Community Based Public Private Partnership (CBP3)

Great Lakes & St Lawrence Cities Initiatives
COMMON REASONS FOR PARTNERING

**Purpose** – Create long-term value by solving the essential problems you can’t solve solely on your own.

- More efficient design, construct new (and/or upgrade existing) capital improvements by transferring risk (planning, design, construction cost, financing, certification, management and maintenance, etc.) to private sector
- Access new capital markets for non-essential project financing thus freeing credit capacity for essential programs.
- Save time & costs in project delivery
- Reduce outstanding debt burden by transferring debt obligations and performance accountability to private sector
- Tap scalable capacity, expertise, and resources offered by private sector
- Keep government staff focused on core mission while allowing private sector partner to concentrate their expertise in planning, procurement, project delivery, community outreach, and operations & maintenance
- Create greater connectivity and impact with the community.
COMMUNITY BASED PUBLIC PRIVATE PARTNERSHIP

Greater impact through private sector commitment, investment, and accountability

Long-term partnership, incentives for improvement, innovation, proactive problem-solving

Improved transparency and confidence through Government oversight

CBP3

ALIGNMENT OF INTERESTS

STRUCTURE

EXPERTISE

Corporate citizenship, community investment, community responsibility

Capital sources, enterprise governance, tailored partnership model

World-class delivery partners & industry experts
INVEST FOR LONG TERM SUSTAINABILITY

Benefit local economic development by creating a market place for a meaningful water quality impact.

- Aggregated vs. Piecemealed approach
- Integrated delivery methodology
- Local Economic Development/Job Creation
- Community Outreach/Educational programs
- Long-term reinvestment program
- Efficiency/Savings reinvested
- Compensation earned through performance and value creation
- Meet Regulatory Compliance requirements
## CRITICAL FACTORS

<table>
<thead>
<tr>
<th>Critical Factor for Government &amp; Rating Agencies</th>
<th>Partnership Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction of Deferred Maintenance</td>
<td>Creation of a reinvestment reserve to fund an out-year development program through annual reserve deposits of savings.</td>
</tr>
<tr>
<td>Government Control and Priorities</td>
<td>Gov’t drives environmental priorities and approaches</td>
</tr>
<tr>
<td>Improving local business and private property owner engagement and capacity</td>
<td>A holistic approach to infrastructure that allows an integrated, comprehensive plan and offers a consistent experience to community.</td>
</tr>
<tr>
<td>Risk Transfer</td>
<td>Municipality does not provide financial support through subordinate expenses or guarantees etc.</td>
</tr>
<tr>
<td>Municipality Maintains Asset Ownership and easement controls.</td>
<td>Title and certification of real assets stays with the Municipality and does not transfer to the SPE in a SCA and Municipality retains easement control and access through the SPE.</td>
</tr>
<tr>
<td>Affordability</td>
<td>Stormwater revenue setting and control process remains with the Municipality.</td>
</tr>
</tbody>
</table>
CASE STUDY: PRINCE GEORGE’S COUNTY

- Provided a feasible master delivery plan and cost structure to retrofit and maintain 2,000 acres of long-term regulatory compliance.
- The Clean Water Partnership has:
  - Reduced the overall cost of retrofits by 30% to 40%.
  - Streamlined the procurement and delivery process.
  - Exceeded socio-economic metrics.
  - Positioned the County as regional stormwater management leader.
  - Obtained innovative financing through a State Revolving Fund loan at 1.9%.
- Nationally recognized community based infrastructure program by the White House CEQ and Environmental Protection Agency.
CREATING A MARKET PLACE FOR SMALL DISADVANTAGED BUSINESSES

Total CWP Target Class at Project Completion: $76,242,000

Total CWP Local and Minority Businesses: $72,431,717

Total CWP Local Expenditures as a Percentage of Target Class Spend: 95%

Economic Impact of Local Expenditures: $152.1M
Public-Private Partnerships and Green Infrastructure

by

Sanjiv Sinha, P.E., Ph.D.

Great Lakes & St. Lawrence Cities Initiative Webinar

March 23, 2017
Outline

- Evaluation of CBP3 enablers
  - Storm water utilities
  - P3 enabling legislations
- The new administration and its approach to P3s
- Green infrastructure and its benefits
  - Large-scale versus small-scale
  - Market drivers
  - Market size
  - A decision tree
  - Some recommendations
Enacting a CBP3 - How to Pay Return on Investment
As of 2015, there were over 1500 storm water utilities (SWU) in the country, with an average monthly fee for a single family home of $4.57.

Smallest utility in the country is in Indian Creek village in Florida (population of 88, as of 2010).

Largest utility in the country is for the city of Los Angeles (population of 3,000,000, as of 2010).

Average SWU community population = 73,900.

Median SWU community population = 19,200.

