VALUATION & ADVISORY

GLOBAL CAPABILITIES AND CORE SERVICES

CUSHMAN & WAKEFIELD

CELEBRATING 100 YEARS

Cushman & Wakefield's Valuation & Advisory (V&A) group provides sophisticated advice on real estate equity and debt decisions to clients on a worldwide scale. Our capabilities span valuation and advisory services relating to acquisition, disposition, financing, litigation, and financial reporting, and 17 practice groups deliver real estate strategies and solutions to clients with unique operational, technical and business requirements. Access to real-time market data, the insights of Cushman & Wakefield's leasing, research and capital markets experts, and the experience derived from more than 35 years of operation ensure the application of best practices and proven, successful methodologies.

Practice Groups

- Agribusiness, Natural Resources & Energy
- Automobile Dealership
- Data Center
- Gas Station & Convenience Store
- Golf
- Government
- Hospitality & Gaming
- Industrial
- Machinery & Equipment
- Multifamily
- Office
- Residential Development
- Restaurant
- Retail
- Self Storage
- Senior Housing/Healthcare
- Sports & Entertainment

Globally,

245,510+

properties valued at over

2.86 trillion

USD in 2016

1,750±

professionals

150±

offices

30±

countries

"Our professionals are knowledgeable and dedicated so our clients can rest assured knowing they have industry experts handling their assignments accurately and efficently."

Nicole Urquhart-Bradley, MAI, FRICS
President, Valuation & Advisory Americas

Although major commercial real estate firms share some of the same capabilities, we offer a set of unique strengths to our clients:

- In-depth real estate industry knowledge ensures our clients have the latest market and industry information, while providing a global context.
- Our professionals are experts in their respective fields and hold credentials from various institutions, including, among others, the Appraisal Institute, the Royal Institution of Chartered Surveyors (RICS), Appraisal Institute of Canada, Japan Appraisal Institute, Singapore Institute of Valuers, Hong Kong Institute of surveyors, China Institute of Real Estate Appraisers, China Real Estate Valuers, and China Asset Appraisers.
- Experienced professionals provide local knowledge with global coverage.
- We offer best-in-class service with an emphasis on quality control and cost effectiveness.
- Our fully integrated technology platform supports our service delivery, helps us understand market trends, and address our client needs.

Knowledge

We develop proprietary research, such as local investor survey data and focus group publications. Our members also provide market presentations, expert witness testimony and are invited to engagements as guest speakers. Our professionals attend seminars and conferences and are considered industry thought leaders.

Experience & Expertise

Our valuation team can offer a spectrum of services to clients. Our depth and diversity of experience ranges from one-off engagements to complex portfolio assignments. Many of our professionals have authored books and articles related to valuation issues, serve as academic instructors, and hold positions within valuation industry groups.

Global Coverage

Engaging a global real estate firm gives our clients access to Cushman & Wakefield's breadth of services. With roughly 1,750 V&A professionals located in nearly 150 offices in 30 countries worldwide, we have the market knowledge, resources, and geographic capabilities to meet our clients' most sophisticated valuation and advisory needs.

Quality

Our valuation services are performed under the highest applicable professional standards. To ensure the highest caliber of service, we have created defined quality control protocols. In addition, our V&A professionals regularly exchange best practices, case studies, and enhancements of business practice controls.

