ORIGINAL

PRAG

PUBLIC RESOURCES ADVISORY GROUP

THE STATE OF WEST VIRGINIA

PROPOSAL TO PROVIDE: INDEPENDENT FINANCIAL ADVISORY SERVICES

SOLICITATION #: CRFP 0201 SEC1700000001

PUBLIC RESOURCES ADVISORY GROUP, INC.
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THOMAS HUESTIS, SENIOR MANAGING DIRECTOR

MAY 9, 2017

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PRAG

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PUBLIC RESOURCES ADVISORY GROUP

May 9, 2017

Linda B. Harper, Buyer Supervisor
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

Dear Ms. Harper,

On behalf of Public Resources Advisory Group, Inc. ("PRAG"), I am pleased to submit our proposal to provide financial advisory services to the State of West Virginia (the "State").

PRAG would be honored to continue serving as the State's financial advisor. Given our considerable experience advising the State, our team has a comprehensive understanding of the State's credit, financial and debt position and is uniquely qualified to assist the State in completing its financings at the lowest cost of borrowing. The level of sophistication and complex needs of our clients has demanded a business model that allows us to offer the highest level of credit rating advice, quantitative analysis and market knowledge. We are confident that no other financial advisory firm can offer the same depth and project specifications to the State as PRAG. This business model coupled with our commitment of senior personnel and integrity has allowed PRAG to be ranked as one of the leading financial advisors in the nation for the last 31 years, having advised issuers on over $882 billion of financings since our inception.

Independence: PRAG is an independent, nationally recognized financial advisory firm that is employee owned. As an independent financial advisor not affiliated in any way with a broker/dealer, PRAG does not engage in any form of underwriting, trading, marketing, or investing in tax-exempt securities, nor does it act as an investment manager for governmental or other funds. This restriction eliminates the possibility that even the appearance of a conflict can ever exist within our organization between marketing and financial advisory services and we will always act in the best interest of our clients. PRAG is registered as a Municipal Advisor with the Securities and Exchange Commission ("SEC") and the Municipal Securities Rulemaking Board ("MSRB") and is licensed to do business in West Virginia.

West Virginia Experience: PRAG has been honored to serve as the State's financial advisor since 2005. Since this time we have advised the State and State agencies on the issuance of general obligation bonds, lease revenue bonds, toll revenue bonds, lottery and excess lottery bonds, tobacco bonds and GARVEE notes. Most recently, our firm has advised the State on the issuance of $28.2 million Infrastructure General Obligation Refunding Bonds, Series 2017 which generated $3.6 million in net present value savings. In total, we have advised the State of West Virginia and affiliated State agencies on 65 series of bonds with an aggregate par amount of $3.6 billion. Furthermore, PRAG has provided other general financial advisory services to the State, such as revising financial policies, reviewing proposed legislation, formulating credit strategies and approaches, advising on municipal market developments and improving new issuance disclosure. Over the course of our engagement with the State, we have strived to be the State's trusted advisor by offering the highest quality comprehensive scope of services in a timely manner.

Quantitative and Analytical Expertise: PRAG is known for being one of the most quantitative financial advisory firms in the business. PRAG's analytic abilities form the core of our advice on complex transactions. By developing financing structures through a large iteration of alternative plans of finance using our highly sophisticated financial and analytic software such as linear optimization models – our quantitative skills will continue to ensure that the State has optimal structuring of its financings, consistent with all financial and legal constraints. PRAG has the capability to develop models for structuring new money bonds, refundings and restructurings, analyzing alternative financing options, providing defeasance analysis, investment optimization, escrow structuring and restructuring, cash flow analysis and stress testing, bid optimization and analyses of derivative products.

Market Knowledge: PRAG's professional staff is aware of and has access to the latest economic data and capital market activity from real-time information sources. As a result of our work with frequent issuers in the municipal market, we are tasked with reviewing the latest financial products and market opportunities. Our market information and advice is timely, accurate and independent.

Credit Experience: One of PRAG's significant strengths is knowledge of credit. The firm has developed an understanding of the rating agency process that we do not believe is present at any other advisory firm. PRAG provides rating agency advisory services to states around the country and as such our general credit expertise and experience are unmatched. We understand the fiscal and financial challenges the State currently faces and we endeavor to continue in assisting the State in maintaining the State's strong ratings.

