CLACKAMAS COUNTY BOARD OF COUNTY COMMISSIONERS

Policy Session Worksheet

Presentation Date: February 18, 2020 **Approx. Start Time:** 2:30 PM **Approx. Length:** 60 min

Presentation Title: Courthouse Replacement Project

Department: County Administration

Presenters: Gary Barth, *Project Director*; Marcel Ham, *IMG Rebel*

Other Invitees: Elizabeth Comfort, *Interim Finance Director*, Sue Hildick, *Director, Public and Government Affairs*, Eric Machado, *County Risk Manager* Kathie Steele, *Presiding Judge*, John Foote, *District Attorney*; Craig Roberts, *Sheriff;* Debbie Spradley, *Trial Court Administrator*

WHAT ACTION ARE YOU REQUESTING FROM THE BOARD?

Information only – no action required.

EXECUTIVE SUMMARY:

The county engaged IMG Rebel to conduct a Value-for-Money (VFM) county courthouse project. The purpose of a VFM analysis is to determine the optimal financial and delivery approach for a public project based on qualitative and quantitative analysis of alternative approaches over a project lifecycle.

The base case for how we deliver, fund and finance the courthouse project is referred to as the "Public Sector Comparator" (PSC) in the VFM analysis shown as Option 1. Four alternative options including a P3 Hybrid were also analyzed to determine if any of the alternatives are more "optimal" or outperform the PSC.

This analysis was conducted during the fourth quarter of 2019 with input provided by an internal VFM Advisory Committee over the course of three work sessions held in November and December, 2019. The final report is now complete after review by members of the Advisory Committee, the Courthouse Project Manager, the Interim Finance Director and the County Risk Manager. Staff and IMG Consultants will be presenting the results of their analysis to the Board at this policy session.

This report is intended to provide the Board with a comprehensive analysis of alternative delivery and financing approaches to aid in providing final direction on the project approaches at the Policy Session scheduled for March 10, 2020.

Previous Board Action:

At a Board of County Commissioners (BCC) Policy Session on October 22, 2019 staff and the Board discussed using a Public-Private Partnership (P3) as an alternative delivery approach to the county's traditional delivery and financing method. Staff informed the Board that IMG Rebel had been retained to conduct a comprehensive VFM analysis during the 4Q2019 that we would be prepared to present to the Board in early 2020.

After discussion the Board voted 4-0-1 to proceed with the courthouse project under Option 1.A.

***Option 1**. Proceed with the project under one of two approaches, subject to the comprehensive analysis being conducted during the fourth quarter of 2019:*

***A.** Utilize a P3 approach to finance, design, develop and maintain the new county courthouse. No payments would be due from the county until project completion. Continue to explore voter support for a General Obligation Bond during the four year design and construction process to reduce the amount of private financing and long-term lease payments at project completion.*

FINANCIAL IMPLICATIONS (current year and ongoing):

Is this item in your current budget?

- Total project costs have been estimated spanning multiple fiscal years through 2023. The County is currently covering the pre-planning effort through a $2.4 million budget split 50/50 between the County and the State and governed by an approved Intergovernmental Agreement. The State has approved an additional $31.5 for their 50% share of the first $63 million in Project costs incurred in FY19/21. With an approved Financing Plan by the Board, the County will develop a supplemental budget for FY 19/20 to reflect estimated costs in the current fiscal year. Subsequent years will then be budgeted in accordance with the Financing Plan, projected timing of costs, and State match fund reimbursements.

What is the cost?

- The total project cost is approximately $220 million (estimate)
  - Courthouse – $190 million (estimate),
  - On-campus parking additions, roadway changes and re-routing, intersection signalization Red Soils Master Plan updates, District Attorney office portion of the new Courthouse building , and related soft costs associated with the new Courthouse - $30 million (estimate)

  - **Total County cost of the project** - $125.5 million (estimate) plus $1.2 million County General Fund
  - **Total State Cost** - $94.5 million bonds plus $1.2 million State General Fund (50% match on Courthouse cost)

What is the funding source?

The State funds are coming from The Oregon Courthouse Capital Construction and Improvement Fund (OCCCIF). Depending on Board action, the County funds will come from one of three funding sources or combination of sources. 1) Full Faith & Credit (FF&C) bonds to be repaid from County discretionary funds 2) General Obligation Bonds which will require voter approval and generate new property tax revenue for repayment or 3) Private equity and debt provided by a P3 partner to be repaid through long-term lease payments. These options will be explored as part of the Financing Plan discussion.

STRATEGIC PLAN ALIGNMENT:

This project aligns with three of the Board's five Strategic Priorities:

- Ensure safe, healthy and secure communities – the new courthouse will be large enough to accommodate the number of judges available and needed for this community and eliminate overcrowding that cause intermixing of jurors, the public, and offenders providing adequate circulation.
- Build a strong infrastructure – the project will replace the outdated County courthouse in downtown Oregon City, which is too small to accommodate the number of judges needed for the community and is not seismically sound.
- Build public trust through good government – the project will improve access to justice for all residents of Clackamas County.

LEGAL/POLICY REQUIREMENTS:

1. The OCCCIF program requires that the County spend at least an equal amount of matching funds for courthouse related costs to those provided by the State OCCCIF.
2. The County must adhere to conditions and outcomes outlined in the IGA's with the State.
3. The Green Energy Technology program applies to public entities in Oregon and requires that 1.5 percent of the total cost for new construction of a public building must be spent on green energy technology, regardless of the funding source.
4. This project will be subject to Oregon City comprehensive plan and permit requirements.
5. The project will adhere to the County Green Building policy in effect as the building is being designed.

PUBLIC/GOVERNMENTAL PARTICIPATION:

The replacement County Courthouse Project was one of the County's top two initiatives along with I-205 for the recently concluded 2019 legislative session. Success with this priority lead to the State approving $31.5 million for FY 19/21 for the State share of courthouse design and pre-construction costs. The Courthouse Project is also one of 11 key strategic initiatives approved by the Board.

In addition to the State Legislature's continued involvement in this process, the project also includes participation of the Courts, Clackamas County Sheriff's Office, the Clackamas County District Attorney's Office, the Oregon Department of Human Services, the Association of Oregon Counties, the City of Oregon City, and additional key stakeholders throughout the community.

OPTIONS & RECOMMENDATIONS:

This is an informational session. Staff will be seeking input and direction from the Board at a Policy Session scheduled for March 10, 2020.

ATTACHMENTS:

1. Value-for-Money Assessment by IMG Rebel

SUBMITTED BY:

Division Director/Head Approval _____
Department Director/Head Approval _____
County Administrator Approval _____

For information on this issue or copies of attachments, please contact Mary Raethke @ 503-742-5912

Clackamas County Courthouse Value for Money Assessment

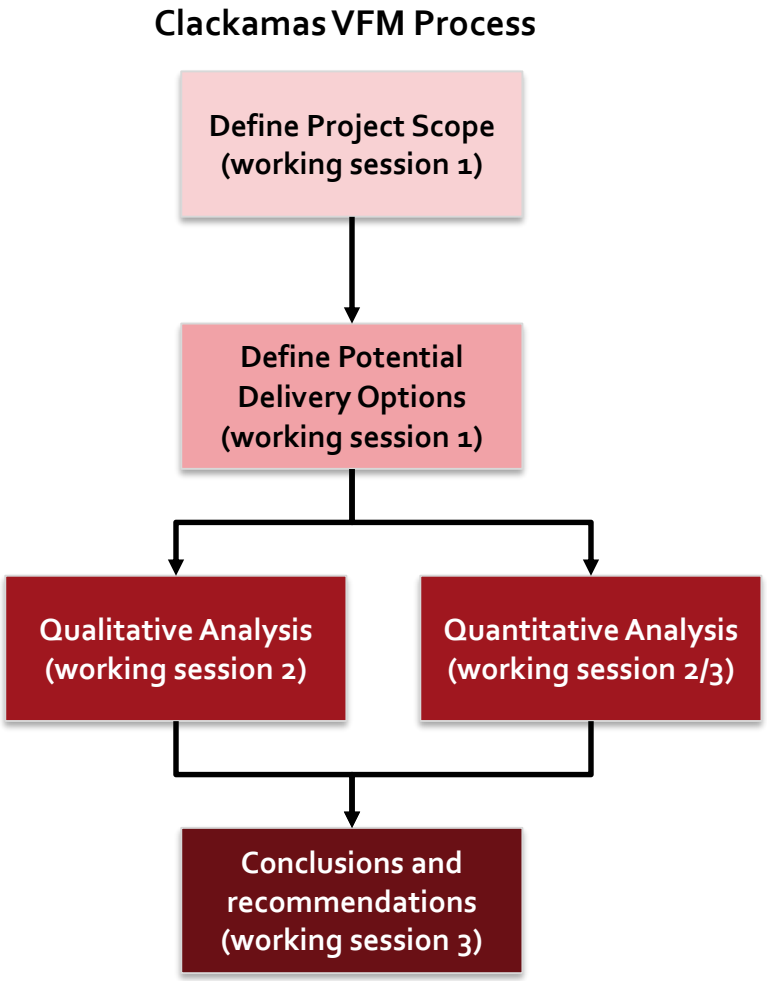
Final Report – 1/7/2020

Table of Contents

Executive Summary

County objectives for the project and the Value for Money Assessment process

- Objective of this process: *Determine the optimal financial and delivery model for the Courthouse project.*
- Analysis based on the County's objectives:
  - Develop a modern, Class A replacement for the County Courthouse, which is beyond is useful life
  - Take advantage of rare opportunity for State to contribute 50% of capital value
  - Achieve best risk-adjusted value for money across a range of key value drivers, and over the useful life of the building
  - Tailor financial obligation around near-term constraints



Five potential models, varying levels of cost and risk transfer

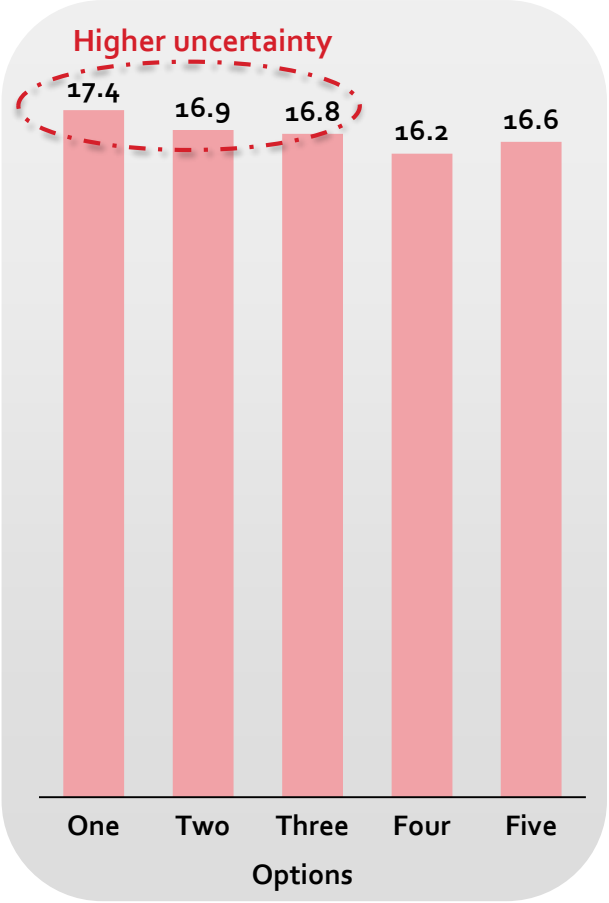
Option 1 DBB+M	Conventional delivery, defined as a design bid build (DBB) with conventional public financing and maintenance.
Option 2 DB+M	Conventional delivery, but with an integrated design build (DB) contract at construction phase.
Option 3 DBM	Integration of design, construction and maintenance (DBM) into a single contract, but without private financing.
Option 4 DBfM	Integration of design, construction, maintenance and partial private finance in a single contract.
Option 5 Tax-Exempt DBfM	Use of tax-exempt vehicle for the private tranches of finance in an integrated contract otherwise the same as Option 4.

not considered

Summary of the qualitative and quantitative analysis

- **Options 1 and 2** offer the County the greatest flexibility throughout the life of the project, but at higher risk-adjusted cost, with less risk transfer and limited certainty regarding long-term performance and costs.
- **Option 3** offers less flexibility, but without the long-term performance incentives and risk transfer of private financing, it does not deliver the full benefits of P3.
- **Options 4 and 5** create more opportunities for life cycle cost savings and risk transfer. They also offer more certainty regarding timely completion, costs and quality of service over the life of the contract. Option 5 has limited precedent and is more challenging to structure well.

