

CAPITAL PROJECTS & CONSTRUCTION

Steve March, Multnomah County Auditor

Michael Bowers, PE, King County CPO Analyst

Steve

- 15 years in the auditing practice
- Elected Auditor 9 years; State Rep 6
- PhD Urban Studies; CIA (IIA)

Michael

- 34 years as a Civil Engineer, PE
- Director of large capital projects
- Master's in Engineering/Construction

King County – seasoned approach

Multnomah County – fairly new to the
game

Lessons & tools from both

King County – a decade of capital project oversight

- WA State Auditor review 2008/2009
- Projects without rudimentary controls
- Legislation created
- Executive branch performance standards
- Capital Project Oversight (CPO) analyst

Multnomah County – no major vertical construction in many years

- Disappointment – 2004 Wapato Jail \$58M
- Success – 2011 East County Court and 2014 Sellwood Bridge Project
- 2013 Audit: minor capital projects
- 2015 Audit: Capital financing and planning
- New County position created

Government Structural influences: King County

- Auditor appointed - County Council Legislative Branch
- Oversees Capital work performed by Executive
- County Executive
 - Departments/Divisions delivering projects
 - Performance Standards & Budget (PSB)
 - Finance Business Operations Division (FBOD)

Government Structural influences: Multnomah County

- County Chair (CEO) + Chief Operating Officer
- Auditor is independently elected
- Two major Departments delivering Capital
- Many hands are out at budget time
- Lack of systematic prioritization
- Solution: Strategic Capital Planning process

King County: Auditor's Office Involvement

- Value-added at the front end
- Risk scoring each budget cycle
- Mandatory Phased Appropriation (MPA)
 - Design Real Estate Implementation
- Budget submittal
- Specific projects selected for oversight

Indicators of High Risk Projects

- ✓ Cost \$100 million. Many years to deliver.
- ✓ Hybrid: alternative technologies w/ infrastructure
- ✓ Project Team inexperienced w/ scope & complexity
- ✓ Multi-agency and/or multiple funding sources
- ✓ Low Quality cost estimate (Planning level only)
- ✓ Immature design; probable environmental issues
- ✓ Real estate acquisition and related issues
- ✓ Political disunity or discontinuity

Multnomah County: Auditor role

- After project approved, at Auditor's discretion
- Internal decision – high risk
- Timing – during or after is a bit late in starting
- “Go vs. no-go” budgeting, with milestones

Different Approaches: KC

- Project team creates Risk Register
- CPO Analyst reviews risks, amplifies concerns
- Evaluate mitigation strategies
- Initial audit on a large project
- Meet regularly with project team; use of Share Point
- Attend governance meetings
- Continuous assessment: follow-up & escalation

Different Approaches: MC

- Auditor decided to take on projects
- Selected audit team(s); initially 4 staff team
 - Team reviewed the risks and approach
- Broken into phases
 - Project Planning – initial reporting – best practices
 - Construction start to invoicing – in process
- Access to all Project information
- Embedded: Meet with construction teams

Specific Project Examples

Auditors making an Impact !!

East County Courthouse



- 2011-2012 New Court \$21 M
- Scope changed adding large data center
- Construction Manager – General Contractor (CMGC)



- Data Center major scope change added very late
- Construction manager firm needed along with robust Owner's Representative (insufficient in-house talent)



Brightwater WWTP

- \$700 Million grew to \$1.9 Billion



Brightwater WWTP

- Tail end of poor scope/cost trend at County
- Concurrent review of Department's programming
- Auditor: "Need for tighter control"
- Desire an alternatives analysis
- Now, falling within 10% baseline



Sellwood Bridge

- 2012-2015 Replace 100-year old Bridge
- \$319M project; multi-agency funded



Sellwood Bridge

- Less than 5% price change w/ unforeseen conditions
- Governance control very high, auditor participation



Children & Family Justice Center

- \$224 Million Court and Detention Facility



Children & Family Justice Center

- Downtown Seattle (high value property)
- Public/Political/Social concerns
- Scope (detention vs. rehabilitation)
- Move-in and Outfitting costs
- Design-Build procurement

Health Department HQ

- Began as \$46 Million six-story project
- Originally a multi-Agency agreement.
- Started in 2012, to be finished in 2015