Source: WKU 2016
Top Prospects Based on Storm Water Utility Revenues

- **MS4 communities:**
  - Ann Arbor
  - Appleton
  - Green Bay
  - Kenosha

- **CSO communities:**
  - Toledo
  - Fort Wayne
  - Lima
  - Cleveland
  - Milwaukee

- Consortium of communities
Enacting a CBP3 - Your State Legislation
Status of P3 Enabling Legislations

Source: AIAI (Association for the Improvement of American Infrastructure) 2017
## Public-Private Partnership Statutes by State (as of 2013)

<table>
<thead>
<tr>
<th>STATE</th>
<th>DESCRIPTION</th>
<th>STATUTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>Currently has enabling legislation for diverse public entities</td>
<td>MCL 125.1871</td>
</tr>
<tr>
<td>Indiana</td>
<td>Law is focused on “public facilities” that could be used if expanded definition of facilities is read</td>
<td>Ind. Code Ann. §§ 5-23-1-1 - 5-23-7-2</td>
</tr>
<tr>
<td>Illinois</td>
<td>Has many different P3 laws, but all are focused on transportation projects and in some cases, explicitly on a targeted project</td>
<td>605 ILCS § 5/10-802 605 ILCS §</td>
</tr>
<tr>
<td>Ohio</td>
<td>State DOT may enter into P3s, but legislation is transportation focused and not broadly applicable</td>
<td>Ohio Rev. Code Ann. § 5501.71</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Law explicitly authorizes state DOT to enter into agreements</td>
<td>Wis. Stat. Ann. § 84.01 (30)</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>Law permits P3s for transportation projects in the commonwealth</td>
<td>Pa. Cons. Stat. 74 §§ 9101 thru 9124</td>
</tr>
<tr>
<td>Minnesota</td>
<td>Very narrow legislation focused on road authorities. Very stringent requirements on what can and cannot be built under the aegis of this legislation</td>
<td>Minn. Stat. §§ 160.84 thru 98</td>
</tr>
<tr>
<td>New York</td>
<td>Currently no P3 legislation</td>
<td>N/A</td>
</tr>
</tbody>
</table>
In States Without P3 Statutes, Home Rule Could be Used as a Way to Set-up P3s

<table>
<thead>
<tr>
<th>STATE</th>
<th>VILLAGE</th>
<th>TOWN</th>
<th>CITY</th>
<th>TOWNSHIP</th>
<th>COUNTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ohio</td>
<td>Home Rule</td>
<td>Home Rule</td>
<td>Home Rule</td>
<td>Home Rule if</td>
<td>Home Rule if opted by the county (such as</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>adopted</td>
<td>Summit and Cuyahoga counties)</td>
</tr>
<tr>
<td>Michigan</td>
<td>Home Rule</td>
<td>Home Rule</td>
<td>Home Rule</td>
<td>Dillon's Rule</td>
<td>Home Rule if opted by the county (such as</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Macomb and Wayne counties)</td>
</tr>
<tr>
<td>Indiana</td>
<td>Home Rule</td>
<td>Home Rule</td>
<td>Home Rule</td>
<td>Dillon's Rule</td>
<td>Home Rule if opted by the county</td>
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<tr>
<td>Illinois</td>
<td>Home Rule</td>
<td>Home Rule</td>
<td>Home Rule</td>
<td>Dillon's Rule</td>
<td>Home Rule if adopted (such as Cook county)</td>
</tr>
<tr>
<td></td>
<td>Any municipality with a population over 25,000 is automatically &quot;Home Rule&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New York</td>
<td>Home Rule</td>
<td>Home Rule</td>
<td>Home Rule</td>
<td>Dillon's Rule</td>
<td>Home Rule if opted by the county</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>Dillon's Rule</td>
<td>Dillon's Rule</td>
<td>Home Rule</td>
<td>Home Rule</td>
<td>Home Rule if opted by the county (such as Alleghany, Delaware, Erie, Lackawanna, Lehigh, Luzerne, and Northampton counties)</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Home Rule</td>
<td>Dillon's Rule</td>
<td>Home Rule</td>
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<tr>
<td>Minnesota</td>
<td>Dillon’s Rule</td>
<td>Home Rule</td>
<td>Home Rule</td>
<td>Dillon's Rule</td>
<td>Home Rule if opted by the county (such as Ramsey County)</td>
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</table>

ECT Environmental Consulting & Technology, Inc.
New Administration and P3s
Investment Gap is Growing

Public Spending on Transportation and Water Infrastructure, by Level of Government, 1956 to 2014

Billions of 2014 Dollars

Source: Congressional Budget Office based on data from the Office of Management and Budget, the Census Bureau, and the Bureau of Economic Analysis.

