Content Area I: General Knowledge (5 percent of exam, 7 questions)

A. Understands 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. Federal, state, and local ordinance requirements

B. Understands the relationship of sustainability practices to parking management

C. Understands the variables and considerations of facility construction, including:
   1. Bid process
   2. Project management

D. Manages the procurement process for goods and services

E. Understands debt (e.g., types and purposes, bond indenture, and debt service obligations)

Content Area II: General Management (20 percent of exam, 30 questions)

A. Establishes, leads, and holds responsibility for corporate/facility:
   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, back-up, PCI compliance)
   8. Customer service policies
   9. Project management
  10. Risk management, including:
      1. Business practices/liability exposure
      2. Financial markets/economy
      3. Revenue/inventory/asset control

B. Manages revenue sources, cash flow, allocation of resources

C. Establishes/maintains business partner relationships and alliances, including:
   1. Government and quasi-government
   2. Administrative services providers (e.g., bookkeeping, banking, insurance, record-keeping)
   3. Professional service providers (e.g., architects, engineers, attorneys, consultants)
   4. Facilities and operational services providers (e.g., physical maintenance, staff, security, data management, revenue equipment)

D. Makes decisions concerning revenue control equipment, including:
   1. Researching and matching various system options to use patterns (e.g., gated vs. un-gated, coin, electronic, self-pay)
   2. Performing a cost-benefit analysis on different systems; selecting system(s)
   3. Financing and contracting system purchase and installation

E. Establishes/reviews policies and procedures (e.g., enforcement, fines, special events)

F. Develops/implements 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

Content Area III: Operations Management (40 percent of exam, 60 questions)

A. Performs operation management services based on:
   1. Industry segment (e.g., airport, municipal, university, hospital, commercial operators)
   2. Number of spaces, ingress/egress lanes, and demand cycles
3. Standard operating procedures, including:
   1. On-street
   2. Off-street
   3. Valet
   4. Multi-modal
   5. Fleet management
   6. Buses and shuttles
   7. Events
4. Use of technology (e.g., parking guidance systems, hand-held equipment)
5. Peak demand/utilization strategies

B. Manages parking system staff by:
1. Writing and updating employee job descriptions based on required skills and responsibilities
2. Recruiting staff
3. Setting staffing levels, organizational structure, performance goals, and scheduling
4. Performing staff internal and external training (e.g., safety, benefits)
5. Adhering to union and/or parking system contract requirements
6. Coordinating with human resources personnel
7. Applying management theories
8. Establishing, applying, monitoring, and/or enforcing:
   1. A code of ethics
   2. Policies and procedures
   3. Incentive programs
9. Monitoring performance and conducting evaluations
10. Providing a safe and secure work environment by:
   1. Complying with the Fair Labor Standards Act (e.g., discrimination, sexual harassment, severance, overtime, minimum wage)
   2. Posting employee safety and rights information, material safety data sheets (MSDS), and hazardous material placards
   3. Providing protection from workplace injury, hazards, the elements, and crime
C. Establishes policies for and manages emergencies (e.g., fire, injury/accident, crime, power outages)
D. Establishes relationships with third-party service providers
E. Manages the revenue control system(s) by:
   1. Managing the installation of system hardware and software
   2. Training staff and ensuring customers are able to use the system
   3. Managing, supervising, auditing, and reporting on functionality, security, and revenue
   4. Setting maintenance and revenue collection schedules
F. Establishes and follows a maintenance program schedule by:
   1. Conducting regularly scheduled inspections to identify maintenance requirements for facility:
      1. Structure (e.g., corrosion, spalling, delamination, oxidization, cracking, roof leaks)
      2. Equipment (e.g., elevators, fencing, lavatories (WC), lighting, signage, revenue)
      3. 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:
      1. Structural (e.g., concrete, beams, coatings, sealants)
      2. Equipment (e.g., elevators, fencing, lavatories (WC), lighting, signage)
      3. Aesthetics (e.g., painting, landscaping, cleaning)
   6. Conducting quality control maintenance performance inspections
G. Safeguards parking system assets by:
   1. Establishing internal revenue controls by:
      1. Eliminating staff conflicts of interest
      2. Segregating duties
      3. Managing bank-facility relationship
   2. Managing assets by keeping inventory records, redundant systems, and performing audits
   3. Responding immediately and consistently to unexpected findings in revenue and inventory audits
   4. Using active and passive security monitoring systems
H. Establishes and supervises the parking system enforcement policy, including:
   1. Purpose of enforcement (e.g., safety, vehicle turnover requirements, quality of life for stakeholders)
2. Personnel training
3. Enforcement practices (e.g., warning, citations, booting, towing, impounding)
4. Fine collections
5. Adjudication and appeals