Commitment of Senior-Level Personnel: Serving as an extension of staff, PRAG takes a pro-active approach to all engagements, with senior members of the firm always available to respond to issues raised and to provide high quality advice in a timely manner. Furthermore, all the resources of the firm will continue to be available to the State as needed.

Record of Integrity: PRAG is proud of our record of integrity. Our success has been built on a history of high-quality independent advice, responsive service, the commitment of experienced personnel, and unblemished integrity.

As stated above, we would be honored to continue to serve the State as financial advisor and we commit to the success of the engagement. The State can be assured that it will continue to receive the highest level of service possible from PRAG and we will always protect the State's interests. Thank you in advance for your consideration. If you have any questions, please do not hesitate to contact me.

Sincerely,

Thomas F. Huestis
Senior Managing Director
(610) 565-5990
thuestis@pragadvisors.com

3. Qualifications and Experience

A. Staff

Question 1. *Provide a proposed staffing plan and include a full resume for each consultant that will be assigned to the West Virginia account, resumes of other key personnel who may be involved in special projects for the State, and any regulatory actions taken or pending relating to each consultant. Also include any staff qualifications and experience in completing similar projects and copies of any staff certifications or degrees applicable to this project;*

The State of West Virginia is one of the firm's most valued clients and retaining our financial advisory relationship with the State is of the utmost importance to the firm. We propose to use the same approach to staffing the engagement that we have used since we were originally hired by the State in 2005. This staffing plan was developed specifically for the State of West Virginia to meet the broad financial advisory needs of the State and provide optimal service. The key elements of our staffing plan include:

Our Approach to Staffing	Why is this Important to the State?
1. Our engagement is organized on a team basis.	Because PRAG does not have profit centers or separate business units, the State will be provided with the best professionals in our firm for the task at hand; unlike some other firms, we have no internal financial incentives or conflicts that affect our staffing decisions.
2. We assign two or more senior personnel (Project Managers) to be available to the State on a day-to-day basis.	This ensures that a senior adviser with working knowledge of the State is always available to provide advice.
3. For specific projects, we assign other senior PRAG professionals who have expertise that matches the needs of the State.	We bring the best people for the particular project to the State of West Virginia, to provide advice, efficiency and cost effective expertise.
4. For certain projects, PRAG has retained independent industry experts at specialty professional services firms, such as actuaries, benefit consulting firms, secondary market disclosure firms or investment consultants.	Use of independent specialty industry experts allows the State to receive the best possible advice in the most cost effective manner in order to make informed decisions.
5. We assign analyst and associate level personnel to assist with quantitative and project support.	This ensures that the State gets the best value for its advisory dollar.
6. We assign a senior PRAG partner to supervise the engagement.	This ensures that all necessary resources of the firm are made available to State.

Our professionals are drawn from diverse backgrounds, including former government finance professionals, advisors, credit analysts, bond lawyers and underwriters of municipal debt to build a team with a high degree of credit expertise, unparalleled knowledge of the public capital markets, unmatched quantitative skills and in-depth appreciation of the unique challenges facing the State. We have assembled an experienced team to provide dedicated service to the State to meet its financing and budgeting needs - all members of the team have worked on the State of West Virginia engagement in various capacities since 2005. No other financial advisory firm offers a team as knowledgeable, experienced, skilled and intimately familiar with the State.

Please note that no PRAG personnel have any pending regulatory matters or have had any regulatory actions taken against them.

Since the inception of our engagement with the State of West Virginia in 2005 over 72% of our current senior professionals have provided financial advisory services to the State. While we anticipate continuing to assign firm specialists and industry experts for specific projects, as needed, we have listed below our proposed core project team based on the current projects. The names, titles and responsibilities of our project team members are as follows:

- **Project Supervisor** is **Thomas Huestis.** Tom is a Senior Managing Director and PRAG Partner. He has been serving as the Project Supervisor on the State of West Virginia account since PRAG's former supervisor and firm chairman retired and had previously served as a Project Manager on the account since 2005. He will continue to oversee the engagement. As a member of PRAG's three-person executive committee, he will ensure that the resources of the firm are utilized to their full potential for the State's benefit.

