



BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

In Re: Application of Raftelis Financial Consultants, Inc to register as an Utility Valuation Expert (UVE) in the Commonwealth of Pennsylvania

Docket No: M-2016-2543193

Check one:

- Initial Application
- Renewal Application

Fee: \$125 fee enclosed

1. Legal Name of the Applicant: Raftelis Financial Consultants, Inc.

Attach proof of compliance with appropriate Pennsylvania Department of State filing requirements.²

2. Trade or Commercial or Fictitious Names Used by Applicant (d/b/a):

Check this box if the Applicant will not be using a fictitious name.

Check this box if the Applicant will be using a fictitious name or using a d/b/a (doing business as) another name and identify names below. If more space is needed, list names on the back of this page or append list to completed application.

Raftelis

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3. Applicant Address:

Street Name & Number:	<u>4 British American Blvd.</u>	PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU
Post Office Box:	<u></u>	
City:	<u>Latham</u>	
State:	<u>New York</u>	
Zip Code:	<u>12110</u>	
Telephone Number:	<u>(518) 391-8944</u>	
Email Address:	<u>jmastracchio@raftelis.com</u>	
Website Address:	<u>www.raftelis.com</u>	

² A copy of any document from the Pennsylvania Department of State (Pa. Dept. of State) documenting the Applicant's Pa. Dept. of State entity number is adequate. However, the document must indicate that the Applicant's Pa. Dept. of State registration is "active." Certified copies of Pa. Dept. of State documents are not required.

Application for Registration as a Utility Valuation Expert (UVE)

4. Point of Contact for this Application:³

Name: John Mastracchio, PE, CFA
 Title: Vice President
Complete the following if different than above:
 Street Name & Number: 4 British American Blvd.
 Post Office Box: _____
 City: Latham
 State: New York
 Zip code: 12110
 Telephone Number: (518) 391-8944
 Email address: jmastracchio@raftelis.com

5. Parent & Subsidiary Companies & Affiliates:

Parent Name and Contact Information. Provide name and contact information for parent company. Check box if any parent company is currently doing business in Pennsylvania as a UVE or WWDC. If none, do not check the box; insert NONE below.

Parent Name: None
 Street Name & Number: _____
 Post Office Box: _____
 City: _____
 State: _____
 Zip Code: _____
 Telephone Number: _____
 Email Address: _____
 Website Address: _____

Subsidiaries and Contact Information. Provide name and contact information for all subsidiary companies. Check this box if any subsidiary is currently doing business in Pennsylvania as a UVE or WWDC. If none, do not check the box; insert NONE below.

Subsidiary Name: None
 Street Name & Number: _____
 Post Office Box: _____
 City: _____
 State: _____
 Zip Code: _____
 Telephone Number: _____
 Email Address: _____
 Website Address: _____

(Copy above information and paste on separate sheet as necessary for additional Subsidiaries)

³ PLEASE NOTE: Upon approval of this application, this Contact Information will be listed on the Commission's UVE Registry.

Application for Registration as a Utility Valuation Expert (UVE)

Affiliates and Contact Information. Provide name and contact information for all affiliated companies. Check box if any affiliate is currently doing business in Pennsylvania as a UVE or WWDC. If none, do not check the box; insert NONE below.

Affiliate Name: None
 Street Name & Number: _____
 Post Office Box: _____
 City: _____
 State: _____
 Zip Code: _____
 Telephone Number: _____
 Email Address: _____

(Copy above information and paste on separate sheet as necessary for additional Affiliates)

6. **Contracts & Business Partnerships:**

Check box if Applicant intends to or has operated under contract with or has partnered with an WWDC within the past five (5) years. Otherwise, insert NONE here: NONE

Check box if Applicant intends to or has operated under contract, subcontracted or partnered with a UVE within the past five (5) years. Otherwise, insert NONE here: NONE.

If applicable, provide name(s) of WWDC(s) and UVE(s) and contact information for each and briefly describe the nature of business services associated with each contract and/or partnership. Attach additional pages as needed.

7. Identify principal officers (i.e., owners, executives, partners and/or directors, etc.), as appropriate for Applicant's organizational structure. Provide an organizational chart and the names, titles, business addresses and telephone numbers for each office.

Please see information attached to this application

8. Attach to this Application a brief biography or single page professional resume for all principal officers and management directly responsible for Applicant's operations.

Please see information attached to this application

9. Provide Applicant's Federal Employer Identification No. (EIN): 20-1054069

Application for Registration as a Utility Valuation Expert (UVE)


10. Registered Agent

a. If the Applicant does not maintain a principal office in the Commonwealth, the Applicant is required by the Pennsylvania Department of State to designate an approved Registered Agent as its representative in the Commonwealth. Check one of the boxes below, as applicable:

YES, the Applicant has registered its business with the Pennsylvania Department of State. Following is the Name and Contact information for the Applicant's Registered Agent approved by the Pennsylvania Department of State.

Registered Agent: InCorp Services, Inc.
 Street Name & Number: See attached filed registration statement
 Post Office Box: _____
 City: _____
 State: _____
 Zip Code: _____
 Main Telephone Number: _____
 Email Address: _____
 Website Address: _____

NO, the Applicant has not registered its business with the Pennsylvania Department of State.

 **STOP**—To avoid denial of your application and forfeiture of your application fee, contact the Pennsylvania Department of State Bureau of Corporations to register as a business entity within the Commonwealth PRIOR TO completion and filing of this application with the Pennsylvania Public Utility Commission.

b. Applicant has registered its business with the Pennsylvania Department of State. Please check appropriate registration type for Applicant as designated with the Department.

- Sole proprietor
- Domestic corporation (none)
- Domestic general partnership
- Domestic limited liability company
- Domestic limited liability partnership
- Foreign corporation
- Foreign general or limited partnership
- Foreign limited liability company
- Foreign limited liability general partnership
- Foreign limited liability limited partnership

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c. If Applicant is not domiciled in the Commonwealth of Pennsylvania and is registered as a "foreign" entity as identified above, please identify all other states where applicant is registered and name the appropriate state department(s):

11. Technical Fitness

Attach to this Application a copy of any certification(s) or similar documentation that would demonstrate the technical fitness of Applicant, such as professional licenses, technical certifications, and/or names of current or past clients with a description of dates and types of services provided by Applicant.

See attached

12. Falsification

The Applicant understands that the making of false statement(s) herein may be grounds for denying the Application, or if later discovered, for revoking any authority granted pursuant to the Application. This Application is subject to 18 Pa. C.S. §§4903 and 4904, relating to perjury and falsification in official matters.

Signature of Principal Official: Matthew Jackson

Official's Name & Title (Please Print) : Matthew Jackson, Corporate Secretary

Date: 12/30/2019

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Application for Registration as a Utility Valuation Expert (UVE)

APPENDIX A

AFFIDAVIT

[Commonwealth/State] of NC
County of Mecklenburg

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SECRETARY'S BUREAU

Matthew Jackson, Affiant, being duly sworn or affirmed according to law, deposes and says that:

Affiant is the Corporate Secretary (Office of Affiant) of Rattelis Financial Consultants Inc. (Name of Applicant);

That Affiant is authorized to and does make this affidavit for said Applicant;

That Rattelis Financial Consultants Inc, the Applicant herein, has the burden of producing information and supporting documentation demonstrating technical fitness to be registered as a Utility Valuation Expert pursuant to Section 1329. 66 Pa. C.S. § 1329.

That Rattelis Financial Consultants Inc, the Applicant herein, acknowledges that it has answered the questions on the application correctly, truthfully and completely and has provided supporting documentation as required.

That Rattelis Financial Consultants Inc, the Applicant herein, acknowledges that it is under a duty to update information provided in answer to questions on this application and contained in supporting documents.

That Rattelis Financial Consultants Inc, the Applicant herein, verifies that neither the UVE nor the UVE's firm, including affiliates, have a conflict of interest that would compromise, or have the appearance of compromising, the UVE's professional judgement and ability to perform the valuation in an unbiased manner.

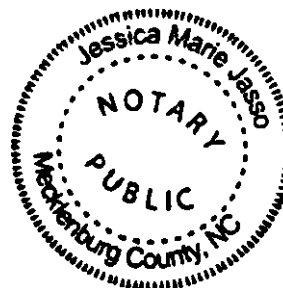
That the facts above set forth are true and correct to the best of Affiant's knowledge, information, and belief, and that Affiant expects said Applicant to be able to prove the same at hearing.

Matthew Jackson
Signature of Affiant

Sworn and subscribed before me this 30th day of December 2019.

Jessica Marie Jasso
Signature of official administering oath

My commission expires: 12-8-24



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF STATE
BUREAU OF CORPORATIONS AND CHARITABLE ORGANIZATIONS
401 NORTH STREET, ROOM 206
P.O. BOX 8722
HARRISBURG, PA 17105-8722
WWW.CORPORATIONS.PA.GOV

Exhibit 1
PA Dept. of filing

Anne Bryant
227 W. Trade Street Suite 1400
Charlotte NC 28202

Raftelis Financial Consultants, Inc.

THE BUREAU OF CORPORATIONS AND CHARITABLE ORGANIZATIONS IS HAPPY TO SEND YOUR FILED DOCUMENT. THE BUREAU IS HERE TO SERVE YOU AND WE WOULD LIKE TO THANK YOU FOR DOING BUSINESS IN PENNSYLVANIA.

IF YOU HAVE ANY QUESTIONS PERTAINING TO THE BUREAU, PLEASE VISIT OUR WEBSITE AT www.dos.pa.gov/BusinessCharities OR YOU MAY CONTACT US BY TELEPHONE AT (717)787-1057. INFORMATION REGARDING BUSINESS AND UCC FILINGS CAN BE FOUND ON OUR SEARCHABLE DATABASE AT www.corporations.pa.gov/Search/CorpSearch.


ENTITY NUMBER : 6563855

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SECRETARY'S BUREAU

**PENNSYLVANIA DEPARTMENT OF STATE
 BUREAU OF CORPORATIONS AND CHARITABLE ORGANIZATIONS**

Document will be returned to the name and address entered below.			Foreign Registration Statement DSCB: 15-412 (rev. 2/2017)  412
Anne Bryant			
Name 227 W. Trade Street, Suite 1400			
Address Charlotte NC 28202			
City	State	Zip Code	

Read all instructions prior to completing. This form may be submitted online at <https://www.corporations.pa.gov/>.

Fee: \$250

In compliance with the requirements of the applicable provisions of 15 Pa.C.S. § 412 (relating to foreign registration statement), the undersigned foreign association hereby states that:

1. The type of association is (check only one):

- Business Corporation
 Limited Partnership
 Business Trust
 Nonprofit Corporation
 Limited Liability (General) Partnership
 Professional Association
 Limited Liability Company
 Limited Liability Limited Partnership

2. The full and proper name of the foreign association as registered in its jurisdiction of formation is:

Raftelis Financial Consultants, Inc.

