## HOW TO PREPARE FOR THE CPWP-M

The **Certified Public Works Professional - Management examination** consists of 150 Multiple-choice questions. Candidates are given 3.5 hours to complete the Computer Based Examination. **The questions on the examination assume the candidate has practical hands-on experience supervising a public works department.** Some test questions may ask candidates to select the best of available options. Usually the best response is the one used most broadly across North America as the correct approach to the policy or procedure.

The examination is divided into 9 domains of which specific Skills, Knowledge and Aptitudes are tested. The percentage indicates the portion of the test that is dedicated to that domain. The following is the content outline for the CPWP-M exam.

DOMAIN: BUDGET AND FINANCE 17.	7.56%
Analyze cost to benefit for potential programs	
Calculate cost recovery for potential and existing infrastructure and programs	
Prepare forecast demands for future services, maintenance and capital needs	
Evaluate programs to determine actual costs	
Track expenditures against budget	
Authorize expenditures	
Conduct financial tracking for projects and contracts	
Implement purchasing processes and requirements	
Evaluate impact of increased service demands/requirements, capital construction and improvement projects on operating budget	
Evaluate relationship between service level and budgets	
Draft operating budget proposal	
Develop capital improvement budget	
Request budgetary adjustments	
Compile data for capital improvement plan (CIP) to determine present and future	
Evaluate capital project requests to establish project ranking and priority	
Establish scope of individual capital projects including estimated costs and revenues	
DOMAIN: ASSET 6.	6.70%

Inventory existing assets	
Determine condition of public assets	
Develop schedule for replacement of assets and asset components	
Direct activities related to maintenance of public assets (e.g., scheduling, repairing)	
Utilize inventory of existing assets to project future levels of service	
Determine operational impacts of proposed improvement projects	
DOMAIN: PROCUREMENT & CONTRACT ADMINISTRATION	8.55%
Implement policies to determine goods and services that require a formal contract	
Implement procedures for purchasing service, maintenance and consultant contracts	
Develop tracking and reporting system to evaluate contract/service performance	
Evaluate suitability of procurement methods for contracts/services	
Draft scope and specifications	
Prepare procurement documents (e.g., requests for proposal [RFP] or bid [RFB]) for contracts/services	
Evaluate and recommend vendor	
Ensure deliverables are met and recommend payment	
DOMAIN: COMMUNICATION	9.609
Establish procedures for receiving and processing inquiries and concerns regarding public works	
Establish relationships with external entities to include HOA, Special Districts, Media	
Resolve difficult and sensitive inquiries from citizens and organizations regarding public works	
Develop communication strategy and system with citizens, elected officials, and organizations	
Implement communication strategy and system with citizens, elected officials, organizations, and other departments	
Implement distribution of information to citizens regarding public works, services and plans	
Implement plan to manage negative publicity (damage control)	
Identify forms and tools of communication appropriate to audience	
Conduct effective meetings	
DOMAIN: HUMAN RESOURCE MANAGEMENT	20.09
Set and communicate employee performance goals and expectations	
Evaluate employee and provide feedback based on performance	
Recognize labor/management relation structure	

Develop and implement personal development plans
Develop and implement employee safety programs
Recognize qualifying incidents for accident reporting requirements
Develop/implement risk management programs
Develop succession plan
Prepare job descriptions that reflect responsibilities, qualifications and working conditions
Implement employee recruitment strategies
Implement employee retention strategies.
Select and hire employees
Allocate human resources to fit operational needs
Resolve conflicts/incidents based on relevant facts
Identify and prioritize tasks based on urgency and importance
Apply delegation skills to work tasks
Assess and utilize leadership styles and team dynamics
DOMAIN: ADMINISTRATIVE 12.9
Interpret applicable regulatory requirements
Develop and implement policies and procedures
Develop and implement practices and procedures
Develop operational priorities in alignment with strategic plan
Develop system for measuring performance of activities
Measure and report activity performance
Assess service and work order requests
Schedule work tasks and crews
Schedule work tasks and crews
Schedule work tasks and crews Establish guidelines for preparation and presentation of technical and operational studies and recommendations
Schedule work tasks and crews Establish guidelines for preparation and presentation of technical and operational studies and recommendations Prepare periodic activity report
Schedule work tasks and crews Establish guidelines for preparation and presentation of technical and operational studies and recommendations Prepare periodic activity report Retain and manage records
Schedule work tasks and crews Establish guidelines for preparation and presentation of technical and operational studies and recommendations Prepare periodic activity report Retain and manage records Conduct service audits to determine appropriate service levels

