

An aerial photograph of Honolulu, Hawaii, showing a mix of urban development, green spaces, and a harbor with a marina. A large yellow trapezoidal shape is overlaid on the left side of the image, containing the title and date. The background shows a cityscape with various buildings, roads, and a body of water in the lower left. In the distance, mountain ranges are visible under a cloudy sky.

Public Private Partnership Commercial Viability Analysis

Honolulu Rail Transit Project

May 24, 2018

Terms of Reference

This report (the “Report”), dated May 2018, represents a deliverable required under the terms of the subcontract agreement between HDR Engineering, Inc. (“HDR”) and Ernst and Young Infrastructure Advisors, LLC (“EYIA” or “we”) dated December 8, 2017, pursuant to the prime contract between HDR and the Honolulu Authority for Rapid Transportation (“HART”) in connection with the Honolulu Rail Transit Project (“H RTP”). In preparing the Report, EYIA relied upon data and cost estimates provided by HDR and HART, and other publicly available information (e.g., Recovery Plan, FFGA Plan of Finance). No procedures were performed by EYIA to evaluate the accuracy or completeness of data and information provided by these entities, and no such procedures were included in the agreed upon scope of work in the subcontract agreement (which was determined in conjunction with the HART and HDR). Accordingly, EYIA expresses no opinion and issues no other form of assurance regarding the data and information provided by HDR or HART. The procedures EYIA performed do not constitute an audit of historical financial statements or an examination of prospective financial statements in accordance with standards established by the American Institute of Certified Public Accountants (“AICPA”).

The services performed by EYIA were advisory in nature. Certain analyses in the Report are based on estimates and/or assumptions about future events which were provided by HDR and HART. Differences between estimated and actual results are not unusual because future events and circumstances frequently do not occur as expected, and those differences may be material. We make no representation of, nor do we take any responsibility over, the achievement of estimated or projected results. The analyses contained in the Report are based on data and information made available to EYIA through the date hereof. Should additional relevant data or information become available subsequent to the date of the Report, such data or information may have a material impact on the analyses contained in the Report. EYIA has no future obligation to update the Report.

Neither the Report nor any of our work constitutes legal opinion or advice. No representation is made relating to matters of a legal nature, including, without limitation, matters of title or ownership, legal description, encumbrances, liens, priority, easements and/or land use restrictions, the validity or enforceability of legal documents, present or future national or local legislation, regulation, ordinance or the like, or legal or equitable defenses.

The Report is intended solely for use by HART. While we believe the work performed is responsive to HART’s request pursuant to the scope of work in our subcontract agreement with HDR, we make no representation as to the sufficiency of the Report and our work for any other purposes. Any third parties reading the Report should be aware that the Report is subject to limitations, and the scope of the Report was not designed for use or reliance by third parties for investment purposes, or any other purpose. We assume no duty, obligation or responsibility whatsoever to any third parties that may obtain access to the Report.

HART Goals

This Public-Private Partnership (“P3”) Commercial Viability Analysis (“P3 Analysis”) has been undertaken to evaluate the potential for a P3 delivery method to help HART meet its goals for the construction of the remaining Honolulu Rail Transit Project elements (“H RTP” or the “Project”) and operations of the full H RTP system. HART’s key goals with respect to the Project are summarized below.

1

Deliver the Project for no more than \$8.165 billion in capital costs using existing funding

Is a P3 delivery affordable? What are key capital, operating and financing variables driving affordability?

2

Transfer risk to the private sector to increase certainty of construction cost and schedule, as well as provide long-term operating cost and performance reliability

What risks will P3 developers assume? What does this mean for contingency? How will O&M be impacted?

3

Open the Project for interim revenue service by 2020 and full revenue service by 2025

What are the key drivers in the project schedule? Can a P3 for the project be delivered in this timeframe?

4

Attract major international firms to promote competition, directly harness global best practices and drive innovation

Are major firms interested in a P3 for the Project? What are key questions/issues to promote competition?

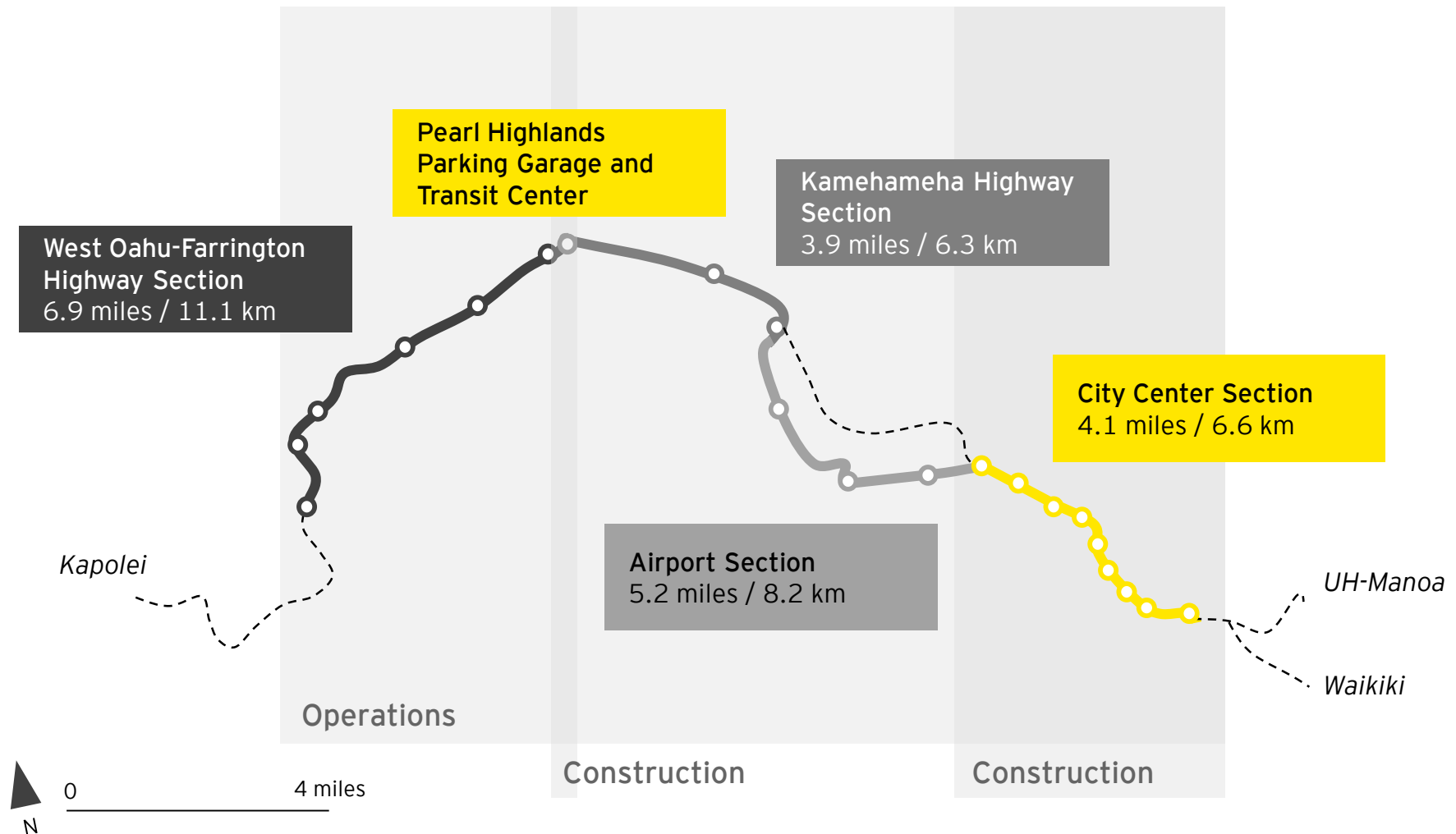
5

Assess potential for transit oriented development (TOD) and ancillary revenues to contribute to a rail infrastructure P3 project

Can these opportunities be incorporated into a P3 procurement? What is the scale of potential revenues?