Note: Dollar amounts are adjusted to remove the effects of inflation using price indexes for government spending that measure the prices of materials and other inputs used to build, operate, and maintain transportation and water infrastructure.
New Administration - What to expect

- A trillion dollar plan
  - 1:5 leverage

- Tax Credits ($167 billion)
  - Lower required equity returns, making P3 more competitive
  - Address viability gap for rural and poorer communities

- Accelerated delivery
  - Streamline approval processes by reducing regulations

- Legislation for federal projects
Green Infrastructure

- Rain Gardens
- Trees
- Greenways, Park Space
- Bioswales
- Wetlands
- Green Roofs
- Landscaping or Soil Amendments
- Green Streets, Alleys, Parking
- Rainwater Catchment
- Porous Pavement
Benefits of Green Infrastructure

- Lower costs, higher savings
  - Reduced water bills
  - Stormwater fee credits and other financial incentives
  - Reduced infrastructure costs
  - Energy savings
  - Reduced flooding costs

- Other social benefits
  - Increased mental health and worker productivity
  - Reduced crime
  - Contribute to climate resiliency
As of 2001, 850 CSO Permits Covering 772 Communities
MS4 Permitted Communities Across the Basin

Number of MS4 Permitted Communities in Great Lakes Watersheds by State

<table>
<thead>
<tr>
<th>State</th>
<th>Number of Communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>223</td>
</tr>
<tr>
<td>Ohio</td>
<td>95</td>
</tr>
<tr>
<td>New York</td>
<td>57</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>55</td>
</tr>
<tr>
<td>Indiana</td>
<td>29</td>
</tr>
<tr>
<td>Illinois</td>
<td>22</td>
</tr>
<tr>
<td>Minnesota</td>
<td>5</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>1</td>
</tr>
</tbody>
</table>

Great Lakes Information Network, Indiana State Map, Michigan Department of Environmental Quality, Ohio Environmental Protection Agency, Pennsylvania Department of Environmental Protection, New York Department of Environmental Conservation
**MS4s or CSOs - Retrofits is where the action is**

- New development is less than 1% of existing development
- Major initiatives:
  - Philadelphia: 10,000 impervious acres to be retrofitted
  - District of Columbia:
    - 415 impervious acres to be retrofitted - MS4
    - $100 Mil of GI in CSS areas - CSO
  - Prince George’s County, MD: 8,000 impervious acres to be retrofitted - MS4
  - Montgomery County, MD: 4,300 impervious acres to be retrofitted - MS4
Is Green Infrastructure Cheaper?
Benefits of Using Small-Scale Green Infrastructure Over Gray Infrastructure

- Reduced Cost: 44.10%
- Did Not Influence Costs: 31.47%
- Increased Costs: 24.50%

(ASLA 2011)
Scale Benefits - Large-Scale Use of Green Infrastructure

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>MILWAUKEE</th>
<th>NEW YORK CITY</th>
<th>PHILADELPHIA</th>
<th>PORTLAND (OREGON)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stormwater volume detained</td>
<td>14.8 billion gallons annually</td>
<td>12.1 billion gallons annually</td>
<td>19.9 billion gallons annually</td>
<td>116 million gallons annually</td>
</tr>
<tr>
<td>Scale of GI investment</td>
<td>$1.3 billion</td>
<td>$1.5 billion</td>
<td>$1.2 billion committed (total anticipated $3 billion through the addition of leveraged activities)</td>
<td>$9 million in GI (additional $48 over four years)</td>
</tr>
<tr>
<td>Total savings by the use of GI (dollars)</td>
<td>$850 million (calculated from $2.15 billion cost of gray infrastructure)</td>
<td>$8.5 billion</td>
<td>$5.6 billion over 25 years</td>
<td>$224 million (maintenance and repair)</td>
</tr>
<tr>
<td>Savings-to-cost ratio</td>
<td>.65</td>
<td>5.67</td>
<td>3.35</td>
<td>3.92</td>
</tr>
</tbody>
</table>
Market Size of Investments in Green Infrastructure
Seven Drivers of Market Size

- Leadership
- Financial ability
- Enabling legislation
- Regulatory drivers
- Efficient and cheaper project delivery
- Performance-based risk transfer
- Situational constraints
Market Size of Green Infrastructure in the Great Lakes Basin

- In states of Ohio, Minnesota, Wisconsin, Illinois, and Indiana: A third of utility revenues from the can support over a billion dollars investment
  - > $50 Mil => $912 Million market
  - Between $10 and $50 Mil => $225 Million market
- Caution - Market valuation models: future is the same as the past
- New York, Pennsylvania, and Michigan are at a significant disadvantage
Summary

- Storm water utilities help
- P3 enabling legislations are very helpful
- New administration seems motivated to promote P3s
- Market size of GI investment in Great Lakes is pretty substantial
  - Think of its impact on algal blooms
- Private finance will continue to emerge as a key way to fund water sector investment gap
- Large-scale aggregation has economies of scale and other benefits that are hard to ignore
Some recommendations

- Adoption of stormwater utilities
- Consistent P3 legislations across all states
- Provide guidance to USEPA for continued focus on green infrastructure
- Assessment of water infrastructure needs
- Consistent green infrastructure ordinances
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