I. Holds responsibility for day-to-day financial operations, including:
   1. Establishing and reviewing fee structures and revenue collection procedures based on evaluation of:
      1. Numbers of transactions
      2. Types of fees (e.g., permit, hourly, daily, weekly, event)
      3. Rate schedules related to time of day, special events, overnight, long term, and lost tickets
      4. Fee payment options
      5. Market survey comparisons
      6. Budget variances
   2. Controlling and auditing revenue by performing:
      1. Daily reconciliation by method of payment
      2. Monthly access card/permits audits comparing active vs. paid
      3. Scheduled and unscheduled internal auditing of revenue (e.g., surprise equipment and vehicle inventories, audit of payroll records)
   3. Controlling and auditing expenses, including:
      1. Comparison of orders-to-invoice to inventory
      2. Comparison of contract to payments
      3. Payroll
      4. Taxes and fees
      5. Changes to purchase patterns (e.g., gas purchase doubled in one month)
   4. Performing internal operational performance audits to assess:
      1. Cash and credit transaction processing procedures
      2. Data security for credit transactions
      3. Stakeholder satisfaction
      4. Safety and security
      5. Emergency preparedness
      6. Staffing requirements
      7. Maintenance goals and requirements
      8. Energy consumption
   J. Designs and maintains a 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

Content Area IV: Financial and Operational Auditing (15 percent of exam, 22 questions)
A. Performs strengths, weaknesses, opportunities, and threats (SWOT) analyses
B. Develops and evaluates performance metrics
C. Performs internal financial audits
D. Assists external financial auditors
E. Prepares for/assists in unscheduled outside regulatory compliance audits (e.g., EPA, OSHA, fire marshal, FTA)
F. Creates/implements management plans to address audit findings

Content Area V: Federal, State, and Local Laws (7 percent of exam, 11 questions)
A. Understands the basics of public policy, including:
   1. Federal and state funding initiatives affecting parking and business pattern operations
   2. Grant funding
   3. Advocacy to protect the public, serve the general welfare, and improve operations
   4. Community development initiatives
   5. Enterprise zone initiatives/parking benefit districts
B. Understands applicable rules, regulations, and laws, including:
   1. Compliance requirements of:
      1. Americans With Disabilities Act
      2. Environmental Protection Agency or state or local equivalent
      3. FERPA/HIPPA
      4. Use of commercial driver’s licenses (CDL)
   2. Reporting requirements for:
      1. Transportation Safety Administration/Federal Transit Authority
      2. Hazardous materials regulations (HMR) (e.g., state and local emergency response commissions)
C. Understands federal, state, and local funding opportunities
D. Understands grant application, spending, and reporting requirements
E. Understands the relationship between federal, state, and local agencies; advocates on behalf of stakeholders

**Content Area VI: Marketing and Public Relations**
*(7 percent of exam, 11 questions)*

A. Establishes and/or implements an external communications policy and protocol
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. Implements marketing practices to increase market share, improve customer retention and satisfaction, and increase revenue
E. Communicates organizational mission and service expectations to stakeholders
F. Practices community involvement/engagement

**Content Area VII: Analysis and Application of Technology, Including Use of:** *(6 percent of exam, 9 questions)*

A. Online business services (e.g., reservations, permit applications and renewal, citation payments and appeals)
B. Smartphone technology (e.g., pay-by-phone, near-field communications, QR code)
C. Real-time communications (e.g., GPS, parking availability, bus schedules/arrivals)
D. License plate recognition
E. Social media marketing and communication
F. Web-app technology
G. Wireless sensing devices for traffic/inventory management
H. Green/sustainable technologies and systems (e.g., EV stations, smart lighting, solar)
I. Cloud-based programming (e.g., security, connectivity access, data-storage capacities)
J. Demand response transportation systems (e.g., bicycle sharing, car sharing)
K. Predictive parking algorithms

A set of sample questions is included as Appendix A.