Manage delivery of projects	
Report project status	
Establish and implement project close-out procedures	
DOMAIN: EMERGENCY MANAGEMENT	8.92%
Coordinate internal communication and information management during emergency incidents	
Coordinate inventory, mobilization, dispatch, and tracking of resources during emergency incidents	
Analyze impact of community risks and vulnerabilities on departmental emergency planning	
Recognize the command and management system for emergency management	
Recognize documentation and recordkeeping system required for emergency incidents	
Recognize emergency purchasing policies for emergency resources	
Execute the role of public works in emergency planning, response and recovery along with the roles of other governmental entities	
Recognize the difference between emergency planning, response, and recovery as it pertains to public works	
DOMAIN: UNDERSTANDING OF PUBLIC WORKS OPERATIONS	10.19%
Broad understanding of PW operational areas and how they are integrated, including the roles, functions and key terminology.	
Water, wastewater, and stormwater systems	
Engineering and project management	
Fleet and equipment management and maintenance	
Transportation	
Sustainability	
Snow and ice management	
Permitting and right-of-way management requirements	
Bridges	
Facilities & grounds management	
Solid waste	
	100%

## The examination is designed to test your existing working knowledge of Public Works Management. No Preparatory materials are prerequisites to earning APWA certifications.

However, there are materials that can help you refresh and improve your understanding of the processes and functions necessary to be a competent Public Works Professional. We suggest you review the content outline and focus any study on the areas for which you are not strong. The following recommended reading list could be utilized to familiarize yourself with these areas.

Please note: APWA Education is independent of APWA Certification. APWA certification programs are governed by the Certification Council, a semi-independent certifying body of APWA. In adherence to certification industry standards, the Commission volunteers are independent and not involved in the development of preparatory programs.

Title	Description	Areas of Focus of Publication	Code, Publisher, APWA Store Price If available
Public Works Practice Manual Edition: 9th edition	Now in its 9th Edition, the updated and revised Public Works Management Practices Manual, also known as "the Manual", includes a new chapter on Asset Management. This is a critical tool for agencies of any size and with a range of responsibilities. Use this manual to develop the policies and procedures necessary to perform as a full-service public works agency. The Manual will provide you with the framework to conduct your own objective agency self-assessment and it serves as the must-have guide for achieving the APWA Accreditation designation.	BUDGET AND FINANCE ASSET MANAGEMENT PROCUREMENT & CONTRACT ADMINISTRATION COMMUNICATION HUMAN RESOURCE MANAGEMENT ADMINISTRATIVE PROJECT MANAGEMENT EMERGENCY MANAGEMENT UNDERSTANDING OF PUBLIC WORKS OPERATIONS	Product Code: PB.APWM Publisher: APWA ISBN Number: 978-1- 60675-043-8 Edition: 9th Member Price: \$50.00 - \$130.00 Nonmember Price: \$75.00 - \$155.00

Public Works Administration: Operations (Blue Book)	APWA's new "Blue Book," a companion to Public Works Administration: Supervision and Management, focuses on the external environment of public works with such issues as finance, law, and fundamentals of government. It also includes an overview of public works operations and concludes with one of the most important aspects of public works leadership—creating the future. This book includes a look at strategic planning, systems thinking, policy development, and other vital forward- looking techniques. (This book supports APWA Public Works Institute Units 6-11.)	BUDGET AND FINANCE ASSET MANAGEMENT PROCUREMENT & CONTRACT ADMINISTRATION HUMAN RESOURCE MANAGEMENT ADMINISTRATIVE EMERGENCY MANAGEMENT UNDERSTANDING OF PUBLIC WORKS OPERATIONS	Product Code: PB.A748 Publisher: APWA Date: December 1, 2018 Member Price: \$75.00 Nonmember Price: \$85.00
Public Works Supervision & Management (Yellow Book)	This successor to APWA's 2008, highly successful Public Works Administration expands on a subject only minimally covered in that book— the management of people. It is no longer enough for a public works leader to be technically competent. Successful public works managers and supervisors also must have the ability to lead, manage, inspire, and communicate. This publication—the "Yellow Book"—discusses supervisory techniques; delves into basic management, communication, and leadership skills; and considers dimensions of community service and customer orientation skills. (This book supports APWA Public Works Institute Units 1-5.)	COMMUNICATION HUMAN RESOURCE MANAGEMENT ADMINISTRATIVE	Product Code: PB.A1699 Author: Leadership and Management Technical Committee Publisher: APWA Date: January 01, 2016 ISBN Number: 978-1- 60675-054-4 Pages: 180 Member Price: \$50.00 Nonmember Price: \$60.00