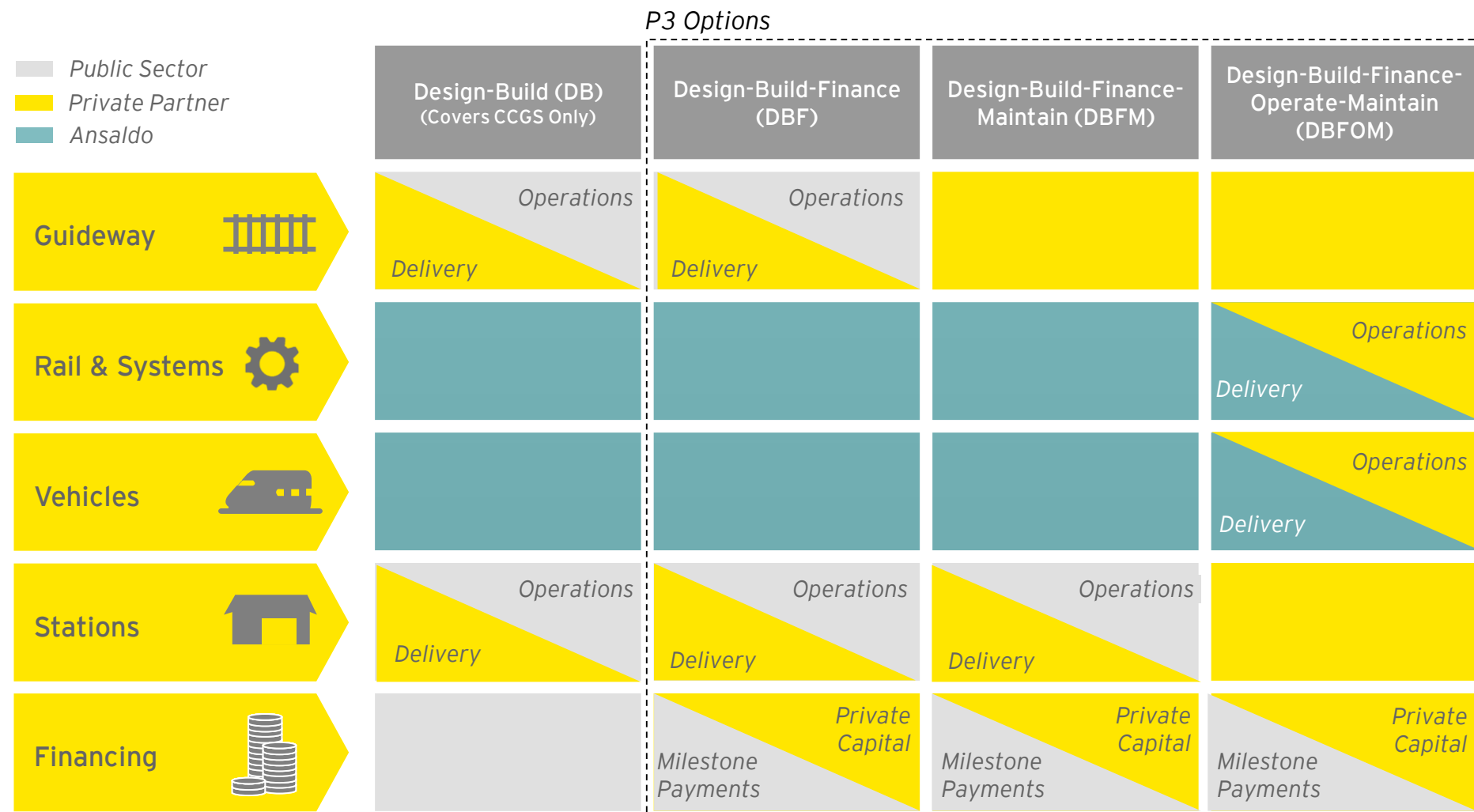
Project Overview

The P3 Analysis focuses on the design and construction of the City Center Section, including related stations (“City Center Guideway and Stations” or “CCGS”), as well as the parking garage and transit center at Pearl Highlands. A P3 delivery would also include operations and maintenance (“O&M”) of the full H RTP system, including the existing (and under construction) guideway, rail and station infrastructure.



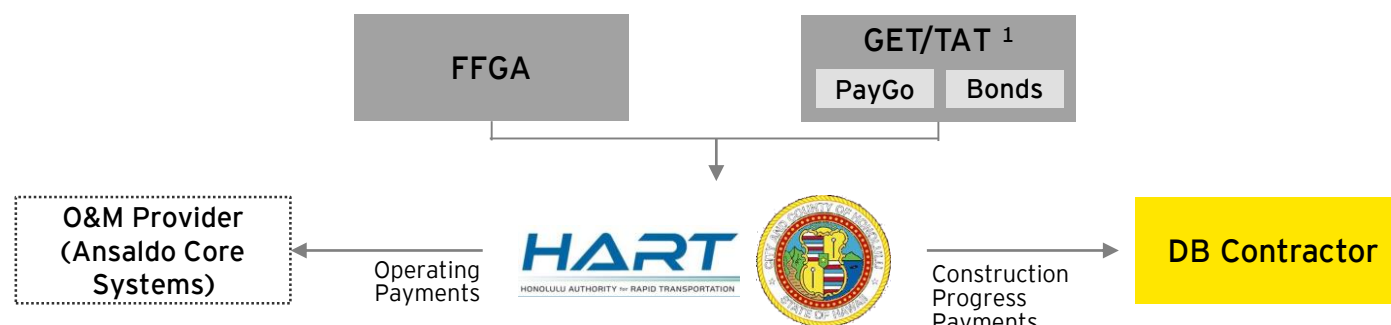
P3 Delivery Options

A P3 delivery approach transfers risk and responsibility for key Project scope items to a private partner. The P3 Analysis examines several types of P3 delivery for the H RTP and compares them against the Design-Build (DB) approach currently contemplated to be used by HART.

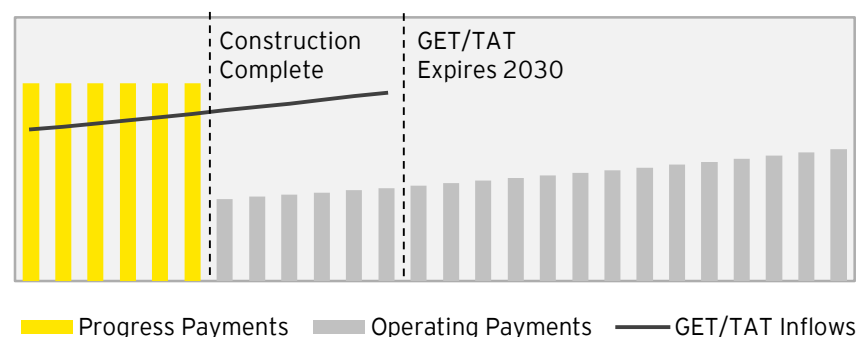


Design Build (DB)

HART has previously used a DB approach for Project construction (including, most recently, on the Airport Section). In a DB, HART enters into a fixed price contract with a construction firm and would make progress or milestone payments during construction using FFGA funds, pay-as-you-go (“PayGo”) GET/TAT revenues and General Obligation (G.O.) bond proceeds. Separately, HART has also entered into a design-build-operate-maintain (DBOM) contract with Ansaldo to cover rail cars, systems and communications as well as the first several years of project operations.



