "no go" decision cancels the project.

The decision to approve a PDA with the selected P3 team is anticipated to come to the Council in February 2021. The PDA period will last for about 7 months, and during this time the P3 team will be completing design up to the 60% - 70% mark. In addition, the P3 team will be performing due diligence, including pricing. As a result, the P3 team will incur substantial costs.

If Lake Oswego or Portland decides "no go" when we receive the Guaranteed Maximum Price / Firm Fixed Price in September 2021, then under the anticipated RFP, the City (as the soliciting entity) will be responsible to the P3 team for a substantial amount of the design costs. As a reference point, Carollo Engineering has advised that similar projects had a breakage fees that equate to the $1.75 - $2 million range when adjusting for comparative project size.

As part of the RFP provisions, the proposers will bid on the percentage split for the breakage fee. There is the potential that proposers could offer to take on some of this cost at their risk. The City will know more when we receive proposals toward the end of this year and a "go / no go" decision is made to proceed with a PA with the highest rated P3 proposer.

One last point is that if a "no go" decision is made during the PDA period, how much of the design the P3 partner has completed will affect the amount of the much breakage fee. For example, staff anticipates holding a study session once the P3 team has completed 30% design. This will be a chance for the Council to evaluate the project and make a "go / no go" decision.

The last item to note is that we will know a lot more information when we receive proposals in the late fall.

Decommissioning, Demolition, and Remediation of the Existing Plant after the New One is Built
When the new plant is built, the existing plant will be decommissioned, demolished, and the site remediated from environmental contamination. The issue of what to do with the old plant is currently outside the anticipated P3 scope. This is an issue that Lake Oswego will need to resolve in the future. There is also not a dedicated funding source for this work.

Without knowing the details, such as what kind of development will occupy the land, it is not possible to know what level of remediation is needed. In addition, there are a lot of unknowns on the condition of the existing plant's soil. Eventual sale of the land for potential redevelopment, given that the plant site is located directly adjacent to the Willamette River, Tryon Cove Park, and Foothills Park, will likely cover some or all of the costs of decommissioning and remediation.

Lastly, depending on timing of when this work is done, there is a potential for a funding gap for the decommissioning, demolition, and remediation work of the existing plant and the site that it occupies. There is the potential for overall cost savings by the P3 project in the long-run, and

these cost savings could be allocated toward accomplishing the decommissioning, demolition, and remediation work, but cash flow in near future will be an issue. Other funding mechanisms, such as short-term bridge loans, could be explored to fund the work until the land could be sold. There is a risk that the land could sit or that the right developer doesn't come along for an unknown period and the City could be holding onto a bridge loan for longer than expected. Another option could be to not demolish the plant and remediate the site immediately following decommissioning, and sell the land "as is" to a potential developer. Practically, this could mean that an old plant would stay in the area for some extended period of time. This is a topic that needs further exploration.

Real Estate Options for New Site

Staff is in the preliminary stages of exploring whether options can be obtained for surrounding properties to the existing plant. Since the existing plant needs to remain in operation during construction, and we would like to utilize the existing outfall (which could significantly simplify the permitting process), the replacement plant will need to be very near the existing plant. Also, the farther the new plant is from the old plant, the more the infrastructure costs for connecting the new plant to existing pipelines will increase.

Staff estimates about six acres are needed for the new plant, but this is only an estimate at this time. The area required will be known when proposals are submitted later this year. Staff feels that it would be prudent to secure options to purchase potential alternate sites as soon as possible to give some more certainty to the three shortlisted P3 teams in expending the time, effort and cost in responding to an RFP. As part of the RFP process, the shortlisted P3 teams will identify the preferable primary site. We would look to them for guidance on what combination of properties are needed to meet their projected site needs.

The reason that we are exploring options for more property than what will be needed is to give the proposers flexibility since there are many unknowns relating to floodplain and environment hazard mitigation. These will require studies that will need to be completed by the P3 team during design development. On the other hand, our strategy of securing options on more land than is needed is only viable if the options are affordable and easily obtainable. This may not be the case. If the options are affordable than staff believes it would make sense to secure them earlier than later. If the options are costly, then it may not make sense to secure more options than what we need. If the options are costly and difficult to obtain, then it would make more sense to wait until we have selected a P3 team and to work in tandem to secure option on only the exact acreage that is required.

FISCAL IMPACT

As of July 9, 2020, the City has paid $180,000 of the $450,000 that was authorized by the City Council so as to develop the interim IGA and to complete the RFP package, which is scheduled for release on September 3. If the Council directs staff to keep going on the project, then the remaining $270,000 that is authorized will be spent through the review of submitted proposals and selection of P3 team in the late fall. There is no more consultant time anticipated to be spent on developing or reviewing the interim IGA with the City of Portland.

