

Texas Desal

2018

P3 or not P3..?



- 💧 Why?
- 💧 A Brief History
- 💧 When & Why?
- 💧 A Financial Example

Why?

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💧 Experience

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- 💧 P3-specific conferences

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 - 💧 Private sector assuming the long-term O&M risk

Brief History

💧 1992

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PFI

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The Private Finance Initiative

💧 1992

PPP

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💧 1997

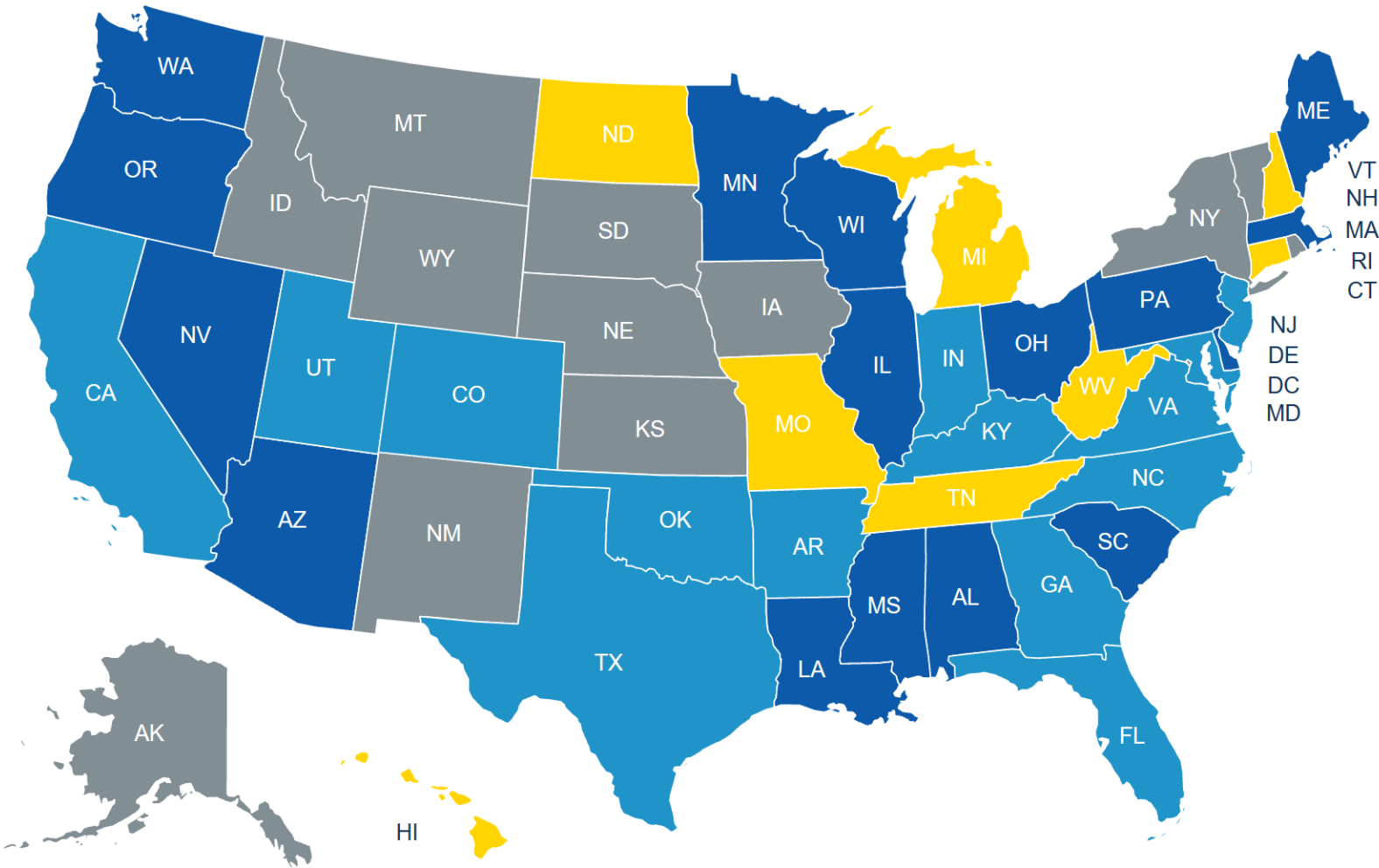
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Brief History (2)