A Public Finance Primer for Public Works Professionals	Do you and your finance officer speak the same language? This book, by a CPA who learned 'to speak public works' through her local government work experience, will give you insight into the accountant's mind. After reading this primer you'll have a better grasp of the terminology and concepts you need to know so that you and the finance officer can both get your jobs done.	BUDGET AND FINANCE	Product Code: PB.A430 Author: Lynda M. Dennis Publisher: APWA Pages: 46 Member Price: \$35.00 Nonmember Price: \$40.00
Public Works Communication Manual, 3rd Ed	Newly revised by a task force of the Leadership and Management Committee, this book is designed to help you through the tough demands of communicating properly in a variety of situations. From public presentations to media relations to desktop publishing, you'll find the help you need in this guide to more effective communication.	COMMUNICATION	Product Code: PB.APWC Publisher: APWA Pages: 104 Member Price: \$30.00 Nonmember Price: \$40.00
APWA Red Book on Qualifications-Based Selection Guidelines for Public Agencies, 4th Ed.	Is it quality or low bid control your agency's decisions when contracting for engineering and architectural consultants? APWA's Red Book discusses the case for qualifications- based selection (QBS) and teaches readers how to conduct interviews, evaluate candidates, formulate, and manage contracts for professional services. The Red Book has been one of APWA's most widely used publications of the last 25 years.	PROCUREMENT & CONTRACT ADMINISTRATION	Product Code: PB.ASEL Author: APWA Engineering and Technology Committee Publisher: APWA Date: January 01, 2006 ISBN Number: 0-917084- 60-8 Pages: 52 Member Price: \$15.00 Nonmember Price: \$20.00

PW Incident Management Manual: Model Procedures Guide for All Hazards and Large- Scale Incidents Using NIMS-ICS	In the midst of a large-scale emergency event, will your agency's efforts be well coordinated - or a disaster of their own? This guide will familiarize you with the terminology and teach you how to use the strategies of the Incident Command System to manage from the smallest incidents to the largest, most complex catastrophes. The NIMS - Incident Command System is the national model for coordinating facilities, equipment, personnel, procedures, and communication for effective and efficient incident management.	EMERGENCY MANAGEMENT	Product Code: PB.A1518 Author: APWA, in partnership with the National Incident Management System Consortium. ISBN Number: 0-917084- 047-6 Pages: 154 Member Price: \$25.00 Nonmember Price: \$30.00
Building on the Basics: Core Competencies in Public Works	Are you a leader or a manager? Do you know the difference between the two? This collection of articles, written by APWA leaders, will help you understand the core competencies that are important for the leader or manager and provide some direction for self-improvement. Use the experience and insight of these public works leaders to help you reach your highest potential.	COMMUNICATION HUMAN RESOURCE MANAGEMENT ADMINISTRATIVE	Product Code: PB.A628 Author: Leadership and Management Committee Publisher: APWA Pages: 192 Member Price: \$20.00 Nonmember Price: \$30.00
Developing a Public Works Operations Manual	An operations manual is an essential asset to any agency, but there's no standard that will fit all agencies. However, there are some common, key elements that should be included in any operations manual, and this book will identify them and teach you how to use them. Learn how to ensure smooth transitions in your workforce, guard against the risk of lost information, and provide consistently good service to your community.	ADMINISTRATIVE UNDERSTANDING OF PUBLIC WORKS OPERATIONS	Product Code: PB.A626 Author: William A. Sterling, P.E Publisher: APWA Pages: 56 Member Price: \$20.00 Nonmember Price: \$30.00