At the September 1 meeting, staff will ask the Council to authorize an additional $200,000 to help staff negotiate the predevelopment agreement in December and January with the selected team. The primary driver of this cost will be the legal review and negotiation by Hawkins, Delafield, & Wood, which is estimated to be between $75,000 and $150,000. There will also be costs from the other consultants, which will likely be about $50,000 combined. These costs are all within existing approved contracts. The legal costs as outlined above were contained within the contract for Hawkins, Delafield, & Wood that was previously approved by Council in May 2019. In total, there are about $470,000 in costs from what has been billed and paid until the first "go/no go" decision for Council to make at either the first or third meeting in February, 2021. At that point, we will have selected a P3 team, received an idea of the basis of design and project approach, be given a preliminary validation on feasibility, and be provided a lot more information as part of the selected P3 team's proposal.

Figure 7: Consultant Contracts and Payments as of July 9, 2020

Consultant	Function	Total Contract Amounts	Total Billed & Paid Since Council's $450,000 Authorization	Total Billed & Paid Since the Start of Project
Jones Lang LaSalle: Jill Jamieson (Contract has ended)	Owner's Representative & Financing Advisor	$100,000	$16,000	$88,000
Illuminati Infrastructure Advisors: Jill Jamieson	Owner's Representative & Financing Advisor	$110,000	$0	$0
West Coast Exchange	Supplemental Owner's Representative	$10,000	$0	$4,000
Carollo Engineers	Technical Advisor	$88,000	$19,000	$40,000
Hawkins, Delafield & McCoy	Legal Advisor	$594,000	$145,000	$185,000
Argent Management (Completed)	2018 Feasibility Study	$150,000	$0	$150,000
	Total	**$1,052,000**	**$180,000**	**$467,000**

RECOMMENDATION

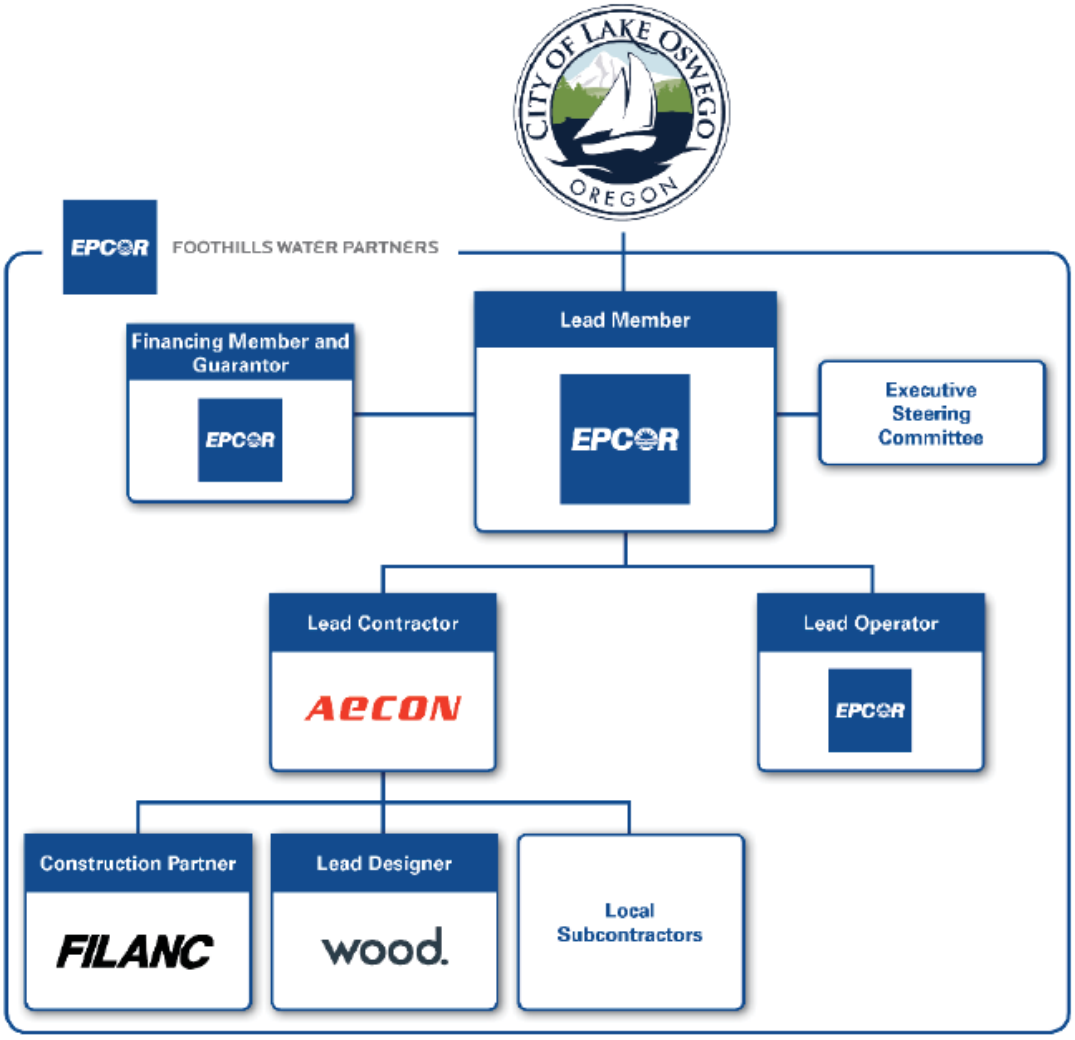
Advance the public-private partnership project for a new wastewater treatment plant and direct staff to return to the Council on September 1 to consider adopting an interim intergovernmental agreement with the City of Portland.