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- Transportation only
- No P3 Authority
- Limited (project-specific)

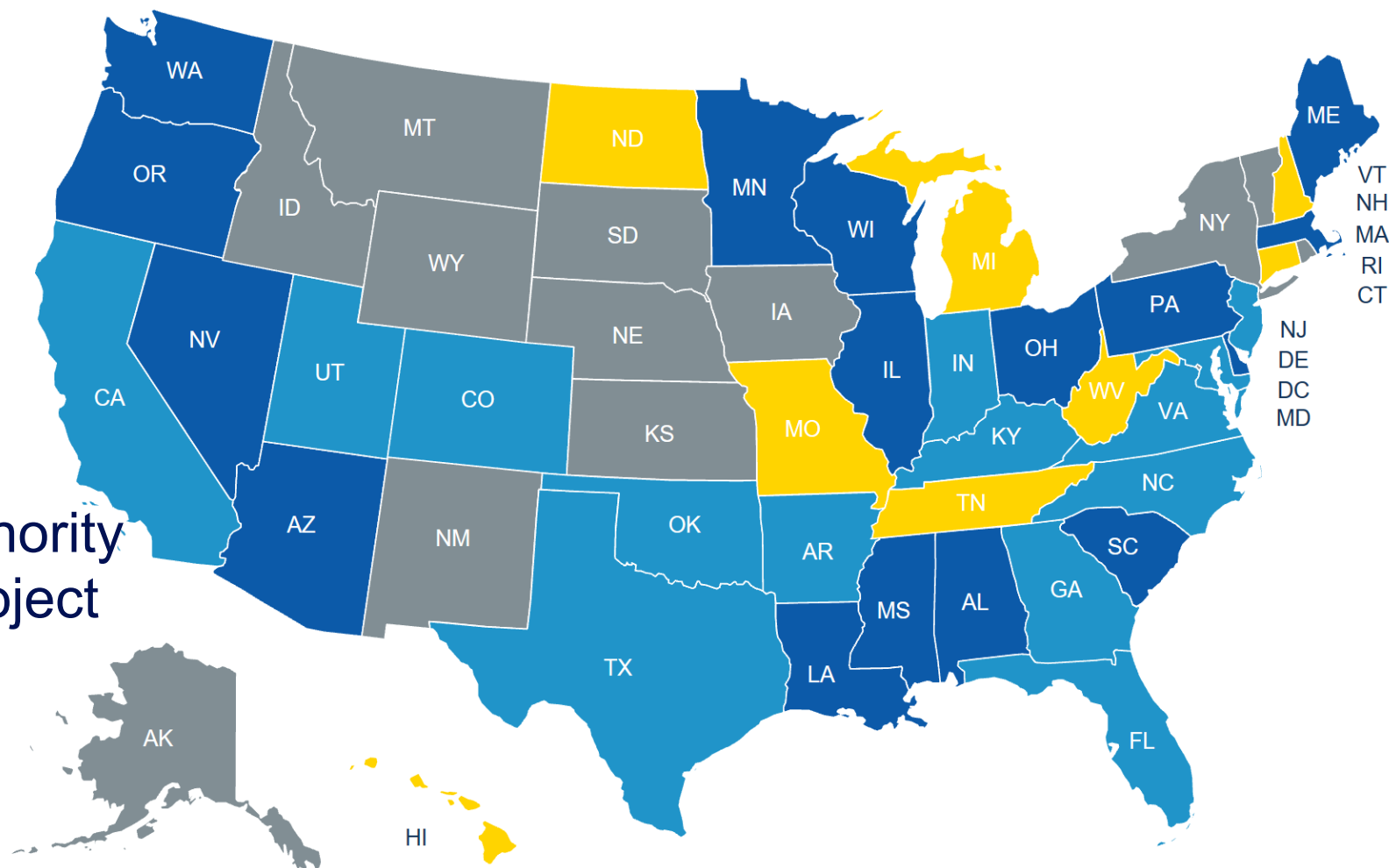


Source: Association for the Improvement of American Infrastructure <https://aiai-infra.info/>