Indicative DB Project Cash Flows ²

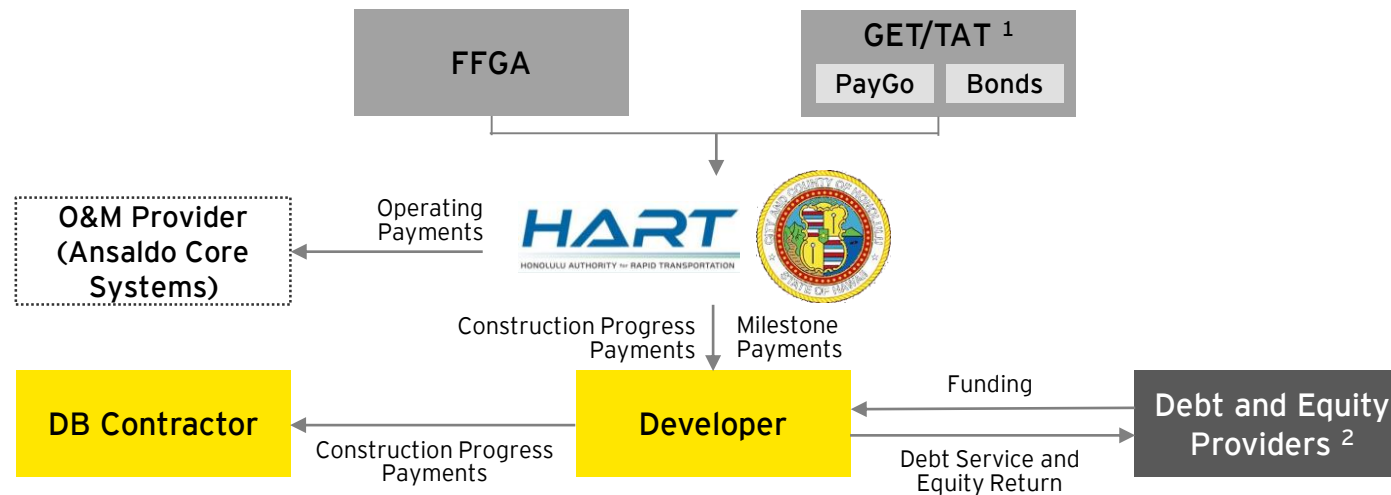


(1) GET/TAT are considered spent on a PayGo basis when contributed directly as cash. General Obligation (G.O.) Bonds are issued when available GET/TAT revenues do not fully cover construction payment needs. Debt service on these bonds is reimbursed by future GET/TAT revenues. See City of Honolulu General Obligation Bonds, Series 2017H.

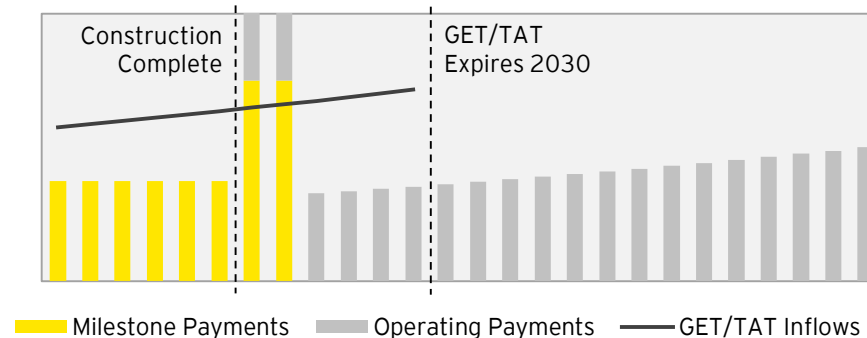
(2) Illustrative and not representative of the actual cash flow from modeled cases.

Design Build Finance (DBF)

Under a DBF, HART enters into a contract with a Developer who directly partners with construction and financial firms to deliver the Project. HART would repay the Developer through a series of payments during and/or after construction. In the U.S., “receivables DBFs” are used by public owners as a strategy to “bridge” a gap between the timing of funding receipts and construction payments. A “project finance DBF” is used to transfer greater construction risk, but the size of the Project could shrink the competitive pool (which is already limited on island) to those few contractors with balance sheets large enough to support such a project (if any).



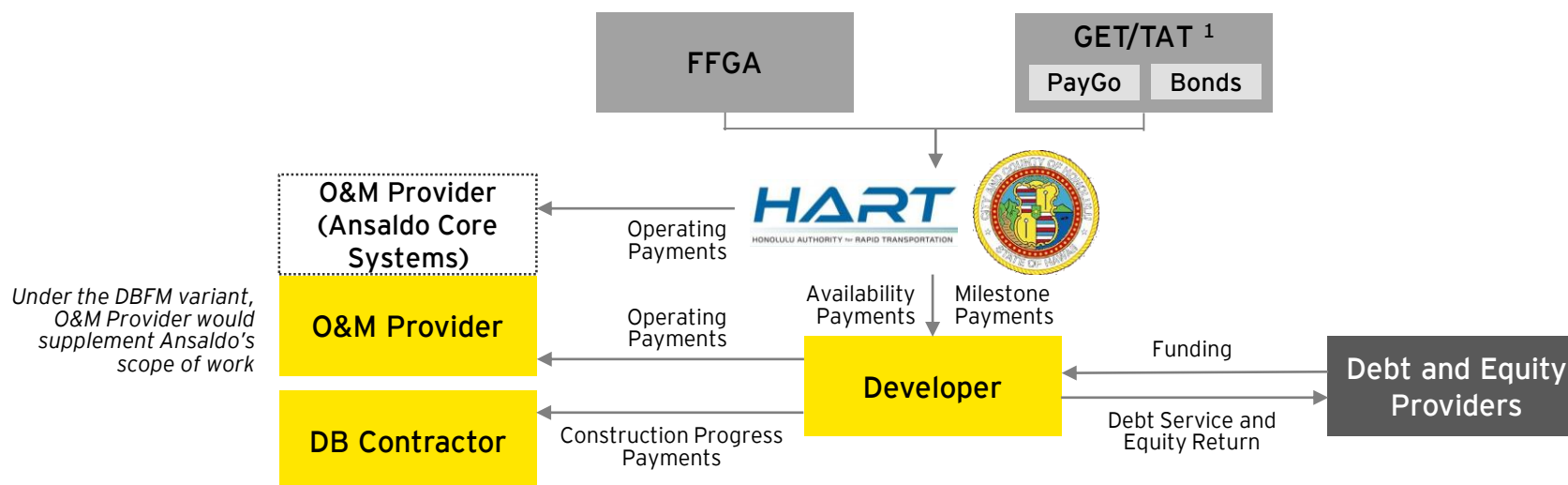
Indicative DBF Project Cash Flows ³



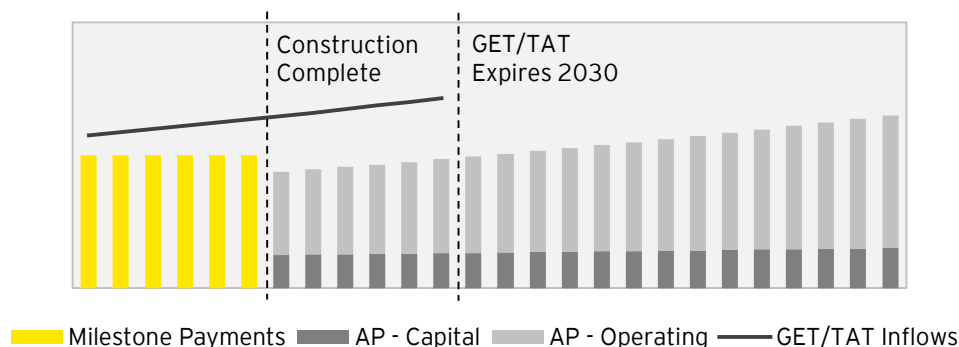
- (1) GET/TAT are considered spent on a PayGo basis when contributed directly as cash. General Obligation (G.O.) Bonds are issued when available GET/TAT revenues do not fully cover construction payment needs. Debt service on these bonds is reimbursed by future GET/TAT revenues. See City of Honolulu General Obligation Bonds, Series 2017H.
- (2) In a receivables DBF, there would be no equity capital. DB Contractor may also elect to use its own balance sheet in lieu of using third party capital.
- (3) Illustrative and not representative of the actual cash flow from modeled cases.

Design Build Finance (Operate) Maintain (DBF(O)M)

Under a DBFOM, HART enters into a contract with a Developer. The Developer then partners with construction, operating and financial partners to deliver the Project. This approach introduces private capital into the Project which is repaid over time subject to successful construction through “availability payments” contingent upon project successful operating performance.