2A. If the name in 2 does not contain a required designator or if the name in 2 is not available for use in the Commonwealth, the alternate name under which the association is registering in this Commonwealth is:

3. The jurisdiction of formation:

NC

4. The street and mailing address of the association's principal office.

227 W. Trade Street, Suite 1400 Charlotte NC 28202

Number and street City State Zip

4A. The street and mailing address of the office, if any, required to be maintained by the law of the association's jurisdiction of formation in that jurisdiction:

227 W. Trade Street, Suite 1400 Charlotte NC 28202

Number and street City State Zip

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PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAUExhibit 2
Principal Officers

Name	Position	Business Address	Phone #
Beckley, Thomas	Vice President	3013 Main St. Kansas City, MO 64108	816-285-9020
Brandt, Peiffer A	President & CEO	227 West Trade St., Ste 1400 Charlotte, NC 28202	704-373-1199
Conti, Elaine V	Vice President	227 West Trade St., Ste 1400 Charlotte, NC 28202	704-373-1199
Davis, Jon P	Exec. Vice President	227 West Trade St., Ste 1400 Charlotte, NC 28202	704-373-1199
Gaur, Sanjay	Vice President	445 S. Figueroa St., Ste 1925 Los Angeles, CA 90071	213-262-9300
Giardina, Richard	Exec. Vice President	5619 DTC Parkway, Ste 850 Greenwood Village, CO 80111	303-305-1135
Hairston, Anthony	Vice President	341 North Maitland Ave., Ste 300 Maitland, FL 32751	407-628-2600
Jackson, Matthew	Corporate Secretary	227 West Trade St., Ste 1400 Charlotte, NC 28202	704-373-1199
Kreps, Jason B	Vice President & Chief Compliance Officer	227 West Trade St., Ste 1400 Charlotte, NC 28202	704-373-1199
Levin, Melissa M	Vice President	227 West Trade St., Ste 1400 Charlotte, NC 28202	704-373-1199
Locklear, Henrietta	Vice President	1331 Union St., Ste 1150 Memphis, TN 38104	901-410-3300
Mastracchio, John	Vice President	4 British American Blvd. Latham, NY 12110	518-310-6330
Pardiwala, Sudhir D	Exec. Vice President	642 Aster Trl San Antonio, TX 78256	626-583-1894
Reading, R Keith	Exec. Vice President	1001 Winstead Dr., Ste 355 Cary, NC 27513	984-201-6240
Smith, Harold J	Vice President	227 West Trade St., Ste 1400 Charlotte, NC 28202	704-373-1199
Stannard, William G	Chairman of the Board	3013 Main St. Kansas City, MO 64108	816-285-9020
Thomas, Darin	Vice President	822 N. Elm St., Ste 104 Greensboro, NC 27401	336-209-1347

John Mastracchio, CFA
Vice President

Specialties

Financial Analysis and modeling
Financial Planning, Cost of Service, Rate Design
Bond Feasibility Studies
Transactional Due Diligence Support
Government Consolidation / Regionalization
Public-Private Partnerships
Inter-Municipal Agreement Support
Valuation assessments
Expert Witness and Litigation support
Benchmarking
Capital Financing and Project Planning
Business Process Improvement
Asset Management / Business Case Evaluations

Professional History

Raftelis: Vice President (2017-present)
Arcadis, U.S., Inc. - (2003-2017)
Arthur Andersen (2001-2002)
Parsons Corporation (1994-2000)

Education

Master of Business Administration, Finance – Cornell University (2001)
Master of Science, Civil & Environmental Engineering – Clarkson University (1994)
Bachelor of Arts – State University of New York, College at Geneseo – (1993)

Certifications

Chartered Financial Analyst
Professional Engineer (PA)
Lean Six Sigma
Series 50 Municipal Advisor Representative

Professional Memberships

American Water Works Association: Vice Chair of Finance, Accounting, and Management Controls Committee
National Council for Public-Private Partnerships
Water Environment Federation

Profile

Mr. Mastracchio is a Vice President serving in a national role and leading the Northeastern practice of Raftelis. His more than 24 years of experience as a financial and management consultant serving the utility, governmental, and private sectors. His experience includes financial planning and rate setting, capital financing, asset management, regionalization, litigation support, and transactional consulting, and spans several utility sectors including water, wastewater, electric, solid waste, and stormwater, along with consulting for general government, transportation, and ports.

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Mr. Mastracchio is a published author and an active member of several industry committees. He is the chairperson of the Finance, Accounting & Management Controls committee and a member of the Rates & Charges committee of the American Water Works Association (AWWA), and is a contributing author of many industry publications on rate setting, financial planning, and capital financing, including the AWWA's: *Manual of Practice M1, Principles of Water Rates, Fees, and Charges; Water Rates, Fees, and the Legal Environment; Manual of Practice M29, Water Capital Financing; and Financial Management for Water Utilities: Principles of Finance, Accounting, and Management Controls*, along with the textbook *The Effective Water Professional: Leadership, Communication, Management, Finance, and Governance*, published by the Water Environment Federation (WEF).

Relevant Project Experience

American Water Works Association, National Association of Clean Water Agencies, and Water Environment Federation. New Framework for Household Affordability and Financial Capability Assessment. Led the development of a new framework for measuring household affordability and financial capability assessment in the water sector intended to be used by the EPA to replace their existing Financial Capability Assessment guidance document. Researched affordability measurement methods used in the water sector and in other utility sectors both within and outside of the U.S. to identify potential options implementable by the EPA. Facilitated stakeholder and EPA outreach to identify the criteria to evaluate affordability alternatives against. Developed a new methodology meeting the most important criteria conveyed by stakeholders. Prepared a report and guidance document for implementation and use of the new recommended affordability methodology. Met with legislators on Capitol Hill to assist in conveying the issues with the existing affordability methodology and to advocate for the adoption of the new proposed methodology. Participated in meetings and workshops with EPA to discuss the new methodology and address their questions and issues.

City of Albany (NY). Regional Stormwater In-Lieu Fee and Credit Banking Feasibility Study. Completed a feasibility study for the implementation of a regional stormwater credit banking and in-lieu fee program to assist six municipalities in the Albany area address the green infrastructure portion of a regional wastewater long-term control plan. The project consisted of conducting research on credit banking and in-lieu fee programs that are in existence around the country, facilitating workshops with the six Albany municipalities to assess how such a program could be implemented on a regional basis, assessed the advantages and disadvantages of such a program, evaluated governance alternatives, and prepared a feasibility and action plan report.

Albany Pool Communities (NY). Long-Term Control Plan. Completed a financial analysis and affordability study to assist the City in assessing its financial capability of affording the capital projects associated with the CSO long-term control plan for six municipalities in the Capital Region.

City of Bridgeport (CT) – Sewer User Charge Study. Completed a comprehensive sewer user charge study for the Bridgeport Water Pollution Control Authority. The project consisted of development of a financial plan to identify revenue requirements over a multi-year forecast period, evaluation of the cost to serve customer of the system, including customers discharging domestic strength wastewater and high strength wastewater, evaluated sewer user charge structure alternatives to recover the WPCA's cost over time, including fixed charges, volumetric charges, and a wet weather charge based on customer impervious area.

Buffalo Sewer Authority (NY). Energy Procurement Support. Assisted the Buffalo Sewer Authority procure energy supply contracts with energy suppliers in New York. Evaluated the Authority's base and peak energy demands and assisted in identifying a hedging strategy that aligned with the Authority's risk tolerance. Prepared energy procurement RFP documents and solicited pricing bids from several energy suppliers. Evaluated the energy bids and assisted the Authority in identifying the terms of its energy supply contract and selecting a supplier most favorable to the Authority's needs.

Capital Region Water (PA). Affordability and Rate Consulting Support / Harrisburg, PA. Provided financial consulting services including preparation of affordability analyses, cost of service modeling to justify rates charged to outside jurisdictional customers, development of financial plans and rate projections, consisting of demand forecasts, projections of revenues and expenses, modelling fiscal requirements and targets, identification of rate revenue requirements, allocation of costs to both retail and wholesale customers, and calculation of utility rates. Involved in the planning and execution of the transfer of conveyance assets from the City of Harrisburg to the client, involving asset valuation, revenue and expense projections, and analysis of shared services costs between the City and client. Completed a bond feasibility report for the water system consisting of asset condition assessment and the development and projection of capital improvement needs over a five-year forecast period to satisfy trust indenture requirements. Completed an affordability assessment to support EPA negotiations on implementation of a long-term control plan.

Capital Region Water (PA). Financial and Rate Consulting Support / Harrisburg, PA. Provided financial consulting services including preparation of cost of service model to justify rates charged to outside jurisdictional customers, development of financial plans and rate projections, consisting of demand forecasts, projections of revenues and expenses, modelling fiscal requirements and targets, identification of rate revenue requirements, allocation of costs to both retail and wholesale customers, and calculation of utility rates. Involved in the planning and execution of the transfer of conveyance assets from the City of Harrisburg to the client, involving asset valuation, revenue and expense projections, and analysis of shared services costs between the City and client. Completed a bond feasibility report for the water system consisting of asset condition assessment and the development and projection of capital improvement needs over a five-year forecast period to satisfy trust indenture requirements.

Charlotte Water (NC). Comprehensive Water and Sewer Rate Studies. Project Manager for a study to evaluate and update CMU's existing water and sewer rate structure, evaluate customer assistance and affordability programs, develop rate structure alternatives, and assist in rate adoption and implementation. Addressed pricing objectives including inter- and intra-class equity, water conservation, revenue stability, low income affordability, and economic development. Completed cost of service studies to determine the cost responsibility of customer classes. Evaluated customer affordability at various income levels and household sizes within the service area. Facilitated a public input process by forming a stakeholder advisory group that consisted of representatives of residential customers in various neighborhoods across the service areas, as well as business representatives from the community. Conducted more than 15 public and stakeholder meetings to obtain customer feedback pertaining to the rate structure. Assisted CMU obtain Council approval for a modified rate structure methodology that included an enhanced lifeline rate, water conservation incentives, and sewer billing based on average winter consumption.

City of Cleveland (OH). Rate Expert Witness. Rate expert in a case involving a contract customer of the City of Cleveland. Prepared cost of service and rate evaluations, written expert reports, presented results to the Cleveland City Council and served as a rate expert in the case providing expert witness testimony.

City of Columbus (OH). Electric Utility Rate Study. Completed an electric utility rate study for the City to assist the City in developing a sustainable financial and rate plan. Evaluated customer electricity usage and demands. Developed projections of revenues from the sale of electricity, and expenses and revenue requirements of the utility. Completed a cost of service evaluation to assess the cost responsibility of each type of customer served by the City. Compared utility rates and rate tariffs of nearby electric utilities to the City's electricity tariff structure. Prepared electricity tariff recommendations based on the results of the cost of service evaluation and electricity tariff competitiveness assessment. Evaluated the net revenues of the system and their ability to fund the City's expanding street lighting program. Evaluated the City's purchased power agreements and assisted the City in developing an approach to adjusting its automatic power cost adjustment mechanism as part of their tariff structure to ensure full cost recovery and to pass through unexpected increases of purchase power costs onto its customers.

Appomattox River Water Authority (VA). Led the completion of a valuation and governance & ownership assessment to help the Authority and its Board of Directors assess the value of its water system and evaluate potential changes or enhancements to its governance and ownership structure. The valuation assessment considered four approaches to determining the system value: the Cost Approach, the Income Approach, the Sales Comparison Approach, and the Rate Base Approach.

City of Columbus (OH). Financial and Rate Consulting. Completed cost-of-service evaluations and rate, fee, and charge assessments to assist the City generate sufficient revenues to pay for upcoming water and sewer capital improvement and operation and maintenance programs. The project included completing a cost-of-service evaluation to determine the cost responsibility of the City's customers, and a rate structure evaluation to identify water and sewer rate structures that were closely aligned with the cost of providing service and developing rate formulas for the city's future use. Provided input into the City's affordability analysis to support implementation of a long-term control plan. Based on the results of this study, assisted the City in implementing a customer assistance program to address affordability by changing its water rates from a declining block structure to a "lifeline" rate and an inclining block structure for residential customers. Also, assisted the city in implementing a separate charge to customers to pay for its upcoming \$2.5 billion wet weather capital program. This charge recovers the cost of the program based upon the impervious surface area of the City's customers. Presented study results to city staff, city council, and other stakeholders using interactive financial modeling tools that were developed for the client. Reviewed the City's low income discount programs and evaluated the revenue and rate impacts associated with the enhancement of these programs.

Town of Darien (CT)– Inter-municipal Sewer Service Agreement Support. Assisted the Town of Darien negotiate a long-term sewer service agreement with the City of Stamford. Developed the sewer user charge pricing provisions included in the agreement, which consisted of a cost allocation process to allocate sewer costs to the Town based on various alternatives, including wastewater flow, billed water consumption, and flat charges for unmetered customers. Supported the WPCA in agreement negotiations with the City.

City of Dayton (OH). Water and Sewer Rate and Cost of Service Studies. Completed water and sewer rate studies for the City, consisting of estimation of revenue requirements, development of financial models, facilitating workshops with the City, completion of cost of service evaluations, and developing projections of utility rates. Also, prepared utility surveys and benchmarking studies to assess competitiveness of existing and proposed rates, and presented results to City staff and officials.

DC Water, Washington D.C. – Sewer User Charge Study. Completed a sewer user charge study to establish a conveyance and treatment rate for DC Water customers that discharge to a large sewer interceptor, the Potomac Interceptor. The study consisted of evaluating the portion of DC Water's costs associated with the Potomac Interceptor and the Blue Plains Wastewater Treatment Plant, developing a cost based allocation to various municipal and federal customers that discharge to the interceptor, and establishing a multi-year sewer rate. Prepared a detailed sewer user charge report and presented the results to the DC Water board.

City of Glens Falls (NY). Water and Sewer Rate Analysis. Completed a comprehensive water and sewer rate study for the City consisting of the development of a financial plan, evaluation of the cost of service to customers, and evaluation of rate structure alternatives. Developed wholesale water rates for future negotiations with neighboring communities, evaluated the unit cost of receiving and treating liquid sludge, septic waste, and industrial wastewater. Evaluated alternative rate structures, including the reduction of the minimum charge, converting the capital charge based on assessed value to a capital charge based on water consumption, and charging wastewater rates based on wintertime water consumption.