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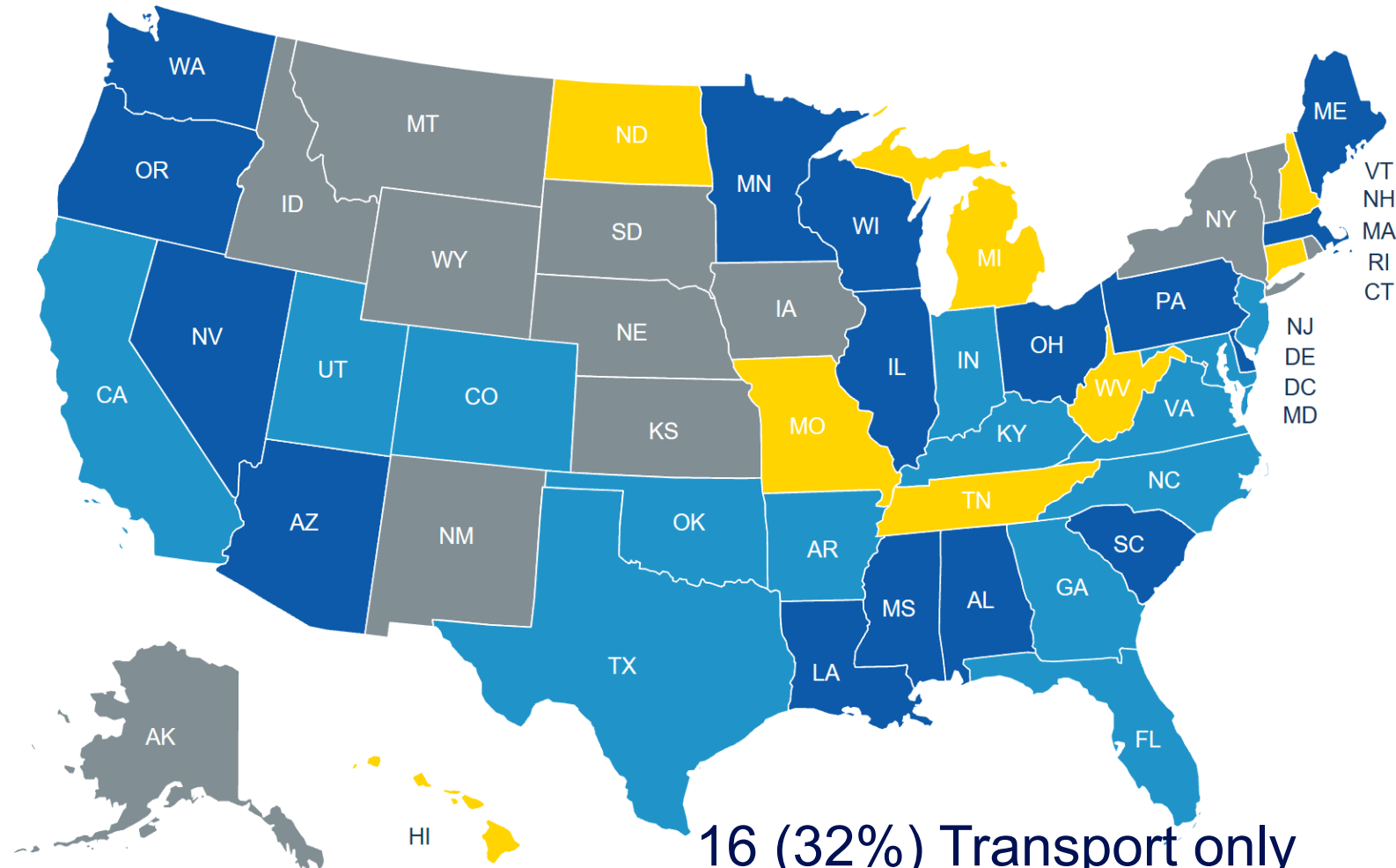
12 (24%) No P3 Authority
8 (16%) Limited/project specific

