

Water and Infrastructure Track - Session 4

Public-Private Partnerships

Barbara A. Lloyd, Founder, *IMPACTS*^{USA} Advisory Services

David Moore, Co-Founder, Clean Energy Capital

Megan Matson, Partner, Table Rock Capital

Brian Renehan, Senior Manager, Arup

Marian Moszoro, PhD, Economist, Haas School of Business

American Society
of Civil Engineers

Region 9

8th Annual
Infrastructure
Symposium

March 14, 2014

Panel Format and Topics

Interactive format will foster dialogue from diverse perspectives

- Introductions
- Overview of Public-Private Partnerships (P3 or PPP)
- Demystifying P3 Jargon
- Reasons Public and Private Participants Consider P3s
- Stakeholder Considerations and Implications
- Key Features and Differences of Alternative Structures
- Lessons Learned from Prior P3 Procurements
- Key Factors for Success
- Questions and Answers

Introductions

Barbara A. Lloyd – moderator, government official and advisor



IMPACTS ^{USA}
Advisory Services

- Experienced financial advisor, investment banker, and government official across more than 25 years in government and public finance
- Specialty is negotiating complex financial transactions in the public interest
- Public finance clients have included State of California; Cities of Oakland, San Jose, and Los Angeles; and Counties of San Diego, Kern, Stanislaus, San Joaquin, Sonoma, and Orange, among others
- P3 clients have included Caltrans, UC Merced, LA Metro, RCTC, and CSU Monterey Bay
- MBA from Stanford Graduate School of Business, and BA from University of California

Key Project – Presidio Parkway P3 Project

CTC Approval: May 2010

Commercial Close: Jan. 2011

Financial Close: June 2012

Status: In Construction

The Presidio Parkway P3 Project achieved notable “firsts”

- 1st project under SB 4 to win CTC approval; overcame legal challenge
- 1st Availability Payment transaction to win approval for federal cost-sharing – setting standards for others to follow
- 1st “two-tranche” TIFIA loan, tailored to milestone and AP revenues



Phase I Construction: 2009 – 2012 (Design-Bid-Build Procurement)

Phase II Construction: 2012 – 2015 (P3 Procurement – DBFOM)

Introductions

Megan Matson – equity investor and P3 project operations officer



- Partner, Table Rock Capital
- Officer, Rialto Water Services, LLC
- Key player in water and wastewater public-private partnership in Rialto, California, including the \$172 mm capital raise, investor due diligence, local agency negotiations, city and labor relations, etc.
- Leads on-going asset management for the Rialto concession, and active analysis, outreach and engagement with other cities
- Previously launched Marin Energy Authority Community Choice Aggregation and co-founded LEAN Energy, a non-profit dedicated to the national proliferation of CCA (community choice energy aggregation)
- BA from Yale University

