

CAPP

CAPP Certification Program CANDIDATE HANDBOOK

Presented by the CAPP Certification Board of the International Parking & Mobility Institute v. 01, 8/2019





IPMI International Parking & Mobility Institute
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571.699.3011 Phone
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Dear CAPP Applicant:

Welcome and congratulations on considering becoming a CAPP, respected worldwide as the leading credential in parking and mobility.

What does it mean to be a CAPP? You need only connect with any industry professional who currently holds the title to know that the CAPP community comprises the very best in the profession—mentors, innovators, leaders—who combine talent, skills, expertise, and a commitment to share their ideas and expertise to advance the profession.

It's a special group, but not an exclusive one. CAPPs warmly welcome new certificants to the fold, expanding what has become a close-knit family of colleagues with whom to network, share, learn, and grow.

As you will see in the CAPP Candidate Handbook the CAPP program is regularly updated to reflect the advancements in parking and mobility management. These changes have been made to ensure we follow best practices in credentialing, and to align the expectations for a CAPP's body of knowledge with IPMI's groundbreaking Job Analysis Survey, which was conducted to ensure the CAPP credential reflects the real-world breadth of knowledge and skills required of today's parking and mobility professionals.

The triangle embedded in the CAPP logo represents the solid foundation that is required of every CAPP, the pinnacle of achievement in earning the credential, and the commitment to always strive to reach new heights.

Congratulations on taking this first step on the road to becoming a CAPP. All of us at IPMI and IPMI's CAPP Certification Board wish you great success and look forward to sharing the journey with you.

Shawn Conrad, CAE Chief Executive Officer

International Parking and Mobility Institute

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The CAPP credential is a program of the International Parking & Mobility Institute (IPMI) and is administered through the Independent CAPP Certification Board of IPMI in cooperation with the University of Virginia.

Table of Contents

Communications	5
Introduction	5
Mission Statement	5
Certification Program	5
Becoming a CAPP	6
Eligibility Requirements	6
Eligibility Matrix	7
Applying for the Credential	8
Verifying Eligibility Documentation	9
Statement of Understanding	9
Endorsement	9
Refunds	9
The William M. Voigt, CAPP, Scholarship Fund	10
Applying for a Scholarship	10
Non-Discrimination Statement	10
Special Accommodations	10
Privacy/Confidentiality Policy	11
Examination Information	11
Examination Development	11
Examination Design, Scoring, and Reporting	12
Examination Content	13
Suggested Study References	17
Additional Opportunities for Study	19
Acronyms Used on the Examination	19
Examination Registration	20
Rescheduling an Examination Registration	20
Rescheduling a Missed Examination	21
Examination Administration Rules and Regulations	21
Application Process	22
Candidate Comments About Examination Questions	22
Examination Scoring and Reporting	22

Retesting for Failing Candidates	23
Examination Appeals	23
Awarding the Credential	25
Maintaining the Credential	25
Recertification Point Matrix	25
Status of the Credential	27
Fee Schedules	28
APPENDIX A — Sample Exam Questions	29
APPENDIX B — Candidate Application Packet	33
Application Instructions	33

Communications

Please direct all communications in writing to:

Mailing Address: International Parking & Mobility Institute

ATTN: CAPP Certification Program 1330 Braddock Place, Suite 350

Alexandra, VA 22314

Office Phone: 571.699.3011

Web Address: parking-mobility.org/capp
Email Address: capp@parking-mobility.org

Introduction

Thank you for your interest in the CAPP Certification Program. The CAPP Certification Program is administered by the CAPP Certification Board of the International Parking and Mobility Institute (IPMI), in cooperation with the University of Virginia.

The CAPP Certification Board is responsible for all aspects of the CAPP credential, as authorized by the bylaws of IPMI. IPMI is a nonprofit membership 501(c)(6) trade organization providing services to and representing the parking industry since 1962.

The CAPP Candidate Handbook details the process, policies, and procedures supporting the CAPP Certification Program. It contains the application, eligibility, and experience requirements; CAPP Examination Content Outline; reference recommendations; information about registering for and taking the examination; and recertification requirements.

Mission Statement

The certification program is designed to:

- Establish a benchmark of excellence for the parking and mobility profession.
- Provide continual information and training to parking, mobility, and transportation professionals.
- Increase the body of knowledge available to parking and mobility professionals.
- Provide a means by which parking and mobility professionals may demonstrate their proficiency and be recognized by their peers, employers, regulators, customers, and the public.

Certification Program

Designation as a CAPP is meant to assure stakeholders (employers, regulators, consumers, and the public) that the credentialed person has demonstrated an established level of knowledge that serves as a foundation for competent practice as a parking and mobility professional.

The goals of the certification program are to:

- I. Provide a means for parking and mobility professionals to demonstrate the critical knowledge, skills, and abilities necessary to serve the public trust and interest.
- II. Encourage personal and professional growth.
- III. Recognize parking and mobility professionals who have demonstrated knowledge and maintain their certification through ongoing professional development.

Becoming a CAPP

To become a candidate for the CAPP credential, applicants must:

- Document a minimum of three years of management/supervisory experience in parking, mobility, or an allied profession (e.g., planning, operations, management, architecture/engineering, construction/maintenance, service/material supplier, consultant).
- Document the minimum education of a high school diploma.
- Document the minimum of 25 professional development contact hours within the past five years of the CAPP application.
- Document the minimum of 50 combined education, experience, and professional development eligibility points as they relate to the profession.
- Receive an endorsement from a CAPP or applicant's employer attesting to the accuracy of education, training, and experience claimed on the application.
- Complete the application in its entirety.
- Sign the Statement of Understanding agreeing to abide by the CAPP Code of Ethics, attesting to the applicant's good standing according to the CAPP Code of Ethics, and to the truth of the professional experience, education, and professional development documentation.
- Submit the application fee.

Eligibility Requirements

Eligibility is based on three criteria:

- 1. Education.
- 2. Experience.
- Professional development related to the parking and mobility profession.*

The CAPP Certification Board recognizes that the pathway to the CAPP credential is diverse. Some professionals have a wealth of experience managing parking facilities; others come to work in the industry based on education or experience in the fields of facility design, urban planning, construction, maintenance, traffic management, etc. Still others working in the industry are consultants, vendors, or ancillary service providers. Therefore, the minimum requirements in each of the three eligibility areas allow applicants to apply various combinations of education, experience, and professional development to meet these requirements.

As the CAPP Examination Content Outline (included in this handbook) details, the knowledge and tasks required to practice competently involve subspecialties representing many areas of management and operations. To require education, professional development, and experience in all subspecialty fields is impractical. Therefore, the minimum requirements in each of the three eligibility areas allow candidates

^{*}To determine if professional development is related to the parking and mobility profession, please refer to the CAPP Examination Content Outline.

to apply various combinations of education, experience, and professional development to meet the eligibility requirements.

Eligibility requirements may focus on one area with the understanding that candidates are expected to obtain the knowledge, skills, and abilities from other domains.

Applicants should compare their current level of knowledge and understanding to the elements in the CAPP Examination Content Outline. A self-assessment (included in this handbook) may highlight knowledge and task areas where the applicant could benefit from additional study, education, and/or professional development before taking the exam. Passing the examination ensures that credential holders have demonstrated mastery of the full complement of subspecialty domain knowledge.

Eligibility Matrix

To be eligible to earn the CAPP credential, applicants must meet the minimum education, experience, and professional development requirements (totaling 41 points), plus nine additional points from any of the three categories, for a total of 50 points. The following matrix outlines the point distributions and requirements:

1. Education/License/Credential:

Minimum Points: 4/Maximum Points: 40

Note: Points awarded for highest level of education achieved from an accredited educational institution.

High School Diploma or GED (or International Equivalent): 4 points
 Associate degree (or International Equivalent): 8 points
 Bachelor's Degree (or International Equivalent): 16 points
 Master's Degree: 24 points
 Doctorate: 40 points

- Applicable Professional License*: (e.g., engineer, architect, accountancy, construction, etc.): 8 points per license.
- Applicable Professional Certification Designation* (must be aligned with the knowledge and tasks reflected in the CAPP Examination Content Outline): (e.g., project management professional, PE, AIA, LEED, etc.): 4 points per designation.

*Note: Applicant must be in good standing with the licensing agency/credentialing body.

2. Experience:

Minimum Points: 12 (3 years)/Maximum Points: 40 (10 years)

Note: Professional experience refers to supervisory and/or managerial roles and/or contact with same (e.g., consultants, vendors) and/or equivalent experience in a related field. Equivalent experience in a related field must be combined with a minimum of three years of experience at any level in the parking, mobility, or transportation industry. No experience points are awarded for service in the parking, mobility, or transportation industry below the manager/supervisor level. Four points can be claimed for each year of management/supervisory experience up to a maximum of 40 points.

- Examples of applicable job titles include:
 - Executive Director.
 - Director of Parking/Transportation/Mobility.
 - Administrative, Operations, IT, or Financial Manager.
 - o Parking, Transportation, or Mobility Coordinator/Administrator.