Source: Association for the Improvement of American Infrastructure <https://aiai-infra.info/>

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16 (32%) Transport only

14 (28%) Transport + Other Public Works

Source: Association for the Improvement of American Infrastructure <https://aiai-infra.info/>

- 2002 - Virginia introduced P3 for public works other than highways
- Other States have tended to base their P3 legislation on the Virginia legislation
- 2011 – Texas adopted P3 legislation for public works other than highways

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- 💧 Other States have tended to base their P3 legislation on the Virginia legislation
- 💧 2011 – Texas adopted P3 legislation for public works other than highways
- 💧 The Texas Facilities Commission (TFC) has published Public-Private Partnership Guidelines

When & Why?

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- 💧 WIFIA overview
 - 💧 \$20m minimum project size
 - 💧 49% maximum portion of eligible project costs
 - 💧 Loan's guaranteed by existing payment streams are preferred over payment streams dependent upon project COD
 - 💧 \$100,000 application fee + \$400,000 - \$700,000 credit processing fee
 - 💧 Interest rate "equal or greater to the US Treasury rate of a similar maturity" - ~3%

- 💧 WIFIA red tape
 - 💧 American Iron and Steel Requirement
 - 💧 WIFIA borrowers may not use WIFIA credit assistance unless **all** iron and steel products used in the projects are produced in U.S.
 - 💧 Waiver granted if **overall** project costs would be increased by >25%
- 💧 National Environmental Policy Act of 1969
 - 💧 Full federal NEPA review mandated and conducted by the EPA
- 💧 Other federal requirements - Flood Plain Management, Executive Order 11988, etc

- 💧 WIFIA & Desalination
 - 💧 3 out of 43 letters of interest submitted to WIFIA in 2017 were for desal projects
 - 💧 0 out of 12 FY2017 selected projects were desal projects
 - 💧 4 out of 62 letters of interest submitted to WIFIA in August 2018 were for desal projects

- Eligible entities: Any political subdivision or nonprofit water supply corporation
- Timeline
 - If project is included in state water plan – 12-18 months
 - If project is not included – 5+ years
- Texas Water Development Board raises AAA bonds on behalf of political subdivision
 - Can fund up to 80% of project cost
 - AAA bond interest rate, depends on market conditions – typically 2-4%

- Responsibilities of political subdivision
 - Compliance with SWIFT application requirements
 - Sourcing relevant advisers for execution of project
 - Financial liabilities
 - SWIFT loan repayment
 - All operational costs
 - Initial equity investment of at least 20% of project