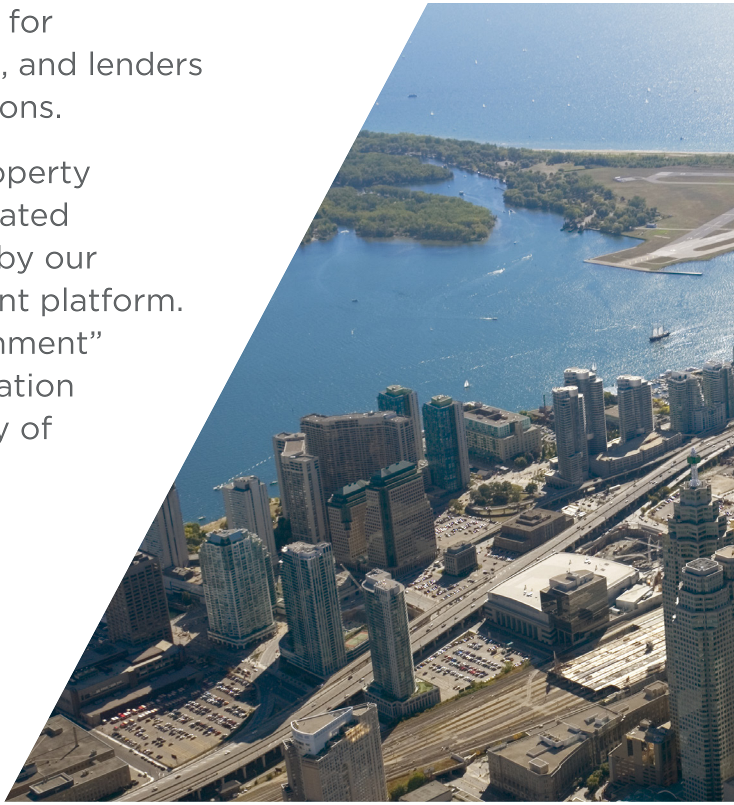
Technology

To provide our clients the best service and end product, our professionals are supported by the following internal technology solutions:

- JobCenter for full life cycle engagement tracking and reporting;
- Knowledge Vault for property and "comparable" transaction tracking, reporting, and integration with narrative reporting tools;
- Global Template Tools for streamlined, consistent narrative report creation.

We specialize in providing appraisal services for corporations, institutional investors, advisors, and lenders on critical equity and debt investment decisions.

We have extensive experience with multi-property portfolios. Portfolio assignments are coordinated by our Portfolio Valuation team and backed by our proprietary web-based appraisal management platform. This platform acts as a “collaborative environment” where the client and our teams share information about each assignment, including a summary of values, assumptions and conclusions, and electronic copies of each appraisal report.



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Our Services:

- Compliance with Uniform Standards of Professional Appraisal Practice (USPAP) and International Valuation Standards (IVS), or any other applicable professional standards
- Consideration of the market value of the fee simple, leasehold or leased fee interests, as appropriate for each property
- Research any and all aspects of a property’s value
- Help determine the value of a property or portfolio for sellers who are entering a transaction and need to protect their investments
- A wide variety of specialized valuation experts in different industry asset classes

Valuation/Portfolio Valuation

Cushman & Wakefield Advantage:

- Centralized process
- Client-specific report formats
- Comprehensive global coverage
- Custom data tape
- Dedicated portfolio team
- Objective and unbiased comprehensive reports
- Phased delivery
- Proven track record
- Quality control program
- Secure transmission of data and reports
- Single point of contact
- Web-based accessibility

The Diligence Advisory Group specializes in acquisition due diligence, underwriting for debt and equity investments, internal credit/risk management analysis, strategic bank advisory, and an array of services specifically designed to meet the investment strategies of our clients.

Working with lenders and investors, our projects encompass underwriting and transaction management for CRE participants across the spectrum and up and down the capital stack. Our expertise is comprehensive and includes all major and esoteric CRE asset classes; in addition, our work product can be standardized or rapidly customized, as desired. We use our experience and knowledge to create value for our clients when acquiring assets and contain risk when underwriting investments.

Our seasoned professionals leverage the larger Cushman & Wakefield knowledge capital when advising clients on complex debt and equity investment decisions. With access to real time market data and global insights from our leasing, research, valuation, and capital markets experts, our diligence professionals are able to compile data from market experts who have boots-on-the-ground knowledge. This market insight allows us to identify emerging trends and surface potential risks.