City of Kingston (NY). Kingston Wastewater Rate Study. Managed the completion of a wastewater rate study for the City's wastewater utility to assist the City generate sufficient revenues to pay for upcoming sewer capital improvement and operation and maintenance programs. An interactive financial planning model was developed to analyze historical and projected revenue requirements, and a five year rate schedule was designed for the City's consideration.

City of Lancaster (OH). Water Sewer Rate Study and Financial Capability Assessment. Project manager for a comprehensive water and sewer rate and charge study to support the client's capital investment planning process. Also, led efforts to complete a financial capability assessment to support the City's Long-Term Control Plan update. The project included assessing alternatives for financing water system capital investments and completing a cost-of-service evaluation to equitably recover utility costs from rate payers. In addition, a nonproprietary financial planning and rate design model was developed to assist in the pricing of utility services. Detailed analyses of customer costs, usage characteristics, capital improvement program costs, and neighboring utility rate comparisons were conducted to support the design of the rate components. At the completion of the project, the rate model was delivered to the city for its future use.

City of Prescott (AZ). Development Impact Fee Study. Project manager for the completion of a development impact fee study for the City. The purpose of the study was to assess whether the City's fees for the various service categories should be continued, and if so, calculate the development impact fees consistent with state statutes. As part of this engagement, development impact fee methods were developed and fees were calculated for Roads, Police, Fire, Library, Parks, Water, Wastewater, and Water Resources.

City of Virginia Beach (VA). Financial Services. Project Manager for a multi-year financial services contract for the City of Virginia Beach that included completing an economic evaluation to support asset management and CIP plans, true-up evaluation, developing an interactive financial planning model, and completing a cost of service evaluation. The true-up evaluation consisted of reviewing the City of Norfolk's cost allocation model for allocating operation and maintenance expenses, reviewing the rate model for allocation of fixed assets, and the rate of return on rate base for reasonableness. This effort

saved Virginia Beach more than \$1 million in payments to the City of Norfolk. The cost of service evaluation consisted of assessing future capital funding needs for the water and sewer utilities due to aging infrastructure, system expansion, and new regulations, determining revenue requirements over a five to ten year period, and developing rates, fees and charges to meet revenue requirements and other City rate-setting goals and objectives.

Charlotte Water (NC). Comprehensive Water and Sewer Rate Studies. Project Manager for a study to evaluate and update CMU's existing water and sewer rate structure, develop rate structure alternatives, and assist in rate adoption and implementation. Addressed pricing objectives including inter- and intra-class equity, water conservation, revenue stability, low income affordability, and economic development. Completed cost of service studies to determine the cost responsibility of customer classes. Evaluated customer affordability at various income levels and household sizes within the service area. Facilitated a public input process by forming a stakeholder advisory group that consisted of representatives of residential customers in various neighborhoods across the service areas, as well as business representatives from the community. Conducted more than 15 public and stakeholder meetings to obtain customer feedback pertaining to the rate structure. Assisted CMU obtain Council approval for a modified rate structure methodology that included an enhanced lifeline rate, water conservation incentives, and sewer billing based on average winter consumption.

Confidential Client (NY). Financial Due Diligence Review for Utility System Acquisition. Completed financial due diligence investigation for the acquisition of a Water Company in the eastern U.S. by an investor. Services included assistance in developing long-term capital improvement plans, reviewing and development of financial modelling assumptions regarding supply and demand, operation and maintenance costs, rate of return, capital expenditures and general rate setting methodology in accordance with each state's rate setting principles and requirements.

Confidential Client (Midwest). Hydroelectric Facility Transactional Due Diligence Support. Assisted a private investor complete review and due diligence for the potential acquisition of several hydroelectric power facilities in the upper Midwest. Validated the investor's financial model and business plan by reviewing and evaluating the electric and other revenues generated by the hydropower facilities, and the annual operations, maintenance, and anticipated future capital needs of the facilities. Provided input regarding the net revenue potential of the facilities and identified and evaluated potential risks to net revenues for the potential investor.

Confidential Client (SC). Environmental Liability Evaluation. Completed a review of the estimates of environmental liability reported to the Securities and Exchange Commission by a publicly traded, national, environmental services company. Reviewed pertinent SEC filings, environmental liability reporting policies and procedures established by the Company, requirements of FASB Statement No. 5 and SFAS Statement No. 143 related to reporting of environmental contingent liabilities and asset retirement obligations. This information was assessed and used to form an opinion about the reasonableness of the estimates of environmental liability prepared by the Company. Our clients, the investment banking firms, relied on our efforts as underwriters for the bonds to be issued by the Company and as agents and lenders with respect to a credit agreement entered into by the Company. In addition, other lenders participating in the syndicate also relied on our report from a credit agreement perspective.

Confidential Client (TX). Financial Due Diligence Review for a Water Public-Private Partnership Project. Completed technical and financial due diligence evaluations for an investor group considering an

equity investment in a billion-dollar water public-private partnership. Services included review and evaluation of contractual documentation with the owner, developer, and subcontractors, developed up-side and down-side financial projections and risk scenarios, identification and evaluation of investor risk, review and development of financial modelling assumptions regarding supply and demand, operation and maintenance costs, rate of return, capital expenditures and cost recovery. Efforts assisted equity investors evaluate the public-private partnership deal.

City of Dayton (OH). Water and Sewer Rate and Cost of Service Studies. Assisted the City in negotiating a long-term water supply contract with an neighboring municipality, and acceptance of a “utility basis” cost of service model that serves as the basis for the cost of purchased water specified in the water supply contract. Completed water and sewer rate studies for the City, consisting of estimation of revenue requirements, development of financial models, facilitating workshops with the City, completion of cost of service evaluations, and developing projections of utility rates. Also, prepared utility surveys and benchmarking studies to assess competitiveness of existing and proposed rates, and presented results to City staff and officials.

City of Dayton (OH). Water Efficiency Master Plan and Rate/Cost of Service Studies. Assisted in completing a water efficiency master plan for the City’s water system that consisted of developing a long-term strategic business plan to help guide the organization’s operation and infrastructure investments. Completed an assessment of current operational efficiency and assisted in identifying areas with the most potential for savings and potential to realize “quick wins”, spanning multiple departments and functions. Completed benchmarking studies to assess cost competitiveness, and assisted in completing an in-depth financial analysis of organizational optimization opportunities. Also, completed water and sewer rate studies for the City, consisting of estimation of revenue requirements, development of financial models, facilitating workshops with the City, completion of cost of service evaluations, and developing projections of utility rates. Prepared utility surveys and benchmarking studies to assess competitiveness of existing and proposed rates, and presented results to City staff and officials.

Delta Diablo (CA). Financial Feasibility Study. Led the completion of a financial Feasibility Study for the East County Bioenergy Project. The project consisted of wastewater system improvement to accept food waste for the generation of renewable biogas that could be sold to generate additional revenues for the District. Developed a financial model and evaluated project risk using Monte Carlo simulation and scenario analysis. Presented results of the financial model to assist the District in making a project investment decision.

Erie County (NY). Sewer Regionalization Feasibility Studies. Managed the evaluation of the feasibility of consolidating three adjacent wastewater systems into Erie County Sewer Districts. Managed the financial evaluation of the impacts of consolidating included potential cost savings and impacts on customer taxes and user fee rates.

Falls Church Public Schools (VA). Owner’s Agent Services. Completed evaluation of the financial impact to the FCCPS of the development of the Fellows Property, an undeveloped property located within the FCCPS service area. The financial evaluation consisted of estimating the property tax revenue that would be generated as a result of the new development (i.e., subdividing the property into six residential properties) and the estimated educational cost incurred by the FCCPS as a result of serving additional students that would result from the development of the Property.

General Services Administration (MD). Real Property Utilization and Disposal Alternatives Study. Lead Financial Analyst for evaluating Real Estate disposal alternatives for a vacant office building in Bethesda Maryland owned by the General Services Administration (GSA). Created valuation documentation and cash flow analyses for various redevelopment options and transaction approach scenarios to determine the overall best value to the Federal Government. Support the project team in identifying opportunities for positive total cash flow and return on investment, increasing the potential transaction value in excess of \$37M.

Gloversville-Johnstown Joint Sewer Board (NY). Wastewater Cost of Service Study. Completed a wastewater cost-of-service study to assist the board in equitably recovering wastewater utility costs from residential, commercial and industrial customers. As a result of this engagement, wastewater rates were unanimously approved by the board.

City of Harrisburg and Capital Region Water (PA), Financial and Operational Improvements. Assisted the City of Harrisburg and Capital Region Water reorganize the operations of its water, wastewater, and stormwater systems as part of the turnaround of the City's financially distressed status under the Municipalities Financial Recovery Act. Led financial analysis efforts to analyze shared services costs between the City and Capital Region Water. Assisted in the planning and execution of the transfer of assets from the City to Capital Region Water, involving asset valuation, revenue and expense projections, and analysis of shared services costs between the City and CRW. Completed a bond feasibility report for the water system consisting of asset condition assessment and the development and projection of capital improvement needs over a five year forecast period to satisfy trust indenture requirements. Provided financial consulting services to CRW following the reorganization, including the development of financial plans and rate projections, consisting of demand forecasts, projections of revenues and expenses, modelling fiscal requirements and targets, identification of rate revenue requirements, allocation of costs to both retail and wholesale customers, and calculation of utility rates. Assisted CRW in revising and renegotiating inter-municipal agreements with suburban communities.

Henrico County (VA). Economic Evaluation to Support Asset Management and CIP Plans. Completed an economic evaluation to support asset management and CIP plans, conducted cost of service evaluation and rate, fee, and charge study to assist Henrico County develop a sustainable financial management plan, determine revenue requirements over the next ten years, and ensure equitable recovery of costs. The study also consisted of completing an impact fee evaluation to ensure that growth pays for itself over the planning period. The financial management plan was developed using an interactive forecast model that allowed alternative scenarios to be easily evaluated. Connection fees, fire protection charges, and local facility fees were established by determining the costs of providing these services and developing fees to equitably recover these costs from customers utilizing the services. Rate, fee, and charge formulas were developed for the County's \$80 million operating budget.

Hill Air Force Base (UT). Public-Private Partnership Lease Arrangement. Senior Analyst for the financial analysis of a proposed Enhanced Use Lease (EUL) at Hill Air Force Base. The analysis included evaluating real estate market conditions and land sales data, completing a life cycle cost analysis of Air Force office space procurement options and developing valuation models for potential site development scenarios. Other activities included developing the financial portion of the Business Case analysis, supporting presentations to leadership, responding to technical questions and developing potential site development scenarios.

Isle of Wight County (VA). Stormwater Feasibility Study. Completed a stormwater feasibility study to assess the cost of the County's stormwater program and develop funding alternatives to recover program costs. The funding alternatives considered the recovery of costs through Ad Valorem taxes and stormwater fees.

Inter-American Development Bank, Technical and Financial Due Diligence of Interagua, Guayaquil, Ecuador. Completed technical and financial assessments of the Interagua water and wastewater utility operating in Guayaquil, Ecuador to support financing due diligence for the Inter-American Development Bank. Reviewed the operations and financial condition of the Interagua utility, including projections of revenues from water and wastewater tariffs, planned capital expenditures, and projections of operational expenses and cash flows. Assessed key financial metrics, such as cash reserve levels and current and projected debt service coverage margins. Reviewed customer demand and growth projections and completed sensitivity analysis of key financial model inputs and assumptions. Completed an affordability analysis to assess customer income levels and the ability of customers to pay for water and wastewater services. Prepared a technical and financial feasibility report and presented results to the IADB.

City of Kingston (NY) - Kingston Rate Study. Managed the completion of a utility rate study for the City's wastewater utility to assist the City generate sufficient revenues to pay for upcoming capital improvement needs and operation and maintenance programs. An interactive financial planning model was developed to analyze historical and projected revenue requirements of the system, and a five year rate schedule was prepared to provide sufficient revenues for the City's utility fund.

Lee County (FL). Asset Valuation and Business Case Evaluation. Provided economic and financial support of the Lee County Asset Management program. Facilitated asset valuation and business case evaluation workshops to help develop asset risk prioritization and a capital improvement plan prioritization approach. Developed an interactive financial model to assess the financial implications of funding the capital plan to meet the desired level of service goals.

Lehigh County Authority (PA). Public-Public Partnership: Bond Feasibility Consultant. Provided technical and financial due diligence services for the Lehigh County Authority to support the issuance of revenue bonds to fund the up-front concession payment for the utility assets associated with the concession agreement with the City of Allentown, PA. Reviewed and evaluated financial projections and cash flow forecasts, evaluated upside and downside financial scenarios, supported organizational due diligence, system condition assessment, and provided bond feasibility opinions related to the transaction.