Introductions

Brian Renehan – technical advisor to lenders and equity investors



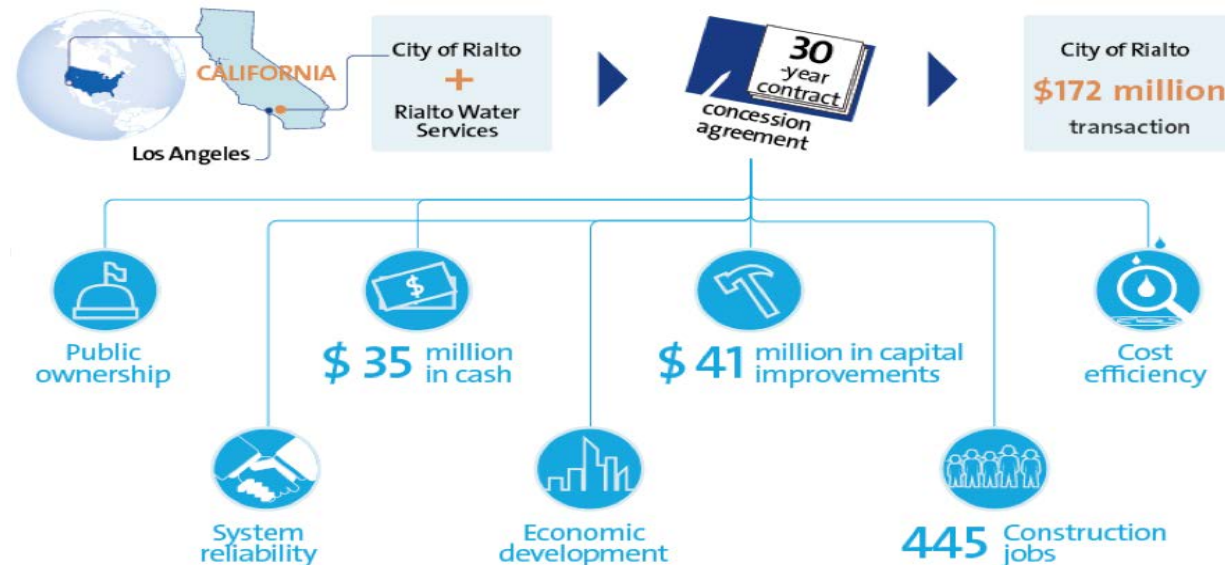
ARUP

- 15 years of experience in the energy, infrastructure and investment industries
- LEED Accredited Professional
- Leads the Energy and Utilities Transaction Advice offering for Arup, a global consulting firm
- Provided equity advisory/technical due diligence on the Rialto water/waste water project
- Advised a key stakeholder group on the Presidio Parkway P3 Project
- MBA from U.C. Berkeley, BA from University of Virginia

Key Project – Rialto Water / Wastewater P3 Project

Water and wastewater system for the City of Rialto (population ~100,000) in San Bernardino County, CA

- Existing water supply and treatment assets are in state of disrepair due to significant deferred maintenance and continuing budget constraints
- \$172 mm financing will allow for implementation of Capital Improvement Plan (CIP), provide City with up front cash and put money in place for O&M (30 year contract with Veolia Water)



Introductions

Marian Moszoro, PhD – economist & former government official



**Haas School of Business
University of California,
Berkeley**

- PhD in Economics from the Warsaw School of Economics (SGH)
- Dissertation was on public-private partnerships
- Former Undersecretary of State and Deputy Minister of Finance of Poland, the youngest ever in that position
- Research encompasses (a) project finance and public-private hybrids, (b) public contracts, scrutiny, and political economy, and (c) governance, risk perception, and asset pricing
- Accomplished author and presenter in US and internationally

Introductions

David M. Moore – corporate finance pro and government advisor



- Veteran deal-maker with 30 years of experience
- Founder and CEO of Clean Energy Capital
- Focused on project finance and public-private partnerships in energy and water infrastructure sectors
- PhD in political science from the University of California, Berkeley and bachelors degree from Harvard College (magna cum laude)

Key Project – Carlsbad Desalination Project

Financial Close: Dec 2012

Status: COD expected 2015

Largest ocean-water desalination plant in Western Hemisphere

Presentation to ASCE Regions 9

& San Francisco Section

March 14, 2014



Infrastructure Funding: Public Private Partnerships

David M. Moore
Managing Director
Clean Energy Capital Securities, LLC



Overview of Public-Private Partnerships (P₃ or PPP)

Key elements defining a “P3” reflect its form and public purpose

- Contractual arrangement reflects a business relationship between public and private sector parties
- Purpose is collaboration to deliver a service or facility for public use
- Skills and capacity of each party involved in delivery and operations
- Rights and responsibilities – and risks and rewards – are allocated pursuant to terms of the contract over time
- Ideal allocation of each risk is to the party most able to manage it

** Adapted from NCP3P, USC, Stanford, KPMG and other published sources*

Overview of Public-Private Partnerships (P₃ or PPP)