ATTACHMENTS

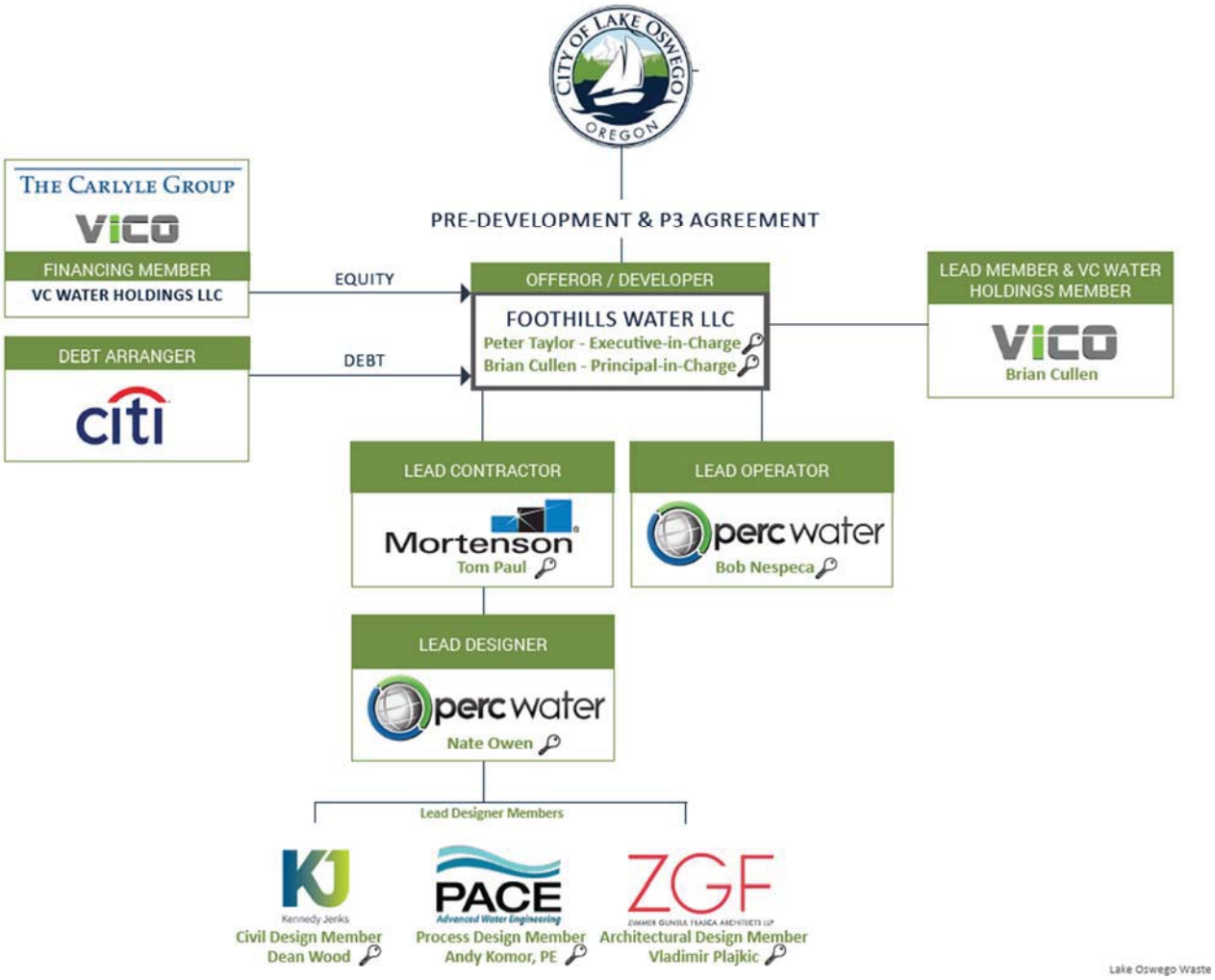
1. Shortlisted Bidders
2. The Value of Life-Cycle Bundling (Jill Jamieson of Illuminati Infrastructure Advisors)
3. Overview of Private Operations and Maintenance Approaches for Water and Wastewater Utilities and Potential Efficiencies (Carollo Engineering)
4. The Value of Private Financing (Jill Jamieson of Illuminati Infrastructure Advisors)