Lehigh County Authority (PA). Concession Agreement Support. Provided financial support to Lehigh County Authority in their bid for the City of Allentown's water and wastewater concession. Reviewed and evaluated key financial forecast assumptions and projections supporting the cash flows associated with the concession. Identified key risk factors for consideration during the negotiation process. Developed a financial feasibility report to assist the Authority in issuing \$300 million in debt to finance the concession transaction. Continue to work with the Authority to optimize revenues and costs under the concession agreement.

LS Power (NJ). Economic Evaluation for LS Power's West Deptford Site. Assessed the potential economic impact of the construction and operation of a modern coal-fired power plant in West Deptford Township, New Jersey. Utilized IMPLAN® software to assess the economic impacts of a 500 MW coal fired power plant on an 11 county region. Examined the direct, indirect, and induced economic benefits to the region, effects of the project on local employment and economic output, during construction and

post construction, and evaluated the potential peak economic stimulus. Prepared report that provided information to elected officials and other stakeholders to support a decision to proceed with the project.

Metropolitan District Commission (CT). Economic Evaluation for Asset Management Program. Provided economic and financial support of the Metropolitan District Commission's Asset Management program. Facilitated business case evaluation workshop to help develop asset risk prioritization and a capital improvement plan prioritization approach. Prepared business case templates and a capital prioritization approach for the District's capital improvement program. Developed an interactive financial model to assess the financial implications of funding the capital plan to meet the desired level of service goals.

The Metropolitan District (CT). Financial Support on Various Projects. Provided financial support on a number of District Projects, including economic and financial analysis associated with the District's Asset Management Program, valuation analysis related to the potential acquisition of water and wastewater systems, calculation of system development charges, economic analysis regarding a biosolids energy project, and financial planning and modeling assistance to support water and wastewater planning. Completed valuations of publicly-owned and investor-owned utilities to assist the District in making utility acquisition decisions.

Metropolitan District Commission (CT). Bioenergy Feasibility Study. Completed a financial evaluation of a proposed bioenergy facility for the MDC that would recover methane gas from wastewater sludge and convert to bioenergy using a co-generation facility that would produce electricity and heat that could be utilized by MDC to reduce its purchased electricity costs. Prepared a business case evaluation for the project including evaluating the life-cycle costs and benefits of the project, developed a financial model for the project, incorporated the impact of various funding sources into the financial analysis, including the generation of renewable energy credits and the use of clean renewable energy bonds (CREBs) to fund the project.

Metropolitan Water Reclamation District of Greater Chicago (IL). Affordability Expert Witness. The District serves a population of 10.35 million people, and owns and operates one of the world's largest water reclamation plants. Served as the lead financial analyst in completing a comprehensive financial, economic, and environmental analyses of potential effluent disinfection at the District's three largest wastewater reclamation plants. Developed an economic and affordability model and completed an analysis of the impact of funding projects needed to meet the effluent disinfection requirements. Assessed the ability to fund and finance the District's entire capital program, assessed the impact on customer's cost of service, and assessed customers' ability to pay for the proposed improvements. Presented written and oral testimony of evaluation results before the Illinois Pollution Control Board.

Milwaukee Metropolitan Sewerage District (WI). Operations Analysis and Procurement Strategies. The Milwaukee Metropolitan Sewerage District provides wastewater collection, conveyance and treatment system services to 28 communities. Assisted the District complete a competitive procurement process for the management, operation, and maintenance of the wastewater collection, conveyance and treatment system. Participated in the preparation of procurement documentation and the financial evaluation of contract and public operations alternatives. Also led the evaluation pertaining to the incremental cost of public operations versus contract operations. The analysis of public versus contract operations focused on the estimated net cost and cost savings as compared to the low best and final offer, and an evaluation of the financial and operating risk between the options.

Monroe County Department of Environmental Services (NY). Sewer User Charge

Study. Completed a Sewer User Charge Study to assist the MCDES generate sufficient revenues to pay for operating and capital needs. MCDES rate structure consists of a combination of Ad Valorem taxes for capital cost recovery, and sewer user charges based on billed water consumption for the recovery of operating expenses. Evaluated the costs of provide sewer service to each of the four different districts based on the varying levels of service provided. For some districts, MCDES provides treatment, conveyance, and collection services, and for others, collection services are provided by the local jurisdiction. Developed a detailed excel-based financial model to assist in preparing the financial plan and cost of service evaluation. Assisted the MCDES evaluate various alternative sewer user charge structures. Prepared and provided a user-friendly sewer rate model for MCDES' future use.

Nassau County (NY), Shared Services Regionalization Study. Assisted in the completion of a regional study to identify the cost savings and operational efficiencies that could be gained from consolidating school districts, fire, police, sanitation, and water services within the County. Led the project team involved in assessment of efficiency savings associated with consolidating 52 water systems within the County. Facilitated working groups with project team members and stakeholders, developed a financial model to analyze the potential savings from consolidation of administrative and operational functions associated with each system, developed strategies for consolidation and sharing services among the water systems, prepared the regionalization study report for the water sector, and led outreach efforts to communicate the results of the study to elected officials, staff, and the general public.

City of Newark (NJ) – Sewer User Charge Study. Completed a sewer user charge study to assist the City pay for a capital improvement program to repair its aging infrastructure system and achieve regulatory requirements. The study consisted of preparing a multi-year financial plan, evaluating the cost of providing sewer collection and treatment services, and designing a fair and equitable rate structure for the City's sewer customers. Several sewer user charge structures were identified and discussed with the City, and a financial model was prepared to evaluate a shortlist of alternatives. The sewer user charge recommendations were summarized in a report, and the results were presented to City Council.

New Castle County (DE). Arbitration and Third-Party Cost of Service Review. Supported New Castle County in negotiating utility rates and a new inter-municipal agreement with a neighboring municipality. Reviewed the cost of service justification for the rates that were being charged and assisted the County in establishing more favorable pricing terms. Identified cost of service methodology and approaches that were inconsistent with common industry practice and assisted the County during an arbitration process to establish more acceptable methods of calculating the utility rates. Served as an expert witness in the Arbitration proceedings. Prepared and defended third-party expert reports through a litigation process. Efforts resulted in the establishment of more favorable contract terms.

City of New London (CT) – Sewer User Charge Study. Completed a comprehensive sewer user charge study for the City of New London that consisted of developing an excel-based financial model to forecast the system cash flows, revenues, and expenses over time, completed a cost of service evaluation to determine the cost responsibility of customers, and evaluation of various sewer user charge alternatives to recover the costs. Also, evaluated and updated the City's connection fees for sewer and water. Results of the study were documented in a report and also presented to the City Council for consideration and adoption.

City of Norwalk (CT) - Financial Plan and Rate Study. Provided annual financial plan, financial modeling, and rate support of the City's Water Pollution Control Authority. Developed financial plan and model to forecast cash flows and revenue requirements over a 10 year forecast period, including a projection of customer accounts, billed flow, operations, maintenance expenses, capital project costs and funding needs. Allocated costs to City customers and evaluated rate structure alternatives to generate sufficient revenues for the Authority and to ensure equitable rates over time. Prepared rate recommendations and presented results to the Authority board.

City of Norwalk (CT) – Sewer User Charge Studies. Completed a Sewer User Charge and Consumption-Based Billing Study to evaluate the feasibility and considerations of changing from a flat rate structure for residential customers that is billed on the real estate tax bill to a consumption-based billing structure. This evaluation included identification of potential rate structure alternatives, including consumption-based billing alternatives, evaluation of the advantages and disadvantages of consumption-based billing alternatives, detailed analysis of sewer rate structure alternatives, assessment of the potential impacts on customer bills, evaluation of the technical and administrative feasibility of implementing consumption-based billing, an evaluation of the potential financial impacts of changing rate structures in terms of billing data acquisition, changes to billing processes, and delinquency rates, and an assessment of the regulatory and legal aspects of the existing rate structure and the rate structure alternatives that were identified. Results of this evaluation were presented to the WPCA and documented in a detailed report. Also, developed financial plans and financial model to forecast cash flows and revenue requirements for the WPCA, including a projection of customer accounts, billed flow, operations, maintenance expenses, capital project costs and funding needs. Allocated costs to City customers and evaluated rate structure alternatives to generate sufficient revenues for the Authority and to ensure equitable rates over time. Prepared rate recommendations and presented results to the WPCA board.

City of Newburgh (NY) - Financial Plan and Rate Study. Developed a financial plan, financial modeling, and rate plan for the City's water and sewer utilities to support the capital needs of the system. Developed financial plan and model to forecast cash flows and revenue requirements over a 10 year forecast period, including a projection of customer accounts, billed flow, operations, maintenance expenses, capital project costs and funding needs. Allocated costs to City customers and evaluated rate structure alternatives to generate sufficient revenues for the City and to ensure equitable rates over time. Prepared rate recommendations and presented results to City Council.

Northern Will County (IL). Water System Valuation Opinion. Provided expert testimony regarding the valuation of the American Lake Water Company, a subsidiary of the American Water Company to support condemnation proceedings. The valuation opinion was prepared including consideration of the asset, income, and market-based valuation methodologies.

Onondaga County Water Authority (NY). Water Rate Study. Completed a water rate study to assist the OCWA generate sufficient revenues to pay for operating and capital needs and recover costs from customers in an equitable manner. Project included completing a water demand forecast, a financial plan, and a rate design model. Assisted in the design of water rates, and prepared and provided a rate model for OCWA's future use.

Puerto Rico Aqueduct & Sewer Authority (PR). Alternative Project Delivery Evaluation: Procurement Support. Provided consulting services to evaluate financial and alternate project delivery options and their impact on PRASA's financial situation, for the Valenciano Regional Aqueduct System (reservoir/dam,

water treatment plant and transmission system). The goal of this project was to expand water availability in the East Central Region, provide redundancy and improve potable water quality. Assisted in the preparation of the Request for Qualifications (RFQ) package for the project, as well as provided support in the preparation of addendums, and in the eventual evaluation of statements of qualification (SOQ) and short-listing of prospective proponents. Assisted in the preparation of the Request for Proposals (RFP).

Puerto Rico Aqueduct & Sewer Authority (PR). Comprehensive Energy Management P3s: Procurement Support. Provided financial support for a comprehensive island-wide energy initiative to improve energy efficiency, reduce energy costs, and minimize pricing volatility associated with PRASA operation of over 125 water treatment plants, 60 wastewater treatment plants, 1,500 pump stations, 300 water wells, and 70 buildings. Responsible for the financial aspects of the identification of project opportunities, development of RFQs and RFPs for performance contracting services and power purchase agreements, review of energy services companies that proposed on the work.

Region of Waterloo (Ontario Canada). Owner's Agent / Procurement Support. Financial analyst for assisting the Regional Municipality of Waterloo, Ontario evaluate whether to continue with contract operations of 13 wastewater treatment plants or return the system back to public operations. Reviewed existing contracts and related performance, financial analysis of options, managed the completion of interviews with other utilities that have returned operations to public, and provided financial analysis information to support a policy decision of the preferred approach.

Saratoga County and Albany County (NY). Regional Biosolids Governance Assessment. Evaluated regional governance alternatives that would allow the Saratoga County Sewer District and the Albany County Sewer District to work together and develop a regional biosolids facility that would be more cost effective than constructing two separate facilities. Evaluated the benefits and limitations of Authority and Inter-Municipal Agreement governance structures and weighted the advantages and disadvantages of each. Assisted both districts in developing a governance plan to support the joint development of the facility.

Saratoga County Water Authority (NY). Water Bond Feasibility. Prepared bond feasibility report for the issuance of \$40 million in water system revenue bonds to finance the construction of a 16 mgd water treatment plant, raw water pipeline, pump station, and distribution mains.

City of Stamford (CT) - Assessment and Connection Fee Expert Witness. Provide assessment and connection fee expert witness assistance to the City of Stamford related to litigation with a developer. The City imposes assessments on properties that are benefitted when utility services are installed, and a connection charge is assigned to the property whenever construction results in the creation of additional units that are connected to the utility system. In addition, any remaining costs not paid by the assessment or connection fees are incorporated into the utility user charge. Prepared an analysis of the cost and benefit provided by the City to the developer associated with the property connected to the City's system, evaluated the merits of the City's assessment, connection, and user fees. Provided an expert report and deposition on the technical justification for the fees and the reasonableness of the fees that are charged. Assistance resulted in the litigation being settled between the parties.

Town of Clifton Park (NY). Sewer Consolidation Study. Completed an evaluation of the potential for combining the Town's sewer districts into one separate enterprise fund and modifying the existing sewer

rate structure to improve ease of administration and maintain rate equity. The Town Sewer Department manages and operates eight sewer districts within the Town. Over several years, the Town has acquired aging sewer systems from developers, each having separate sewer rate structures. As part of this study, evaluated the Towns sewer system organization and funding alternatives, funding approaches used by other sewer districts in New York State, completed sewer rate calculations under several alternative funding options, and prepared recommendations for sewer district consolidation.