Multiple forms of P₃ structures exist

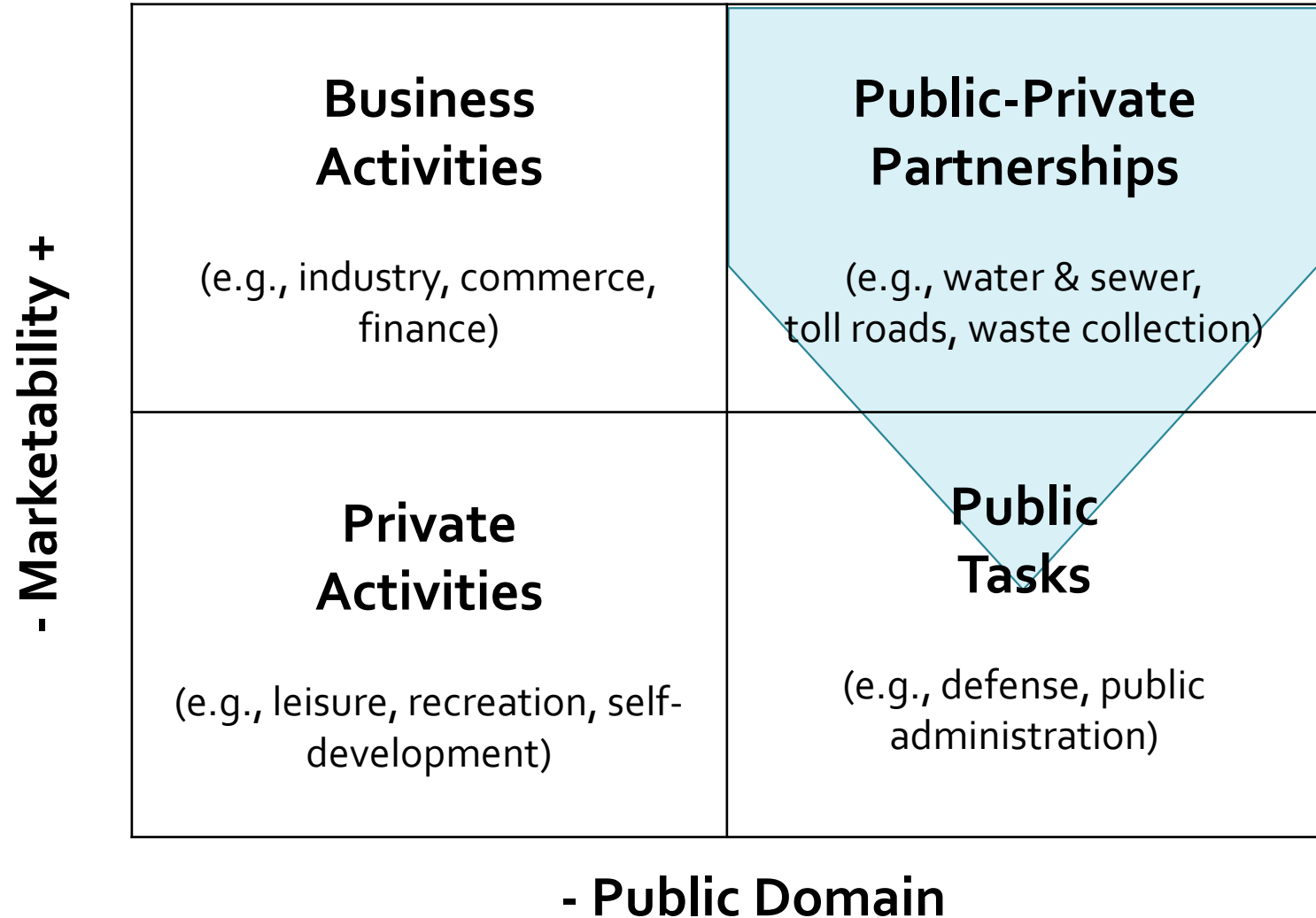
- Key differences lie in allocation of responsibilities and risk

	Design	Build	Finance	O & M	Revenue
Design-Bid-Build (DBB) (Traditional)	Public	Shared *	Public	Public	Public
Design-Build (DB)	Private	Private	Public	Public	Public
Design-Build-Finance (DBF)	Private	Private	Private	Public	Public
DBFOM with Availability Payments	Private	Private	Private	Private	Public
DBFOM as a Full Concession	Private	Private	Private	Private	Private

** Public sector retains significant construction cost and schedule risk, even though Private sector is contracted to build the project*