- **Project Managers** are **Christine Fay** and **Jessica Donnelly.** Ms. Fay is a Senior Managing Director with the firm and has worked with the State of West Virginia since she joined the firm in 2008. She has served as Project Manager for the State's engagement since 2012. Ms. Donnelly, Senior Managing Director, has been one of the principal professionals involved with the State since she joined the firm in 2015 and was as one of the primary bankers responsible for covering West Virginia since 2002 at her prior firm.

- **Special Projects Manager** is **Steven Goldfield.** Mr. Goldfield, Senior Counselor to PRAG has been one of the principal professionals involved with the State in connection with legislative reviews, workers' compensation, pension funding, OPEBs and many other special projects requested by the State. Mr. Goldfield has a deep knowledge of and past experience with the State and has worked with the State since 2005.

- **Pricing Specialist** is **Monika Conley.** Ms. Conley is a Senior Managing Director and PRAG partner. Ms. Conley has experience advising a variety of states on negotiated pricings including the State, Indiana, Maryland, Minnesota, New Hampshire, New York, among others. Ms. Conley will assist the team with the pricing of the State's negotiated financings.

- **Transportation Specialist** is **Janet Lee.** Ms. Lee is a Senior Managing Director and PRAG partner. Ms. Lee has worked with the State and the Department of Transportation, Division of Highways on the State's GARVEEs bonds, Route 35 and Parkways projects. She will continue to assist the Project Managers and be available to advise on future transportation projects.

- **Tobacco Securitization Specialist** is **Barry Valentinsen,** Consultant and PRAG partner. Mr. Valentinsen worked with the State on its Tobacco Securitization and will continue to be available to the State as needed as will Mr. Goldfield who was Co-Project Manager for the State's tobacco securitization that was used to generate $805 million primarily for the Teachers' pension fund.

- **Derivative Specialist** is **Andrew Evanchik.** Mr. Evanchik is a Senior Managing Director with the firm and has worked with the State since 2008. Mr. Evanchik currently provides the West Virginia Parkways Authority quarterly and annual interest rate swap valuations and reports and works with the Project Managers to monitor risks and termination opportunities of the Parkways' swap. Mr. Evanchik will continue to be available to advise on derivative projects.

- **Regulatory Asset Securitization Specialist** is **Wesley Hough.** Mr. Hough is a Director and Senior Counselor with the firm. Mr. Hough, along with Mr. Huestis, advised the State and the West Virginia Public Service Commission regarding the completed consumer rate relief securitization related to Appalachian Power Company's stranded energy costs. Mr. Hough is the former Co-President of PRAG and will be available to provide advice on future securitization projects, as needed.

- As **Project Assistants, Ryan Killen, Associate** and **Lauren Weir, Analyst** will provide quantitative and general project support, as required. Both Mr. Killen and Ms. Weir have already provided assistance on a variety of projects for the State and will continue to do so.

Name, Title, and Contact Information	Roles and Responsibilities and Relevant Background and Experience
Thomas Huestis, Senior Managing Director thuestis@pragadvisors.com	***Mr. Huestis will serve as Project Supervisor for this engagement.*** Mr. Huestis joined PRAG in 2002 and is the resident manager of the firm's Pennsylvania office. Mr. Huestis brings a unique

Public Finance Experience:
26 years

Licenses:
Series 50 - Municipal Advisor Reg. Representative
Series 65, Investment Advisor Representative

understanding of public sector investment, debt management and financial management based on his over 25 years of experience as an independent financial advisor and as a municipal finance executive.

Mr. Huestis provides advice to a wide variety of PRAG clients including states, counties, cities and authorities and has experience with all types of financing structures including general obligation bonds, revenue bonds, securitizations, lease and appropriation backed bonds, notes, commercial paper, variable rate bonds, among others.