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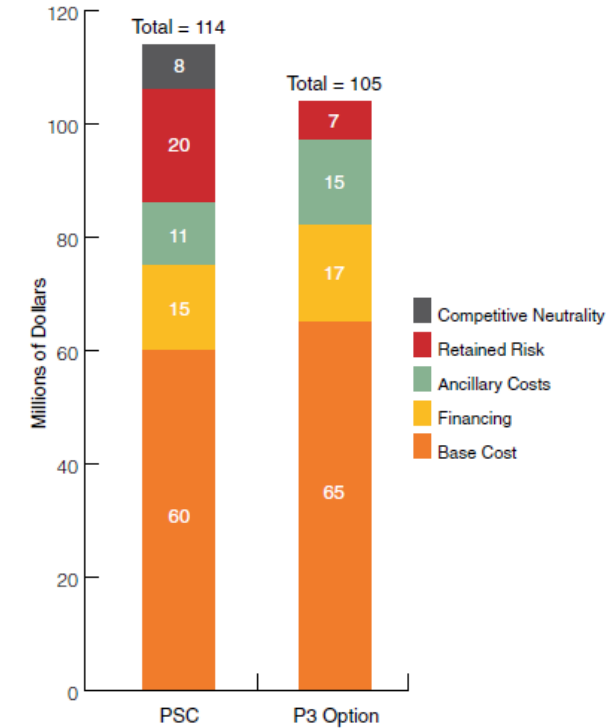
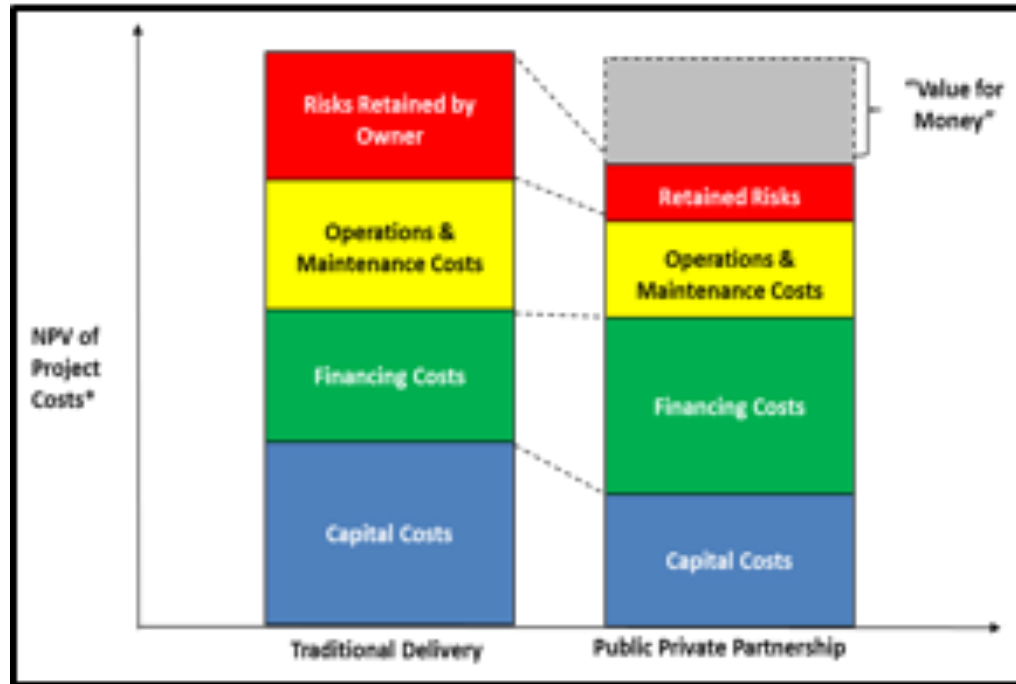
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- Concentrate on the optimal transference of Risk