	•	, isosociato, i isosocia i i z ii cotto i , i i an agori	
	0	Project Manager.	
	0	Consultant/Vendor.	
	0	Program Supervisor (Parking, Transport, Enforcement, Security, M	obility).
	0	Contract Manager/Commercial Operator.	
•	Manag	gerial/Supervisory Parking/Transport Experience:	
	# years x	x 4 points per year = Total Managerial/Supervisory Experience points	
	Delete	d Marcon de l'Orange Constitution and a constitution of the land at a constitution of the land a	
•		d Managerial/Supervisory Experience + 3 years in Parking Industry:	
	# yeurs x	x 4 points per year = Total Related Managerial/Supervisory Experience points	
	Total E	Experience Points:	
2	Profession	onal Development/Continuing Education:	
•			
		num Points: 25/No Maximum	
		rofessional development courses must have been completed within the past five ye c APP* (e.g., IPMI webinars, IPMI courses and training, other professional developme	
	-	onal certificates.) One point is awarded per contact hour of professional developme	
	p. 5,555.5	,,,,,,	,
•	To dete	ermine the applicability of the training, refer to the CAPP Examination	on Content Outline, which
	lists the	e knowledge and tasks that form the foundation of the examination	1.
	Profess	sional Development Continuing Education:	Points
	Profess	sional Certificate Award Continuing Education:	Points
	Total P	Professional Development Points:	
	Minim	um Number of Eligibility Points Required for CAPP Candidacy: 50	
	Catego	pry Points:	
	Edu	ucation/License/Credential:	
	Exp	perience:	
	Pro	ofessional Development:	

Associate/Assistant Director/Manager

Questions concerning eligibility should be directed to the CAPP Certification Program at 571.699.3011 or capp@parking-mobility.org

Applying for the Credential

TOTAL POINTS:

The application is downloadable from the CAPP website at parking-mobility.org/capp. Applicants may also request a printed version. Applications must be submitted in writing, filled out completely, signed, and then mailed or emailed. Applications will not be accepted without payment and documentation of all three areas of education, professional development, and experience. Endorsements must be received via email (capp. Applicants may and then mailed or emailed. Applications will not be accepted without payment and documentation of all three areas of education, professional development, and experience. Endorsements must be received via email (capp. Applicants may

The application fee is \$475 (IPMI members) or \$700 (IPMI non-members) U.S., which includes a non-refundable \$100 administrative processing fee. Additional testing fees may apply outside the U.S.

Applicants are responsible for notifying IPMI staff in writing of any change of name, address, or contact information.

The application contains a checklist of requirements you can use to determine if you have the minimum eligibility requirements. Incomplete applications will not be considered. Applications will be processed within 30 days of receipt. If an application is approved, applicants will receive emailed instructions concerning examination registration procedures and testing options.

Applicants submitting incomplete applications will be notified in writing of deficiencies and provided 30 days to produce the missing documentation or application terms. If the application is not completed within the 30-day window, the Certification Department will notify the applicant via email and postal mail that the application is denied. Withdrawal or failure to respond to requests for information results in a refund of the application fee, minus the \$100 administrative processing fee. If an application is denied at the end of the 30-day deficiency/correction review timeframe, applicants may appeal the decision by requesting, in writing, a final application review from the CAPP Certification Board Appeals and Discipline Committee. The committee or its agents will review the application and make a final decision within 30 days of receipt of the appeal.

Verifying Eligibility Documentation

The CAPP Certification Board and/or CAPP Certification Program staff reserve the right to audit/verify the experience, education, and professional development provided by the applicant. This may be accomplished by a phone interview with a supervising professional or employers or through verification of education/professional development transcripts, certificates, and/or licenses. Additional documentation may be requested to support the information provided by the applicant.

Statement of Understanding

Applicants are required to attest to the accuracy of the application and to agree to abide by the CAPP Code of Ethics principles and rules, which are downloadable from parking-mobility.org/capp. Any misrepresentation or misconduct related to the application or examination may result in disqualification or revocation of certification. By applying for the credential, applicants agree to the terms set forth in the application and the CAPP Candidate Handbook.

Endorsement

All applicants must obtain an endorsement from an appropriately certified individual or employment supervisor who is willing to attest to the applicant's assertions regarding professional experience and confirm that the applicant is in good standing within the profession. If a CAPP is not available, another qualified professional with knowledge of the CAPP certification or an employment supervisor may validate/endorse the applicant's claim of professional experience and professional standing. The endorsement must be submitted independent of the application.

Refunds

Should an application be denied, the application fee will be reimbursed less the \$100 administrative processing fee. Similarly, applicants requesting to withdraw from consideration will be refunded the application fee less the \$100 administrative processing fee. Applicants suspecting they may not meet the eligibility requirements are encouraged to contact Certification Program staff prior to applying.

The William M. Voigt, CAPP, Scholarship Fund

The William M. Voigt, CAPP, Scholarship Fund was established in 1997 to benefit CAPP applicants in need of financial support to earn the credential. The scholarship fund is designed to provide financial assistance to support applicants efforts to achieve and maintain the CAPP credential. The CAPP Certification Board offers scholarship awards based on:

- 1. Scholarships are available to offset the cost of registration fees, travel, and lodging expenses related to earning and maintaining the CAPP credential.
- 2. If requesting assistance for professional development to support an application, applicants must demonstrate progress toward the required 50 eligibility points.
- 3. If requesting assistance toward recertification requirements, a CAPP must demonstrate that he or she has accumulated a minimum of 6 recertification points supporting the three-year, 20-point requirement.
- 4. There is a lifetime award limit of \$2,500 per applicant.

Applying for a Scholarship

Scholarship application forms are downloadable from parking-mobility.org/capp. All information included on the scholarship application is kept confidential and secure in accordance with the IPMI privacy policy. Scholarships are provided to individuals needing to attend in-person training and/or professional development courses. Scholarship applications are accepted year-round but must be submitted at least six weeks prior to the event. Award decisions are made within 30 days of application. Questions concerning the scholarship program should be directed to capp@parking-mobility.org or 571.699.3011.

Non-Discrimination Statement

The CAPP Certification Board will admit applicants regardless of age, sex, sexual orientation, race, religion, ethnicity, national origin, disability, or marital status and provide all rights and privileges, as well as open access to programs, examinations, and certification.

Special Accommodations

The CAPP Certification Board grants reasonable accommodations for candidates with documented disabilities in compliance with the Americans with Disabilities Act. If special assistance or arrangements are required, the following protocol must be followed:

- 1. Applicants must make a request for accommodations in writing when the application is submitted. This request must include a complete description of the requested accommodation.
- 2. Documentation of the disability, as diagnosed by a qualified health care professional, must accompany the accommodation request.

Applicants requesting accommodations may be contacted by Certification Program staff to discuss the disability and requested accommodation. Every effort will be made to provide a reasonable accommodation within the constraints of consideration of examination security and examination administration guidelines. Applicants will be notified in writing of the accommodations that can be offered.

Privacy/Confidentiality Policy

The CAPP Certification Board abides by IPMI's strict privacy/confidentiality policy, demonstrating its firm commitment to applicant, candidate, and certificant privacy (available at parking-mobility.org/capp). The policy applies to all aspects of the credential, including the secure handling and storage of application materials, examinations, scores, and candidate and certificant records. IPMI's Certification Program staff are required to complete a confidentiality/non-disclosure document agreeing to protect the privacy of applicants, candidates, and certificants. The CAPP Certification Board's policy is that non-disclosure-protected applicant, candidate, and certificant information (i.e. protected information) may not be released to or shared with:

- 1. Any member of the public unless there is applicable statutory exception or written release from the applicant, candidate, or certificant.
- 2. Any member of the CAPP Certification Board unless the recipient has a legitimate interest for the use of that protected information to perform a service or carry out a responsibility within that person's scope of employment or engagement as a public official.

Certification Program staff with access to protected information are expected to safeguard that information from unauthorized disclosure. This includes, as appropriate:

- Computer systems and applications security: central processing units, peripherals, portable storage devices, operating systems, applications software, and data.
- Physical security: The premises occupied by CAPP and/or the IPMI personnel or contractors using computer equipment storing or having access to protected information.
- Operational security: Environmental control, power equipment, and operational activities related to operations.
- Procedural security: Established and documented security processes for information technology staff, vendors, management, and individual users of protected information.
- Network security: Communications equipment, transmission paths, switches, terminals, and adjacent areas.

IPMI and the CAPP Certification Board reserve the right to change this policy at any time by notifying users of the adoption of a new privacy statement.

Examination Information

Examination Development

The content validity (relevance), fairness, and accuracy of the CAPP examination are assured. The CAPP Certification Board, working with experts in the field of certification program management, mandates that the examination development, administration, scoring, and reporting adhere to international professional certification standards and guidelines establishing assessment and certification best practices. The most important of these standards are promulgated by such key organizations as the National Commission for Certifying Agencies (NCCA), ISO/American National Standards Institute (ANSI) 17024 Standards, American Psychological Association (APA), and Council on Licensure, Enforcement and Regulation (CLEAR). This body of standards provides a means for ensuring that the assessment and credentialing process is a fair measure of competence and knowledge and is legally defensible.