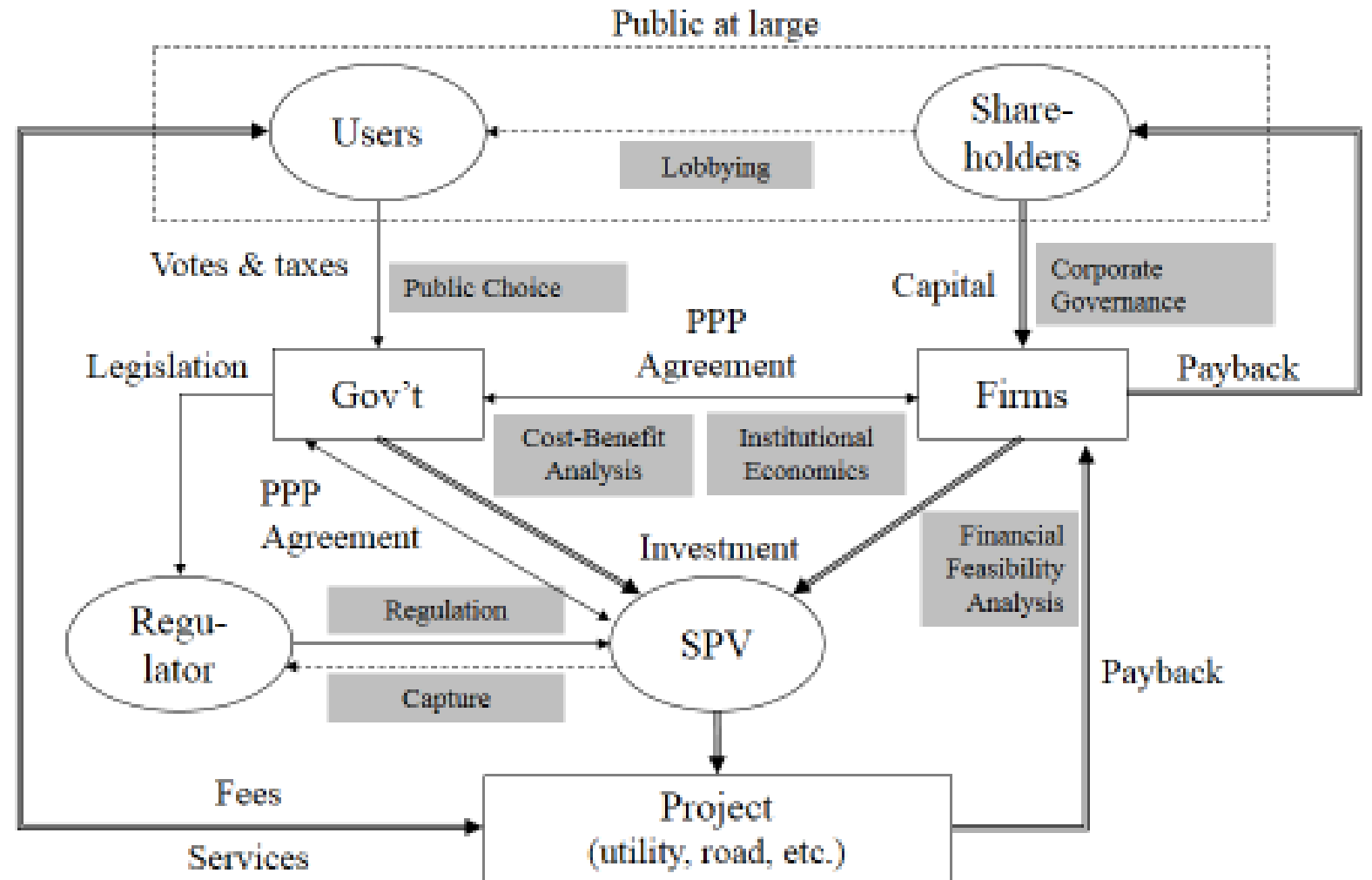
Overview of Public-Private Partnerships (P₃ or PPP)

P3 approaches are more common in some spheres than others



Overview of Public-Private Partnerships (P₃ or PPP)

P₃ transactions have some common players, structures and elements



Note: double lines represent capital and business transfers, solid single lines represent contractual and legal relationships, and dashed lines represent informal ties and influences.

