New Financial Tools: Public Private Partnerships for Water

Chicago
June 9, 2014
Jim Perron

Illinois Retreat on Public Private Partnerships

NGA
World Wide Tendencies for Water Partnerships

Challenges facing Cities today

- Modernization of water systems and capacity to attract needed talent
- Multiple stakeholders and citizens awareness. Demand for greater transparency and accountability
- Complex technology to meet new regulations
- Demand for better Environmental Performance

Private operators value added

- Ability to manage complex situations based on broad range of experience
- Cost-effective solutions
- Knowhow of advanced technologies
- Cost efficient OPEX/ CAPEX approach
- Ability to attract private financing

Water Partnership Models

- Specialized Service Delivery:
  - Billing & Customer Service
  - Smart Metering
  - Non-Revenue Water Improvement
  - CSO Management and Control
  - Energy Management
  - IT Solutions for Smart Cities

- Public-Private O&M Outsourcing & Alliance Partnering Contracts

- BOT/ DBO’s for greenfield Water, Wastewater and Biosolid projects

- Concessions and Leases
Choosing a Contract Model to Meet a City’s Objectives

- **You want world-class know-how provided in an integrated manner to solve your operational needs**
  - Specialized Services

- **You want to keep responsibility for operation AND benefit from expertise of the private sector**
  - Management Contract

- **You want to share responsibility for managing your utility and pay a fixed fee, combined with an incentive for performance**
  - Alliance Partnering Contract

- **You want to delegate full responsibility for operation & maintenance (O&M)**
  - O&M Outsourcing Contract

- **You want reliable operation coupled with funding of future capital needs & refinancing of City’s debt to improve credit**
  - Concession / Lease
After decades of neglect, investment can no longer be deferred in many U.S. cities....

WATER INFRASTRUCTURE RATED D

$1.3 trillion to upgrade our water & waste water systems over the next 25 years

.... municipalities need creative alternatives to meet America’s water challenge!
Suez Environnement North America (SENA): Organized to meet *Market Needs*

- **Value Provided**
  - Do Nothing
  - Equipment Purchases
  - Capital Improvement Delivery
  - Asset &/or Tank Management
  - Packaged Services
  - Management Services
  - Outsource Operations &/or CPM
  - Design Build Operate
  - Concessions / Leases (Upfront Pmt + CAPEX)
  - Utilities (Transfer Ownership)

- **Political Difficulty**

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**Packaged Services**
- Design
- Build
- Operate

**Management Services**
- Concession / Leases
- Equipment
- Concession / Leases

**Utilities**
- Utilities

**Concessions / Leases**
- Concessions
- Leases

**Equipment Purchases**
- Equipment

**Capital Improvement Delivery**
- Capital Improvement Delivery

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**Do Nothing**
- Do Nothing

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**Political Difficulty**
- Political Difficulty

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**Value Provided**
- Value Provided

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**SENA**
- SENA

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**Utilities**
- Utilities

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**Concessions / Leases**
- Concessions
- Leases

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**Equipment Purchases**
- Equipment

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**Capital Improvement Delivery**
- Capital Improvement Delivery
Tailoring contractual services to meet *market needs*

**Adding private capital**

- Economic Development & Job Creation
- Rate/ Tariff Predictability & Stability
- Asset Management & Protection
- Debt Reduction & Credit Enhancement

- Employee Training & Operational Best Practices
- Community Relations & Customer Care
- Compliance Expertise & Environmental Stewardship
- Operational Efficiencies & Technical Capability

**O & M related**
All these elements together create our SOLUTION™

Adding private capital

Economic Development & Jobs
Rate/ Tariff Predictability & Stability
Asset Management & Protection
Debt Reduction & Credit Enhancement
Employee Training & Operational Best Practices
Community Relations & Customer Care
Environmental Expertise & Environmental Stewardship
Operational Efficiencies & Technical Capability

O & M related
Our Solution\textsuperscript{SM} is an innovation in the U.S. water sector.

"This really is an innovative approach, but I'm afraid we can't consider it. It's never been done before."
# Bayonne’s challenges and objectives

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Objectives</th>
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<tr>
<td>Deeply leveraged - beyond underlying value of assets</td>
<td>Mechanisms for guaranteed capital improvements</td>
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<tr>
<td>History of deferred investment in system assets</td>
<td>Improve asset condition and customer service</td>
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<tr>
<td>Credit quality problems: city needs funds for other services</td>
<td>Strengthen balance sheet and leave the Bayonne Municipal Utility Authority (BMUA) debt free</td>
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<tr>
<td>Difficulty attracting qualified staff to manage the utility</td>
<td>Steady and predictable rate rises for consumers</td>
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<td>Maintain utility jobs and improve staff training</td>
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Public officials in Bayonne had some questions...