The CAPP Examination Content Outline is based on the 2018 Parking and Mobility Professionals Job Analysis Study. This full-scale survey study will be revalidated periodically and used a methodology inviting parking and mobility professionals and current CAPPs to participate. Additionally, the research

was performed by a certification industry exam development subject matter expert (SME) (or psychometrician) and involved a panel of parking and mobility professionals/SMEs representing the full complement of diversity in the industry. It documents the link between the content of the examination and practice on the job.

The passing score for the examination was determined using the Angoff, Design V. Psychometric procedures are used to score the examinations in compliance with relevant technical guidelines. IPMI reports scores using a scaled score model in which raw scores are placed on a 0-100 scale with 70 reported as the passing score. Using scaled scores is a common psychometric practice employed on many examinations, including the SAT, ACT, and CPA examinations.

Ongoing question writing, question review, and examination and question analyses are conducted to ensure that the validity, reliability, and other psychometric characteristics of the examinations conform to standards. New questions written by SMEs are reviewed multiple times, verified to an approved reference, and linked to the CAPP Examination Content Outline. All questions undergo statistical review to ensure they perform properly. All these activities are overseen by professional test development and psychometric staff, as contracted by the CAPP Certification Board. The Board is highly confident the validity of the exam content, the reliability of the test instruments, and the measurement processes employed to analyze, score, and establish the reporting passing scores are of the highest caliber.

Examination Design, Scoring, and Reporting

The examination has 165 questions: 150 live (scored) and 15 pretest (not scored) four-option, multiple-choice questions, administered using computer-based technology. Candidates can take up to three hours to complete the exam. Each multiple-choice question has four answer choices; only one answer choice is correct. It is a closed-book examination. Candidates always have access to an on-screen calculator during the examination and are provided with scratch paper that will be collected after the test administration. Candidates are encouraged to read the questions carefully and choose the best response, first answering the questions they are sure of and returning to the more difficult questions as time allows. Credit is given only for questions that candidates have answered.

Questions left blank will be scored as incorrect. Therefore, there is no penalty for guessing.

At the end of a testing session, a computer-generated score report will be issued.* This score is provisional, pending statistical verification that will take place within 72 hours. If candidates do not hear from the Certification Department within that time, they may assume the score stands as reported. Candidates passing the examination will not receive a scaled score. Failing candidates will receive a scaled score along with a diagnostic report indicating the percent of questions answered correctly in each of the representative domains.

*At times during the examination development cycle, candidate scores may be withheld pending further psychometric analysis. Withheld scores will be released within approximately 60 days of the test administration date.

Examination Content

As described, the CAPP Examination Content Outline is based upon the 2018 Parking and Mobility Professionals Job Analysis Study and is divided into six domains. The complete CAPP Examination Content Outline follows:

CAPP Examination Content Outline

Domain I: General Management

(22 percent of exam)

- A. Demonstrates knowledge of the following management practices and techniques:
 - 1. Management structure and teams
 - 2. Internal communications
 - 3. Business and strategic plan
 - 4. Performance measures
 - 5. Budgeting
 - 6. Hardware and software interoperability
 - 7. Electronic data security (e.g., encryption, data storage, backup, PCI compliance)
 - 8. Customer service policies
 - 9. Project/operations management
 - 10. Risk management, including;
 - a. Business practices/liability exposure (e.g., insurance, permits, licenses)
 - b. Financial markets/economy
 - c. Revenue/inventory/asset control auditing
 - d. Facility maintenance
 - e. Data management, data security, remediation
 - f. Safety and security (e.g., security patrol, emergency phones, cameras, suicide prevention)
 - g. Emergency procedures (e.g., power/system outages, disaster)
- B. Manages revenue sources, cash flow, and/or allocation of resources
- C. Analyze, propose, and/or determine aspects of revenue control solutions, including:
 - 1. Researching and matching various systems options to customer usage patterns
 - 2. Performing a cost-benefit analysis on different systems; selecting system(s)
 - 3. Financing and contracting system purchase and installation
- D. Determine, recommend, and/or employ business-partner relationships and alliances including:
 - 1. Government and quasi-government
 - 2. Administrative services providers (e.g., bookkeeping, banking, insurance, recordkeeping)
 - 3. Professional service providers (e.g., architects, engineers, attorneys, consultants)
 - 4. Facilities and operational services providers
- E. Evaluate, review, and/or select policies and procedures
- F. Examine and/or select transportation demand management (TDM) plans, including:
 - 1. Programming by mode-split (e.g., bike, carpools, transit)
 - 2. Coordinating TDM and transit with parking management
 - 3. Marketing to and educating stakeholders
 - 4. Assessing and measuring the effectiveness of the program/strategies
- G. Recognize organizational human resources practices regarding:
 - 1. Writing and updating employee job descriptions based on required skills and responsibilities
 - 2. Recruiting staff

- 3. Setting staffing levels, organizational structure, performance goals, scheduling and succession planning
- 4. Performing staff internal and external training (e.g., safety, benefits)
- 5. Identifying and complying with organized workers associations (e.g., unions, collective bargaining agreements)
- 6. Applying management/leadership principles
- 7. Establishing, applying, monitoring, and/or enforcing:
 - a. A code of ethics
 - b. Policies and procedures
 - c. Incentive programs and retention
- 8. Develop and monitor performance metrics for unambiguous evaluation
- 9. Providing a safe and secure work environment by:
 - a. Applying government workplace standards
 - b. Posting applicable employee safety and rights information and hazardous materials data sheets
 - c. Providing protection from workplace injury, hazards, the elements, and crime

Domain II: Project Management

(15 percent of exam)

- A. Identify/recognize the variables and considerations of facility design (surface and structure) including:
 - 1. Functional design
 - 2. Operational considerations (e.g., safety and security, automated)
 - 3. Financial feasibility
 - 4. Site considerations, location, climate, and local architecture
 - 5. Maintenance considerations
 - 6. Relevant government requirements (e.g., disability, environmental building codes)
- B. Recognize the components to sustainability
- C. Explain the variables and considerations of procurement practices including:
 - 1. Research and due diligence (e.g., test, pilot, systems, demo, site visits)
 - 2. Big process (e.g., request for proposal/information/qualifications, selection process)
 - 3. Implementation
- D. Recognize and/or compare financial options new or capital renewal (e.g., types and purposes, bond indenture and debt service obligations, mortgages)

Domain III: Financial and Operational Auditing

(16 percent of exam)

- A. Performs strengths, weaknesses, opportunities, and threats (SWOT) analyses
- B. Develops and evaluates performance metrics
- C. Performs internal financial audits
- D. Commission and/or assist external auditors
- E. Prepares for/assists in unscheduled outside regulatory compliance audits
- F. Creates/implements management plans to address audit findings

Domain IV: Operations Management

(21 Percent of exam)

- A. Applies operations management based on:
 - 1. Industry segments (e.g., airport, municipal, university, hospital, commercial operators)
 - 2. Number of spaces, ingress/egress lanes, and demand cycles
 - 3. Prepare standard operating procedures including:
 - a. On-street
 - b. Off-street (e.g., multi-use garage)
 - c. Valet
 - d. Multi-modal (e.g., bikes, ped., TNC)
 - e. Fleet management
 - f. Buses and shuttles
 - q. Events
 - 4. Integration of technology (e.g., parking guidance systems, handheld equipment, LPR)
 - 5. Employ peak demand/utilization strategies
- B. Manages the revenue control system(s) by:
 - 1. Managing the installation of system hardware and software
 - 2. Training staff and ensuring customers can use the system
 - 3. Managing, supervising, auditing, and reporting on performance, security, and revenue
 - 4. Determining maintenance and revenue collection schedules
- C. Determines and follows a maintenance program schedule by:
 - 1. Conducting regularly scheduled inspections to identify maintenance requirements for facility:
 - a. Structure (e.g., corrosion, spalling, delamination, oxidization, cracking, leaks)
 - b. Equipment (e.g., elevators, fencing, lighting, signage, revenue)
 - c. Aesthetics (e.g., painting, landscaping, cleaning)
 - 2. Identifying, analyzing, and prioritizing long-term, short-term, and preventive maintenance projects
 - 3. Implementing cost-saving measures, including energy-efficient equipment upgrades
 - 4. Ensuring continuity of services
 - 5. Performing in-house or subcontracted maintenance/repairs:
 - a. Structural (e.g., concrete, beams, coatings, sealants)
 - b. Equipment (e.g., elevators, fencing, lighting, signage)
 - c. Aesthetics (e.g., painting, landscaping, cleaning, sweeping)
 - d. Geographical weather mitigation (e.g., snow/ice removal as applicable, floods, sandstorm)
 - 6. Conducting quality control maintenance performance inspections
- D. Managing parking system revenue controls by:
 - 1. Establishing internal revenue controls by:
 - a. Eliminating staff conflicts of interest
 - b. Segregating duties
 - c. Managing bank-facility relationship (e.g., financial flows within your organization, managing revenue processing relationships)
 - 2. Responding to unexpected findings in revenue and inventory audits
 - 3. Keeping inventory records, redundant systems, and performing audits
 - 4. Using active and passive monitoring systems
- E. Establishes and supervises the parking system enforcement policy, including:
 - 1. Purpose of enforcement (e.g., safety, vehicle turnover requirements)
 - 2. Personnel training
 - 3. Enforcement practices (e.g., warning, citations, booting, towing, impounding, LPR)