Panel Discussion

- Demystifying P3 Jargon
- Reasons Public and Private Participants Consider P3s
- Stakeholder Considerations and Implications
- Key Features and Differences of Alternative Structures
- Lessons Learned from Prior P3 Procurements
- Key Factors for Success
- Audience Questions

For More Information

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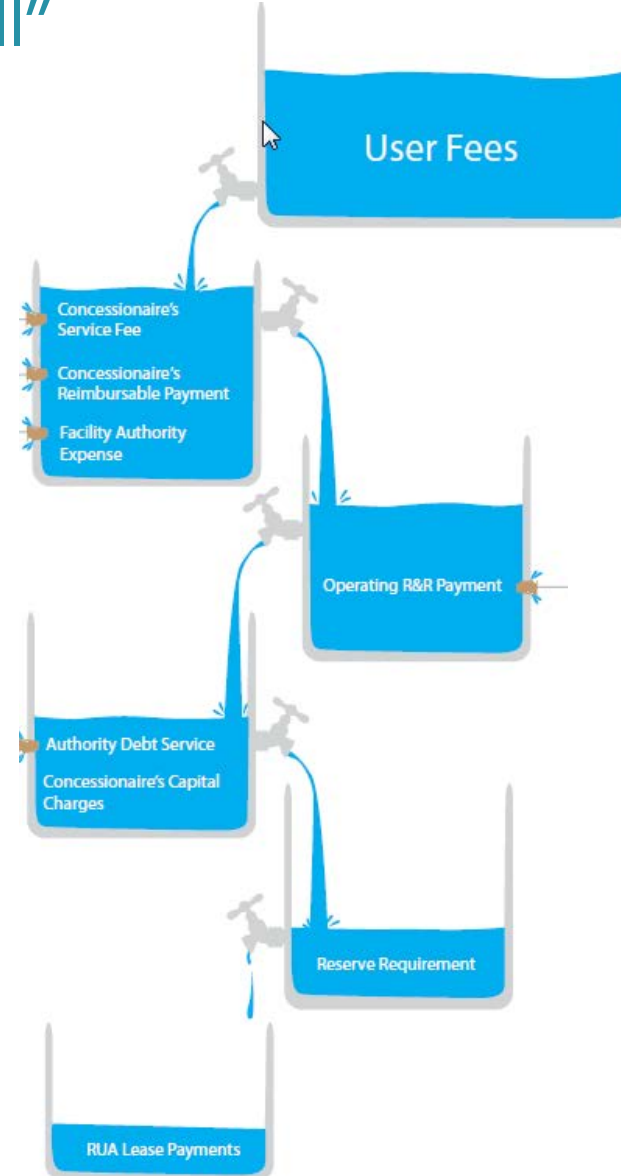
Case Study Details