Town of Greenburgh Consolidated Water District (NY) - Water Financial Plan and Rate Study. Prepared a financial plan, financial model and water rate plan to assist the Town pay for anticipated water system capital improvements. The financial plan and model was prepared to forecast cash flow and revenue requirement needs over a 10 year period. The model included forecasts of customer accounts and water consumption, operations, maintenance, and capital project costs, and capital funding needs over the forecast period, including the cost of purchased water from New York City. The rate study consisted of an allocation of costs to the Town's customers, and an evaluation of rate structure alternatives to provide sufficient revenues to the Town and to ensure an equitable and stable revenue source over time to support the needs of the system. Prepared and provide the Town with financial and rate models, and presented rate recommendations to the Town Board and the Water Advisory Committee.

Town of Mamaroneck, City of New Rochelle, Village of Pelham Manor, Village of Larchmont, and Westchester County (NY) - Consortium Consolidation Feasibility Study. Identified potential alternative organizational structures available for the consortium members for future regional management of their combined systems, evaluated the financial, technical, and legal advantages and disadvantages of each governance alternative to allow for the assessment of the feasibility of alternatives. Identified the key decision factors associated with each alternative, including general powers and authority, roles and responsibilities of each party, financing, regulatory compliance, transfer of assets, and liability identification. Facilitated meetings with legal and financial representatives to discuss potential structures that may warrant additional investigation, identified existing contracts, enabling legislation, regulatory, and other governing and funding/financing requirements that may have potential impacts on the feasibility of alternatives under consideration. Facilitated workshops with the consortium members and prepared a report documenting the feasibility of alternatives.

Utilities Inc (IL), Valuation and Strategic Financial Consulting. Managed the completion of financial assessments, including the projection of performance and business value for more than 90 operating companies of an investor-owned utility. Provided analysis results to the senior leadership team of Utilities, Inc.

Virgin Islands Public Services Commission, St. Thomas, U.S. Virgin Islands. User Fee Evaluation. Served as a financial and rate expert for the U.S. Virgin Islands PSC regarding the Waste Management Authority's solid waste and wastewater utility rate cases. Reviewed financial and rate aspects of the Authority's filings, prepared written testimony, and presented oral testimony before the Public Services Commission. Application involved establishment of new Authority Environmental User Fees and Wastewater User Fees. Technical issues reviewed involved the reasonableness of the rate revenue requirements, fairness and equitability of the rate structure, and affordability issues.

Waste Management Authority, St. Thomas and St. Croix. U.S. Virgin Islands. Financial Consulting and Rate Study Support. Provided financial consulting and rate calculation support for the Waste Management Authority's wastewater and solid waste utilities. Assisted the Waste Management Authority complete a detailed cost of service evaluation to ensure equitable recovery of costs from various

categories of customers. Prepared tariff models and developed rate and fee recommendations. Document results in rate study report that was presented to the Authority and the PSC for approval.

Water Research Foundation (CO). Rate Approval Process Communication Strategy and Toolkit. Principal investigator on a research project to identify and develop communication approaches, messages, and tools that water utilities can use to communicate water rate and pricing changes more effectively to governing board members, and gain support for needed utility rate adjustments. Through this research, identified the factors critical to successful rate case adoptions, identified factors that tend to inhibit successful rate adoption, developed a framework for effective rate communications, and prepared a rate communications toolkit that can be used by utilities to effectively communicate and garner support for rate adjustments.

Water Research Foundation (CO). New and Emerging Capital Providers for Infrastructure Funding. Principal investigator on a research project to identify and evaluate new and emerging capital financing alternatives and capital providers relevant to the water industry. Identified new and emerging capital providers and financing alternatives, evaluated their benefits and limitations. Prepared research report and capital financing evaluation toolkit consisting of a series of case studies and a decision support tool that can be used to evaluate the financing alternatives.

Wayne County (MI). Comprehensive Assessment and Master Plan. Assisted in the completion of an organizational review and comprehensive master plan to assess the operational efficiency and identify efficiency improvements for the Wayne County, Department of Environmental Services. Led the finance and management work group that focused on the review and analysis of budget, finance, and accounting functions of the Department. Identified organizational savings opportunities and assisted in compiling and prioritizing the opportunities to identify quick wins that could be implemented immediately to build program momentum. Completed benchmarking of organizational efficiency metrics to assess current and potential future efficiency opportunities. Developed public outreach materials describing the master plan, and assisted in presenting the results to County leadership and community stakeholders.

Westchester Joint Water Works (NY). Rate Studies and Governance Evaluation. Provided rate consulting support to the WJWW including developed projections of rate revenue requirements, completed cost of service studies to ensure costs allocated equitably to each of its customers, and assisted the member municipalities in revising their rate structures. Also assisted the WJWW in evaluating various governance structures, developing annual budgets, and has also assisted the WJWW in revising its rate methodologies associated with its wholesale water customers, changing from a location-specific cost of service approach to an average cost approach. The results of these efforts have improved the fairness and equity of the water rates charged to WJWW's customers.

Williamsport Sanitary Authority (PA). Nutrient Credit Bank Economic Evaluation. Completed an economic feasibility study to assess the purchase of nutrient credits from a nutrient credit bank versus designing and constructing various capital planning options for nutrient removal. Developed an economic model to evaluate alternatives and assist in decision making. Prepared procurement documents for the pricing of nutrient credits from various sources. Analyzed nutrient credit purchase costs versus capital construction costs as part of completing the economic feasibility study.

Other Relevant Experience

Albany Water Board, NY – Business Case Evaluations to support an asset management program
 Borough of Elmwood Park, NJ – Water financial plan
 Buncombe County MSD, NC – Merger study.
 Chesterfield County, VA – Capacity fee evaluation, water and wastewater rate study.
 City of Bridgeport, CT – Wastewater rate study.
 City of Darien, CT – Inter-municipal wastewater service agreement
 City of E. Providence, RI – Water and wastewater rate study
 City of Evanston, IL – Water and wastewater rate study.
 City of Fort Wayne, IN – Water and wastewater valuation study.
 City of Harrisburg, PA – Asset transfer support
 City of Heath, OH – Water and wastewater rate study
 City of Hopewell, VA – Wastewater bond feasibility study
 City of Key West, FL – Sewer, stormwater, solid waste, marina rate studies, indirect cost study
 City of Kingston, NY – Wastewater rate study
 City of Lancaster, OH – Water and wastewater rate study, financial capability assessment
 City of Lansing, MI – Wastewater rate study
 City of Lorain, OH – Wastewater regionalization study
 City of Marysville, OH – Water and Wastewater rate studies, capacity fee analyses.
 City of Miamisburg, OH – Water and wastewater rate studies, valuation assessment
 City of New London, CT – Water and wastewater rate study
 City of Newark, NJ – Water and wastewater rate study
 City of Newark, OH – Water and wastewater rate study
 City of Norwalk, CT – Wastewater rate study, stormwater feasibility assessment, strategic plan
 City of San Diego, CA – Water rate study
 City of Stamford, CT – Capacity fee expert witness support
 City of Virginia Beach, VA – Water and wastewater rate studies, bond feasibility support.
 City of Warren, OH – Inter-municipal agreement support
 Delaware County, OH – Capacity fee evaluation
 Department of the Public Advocate, NJ – Valuation assessment
 DC Water, Washington D.C. – Conveyance cost of service evaluation
 Erie County DEP, NY – Merger feasibility studies
 Greene County, OH – Wastewater rate study.
 Henrico County, VA – Water and wastewater rate studies, capacity fee evaluation
 Isle of Wight County, VA – Water and wastewater rate studies, financial planning.
 Macomb County, MI – Wastewater acquisition evaluation, rate studies.
 Metropolitan District Commission, CT – Financial planning, acquisition support.
 Miami-Dade County Seaport Dept, FL – Financial planning, bond consulting support
 Milwaukee Metropolitan Sewer District, WI – Owner’s agent operations contracting assessment.
 Monroe County Department of Environmental Services, NY – Wastewater rate studies
 Montgomery County, OH – Water and wastewater rate studies.
 New Castle County, DE – Inter-municipal wastewater agreement support.
 Northern Kentucky SD1, KY – Wastewater Financial Modeling
 Onondaga County Water Authority, NY – Water rate study
 Onslow Water and Sewer Authority, NC – Water and wastewater rate studies, capacity fee evaluation.
 Passaic Valley Sewerage Commission, NJ – Wastewater cost of service evaluation
 Philadelphia Water Department, PA – Financial modeling support.
 Prince William County Service Authority, VA – Water and wastewater rate study
 Saratoga County Water Authority, NY – Water Bond feasibility support.
 Solid Waste Authority of Central Ohio – Financial planning and modeling
 Summit County, OH – Wastewater Rate study.
 Town of Greenburgh, NY – Water rate study.

Town of Lincoln, RI – Wastewater rate study.
Town of Newburgh, NY – Wastewater affordability assessment and rate study.
Union County, NC – Water and wastewater rate study and capacity fee assessment.
Virgin Islands Waste Management Authority, USVI – Sewer and solid waste fee assessment.
Williamsport Sanitary Authority, PA – Wastewater rate study, nutrient credit support, inter-municipal agreement support
City of Heath, OH – Water and wastewater rate study
City of Lorain, OH – Wastewater regionalization study
City of Marysville, OH – Water and Wastewater rate studies, capacity fee analyses.
City of Miamisburg, OH – Water and wastewater rate studies, valuation assessment
City of Newark, OH – Water and wastewater rate study
City of Warren, OH – Inter-municipal agreement support
Delaware County, OH – Capacity fee evaluation
Greene County, OH – Wastewater rate study.
Montgomery County, OH – Water and wastewater rate studies.
Summit County, OH – Wastewater Rate study.

Publications/Presentations

Mastracchio, J.M. “A Path Forward on Affordability”, presented at the Utility Leaders Plenary Session at WEFTEC, Chicago, IL, September 14, 2019.

Mastracchio, J.M. “The Nuts and Bolts of the New Affordability Proposal”, presented at the River Rally Conference, Cleveland, OH, June 23, 2019.

Mastracchio, J.M. “Evaluating if Water Service is Affordable – Integrated Planning and Beyond”, presented at the American Water Works Association Annual Conference, Denver, CO, June 10, 2019.

Mastracchio, J.M. “Strategies and Approaches that Small Utilities Can Use to Improve Success in Funding Deferred Capital Needs”, Utility Management Conference, Nashville, TN, March 2019.

Mastracchio, J.M. “Asset Bundling, Alternative Financing, and Cold Hard Cash”, presented at the American Water Works Association Annual Conference, Las Vegas, NV, June 13, 2018.

Mastracchio, J.M. “Sustainability and Implications for Utility Management and Financing”, presented at the P3 Water Summit, San Diego, April 4, 2018.

Mastracchio, J.M., et al., “Financing & Charges for Wastewater Systems,” Manual of Practice M27, 4th Edition, 2017.

Mastracchio, J.M. “New & Emerging Capital Providers for Infrastructure Funding”, presented at the 2017 NACWA Conference, Tampa, FL, February 6, 2017.

Mastracchio, J.M. “Innovations in Water Infrastructure Financing: Addressing the Infrastructure Gap”, presented at the 2017 Utility Management Conference, Tampa, FL, February 8, 2017.

Mastracchio, J., Huestis, T., Petersen, E. 2017. New & Emerging Capital Providers for Infrastructure Funding. Project #4617. Denver, Colo.: Water Research Foundation.

Mastracchio, J., A. Santos, R. Giardina, R. Raucher, K. Raucher, M. Wyatt Tiger, J. Hughes, and R. Atwater. 2016. Rate Approval Process Communication Strategy and Toolkit. Project #4455. Denver, Colo.: Water Research Foundation. Mastracchio, J.M. “The Effective Water Professional: Leadership, Communication, Management, Finance, and Governance”, Water Environment Federation, 2015.

Mastracchio, J.M. “Five Ways to Achieve Long-Term Financial Strength”, presented at the 2015 Utility Management Conference, Austin TX, February 18, 2015.

Mastracchio, J.M. "Financial Management: Equip Your Utility for Economic Resilience", presented at the 2014 American Water Works Association Conference, Boston, MA, June 9, 2014.

Mastracchio, J.M. "Rate Approval Triumphs and Challenges: Keys to Successful Governing Board Communications", presented at the 2014 American Water Works Association Conference, Boston, MA, June 10, 2014.

Mastracchio, J.M., et al., "Water Capital Financing, Manual of Practice M29," Led the subcommittee involved in updating and publishing a new edition of the M29 manual.