- 4. Adjudication and appeals
- 5. Fine collections (e.g., lookups, notices, third-party collections)
- F. Manage day-to-day financial operations, including:
 - 1. Creating and assessing fee structures and revenue collection procedures based on evaluation of:
 - a. Utilization and occupancy studies
 - b. Types of fees (e.g., permit, hourly, daily, weekly, event)
 - c. Rate schedules (e.g., time of day, special events, overnight, long-term, and lost tickets)
 - d. Fee payment options
 - e. Market rate survey comparisons
 - f. Budget variances
 - g. Pricing strategies (e.g., dynamic, progressive)
 - 2. Managing revenue by performing:
 - a. Daily reconciliation by method of payment
 - b. Monthly access card/permit audits comparing active vs. paid
 - c. Scheduled and unscheduled internal auditing of revenue (e.g., surprise equipment and vehicle inventories, audit of payroll deduction records)
 - d. Execution of audit findings
 - 3. Managing expenses including:
 - a. Comparison of orders-to-invoice-to-inventory
 - b. Comparison of contract to payments (e.g., accounts payable)
 - c. Staff salaries and/or expenses
 - d. Taxes and fees where applicable
 - e. Changes to purchase patterns (e.g., gas purchase doubled in one month)
 - 4. Evaluate internal operational policies to assess potential improvements:
 - a. Cash and credit transaction processing procedures
 - b. Data security for credit transactions
 - c. Stakeholder satisfaction
 - d. Safety and security
 - e. Emergency preparedness
 - f. Staffing requirements
 - g. Maintenance goals and requirements
 - h. Energy consumption
- G. Create and implement an emergency management/disaster preparedness program including responses to and safeguards for:
 - 1. Natural and/or man-made disasters/incidents
 - 2. Data and information protection (e.g., computer system backups, off-site data storage, off-site monitoring)
 - 3. Equipment and asset protection

Domain V: Marketing and Public Relations

(10 percent of exam)

- A. Establishes and/or implements an external communications policy and protocol to communicate with stakeholders
- B. Shares the details of emergency/disaster response(s) with stakeholders
- C. Identifies and markets services based on stakeholder and service profiles, competitors, and feedback
- D. Communicates organizational mission and service expectations to stakeholders

- E. Practices community involvement/engagement
- F. Integrates marketing tools to increase market share and improve brand (e.g., external wayfinding, focus groups, customer survey, newsletter, social media, website, online search optimization, email marketing)
- G. Develops and implements customer retention and satisfaction programs (e.g., jump starts, flat tires, lights left on, lost cars)

Domain VI: Analysis and Application of Technology (16 percent of exam)

- A. Analyze, manage, and/or apply parking management solutions (e.g., PARCS, ALPR, RFID, robotic systems, parking guidance systems, event parking solutions)
- B. Analyze, manage, and/or employ enforcement applications (e.g., citation management, LPR, enforcement handhelds, plate lookups, online appeals/payments)
- C. Examine and propose payment processing and applications (e.g., credit card processing, PCI compliance, online payments, cybersecurity, cashiering systems, payment apps)
- D. Evaluate and recommend smartphone technology (e.g., payment/reservation apps, near-field communications, QR code, parking availability, trip planning)
- E. Evaluate and/or employ real-time communications (e.g., GPS, parking availability, sensors, APIs, bus schedules/arrivals)
- F. Evaluate and/or employ sustainable technologies (e.g., EV charging stations, smart lighting, solar panels, ride-sharing, bicycle-sharing, car-sharing)
- G. Manage data collection, reporting and analytics (e.g., cloud-based data, parking utilizations, predictive parking algorithms, demand-based pricing recommendations)
- H. Review and evaluate emerging technologies (e.g., autonomous vehicles, mobility-as-a-service, (MaaS), smart cities)

Appendix A contains sample questions.

Suggested Study References

The CAPP Certification Board provides a suggested reference list as a resource that may be useful to candidates as they study for the exam. This list is not intended to be all-inclusive but reflects references used to support the test development process.

Candidates are encouraged to review resources and information in all content areas. The CAPP Certification Board does not endorse any particular text or author.

The CAPP Certification Board does not recommend candidates memorize all suggested references.

The exam questions are written based on the knowledge and tasks identified in the CAPP Examination Content Outline.

Note: Using the references does not guarantee successful performance on the examination.

Regulations/Processes

- The Generally Accepted Accounting Principles (Foreword and Preamble)
- The Generally Accepted Auditing Standards

- https://www.cisecurity.org/white-papers/cis-primer-emergency-preparedness-for-cyber-infrastructure/
- https://www.ibm.com/support/knowledgecenter/en/ssw_ibm_i_73/rzarm/rzarmdisastr.htm
- https://www.fema.gov/preparedness-checklists-toolkits
- Emergency Preparedness Manual, International Parking & Mobility Institute
- The Complete Guide to Physical Security, 1st Edition; Dr. Paul Baker, and Dr. Daniel Benny, https://www.amazon.com/Complete-Guide-Physical-Security/dp/1420099639

IPMI Publications

- <u>Sustainable Parking Design & Management: A Practitioners Handbook</u>, International Parking & Mobility Institute
- <u>A Guide to Parking</u>, International Parking & Mobility Institute
- <u>The Technology Glossary for Parking Professionals (First edition 2017), International Parking &</u> Mobility Institute and the British Parking Association
- <u>Parksmart Certification Standard, Version 1.0 with Addenda</u>, Green Business Certification Inc.

Parking-Related Texts

- The Dimensions of Parking, (5th Edition, 2010) Urban Land Institute, National Parking Institute
- The High Cost of Free Parking, (Edition June 2011) Shoup, Donald C., APA Planners Press
- Lots of Parking: Land Use in a Car Culture, (July 8, 2004) Jakle, Scuttle, University of Virginia Press
- <u>Parking Structures: Planning, Design, Construction, Maintenance and Repair,</u> (Third edition February 2001) Chrest, Smith et. al., Springer
- <u>Parking Management Best Practices,</u> (Second edition March 2006) Litman, Todd, APA Planners Press
- <u>Guide to the Project Management Body of Knowledge PMBOK Guide® 6th Edition PDF eTextbook</u> ISBN: 978-1628251845 Publication Date: 2017 Author: Project Management Institute (PMI)

Ancillary Resources

- Management: Building a Competitive Advantage, 3rd Edition 1996, Bateman, Snell.
- <u>Management: Leading and Collaborating in a Competitive World</u>, (Tenth edition, January 2012)
 Bateman and McGraw-Hill/Irwin; 10 edition (January 17, 2012)
- <u>The Leadership Challenge</u>, James Kouzes and Barry Posner, Jossey-Bass Publishers, 7th Edition,
 2012
- <u>Please Understand Me</u>, David Keirsey and Marilyn Bates, Prometheus Nemesis Book Company, 1984
- Team Players and Teamwork, Parker, Glenn; 1990
- Management of Organizational Behavior: Leading Human Resources, Hersey, P. Blanchard, K and Johnson, D. Upper Saddle River, NJ: Prentice Hal, 2001
- The Situational Leader. The Center for Leadership Studies, Hersey, Paul. Escondido, CA. 1984

Additional Opportunities for Study

IPMI offers single- and multi-day training seminars and workshops independent of the CAPP Certification Board. The CAPP Certification Board provides neither training nor educational materials, and it is important to note that candidates are not required to purchase training or education materials from IPMI to pass the examination. More information about educational opportunities may be found at the Meetings & Events and Professional Development sections of parking-mobility.org.

IPMI's education courses are not designed to serve as examination preparation classes. Attendance at IPMI courses and training is not a prerequisite to take the CAPP examination.

Acronyms Used on the Examination

Candidates should be familiar with these acronyms and recognize their meaning.

ACRONYM EXPANSION

AVI Automatic Vehicle Identification DSL Digital Subscriber Line DVR Digital Video Recorder EPA Environmental Protection Agency FEMA Federal Emergency Management Agency **GPS Global Positioning Satellite HOV High-Occupancy Vehicle** LEED Leadership in Energy and Environmental Design MSDS Material Safety Data Sheets OSHA Occupational Safety and Health Administration PSI Pounds per Square Inch **RFID Radio Frequency Identification RFP Request for Proposal SOV Single-Occupancy Vehicle** SWOT Strengths, Weaknesses, Opportunities, and Threats **TDM Transportation Demand Management**

Examination Registration

Once an application is approved, applicants will receive a Candidate Admission Letter via email with instructions on how to schedule an exam.

Note: Applicants need to take this letter to the test center or they will be denied access.

The examination is administered on computers at more than 250 test sites in the U.S. and Puerto Rico, U.S. territories, Canada, and various sites outside of North America. Test sites operate in all 50 states and most are open from Monday to Saturday from 9:00 a.m. to 9:00 p.m., and Sundays from 1:00 p.m. to 6:00 p.m., excluding holidays. These sites are operated by ISO Quality Testing, IPMI's examination vendor. Information concerning test center locations and operating hours may be found at isoqualitytesting.com. Click the Take a Test tab and then the Locate a Testing Center link.