Nominal annual risk-adjusted cost to the County in year 1 of full repayment



Conclusions and recommendations

- A P3 model with partial private financing (option 4) seems to be best aligned with the goals of the County and results in better value for money for the taxpayers of Clackamas County than more conventional delivery models and than P3 models with either tax-exempt financing through a conduit issuer or full private financing.
- The process of further project development allows for the further optimization of the precise project scope, risk allocation and funding and financing solution.

- The Clackamas County Board of Commissioners is recommended to:
  - decide on the preferred delivery and financing option considering the information in this report and the Advisory Board's recommendations;
  - approve further preparation of the procurement strategy and procurement documentation; and
  - direct 1) that the project team keeps the board informed of its progress and 2) that the project team will present the project documentation for approval prior to the launch of the procurement.

1. Project Definition

Project definition and scope (1/2)

Site

- Red Soils Campus (57 acres in Hillendale)
- Master Plan was first approved in 1998
- Courthouse is the heart of the campus
- Courthouse will have 'two front doors'

Scope

- 218,000 gsf of Courthouse space
  - 16 Courtrooms 20 Judicial Chamber sets
  - Court Operations and Administration
  - Grand Jury, Jury assembly and deliberation rooms
  - Sallyport, holding and support spaces for the Sheriff Civil Division
  - Secure parking for Judicial staff
  - Secure loading dock and staging
- 37,000 gsf DA's office
- Meets projected 2060 needs

Project definition and scope (1/2)

Project Scope for Analysis & Comparison

- $220M construction cost (under DBB delivery)
  - Including:
    - FF&E allowance
    - Green Technology Allowance
    - Preconstruction fees
    - 10% owner's contingency
  - Excluding:
    - Owner's rep fees
    - Compression of schedule
    - Environmental impact mitigation
    - Land and easement acquisition
    - Connection b/n courthouse and jail
    - Structured parking
    - Surface parking lot
- Routine and major maintenance
- Facility management: utilities, water & sewer, HVAC (taking into account , janitorial, landscaping, trash removal, window washing, snow removal, and insurance

Excluded from Analysis

- Relocation of existing uses and services in the existing courthouse
- Decommissioning existing courthouse
- Redevelopment of existing courthouse
- Relocation of existing buildings and services on new Courthouse site

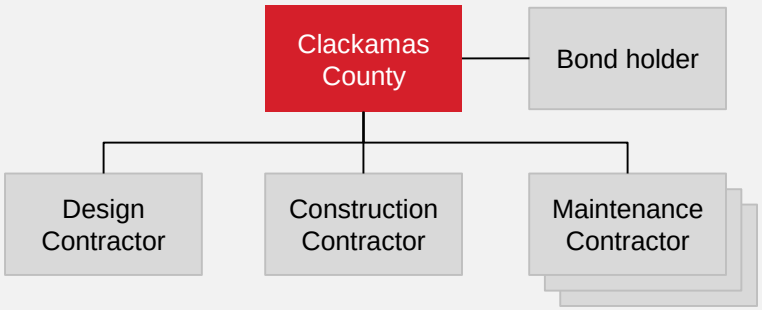
Term

- A construction period of 36 months
- A 30 year O&M period

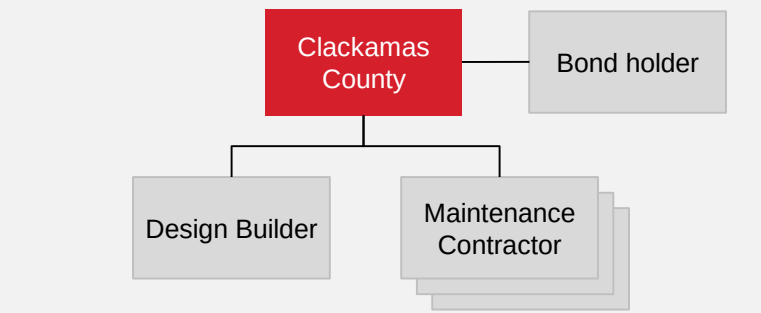
2. Financing and Delivery Options

Five main financing and delivery models (1/2)

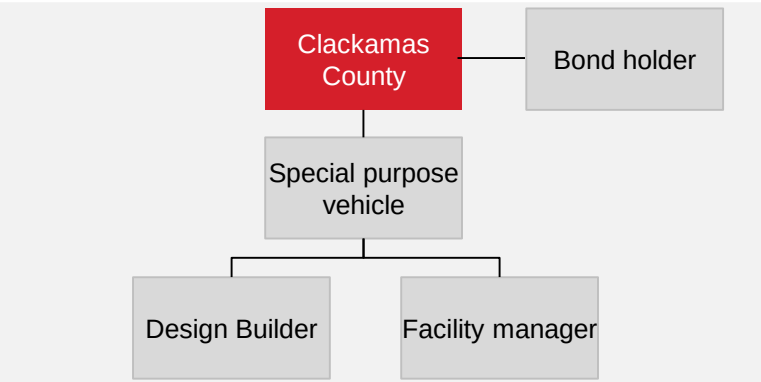
Option 1 DBB + M
All functions separated



Option 2 DB + M
Integration of design and construction

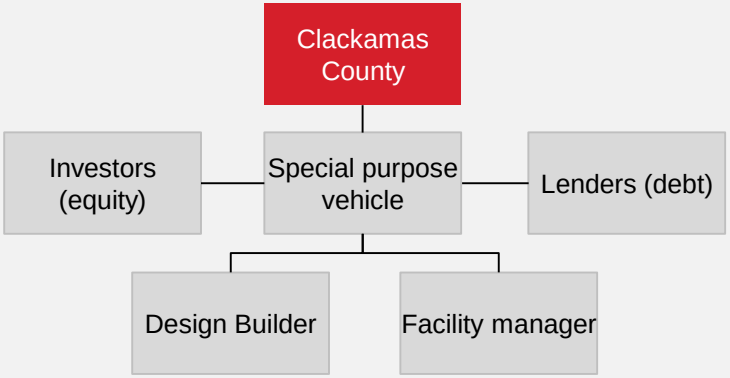


Option 3 DBM
Integration of design, construction and maintenance

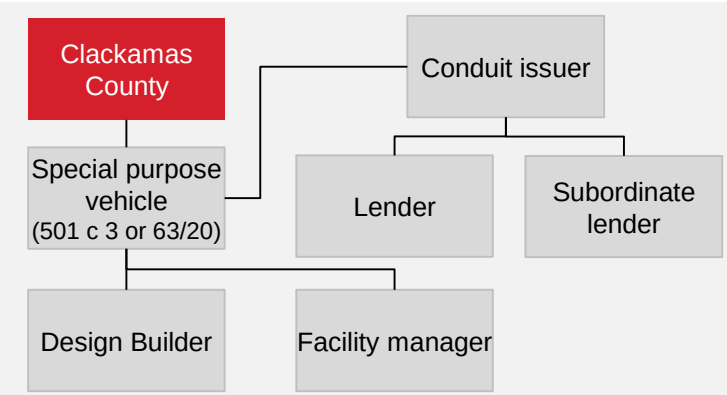


Five main financing and delivery models (2/2)

Option 4 DBfM
Integration of design, construction, finance, and maintenance



Option 5 Tax exempt DBfM
Integration of design, construction, finance, and maintenance with tax exempt financing

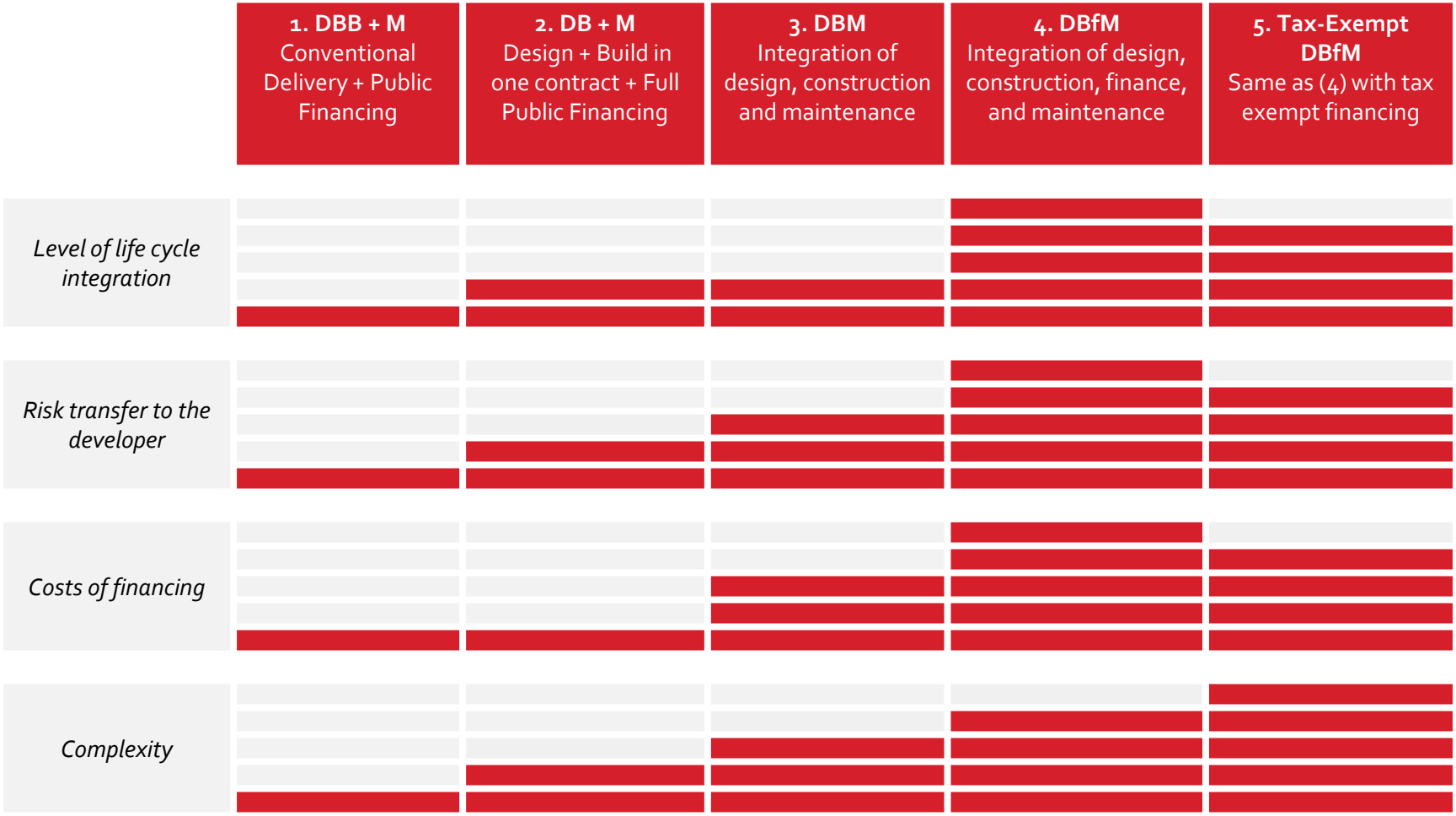


* Because most core operations will be conducted by the State or County, "Operating" contracts are not considered here. However, non-core activities like janitorial/custodial, catering, and security systems maintenance could be included in the maintenance contracts. Please note that DBFM with this scope is referred to as DBFOM in other projects (Long Beach Courthouse, Howard County Courthouse and Miami Dade Courthouse).