Indicative DBFOM Project Cash Flows^{2, 3}



- (1) GET/TAT are considered spent on a PayGo basis when contributed directly as cash. General Obligation (G.O.) Bonds are issued when available GET/TAT revenues do not fully cover construction payment needs. Debt service on these bonds is reimbursed by future GET/TAT revenues. See City of Honolulu General Obligation Bonds, Series 2017H.
- (2) Illustrative and not representative of the actual cash flow from modeled cases.
- (3) A “final acceptance payment” may be also added to this structure, made after construction is over.

Analysis Approach

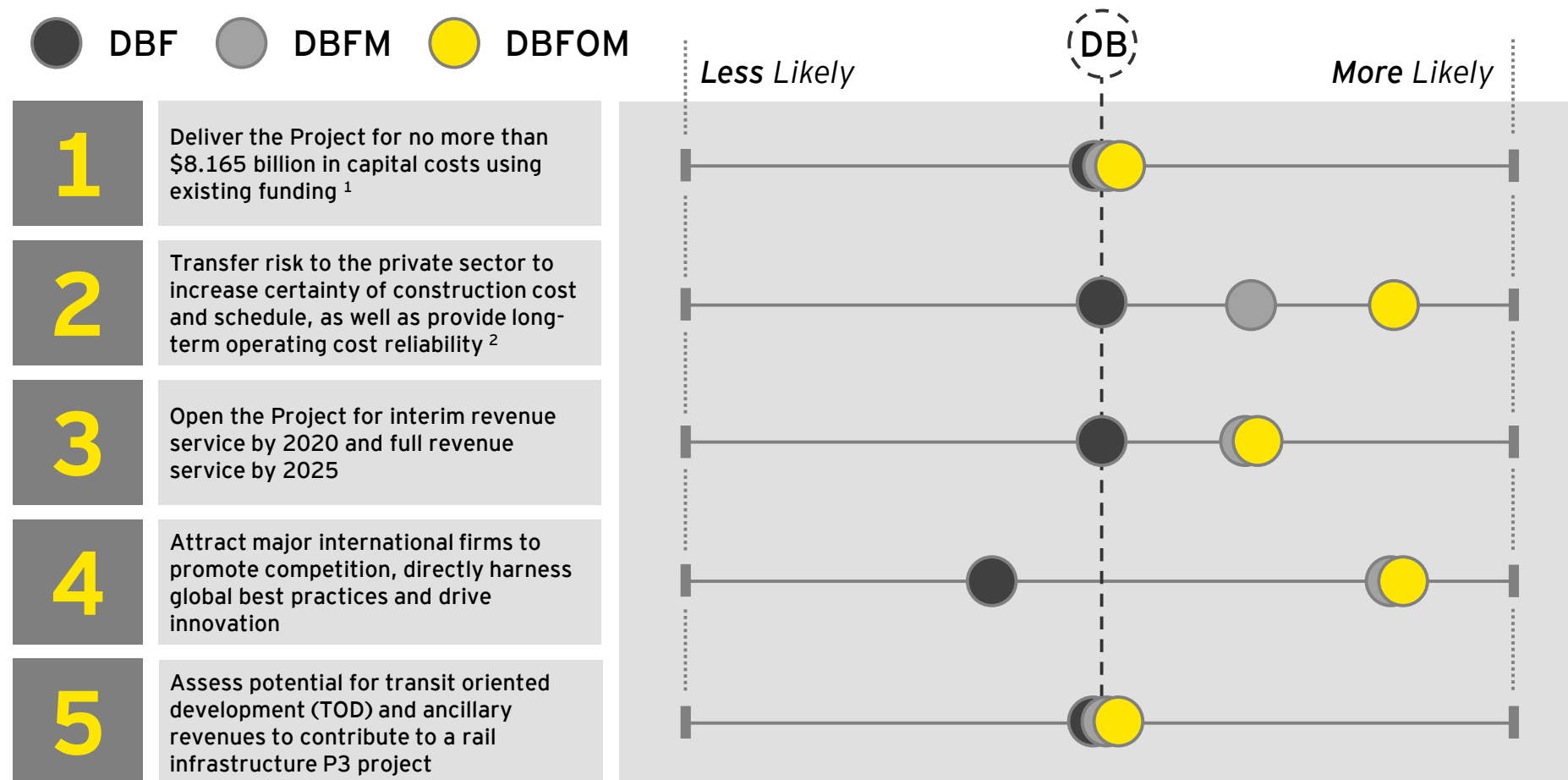
The Commercial Viability analysis evaluated all of the P3 delivery methods against HART goals for the Project to determine if a P3 model is a suitable delivery approach. The analysis included several steps to inform the feasibility of a P3 for the Project

-  Interaction with key industry participants¹
-  Analysis of affordability and financial outcomes
-  Evaluation of procurement approaches and timelines
-  Consideration of key operational considerations
-  Development of feasibility analysis of transit-oriented development and ancillary revenue opportunities
-  Survey of key precedent projects and lessons learned across national and international case studies

(1) To assess competitive landscape and identify key issues important to interested parties (including a two day industry forum on February 13-14)

P3 Delivery Options: Goals

The P3 Analysis evaluated the DB and P3 delivery options against HART goals. The analysis determined that, while all methods achieve HART goals, DBFM and DBFOM provide the best overall value to HART and the City.



- (1) The DB and DBF options have the lowest cost of capital and require the lowest amount of funds to cover base capital costs. While the DBFM and DBFOM options have higher cost of capital, they are also more likely to promote innovation and enhance competition to drive improved construction pricing to offset higher financing cost.
- (2) The DBFM and DBFOM options offer higher risk transfer than DB and DBF, driving improved price and schedule certainty, including more reliable base capital cost pricing due to contractual risk transfer provisions.

Note: DB (Design-Build) is shown as a "vertical" baseline - DBF, DBFM and DBFOM's ability to meet HART's goals are shown relative to DB.

Goal 1: Project Affordability

1

Deliver the Project for no more than \$8.165 billion in capital costs using existing funding

Is a P3 delivery method affordable? What are key variables driving affordability considerations?

A 26-year DBF(O)M is affordable within the existing \$8.165 billion HART budget. An “affordability limit” can be incorporated into a P3 procurement to communicate budget limits to teams, and the evaluation criteria can be designed to incentivize offerors to meet financial goals.

The affordability of a P3 for the Project has been evaluated based on assumptions about HART revenues:

- ▶ GET and TAT revenue projections
- ▶ FFGA funding availability
- ▶ City subsidy

The affordability of the P3 is also driven by cost items related to the P3 and non-P3 components of the project:

- ▶ Construction costs (P3 project vs. non-P3 project) and contingency
- ▶ P3 agreement term (currently 6 years of construction plus 20 years of operations)
- ▶ Sizing of construction milestone payments
- ▶ Cost of capital for at-risk private financing

Given color of money considerations, operating costs (and potential operating savings related to a P3) have not been incorporated into the affordability curve; it is assumed that the City covers all operations and maintenance-related costs.

Uses and Sources of Funds during Construction (YOE \$Ms)

H RTP Uses	Past	Non-P3	P3	Total
Total	2,691	3,847	1,627	8,165
H RTP Sources	Past	Non-P3	P3	Total
FFGA Funds	785	365	399	1,550
GET/TAT Funds	1,546	2,070	366	3,982 ¹
G.O. Bond Proceeds	-	1,240	409	1,649
Other	360	172	452	984
Total	2,691	3,847	1,627	8,165

Note: Chart shows total H RTP costs for full scope. Past costs shown through end 2017. Non-P3 costs are for remaining segments under construction outside P3 scope. Other uses of funds include government agency costs and required savings; they do not include financing costs. Other sources of funds include City subsidy, private capital and others.

(1) Total GET/TAT funds amount to approximately \$7 billion throughout the P3 agreement term, with the remainder of funds received after construction paying for G.O. debt service, availability payments related to capital/construction costs, and additional railcars.