- 💧 Risk Transference to the Private Sector

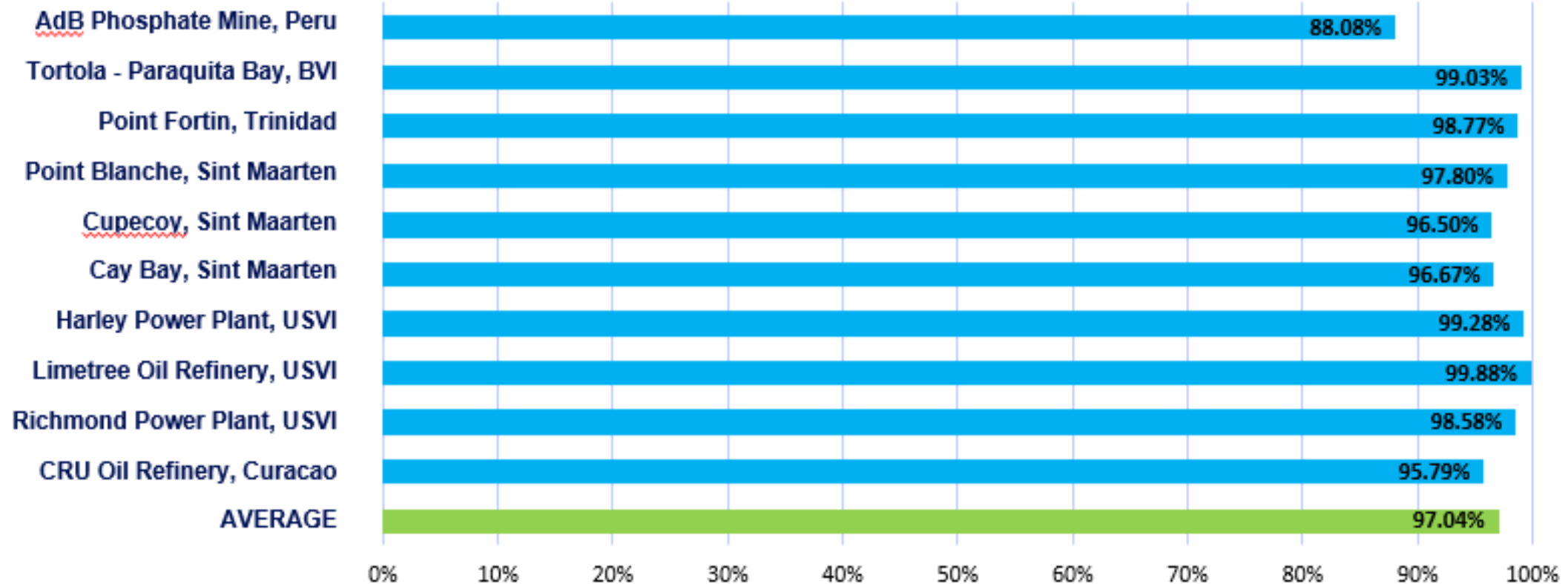
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 - 💧 Project Delivery - Process risk - Long-term Operations & Maintenance
 - 💧 Public sector clients always seems to concentrate on the Design-Build/EPC portion of the contract, but forget about the long-term O&M risk
 - 💧 It's actually this long-term O&M period that differentiates the lifetime project cost between the public & private sector, & negates the perceived higher cost of private sector equity + project financing vs public sector financing

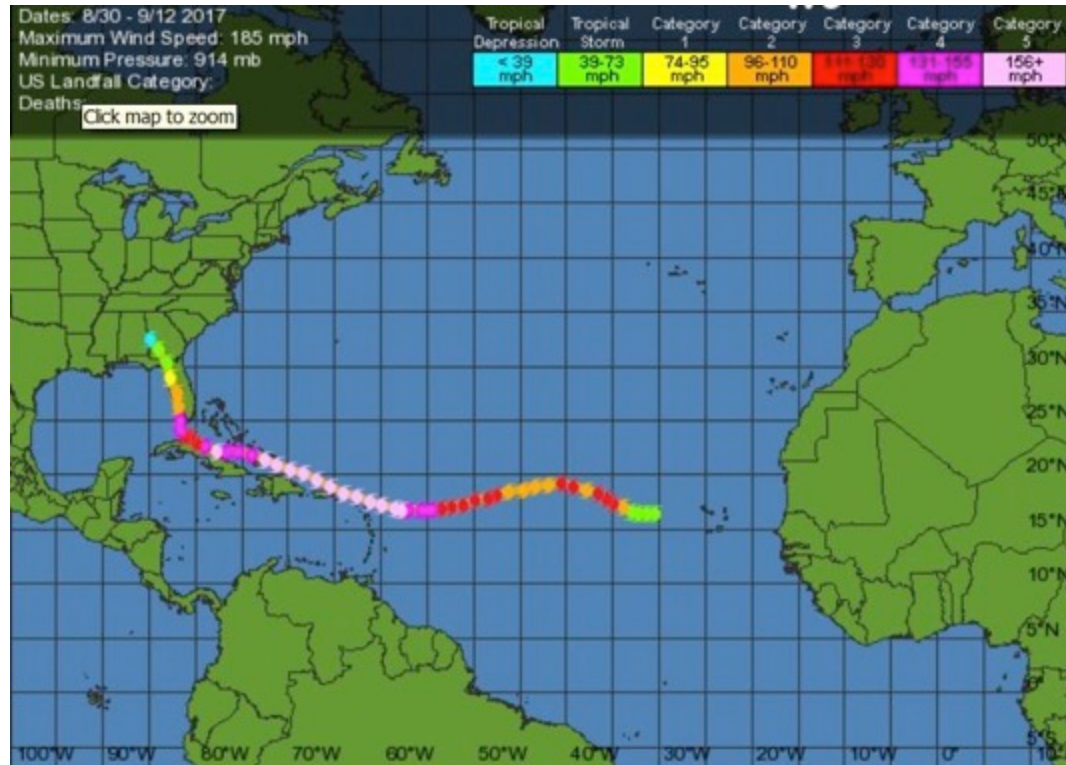
Long-term O&M - Private Operator Plant Availability