Note: Candidates may not register to take the exam until registration information is provided by the CAPP Certification Department upon application approval.

Once approved to take the CAPP examination, candidates will receive correspondence directing them to:

- 1. Navigate to the examination vendor's registration page: iqttesting.com
- 2. Choose the option Exam Registration.
- 3. Enter the provided username and password to login:
 - a. Username: (Your email address)
 - b. Password: Unique CAPP applicant number included in your Candidate Admission Letter email from ISO Quality Testing, Inc.
- 4. Select the organization: IPMI
- 5. Select the exam: CAPP After logging in, please follow the on-screen instructions to schedule an appointment.

Note: Candidates must test within one year of application approval.

For assistance, click on the Contact Us tab on the home page to send a message to ISO Testing's customer service, or call 866.773.1114 (U.S. and Canada) or +1.727.733.1110 (other countries).

ISO Quality Testing maintains an online demo of its test delivery system that applicants can access at home.smttest.com/candidates.aspx. Many candidates find it helpful to familiarize themselves with the system before they visit the testing site.

Rescheduling an Examination Registration

Candidates scheduled to take the examination may reschedule or cancel for a \$25 charge if the request is made five working days in advance of the scheduled administration date. Additional non-U.S. (international) rescheduling fees may apply. The only reasons a candidate can reschedule an exam are:

- Jury duty
- Death in the immediate family*
- Military deployment
- Sickness

*Immediate family is defined as a person's grandparents, parents, spouses, siblings, and children.

Note that proper documentation will be required for any of the four reasons before rescheduling to a new date.

Rescheduling a Missed Examination

The fee for rescheduling a missed examination administration appointment is \$150. Additional retesting fees may apply outside the U.S. It is the candidate's responsibility to contact ISO Quality Testing to reschedule a test administration.

Failure to appear at any scheduled examination site without contacting ISO Quality Testing or failure to reschedule an examination date within one year of application approval will cause the forfeiture of all application fees. Candidates may reapply by paying the full application fee.

Examination Administration Rules and Regulations

The examination administrator or proctor is the CAPP Certification Board's designated agent for maintaining a secure and valid examination administration. Any individual found by the CAPP Certification Board or its agent to have engaged in conduct that compromises or attempts to compromise the integrity of the examination process will be subject to disciplinary action as sanctioned by the CAPP Certification Board, the Code of Ethics, and the CAPP Certification Board policies and procedures. Examinations are administered according to a strict protocol to ensure the examination's security and protect the right of each candidate to a standardized testing experience.

Candidates are required to sign a security affidavit agreeing to abide by all rules and regulations:

- During the registration procedures at the test site, candidates must sign the test roster and provide
 one form of valid government-issued photo identification with a signature, such as a driver's
 license or passport.
- No books, papers, texts, references, or personal calculators are allowed into the examination room. An on-screen calculator will be provided along with scratch paper and a pencil that will be collected by the test proctor after testing. No electronic devices of any kind are permitted in the testing room (e.g., cellphones, smartphones). If any are found, the candidate will be disqualified. If possible, personal belongings should not be brought to the testing site. If they are, they will be placed in a secure location and will be unavailable to the candidate during the examination. No food or drink is allowed in the examination room.
- Candidates with a specific medical condition (e.g., hypoglycemia, pregnancy, diabetes) requiring the consumption of water or food during the examination period must submit a written request to the CAPP Certification Board for a special accommodation prior to the examination.
- Visitors are not permitted in the examination room.
- At no time during the examination may candidates give or receive help to one another or communicate in any way. Examination proctors have the authority to remove a candidate suspected of cheating from the examination room, at which time scores will be cancelled and disciplinary action will be taken.
- Candidates are expected to follow all instructions from examination proctors, printed in test booklets and answer sheets, and/or displayed in the computer-testing program. Candidates will be provided with the opportunity to ask questions prior to beginning the examination.
- Candidates may leave the testing room only after receipt of express permission from the proctor.
 Candidates must sign out and sign in from the room and must surrender all testing materials when they exit. Exit from the testing room is permitted for washroom and drinking fountain visits only.
 Candidates may not access cellphones or leave the building during breaks. Test timing is not paused for these breaks.
- Disqualifying behaviors include:
 - Creating a disturbance.
 - Aiding or asking for aid from another candidate.
 - Any attempt to remove, copy, buy, sell, or reproduce testing materials.

- Unauthorized possession of test materials.
- Impersonation of another candidate.
- Use of contraband materials or equipment in the testing site.
- Any falsification or misrepresentation of information provided during the CAPP application process.

Prior to beginning the examination, candidates will review a five-minute tutorial program designed to familiarize them with how the exam will be presented, as well as introduce familiarity with the system. There are some examples of test questions provided in the tutorial; these are for demonstration purposes only and do not affect examination scores. Candidates are encouraged to take the time to complete the tutorial as it explains features of the computerized testing system. The candidate's name and the name of the examination will be shown in the upper left corner of the screen. If either of these is incorrect, candidates are asked to inform the proctor.

Note: the five minutes for the tutorial are not deducted from the three hours candidates must complete their exam.

A navigation grid is posted on the upper right of the screen that depicts the number of questions on the examination and the status of those questions (answered, bookmarked for review, or skipped.) A digital clock is also posted indicating a countdown of available time. Registered candidates may take a sample test (content is not parking-related) before going to the test site by accessing isoqualitytesting.com/mlocations.aspx.

Application Process

Candidate Comments About Examination Questions

During the examination, candidates can post comments about questions by clicking on the icon "Comment on this Question." Once the examination is completed, candidates may provide additional feedback and comments on or about exam questions or examination process via the Examination Exit Survey.

Examination proctors may neither discuss nor comment on the examination contents. All comments and questions are reviewed and considered by the CAPP Examination Item Writing Committee. Neither the CAPP Examination Item Writing Committee nor the CAPP Certification Board nor IPMI staff will discuss individual test questions or comments with candidates. Candidates should not expect a response to a comment unless it relates to a problem with the examination administration. Candidate comments or lack thereof may be taken into consideration as evidence during any appeals process (details of examination appeal procedures follow).

Note: no additional time is provided for candidates to make comments.

Examination Scoring and Reporting

The CAPP Certification Board works with its testing consultant and contractors in the development, administration, scoring, and reporting of the CAPP exam. Additionally, the CAPP Certification Board approves the passing score (or passing/cut score) that is established with a committee of CAPPs who are led by a psychometrician using the Modified Angoff V standard-setting procedure. The raw passing score is translated into a scaled score. Passing the examination requires a scaled score of 70.

Candidates passing the examination receive notice they passed the exam. The CAPP examination is not intended to distinguish scores above the passing point; therefore, scores are not reported above the passing score.

Failing candidates receive a scaled score and a report indicating percent of questions the candidate answered correctly in each of the seven content areas of weakness. The report is designed to provide a tool for study and preparation for retaking the examination.

At the testing site, candidates receive a preliminary printed score report upon completion of the examination. At certain times in the test development process, scores may be withheld pending test/question statistical review.

Retesting for Failing Candidates

Failing candidates can reapply to retake the examination upon payment of a \$150 re-examination fee within their original one-year timeframe from the date of the application submission acceptance. Additional retesting fees may apply outside the U.S.

Candidates are given one year in which to take and pass the examination. This one-year time period includes any failures. The first retake may take place as soon as the \$150 re-examination fee is received and processed. Candidates may retest up to three times within one year of initial application approval. An additional \$150 re-examination fee must be paid for any subsequent retest. After the fourth failure there is a six-month waiting period, after which candidates need to submit a new application and pay the full initial application fees.

Examination Appeals

Candidates have the right to appeal examination results within the following specified criteria established by the CAPP Appeals and Discipline Committee.

Section 1: *Grounds for Appeal*

- 1. Appellants may appeal examination results in situations restricted to extraordinary circumstances that:
 - Arise coincidentally with the examination administration.
 - Are outside the control of the appellant.
 - Made the appellant's experience different from other candidates' (related to the examination administration) and/or affected the candidate's ability to receive credit for a test question (related to the examination content).
 - Were severe enough to account for examination failure.
 - Were properly reported to the examination administrator and the CAPP Appeals and Discipline Committee.

Appellants must meet all the above criteria to submit an appeal.

2. If written documentation of the extraordinary circumstances is not received by the CAPP Appeals and Discipline Committee within 72 hours of an examination, an appellant will forfeit the right to appeal.

Section 2: *Method of Appeal*

- 1. Appeals will:
 - Be provided in writing.

- Detail the specific nature of the appeal and all documentation and information necessary for the appeal to be adjudicated.
- Be mailed (must be postmarked within 72 hours of the examination administration) or emailed to the CAPP Appeals and Discipline Committee.
- Include a non-refundable fee of \$50.