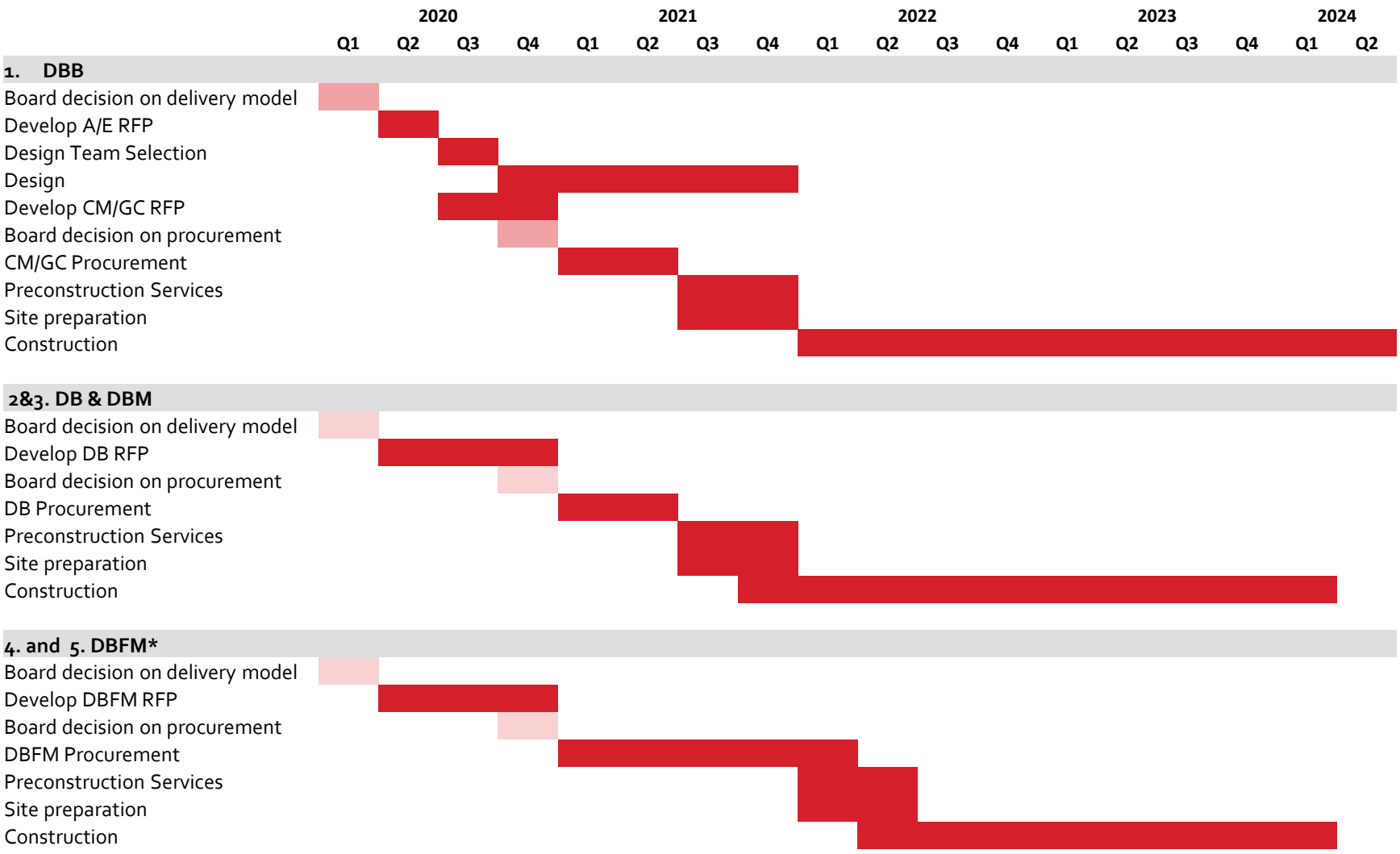
Financing and delivery model definitions (1/2)

	1. DBB + M Conventional Delivery + Public Financing	**2. DB + M** Design + Build in one contract + Full Public Financing	**3. DBM** Integration of design, construction and maintenance	**4. DBfM** Integration of design, construction, finance, and maintenance	**5. Tax-Exempt DBfM** Same as (4) with tax exempt financing
Contracting	Design Bid Build + multiple short term O&M contracts	Design-Build contract + multiple short term maintenance contracts	Integrated Design-Build and Maintenance contract (longer term)	One integrated Design, Build, Finance, Operate and Maintain contract	Integrated contract with tax exempt finance through a 501(c)(3) corporation
Financing	Public	Public	Public	Private (milestone payment = partial public)	Private with tax exempt component
Payment	Progress payments during construction and periodic payments for the various O&M contractors	Milestone payment at substantial completion and periodic payments for the various maintenance contractors	Milestone payment at substantial completion and periodic payments for the maintenance contractor	Partial Milestone payment at substantial completion and availability payments compensating for all the activities within the scope.	Same as 4
Evaluation criterion	Lowest construction price	Lowest design and construction price (with potential addition of quality of design scoring)	Best value (combination of whole life cycle costs and other relevant public objectives, for example design quality, risk acceptance, timing of completion)		

Financing and delivery model definitions (2/2)



Indicative timelines for all delivery models



IMG ARBEL

** Tax-exempt option may add additional complexity which could impact timeline.*

Indicative risk allocation (1/2)

Project risks organized into categories	DBB	DB	DBM	DBfM	DBfM (TE)
Approval and funding process					
Political risk of deal termination or long delays	Public	Public	Public	Public	Public
Planning process and approvals for site	Public	Shared	Shared	Shared	Shared
Permitting and approvals					
Completion of site development process	Public	Public	Public	Shared	Shared
Permits and third-party approvals	Public	Shared	Shared	Shared	Shared
Geotechnical / environmental					
Relocation of utilities	Public	Shared	Shared	Shared	Shared
Geotechnical and environmental site conditions	Public	Public	Shared	Shared	Shared
Procurement					
Delays in procurement process	Public	Public	Public	Public	Public
Design					
Delays in design process	Public	Private	Private	Private	Private
Design errors	Public	Shared	Private	Private	Private
Construction risk					
Construction cost overruns	Private	Private	Private	Private	Private
Regular construction risks	Private	Private	Private	Private	Private
Construction delays	Public	Private	Private	Private	Private
Weather related events and force majeure	Public	Shared	Shared	Shared	Shared
Changes in labor and materials costs	Shared	Private	Private	Private	Private
Relocation of existing operations of Court	Public	Public	Public	Public	Public

Indicative risk allocation (2/2)

Project risks organized into categories	DBB	DB	DBM	DBfM	DBfM (TE)
Financing					
Interest rate risk after financial close	Public	Public	Public	Private	Private
Equipment and commissioning					
Relocation of operations to new courthouses	Public	Public	Public	Public	Public
Changes in equipment cost or equipment selection	Public	Shared	Shared	Private	Private
Changes in furniture and fixtures costs or selection	Public	Public	Public	Public	Public
Delay in schedule for equipment installation	Public	Private	Private	Private	Private
Lifecycle maintenance					
General capital maintenance cost overruns	Public	Public	Shared	Private	Private
Scheduled preventative maintenance cost overruns	Public	Public	Shared	Private	Private
Emergency maintenance cost overruns	Public	Public	Shared	Private	Private
Structural performance issues	Public	Public	Shared	Private	Shared
Operational					
Coordination between subcontractors	Public	Shared	Private	Private	Private
Long term performance risk	Public	Shared	Shared	Private	Shared
Changes in requirements / specifications	Public	Public	Public	Public	Public

3. Qualitative Analysis

Pros and cons of the delivery models (1/2)

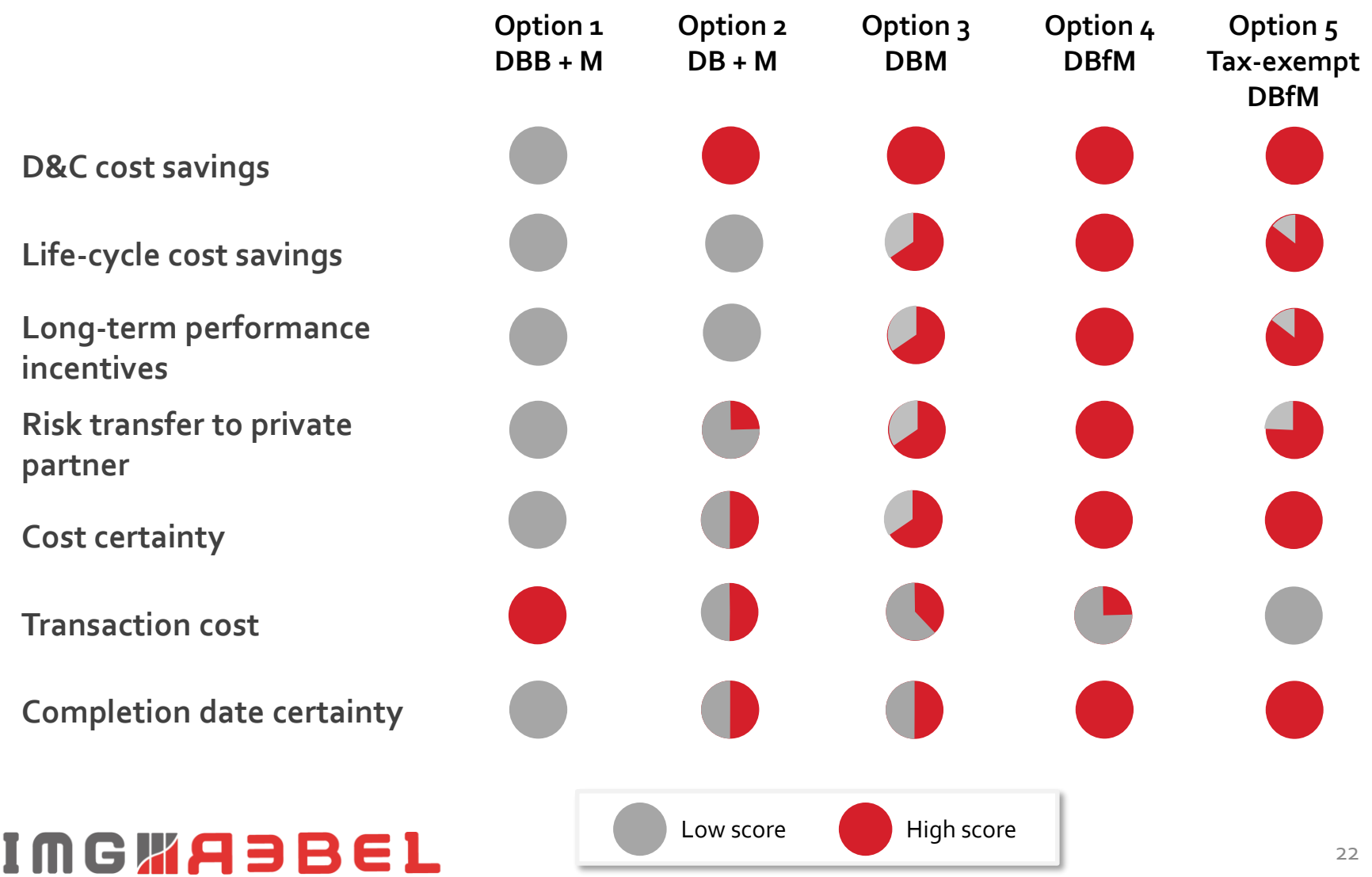
Model	Pro	Con
1. DBB + M	• Known and proven method for Clackamas County • Full control on design details, means and methods • Attractive FF&C bond pricing	• Forced marriage of designer and builder • Price is only selection factor • Slower delivery & higher cost • Can be dispute prone • Limited lifecycle focus • No lifecycle cost savings • Most risks are retained by County
2. DB + M	• Expedited delivery schedule • Early price certainty • Qualifications based selection • Best value selection • Lessens design and construction costs • Limited change orders • Promotes innovation • Significant risk transfer • Attractive FF&C bond financing	• Less familiarity to County • Greater transactional complexity • Less control over design details • Limited lifecycle focus • Longer procurement process