Lake Oswego P3 – Shortlisted Bidders

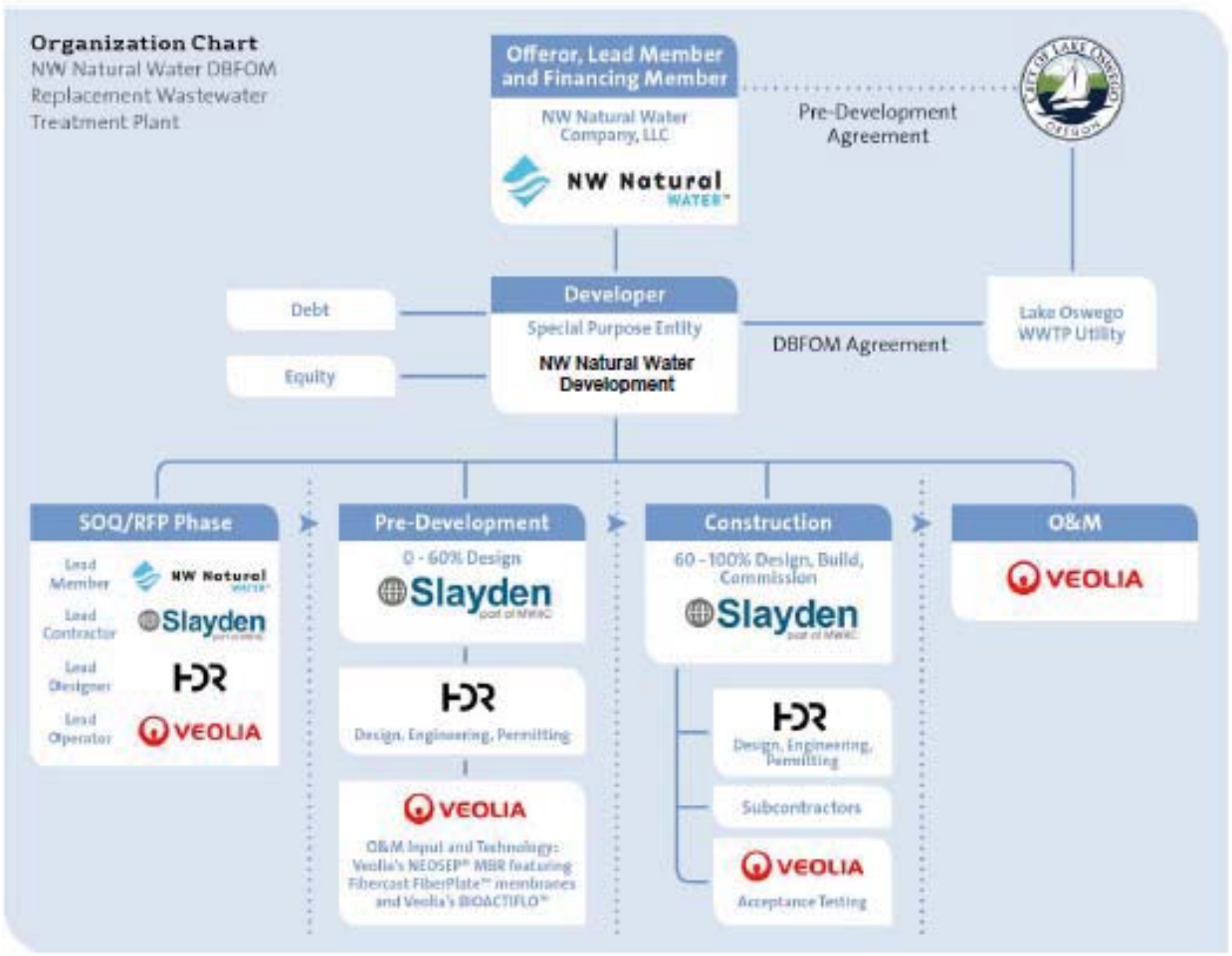
Bidder 1: EPCOR Foothills Partnerships (EFWP)