Rialto Water/Wastewater P3 Project

Presidio Parkway P3 Project

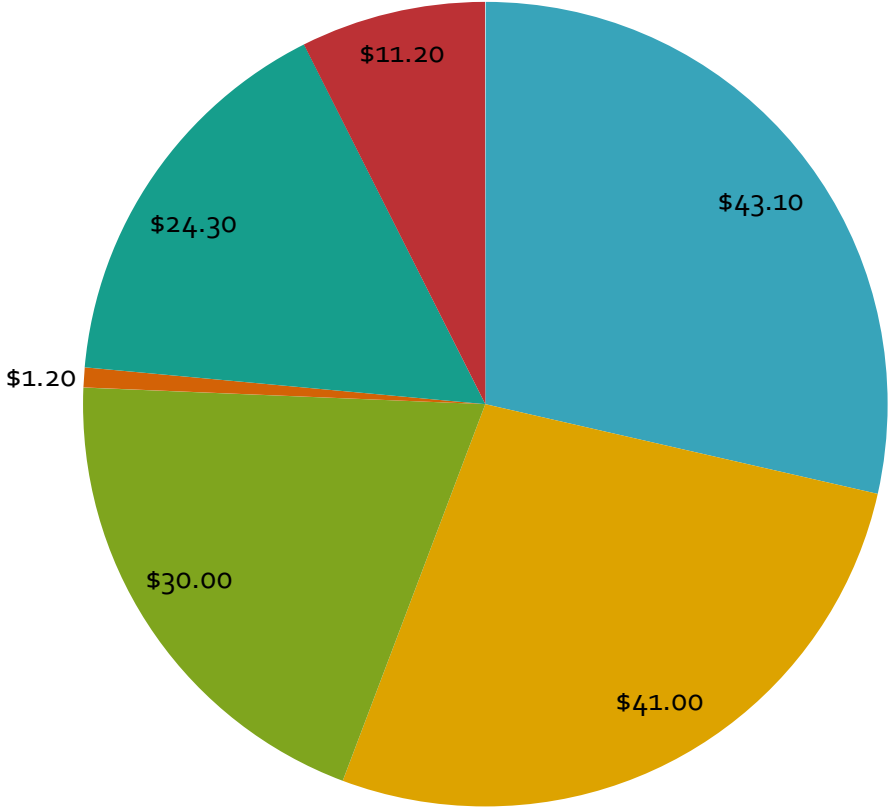
Rialto Water / Wastewater P3 Project

Revenue "Waterfall"



Rialto Water / Wastewater P3 Project

Use of Funds (\$mm)



- O&M
- CIP
- Catch Up Lease Payments
- Refinance Existing Debt
- Debt Issuance Costs
- Transaction Costs

Rialto Water / Wastewater P3 Project

City of Rialto's perspective

The City of Rialto had deep needs on both the Enterprise and City side.

Rialto's public-private solution generates **445 jobs** and **\$2 million in annual payments**.



"The partnership ensures that the city's water and wastewater infrastructure is upgraded and run in the most cost-efficient manner, while also laying the groundwork for new economic development."

Mike Story
Rialto City Administrator

Rialto Water / Wastewater P3 Project

Understanding the need for project delivery alternatives

Aging Infrastructure, Retiring Expertise

- U.S. faces greatest water and wastewater infrastructure challenge in its history
- Backlog of necessary repairs and upgrades with little funding and dwindling base of expertise to oversee capital projects, operate efficiently

Stressed Budgets, Few Options

- Since '08-'09, U.S. cities have been forced to dramatically scale back their city budgets due to city tax revenue reductions, state & federal funding cuts

Labor: Jobs Creation, Pension Options

- Tight budgets lead to lack of projects, reduced job growth, increasing layoffs
- Cities struggling with public employee/safety employee pension obligations

Answer: Public-Private Partnerships for Water/Wastewater

- Long-term partnership to manage and invest in cities' core infrastructure
- Provides stability to general fund through upfront and annual payments