Anne Jablonski
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Our Services & Capabilities:

- Acquisition/disposition diligence
- Asset surveillance
- B-Piece diligence
- Bank stress testing advisory
- Bank target advisory and due diligence for M&A transactions

Diligence Advisory

- Cost/Benefit analysis for property relocation
- Credit/Risk management
- CRE advisory
- Data benchmarking
- Debt asset management
- Desktop “second opinion”
- Due diligence for acquisition/financing
- Financial modeling
- Lease abstraction
- Loan file data aggregation
- Loan portfolio underwriting & due diligence
- Loan restructuring
- Loss sharing analysis and advisory
- Ongoing loan/Risk rating review and reporting
- Quarterly surveillance/Loan administration
- Third-party management and review

Our Dispute Analysis & Litigation Support (DALS) group is comprised of individuals with expertise in real property and business valuation, economics, finance, statistical and financial modeling, forensic and fraud investigations, damage calculations involving contamination and toxic tort matters, partnership disputes, and other types of commercial litigation.

The DALS practice is a provider of expert services to the legal, real estate, and corporate communities in real estate-related, complex commercial litigation. Practice members have qualified in federal, state, and local courts throughout the United States and before the International Centre for the Settlement of Investment Disputes as experts in valuation, economics, damages, and finance. Practice members also serve in arbitration roles as sole arbitrators or as members of arbitration panels.

DALS practice members have experience in business interests and damage calculations in cases involving environmental impairment, breaches of lease or contract, lender liability, construction delays and construction defects, breach of fiduciary duty, and eminent domain. We also provide valuations and testimony in variety of other situations, including property tax matters. Our services focus on dispute analysis, expert testimony, trial support, litigation consulting, and arbitration.

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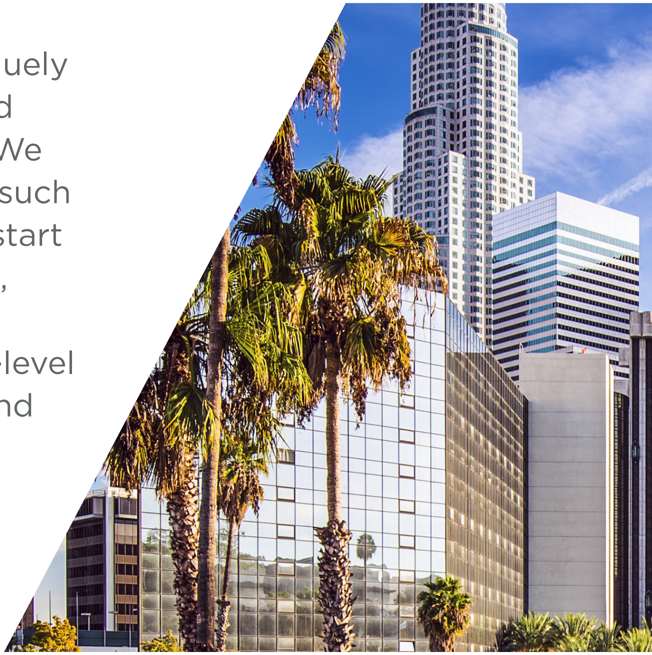
Dispute Analysis & Litigation Support

Our Capabilities:

- Bankruptcy and restructuring
- Best practices opinions
- Breach of contract or lease
- Business valuation
- Charitable donations
- Complex business and partnership disputes
- Construction defects and delays
- Damages theory and damage calculations
- Eminent domain and property tax appeal matters
- Environmental impairment, toxic tort, and detrimental conditions
- Event studies/time series analyses
- Expert witness testimony
- Feasibility and marketability studies
- Fraud and forensic investigations
- Lease negotiations and rental resets
- Lender liability
- Life estate administration
- Partial and fractional interest valuations, including debt and equity, remainderman, and other property interests
- Post-acquisition disputes
- Safe Harbor opinions
- Transportation and utility corridor issues



With exceptional credentials, industry knowledge, and unparalleled talent, our professionals are uniquely qualified to address financial reporting and related issues on both a national and international basis. We provide services for financial reporting purposes, such as fair value, purchase price allocation, and fresh start accounting, which adhere to applicable standards, including U.S. GAAP and IFRS, as well as country-specific compliance. We provide robust advice, C-level interaction and consulting, peer-to-peer review, and specialty practice resources.