2017 Plant Availability



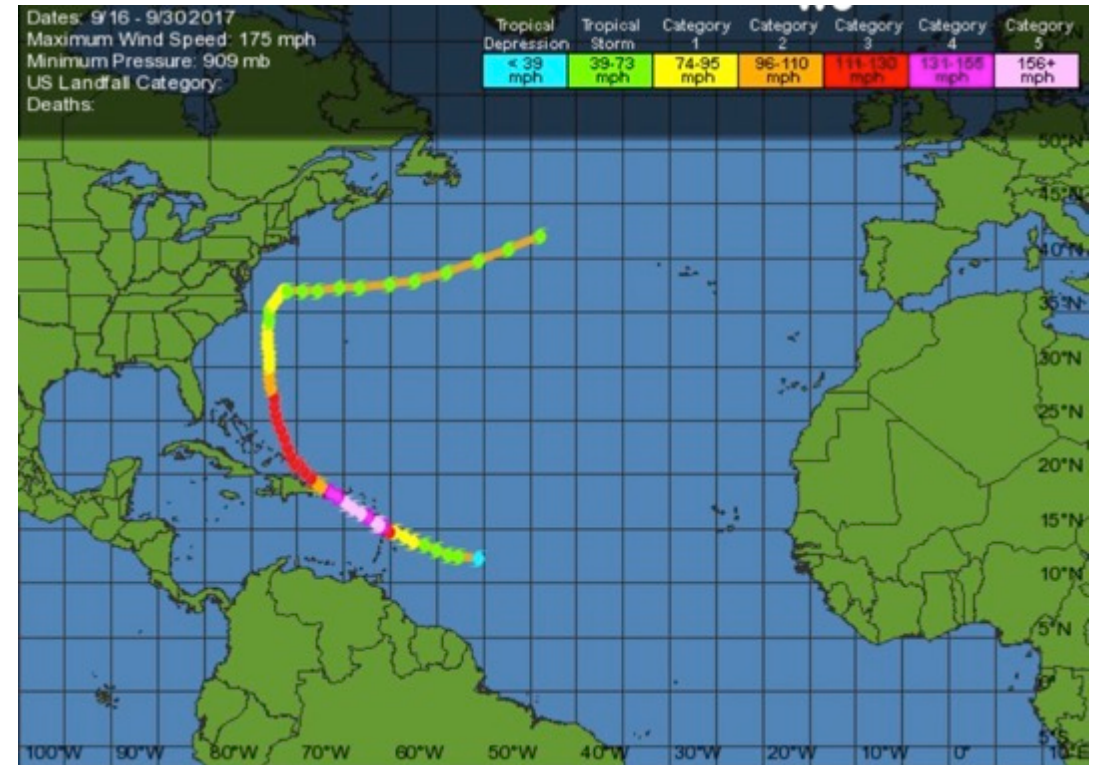
💧 2017 – Irma, Maria, El Niño

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Hurricane Irma:

