Northwestern University
Executive Management for Design and Construction

Public Works Administration
PROJ_MGT 477

Course Objective:
Government public works programs are in a dynamic period with increasing demands on services, parks, roads, facilities and utility infrastructures which have daunting project backlogs and reducing revenue streams. This course examines these challenges from the perspective of the government leadership team and their partners in other public agencies, the private sector and the communities they serve.

Week-by-week description of the course:

Week 1 The Public Works Universe
• Overview the wide variety of infrastructure projects and services included in the Public Works field and narrow the focus to typical services and infrastructure managed at a local Public Works level within municipalities and county and site offices of state and federal agencies.
• Examine common organizational structures using examples from local Illinois village, city and county agencies and the Veterans Administration and Department of Defense as examples of Federal agency organizations. Examples will highlight the variations of in-house work forces, outsourced services, and challenges with local and large enterprise process management.

Week 2 Planning and Budgeting
• Overview the types of planning efforts required in a successful Public Works organization beginning with the value of developing organizational mission statements, guiding principles and strategic goals.
• Examine the types of master plans Public Work functions are nested within and those independently developed for specific Public Works programs such as real-estate campus development or utility systems.
• Review Capital Improvement Planning to include asset management programs, establishment of consistent and transparent project evaluation criteria, defining current and future requirements and balancing requirements, and inserting budget realities.
• Review traditional budget cycles, the process of developing a budget, managing the budget during the year, setting utility rates, the dynamics of standalone enterprise funds, and sources of funding from user fees, local taxes, loans, grants and other external sources.
**Week 3  Key Stake Holders, the In-House Workforce and Consultants**

- Examine the interaction with key stakeholders for a Public Works Organization from direct customers, tax payers, elected officials, regulatory bodies, supported municipalities, and staff at higher levels of the agency.
- Discuss the dynamics of leading the in-house workforce to include partnering with unions, recruiting, training and retaining the workforce and proactively managing the transition as an aging workforce nears retirement.
- Discuss how to effectively use consultants starting with developing of quality statements of work to evaluating proposals and effective partnership to deliver the product.

**Week 4  Delivering High Quality Services**

- Review typical work management systems, examine common pitfalls and explore ways to get the most out of the data.
- Discuss the importance of structured Project Management oversight, the use of 3rd party inspections and using a partnership mindset with contracted services.
- Review the importance of determining what matters. Explore how to define and measure performance in ways that enable informed decision making.
- Discuss common fatal flaws, how to avoid them and review leadership and communications during a crisis.

**Week 5  Emerging Trends / Key Issues**

- Discuss the regulatory environment and implied investment requirements.
- Discuss the magnitude of the infrastructure project backlog and possible emergence of alternative funding sources.
- Explore the desire to go green and the tension with cost drivers.
- Explore the promise of utility automation and related concerns with information assurance.

**Weekly Homework:**
Weekly homework assignments will consist of writing one-page summaries of assigned reading assigned from professional association articles and case studies.

**Course project:**
Students will select a Public Works Organization from a list provided and review the organization’s scope of work, budgets and future plans from open source materials. Students will interview the Public Works Director and take gathered information to complete a three-page worksheet. Students will then prepare and give a presentation during the Week 5 webinar.
Grade Determination:
Course Project......................25%
Homework............................25%
Class Participation...............50%

Text:
No text required

Software:
No software required

NOTE: This course description explains the essence of the material covered. Canvas is the best source for the most up-to-date information about specific details for any given offering of the course.