Section 3: Appeal Procedures

- 1. Level One: CAPP Appeals and Discipline Committee Appeal Consideration:
 - a) An appeal will be submitted to the Appeals and Discipline Committee within 72 hours of the candidate receiving examination scores. All communication from the Appeals and Discipline Committee will be mailed to the address stated on the submitted appeal.
 - b) Two representatives of the Appeals and Discipline Committee will determine the validity of the appeal based upon the submitted documentation as to the existence of extraordinary circumstances described in Section 1.01.
 - c) A CAPP Appeals and Discipline Committee representative will notify the appellant by mail within 10 business days of receipt of the appeal regarding whether the appeal has been accepted or denied. Accepted appeals will be brought to the consideration of the CAPP Appeals and Discipline Committee.
- 2. Level Two: Appeals and Discipline Committee Action:
 - a) Only appeals brought forth for consideration by the two representatives of the CAPP Appeals and Discipline Committee will be reviewed by the full CAPP Appeals and Discipline Committee. The Committee will review the appeal within 60 days.
 - b) The Appeals and Discipline Committee will review:
 - The appellant's statement of appeal.
 - A statement from an IPMI staff member concerning the exam process relative to the appeal.
 - Examiner reports and comments submitted by the appellant at the time of the examination.
 - c) The CAPP Appeals and Discipline Committee decision will be sent to the appellant by mail within 15 business days of the hearing.
 - d) No member of the CAPP Appeals and Discipline Committee will communicate directly with an appellant. IPMI staff will communicate with the appellant.

Section 4: CAPP Appeals and Discipline Committee Decisions

- 1. The CAPP Appeals and Discipline Committee may take the following action based upon evidence presented by the appellant:
 - Grant the appeal.
 - Deny the appeal.
 - Deny the appeal and grant the appellant an attempt at the next examination administration at no cost.
- 2. All decisions of the CAPP Appeals and Discipline Committee are final.

Awarding the Credential

Upon notification from the testing center that a candidate has passed the exam, candidates may use the title of CAPP, if all requirements for certification are maintained. The CAPP credential may be used as part of a signature (e.g., on letterheads and business cards) and in accordance with the policies and procedures of the CAPP Certification Board.

Maintaining the Credential

The CAPP credential is valid for three years from the date it was awarded. Please see the Pro-Rate chart of the CAPP Recertification Guidelines to determine your point requirement for your first recertification cycle.

To maintain the CAPP credential, recertification requirements must be met every three years. Requirements include earning a total of 20 points that were earned during these three years and submitting them prior to the credential expiration date.

Points may be spread across the recertification matrix ensuring the Mandatory Program Types points are met. The recertification cycle begins on January 1 of the year following the award of the CAPP credential on a pro-rated schedule. Points may not be carried forward from one recertification period to another. The matrix that follows outlines the point distributions and requirements. For additional information, refer to the CAPP Recertification Guidelines document.

Recertification Point Matrix

The following matrix outlines the recertification point distributions and requirements. A minimum of 20 points per three-year certification cycle is required to recertify.

Program Type 1 – Education – *No point requirement*

Note: Points must be earned through receipt of a degree or passing grade of a course offered/taken outside of a degree program, as bestowed by an accredited institution of higher education.

College-level course in a related professional discipline (e.g., urban planning, information technology, accounting, finance, economics)	2 points per class
Associate degree (or International equivalent	8 points
Bachelor's Degree (or International equivalent	16 points
Master's Degree (or International equivalent	24 points
Doctorate	40 points

Program Type 2 - Professional Development/Continuing Education – *Mandatory: 1 point*; Maximum: 4 points per year.*

Recertification points may be earned by attending educational seminars offered through IPMI-sponsored or approved conferences or other programs, such as college or university courses or other professional development programs. Individuals or organizations may write to the CAPP Certification Board to have their educational programs recognized for recertification points

Note: Professional development courses/training examples include industry seminars, other professional training programs, other professional certificates. One point is awarded per continuing education hour of professional development/continuing education.

IPMI Annual Conference Attendance	4 points for attending 4, 1-hour education sessions
IPMI Seminars/Courses/Training Programs	Points as assigned; up to max. 4 points per year**
Other Professional Seminars/Conferences (such as IPMI allied State and Regional conferences)	Points as assigned; up to max. 4 points per year**

Program Type 3 – Board-Level Professional Service/Leadership/IPMI Committees – *No minimum point requirement; Maximum: 2 points per year, per Board or IPMI Committee/4 points per year or 4 points per year for CAPP Mentor.*

Program Type 4 – Professional Presentation/Feature Article/Regular Column – *Mandatory: 1* point *; No maximum. Each article/presentation written for Parking & Mobility is worth 1 point. Two blog posts per year for three years are worth 1 point.

- Feature articles must be original and a minimum of 1,600 words.
- Original articles and presentations can only be listed once on the CAPP Recertification
 Recordkeeping Form for points (e.g. cannot list a presentation that was given at a conference and
 then also submit it to *Parking & Mobility* for publication.)
- Committees recurring columns are 650 words each, written once per year and assigned by IPMI's Vice President, Program Development up to one year in advance.
- Parking Spotlights are 1,000 words each which can be submitted at any time during the year. They usually consist of case studies.
- Blog posts must be 300 words max., two blog posts per year for each of your three years of current certification. They should be submitted to IPMI's Director of Publications at editor@parking-mobility.org.
- See Appendix A Submission Guidelines for Professional Articles in this document for more information.

Program Type 5 – Online Training Modules (e.g., webinars, web-based seminars, IPMI Online courses) - No minimum point requirement; Maximum: Unlimited

Attendance at an industry related online course (1 point per hour of instruction)	Points as assigned**
Attendance at an industry related webinar (1 point per hour of instruction)	Points as assigned**

Program Type 6 – Re-taking the Certification Exam – 19 points for passing the exam and 1 point for the Program Type 4 requirement = minimum 20 points to recertify for the next three-year period.

To recertify by retesting, you will need to:

- Sit for and pass the Certification Exam. If the examination is not passed, the individual will lose their CAPP credential and must restart the process.
- Meet the 1-point minimum requirement for Program Type 4 Professional Presentation/Feature Article/Regular Column requirement.
- Sitting for the exam and the Program Type 4 requirements must be completed before December 31 of the recertification year.

Status of the Credential

Certificants failing to recertify within the three-year window are forbidden to use the CAPP credential.

A certificant whose certification has lapsed will be reinstated if they apply again to obtain the credential and take and pass the CAPP exam.

However, under special circumstances the following alternative statuses will be considered:

1. CAPP Retired status may be requested by CAPPs in good standing who are retiring or leaving the profession. Requests must be made within one year of a CAPP's retirement or professional change; recertification requirements are waived for professionals holding this status. The designation CAPP (Ret.) may be used.

Note: CAPP (Ret.) status cannot be reversed. To go back to CAPP certification, a new application must be processed, and an exam must be passed.

2. Suspended status may be awarded in the case of extenuating circumstances that preclude a certificant from earning the required recertification points within the three-year recertification window (e.g., serious illness, military leave, or family emergency.) The credential may not be used during suspension, and the credential may only be reactivated after the missed recertification points have been made up and the CAPP is again in good standing.

^{*}Certificants must either create/facilitate one one-hour presentation, submit one 1,600-word professional feature article during every three-year recertification cycle, or write six 200-300-word blog posts. See "Appendix A: Submission Guidelines for Professional Articles" for details.

Fee Schedules

CAPP Application:	 \$475 for IPMI members \$700 for non-members (Includes a \$100 non-refundable administrative processing fee for both members and non-members)
Exam Administration: (First Test Administration)	Failing to test within 12 months of an application approval will result in forfeiture of the entire \$475/\$700 application fee.
Rescheduling an examination within established deadlines:	\$25 payable to the appropriate ISO Quality Testing Center if done within the five days prior to the scheduled testing date.
Rescheduling an examination outside of established deadlines:	• \$150 Failure to reschedule within a one-year window of the application approval will result in forfeiture of the entire \$475/\$700 CAPP application fee.
Retesting for failing candidates:	\$150 per retest in the United States. Additional fees may apply outside the U.S.
Recertification:	\$200 every three years for IPMI members/\$300 every three years for non-members

APPENDIX A — Sample Exam Questions

- 1. What is the best practice to ensure data security?
 - (A) Have a dedicated credit card server that is separate from the application server.
 - (B) Have the software application and credit card transactions stored on the same server.
 - (C) Provide a physical receipt to every customer.
 - (D) Require a signature on all debit or credit card transactions.

Domain I. General Management: A. Demonstrates knowledge of the following management practices and techniques: 7. Electronic data security (e.g., encryption, data storage, backup, PCI compliance).

- 2. How can a business mitigate liability exposure related to reducing slip and fall claims?
 - (A) Ensure lighting is at or above industry standard of 2 foot-candles.
 - (B) Use a silane sealer.
 - (C) Paint parking stripes yellow.
 - (D) Maintain a maintenance log of the cleaning of stairwell rails.

Domain I. General Management: A. Demonstrates knowledge of the following management practices and techniques: 10. Risk management, including: a. Business practices/liability exposure (e.g., insurance, permits, licenses).

