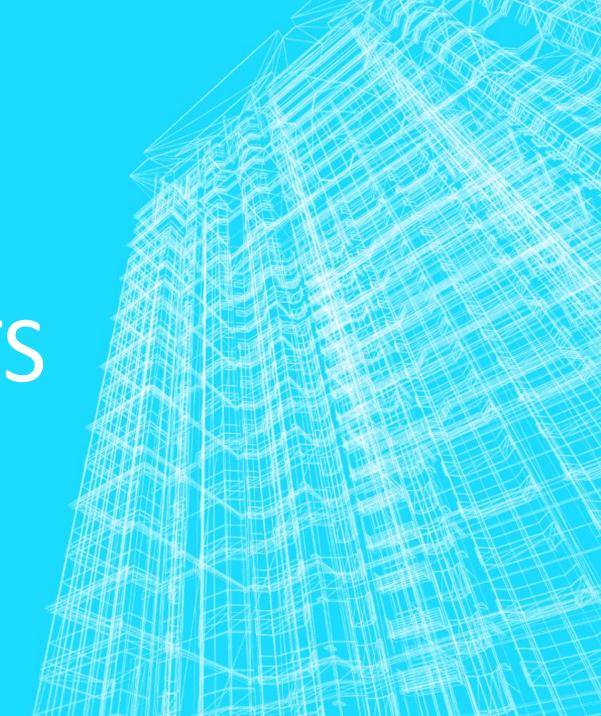
TRACKING RESILIENCY IMPROVEMENTS

Seth Platt





Moody's investors service

"The growing effects of climate change, including climbing global temperatures, and rising sea levels, are forecast to have an increasing economic impact on US state and local issuers. This will be a growing negative credit factor for issuers without sufficient adaptation and mitigation strategies."

Concerned Scientists

 1 million Florida homes worth \$351 Billion will be at risk for tidal flooding and about \$5 billion in annual property tax revenue will also be in jeopardy.



- 2017 Extreme weather costs exceeded \$312 billion.
- 2018 Extreme weather costs exceeded \$91 billion



Natural Hazard Mitigation Saves: 2017 Interim Report

- Mitigation funding can save the nation \$6 in future disaster costs, for every \$1 spent on hazard mitigation.
- The Report demonstrates that investing in hazard mitigation measures to exceed select Building code requirements can save the nation \$4 for every \$1 spent.

BENEFITS OF TRACKING RESILIENCY SPENDING

- Motivates mitigation and resiliency components to be included.
- Mitigates future credit downgrades associated with climate change risk.
- Mitigates increases to insurance for the private and public sector.
- Justifies requests for State and Federal matching dollars or grants.
- Leverages Infrastructure Life Cycles in Bonding.
- Increases public awareness of real costs associated with climate change.
- Helps to fulfill defined goals of implementing strong resiliency programs.
- Saves taxpayers' dollars by extending lifecycle through hardening infrastructure.
- Demonstrates leadership in climate change mitigation.

HOW DO WE INCENTIVIZE RESILIENCY AND SUSTAINABILITY IN PUBLIC PROCUREMENT?

Conflict: Resiliency/Sustainability vs Traditional Procurement

- Procurements Often Seeks Cost Benefit vs Sustainability.
- Can pricing be weighted against resiliency?
- How do different methods of procurement address this conflict?
- Does State Law allow resiliency as a consideration in procurement?
- How do we create a resiliency procurement method which cities and Counties may incorporate?
- Types or procurements to target
 - Products or services
 - Infrastructure projects

RESILIENCY TRACKING PUBLIC SECTOR VS PRIVATE SECTOR

- Public Sector
 - Requires staff review of infrastructure projects
 - Requires tallying of all resiliency improvements
 - Adoption of standards like LEED
- Private sector
 - Include resiliency improvements review in CCNA
 - Identify tangible improvements for bid process
 - Include Life Cycle Costing
 - Require private sector quantitative cost measurement reporting similar to small business program reporting.
- Hybrid

CCNA

Florida State Statute 287.055(4)(b)

- In determining whether a firm is qualified, the agency shall consider such factors as the ability of professional personnel; whether a firm is a certified minority business enterprise; past performance; willingness to meet time and budget requirements; location; recent, current, and projected workloads of the firms; and the volume of work previously awarded to each firm by the agency.
- CCNA does not allow for sustainability to be considered as an evaluation criteria in a firm's proposal.

EMPOWER YOUR CONSULTANT

- Communicate desire for resiliency inclusion.
- Establish benchmarks.
- CCNA Initial Design Review can identify potential resiliency opportunities.
- Request Life Cycle Cost Analysis justifications.
 - GSA mandates Life Cycle Costing in (CFR), Title 10, Part 436, Subpart A: Program Rules of the Federal Energy Management Program when applied to building design energy conservation measures.
 - Request tangible life cycle cost analysis on procurement items, i.e. Chillers, fleet vehicles.
 - Compare building materials.
- Establish baselines for methods and materials.

CALIFORNIA EXECUTIVE ORDER B-30-15

- State agencies shall take climate change into account in their planning and investment decisions and employ full life-cycle cost accounting to evaluate and compare infrastructure investments and alternatives.
- State agencies' planning and investment shall be guided by the following principles
 - Priority should be given to actions that both build climate preparedness and reduce greenhouse gas emissions;
 - Where possible, flexible and adaptive approaches should be taken to prepare for uncertain climate impacts;
 - Natural infrastructure solutions should be prioritized.
- The state's Five-Year Infrastructure Plan will take current and future climate change impacts into account in all infrastructure projects
- The Governor's Office of Planning and Research will establish a technical, advisory group to help state agencies incorporate climate change impacts into planning and investment decisions.

DESIGN BUILD

Per FL SS. 287.055 9(c) 3:

- The criteria, procedures, and standards for the evaluation of design-build contract proposals or bids, based on price, technical, and design aspects of the public construction project, weighted for the project.
- Sliding scale for pricing weighted against provable life cycle costs savings.

DESIGN COMPETITIONS & CHALLENGES

- Encourage innovation
- Challenge.gov
- HUD -Rebuild by Design & National Disaster Resilience Competition
- White House Budget Proposal
 - \$100 Billion in Incentive Grants
 - \$20 Billion in Transformative Projects
- White House & Congress \$2 Trillion Infrastructure

PUBLIC PRIVATE PARTNERSHIPS

- Performance Contracts
 - Energy Savings Performance Contracts
 - Are there other procurements which can leverage this method?
- Infrastructure
 - Resilient inclusion is incentivized
 - Collaborative Project Delivery
 - Operations
 - Maintenance
 - Increased Life Cycles Benefit Financing



THANK YOU.