With one of the most tenured professional staffs in the industry, we are experienced in working within, forming, and managing multi-disciplinary teams from engagement inception through audit review. Collectively, having serviced clients ranging from public and private REITs, multi-national corporations, private equity, pension funds, and sovereign wealth funds, we have diversified case experience covering many issues, legal jurisdictions, and property types.

Our Financial Reporting practice provides a unique combination of experience, property-specific knowledge, and global scalability to provide our clients timely and accurate financial reporting services.

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Financial Reporting

Our Services:

U.S. GAAP

- ASC350: Intangibles—Goodwill
- ASC360: Property, Plant & Equipment
- ASC805: Business Combinations
- ASC820: Fair Value Measurements and Disclosures
- ASC840/842: Leases

IFRS

- IFRS3: Business Combinations
- IFRS5: Non-current Assets Held for Sale and Discontinued Operations
- IFRS13: Fair Value Measurement
- IAS16: Property, Plant & Equipment
- IAS17 / IFRS17: Leases
- IAS36: Impairment of Assets
- IAS38: Intangible Assets
- IAS40: Investment Property
- IAS41: Agriculture

OTHER SERVICES

- Non-Traded REIT Valuations, FINRA Rule 2310 & NASD Rule 2340 Compliance
- Agreed Upon Procedures (AUP)
- Debt and equity valuation
- FIRPTA valuations
- Net Asset Value (NAV) consulting
- Partnership & fractional interest valuations
- Portfolio valuation management
- Positive Assurance Opinions
- REIT & fund valuations
- Valuation compliance consulting
- Valuations for bankruptcy/fresh start accounting

V&A's Property Tax Services (PTS) team is a network of professionals with the jurisdictional and valuation expertise needed to provide exceptional tax savings results. We have built a reputation for excellence in understanding the unique complexities of all property types. Through our long-standing experience we have developed specialized knowledge of local processes and unique jurisdictional procedures. With the platform of PTaxSolution™, our proprietary property tax management software, and as your trusted advisor, the PTS team can handle every aspect of property tax administration and management.

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Property Tax Services

Our Services:

PTAXSOLUTION™ SOFTWARE

- Web-based access to property tax management software with customized reports
- Track and audit assessments and tax bills
- Repository for all tax documents with capability to sort, search, and send
- View parcel maps, site maps, and aerial maps
- Real-time email notification alerts (tax bill payments, appeal deadlines, etc.)

JURISDICTIONAL REPORTING

- Provide strategic advice on disclosure requirements and respond to requests for information from taxing jurisdictions

REAL PROPERTY TAX REVIEW

- Review real property locations for potential exemptions, credits, and incentives

ASSESSMENT APPEALS

- Proactively manage all appeal opportunities through annual Review and Recommend Peport
- Prepare, file, and negotiate assessment appeals
- Provide expert valuation representation when negotiating with assessing authorities and appearing before tribunals or courts

ANNUAL REAL PROPERTY BUDGET

- Project annual assessments to calculate the corresponding tax liability, with payments illustrated on an accrual and cash basis based on jurisdictionally specific payment deadlines

DUE DILIGENCE TAX ESTIMATE

- Forecast change in assessment likely to occur based upon potential acquisition, new construction, or other physical or economic changes
- Calculate and project corresponding tax liability as a result of those changes

BUSINESS PERSONAL PROPERTY TAX

- Analyze fixed asset listing for tax savings
- Determine taxability of assets and appropriate depreciation schedules
- Prepare and submit personal property tax returns
- Prepare, file, and negotiate appeals

LITIGATION MANAGEMENT

- Prepare cost/benefit analysis related to pursuit of litigation
- Oversee litigation process, including participation in negotiations
- Provide context and understanding to real estate and financial components
- Work with client and counsel in the decision-making process

Our team provides expertise in all facets of appraisal management and administration, including bidding, engaging and reviewing appraisal reports, compliance, third-party appraiser selection, risk analysis, and property inspections. Services range from single property appraisal reviews to major portfolio consulting engagements. Appraisal Management's senior staff combines broad-based appraisal experience with banking expertise, including in-depth regulatory knowledge. This experience ensures that the appraisal process is performed in accordance with appraisal industry and regulatory standards, including the requirements for appraiser independence and unbiased analysis.