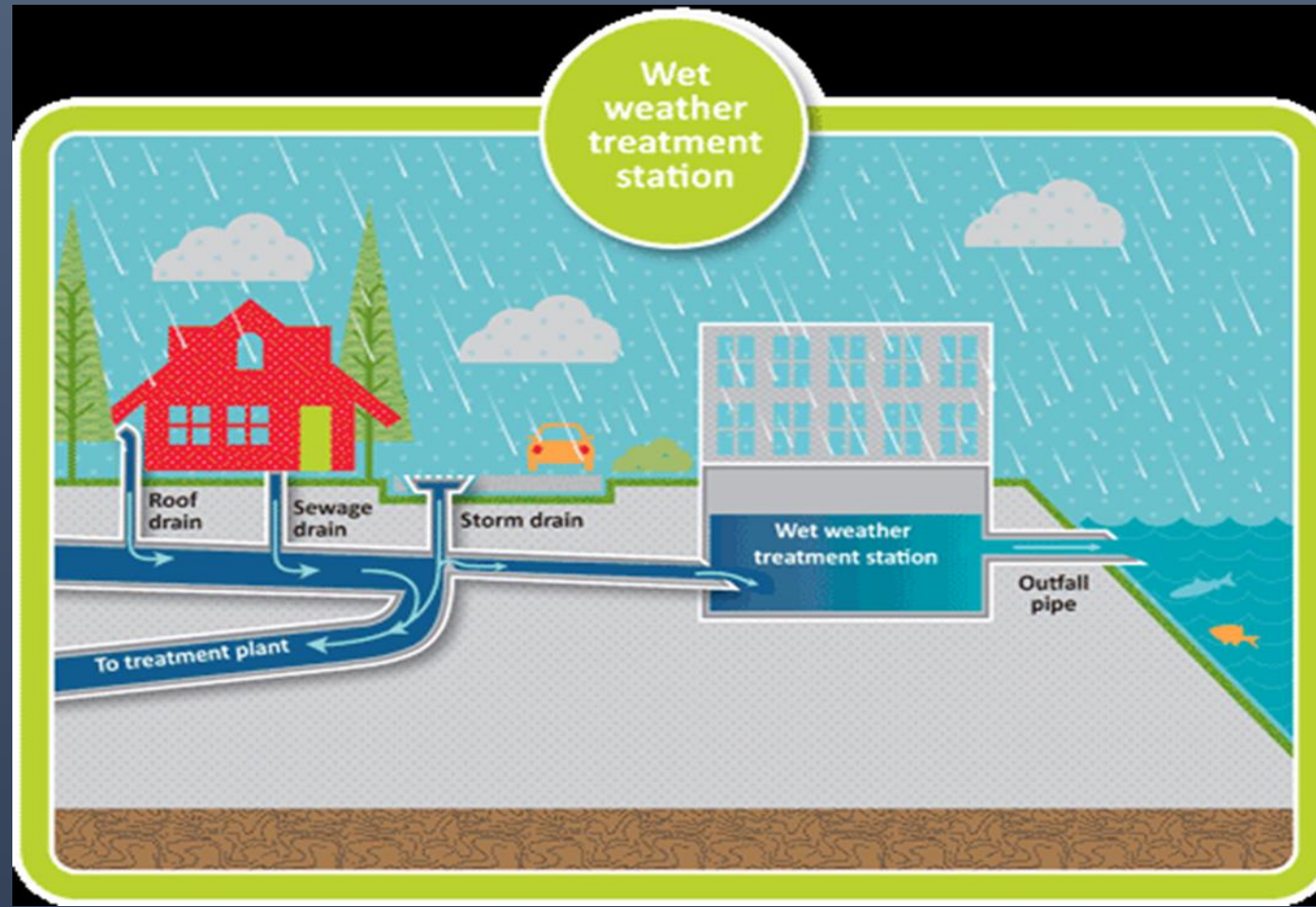
Health Department HQ



- Unwound original agreement
- Added scope; more floors to facility
- Added 3 years – now \$94 Million
- Adopted Owner's rep & CMGC approach

Georgetown Combined Sewer

- 2015 to 2030 C.S.O plan; consent decree



Georgetown Combined Sewer

- Separating sanitary and storm sewers
- Treatment station, Outfall, Conveyance
- Regulators, permitting, 3rd parties
- Firm deadline; \$240M budget
- Success: within scope, schedule, budget!



Downtown County Courthouse



- Replacement for 100 year old Court
- \$325 M project
- Groundbreaking 2016
- Conclusion of 29 “studies” completed over 40 years



Downtown County Courthouse



Courthouse Project

□ \$280 Million proposed renovation



Courthouse Project

- Scope: mechanical, electrical systems
- No improvement to structure/configuration
- Auditor: perform alternative/needs analysis
- Analysis now underway = next 2 years
- Electrical work performed interim

LESSONS-LEARNED: MC

- ✓ Early involvement works best
- ✓ Can be done without existing construction auditors
- ✓ Look for best practices & construction audit findings
- ✓ Difficult to make specific savings, but process improvements
- ✓ Need to develop good working relationship with auditees, owner's reps & contractors

LESSONS-LEARNED: KC

- ✓ Improved Planning and Estimating = few surprises
- ✓ Continuous improvement of PM manuals
- ✓ Diligent risk analysis and mitigation alternatives
- ✓ Legislative and Executive checks & balances work
- ✓ CPO Analyst functions as collaborative team member
- ✓ Good time to evaluate a decade of work; tune-up

KC Moving to Program Oversight

- Master Plans or Comprehensive Plans...
- .. Integrated with Asset Management Plans
- Transit Capital Program (\$1.0B over 5-7 years)
- Solid Waste Capital Program – new facilities
- Comb. Sewer Overflow Program (\$1.3B to 2030)
- Facilities Management CIP – strategic emphasis

TOOLS



TOOLS - MC

- Check other Audit shops
 - GAO
 - Similar size county/agency
- Project Management best practices (PMBOK)
- Talk to other Public entities
 - Bond accountability commission (PPS)
 - University (PSU) internal auditor or educator
- Seminars and webinars
- Internet research
 - CM/GC guidelines for public owners

TOOLS - KC

- Risk scoring tool and criteria
- Mandatory phased appropriation legislation
- Sample risk registers
- Quarterly construction reports
- Earned value analysis
- Request independent peer review cost validation
- Alternatives analysis of project approach
- More fundamental auditor templates..

CONTACTS

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Questions ??