Pros and cons of the delivery models (2/2)

Option	Pro	Con
3. DBM	• DB + M pros + • Lifecycle cost savings • Long-term high-quality facility	• DB + M cons + • Even greater transactional complexity • Limits County's ability to defer maintenance
4. DBfM	• DBM pros + • Enhanced performance security • Long term budget certainty • More effective long-term risk transfer	• DBM cons + • Higher cost of private capital due to partial taxable financing

5. Tax-exempt DBfM	• DBM pros +
	• Long term budget certainty
		• DBM cons +
		• Compared to DBfM:
		  • Even greater transactional complexity
		  • Less long-term risk transfer
		  • Less performance security
		  • Less interest from P3 bidders

Qualitative comparison of delivery models

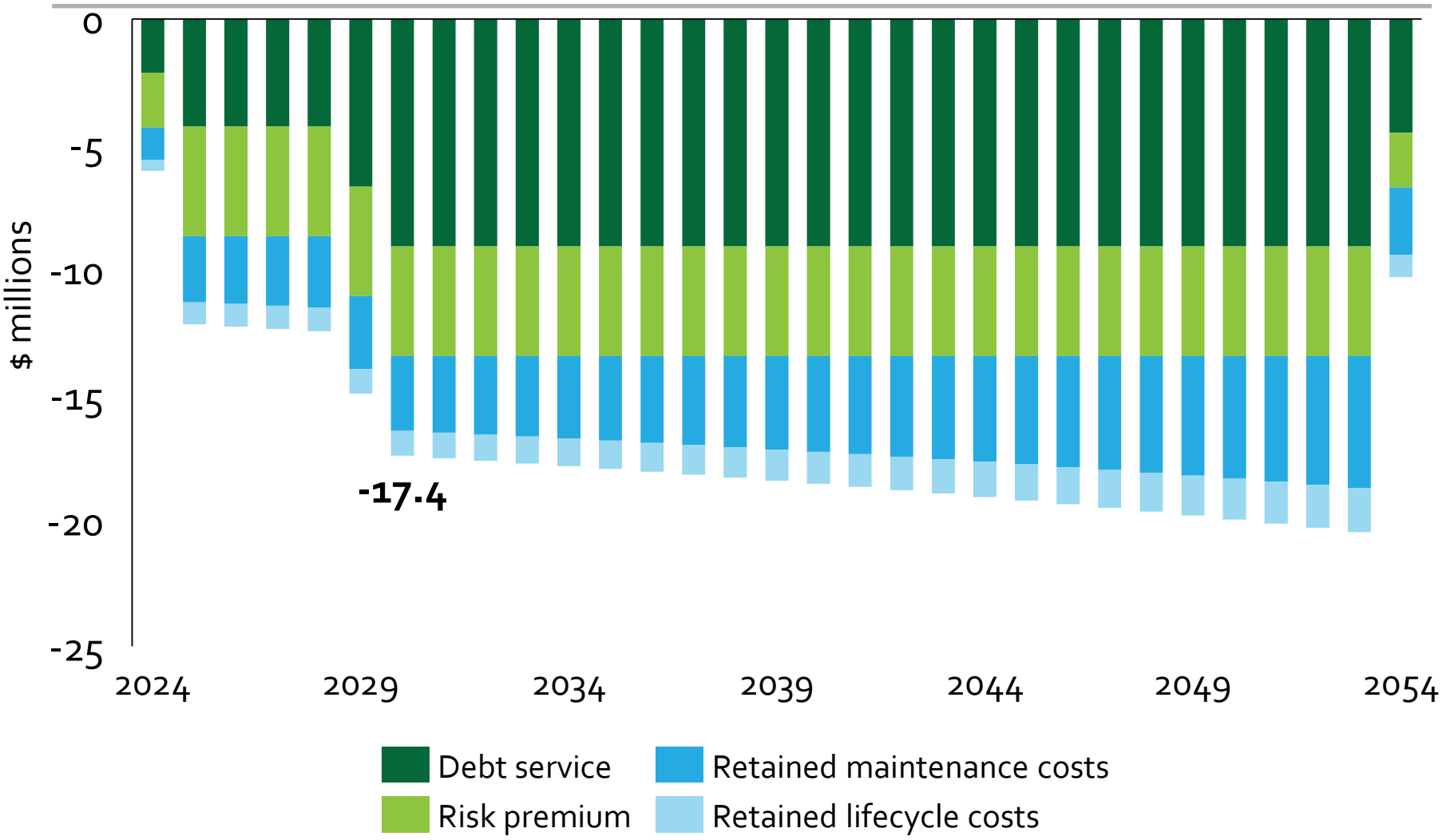


4. Quantitative Analysis

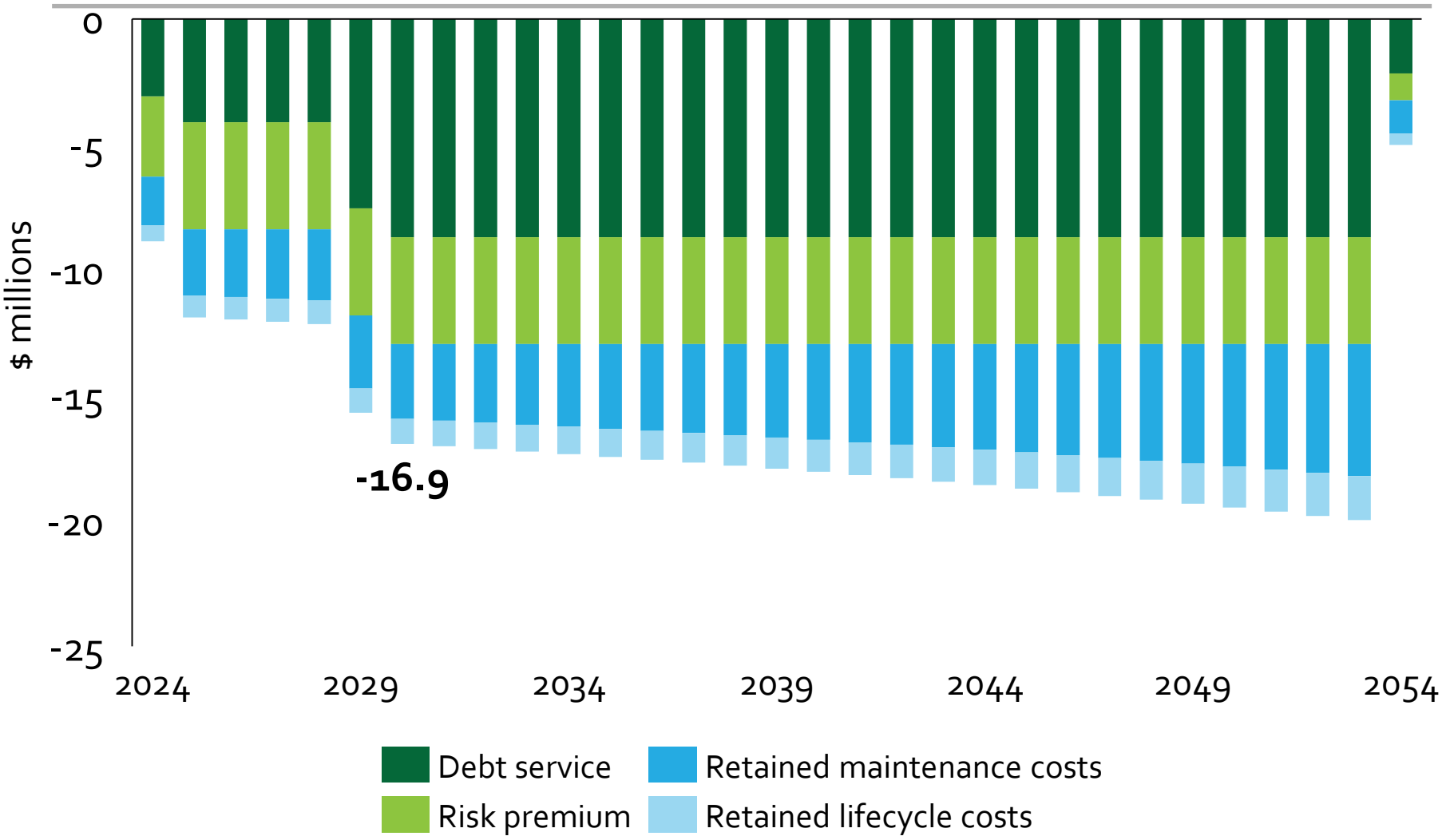
Approach to estimated cash flows

- The quantitative analysis is driven by key assumptions about the cash flows and timing of each of the scenarios, shown in detail in Appendix 3.
- Assumptions are based on our experience, research, and discussions with the County, and should be agreed by all parties. Assumption categories include:
  - Baseline cost estimates for conventional delivery;
  - O&M assumptions;
  - Financing assumptions; and
  - Efficiencies, cost allocation and other assumptions.
- Key assumptions driving the shape of the cash flows shown, are:
  - Costs incurred before substantial completion are rolled into long term debt, financed over the short term by a Bond Anticipation Note;
  - Lifecycle costs shown as a smooth annual value rather than as usual lumpy intermittent values; and
  - The same roughly $85M State funding available to reduce financing need for all delivery models.
- As a result of the above assumptions, all costs are expressed as long-term obligation after substantial completion.