- US Virgin Islands
- British Virgin Islands
- Sint Maarten
- Turks & Caicos
- Bahamas
- Tampa HO



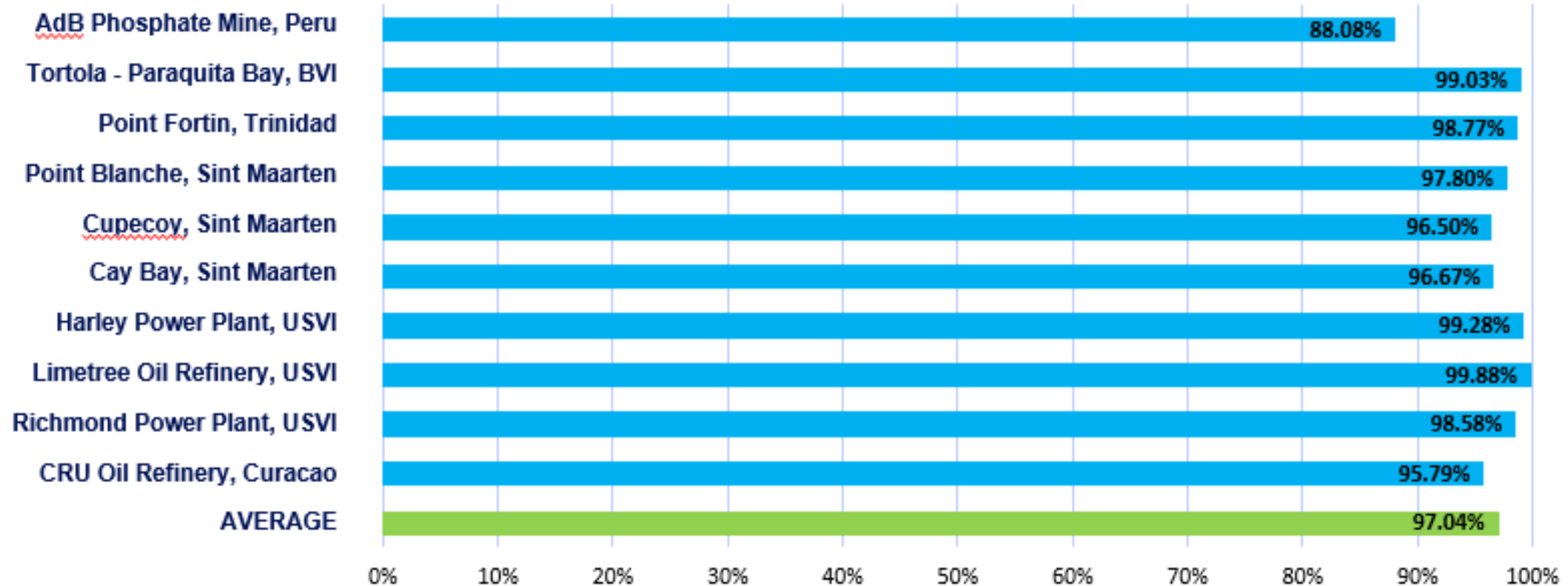
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Long-term O&M - Private Operator Plant Availability

2017 Plant Availability



💧 >130 years total operations experience across 16 SWRO plants

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- 💧 Power costs are excluded in this example

Financial Example



Design-Build/EPC		P3		Year
Availability (%)	Available supply (MGD)	Availability (%)	Available supply (MGD)	
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Total volume produced:

EPC + O&M: ~61,400MG

P3: ~73,000MG
(~1.6MGD)

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Average unit price:

EPC + O&M: ~ \$3.35/kgal

P3: ~ \$3.10/kgal
(7.5% lower unit price)

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- The financial example illustrated either public sector financing (SWIFT) or private sector financing
- Don't forget that the 3rd P is for Partnership – there's no reason why the public sector partner cannot bring the project loan/debt to the project

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- 💧 In the financial example, using SWIFT funds instead of the commercial loan would obviously lower the unit cost of water even further

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Richard Whiting,
VP Business
Development