Rialto Water / Wastewater P3 Project

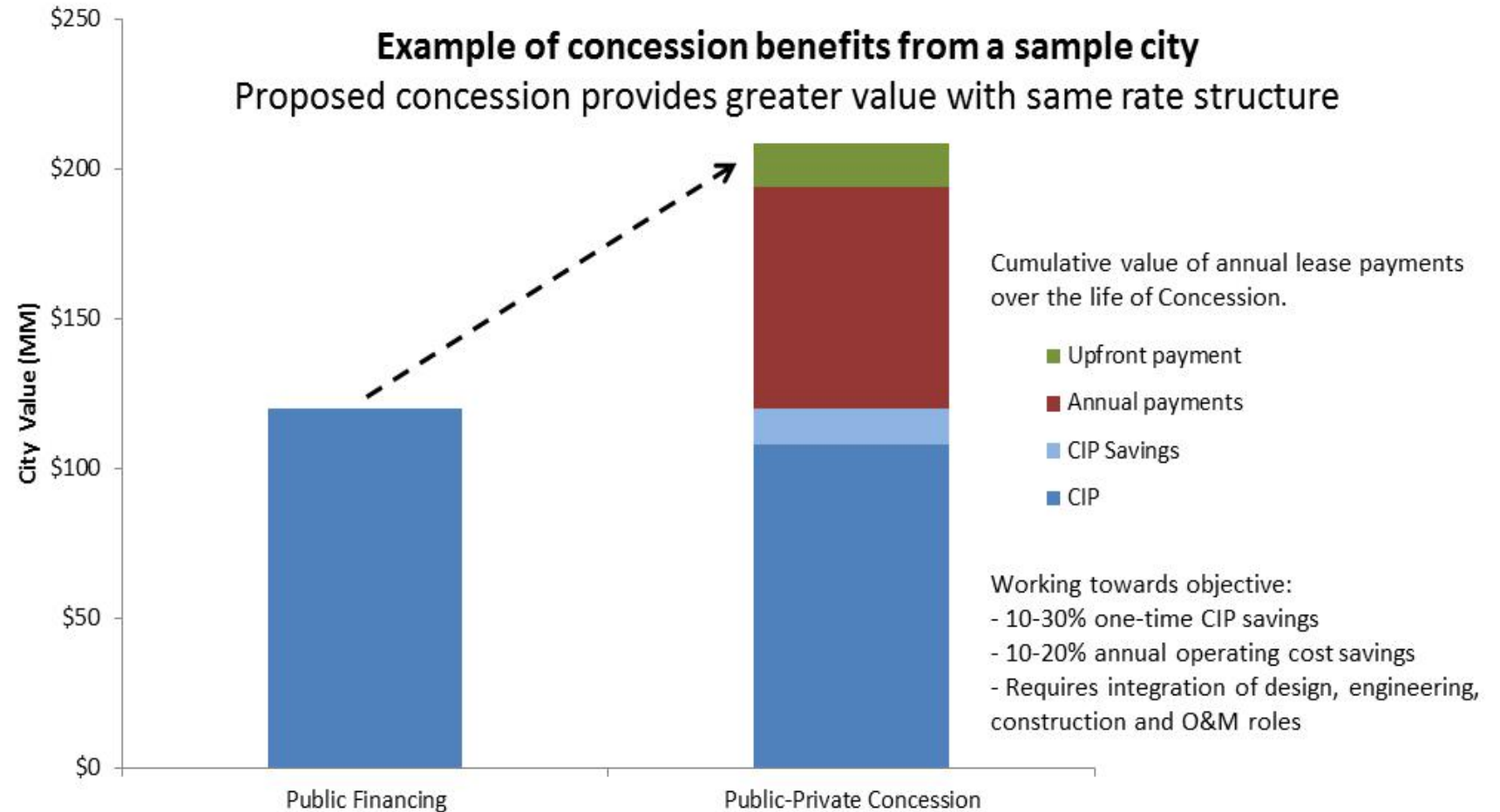
30+ Year Horizon: Concession's Financial & Legal Structure Brings Stewardship Discipline to Water

- **30-year agreement takes the Enterprise off the Election Cycle**
Infrastructure needs and funding are long-term, better served by decision-making on a 30-year time horizon
- **Maintenance commitment built in**
Asset analysis, reserves and funding mechanisms in place to ensure cost-efficient repairs and replacement on an ongoing basis
- **Future CIP needs anticipated**
Contractual mechanisms insure periodic reevaluation of system needs and the ability to raise capital toward future necessary upgrades, improvements

When public-private interests are aligned for 30-years, system health IS the bottom line.

Rialto Water / Wastewater P3 Project

Risk transfer & associated savings CAN mean concession approach delivers higher value under same rate increase



Presidio Parkway P3 Project

Key Milestones

- February 2010: Public Infrastructure Advisory Commission approval
- May 2010: California Transportation Commission approval
- October 2010: Preferred Proposer selected (October 16, 2010)
(Golden Link Concessionaire – GLC)
- November 2010: Litigation Filed by Professional Engineers in CA Govt.
- January 2011: P3 Agreement signed (Commercial Close on January 3, 2011)
- February 2011: Trial Court rules in favor of Department
- February 2011: Initial Project Debt Competition (IPDC) commenced
(later suspended until end of litigation delay)
- April 2011: Notice to Proceed (NTP 1) issued (to commence design)
- August 2011: Appellate Court rules in favor of Department
- October 6, 2011: First Amendment to P3 Agreement
(adjusts for delay, including new financial close deadline)
- November 2011: California Supreme Court Denies PECCG Petition for Review
- March 2012: TIFIA Loan Approved; Bank Shortlist approved
- June 2012: Financial Close (June 14, 2012)