Bidder 2: Foothills Water, LLC



Bidder 3: NW Natural Water Company



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O&M AS A VALUE DRIVER IN P3

*The **public-private-partnership (P3)** model has been used extensively since the early 1990's to finance and deliver a wide variety of infrastructure projects around the world. While the use of private-sector capital and expertise has helped to deliver many high-quality infrastructure assets, some policy makers have questioned the benefits of transferring O&M and life-cycle asset management responsibilities to a private partner. Although P3 transactions may vary significantly in terms of the transfer of O&M responsibilities transferred, there is an ongoing debate as to whether and to what whether and to what extent the inclusion of operations and maintenance in a P3 agreement drives value for taxpayers.*

P3s do not always make sense, nor does the transfer of operations and maitenance responsibilities to a private partner. Those who assert otherwise are being disingenous. The true value created by inclusion of life-cycle operations and maintenance in a P3 is highly dependent on a number of factors, including the public agency's institutional capacity, technical know-how, budget processes, labor considerations, procurement regulations, etc. Public owners need to consider carefully whether or not efficiencies can be gained by retaining some level of operations and maintenance or whether greater benefits can be achieved by allocating some or all of those responsibilities to a private partner.

P3 transactions need to be carefully and objectively structured to align with a public agency's broader policy objectives. There is no "*best*" approach. Some P3 structures (such as design-build-finance, "*DBF*") do not contemplate shifting any operations or life-cycle obligations; while others (such as design-build-finance-operation-maintain, "*DBFOM*") include the long-term transfer of operations and maintenance to a private partner. Between these ends of the spectrum, there are an infinite number of other potential structures characterized by the transfer of varying degrees of responsiblity. Examples include design-build-finance-maintain, ("*DBFM*"), in which the public sector retains responsibility for daily operations but transfers to the private partner specified life-cycle repair and replacement obligations. Every model is valid and each has its benefits and challenges.

Nevertheless, all too often policy makers reject any consideration of a transfer of operations and maintenance responsibilities to the private partner out of fear that it is "*more expensive*". As the argument goes, given private sector profit requirements, outsourced O&M is always much more expensive for government agencies than public sector delivery of O&M services. This argument, however, is does not stand up to greater scrutiny.

While there arguably will be higher costs associated with some private O&M activities, the value of transferring O&M responsibilties within a broader DBFOM P3 transaction does not derive from unitary costs. In much the same way an automobile sourced from junk yard parts may be less expensive than one sourced from factory provided parts, the life-cycle cost of operating and maintaining that car must also be considered. The value of transferring O&M responsibilities derives in great part from risk transfer:

Life-Cycle Design Integration

Analyses undertaken by a variety of public agencies have concluded that significant life-cycle savings can be achieved by integrating design and construction responsibilities with long-term operations and maintenance obligations. Due to the fact that the private partner will not only be responsible for delivery of the asset, but for also for its long-term life-cycle performance, the private partner is incentivized to build the asset to last. As such, the DBOM structure tends to inspire increased innovation, as the nature of the long-term contractual relationship creates an added incentive to reduce whole life costs of the Project. In other words, given that the private partner is at risk and responsible for long-term life-cycle maintenance, it has a vested interest to deliver the best quality asset up-front. This commitment drives innovation in Project design which typically delivers cost-savings to the public sector over the operating, maintenance and rehabilitation term. While the scope of the savings will vary by project, Partnerships UK research has indicated that the integration of life-cycle O&M obligations with design-build responsibilities tends to save between 10%-15% in life-cycle costs versus baseline design-build contracts.

Life-Cycle Asset Management

A P3 involving long term O&M will prescribe service levels over the term of the agreement, holding the private partner financially responsible for any performance shortfalls. This transfer of performance risk locks in life-cycle maintenance over the term of the P3 and detailed handback standards set forth in the agreement ensure that the asset is returned to the public sector at the end of the P3 term with a minimally prescribed "*remaining useful life*", thereby ensuring the public agency receives a well functioning asset. These provisions guarantee adequate life-cycle asset management over the term of the P3, protecting taxpayers from unnecessary costs associated with addressing deferred maintenance.