Goal 1: Project Affordability

1

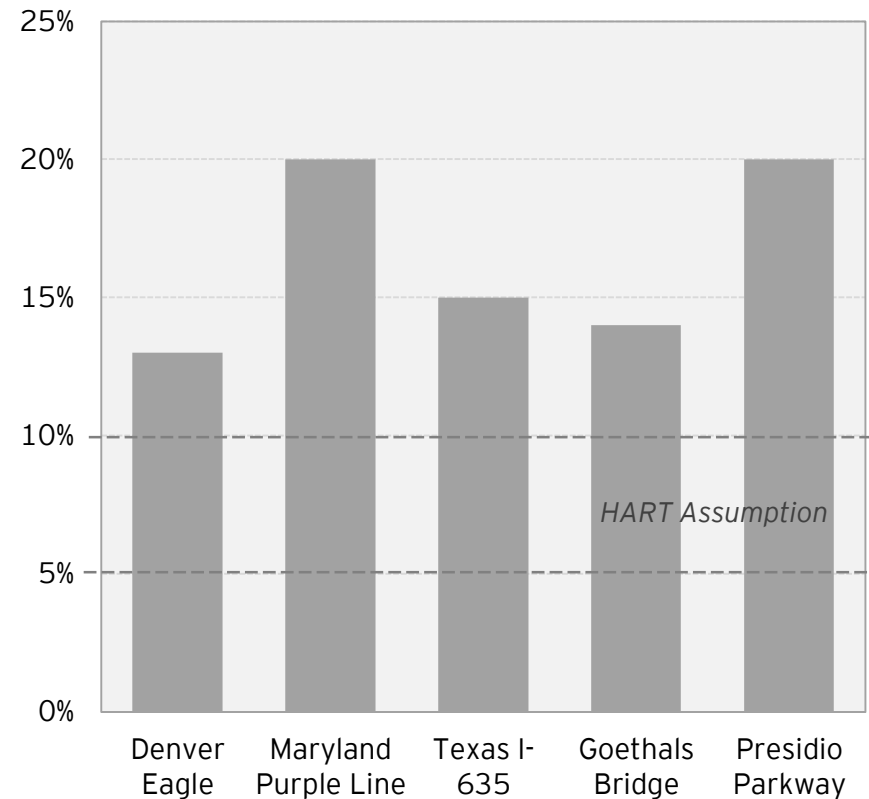
Deliver the Project for no more than \$8.165 billion in capital costs using existing funding

Is a P3 delivery method affordable? What are key variables driving affordability considerations?

The DBF(O)M base case incorporates 5-10% construction cost savings on the \$1.627 billion P3 Project (1-2% of the \$8.165 billion H RTP) related to innovation and competition relative to a more traditional procurement and delivery.

- ▶ **Reduction in baseline capital cost:** The 5-10% base capital costs reduction is more than reasonable compared to savings observed on other DBF(O)Ms. A savings of 10-20% or more versus public sponsor projections has been observed on P3s across the country. On the innovation front, given the project is partially built and environmental approvals constrain certain design decisions, the lower end of the range has been assumed. On the competition side, HART has not historically attracted major international contractors. These firms may be able to price certain risks more competitively in the context of a DBF(O)M opportunity.
- ▶ **No reduction in construction contingency:** The HART budget is currently carrying an approximately 16% contingency allocated to the P3 project scope with additional unallocated contingency included in its financial projections. The P3 conservatively assumes this full contingency remains unchanged despite the incremental risk allocation benefits of a P3 structure which should reduce the need for funds beyond the base budget.
- ▶ **No reduction in operating costs:** P3 delivery also has a history of reducing long-term operations and maintenance costs. No savings has been assumed in this analysis, but this could represent a very substantial value - a 5% savings represents over \$150 million in value over 20 years.

*Historical P3 Innovation/Competition Savings
(% of Public Sponsor Projected Cost)*



Goal 2: Risk Transfer

2

Transfer risk to the private sector to increase certainty of construction cost and schedule, as well as provide long-term operating cost and performance reliability

What risks will P3 developers assume? What does this mean for contingency? How will O&M be impacted?

A DBF(O)M delivery strategy allows HART to transfer key project delivery risks to the private sector and increase certainty of on schedule, on budget delivery. This risk transfer will reduce pressure on the HART contingency - however, the P3 analysis has conservatively left the contingency unchanged.

A private partner will assume substantially more risks under a DBFM or DBFOM than a typical DB contract, allowing a public sponsor to substantially reduce its allocated contingency budget for these risks:

- ▶ Construction period environmental, supervening event and geological/archeological risks
- ▶ Long-term operations and maintenance cost and performance risk on new and existing assets
- ▶ Risk of interface issues between new and existing assets, systems and vehicles

While a DB approach transfers core construction cost and schedule risk, construction risk transfer under a DBF(O)M is magnified by private capital

- ▶ Equity investors are highly incentivized to ensure timely completion to begin to receive cash flow
- ▶ Lenders require step in rights to manage construction directly in the event equity does not comply with commitments to complete

Note: DBFM and DBFOM may have different risk allocation with respect to interface, operations and maintenance, system performance and long-term asset condition as per table.

Indicative Allocation ○ Public ● Private ◐ Shared

Risk Item	DB	DBFM/DBFOM
Construction Costs/Errors & Omissions	●	●
Construction Schedule	◐	●
Utilities Relocation	○	○
Geotechnical and Archeological	◐	◐
Environmental and Permits	◐	◐
Right of Way Acquisition	○	○
Supervening/Relief Events	◐	◐
Interface Risk	○	◐/◐
Operations & Maintenance Costs	○	◐/●
Defects in Existing Assets/Vehicles	◐	◐
System Performance/Service Quality	◐	◐/●
Long-Term Asset Condition/Useful Life	○	●
Ridership and Revenue	○	○

Goal 2: Risk Transfer

2

Transfer risk to the private sector to increase certainty of construction cost and schedule, as well as provide long-term operating cost and performance reliability

What risks will P3 developers assume? What does this mean for contingency? How will O&M be impacted?

A DBFOM delivery strategy also allows HART and the City to have committed long-term pricing for operations, maintenance and capital asset replacement for the system and will require the Developer to meet high quality performance standards related to on-time performance, cleanliness and incident response.

Under a DBF(O)M, the offerors will develop a comprehensive, detailed operations and maintenance plan as part of a proposal and provide fixed pricing for operations, maintenance and capital replacement over the 20+ year term of the agreement.

The private partner will also be responsible for meeting key performance standards (indicative list of categories at right) over the course of the operating period.

- ▶ HART and the City will have the right to make deductions against availability payments in the event performance standards are not met (both operating and capital components)
- ▶ This represents a very strong incentive for the operator and the debt and equity investors of the private partner to ensure operations are conducted at the highest quality.

These operating standards will also include a capital asset replacement program to ensure the private partner makes responsible, consistent investments in capital asset replacement to manage overall operating costs and mitigate risks of failure / ensure a state of good repair

- ▶ Offerors will incorporate long-term operations and lifecycle planning into their proposals to manage total life project costs and deliver value for HART and the City.