Mr. Huestis has worked with the State of West Virginia since the firm was hired in 2005. Mr. Huestis has provided advice on a variety West Virginia bond issues including lottery and excess lottery bonds issued by the School Building Authority, Higher Education Policy Commission and the Economic Development Authority, revenue bonds for the Water Development Authority, Tobacco Securitization bonds, securitization of rate relief costs for WV Public Service Commission, Lease Revenue bonds issued by the Economic Development Authority, GARVEEs issued by the Department of Highways, and State General Obligation Bonds. Mr. Huestis has also managed various financial planning projects including: (i) an independent financial review and analysis of the West Virginia Parkways evaluating the need for proposed toll increases and maintaining the Turnpike in an acceptable level of service, (ii) long-term financial projections for Stonewall Jackson Lake State Park, and the credit implications of State requested cash contributions, (iii) procurement for the private operations for Chief Logan State Park. In addition, Mr. Huestis has provided credit and rating agency advice to the State including participating with the Governor and the Legislative leaders in presentations to the agencies in New York, managing communication which each of the three agencies on State bond issues, as well as the on-going ratings surveillance processes with S&P, Moody's and Fitch.

In addition to his work with the State of West Virginia, Mr. Huestis has extensive experience providing financial advice to states and state agencies. Mr. Huestis currently acts as financial advisor to the states of Illinois, Minnesota, Rhode Island and Vermont and has provided advice to the states of Florida, Indiana, Maryland, New Mexico, New York and Ohio. Mr. Huestis has also worked with state agencies including New Jersey Educational Facilities Authority, Maine Turnpike Authority, Maryland Stadium Authority, State of New York Mortgage Agency, Vermont Economic Development Authority, among others.

Prior to joining PRAG, Mr. Huestis was the Treasurer of the District of Columbia where he was responsible for the management of the District's financial assets, all debt offerings and financing programs, including maintaining rating agency and investor relations with the public and private debt markets. Under Mr. Huestis' leadership, the District's S&P rating improved from "B" to "BBB."

Mr. Huestis received his MBA from Carnegie Mellon University and Bachelor of Arts Degree in Government from Franklin & Marshall College. Mr. Huestis is a Registered Investment Adviser Representative and a Registered Municipal Advisor Representative. Mr. Huestis is PRAG's Chief Compliance Officer for the firm's investment advisory services.

Christine Fay, Senior Managing Director
cfay@pragadvisors.com

Public Finance Experience:
15 years

Licenses:
Series 50 - Municipal Advisor Reg. Representative

Ms. Fay will serve as Project Manager for this engagement. Ms. Fay joined PRAG in 2008 and has over fifteen years' experience as an independent financial advisor and as a municipal finance executive. In addition to the State of West Virginia, Ms. Fay has provided client management to large issuers such the States of Minnesota, Illinois and Vermont. Ms. Fay has advised these issuers with respect to rating strategy, structuring transactions, issuing both competitive and negotiated deals, bidding escrow investments, monitoring refunding candidates, and drafting and evaluating RFPs.

Ms. Fay has been advising for the State of West Virginia since she was hired by PRAG in 2008. She is currently working with the School Building Authority on the refunding of its 2007 Capital Improvement Bonds and the Water Development Authority on the refunding of its Series 2005 Loan Program IV bonds. In 2016 Mrs. Fay assisted the Division of Highways with the issuance of $53.38 million of GARVEE notes to accelerate FHWA funds for the Rock Creek Development Project. As part of this financing Ms. Fay worked with the Division of Highways and other members of the working group to draft the disclosure document, develop the rating strategy, prepare the rating and investor presentation and structure the bonds. Mrs. Fay has served as a Project Manager for the State's engagement since 2012 and since this time Ms. Fay has advised the State on the issuance of State Road and Infrastructure general obligation refunding bonds, lease revenue bonds to fund construction and renovations to the Fairmont, Clarksburg and Building 3 projects, lottery and excess lottery revenue bonds to fund school construction, environmental improvements to the Chesapeake Bay and Greenbrier River and is currently working on an issuance to fund improvement to the Cacapon State Park. Furthermore she has worked on refunding transactions for the School Building Authority, Water Development Authority, Higher Education Policy Commission and Economic Development Authority. Ms. Fay worked on the Qualified School Construction Bonds for the School Building Authority and the Build America Bonds (BABs) for the Higher Education Policy Commission that closed just prior to December 2010 when the ARRA (stimulus legislation) expired. By selling BABs the Commission saved 60 basis points in borrowing costs which generated an additional $3.85 million for building projects.