Performance-Based Payments

The transfer of O&M responsibilities is also fundamental to the construct of performance-based payments. Instead of establishing a fixed fee for services, payments under a P3 are tied to performance. In the event that the asset is not performing to standard, whether such underperformance is imputable to design and construction issues or O&M services, payments to the private partner are withheld. This ties payments to performance of the asset and holds the the private partner accountable, incentivizing the private partner to expeditiously address any issues. Under traditional O&M, public funds are expended whether or not the asset is performing to standard; with P3, this is not the case. In many ways, the use of performance-based payments serves as an extended warranty, guaranteeing that the asset will be operated and maintained to prescribed standards throughout the term of the P3.

Budget Impact

One of the benefits of the transfer of long-term O&M is that it allows for public payments to be deferred until after the construction and commissioning of the asset, with payments being spread out over the term of the P3 agreement. The performance-based availability payments that would cover both capital and operating costs, subject to deductions in the case of performance shortfalls. This, at a minimum, provides long-term budget predictability over the term of the agreement, thus addressing a risk concern that is frequently flagged by credit rating agencies.

Other

Other benefits include the addition of lender due diligence; limited scope change; and enhanced enforceability through payments tied to performance.

The inclusion of O&M in broader P3 structures tends to inspire increased innovation, as the nature of the long-term contractual relationship creates an added incentive to reduce whole life costs of the Project. In other words, given that the private partner is at risk and responsible for long-term life-cycle operations and maintenance, it has a vested interest to deliver the best quality asset up-front. This commitment drives innovation in Project design which typically drives value to the public sector over the term of the P3 agreement, while performance-based payments guarantee optimized life-cycle asset management.

PROJECT MEMORANDUM

DBFOM FRQ AND RFP ASSISTANCE

City of Lake Oswego

Date: 7/1/2020
Project No.: 11476A60

To:	Anthony Hooper, Deputy City Manager – City of Lake Oswego
Prepared By:	Kyle Rhorer, Vice President – Carollo Engineers, Inc.
Subject:	Overview of Private Operations and Maintenance Approaches for Water and Wastewater Utilities and Potential Efficiencies

Introduction

This memo provides an overview of the operations and maintenance (O&M) approaches generally applied by the private sector water and wastewater operations industry under project delivery methods such as design-build-operate (DBO) and design-build-finance-operate-maintain (DBFOM or P3), and how those approaches have the potential to create cost efficiencies when compared to the traditional public O&M model that utilizes municipal labor.

This memo contains a general discussion and is not intended to provide a specific opinion to the City of Lake Oswego (City) regarding the comparative cost or affordability of private vs. public O&M delivery options for the wastewater treatment plant P3 project the City is currently considering.

Potential Cost Saving Efficiencies through Private Sector O&M

Private sector O&M approaches for water and wastewater infrastructure can achieve efficiencies over public sector delivery in a variety of ways, depending on the specific characteristics of the project and its facilities. In addition, under longer term O&M contracts (10+ years), the private sector operator is often able to refine and improve its O&M approach, potentially creating even greater efficiencies over time. Efficiencies of private sector O&M primarily fall into the following categories:

Labor

Generally the largest O&M cost component for a water or wastewater treatment facility, private sector operators implement labor-saving solutions such as facility automation and the combining of various operations, maintenance, repair, and replacement responsibilities among a smaller O&M staff. In addition, the value of the total compensation packages (including fringe benefits) paid to private sector O&M workers is generally lower than those received by their municipal counterparts.

Non-Labor

Private O&M approaches often involve investment in efficiency-promoting treatment equipment and technology in order to achieve greater non-labor operational cost efficiencies, particularly in the areas of energy and chemical usage. This is especially true for fully integrated project delivery models such as DBO and DBFOM (P3), where the private sector company is able to design and construct the project facilities with long-term operational cost efficiencies in mind.

Asset Management

The level of sophistication of private sector asset management approaches and tools is generally greater than that found in municipal utility environments. Because of this investment, private O&M companies utilize robust asset information to guide asset repair and replacement decisions that optimize asset useful life, creating long-term operational cost efficiencies.

Economies of Scale

Most private sector O&M companies enjoy a national or even international presence, providing them the ability to realize economies of scale for the purchase of equipment and supplies. This benefit is particularly attractive to utilities operating smaller treatment facilities that would otherwise lack the ability to buy in bulk at a quantity savings.

Technical Specialization

The larger companies providing contract O&M services usually have access to a broad range of specialized technical resources that can be deployed as needed to address unique operational technical issues as they arise. These in-house technical support services are usually included in the O&M service fee paid by the municipality.