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Property Types:

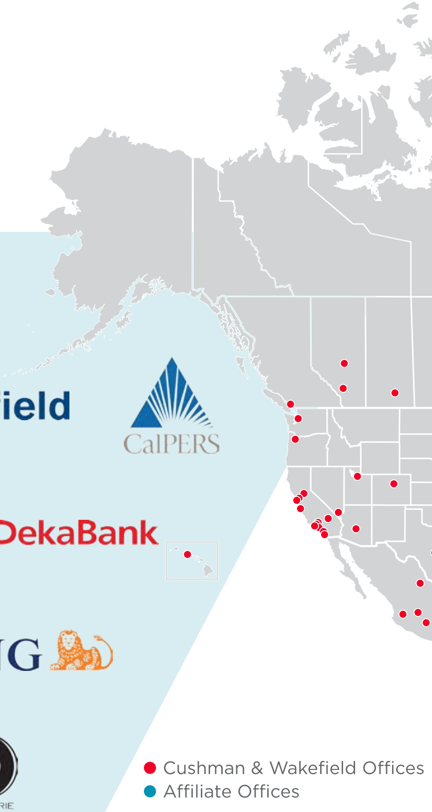
- Apartment buildings
- Condominium projects
- Hotels and motels
- Industrial buildings
- Medical office buildings
- Mixed-use projects
- Office buildings
- Residential development
- Retail properties
- Senior housing

Appraisal Management

Our Services:

- Complete proprietary appraisal management tracking system and customized reporting
- Market rent studies
- Provide independence between client and third-party appraisal firm
- Quarterly valuations
- Review of cash flow models
- Scheduling of current appraisal assignments and future rotations
- Standardized executive summaries
- Standardized information flow between client, Cushman & Wakefield and vendor
- Third-party appraisal reviews (Standard 3 and Compliance) in a standard USPAP compliant format

We are privileged to work with some of the best clients in the world on some of the most interesting assignments.



Representative Clients

ally · AXA · Bank of America · BARCLAYS · Brookfield · CalPERS

Carrefour · CPP Investment Board · CIT · citigroup · Credit Suisse · DekaBank

Deutsche Bank · GE Capital · Goldman Sachs · Grosvenor · HSBC · ING

Itaú · Ivanhoe Cambridge · Jones Day · J.P.Morgan · LaSalle Investment Management · Macquarie

Manulife Financial · MetLife · Norges Bank Investment Management · Novartis · Teachers' Pension Plan Ontario

Prologis · Prudential · RBC · RBS The Royal Bank of Scotland · Sabadell

Shinsei Bank · Sidley Austin LLP Sidley · Sonae · UBS

United Technologies · Wells Fargo · Westfield · Zurich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About Cushman & Wakefield

Cushman & Wakefield is a leading global real estate services firm that helps clients transform the way people work, shop, and live. Our 45,000 employees in more than 70 countries help occupiers and investors optimize the value of their real estate by combining our global perspective and deep local knowledge with an impressive platform of real estate solutions. Cushman & Wakefield is among the largest commercial real estate services firms with revenue of $6 billion across core services of agency leasing, asset services, capital markets, facility services (C&W Services), global occupier services, investment & asset management (DTZ Investors), project & development services, tenant representation, and valuation & advisory. 2017 marks the 100-year anniversary of the Cushman & Wakefield brand. 100 years of taking our clients' ideas and putting them into action. To learn more, visit www.cushwakecentennial.com, www.cushmanwakefield.com or follow @CushWake on Twitter.

Cushman & Wakefield Primary Services

Global Occupier Services / Capital Markets / Investment & Asset Management
Valuation & Advisory / Project and Development Services / Tenant Representation
Agency Leasing / Asset Services / Facility Services

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