Ms. Fay has served as the point of contact with the State's rating analysts and has fostered communication with the analysts and State representatives through the years. Ms. Fay has advised the State on rating strategy, timing, approach and presentation for multiple State credits. In 2014, Mrs. Fay worked intimately with the Department of Administration and the State's Disclosure Counsel in preparing the questionnaire to self-report missed and late continuing disclosure filings under the MCDC Initiative. Ms. Fay has also reviewed and provided comments on proposed legislation including, most recently in the 2017 legislative session, reviewing legislation for the tax reform, the issuance of general obligation bonds and extension of the tolls and possible issuance of toll revenue bonds for the Parkways Authority. Mrs. Fay has also developed models to project debt capacity for the Governor's Infrastructure Plan.

Prior to joining PRAG, Ms. Fay served as the Debt Finance Manager at the County of San Diego where she oversaw a $2.4 billion debt portfolio, managed the County's debt issuance process, was on the capital planning committee, and served as the point of contact to the rating agencies. As the Debt Finance Manager at the County of San Diego, Ms. Fay successfully managed lease revenue transactions, conduit financings, formed the County's first special tax district, and was instrumental in the County getting upgraded to AAA by Standard and Poor's.

Ms. Fay received her MBA from UCLA Anderson School of Business and a Bachelor of Arts degree in Economics from the University of Pennsylvania.

Jessica Donnelly, Senior Managing Director
jdonnelly@pragadvisors.com

Public Finance Experience:
16 years
Licenses:
Series 50 - Municipal Advisor Reg. Representative

Ms. Donnelly will serve as Project Manager for this engagement. Ms. Donnelly joined PRAG in its Media, Pennsylvania office in May 2015 and has 16 years of municipal finance experience. In her capacity at PRAG, Ms. Donnelly provides credit, market and deal structuring advice and overall project management for various PRAG clients. Prior to joining PRAG, Ms. Donnelly was a Director at Citigroup Global Markets Inc. in its Public Finance Department and worked on the structuring, negotiating and development of over $15 billion in financings for state and local issuers. At her previous firm, Ms. Donnelly provided day-to-day management for general municipal clients in the Mid-Atlantic region and several project finance issuers throughout the country. Her work at Citigroup included working in the State of West Virginia since 2001 and most recently serving as one of the primary bankers to the State of West Virginia and its agencies and universities.

Since joining PRAG and at her prior firm, Ms. Donnelly has extensive experience with the State which includes building complex capital planning models, developing rating strategies, transaction structuring and evaluating funding options for various State issuers. Specifically, for education issues, Ms. Donnelly has worked on all Higher Education Policy Commission ("HEPC") transactions since 2004 and was involved in the creation of the double-barreled credit structure that combines the HEPC's Education and General Capital Fees and statuary allocations for the Lottery. Ms. Donnelly has worked on all of the School Building Authority transactions since 2009 and more recently has worked on developing rating strategies and monitoring the Authority's funding plan to be sure there is an ongoing and consistent funding source for K-12 construction projects into the future. This work has included a deep focus on the State's Lottery credit.

Ms. Donnelly served as a co-project manager on the recent issuance of the State's GARVEE Bonds through the WV Division of Highways. She assisted in the rating strategy, structure development and executing of the financing. Ms. Donnelly also worked with the WV Parkways Authority on various analysis including refundings and credit facility replacement. More recently, Ms. Donnelly has been integrally involved in the evaluation and development of the Governor's transportation initiatives which include the continued tolling and leveraging of those toll revenues as well as the implementation