Mastracchio, J.M., et al., "Developing Rates for Small Systems M54," Chapter author involved in updating and publishing a new edition of the M54 manual.

Mastracchio, J.M., "Preparing a Utility For Financing," presented at the 2013 Utility Management Conference, Glendale, AZ, March 11, 2013.

Mastracchio, J.M., et al., Financial Management for Water Utilities: Principles of Finance, Accounting, and Management Controls, American Water Works Association (AWWA), 2nd Edition, 2012.

Mastracchio, J.M., "Financial and Rate Planning, A Strategic Perspective," presented at the New York State County Manager's Association Annual Meeting, Albany NY, February 29, 2012.

Corssmit, C.W., Editor, and contributing editors, reviewers, and technical editors: Hildebrand, M., Giardina, R.D., Malesky, C.F., Matthews, P.L., Mastracchio, J.M., "Water Rates, Fees, and the Legal Environment," American Water Works Association (AWWA), 2nd Edition, 2010. ISBN 978-1-58321-796-2.

Mastracchio, J.M., Ginley, J.F., "Utility to Utility Collaboration: Working Together to Tackle Today's Issues," presented at the Annual Conference of the American Water Works Association, New York Section, Saratoga Springs NY, April 20-22, 2010.

Mastracchio, J.M., "Budgeting and Financial Planning," in Wastewater Collection System Management, Manual of Practice No. 7, Chapter 8. Water Environment Federation 2009.

Mastracchio, J.M., "The Dollar Stretch: A Rate and Financial Review Warm Up," presented at the Workshop on Strategic Financial Planning: The Utility's Road Map to Financial Health, Annual Conference and Exposition of the American Water Works Association (AWWA), San Diego CA, June 14-18, 2009.

Mastracchio, J.M., et al., "Financing Water and Wastewater Utility Capital Program Needs," presented at the Utility Management Conference sponsored jointly by the American Water Works Association and Water Environment Federation (AWWA/WEF), New Orleans LA, February 17-21, 2009.

Mastracchio, J.M., "Capital Project Funding: Improving Your Success Rate," presented at the 26th Annual Greater Buffalo Environmental Conference, New York Water Environment Association, Western Chapter, Buffalo NY, March 18, 2008.

Mastracchio, J.M., et al., "Water Capital Financing, Manual of Practice M29," workshop presentation at the 126th Annual Conference and Exposition of the American Water Works Association (AWWA), Toronto ON, June 23-28, 2007.

Lockridge, R., Mastracchio, J.M., Santos, A., "Maintaining Long Term Financial Health," Talk of the Towns, pp. 25-26, May/June 2007. Association of Towns of the State of New York.

Mastracchio, J.M., "Economic and Financial Elements of Water Utility Facilities Master Planning," presented at the Spring Meeting of the American Water Works Association, New York Section, Saratoga Springs NY, April 24-27, 2007.

Mastracchio, J.M., "Budget Forecasting in the New Construction Cost Era - It's Not as Simple as the ENR Anymore," presented at the Conference of the United States Society of Dams, Pittsburgh PA, March 7, 2007.

Gangemi, A.N, Mastracchio, J.M., "Dynamic Utility Financial Modeling - A Utility Manager's Crystal Ball," presented at the Annual Conference of the New England Water Works Association, Danvers MA, September 17-20, 2006.

Mastracchio, J.M., "The Next Challenge in Eliminating Sewer Overflows: Who Pays?," Clearwaters, Vol 35, p. 26-27, Winter 2005. New York Water Environment Association, Inc.

Lockridge, R.L., Mastracchio, J.M., "Dynamic Financial Modeling for Local Governments," Proceedings, 91st Annual Conference of the International City/County Management Association (ICMA), Minneapolis MN, September 25-28, 2005.

Mastracchio, J.M., "Interactive Financial Modeling: An Effective Tool for Utility Management and Planning," Proceedings, 68th Annual Conference of the Indiana Water Environment Association, Indianapolis IN, November 15-17, 2004.

Mastracchio, J.M., "The Use of Financial Modeling to Support Utility Management and Planning," presented at the 78th Annual Conference of the Ohio Water Environment Association, Columbus OH, June 21-24, 2004.

Mastracchio, J.M., "Using Financial Models to Establish and Update Water and Sewer Rates," presented at the Winter Conference of the County Commissioners Association of Ohio, Columbus OH, December 1, 2003.

Thomas A. Beckley
Vice President

Specialties

Utility cost of service and rate structure studies
Conservation rate studies
Bond forecasts and feasibility studies
Economic feasibility studies
Industrial waste charge studies
Capital recovery fee studies

Professional History

Raftelis: Senior Manager (2014-present); Manager (2000–2013)

Education

Master of Public Administration - University of Kansas (2008)
Master of Business Administration (Concentration in Finance) – A.B. Freeman School of Business, Tulane University (2000)
Bachelor of Science, Naval Architecture and Marine Engineering - Webb Institute (1995)

Professional Memberships

American Water Works Association
International Water Association
Water Environment Federation

Certifications

Series 50 Municipal Advisor Representative

Profile

Mr. Beckley has over 18 years of experience with Raftelis conducting financial and rate consulting related projects. He has assisted a wide range of municipal water and wastewater utilities in conducting cost of service, rate setting, financial feasibility, privatization, system development fees, and other finance-related studies. Mr. Beckley authored a chapter entitled, "Designing Water and Wastewater Rate Structures," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*. He is also an active member of AWWA and WEF, as well as ICMA, and has presented at various national and state conferences.

Peiffer A. Brandt
President & Chief Executive Officer

Specialties

Utility cost of service and rate structure studies
Conservation rate studies
Bond forecasts and feasibility studies
Economic feasibility studies
Industrial waste charge studies
Capital recovery fee studies
Survey research of water and wastewater utility characteristics and rates

Professional History

Raftelis: President & Chief Executive Officer (2017-present); Chief Operating Officer (2008-2016);
Vice President (2004-2008); Manager (2000-2003); Senior Consultant (1998-1999)

Education

Master of Science, Public Health in Environmental Management and Policy – University of North Carolina at Chapel Hill (1997)
Bachelor of Science and Engineering in Chemical Engineering – Princeton University (1994)

Professional Memberships

American Water Works Association
Water Environment Federation
North Carolina AWWA-WEA (Former Chair: Finance and Management Committee)
Association of Metropolitan Water Agencies

Certifications

Series 50 Municipal Advisor Representative

Profile

Mr. Brandt 20 years of experience managing a variety of projects to assist water and wastewater utilities in addressing economic, financial, and pricing issues. As the President and Chief Executive Officer of Raftelis, he is responsible for managing the overall strategic direction of the firm, and he remains involved in many client engagements. Through his work on utility surveys, like the AWWA's *Water and Wastewater Rate Survey* and AMWA's *Utility Financial Indicators Survey*, he also has broad knowledge of water and wastewater rate structures and rate-setting practices. Mr. Brandt is the former Chair of the North Carolina AWWA-WEA Finance and Management Committee. Mr. Brandt has also served as an expert witness in rate litigation matters, and was a contributing author for AWWA's *Water Rates, Fees, and the Legal Environment*. Mr. Brandt also co-authored a chapter entitled, "Public Outreach and Gaining Stakeholder Commitment," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*.

Keith Readling, PE
Executive Vice President and Director of Stormwater Management Consulting

Specialties

Stormwater program planning and development
Stormwater finance and utility development
Management policy and practice
Business process development and improvement
Data and systems integration
Database architecture and design

Professional History

Raftelis: Executive Vice President (2016-present); Vice President (2014-2015); Director of Stormwater Management Consulting (2011-2013)
AMEC: Vice President (1998-2011); Senior Project Manager (1995-1998); Project Manager (1991-1995)
Jarvis Associates: Project Engineer (1988-1991)
Talbert, Cox, and Associates: Project Engineer (1985-1988)

Education

Bachelor of Science in Civil Engineering – North Carolina State University (1985)

Professional Memberships

American Public Works Association: Past President, North Carolina Chapter, Water Resources Division

Professional Registrations

Registered Professional Engineer: NC #15868 (1989)

Profile

Mr. Readling has 32 years of experience in municipal stormwater management and civil engineering. As an executive and the leader of Raftelis' Stormwater Management Consulting Division, he has broad responsibilities for service delivery to clients across the U.S., with a particular focus on program and financial planning, stormwater utility development and implementation, and enterprise fund data and systems development for local governments. Mr. Readling has consulted with many of the largest and most complex stormwater utilities in the U.S. and is one of the foremost authorities in the country regarding stormwater management programs, data, systems, and business processes. He has assisted with the establishment of 41 stormwater utilities in 14 states, serving as the lead consultant for 19 of them. As a senior manager for data-related services in this capacity, he has developed more than 30 stormwater utility impervious area or intensity of development databases and utility billing and collections or integration systems to support the connectivity of geographic billing data to legacy account-based billing systems. Mr. Readling's other technical expertise includes water resources and civil engineering planning, analysis, graphical and non-graphical database development and management, and environmental and regulatory compliance efforts. He is experienced in all aspects of implementing municipal stormwater management programs, from strategic planning and regulatory compliance services, to database architecture and customer service support systems. Mr. Readling also co-authored a chapter entitled, "Expanding Financing and Pricing Concepts into Stormwater," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*.

Elaine Conti
Vice President

Specialties

Cost of service and rate structure studies
Bond forecasts and feasibility studies
Litigation support
Economic feasibility studies
Financial valuation and appraisal
Effective utility management studies
Customer service assessments
Performance benchmarking studies
Privatization feasibility studies and implementation analysis

Professional History

Raftelis: Vice President (2019-present); Senior Manager (2017-2018); Manager (2009-2016); Senior Consultant (2000-2009)
Wachovia Bank, NA: Assistant Vice President (1995-2000)

Education

Masters in Business Administration - Wake Forest University (2004)
Bachelor of Science in Business Administration - University of North Carolina at Chapel Hill (1995)

Professional Memberships

Former Chair - NC AWWA-WEA Finance & Management Committee

Profile

Ms. Conti joined Raftelis in 2000 and has managed numerous water and wastewater cost of service and rate and financial planning studies. She has performed rate studies for numerous clients across the country and has assisted in providing utilities with benchmarking data and industry standards from which they can assess their utility's performance and efficiency. Ms. Conti has also assisted several utilities in their efforts to implement management practices consistent with the Effective Utility Management (EUM) framework. Ms. Conti is the former Chair of the North Carolina AWWA-WEA Finance & Management Committee. She also co-authored a chapter entitled, "Outside-City Rates for Retail and Wholesale Customers, and Wheeling Rates," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*.

Jon Davis
Executive Vice President

Specialties

Utility cost of service and rate structure studies
Development impact fee studies
Affordability program development
Long-range financial planning and feasibility studies
Cost analysis and cost allocation

Professional History

Raftelis: Executive Vice President (2019-present); Vice President (2013-2018); Senior Manager (2009-2012); Manager (2005-2009); Senior Consultant (2000-2004)
Lance, Incorporated: Director of Energy & Environment, Projects Manager, Financial Analyst (1992-2000)

Education

Master of Business Administration - Queens College (1998)
Bachelor of Science, Physics and Mathematics - Wake Forest University (1990)

Professional Memberships

American Water Works Association: Virginia Section; Chesapeake Section; Pennsylvania Section; North Carolina Section
Water Environment Federation: Utility Management Committee; Finance & Administration Subcommittee Chair; WEFTEC Conference Planning Committee; Utility Management Conference Planning Committee; Technical Practices Committee

Certifications

Series 50 Municipal Advisor Representative

Profile

Mr. Davis joined Raftelis in 2000 and currently serves the firm as a Vice President. Mr. Davis has extensive experience in financial forecasting and modeling and has led projects to apply advanced risk analysis techniques to rate and financial planning studies for the water and wastewater industry. Mr. Davis is an active member of the Water Environment Federation (WEF) Utility Management Committee where he chairs the subcommittee on Finance and Administration. He also serves on the WEF Technical Practices Committee and the WEFTEC Planning Committee. Mr. Davis has presented at many industry conferences, and also co-authored a chapter entitled, "Financial Capability and Affordability," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*. Prior to joining Raftelis, Mr. Davis worked in water resource recovery facility management and capital projects engineering.