Option 1: DBB + M



Option 2: DB + M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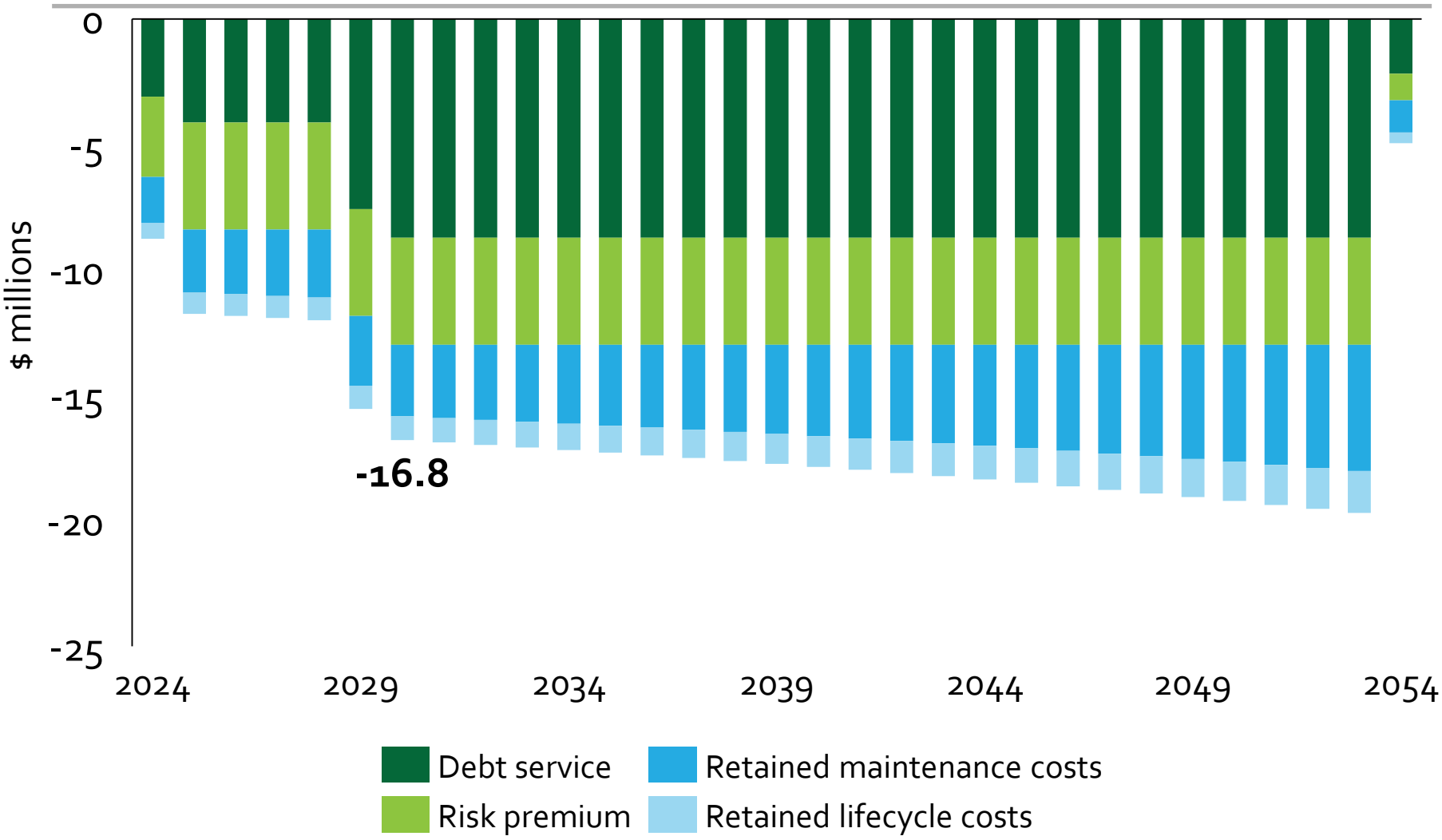
Debt service
Risk premium
Retained maintenance costs
Retained lifecycle costs

Option 3: DBM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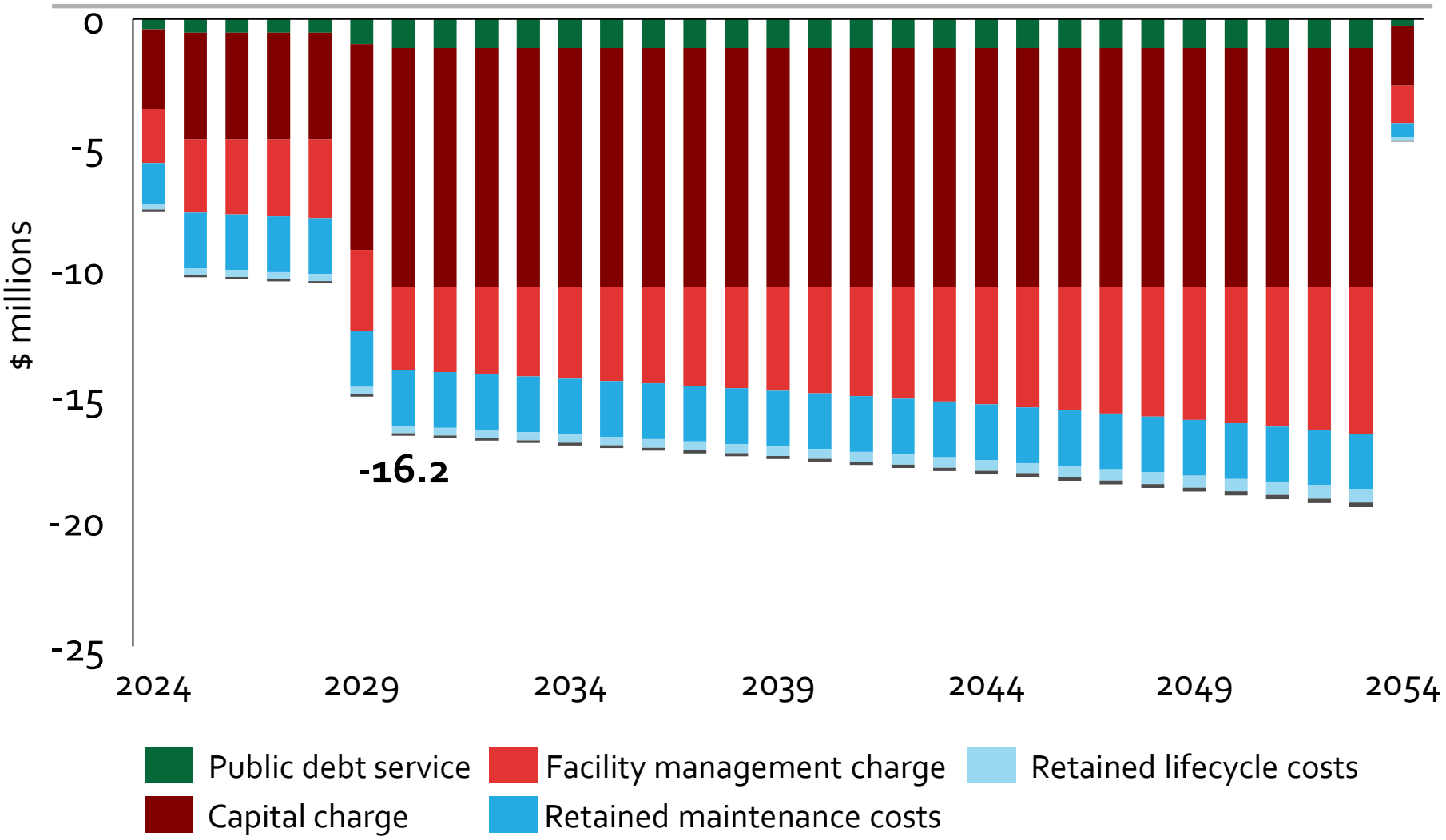
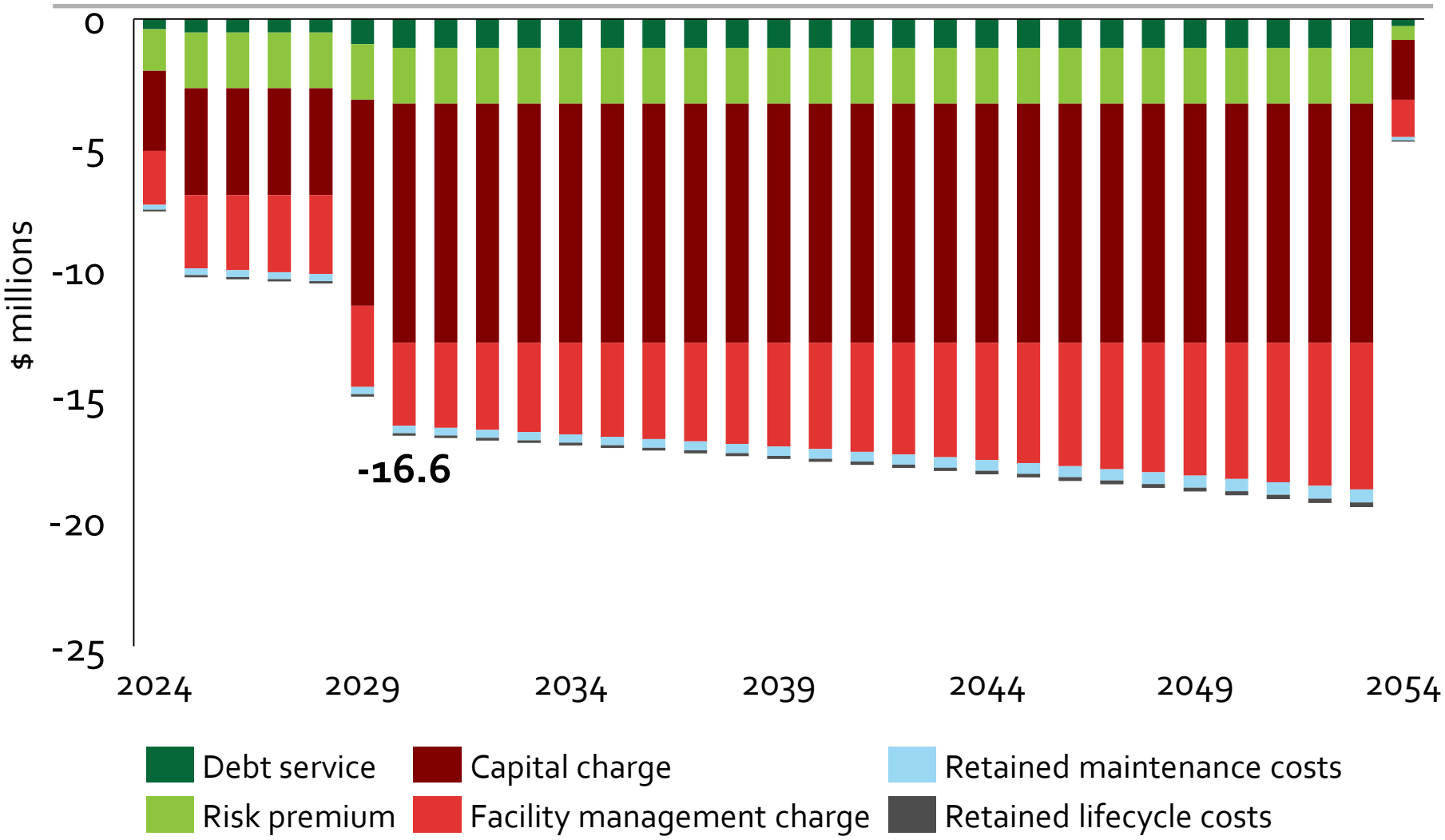
Debt service
Risk premium
Retained maintenance costs
Retained lifecycle costs

Option 4: DBfM



Option 5: Tax Exempt DBfM



Cashflow in 2030 for each delivery option

Delivery model	Downside	Base case	Upside
1. DBB + M	N/A	$17.4M	N/A
2. DB + M	$17.3M	$16.9M	$16.6M
3. DBM	$17.2M	$16.8M	$16.4M
4. DBfM	$16.8M	$16.2M	$15.7M
5. Tax exempt DBfM	$17.1M	$16.6M	$16.2M

* The upside and downside scenarios are based on the minimum and maximum assumptions regarding the efficiencies expected under the various delivery models as per appendix 3.