	of the single fee program. In addition, Ms. Donnelly assisted the members of the Administration as they evaluated the findings of the Blue Ribbon Commission on Transportation by developing models for assessing bonding capacity and funding options for the State's transportation needs. Ms. Donnelly worked on the State's Series 2005 General Obligation State Road Refunding Bonds having primary responsibility for the credit approach and numerical analysis. Ms. Donnelly recently advised the State on the refunding of its outstanding Series 2006 Infrastructure General Obligation Bonds. This financing was competitively sold on January 5, 2017 and resulted in approximately $4 million in Net Present Value Savings for the State with over $2.4 million of savings in Fiscal Year 2018. Ms. Donnelly has also advised the State on lease financings including the Correctional Facility financings and various State Office buildings. Ms. Donnelly has worked with various other State issuers nationally including the States of Maryland, New Jersey, Delaware and Georgia as well as the Commonwealths of Pennsylvania, Kentucky and Virginia. Ms. Donnelly has worked with a number of other state-level authorities and local issuers such as, Pennsylvania State Public School Building Authority, the Pennsylvania Economic Development Authority; the Pennsylvania Higher Education Facilities Authority, the Virginia Resources Authority, Fairfax County Water Authority, the City of Hampton, the Virginia Department of Transportation, Loudoun County, the City of Richmond and the City of Suffolk. Ms. Donnelly's experience has included a variety of different security structures and includes refunding transactions, complex restructurings, innovative financings and new money financings. For each of these engagements, Ms. Donnelly is involved in the deal structuring, credit rating strategy, financial analysis and marketing.
<u>Steven Goldfield, Consultant</u> sgoldfield@pragadvisors.com ***Public Finance Experience:*** 26 years ***Licenses:*** Series 50 - Municipal Advisor Reg. Representative	***Mr. Goldfield will serve as Special Projects Manager for this engagement.*** Mr. Goldfield has 26 years of experience in the field of public finance. Mr. Goldfield has worked with PRAG since 2005. Mr. Goldfield has participated in the West Virginia Tobacco Settlement Authority's $911.1 million taxable offering, three successful qualified school construction bond financings, including the first successful state-wide issue, lottery-backed public school funding for the West Virginia School Building Authority, and transactions with the Higher Education Policy Commission, Parkways Authority and Economic Development Authority. Mr. Goldfield was a co-presenter at an all-day "Bond School" presentation to state level officials in West Virginia from several departments and agencies that are involved from time to time in the issuance of bonds. Mr. Goldfield has been asked to comment on multiple legislative proposals relating to bond issuance in West Virginia, and has participated in presentations and discussions with legislative leaders, the Governor's staff and the Governor. For the State of Illinois, he participated in the execution of two tax-exempt working capital financings totaling approximately $1.5 billion. The first of the two financings enabled the State to significantly increase its matching funding under the Federal government's FMAP program. Mr. Goldfield assisted the State with tobacco securitization, which at the time was the largest taxable transaction of its kind ever successfully completed. This transaction saved the State several billions of dollars, reduced the annual funding level to an affordable cost and significantly improved the funding level of the Teachers' Retirement System which along with diversification of the West Virginia economy, had been the rationale for West Virginia's low rating at the time. He also assisted the State with the transfer of teachers from defined contribution plan back into defined benefit plan while reducing the overall annual funding cost to the State for such transferees. In addition, Mr. Goldfield provided independent analysis of OPEB liability and reviewed benefit structure and operations of PEIA leading to a series of recommendations that enabled the State to shift healthcare costs to the Federal Government, thereby saving the State in excess of $100 million and reducing the OPEB liability substantially. He also made a presentation to the Senate and House finance committees comparing West Virginia to other states and provided ideas to reign in this growing liability including capping the State's contributions. Mr. Goldfield has participated at the state level with drafting and review of bond-related statutes in Delaware, Pennsylvania, in addition to West Virginia. Mr. Goldfield was primarily responsible for advising the State of West Virginia with respect to legislative initiatives in the areas of lottery secured and excess lottery secured bond financings and other bond related statutes. While practicing law in