Sanjay Gaur
Vice President

Specialties

Proposition 218 rate compliance
Financial analysis
Cost of service studies
Conservation rate structure design
Capacity fee studies
Cost benefit analysis
Econometric analysis

Professional History

Raftelis: Vice President (2015-present); Senior Manager (2012-2014); Manager (2009-2012)
Red Oak Consulting, Division of Malcolm Pirnie (2007-2009)
MuniFinancial (2005-2006)
A & N Technical Services (1999-2003)
United States Peace Corps, Bulgaria (1995-1997)

Education

Master of Public Administration, Public Administration/International Development, Kennedy School of Government - Harvard University (2003)
Master of Science, Applied Economics - University of California, Santa Cruz (1994)
Bachelor of Arts, Economics and Environmental Studies - University of California, Santa Cruz (1992)

Professional Memberships

American Water Works Association - Rates and Charges Committee
California Society of Municipal Finance Officers

Professional Recognition

Who's Who in America, 63rd Edition (2009)
Finalist, National Venture Competition (2003); Goldman Sachs Foundation
Roy Environmental Fellowship (2002), Kennedy School of Government, Harvard University
Academic Scholarship (2001-2003), Kennedy School of Government, Harvard University
Certificate of Outstanding Service (1997), United States Peace Corps

Profile

Mr. Gaur has over 20 years of public-sector consulting experience, primarily focusing on providing financial and rate consulting services to water and wastewater utilities. His experience includes providing rate structure design, cost of service studies, financial analysis, cost benefit analysis, capacity fee studies, conservation studies, and demand forecasting for utilities spanning the west coast. He has provided consulting service to over 100 different agencies. Mr. Gaur is considered one of the leading experts in developing rates that meet Proposition 218 requirements, has exceptional public speaking skills and, due to these qualities, he is often sought out to provide assistance on rate studies that are complex and controversial. He has often provided his insight into utility rate and conservation-related matters for various publications and industry forums including: authoring articles in *Journal AWWA*; being quoted in various newspaper articles including the *Los Angeles Times* and the *New York Times*; participating in a forum regarding the future of water in Southern California sponsored by the Milken Institute; being quoted on National Public Radio; speaking at various industry conferences including American Water Works Association (AWWA), the Utility Management Conference, Association of California Water Agencies, and California Society of Municipal Finance Officers; and, co-authoring several industry guide books including AWWA's *Manual M1 Principles of Water Rates, Fees and Charges, 7th Edition* as well as AWWA's *Water Rates, Fees, and the Legal Environment, Second Edition*. Mr. Gaur co-authored a chapter entitled, "Understanding Conservation and Efficiency Rate Structures," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*. Mr. Gaur is also active in a number of utility-related associations, including serving as a member of AWWA's Rates and Charges Committee.

Rick Giardina, CPA
Executive Vice President

Specialties

Cost of service and rate structure studies
Litigation support
Economic feasibility analyses
Impact fee studies
Management and operational audits
Reviews of policies, procedures, and operating practices
Public-Private Partnerships
Mergers and acquisitions - regionalization
Valuation services
Rate filing and reporting

Professional History

Raftelis: Executive Vice President (2013–present, 1993-1995)
Malcolm Pirnie-Arcadis-US (2004-2013)
Rick Giardina & Associates, Inc. (1995-2004)
Ernst & Young (1984-1993)
Stone & Webster Management Consultants, Inc. (1981-1984)
State of Colorado Public Utilities Commission (1978-1981)

Education

Bachelor of Arts in Business Administration - Western State College of Colorado (1978)

Certifications

Certified Public Accountant, Colorado
Series 50 Municipal Advisor Representative

Professional Memberships

American Institute of Certified Public Accountants
American Water Works Association: Trustee and Vice Chair of Management and Leadership Division
Government Financial Officers Association
Water Environment Federation

Profile

Mr. Giardina is an Executive Vice President with Raftelis and, while serving in a national role, he also leads the Rocky Mountain regional practice of Raftelis. His over 39 years of managerial and financial experience includes more than 300 financial studies serving both the private and public sector. His experience covers technical areas and industries such as municipal fee development, utility cost of service and rate structure studies, litigation support, economic feasibility analyses, privatization and regionalization feasibility and implementation studies, impact fee studies, management and operational audits, reviews of policies and procedures and operating practices, mergers and acquisitions, valuation services, and rate filing and reporting. He has also served as an arbitrator for several wholesale rate disputes.

As a member of several industry associations, he has developed industry guidelines regarding financial and rate-making practices. Mr. Giardina is currently a Trustee and Vice Chair of the AWWA Management and Leadership Division. In addition, as the former Chair of the AWWA Rates and Charges Committee, he chaired one group that prepared the first edition of the *M54 – Small System Rate Manual* and another that re-wrote the *Water Utility Capital Financing Manual*. He also chaired the re-write of *Manual M1, Principles of Water Rates, Fees, and Charges* (the Sixth Edition was published in June of 2012, and he also oversaw the publication of the Seventh Edition in January 2017).

In addition, he was a contributing author to the WEF's *Financing and Charges for Wastewater Systems* manual. Mr. Giardina organized and led WEF-sponsored seminars in 2010 and 2011 titled "Weathering the Storm: Is This the Right Time for You to Form a Stormwater Utility?"; seminars on the opportunities and challenges surrounding the creation of a stormwater utility.

In 2011, he was appointed to the EPA Environmental Financial Advisory Board (EFAB), serving two terms through June of 2017. The EFAB provides ideas and advice to the EPA's Administrator and program offices on ways to lower the costs of and increase investments in environmental and public health protection.

Tony D. Hairston
Vice President

Specialties

Utility cost of service and rate structure studies
Bond feasibility reports
Impact fee studies
Alternative Water Supply Planning
Long range financial planning and feasibility studies
Cost analysis and cost allocation

Professional History

Raftelis: Vice President (2018-present); Senior Manager (2015-2018); Manager (2012-2014)
Public Resources Management Group (PRMG): (1998-2012)
Federal Reserve Bank of Richmond, VA: Bank Analyst (1995-1998)

Education

Master of Science, Economics – Florida State University (1995)
Bachelor of Science, Economics – Florida State University (1993)

Professional Memberships

American Water Works Association – Founding Chair of Florida Section Rates and Finance Committee
Florida Government Finance Officers Association
Florida Stormwater Association

Certifications

Series 50 Municipal Advisor Representative

Profile

Mr. Hairston currently serves as a Vice President in Raftelis' Casselberry, FL Office. He has 20 years of experience implementing solutions for utility and other municipal clients. He has both managed and provided technical analyses on a variety of complex financial and management projects including alternative water supply analysis, comprehensive utility rate studies, impact fees, bond feasibility reports, and assisting numerous municipalities and utilities in addressing their rate-setting and financial planning goals. He has assisted governmental clients with projects including the creation and planning of several new wastewater utilities to protect the near shore water quality of the Florida Keys. Mr. Hairston has presented at many national and regional conferences, like the WaterReuse Foundation, Florida Section AWWA, Alabama/Mississippi AWWA, Caribbean AWWA, Alabama Water and Wastewater Institute, and the Tampa Bay Water Shortage Management workshop. He also co-authored a chapter entitled, "Projecting Customer Demand," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*.

Matt Jackson
Corporate Secretary

Technical Specialties

GAAP Accounting
Financial Reporting and Analysis
Internal Controls

Professional History

Raftelis Financial Consultants, Inc.: Controller (2016-present)
Duke Energy: Lead Accounting Analyst (2010-2015)
Sonic Automotive: Financial Analyst (2008-2011)
Grant Thornton: Senior Assurance Associate (2006-2008)

Education

MSA and BSA in Accounting – East Carolina University (December 2005)

Profile

Mr. Jackson has more than 11 years of experience in the field of accounting and finance, including roles in public accounting, SEC financial reporting, and regulatory utility accounting. As Raftelis' Controller, he oversees the firm's financial accounting and reporting, billing, accounts payable, payroll administration, and other corporate finance responsibilities. He also strives to provide the highest quality service to our financial consultants to enable them to do the same for our clients. Mr. Jackson received a Master's in Accounting from East Carolina University and is a licensed CPA in the State of North Carolina.

Bart Kreps

Vice President and Chief Compliance Officer

Specialties

Utility cost of service and rate studies

Bond forecasts and feasibility studies

Capital financing plan development

Development and impact fee studies

Economic feasibility studies

Regionalization studies

Alternative project delivery studies

Professional History

Raftelis: Vice President (2018-present); Senior Manager (2014-2017); Manager (2010-2013); Senior Consultant (2005-2009); Staff Consultant (2002-2004)

Wells Fargo Securities: Fixed Income Analyst (1998-2000)

Education

Master of Business Administration in Finance & Environmental Management - The University of Tennessee (2002)

Bachelor of Business Administration in Finance - James Madison University (1998)

Professional Memberships

North Carolina AWWA

Tennessee/Kentucky AWWA

Virginia AWWA

Virginia AWWA/WEF Utility Management Committee - Financial Management Subcommittee lead

Certifications

Series 50 Municipal Advisor Representative

Profile

Mr. Kreps has been with Raftelis since 2002, managing a variety of projects to assist water, wastewater, and stormwater utilities in addressing economic and financial issues. Key areas of focus include: utility rate, cost of service, and financial planning studies; capital financing plan development; bond forecast and feasibility studies; economic impact assessments; and system development fees studies. Mr. Kreps has extensive experience in financial forecasting and modeling including the application of advanced techniques in risk management. Mr. Kreps' background is focused predominantly on public finance. He has assisted many utilities in designing optimal capital financing plans and has developed numerous financial feasibility reports and forecasts related to more than \$1 billion in revenue bond sales. Mr. Kreps is the current lead of the Virginia AWWA/WEA Financial Management Subcommittee. He also authored a chapter entitled, "Evaluating Risk in Capital Planning, Financing, and Rate Setting," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*. Prior to joining Raftelis, Mr. Kreps served as fixed income analyst for Wells Fargo Securities, in the company's Capital Markets Group.

Melissa M. Levin

Vice President

Specialties

Utility cost of service and rate structure studies

Development fee studies

Privatization procurement

Wholesale rate analysis

High-strength surcharge studies

Bond feasibility studies

Financial valuation and economic impact studies

Public works organization

Survey research of water and wastewater utility characteristics and rates

Professional History

Raftelis: Senior Manager (2017-present); Manager (2005-2016); Senior Consultant (1999-2004)

BASF Corporation: Chemist (1994-1999); Research Lab Leader (1991-1994)

Education

Masters in Business Administration - Wake Forest University (1998)

Bachelor of Science in Chemistry - Georgia Institute of Technology (1991)

Professional Memberships

American Water Works Association – North Carolina Section

Georgia Association of Water Professionals

Profile

Ms. Levin has been with Raftelis since 1999 and has worked on a variety of projects to assist water and wastewater utilities in addressing economic and financial issues. These projects include: cost of service and rate structure studies; financial valuation and economic impact studies; litigation support; bond forecast and feasibility studies; privatization assessment and implementation; and financial forecasting and modeling. Ms. Levin authored the chapter entitled, "Valuation of Water and Wastewater Utility Assets," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*.

Henrietta Locklear, MPA
Vice President

Specialties

Stormwater program planning and development
Stormwater finance and utility development
Stormwater rate structure analysis and cost allocation
Affordability program analysis, development and implementation
Billing and information systems
Meter technology modernization (AMI/AMR)
Public involvement and stakeholder facilitation
Management policy and practice
Technical writing
Business process development and improvement
Data and systems integration
Database architecture and analysis

Professional History

Raftelis: Vice President (2019-Present); Senior Manager (2015-2018); Manager (2013-2014); Senior Consultant (2011-2012)
AMEC: Team Leader and Project Manager (Morrisville, NC) 2009-2011; Supervisor and Project Manager (Raleigh, NC) 2008-2009; Project Manager (Raleigh, NC) 2006-2008; Public Affairs Coordinator (Nashville, TN), 2004-2006
Wake County Government: Planning Technician (Department of Environmental Services) (2003-2004); Intern (Manager's Office) (2003)
School of Government at the University of North Carolina at Chapel Hill: Research Assistant (2004)

Education

Master of Public Administration -- University of North Carolina at Chapel Hill (2004); Deil S. Wright Award for Outstanding Capstone Paper
Bachelor of Arts in Political Science, University of North Carolina at Chapel Hill (2002); Phi Beta Kappa; Order of the Golden Fleece

Professional Memberships

Water Environment Federation

Certifications

Series 50 Municipal Advisor

Profile

Ms. Locklear has 13 years of experience in local government finance and stormwater management. She specializes in working with local government staff, stakeholders, and elected officials to identify solutions and implement programs to meet environmental and public health challenges. Ms. Locklear is experienced in governmental financial analysis and planning, particularly in stormwater utility implementation and rate studies. She is also experienced in all aspects of utility implementation, with particular focus on policy analysis and development, and data and billing system implementation. She has studied fee credit programs and served as project lead on credit program development for several large stormwater utilities. Ms. Locklear has worked with more than 50 local governments on stormwater funding analyses, fee feasibility, or implementation projects and has served as project manager for more than 15 stormwater utility fee implementation projects. She was a member of the working group that developed the certification test for APWA's Stormwater Manager Certification. She was also a reviewer for the Water Environment Federation's Special Publication entitled, *User-Fee-Funded Stormwater Programs, 2nd Edition*. In addition, Ms. Locklear co-authored two chapters in the industry guidebook *Water and Wastewater Finance and Pricing: The Changing Landscape*, which are entitled, "Public Outreach and Gaining Stakeholder Commitment" and "Expanding Financing and Pricing Concepts into Stormwater." Ms. Locklear has a wealth of experience with public input processes. On a variety of projects, she has developed and facilitated public stakeholder processes, outreach strategies, and education campaigns for programs ranging from stormwater utilities and NPDES compliance efforts to brownfields, on-site wastewater, and hazard mitigation programs.