Net Present Values for each delivery option

Delivery model	Downside	Base case	Upside
1. DBB + M	N/A	$210.4M	N/A
2. DB + M	$211.0M	$207.3M	$204.0M
3. DBM	$210.0M	$205.0M	$200.4M
4. DBfM	$198.0M	$191.5M	$185.1M
5. Tax exempt DBfM	$203.3M	$198.0M	$192.6M

* The upside and downside scenarios are based on the minimum and maximum assumptions regarding the efficiencies expected under the various delivery models as per appendix 3.
** The Net Present Values (NPVs) are the calculated by discounting all cashflows to January 1st, 2020 at a discount rate of 5%.

5. Conclusion and next steps

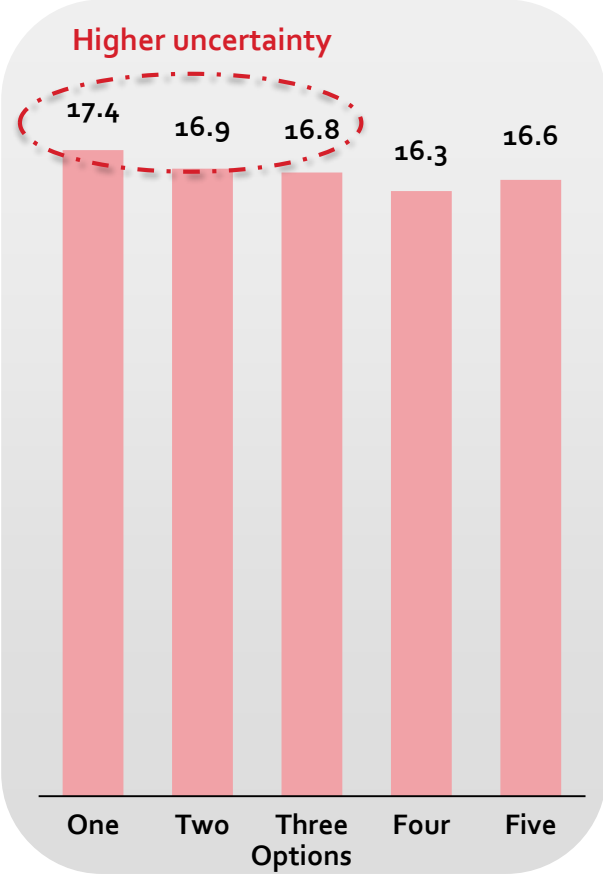
Summary of qualitative analysis

1. DBB + M	The greatest flexibility throughout the life of the Project, but at highest risk-adjusted cost to the County and with lowest risk transfer and long-term cost certainty.
2. DB + M	Better efficiency and integration of design and construction risks than option one. High flexibility but low efficiency and certainty over project lifecycle and particularly during O&M phase.
3. DBM	Less flexibility than conventional options, but without the long-term performance incentives and risk transfer of private financing. This option has limited precedent and is more challenging to structure well.
4. DBfM	Performs well along most qualitative value drivers and is expected to result in better value for money for the taxpayers of the County than more conventional delivery models.
5. TE DBfM	Advantage of lower financing cost but also lower alignment with key qualitative drivers. This option has limited precedent and is more challenging to structure well.

Summary of quantitative analysis

- The nominal annual risk-adjusted cost to the County in year 1 of full repayment (2030) ranges from $16.3 to $17.4 million, depending on the delivery model.
- The DBfM risk-adjusted costs are the lowest of all delivery models; the DBB risk-adjusted costs are the highest of all delivery models, and the most uncertain as well.
- Whereas the DBfM model results in a committed bid including financing during the procurement, the DB and the DBM model only lock in the interest rate in 2024, which leaves more uncertainty for the County.
- The tax-exempt DBfM model as envisaged by the County, involves higher uncertainty because of limited precedent.

Nominal annual risk-adjusted cost to the County in year 1 of full repayment



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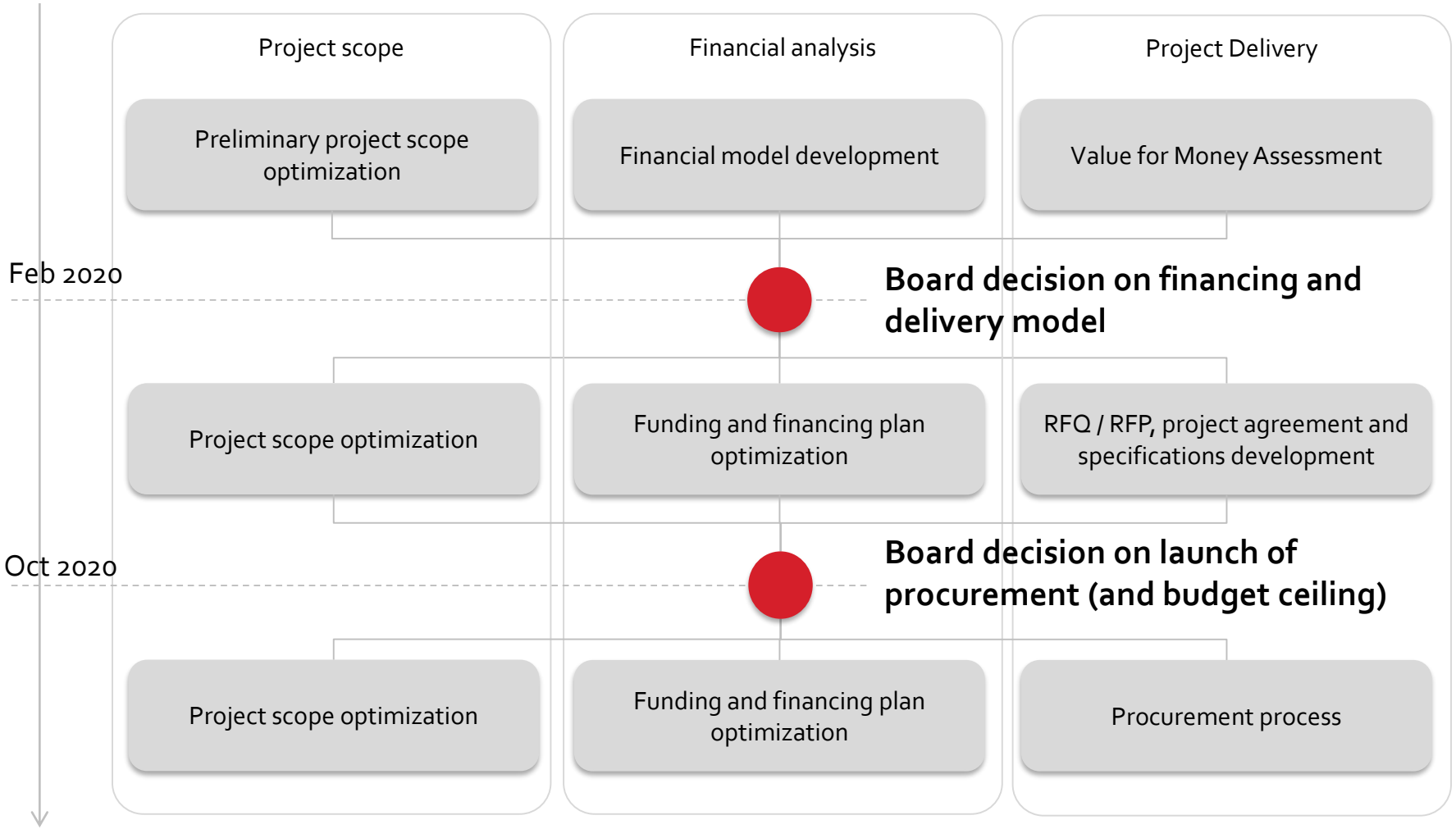
Two-Step Board Decision making

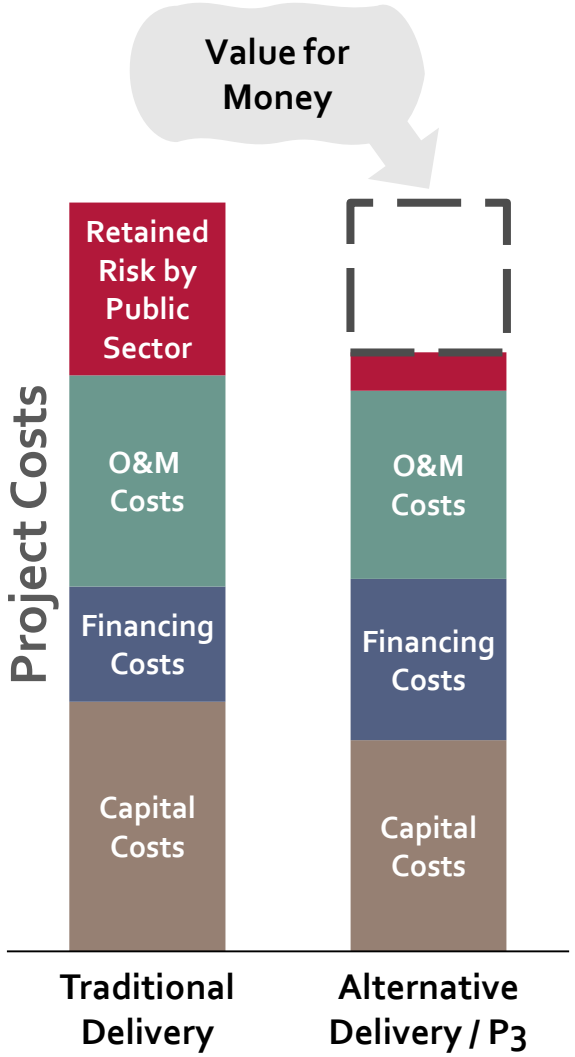


Appendices

Appendix 1: Value for Money Approach and Value Drivers

Value for money concept

- The VfM concept is used to compare P3 and conventional delivery methods for the same investment project.
- Quantitative VfM assessment comes down to a comparison of the NPV of (expected) cash flows of the P3 and conventional approaches.
- Qualitative VfM assessment comes down to a comparison along key P3 value drivers, identified in the following slides.
- VfM assessment:
  - Answers the question, "Which delivery method provides the 'best deal' for implementing a specific project?"
  - Should create an understanding of the differences between the P3 and conventional delivery methods
  - Contributes to a better understanding of the potential value-driving mechanisms of the P3 option
  - Provides decision makers with better information to determine and optimize all of the project delivery alternatives



Value driver 1: Integration and life cycle costing

- Large and long-term P3 contracts integrate different components and phases of public service delivery.
- This allows the contractor to minimize interface problems and optimize life cycle costs and quality of service.
- For social infrastructure this effect typically is even bigger because of the integration of 'hard services' and 'soft services'.