<table>
<thead>
<tr>
<th>CONCERNS</th>
<th>RESOLUTIONS</th>
</tr>
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<tbody>
<tr>
<td>Who owns system</td>
<td>City retains system ownership</td>
</tr>
<tr>
<td>Vague operational and technical standards</td>
<td>Governance and operational standard setting</td>
</tr>
<tr>
<td>Lose control over rates</td>
<td>Rates set by formula</td>
</tr>
<tr>
<td>Impact on jobs</td>
<td>Maintains authority jobs</td>
</tr>
<tr>
<td>‘Windfall’ to concessionaire</td>
<td>Investment creates new local job opportunities</td>
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<tr>
<td></td>
<td>Oversight of funding</td>
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<td>No excess revenues</td>
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</table>
Long-term contract provisions provide customers greater reliability and stability

‘Revenue path’ approach limits rate increases, prevents windfall profits, and provides flexibility to guarantee ongoing investment

- Improved system efficiency reduces operating costs
- Capital investment reduces risk of service disruption and protects the environment

Actual Revenue

Defined Revenue Requirement
Bayonne’s mayor said that this transaction helped the city earn its first credit upgrade in 5 years.

- Upfront payment, eliminated $125M of BMUA debt
- Capital investment to modernize water, sewer and storm water system of $107M over 40 years
- Just 3 months after closing, Moody’s Investors Service upgraded City’s credit outlook.

Moody’s Investors Service
Global Credit Research

‘The stable outlook reflects the city’s recent progress in reducing its debt burden through the lease-sale of the MUA operations…’

Bayonne Mayor Mark A. Smith
Major Progress Over the First Year of Contract

- Full GIS of Water and Sewer Systems
- Fixed Network AMI System installed
- Asset Management System installed
- Cleaned >28,900 feet of sewer main
- Cleaned & flushed >10,300 of water main
- 1,500+ hydrants inspected, 400+ valves exercised
- >2,500 hours of employee training
- Operational & safety improvements to CSO netting chambers - 75 tons collected
- New protective equipment including hard hats, boots, gloves & other safety essentials
- Office improvements & new vehicles to meet health & safety standards
- Comprehensive study of City’s water infrastructure system underway to develop long-term asset management plan
It took bold champions in Bayonne to take these first steps in using private capital to invest in America’s water infrastructure.

"I can feel it! We're about to make a huge breakthrough."
Key Transaction Take-Aways

- **Set Realistic Goals**
  - Risk Allocation
  - Rate Increases
  - Capital Needs
  - Avoid Trying to Solve Unrelated Problems

- **Prepare Extensive Due Diligence**
  - Quality Due Diligence Package
  - Tie Up Loose Ends

- **Engage Experienced Professional Team**
  - Engineering, Financial & Legal

- **Engage Stakeholders**
  - Employees, Users, Officials

Elements of the transaction structure: Municipal Authority, Joint venture (LLC), United Water, Private equity partner, Consortium of lenders, Equity, Debt, O&M, Capital projects as required.
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Director, Project Development
United Water
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Thank You
Backup Slides
Degradation of rivets on 48" aqueduct
The City of Bayonne

- The City of Bayonne lies in the heart of the Port of New York and New Jersey

- Traditional distribution, manufacturing, healthcare and port activities remain important to the city’s economy
Bayonne’s water system

- More than 96 miles of mains including valves, fire hydrants etc.
- Water supplied from the North Jersey District Water Supply Commission’s Wanaque and Monksville reservoirs
- Total system capacity is 17.6 MGD and on average uses 8.5 MGD
Bayonne’s sewer system

- Oak Street Pumping Station pumps flows to the Passaic Valley Sewerage Commission by a force main.

- Total system capacity is 17.6 MGD; average daily dry weather flow 8.3 MGD.