Sample Performance Standards

Service Frequency/Routing

On Time Performance

Performance on Satisfaction Surveys

Response to Customer Comments

Elevator & Escalator Performance

Janitorial/Cleanliness - Stations + Vehicles

Graffiti

Visual Display Availability

Lighting - Stations + Vehicles

Asset Condition - Stations, Vehicles, Guideway

Major Capital Investment

Debris Control/Drainage

Emergency Response

Goal 3: Project Schedule

3

Open the Project for full revenue service by 2025

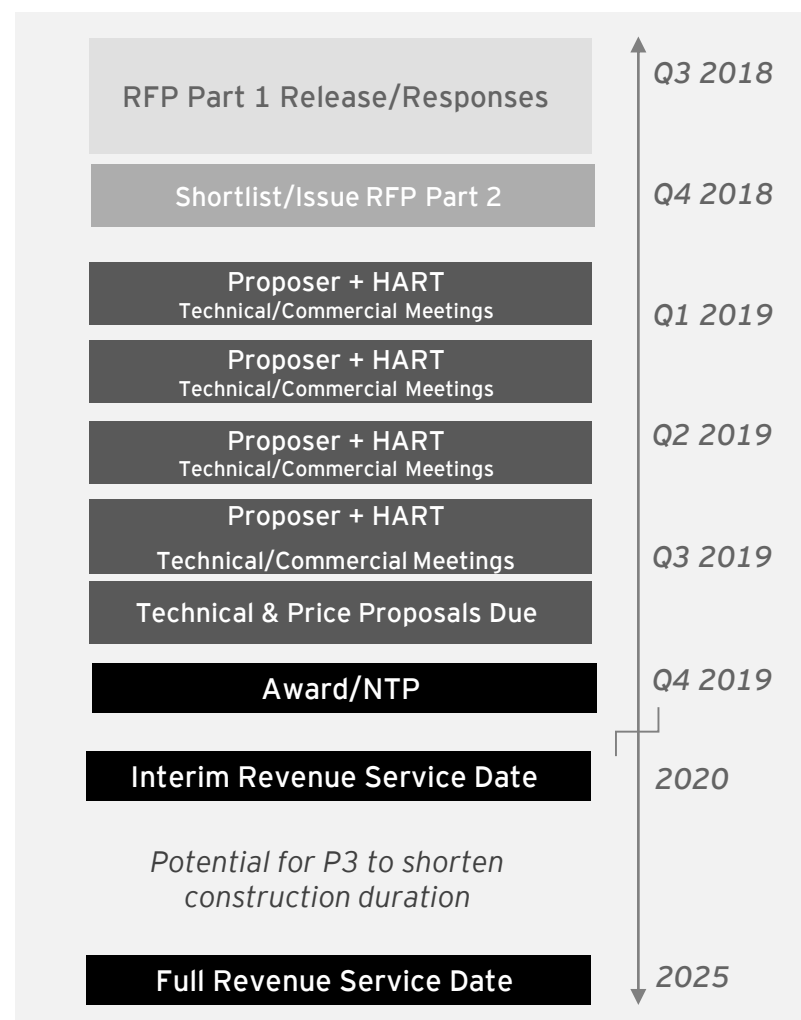
What are the key drivers in the project schedule? Can a P3 for the project be delivered in this timeframe?

A DBF(O)M may allow for improvement on HART's committed project delivery schedule; already ongoing advance utility relocation works are a prudent strategy for further enhancing schedule.

A competitive P3 procurement will give offerors a Project completion deadline, and teams can be incentivized through the RFP the P3 compensation structure to further accelerate completion to (i) lower construction price by reducing construction inflation and (ii) score points related to construction schedule acceleration.

While a P3 procurement typically takes longer than a traditional DB (18 months vs. 9-12 months), significant design work will be accelerated and included in proposals, which allows for full service opening earlier or no later than 2025. The schedule shown assumes a two-step P3 procurement:

- ▶ **Request for Proposals Part 1 (Qualifications):** All teams submit information on relevant experience on similar projects and details on financial strength
- ▶ **Request for Proposals Part 2 to Priority Listed Offerors:** Selected teams from Part 1 phase engage with HART team over an extended period to refine DBF(O)M commercial terms culminating in the submittal of detailed technical and financial proposals which include fixed price offers
- ▶ **Full design and construction:** Approximately 6 years from Q4 2019 to Q4 2025 (no P3 schedule savings assumed)



Goal 4: Promote Competition and Innovation

4

Attract major international firms to promote competition, directly harness global best practices and drive innovation

Are major firms interested in a P3 for the Project ? What are key questions/issues to promote competition?

Based on market feedback to date, a DBF(O)M procurement would be of significant interest to major developers and contractors who may not otherwise pursue a more traditional delivery approach. Expanding the competitive landscape (which has historically been constrained in Hawaii) may result in more favorable pricing for the Project. However, teaming and participation of local contractors will be critical to a successful P3 procurement and delivery.

The industry forum gathered 170 people from over 70 firms and provided several key takeaways through one-on-one meetings with infrastructure and real estate developers, investors and major contractors among others.



P3 developers were very interested in a P3 scope which includes substantial operations and maintenance activities, and found a P3 business opportunity of this size and scope very attractive



P3 developers suggested that a DBF(O)M for rail exclude TOD and ancillary revenue items due to different risk/return profiles of P3 vs. real estate investors; TOD and ancillary-conscious elements can be incorporated into the P3 scope and scoring



P3 developers highlighted taking on maintenance of facilities built by others as a key risk, and noted that having all HART reports and records available to proposers would lead to more competitive risk-adjusted pricing for the project



Real estate developers were interested in retail opportunities adjacent to stations and highlighted the importance of schedule certainty for the rail segments in order for them to begin investing in real estate activities

Additionally, the use of performance-based output specifications (rather than more prescriptive design inputs) in the DBF(O)M model helps drive innovation and lifecycle costing strategies that result in lower all-in design, construction, O&M and financing costs, as witnessed on Denver Eagle, Maryland Purple Line, and, most recently Los Angeles World Airport's Automated People Mover.

Goal 5: TOD and Ancillary Revenue Opportunities

5

Assess potential for transit oriented development (TOD) and ancillary revenue opportunities to contribute to a rail infrastructure P3 project

Can these opportunities be incorporated into a P3 procurement? What is the scale of potential revenues?

Industry day participants were clear that TOD and ancillary revenue opportunities should be kept separate from any P3 rail procurement. Instead, HART and the City can extract maximum value from TOD assets through management of real estate and transit system assets through a separate, coordinated procurement process.

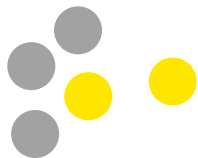
Key Reasons for a Separate P3 Rail Procurement



- ▶ Rail infrastructure developers and investors are reluctant to assume market and revenue risk related to the timing and amount of TOD rental income
- ▶ Real estate investors generally seek higher rates of return than infra developers



- ▶ Most rail infrastructure developers would likely seek to pass TOD assets through to a real estate investor rather than retain long-term development risk.
- ▶ Development rights to any TOD assets would likely be sold to the investor at a discount upon award of the rail P3 contract award, diminishing value for the City/HART.



- ▶ Inclusion of TOD real estate assets in the P3 project scope may reduce participation in the procurement.
- ▶ If the P3 RFP requires or favors integration of complex TOD concepts at HART stations, some proposers may opt out entirely.

Proposers may be willing to incorporate TOD-compatible design so as not to preclude future development on station-adjacent sites such as Chinatown. While it is difficult to combine rail and TOD into a single procurement, a clear commitment for on budget, on schedule delivery of infrastructure will encourage real estate investment.

Goal 5: TOD and Ancillary Revenue Opportunities

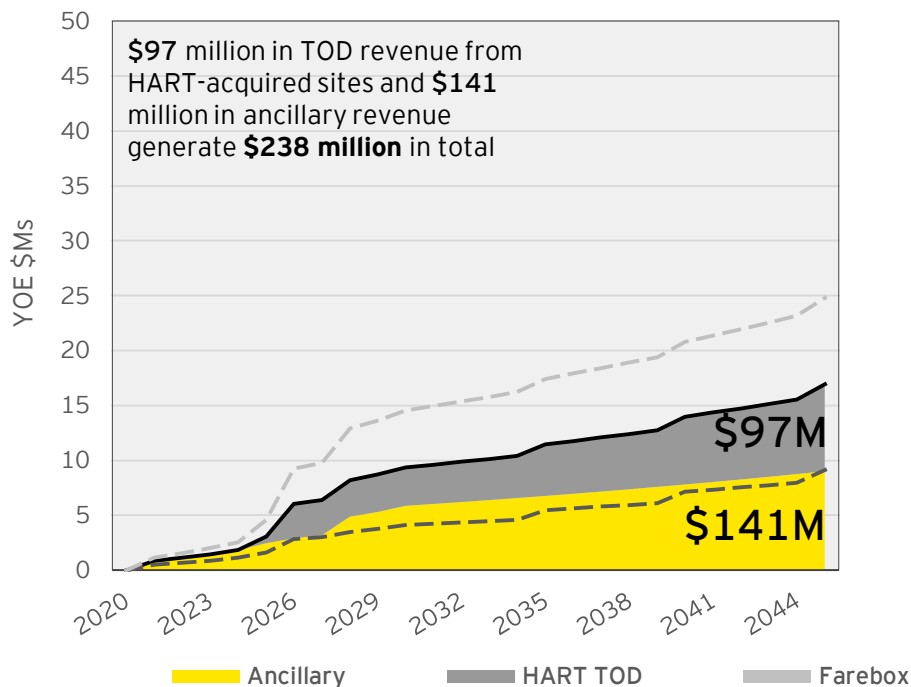
5

Assess potential for transit oriented development (TOD) and ancillary revenue opportunities to contribute to a rail infrastructure P3 project