Value driver 2: Specifications allowing for innovation

- Output-based contracting leaves room for the private sector to decide how to deliver the envisaged services.
- Under competitive pressure this leads to creative solutions, life cycle cost savings and better quality of service.
- Setting long-term performance requirements turns out to be difficult.
- If the specifications are not structured well, the payment mechanism does not work either and the service will be low.
- As in other delivery methods, changing the requirements comes at a cost.

Value driver 3: Financial incentives – Evaluation criteria

- In a competitive process the goal of all bidders is to win. Bidders can win if they score best on the evaluation criteria.
- In other words, the evaluation criteria can be used to focus the bidders on the public sector objectives.
- In order to do that, evaluation is not just price-based, but value-based (economically most advantageous bids).
- There are several systems of including quality of services and risk allocation in the evaluation criteria.
- Complicated and opaque evaluation criteria do not point bidders in the right direction and can lead to unexpected results.

Value driver 3: Financial incentives – Payment mechanism

- The private sector can best be incentivized through both carrots and sticks, aligning public and private interests.
- Poor performance should trigger penalties, which will suppress the private sector's financial performance.
- Good performance improves the private sector's profits directly (through higher payments) or indirectly (through lower costs).
- Such penalties should be set to tickle, then hurt, but not kill a private operator.
- Key is the financing component in P3 deals, making sure that the contractor has 'money at stake'.

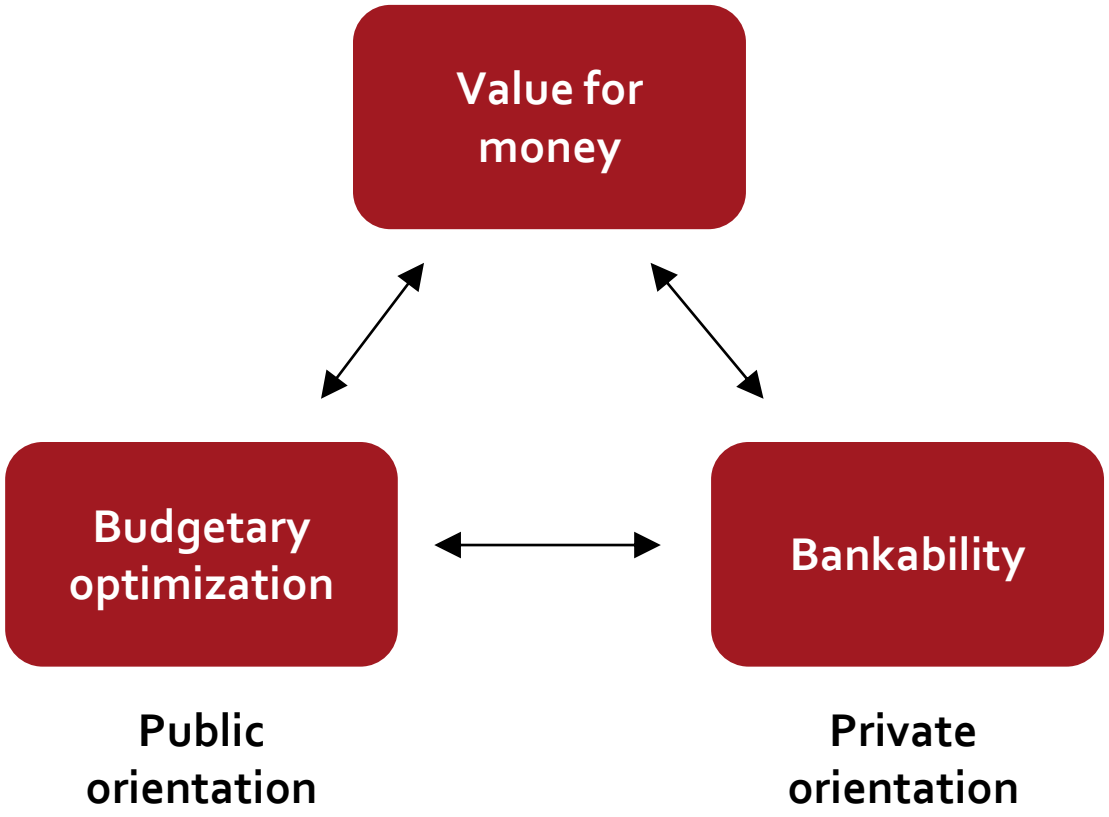
Value driver 4: Competition

- The benefits of a P3 will only materialize if there is market appetite and market capacity.
- This creates a competitive environment for procuring the public service.
- Competition for P3 projects is typically different from competition for conventional projects.
- The expected transaction costs and shortlisting procedure affect the market appetite, so procurement strategy does matter!

Value driver 5: Efficient risk allocation

- Risk allocation is at the core of P3 deal: the P3 contract is all about the risk allocation (different from conventional).
- The private sector should be able to take responsibility for the delivery of a public service (i.e. take on the performance risks).
- The private sector is not willing to take just any risks, for example sovereign risks, and sometimes not revenue risks.
- Risk allocation based on the principle that the party best able to manage these risks should indeed bear them increases VfM.

Value driver 5: Efficient risk allocation – Conflicts



Risk attitude

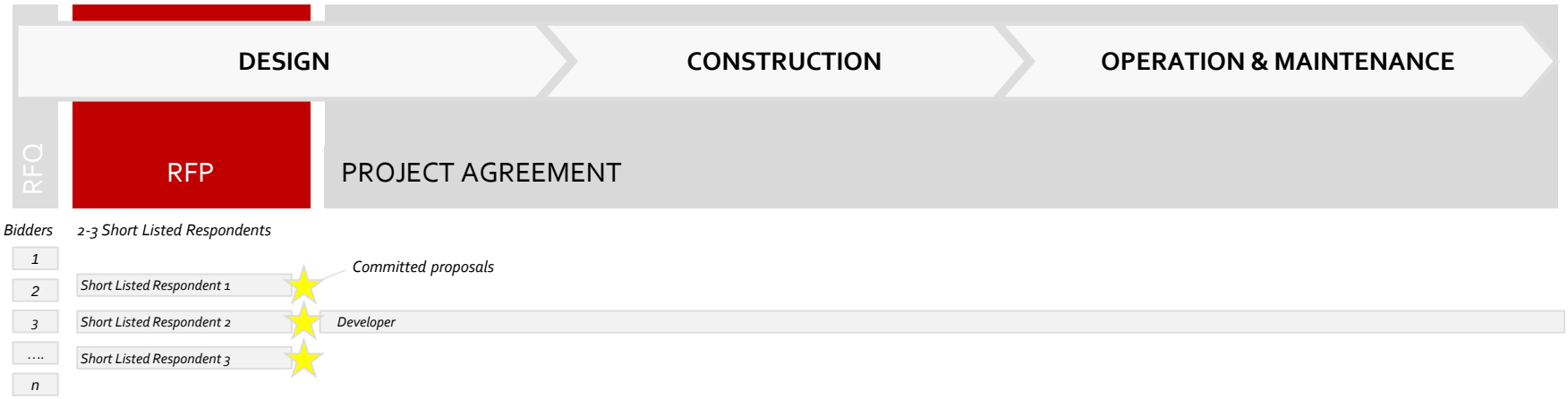
Allocation of project risks to those parties best able to manage them

Low risk to private sector, high risk to public sector

Appendix 2: Alternative project Development Approaches

A competitive two-step procurement process is most commonly used for alternative delivery

- The two-step competitive procurement works as follows:
  1. public initiation and preparation of the project and procurement documentation;
  2. shortlisting of multiple integrated bidding teams that are best qualified for the project (RFQ phase);
  3. followed by an interactive yet competitive process leading to proposals that are based on a single standardized contract and that supply fixed prices and minimize additional post-selection negotiation, which usually includes private sector penalties for failure to close (RFP phase); and
  4. selection of the preferred bidder that proposed the "best value" solution to the agency.



Some agencies consider alternative procurement and project development processes

- Some agencies consider alternative project development processes, especially if they lack technical or financial capacity to develop and structure projects. This process works as follows:
  1. public or private initiation and preparation of the project;
  2. competitive selection of the project partner on the basis of experience and indicative pricing and committed developer fees;
  3. collaborative project development and design, under a Pre-Development Agreement and/or guaranteed maximum price arrangement;
  4. direct negotiation of the project agreement, potentially with competitive procurement of various project components and financing.

Experiences with alternative procurement processes are not all positive

- Our review of processes in which the developer has a leading role in project development and directly negotiates a comprehensive development agreement with the procuring agency, concluded that:
  - Such alternative procurement approaches help governments with little internal capacity to identify, develop and implement their infrastructure projects and generate innovative solutions to infrastructure challenges;
  - Alternative procurement approaches are not necessarily easier to implement than standard procurements and have caused public controversies that delayed projects and/or resulted in renegotiations several years later;
  - Such alternative procurements are subject to corruption allegations, which, although often unproven, shows that this approach is highly sensitive to public-perception issues and may be vulnerable to being challenged in the future.

Appendix 3: Quantitative Analysis Assumptions

Baseline cost estimate for conventional delivery

Capex item	Cost (2019 $ thousands)
Construction costs eligible for funding	
Building: courthouse	116,464
Building: Judge's parking	1,173
Site: Courthouse site	6,889
Soft costs eligible for funding*	21,294
Total	**145,819**
Construction costs non-eligible for funding	
Building: DA + Office	18,117
Loop Road	2,086
Gravel Lot	174
Soft costs*	3,484
Total	**23,861**
Design Costs	**15,215**
Owner's contingency	**14,490**
Project costs	**199,385**

Please note that this cost estimate is in 2019 dollars and is the exact equivalent of the $220M cost estimate that is expressed in year of expenditure dollars.

Maintenance cost assumptions

- Routine maintenance costs are estimated at $9 / sqft / year, based on the following inputs:
  - A benchmark of routine O&M costs for comparable courthouses shows a range of $8 - $10 / sqft / year
  - Current routine O&M spending on the existing courthouse is in the range of $7 / sqft / year, but is considered insufficient

- Life cycle costs are estimated at $3 / sqft / year, based on the following inputs:
  - A benchmark of lifecycle costs for comparable courthouses shows a range of $2 - $5 / sqft / year
  - The new courthouse will be connected to the central plant on campus for heating and cooling, which allows for below-average life cycle costs

Additional transaction cost assumptions

Assumption	DBB + M	DB + M	DBM	DBfM	DBfM + TE
Additional preparation costs for Clackamas County	-	$0.5M	$1M	$3M	$3.25M

Additional preparation costs are difficult to specify prior to procurement, some costs would be typical of social infrastructure procurements, such as technical advisors for architecture and engineering. Conventional delivery requires multiple procurements for design, construction and multiple short-duration O&M contracts—this could lead to a situation where a P3 procurement can be less costly than all of the combined procurement processes needed during the entire lifecycle of a project that is delivered conventionally. On the other hand, the additional costs associated with P3 procurements are due to the complexity of executing competitive P3 procurements and drafting P3 contracts. Many agencies hire external legal counsel and financial advisors to support them through a P3 procurement. The costs of external advisors are dependent on 1) duration and complexity of procurement and 2) P3 experience of the agency. The transaction costs associated with the tax-exempt P3 model are higher than a "regular" P3, because of the 1) lack of precedent for this specific model and 2) the costs associated with the 501 c 3 structure and 3) the required changes to "regular" P3 model.