Her strengths include: policy analysis and development; research methods, including survey development and administration; data analysis; local government finance; stakeholder facilitation; and strong written and oral communication skills. Recently, she has also focused on developing utility customer assistance and affordability programs.

Sudhir Pardiwala, PE
Executive Vice President

Specialties

Cost of service rate studies
Conservation and drought management studies
Economic analyses
Water and wastewater utility cost accounting
Valuation
Financial and revenue planning
Assessment engineering
Reviewing/obtaining capital improvement funding
Computer modeling

Professional History

Raftelis: Executive Vice President (2013-present); Vice President (2004-2013)
Black & Veatch: Principal Consultant (1997-2004)
MWH: Principal Engineer (1985-1997)
CF Braun: Senior Engineer (1979-1985)
PFR Engineering Systems: Research Engineer (1977-1979)

Education

Master of Business Administration - University of California, Los Angeles (1982)
Master of Science in Chemical Engineering - Arizona State University (1976)
Bachelor of Science in Chemical Engineering - Indian Institute of Technology, Bombay (1974)

Professional Registrations

Registered Professional Engineer: CA (Chemical (1981) and Civil (1988))

Professional Memberships

American Water Works Association
Water Environment Federation
California Municipal Finance Officers Association

Certifications

Series 50 Municipal Advisor Representative

Profile

Mr. Pardiwala has 40 years of experience in financial studies and engineering. He has extensive expertise in water and wastewater utility financial and revenue planning, valuation, and assessment engineering. He has conducted numerous water, wastewater, stormwater, and reclaimed water rate studies involving conservation, drought management, risk analysis, as well as system development fee studies, and has developed computerized models for these financial evaluations. Mr. Pardiwala has assisted public agencies in reviewing and obtaining alternate sources of funding for capital improvements, including low-interest state and federal loans and grants. He has assisted several utilities with State Revolving Fund and Water Reclamation Bond loans. Mr. Pardiwala authored the chapter on reclaimed water rates in the *Manual of Practice No. 27, Financing and Charges for Wastewater Systems*, published by the Water Environment Federation (WEF). He also authored a chapter entitled, "Recycled Water Rates," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*. Mr. Pardiwala was vice-chairman of the CA-NV AWWA Business Management Division and Chairman of the Financial Management Committee.

Harold J. Smith
Vice President

Technical Specialties

Utility cost of service and rate structure studies
Regulated utility filings
Utility financial planning studies
Alternative project delivery procurements
Alternative project delivery feasibility studies
Regionalization/consolidation studies

Professional History

Raftelis Financial Consultants, Inc.: Vice President (2002-present); Manager (1997-2002)
Geoscience Group: Environmental Department Manager and Senior Geologist (1991-1997)
Trigon Engineering Consultants, Inc.: Project Geologist (1989-1991)

Education

Master of Business Administration - Wake Forest University (1997)
Bachelor of Science in Natural Resources - University of the South (1987)

Professional Registrations

Licensed Professional Geologist

Professional Memberships

American Water Works Association - Past Chair of Strategic Management Practices Committee
New England Water Works Association - Member of Financial Management Committee
Design Build Institute of America

Certifications

Series 50 Municipal Advisor Representative

Profile

Mr. Smith is a nationally recognized expert in water and wastewater finance, management, and pricing. For more than 25 years, he has focused on advising municipal water and wastewater utilities throughout the United States. Mr. Smith has participated in a variety of projects to assist water and wastewater utilities focusing on financial, management, and public policy requirements. His broad-based experience includes cost of service and rate analyses, development of comprehensive financial plans, utility impact fee studies, revenue bond feasibility studies, management studies, and strategic planning. Mr. Smith is the past-Chair of the AWWA Strategic Management Practices Committee and is a member of the Financial Management Committee of the New England Water Works Association. Mr. Smith also co-authored a chapter entitled, "Role of the Private Sector and Alternative Project Delivery Methods," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*.

William Stannard, PE
Chairman of the Board

Specialties

Cost of service and rate studies
Financial planning studies
Valuation and acquisitions
Bond forecasts and examinations
Regionalization studies
Management policy and practice
Environmental finance & accounting
Litigation Support/Expert Witness

Professional History

Raftelis: Chairman of the Board (2017-present); Chief Executive Officer (2012-2016); President (2008-2016); Vice President (2002-2008)
Black & Veatch: Senior Vice President (1996-2002); Vice President (1992-1996); Project Manager (1984-1992); Assistant Project Manager (1980-1984); Staff Consultant (1975-1980)

Education

Bachelor of Science in Business Administration - Kansas State University (1975)
Bachelor of Science in Civil Engineering - Kansas State University (1975)

Professional Memberships

American Society of Civil Engineers
American Water Works Association: Past-Chair of Management and Leadership Division, Former Trustee of Technical and Education Council, Past-Chair of Finance, Accounting and Management Controls Committee, Current member of the Rates and Charges Committee and the Finance, Accounting and Management Controls Committee
Water Environment Federation: Past-Chair of Task Force on Wastewater Charges, member of the government Affairs Committee
National Association of Clean Water Agencies
US EPA Environmental Finance Advisory Board
Listed in Best Lawyers in America – Directory of Expert Witnesses

Professional Registrations

Registered Professional Engineer: MI (6201028796); OH (PE 57725); MA (38847); KS - 1979 (8636)

Certifications

Series 50 Municipal Advisor Representative

Profile

Mr. Stannard has 40 years of experience providing consulting services to investor- and municipally-owned utilities covering management, operation, economic, and financial matters. His extensive experience encompasses: formulation of financial systems and ordinances for compliance with regulations regarding the Clean Water Act and the Safe Drinking Water Act; comprehensive revenue requirements and cost of service studies; rate setting; consulting engineers and financial feasibility reports related to the sale of revenue bonds; financial feasibility analyses; organizational and management reviews; and utility competitiveness studies. He has served as an expert witness in rate litigation matters in federal and state courts and before arbitration panels and state public service commissions. Mr. Stannard has also served as an arbitrator in resolving water and wastewater rate disputes. Mr. Stannard is an active member of the WEF and AWWA. He served as chair of the WEF's task force charged with the development of a Manual of Practice, *Financing and Charges for Wastewater Systems*. Mr. Stannard also authored a chapter entitled, "Selecting the Optimal Capital Financing Plan and Pricing Structure," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*. He is the Chair of AWWA's Management and Leadership Division, a Trustee of AWWA's Technical & Education Council, and a past-Chair of AWWA's Finance, Accounting and Management Controls Committee.

Darin H. Thomas
Vice President

Specialties

Strategic planning
Strategic plan implementation management
Utility management and operations assessments
Organizational performance measurement and management
Utility benchmarking studies

Professional History

Raftelis: Vice President (2017-present); Director of Management Consulting (2010-2016)
ARCADIS US, Inc.: Vice President (2001-2010)
EarthTech: Business Unit Manager (1999-2001)
Water Utility Start-up Company Advisor: Byrd/Forbes Associates, Inc., HERC Products, Inc., RETUSA, Inc., (1995-1999)
ADS Environmental Services, Inc.: Vice-President (1990-1995)
Stord Bartz Inc.: Applications Engineer (1987-1990)
Nutech Engineers: Project Engineer (1985-1987)

Education

Bachelor of Science in Mechanical Engineering – Michigan Technological University (1985)

Certifications

Denver Peak Academy – Lean/Six Sigma Blackbelt (2017)

Profile

Mr. Thomas is a seasoned utility industry leader, with more than 30 years of experience. Mr. Thomas has a track record of delivering innovation to the industry which has resulted in significant technological advancements and economic savings for hundreds of utility organizations. In the mid-1980s, he was instrumental in developing and advancing the application of bio-solids combustion for energy cogeneration. In the early 1990s, he was an early adopter and pioneer in the sanitary sewer system evaluation field and was a leader in the adoption of open channel flow metering for I/I mitigation and billing as well as a pioneer in the use of desktop GIS for asset management programming. In the mid- to late-1990s Mr. Thomas successfully led the introduction of the use of in-situ epoxy lining for water mains, and for several years became a utility contractor performing water main rehabilitation projects across the United States. Since the early 2000s, Mr. Thomas has been an active utility executive business consultant helping utility organizations implement a number of significant transformation changes that span the areas of business process optimization, strategic planning, and adoption and use of technologies to enhance organizational performance. Mr. Thomas also co-authored a chapter entitled, "The First Step: Establishing a Strong Utility Management Foundation," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*.

Exhibit 4
Technical Fitness

Technical Fitness:

Raftelis staff have a set of experience, skills, and education vital to utility valuation. Current, Raftelis personnel hold the designations of Professional Engineer (PE) in several states, including Pennsylvania; Certified Public Accountants (CPA); and the Chartered Financial Analyst (CFA) designation. The CFA is an internationally recognized designation that signifies professional standards in finance, valuation, and investment management. Raftelis has completed more than 40 valuation assessments over the past 10 years. These valuations have been for the purposes of utility sale or acquisition, impact fee development, financial feasibility analysis, and asset management. Please see the attached resumes for examples of valuation engagements with current and past clients.

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Exhibit 5
State Registrations

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Arkansas
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Colorado
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District of Columbia
Florida
Georgia
Hawaii
Illinois
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Kansas
Kentucky
Louisiana
Maryland
Massachusetts
Michigan
Mississippi
Missouri
New Jersey
New Mexico
North Carolina
Ohio
Oklahoma
Pennsylvania
Puerto Rico
Rhode Island
South Carolina
Tennessee
Texas
Utah
Vermont
Virginia
Washington State
Wisconsin

Department Holding Registration

Alabama Secretary of State
Arizona Secretary of State
Arkansas Secretary of State
California Secretary of State
Colorado Secretary of State
Connecticut Secretary of State
Dept. of Consumer & Regulatory Affairs
Florida Secretary of State
Georgia Secretary of State
Dept. of Commerce and Consumer Affairs
Illinois Secretary of State
Iowa Secretary of State
Kansas Secretary of State
Kentucky Secretary of State
Louisiana Secretary of State
Maryland Dept. of Assessments and Taxation
Secretary of the Commonwealth of Massachusetts
Dept. of Licensing and Regulatory Affairs (LARA)
Mississippi Secretary of State
Missouri Secretary of State
NJ Dept. of the Treasury
New Mexico Secretary of State
NC Secretary of State
Ohio Secretary of State
Oklahoma Secretary of State
Pennsylvania Secretary of State
Puerto Rico Department of State
Rhode Island Secretary of State
South Carolina Secretary of State
Tennessee Secretary of State
Texas Secretary of State
Utah Dept. of Commerce
Vermont Secretary of State
Commonwealth of VA State Corporation Commission
Washington Secretary of State
Wisconsin Dept. of Financial Institutions

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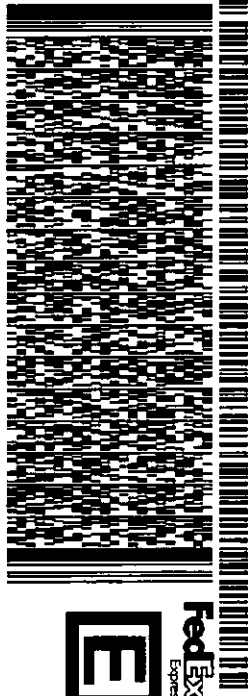
ORIGIN ID: QWGA (704) 373-1199
JOHN MASTRACCHIO
RAFFEL'S FINANCIAL CONSULTING
227 WEST TRADE STREET
SUITE 1400
CHARLOTTE, NC 28202
UNITED STATES US

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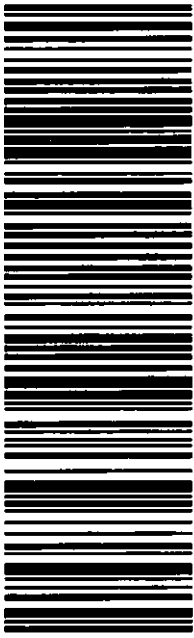


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