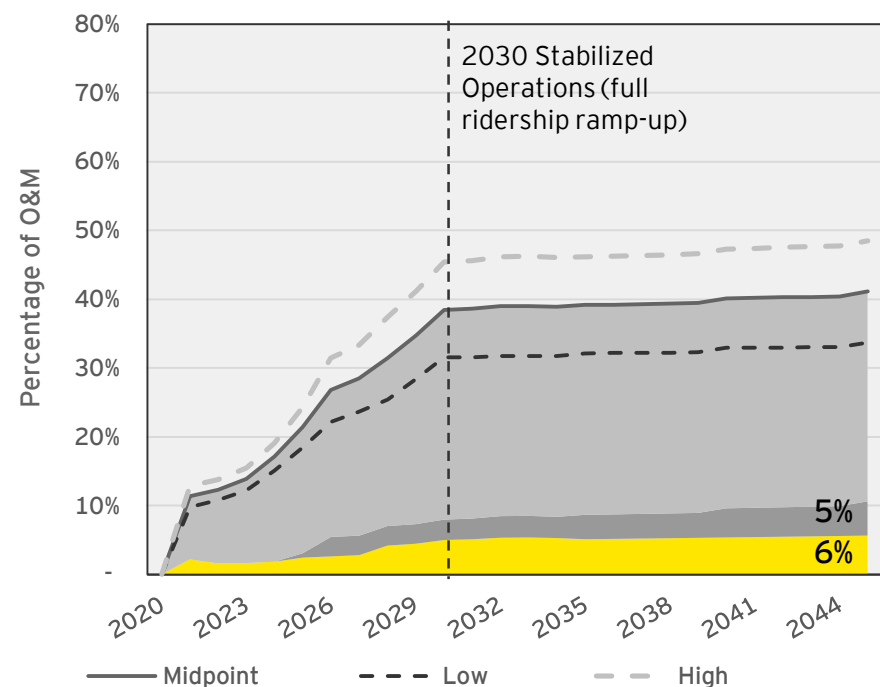
Can these opportunities be incorporated into a P3 procurement? What is the scale of potential revenues?

Ground lease income from HART-acquired TOD sites¹ and ancillary revenue opportunities such as parking and concessions offer a long-term funding source for the Project. By 2045, these sources are estimated to yield a cumulative \$238 million and cover up to 11% of annual O&M availability payments.⁽²⁾ Coupled with projected 2030 ridership revenue, it could cover roughly 40% of annual O&M payments upon stabilized operations. Revenue risk related to the amount or timing of these receipts would remain with the City.

HART TOD and Ancillary Revenues



Likely Impact on O&M Funding



(1) Refers to sites originally acquired by HART for a transit purpose. Revenue from these sites is assumed to be available for HART system O&M costs.

(2) Reflects midpoint estimate; low is \$116M(6%) and high is \$361M(16%); ground lease estimates assume affordable housing requirements are met.

Note: Figures assume inflation of 2.5% per annum.

Key Opportunities & Challenges

While a P3 delivery could be an effective method by which the HART Project achieves its objectives, there are specific opportunities and challenges related to the procurement and execution of a P3 approach that should be evaluated further as part of the decision to pursue a P3.

Opportunities		Challenges	
Budget & Schedule Certainty	<ul style="list-style-type: none"> ▶ A P3 can deliver a fixed price and schedule commitment to complete the development and construction of the remaining system components ▶ This approach can ensure sufficiency of the existing GET/TAT revenue stream 	Existing Ansaldo Contract	<ul style="list-style-type: none"> ▶ Clarity on the approach to the existing Ansaldo contract as it pertains to operations and maintenance under the P3 will be critical for Proposers to invest in an RFP process
Federal Opportunities	<ul style="list-style-type: none"> ▶ Access to federal financing tools reduce private cost of financing and further enhance the P3 project affordability ▶ A TIFIA loan is assumed as part of the base case. While TIFIA loan process is complicated, it provides substantial value to the project 	Condition of Existing Assets	<ul style="list-style-type: none"> ▶ Proposers will look for substantial baseline information about existing project construction, including as-built drawings, incident reporting and quality reports ▶ HART will likely need to provide cost and time relief for deviations from these baselines (not all risks can be transferred)
Competition & Innovation	<ul style="list-style-type: none"> ▶ A P3 process must be designed and executed to attract leading international contractors who have the expertise and experience to undertake a project of this scale and scope ▶ Clear evaluation criteria will drive competition and best value results 	TOD & Ancillary Revenues	<ul style="list-style-type: none"> ▶ TOD and ancillary revenues should not be incorporated directly into the rail P3 delivery but can be a key project funding source ▶ Rail specifications and evaluation criteria can incorporate certain concepts to facilitate and incentivize TOD/commercially-conscious design and operating decisions from offerors

Summary Takeaways

A DBF(O)M “Availability Payment” is the P3 structure that would likely provide the most benefits to HART. A Developer would design, build and finance the CCGS and the Pearl Highlands Transit Center, and be responsible for O&M of the entire H RTP upon full revenue service in 2025.

1

DBF(O)M offers clear risk transfer benefits related to cost, schedule and interface

The DBF(O)M transfers substantial risks to the private sector and directly exposes private debt and equity investment to losses for construction delays, cost overruns, system interface challenges and many other risks; repayment of private investment only starts once construction is complete and accepted. This strong incentive combined with contractual protections increases the reliability and execution certainty for the Project substantially relative to a DB. In addition, the use of the “single point of contact” Developer will also reduce the need for HART to hire additional staff to oversee/manage the interfaces between civil works, systems and rolling stock, and operations and maintenance and mitigate contract administration and interface risks.

2

DBF(O)M incentivizes high quality system performance over the long-term

DBF(O)M payments are only made if the rail system is performing as expected; payments are subject to deductions for an enumerated set of operational performance requirements. This provides significant long-term risk transfer and reliability for the Project via a guaranteed price for operating and maintaining the full system to required performance levels, and in a state of good repair (the built-in long-term “retainage” provided via private capital investment is akin to a long-term warranty). The City has successfully employed private operations outsourcing for TheBus over the years and here could also benefit from private sector operating expertise as well as long-term pricing locked-in years before full revenue service.

3

DBF(O)M will enhance opportunities for cost reduction and innovation

The DBF(O)M is best positioned to allow offerors to compete on HART’s all-in cost of ownership (including capital costs, O&M and financing) over the full 26-year term. This is achieved through (1) use of output-based performance specifications as opposed to prescriptive requirements to facilitate innovation, (2) enhanced competition by drawing in Developers and large contractors otherwise not present in Hawaii, and (3) potential for long-term O&M savings through a competitive procurement. Based on experience on comparable US projects, a DBF(O)M is likely to produce the \$81-169 million in capital cost savings required to offset the higher financing costs and progress with a less risky, yet affordable DBF(O)M.²

4

TOD efforts should be progressed in parallel with, but separately from, a rail DBF(O)M