Mitigating Factors Impacting Realization of Private Sector O&M Cost Savings

The potential cost efficiencies associated with private sector O&M services are often diminished (or even eliminated) through a number of factors. The most common examples include:

Private Sector Profit / Limited Private O&M Services Market

The service fee paid by the municipality for private O&M services will include a profit for the provider which may or may not be transparent to the municipality, depending on the procurement and contracting approach. In addition, the current U.S. market for private water/wastewater O&M services contains a very limited number of providers, allowing them to charge higher service fees than in historically larger, more competitive market landscapes.

High Capital Cost

Private O&M efficiencies can be more than offset by increased initial and ongoing capital investment in the treatment facilities. Depending on the project delivery method, a municipality may need to finance more expensive capital improvements in order to realize the operational efficiencies (e.g. staff, energy, and chemical reduction) promoted by the private O&M provider.

Changes in Operational Conditions

Private O&M providers are contractually bound to meet specific operational performance requirements concerning product water quality, odor control, solids management, etc. under the assumed operating conditions described in the contract. Changes in those operating conditions, such as an increase in incoming wastewater quantities or concentrations, will generally require an adjustment to the O&M service fee. Similarly, changes to the performance requirements, such as more stringent discharge permit requirements, will also trigger a compensation adjustment.

Inefficient Risk Transfer

Great care must be taken by the municipal owner in the development of the contractual requirements to ensure the allocation of O&M risks between the municipal owner and the private operator is appropriate.

Transferring certain risks to the private O&M provider (for example the responsibility for changes in regulatory requirements, or changes in influent quantity or quality) will result in a risk premium in the O&M service fee charged to the municipality.

Transaction Costs

While transaction costs such as technical, legal and financial assistance vary by the chosen project delivery method (e.g. Contract Operations, DB+O, DBO, DBFOM (P3)), the costs to a municipality of procuring and executing a long-term contract for private water/wastewater O&M services can be considerable, and must be replicated at the end of the contract term subject to state and federal law. In addition, regular administrative oversight by the municipality over the life of the O&M period is critical to ensure contractual compliance by the private O&M provider.

Other Considerations Regarding Private Sector O&M

Beyond the potential cost efficiencies, a municipality's decision to privatize the operations of its water or wastewater utility can be influenced by other factors. Some smaller municipalities make the political/economic decision to simply discontinue municipal delivery of water/wastewater utility services in order to focus on other core objectives, choosing to engage the private sector to absorb the existing public employees and operate the facilities under a long-term contract.

In some cases, the development of a new treatment facility (sometimes called a "greenfield" project), necessitates additional staff and/or specialized expertise not readily available to the municipality, thus requiring private sector O&M. Further, a greenfield project developed under a private financing structure (P3) will generally require the municipality to enter into a long-term private O&M agreement in order for the private financing to be feasible.

The long-term flexibility in managing the utility assets is also a consideration. Most private O&M agreements contain a long duration (10 to 20 years or more) in order for the provider to be able to realize the increased operational efficiencies over time. This long-term commitment can impact the ability of the municipal owner to make changes to how the managed assets are utilized without incurring sometimes significant financial consequences. In addition, moving from a private O&M model to a municipal approach, especially for a greenfield and/or privately financed project, can be a complicated and expensive endeavor.

Lastly, the long-term implications of a private O&M model must also be considered in terms of the municipality's level of service goals for the utility's customers and user rate affordability considerations. The procurement of private sector O&M services is based on a specific level of service that will be provided to the municipality for the agreed upon service fee. Under a private O&M structure, expanding the scope and/or enhancing the level of utility service provided to municipal customers generally requires a renegotiation of the O&M service contract.

Conclusions

Private sector operations of water/wastewater treatment facilities can result in measurable cost efficiencies over the traditional municipal model. These efficiencies are primarily borne through investment in equipment and processes that reduce both labor and non-labor costs. However, the degree of cost savings resulting from private O&M is tempered by factors such as profit, private O&M market conditions, risk allocation among parties, and the cost of initial and ongoing utility capital improvements.