- 3. What does an effective job description describe?
 - (A) Personality of preferred candidate.
 - (B) Major areas of employee's responsibilities.
 - (C) Compensation and benefit levels at each stage of responsibility.
 - (D) Advancement opportunities.

Domain I. General Management: G. Recognize organizational human resources practices regarding: 1. Writing and updating employee job descriptions based on required skills and responsibilities.

- 4. What is the industry standard used for planning purposes to calculate the amount of square feet per 90° parking space?
 - (A) 180 square feet.
 - (B) 300 square feet.
 - (C) 360 square feet.
 - (D) 400 square feet.

Domain II. Project Management: A. Identify/recognize the variables and considerations of facility design (surface and structure) including: 1. Functional design.

- 5. What should you consider when developing a maintenance program for a facility located in Zone III?
 - (A) Rare instances of freezing and lack of salt use.
 - (B) Common freezing and salt use.
 - (C) Common freezing and limited use of salt.
 - (D) Coastal chloride conditions.

Domain II. Project Management: A. Identify/recognize the variables and considerations of facility design (surface and structure) including: 5. Maintenance considerations.

- 6. Who is best equipped to assist with competitive bidding, and can provide clarification to prospective contractors during the bidding process?
 - (A) The owner with decision-making authority for the structure.
 - (B) The asset management department of the business.
 - (C) The maintenance department who manage repairs.
 - (D) The engineer who prepared the construction documents.

Domain II. Project Management: C. Explain the variables and considerations of procurement practices including: 2. Bid process (e.g., request for proposal/information/qualifications, selection process).

- 7. What best describes written cash-handling procedures?
 - (A) They are consistently and routinely enforced and followed.
 - (B) They may be overridden by management.
 - (C) They can be modified to ensure economy and efficiency in cashiering.
 - (D) They are used as guidelines by management.

Domain III. Financial and Operational Auditing: A. Performs strengths, weaknesses, opportunities, and threats (SWOT) analyses.

- 8. Why do you conduct regular financial audits of a parking facility?
 - (A) Meet accounting requirements.
 - (B) Reduce theft.
 - (C) Identify operational weaknesses.
 - (D) Increase revenue.

Domain III. Financial and Operational Auditing: C. Performs internal financial audits.

- 9. You have been hired to manage a surface lot that has parking spaces that are clearly numbered with signs and surface paint. Without knowing the customer base, which type of multi-space meter would work best for this surface lot?
 - (A) Pay and display.
 - (B) Pay by space.
 - (C) Pay and drive.
 - (D) Pay by day.

Domain IV. Operations Management: A. Applies operations management based on: 4. Integration of technology (e.g., parking guidance systems, hand-held equipment, LPR).

- 10. What is the most effective method of preventing moisture intrusion in the concrete of parking facilities?
 - (A) Using preventive sealers.
 - (B) Pressure washing.
 - (C) Using polyurethane deck coating.
 - (D) Mechanical sweeping.

Domain IV. Operations Management: C. Determines and follows a maintenance program schedule by: 5. Performing in-house or subcontracted maintenance/repairs: 1. Structural (e.g., concrete, beams, coatings, sealants).

- 11. What is a fundamental community benefit of on-street parking enforcement?
 - (A) Vehicle turnover.
 - (B) Revenue generation.
 - (C) Law enforcement.
 - (D) Length of stay.

Domain IV. Operations Management: E. Establishes and supervises the parking system enforcement policy including: 1. Purpose of enforcement (e.g., safety, vehicle turnover requirements).

- 12. A policy to ensure that employees handle daily receipt deposits properly requires which of the following?
 - (A) Comparison of actual daily receipts to receipt tapes before deposits are submitted.
 - (B) The conduct of blind counts to receipts without access to daily revenue reports.
 - (C) Employees to double check each other's receipts before submitting daily deposits.
 - (D) Employees to submit their daily deposit without counting receipts.

Domain IV. Operations Management: F. Manage day-to-day financial operations including: 4. Evaluate internal operational policies to assess potential improvements: a. Cash and credit transaction processing procedures.

- 13. What should emergency/disaster management information that is posted for consumers include?
 - (A) Maps showing "you are here" signage and corresponding exit routes.
 - (B) The location of the nearest water valves.
 - (C) Directions to the nearest emergency room.
 - (D) A fire extinguisher.

Domain V. Marketing and Public Relations: B. Shares the details of emergency/disaster response(s) with stakeholders.

- 14. What are the three most important rules in crisis communication?
 - (A) Know your communication system, procedures, and policies.
 - (B) Demonstrate consistency, frequency and anchoring.
 - (C) Know the facts, tell the truth, and tell it fast.
 - (D) Contact the ICS, NIMS, and FEMA.

Domain V. Marketing and Public Relations: B. Shares the details of emergency/disaster response(s) with stakeholders.

- 15. A survey of parking facility customers indicates that the majority is long-term parkers, but a sizable percentage is short-term visitors. Based on this information, what initiative would help increase customer satisfaction for the fewest customers?
 - (A) Coordinating a van pool program.
 - (B) Installing bike lockers and a tire inflation station.
 - (C) Adding a dry-cleaning service within the facility.
 - (D) Adding a car wash operation within the facility.

Domain V. Marketing and Public Relations: C. Identifies and markets services based on stakeholder and service profiles, competitors, and feedback.

- 16. What technology best facilitates communication between busses and riders?
 - (A) Online posting of bus schedules and routes.
 - (B) GPS bus tracking with real-time arrival information.
 - (C) Traffic monitoring systems.
 - (D) Multi-modal transportation system swipe cards.

Domain VI: Analysis and Application of Technology: E. Evaluate and/or employ real-time communications (e.g., GPS, parking availability, sensors, bus schedules/arrivals).

- 17. What technology is rapidly growing in use in urban garage operations to collect payments and verify access credentials in real time?
 - (A) Cashiers and automated systems.
 - (B) Paper permits and parking passes.
 - (C) Transit ticket/information kiosks.
 - (D) Handheld and mobile devices.

Domain VI: Analysis and Application of Technology: E. Evaluate and/or employ real-time communications (e.g., GPS, parking availability, sensors, bus schedules/arrivals).

- 18. Which of the following, when used in a gated facility, maximizes the reduction of carbon emissions?
 - (A) Magnetic stripe.
 - (B) Proximity card.
 - (C) RFID.
 - (D) Barcode.

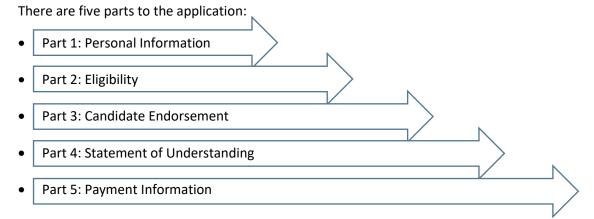
Domain VI: Analysis and Application of Technology: F. Evaluate and/or employ sustainable technologies (e.g., EV charging stations, smart lighting, solar panels, ride sharing, bicycle sharing, car sharing).

KEY.

1: A	7: A	13: A
2: A	8: C	14: C
3: B	9: B	15: B
4: B	10: C	16: B
5: B	11: A	17: D
6: D	12: B	18: C

APPENDIX B — Candidate Application Packet

Congratulations on starting the process of becoming a CAPP. Before completing this application, please visit parking-mobility.org/capp, select Professional Development: CAPP, and download the CAPP Candidate Handbook. It provides a comprehensive explanation of the application process, eligibility requirements, examination content, development information, and much more. Applicants must review the CAPP Candidate Handbook to properly complete this application.



Please ensure all parts of the application are complete. If you have questions, please contact IPMI staff at 571.699.3011 or capp@parking-mobility.org.

Application information is held in strict confidence. To view our privacy policy, please go to parking-mobility.org and click Privacy Policy.

Application Instructions

- 1. List your legal name: this is the name that will be submitted to the testing center. The name must match the name on your government-issued picture identification card, which you will be required to present at the testing center.
- 2. All correspondence will be sent to your business address unless you note on the form that the home address is to be your address of record/contact.
- 3. Once you have completed the application, you may scan and email it to the address posted on the form. Applications will not be considered without payment. Applicants will be directed to parking-mobility.org or to call 571-699-3011 to process payment securely.
- 4. Endorsements must not be included with the application. Your endorsement provider must complete the Endorsement Form and email it separately from your application to: capp@parking-mobility.org.

CAPP

Application for the Examination

The completed application should be scanned and emailed to: capp@parking-mobility.org

Part 1. Personal Information

Legal Name:			
Last	First	Middle	
Business Contact Informat	ion:		
Organization:			
Title:			
Address:			
City, State, Zip/Postal Code	e, Country:		
Phone (plus extension if ap	pplicable):		
Cell:			
Email:			
Home Contact Information	1:		
Please address all CAPP co	mmunication using my home information	Yes	□ _{No}
Address:			
City, State, Zip/Postal Code	e, Country:		
Phone:			
Email Address:			

Part 2. Education, Experience, and Professional Development/Education Courses

To be eligible for the credential, you must meet the minimum education, experience, and professional development requirements: 41 points, plus nine additional points from any of the three eligibility categories, for a total of 50 points. The following matrix outlines the point distributions and requirements.