Executive Soft Skills Pocket Guide	Executive managers in public works get their jobs because of excellent technical and leadership skills. But to succeed they must also master the 'soft skills' that will get the hard results! This pocket guide provides	COMMUNICATION HUMAN RESOURCE MANAGEMENT ADMINISTRATIVE	Product Code: PB.A1698 Publisher: APWA Leadership and Management Technical Committee ISBN Number: 978-1-60675-
	tips on managing meetings, communicating effectively, handling media, promoting your agency's message, and building constructive work relationships.		053-7 Pages: 28 Member Price: \$8.00 Nonmember Price: \$10 00
Performance Measurement in Public Works	This book is a practical guideline from a public works perspective. It provides all the important tools you need to kick-start your successful performance measurement effort.	BUDGET AND FINANCE HUMAN RESOURCE MANAGEMENT ADMINISTRATIVE	Product Code: PB.ANUT Author: William B. Cook Publisher: APWA ISBN Number: 0-917084- 70-5 Pages: 70 Format: Download available Member Price: \$0.00 - \$20.00 Nonmember Price: \$30.00 - \$40.00
Public Works Performance Management	This book discusses performance management, accountability, and performance measurement. In exploring these three terms, it helps you determine if your agency should renew or initiate its efforts and provides ideas on how to best proceed with those efforts.	BUDGET AND FINANCE HUMAN RESOURCE MANAGEMENT ADMINISTRATIVE	Product Code: PB.APER Author: William B. Cook Publisher: APWA ISBN Number: 0-917084- 70-5 Pages: 72 Download available Member Price: \$0.00 - \$20.00 Nonmember Price: \$20.00 - \$40.00

Getting the Most Out of Your Infrastructure Assets	The skills required for infrastructure asset management have grown beyond traditional engineering training. The new infrastructure asset manager must draw on practices from business and finance, information systems and public administration. This guide will help prepare you with the goals, philosophy, principles, practical methods, and tools available for asset management.	ASSET MANAGEMENT PROCUREMENT & CONTRACT ADMINISTRATION	Product Code: PB.AGIA Author: Andrew C. Lemer, Ph.D Publisher: APWA ISBN Number: 0-917084- 95-0 Pages: 60 Member Price: \$15.00 Nonmember Price: \$40.00
The Ultimate Public Works Project Management Manual	While there are certainly some similarities between a private-sector Project Manager and Public Works Project Manager, there are numerous variations that can lead to substantial differences in how to effectively manage the moving parts of a project. For starters, Public Works Project Managers need the unique skillset and know-how to select the best consultants, negotiate scope, schedule and budget, and deal with elected officials and the public in a very direct manner.	PROJECT MANAGEMENT	Publisher: PSMJ Resources, Inc. Date Published: 2015 Number of Pages: 506 pages ISBN: 1-55538-299-1 Format: Hardcopy & PDF Price: \$147.00
The Practical Guide to Project Management;	This book is designed to help you understand the theory, tools, techniques, and key success factors for you to succeed in your projects. We will be looking at all aspects of managing projects - from the technical checklists to the soft skills that are essential for a Project Manager to succeed.	PROJECT MANAGEMENT	Date Published: 2013; Author: Christine Peterson ISBN 978-87-403-0524-1 Bookboon.com
The Procurement and Supply Manager's Desk Reference	Every supply manager's essential desktop tool with in-depth, authoritative coverage of each topic. Leaving no stone unturned in covering all aspects of the procurement and sourcing functions,	PROCUREMENT & CONTRACT ADMINISTRATION	Authors: Fred Sollish, John Semanik; Publisher: John Wiley and Son's Date Published: 2007

	The Procurement and Supply Manager's Desk Reference, Second Edition is filled with everything every organization needs to know about the key roles and responsibilities of a procurement professional. Presented logically to match the flow of the procurement and sourcing functions, the book is filled with practical aids such as step-by-step guides to each segment of the process, as well as checklists and customizable forms.		
Guide to Project Management Body of Knowledge (PMBOK Guide)	PMI's flagship publication has been updated to reflect the latest good practices in project management. New to the Sixth Edition, each knowledge area will contain a section entitled Approaches for Agile, Iterative and Adaptive Environments, describing how these practices integrate in project settings. It will also contain more emphasis on strategic and business knowledge—including discussion of project management business documents—and information on the PMI Talent Triangle <sup>™</sup> and the essential skills for success in today's market.	PROJECT MANAGEMENT	Publisher: Project Management Institute (PMI) ISBN-10: 1628251840