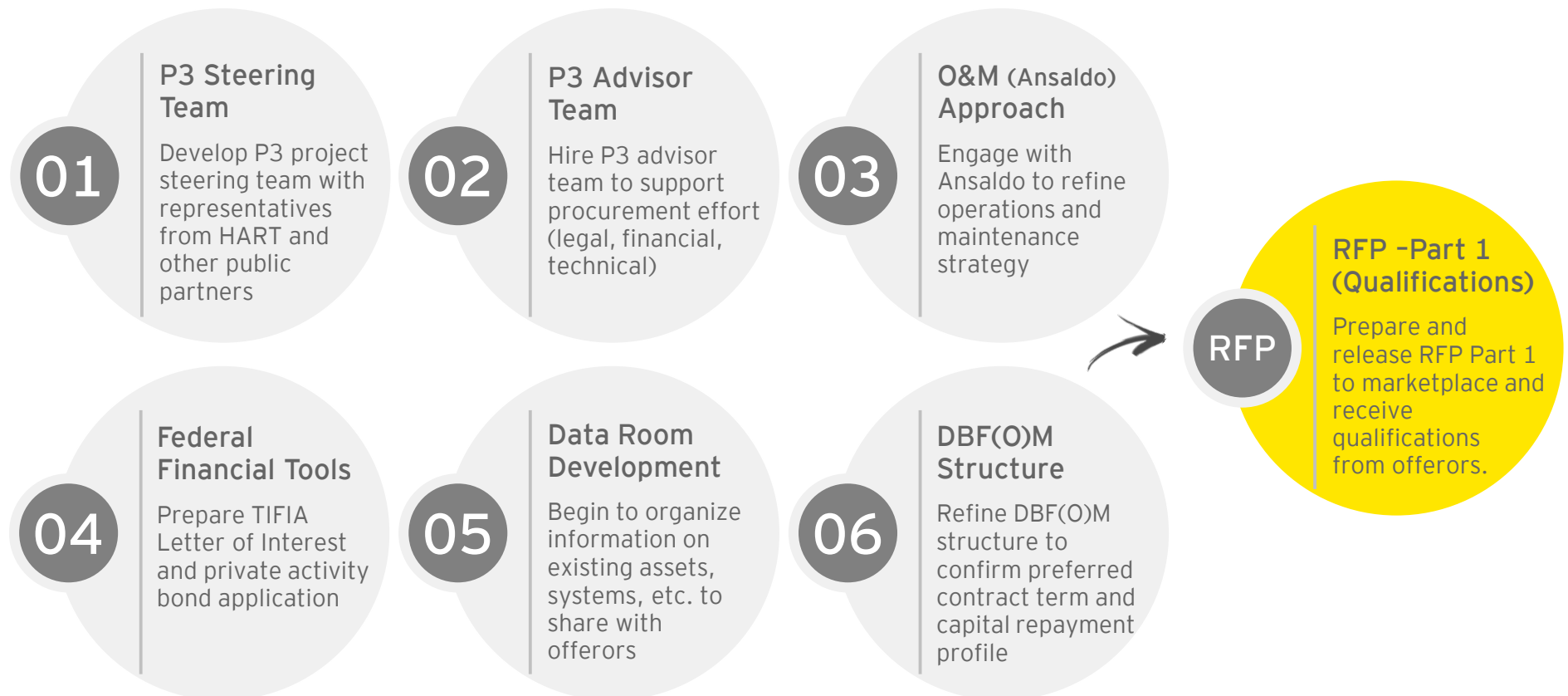
Long-term revenues from the development of TOD parcels would be best leveraged through separate developments/RFPs. Together, ground lease revenues from HART-acquired properties and ancillary revenues can fund 4% to 11% of the O&M cost (supplementing farebox collections). Under a DBF(O)M the rail O&M would be paid through the Availability Payments - and these TOD and ancillary collections are a sustainable source to fund a portion of these payments.

(1) 5-10% of the \$1.627 billion P3 Project, or 1-2% of the total \$8.165 billion H RTP

(2) The use of subsidized federal financing tools and City G.O. debt will also be critical to maintain a competitive cost of capital for the DBF(O)M

Next Steps

If HART elects to move forward with a DBF(O)M approach for the Project, a number of near-term actions should be considered before HART could launch a procurement for the Project. These next steps address organizational and staffing considerations, project scoping and potential financial enhancements to support a successful DBF(O)M delivery.

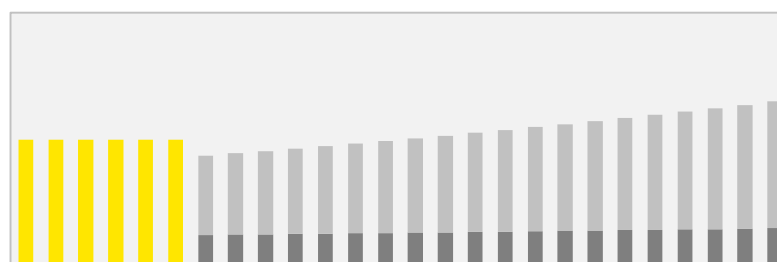


DBF(O)M Structure

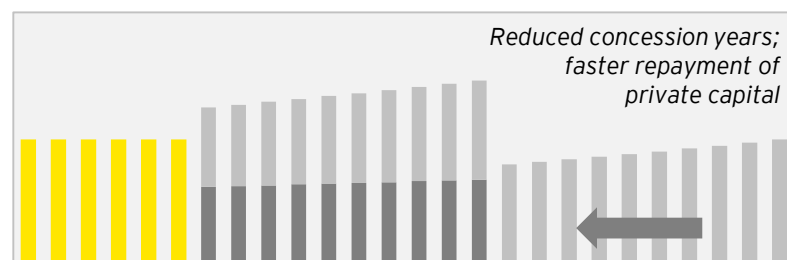
If a DBF(O)M is pursued, as a next step the exact financial and payment structure would be refined to manage cash flow, affordability, risk transfer, lifecycle benefits and market competition goals. Several variations of the base case DBF(O)M approach (including traditional delivery/P3 hybrids) can be pursued to achieve a proper balance between cash flow/affordability and other benefits. Note the payment profiles below are illustrative - the exact value and market “bankability” of some of the models would need to be further validated.

■ Milestone Payments ■ AP - Capital ■ AP - Operating

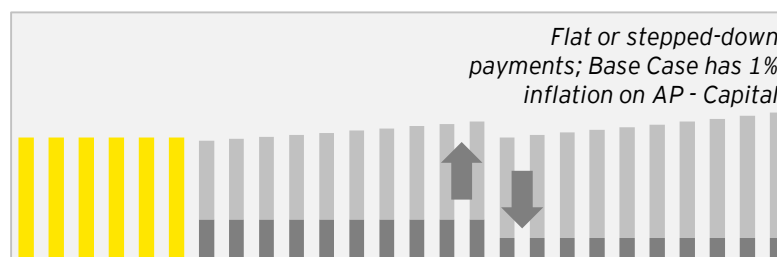
Base Case



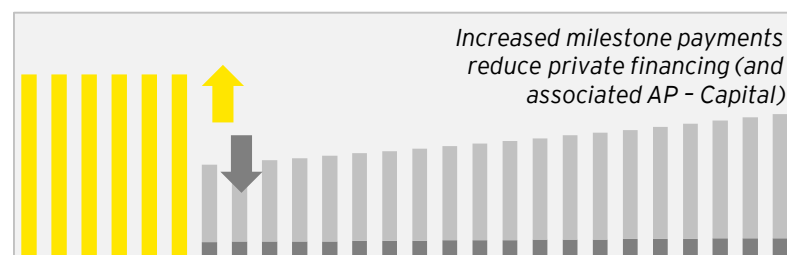
Reduced Term/Short-Term Finance



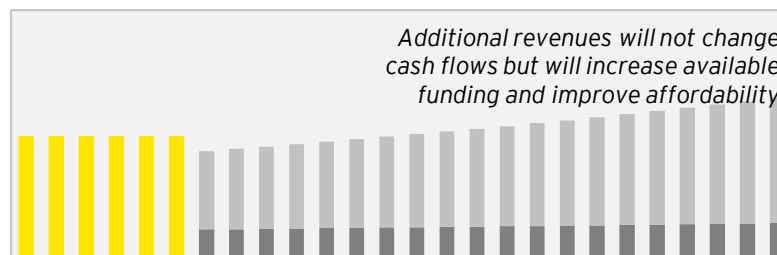
Revised AP Profile



Reduced Private Capital



Use of TOD/Ancillary Revenues¹



(1) Subject to policy acceptance