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PRIVATE FINANCING AS A VALUE DRIVER IN P3

The ***public-private-partnership (P3)*** *model has been used extensively since the early 1990's to finance and procure a wide variety of infrastructure projects around the world. While the use of private-sector capital and expertise has helped to deliver many high-quality infrastructure assets, some policy makers have questioned the model, specifically distrusting of the use of "*more expensive*" private finance.*

The ***P3 financing premium -measured as the difference between the government's cost of borrowing and the cost of private capital-*** *remains a topic of public debate. While it is generally accepted that P3s involve a financing premium, it is reasonable to ask what taxpayers get for this financing premium and whether the benefits of the P3 outweigh any additional financing costs.*

It is important to note that extensive analysis has been undertaken in the US and across the globe to determine whether P3 make sense from a taxpayer perspective. Government agencies in the United States, Canada and Australia have concluded that, while private finance is generally more expensive, the use of at-risk private capital frequently (although not always) generates more value for taxpayers than if the government financed the project itself. The reason for this is that ***at-risk private capital*** shifts risks to the private partner, while also incentivizing better performance. This often leads to accelerated delivery, more effective life-cycle asset management, enhanced innovation, and lower overall costs. Comprehensive methodologies have been developed to compare the private-financing premium with the value of the benefits that P3 can provide, and widely published reports by diverse government entities, such as Partnerships British Columbia, Infrastructure Ontario, Infrastructure Australia and US Department of Transportation, have all concluded that using P3 or alternative financing and procurement methods can be more cost effective than traditional publicly financed infrastructure delivery.

Of course, the actual cost of this risk premium must be right for P3 to make sense. While private financing structures and costs vary significantly by transaction; on average, recently published market analyses suggest that the private financing premium ranges from 130 to 220 basis points relative to pure public financing. This premium, however, is highly dependent on the transaction structure, project risk profiles and the prevailing credit and equity market conditions.

When competitively procured, the financing component of a P3 is subject to market pricing. Proposers are incentivized to provide the lowest possible cost of financing for a project, often turning to products designed to reduce the price differential between public and private finance such as private activity bonds (PABs); 63-20 financing, tax-exempt financing; and credit-assistance programs, such as the Water Infrastructure Finance and Innovation Act (WIFIA).

That said, the choice of financing tools and credit instruments is not just about interest rates and the cost of borrowing, but also about flexibility. For example, in contrast to municipal bonds, private financing often affords a project with greater opportunity for deferred or extended drawdowns, thereby reducing borrowing costs. Private financing can also provide for more flexible amortization schedules. Loan repayment ultimately impacts utility rates, and flexible repayment can provide additional rate affordability relief. In this sense, it is useful to think of the incremental cost of private finance in a P3, in part, as premium paid for additional financial flexibility. But this is only part of its value.

More importantly, the private financing premium is also compensating the private partner for assuming substantial risks associated with the project. The value of P3 does not lie in private financing itself, but in using at-risk private capital to effectively transfer project risk away from taxpayers and onto a private partner capable of managing those risks.

The delivery of large complex public infrastructure projects in the United States under traditional publicly financed delivery models is too often characterized by construction delays, cost overruns, and longer-term performance failures. A recent assessment evidenced that nine out of every ten mega-projects suffers from cost-overruns and schedule delays, resulting in a failure to deliver expected public benefits.[1] Under traditional publicly financed infrastructure delivery, cost overruns of 10 or 20 percent are widely accepted as "success" in project delivery, while project delays force governments to pay interest on bonds for years before projects deliver public benefits. Moreover, limited budgets and competing priorities often force public agencies to defer maintenance on key assets, resulting in higher life-cycle costs and lower asset performance. P3 transfers a substantial portion of these risks away from the taxpayer and onto the private partner. This risk transfer is in great part achieved through the use of at-risk private capital and much of the cost of this risk transfer is reflected in the private financing premium.

Put simply, the incremental cost of private finance in a P3 can be thought of, at least in part, as a guarantee against the risks of poor design, budget and schedule overruns, and deferred or inadequate maintenance. It is also as a warranty on overall asset performance. In a traditional publicly financed infrastructure delivery, taxpayers pay more if these risks materialize. In a P3, the private partner assumes these risks in exchange for a return on private capital reflected in the P3 financing premium.

P3 is not a panacea, but when done right, it can provide valuable financial benefits to taxpayers. By using private capital and privately backed debt, a public agency can avoid taking on increased debt, preserving its bond capacity, and protecting public credit ratings. It can defer payments until after completion and commissioning of an asset, better aligning outlays with project benefits. Key risks of large infrastructure projects can be shifted to the private sector, giving taxpayers additional protections, while the public agency retains ownership and oversight of these projects.

It is important to understand that the value of P3 lies not in any one element of the asset life cycle (design, construction, financing, operations or maintenance), but instead in their intersection. Obviously, it would be absurd to suggest that anyone ever undertake a P3 if this were simply a more expensive means of financing a project. The value of a P3 comes from integrating diverse project elements and by tying at-risk private capital to project performance.

[1] Source: *Bent Flyvbjerg, University of Oxford Saïd Business School. M*egaproject delivery data.