Bond issuance costs for Clackamas County	1%	1%	1%	-	-

For delivery models 1 – 3, a 30 –year FF&C bond will be issued in order to provide public financing for the project.

Additional bid costs for successful bidder	-	$0.5M	$1M	$2M	$2.25M

Additional costs associated with submitting a winning bid under a competitive P3 procurement vary based on project complexity, procurement duration, and the predictability of the procurement process. It is typical for bidders to engage external legal counsel, financial advisor. The financing and due diligence process for successful bidders is lengthy and P3 bidders typically engage external advisors to help them through this process.

Stipends for unsuccessful bidders	-	$0.5M	$0.5M	$1M	$1M

Providing stipends to unsuccessful bidders is considered a best practice and common for competitive P3 procurements. Stipends demonstrate the commitment of the agency and enhances market appetite and competition. Stipends range from several hundreds of thousands up to $1M per unsuccessful bidder. Clackamas County can determine if it wants to use a stipend – and if so at what level – in the development of its procurement strategy. Note that the total shown above is the total cost for Clackamas County to pay multiple unsuccessful bidders.

Efficiencies and cost allocation assumptions

Assumption	DBB + M	DB + M	DBM	DBfM	DBfM + TE
Efficiencies					
Design efficiencies	-	2.5-7.5%	2.5-7.5%	7.5-12.5%	7.5-12.5%
Capex efficiencies	-	2.5-7.5%	2.5-7.5%	7.5-12.5%	7.5-12.5%
Routine maintenance efficiencies	-	-	2.5-7.5%	7.5-12.5%	7.5-12.5%
Lifecycle efficiencies	-	-	2.5-7.5%	7.5-12.5%	7.5-12.5%
Costs & Risks retained by County					
Retained design costs	100%	30%	30%	30%	30%
Retained preparation & procurement costs	100%	100%	100%	100%	100%
Retained contract management costs	100%	20%	20%	20%	20%
Retained routine O&M costs	100%	100%	10%	10%	10%
Retained lifecycle costs	100%	100%	10%	10%	10%
Design & Construction Risks	100%	40%	40%	40%	40%
Maintenance Risks	100%	100%	100%	40%	40%

Inflation, term, funding and financing assumptions

Project term and inflation

- Concession period: 30 years
- Construction costs escalation: 5%
- Maintenance cost escalation: 2.5% (long-term historical average CPI)

  Source: U.S. Department of Labor, Bureau Of Labor Statistics

Funding

- State funding: 50% of eligible costs (for the purpose of this analysis a ~$85M State contribution was used for all options)

Financing

- 4-year Bond anticipation note interest rate: 1.5%
- FF&C Bond interest rate: 2.6%
- P3 weighted average cost of capital: 5.6% (next slides)
- P3 weighted average cost of capital - tax exempt): 4.0% (next slides)
- Term: 30 years, starting with 5 years of interest only after substantial completion

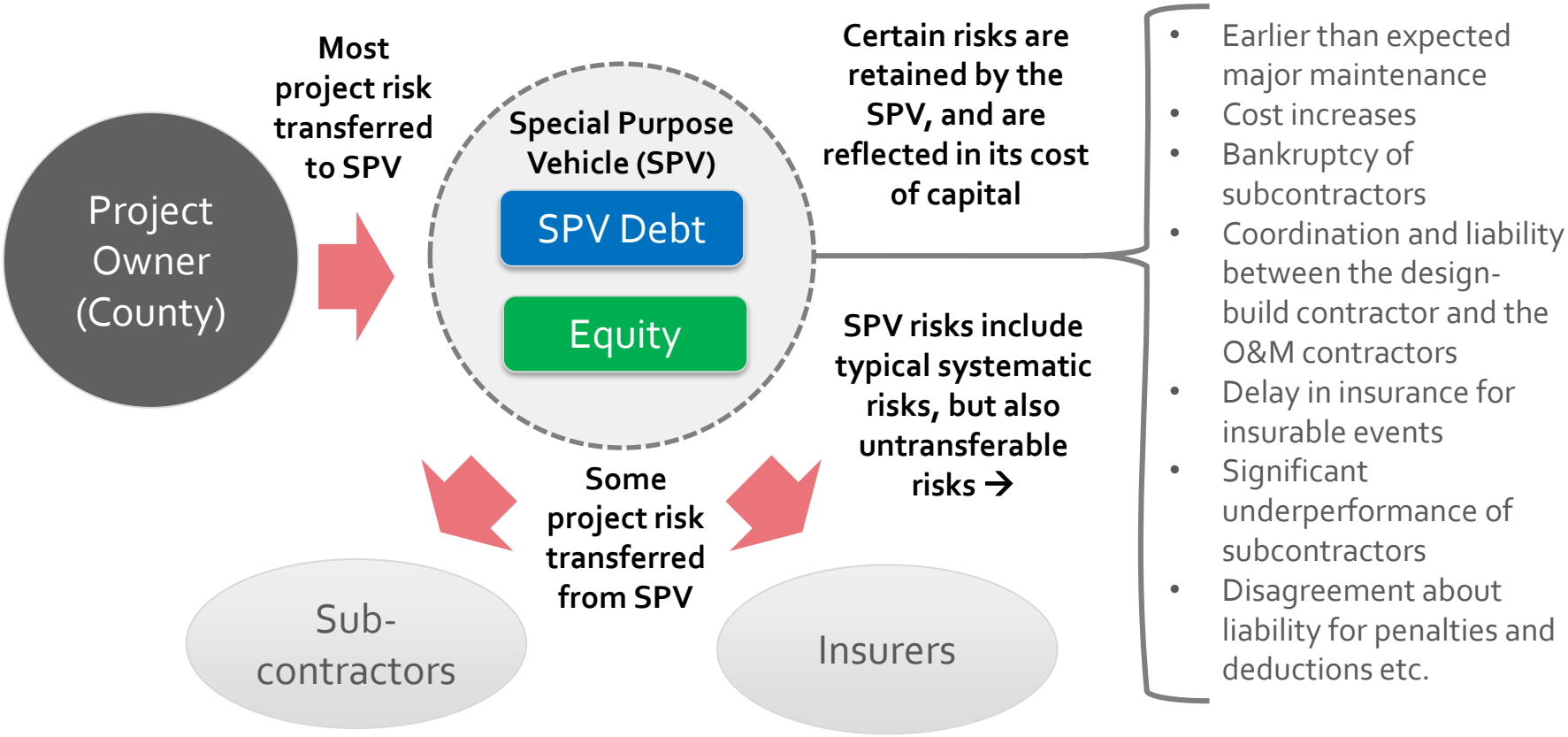
Option 4 financing assumptions

Assumption	Low	Medium	High	Source
Long term debt under taxable P3				
Base rate	2.25%	2.85%	3.50%	• 2.16% 20-year US Treasury • Assumed average life / tenor: 20 years • Source: 20-year US Treasury (11/15/2019) • UST is a typical base rate for a bond or private placement solution. The 20-year rate is a proxy for the average loan life of a 30-year P3.
Credit spread	165 bps	180 bps	200 bps	Data from comparable transactions
Cost of debt	3.90%	4.65%	5.50%	Calculated
Equity				
Equity IRR (pre tax)	11%	12%	13%	Data from comparable transactions (based on pre-tax IRR)
Leverage	91:09	90:10	88:12	Assumes the subordinate lien in the 501c3 solution is the same % of the capital structure as equity
WACC				
	4.79%	5.64%	6.65%	WACC calculation, upward correction of 0.25% to account for reserve accounts and changes in leverage over time

Option 5 financing assumptions

Assumption	Low	Medium	High	Source
Tax-Exempt debt				
Base rate	2.10%	2.60%	3.10%	• 20-year AAA GO Municipal Market Data (MMD) on 11/15/2019: 1.97%. Source: Bond Buyer • + 10 bp Low Case "Buffer" (rounded) • 20 year used to reflect average life and serial bond structure of municipal debt.
Spread for 501(c)(3)	0 bps	25 bps	50 bps	IMG Rebel analysis
Debt rate	2.10%	2.85%	3.60%	Calculated
Tax-Exempt sub-debt				
"Equity" / Sub-debt	11%	12%	13%	Data from comparable transactions (based on pre-tax IRR)
Leverage	91:09	90:10	88:12	Assumes the subordinate lien in the 501c3 solution is the same % of the capital structure as equity
WACC				
	3.15%	4.02%	5.00%	WACC calculation, upward correction of 0.25% to account for reserve accounts and changes in leverage over time

Certain P3 developer risks cannot be transferred, and are reflected in a higher cost of capital



Without a P3 transaction, the County will retain these risks, or insure them at its expense.

We use a "risk premium" approach to valuing SPV risk in cash flows

- The table below describes three common approaches to valuing SPV risk in value for money analysis.
- Approaches 2 and 3 assume financial markets are efficient: the additional cost of capital incurred by a P3 SPV is the best estimate of the cost of risks retained by the SPV.
- We use a risk premium approach. Because modelled cash flow profiles between models are similar, and this approach allows cash flows in each period to be directly compared.

Method	Description	Pros	Cons
(1) Direct valuation of risks	Independent risks are identified, with the estimated cost impact and probability of each risk modeled	• Conceptually straightforward • Risk valuation can be used to refine project structuring	• High-cost and long process • "Unknowns" remain unconsidered and unvalued
(2) Risk-adjusted NPV discounting	Nominal, non risk-adjusted public-sector cash flows are forecast for each model. Each model's cash flows discounted at a "risk-adjusted" WACC	• Allows risk valuation estimate with less time and lower cost • Likely to capture "unknowns" better than top-down approaches	• Does not allow comparison in an individual period • Cannot identify the contribution of each SPV risk to overall cost
(3) Risk premium approach	A risk adjustment is added to nominal cash flows in each period, based on a WACC premium corresponding to SPV risks.	• Allows cash flows in each period to be directly compared	• Timing impacts of risk impact may be considered slightly less precisely than in Method 2.

What the literature is saying about the comparability of public and private financing

"Arrow and Lind conclude that, under certain conditions, the social cost of public-sector-provided capital is lower because project risk can be spread more broadly across taxpayers than across relatively concentrated private investors. (…) We find that institutional arrangements that have evolved over decades to reduce the cost of private-sector risk bearing are unavailable to taxpayers in their capacity as public investment's ultimate risk bearers. Our analysis of the arrangements surrounding public- versus private-sector risk bearing casts doubt on Arrow and Lind's conclusions."

Institutional Economics Meets the Cost of Capital: Implications for Public Versus Private Infrastructure Delivery, Rick Geddes

"…the low cost of borrowing by governments does not reflect superior capabilities to choose or manage projects. Instead, it reflects the fact that governments have recourse to taxpayers, who de facto provide a fairly open-ended credit insurance to the government. If taxpayers were remunerated for the risk they assume in the case of tax-financed projects, then ex ante there would be no capital cost advantage to government finance. The risk premium on government finance would, in principle, be no different from that of private investors."

The risk premium for evaluating public projects, Michael Klein

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