- Capacity to pump 40 MGD during wet weather events caused by combined sewers.
# Concession Agreement - Risk Allocation

## Revenue

<table>
<thead>
<tr>
<th>Underperformance of Revenue</th>
<th>No volume risk due to contracted Revenue Requirement set out for the term of the Concession Agreement</th>
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<tbody>
<tr>
<td></td>
<td>A rate adjustment mechanism will be applied to ensure the defined Revenue Requirement is maintained</td>
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<tr>
<td></td>
<td>Such rate adjustments will occur annually and will be bi-directional</td>
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<tr>
<td></td>
<td>Issuer is not dependent upon regulatory approval for rate base adjustments typical of a regulated utility</td>
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<tr>
<th>Rate Increases to Unsustainable Levels</th>
<th>Water rates are comparable to other municipalities and sewer rates are considerably lower</th>
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<tr>
<td></td>
<td>Rate growth stipulated in the Concession Agreement is below the historical rate growth in NJ</td>
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<tr>
<th>Usage Risk</th>
<th>Customer growth in New Jersey has grown steadily over the past 40 years and are expected to show even higher levels of growth in Bayonne from various developments in the region</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In the event that usage actually decreases, there are contractually protected rate adjustments to ensure payment to the Concessionaire according to the Revenue Requirement</td>
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<tr>
<th>Counterparty Risk</th>
<th>93% of customers are residential and spread over 11,000+ accounts, limiting counterparty risk</th>
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<tr>
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<td>Residents of Bayonne are relatively affluent, with a median household income 12% greater than the national average</td>
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<th>Collections Risk</th>
<th>Collections are expected to increase from the installation of the new metering system</th>
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<tr>
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<td>Secured by the BMUA’s obligation to remit proceeds of annual lien sales for unpaid bills</td>
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<tr>
<th>Supply Risk</th>
<th>Quantity and quality of water supply is guaranteed by the Authority</th>
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</table>

| Inflation | 30% of revenue is inflation linked which provides alignment between revenues and costs |
## Concession Agreement - Risk Allocation

### Costs

<table>
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<tr>
<th>Category</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Capex Increases</td>
<td>United assumes the risk of increased costs of the Base Capex program. Any divergence in ongoing capex from the agreed upon threshold results in a true up in the following year.</td>
</tr>
<tr>
<td>Opex Increases</td>
<td>Costs are either pass-through to rate payers, covered by United under a fixed price contract, fixed amount as per the Concession Agreement or represent relatively small overhead and administrative costs.</td>
</tr>
<tr>
<td>O&amp;M Contract Terminated</td>
<td>Large supply of companies with the financial strength and operational expertise to manage the System. Robust replacement and operating cost sensitivities.</td>
</tr>
<tr>
<td>Liquidity Issues</td>
<td>“Safety valves” kick in if pass-through costs or volumes are below certain levels during the rate freeze period. Availability of a $10.0 million revolving credit facility, a $6.5 million rate stabilization payment amount, and $5.0mm of cash on the balance sheet will mitigate any short term liquidity risk.</td>
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### Contractual

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<tr>
<th>Concessionaire / BMUA Default</th>
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<td></td>
<td>Significant termination compensation available in the event of a Concessionaire or Authority default.</td>
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<tr>
<td></td>
<td>In both cases the termination payment must be at least the debt, accrued interest and make-whole.</td>
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<tr>
<td></td>
<td>BMUA has no significant payment obligations as revenue shortfalls are passed through to rate payers under the rate adjustment mechanism.</td>
</tr>
<tr>
<td></td>
<td>Termination payment would be funded by proceeds of a re-concession or a BMUA debt issuance.</td>
</tr>
<tr>
<td></td>
<td>A Deficiency Agreement between the City of Bayonne and the BMUA will be maintained throughout the life of the Concession which will allow the BMUA to issue bonds back by the City to pay termination payments.</td>
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### Other

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<tbody>
<tr>
<td>Pension and Labour</td>
<td>No material pension or labor liabilities</td>
</tr>
<tr>
<td>Environmental</td>
<td>United operates 100+ systems under contract and also owns and operates utilities in 8 states. United has never had a contract terminated because of an environmental concern.</td>
</tr>
</tbody>
</table>
United Water’s SOLUTION SM is gaining recognition

Received New Jersey Alliance for Action Distinguished Engineering Award, May 2013

Voted by peers as ‘Partnership of the Year’ at the American Water Summit 2012 for having delivered “the most dramatic improvement in service and customer value in the three most recent years”

Featured at the 2012 Clinton Global Initiative as an “innovative partnership which meets one of the world’s most pressing challenges”