1	Education/	License	credential*:	(Required	Minimum	Points: 4	/Maximum	Points:	40)
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*Note: License/credential holder must be in good standing with the licensing agency/credentialing body

Highest level of education achieved from an accredited educational institution:

	Highest level of education achieved from an accredited educational institution:						
		High School Diploma or GED	4 points				
		Associate Degree	8 points				
		Bachelor's Degree	16 points				
		Master's Degree	24 points				
		Doctorate	40 points	Points:			
		Applicable Professional Licensing: (eaccountancy, construction, etc.): (8		tect, Points:			
	 Applicable Professional Certification Designation (must be applicable to competency as a CAPP): (e.g., project management professional, LEED, PE, AIA, etc.): (4 points per designation) 						
Tot	Total Education/License/Credential Points:						
2.	2. Experience: (Required Minimum Points: 12 (3 years)/Maximum Points: 40 (10 years) Note: Professional experience must be in supervisory and/or managerial roles and/or contact with same (e.g., consultants, vendors) and/or equivalent experience in a related field. Equivalent experience in a related field must be combined with a minimum of three years of experience at any level in the parking, mobility or transportation industry. No experience points are awarded for service in the parking, mobility or transportation industry below the manager/supervisor level. Four points can be claimed for each year of management/supervisory experience up to the maximum of 40 points.						
	Acceptable job titles are provided earlier in this handbook under "Candidate Eligibility Matrix/2. Experience."						
	Managerial/Supervisory Parking/Transport Experience:						
	years X 4 points per year =						
	 Related Managerial Supervisory Experience + 3 years in Parking/Mobility/Transportation Industry: 						

Total Experience Points:

_ years X 4 points per year = ______

Professional Development/Continuing Education: (Required Minimum Points: 25/No Maximum)

Note: Professional development courses/training must have been completed within the past five years and be applicable to the role of the CAPP* (e.g., IPMI courses and training, other professional training programs, other professional certificates). One point is awarded per hour of professional development/continuing education.

*Note: Refer to the CAPP Examination Content Outline if you have any questions about the applicability of your professional development courses/continuing education.

Professional Development Continuing Education:
Professional Certificate Award Continuing Education:
Points:

Total Professional Development Points:

Minimum Number of Eligibility Points Required: 50

Category Points:
1. Education/License/Credential:
2. Experience:
3. Professional Development:

TOTAL POINTS:

Part 3. Endorsement

Please provide the Application Endorsement Form with a copy of your Experience Documentation Form to a CAPP in good standing or to an employment supervisor who can attest to the accuracy of the information on the application and your suitability for certification. The CAPP or employer is required to email the document to the Certification Department separately to capp@parking-mobility.org.*

Part 4. Statement of Understanding

To qualify for the CAPP credential, you must respond to the following questions and sign the Statement of Understanding:

1. Ethics

I hereby attest that the following statements are true, correct, and accurate to the best of my knowledge, and I further agree to fulfill the following obligations:
a. \square Y \square N $-$ I agree to give the CAPP Certification Department timely notice of any contact or address change in writing.
b. \square Y \square N — Having read the CAPP Code of Ethics on the CAPP website, I hereby confirm that I have not violated any of its provisions in the past and will comply with all tenets in the future. I agree to
act and conduct my professional practice in accordance with the currently adopted code.

^{*}Do not include this document with your application.

c. \square Y \square N — I understand that any intentional or unintentional failure to provide true and complete responses to this application may result in sanctions by the CAPP Appeals and Discipline Committee.
If you answered "no" to any statements above, please provide a written explanation on a separate page. Attach the page to this application.
2. Special Accommodations:
I am requesting special testing accommodations: Y N
If you answered "yes," please attach documentation as specified in the CAPP Candidate Handbook. 3. Privacy Policy: I understand that a condition of certification is accepting all official correspondence from the CAPP Certification Board. I understand that refusal to accept official correspondence or requesting to have my personal information removed from the IPMI database will cause revocation of certification status.
For Non-IPMI Members Only:
$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
By signing this document, I hereby attest that the information provided within and attached to this application is true, accurate, and complete to the best of my knowledge and belief. I understand and agree that the CAPP Certification Board has the right to contact any person, agency/entity, or organization to review or confirm any information provided in this application. I further agree to authorize the release of any information requested by the CAPP Certification Board regarding the review of this application. I further understand and agree that the CAPP Certification Board has the right to notify pertinent credentialing and professional organizations if it is determined that this application contains false information.
I understand and agree that CAPP certification and recertification depends upon my fulfillment of all required criteria and obligations, including compliance with the CAPP Code of Ethics and Policies and Procedures. I further agree to inform the CAPP Certification Board in a timely manner if I become the subject of any ethics, criminal, or lesser offenses, complaints, and/or charges.
I understand that all material included in this application becomes the property of the CAPP Certification Board upon receipt and that neither originals nor photocopies will be returned to me. If my certification is suspended or revoked, I agree to comply with all directives or orders of the CAPP Certification Board, including the return of all CAPP credentialing documents. I agree to comply with such directives and orders in a timely manner and at my own expense.
Signature:
Date:
Print Name:

Part	5. Payment
	I am an IPMI member applying for the CAPP Certification. \$475 U.S. fee
	I am an IPMI non-member applying for CAPP Certification. \$700 U.S. fee
	If paying by check, I understand my application will be held until the check clears.
Pleas	se select one:credit cardcheck
appli	by by credit card, please submit your application to capp@parking-mobility.org. Once the cation is received, IPMI will send you an email with login instructions to make payment online with dit card. For your application to be processed, the application fees must be paid within 48 hours.
То ра	by check, please make all checks payable to: International Parking & Mobility Institute (IPMI)
And r	remit to:
	International Parking & Mobility Institute (IPMI)
	CAPP Processing Department
	1330 Braddock Place, Suite 350
	Alexandria, VA 22314 USA
	ks must be received within 10 business days of the CAPP Application submission or your application of be processed.
Appl	ication Checklist:
	Complete Part 1: Personal Information
	Complete Part 2: Eligibility Form, Certificates, and Supporting Documents/Education Experience
	Complete Part 3: Endorsement: Provide an endorsement form to a CAPP or employer with a copy
	of your Experience Documentation Form. The endorsement provider must scan and email a copy
	of your experience document along with the Endorsement Documentation Form to the CAPP
	Certification at capp@parking-mobility.org .
	Complete Part 4: Statement of Understanding and Signature
	Complete Part 5: Payment

Education/License/Credential Documentation Form

(Minimum of a High School Diploma)

Cand	lidate	Name:

Last, First, Middle:		Date Submitted:		
Dates of Education or Receipt of License/Credential	Name and Address of Educational Facility/License or Credential Issuing Body	Name and Title of Program (e.g., college major, XYZ, licensed XXX, certified ABC)	Description of Courses of Study	

Experience Documentation Form

Note: Use this form to document your experience as a parking, mobility or transportation professional (minimum of three years required.) The original must be included with your application. A copy must be provided to the endorsement provider and included in the separate endorsement mailing.

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Last, First, Middle:			Date Submitted:	
Dates of Employment	Organization Name and Address	Name and Title of Supervisor	Description of Roles and Responsibilities related to Parking, Mobility and Transportation Management	

Professional Development Documentation Form

*Note: Refer to the CAPP Examination Content Outline if you have any questions about the applicability of your education/professional development. If more space is needed, please feel free to use an additional Word document with your information.

Canc	lid	ata N	lame:
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Last, First, Middle:			Date Submitted:	
Dates of Education/Professional Development	Name and Address of Educational Facility	Name and Title of Program	Description of program including program contact hours (e.g., length of seminar, webinar) and applicability to the role of the CAPP	

CAPP

Application for the Examination

(Present this form to endorser with copy of training and experience documentation.) Please type or legibly print all information in black or blue ink. Sign, scan and email this form to:

International Parking & Mobility Institute

ATTN: CAPP Certification Program | Email: capp@parking-mobility.org

CAPP Applicant Information:	
Last Name/Surname:	
First/Given Name and Middle Initial:	
Organization:	
Endorser's Information:	
Last Name/Surname:	
First/Given Name and Middle Initial:	
Organization:	
Title:	
Street Address:	
City, State, Zip/Postal Code, Country:	
Phone (plus extension if applicable):	
Cell:	
Email:	
Endorsement:	
l,	, hereby state that I am
(select all that apply)	
A CAPP in good standing	
Licensed, commissioned, and/or certified as a:	
License/Certificate #s:	
Licensing body(ies):	
Employment supervisor: Position/Title	
and am knowledgeable of, and in good standing within, the parking, mob	pility and transportation

profession. I hereby affirm that I personally know or have researched and reviewed to the best of my

ability, the work history, experience, and reputation of the above-referenced candidate and find she/he
meets the CAPP Certification Program eligibility requirements indicated in this handbook. In support of
my findings, I have attached a copy of the applicant's statement of experience as presented to me by
the applicant. Based upon my findings, I hereby endorse the above-referenced applicant for
consideration as a candidate for the CAPP Credentialing Program.

Submitted this	day of	, 20
Endorser's signature:		