Presidio Parkway P3 Project

P3 Agreement – Key Financial Terms

- Financial Close results provide significant savings over prior estimates
 - ▶ **\$271.2 MM** Design-build construction costs (vs. Engineer's Estimate of \$473 MM)
 - ▶ **\$22.1 MM** Base Maximum Availability Payment (vs. CTC cap on MAP of \$35 MM)
 - ▶ **87.5% to 12.5%** Debt-to-Equity ratio (remains unchanged from time of Proposal)
- Due to time between Proposal and Financial Close, financing costs were not "firm" – they were subject to adjustment based on various factors
 - ▶ Risks were allocated between Caltrans and GLC, depending on nature of change, with certain risks shared "pro-rata"
 - ▶ Caltrans received the benefit of improved financing costs (having carried the risk of certain higher rates and transaction costs)

Presidio Parkway P3 Project

Financing Sources at Financial Close

- Multi-tranche financing structure is tailored to Presidio Parkway's funding sources and P3 Agreement structure

	Amount (millions)	Funding Source for Repayment	Comments
Construction Bank Loans	\$166.6	State Federal Aid Local Transportation Funds	3+ Year Bank Loan Repaid w/Milestone Pmt 1
Short-Term TIFIA Loan	\$89.8	Local Transportation Funds	3+ Year TIFIA Loan Repaid w/Milestone Pmt 2
Long-Term TIFIA Loan	\$60.2	State Hwy Funds	30-Year TIFIA Loan Repaid with APs
Private Equity	\$45.6	State Hwy Funds State Federal Aid	Hochtief & Meridiam Repaid with MP & APs
Total Financing	\$362.2		

Presidio Parkway P₃ Project

P₃ Agreement Payments

- Milestone Payments at Substantial Completion
 - ▶ Adjusted financial structure to take advantage of attractive short-term rates, lower costs in bank market, and reduced reliance on long-term TIFIA loan
 - ▶ **\$185.4 MM** Milestone Payment 1 is used to repay short-term bank loans and a portion of equity
 - ▶ **\$91.0 MM** Milestone Payment 2 is used to repay short-term TIFIA Loan
- Availability Payments over 30 Years
 - ▶ Compensate Developer for routine O&M, lifecycle maintenance; repay long-term TIFIA loan, and provide return to equity
 - ▶ APs are subject to performance regime and potential reductions; a small portion is indexed to the Consumer Price Index (CPI)
 - ▶ Base Maximum Availability Payment (MAP) is **\$22.1 million** – a savings of **\$12.9 million** below the CTC's MAP affordability limit
- **Over \$325 million reduction in total 30-year cost between time of CTC approval and Financial Close (and \$99 million savings since GLC Proposal)**

Presidio Parkway P3 Project

Unique TIFIA Loan Tailored to Available Funds

- TIFIA Office proposed a two-tranche loan
 - ▶ Short-term TIFIA tranche will be repaid at Substantial Completion, and has a rate of **0.46%**
 - ▶ Long-term TIFIA tranche amortizes over roughly 30 years, and has a rate of **2.71%**
 - ▶ GLC Proposal had assumed **4.5%** TIFIA rate; Caltrans took the full interest rate risk on the TIFIA Loan (and received 100% of the benefit of falling US Treasury rates)
- Both tranches designed to match availability of non-federal funds for repayment of the loans
 - ▶ **\$91 million** in state and local funds available at Substantial Completion for the Short-term tranche
 - ▶ **\$100 million** in State Highway Account available as a continuous appropriation for Long-term tranche

Presidio Parkway P3 Project

Bank Loans & Equity Complete Financing Package

■ Short-term bank debt (≈3.5 years)

- ▶ **\$166.6 million** Construction Loan; repaid with **\$185.4 million** Milestone Payment
- ▶ Reduced all-in Bank Loan costs by over 55 basis points
 - All-in rate of **3.10% anticipated at time of Proposal** (benchmark MMD rate of 0.85% plus 225 bps margin)
 - All-in rate of **2.535% achieved at Financial Close** (LIBOR-Swap rate of 0.785% plus 175 bps)
- ▶ Highly competitive market with 14 banks responding; Six banks met the project's aggressive pricing and terms

■ Private Equity (30+ years)

- ▶ **\$45.6 million** of invested equity capital provides “skin in the game” to make project operate efficiently; equity must be drawn before construction loans from banks and TIFIA
- ▶ Significant risk transfer – deductions can reach 100% of APs