	the area of municipal finance for 13 years, he has become very familiar with a wide variety of aspects of Federal securities law and Federal tax law relating to issuance of tax exempt and taxable bonds including arbitrage and rebate, yield reduction payments, multi-purpose allocation rules, private activity bond tests, restrictions relating to refunding bonds, and disclosure requirements under applicable securities laws, among others. Since 2013, Mr. Goldfield has spent a substantial portion of his time assisting the Commonwealth of Pennsylvania with a recovery plan for the City of Harrisburg which includes long term budget restructuring, monetization of certain assets, expense reduction initiatives and working with municipal officials of the state capitol to develop a long term solution to infrastructure needs, economic development, OPEBs and other challenging issues confronting municipalities. Mr. Goldfield practiced law in the City of Philadelphia as a partner at Saul Ewing and a Senior Member of Cozen O'Connor prior to joining PRAG. As such, he has served as underwriters' counsel, bond counsel, issuer's counsel and more recently as financial advisor and thus brings a wide array of perspective to his services. Mr. Goldfield is a member of the Board of Directors of the Pennsylvania Association of Bond Lawyers. Mr. Goldfield received his Bachelor of Arts Degree with distinction in Political Science from The George Washington University and his J.D. cum laude from Villanova Law School.
Wesley Hough, Consultant whough@pragadvisors.com ***Public Finance Experience:*** 35 years ***Licenses:*** Series 50 - Municipal Advisor Reg. Representative	***Mr. Hough will serve as Regulatory asset Securitization Specialist for this engagement.*** One of the founding partners of PRAG, Mr. Hough has over 35 years of public finance experience and has a broad background in public securities issuance including specific experience in public enterprise revenue-based financings and utility tariff securitization. Mr. Hough managed the firm's Los Angeles office until 2008. He worked on the three inaugural issues of Rate Reduction Bonds issued in 1997 by the State of California on behalf of PGE, SCE and SDG&E. He served as a key member of the financing team that completed the three transactions totaling $6.1 billion and participated in development of the credit rating approach for the transactions which succeeded in obtaining triple-A bond ratings from all three rating agencies. A similar approach to utility tariff securitization as was first used in California has since been used by utilities and Public Utility Commissions across the country. Mr. Hough also worked on the firm's utility tariff securitizations for the States of New Hampshire and Connecticut and during 2007 he managed the firm's work for the Maryland Public Service Commission on the issuance of $623.2 million Rate Stabilization Bonds on behalf of Baltimore Gas & Electric. He served as the Maryland PSC's representative on all matters related to the issuance of the bonds, including underwriter selection, bond structuring and bond pricing, in order to ensure the bonds carried the lowest cost to ratepayers. He also worked on securitizations for the West Virginia Public Service Commission and the District of Columbia. Prior to founding PRAG, Mr. Hough was Manager of the Government Finance Officers Association, Government Finance Research Center. While Manager of the GFRC, Mr. Hough was responsible for the Center's debt management and financial advisory activities. Mr. Hough has published several articles in the area of public finance and is co-author of the book Creative Capital Financing for State and Local Governments. He holds a B.A. degree in Economics from the University of Michigan and a Master's degree in Economics from the London School of Economics.
Monika Conley, Senior Managing Director mconley@pragadvisors.com  ***Public Finance Experience:***	***Ms. Conley will serve as Pricing Specialist for this engagement.*** Ms. Conley serves as project manager for the states of Maryland, New Hampshire and New York, the New York Local Government Assistance Corporation, New York State Thruway Authority, New Hampshire Turnpike System, Baltimore County and Monmouth County. She has also assisted the states of West Virginia, Alabama, Florida, Georgia, Maryland and Virginia in the issuance of general obligation, revenue and lease revenue bonds and on special projects. She has worked on financings for a variety of purposes including transportation, water and wastewater, solid waste disposal and general governments. Ms. Conley has developed cash flow models and models for structuring new money and refunding issues for PRAG's clients. In addition to providing the quantitative analyses on PRAG engagements, her responsibilities have included review of legal documents, drafting of the official statement and the

25 years ***Licenses:*** Series 50 - Municipal Advisor Reg. Representative	notice of sale, preparation of presentations for rating agencies and communication with issuers, bond counsels, underwriters and investment bankers. For the State of New Hampshire, Ms. Conley has advised on all bond issues since 1992. She is involved in the preparation of rating agencies' presentations for the State and the yearly updates of its debt affordability study. For the State of New York, Ms. Conley assists in all bond issues, both new money and refundings. She prepares bond structures, calculates true interest cost in competitive sales and resizes the issues to comply with the state and local law. She evaluates refunding opportunities and serves as a contact with underwriters. She was involved in the development of PRAG's call option pricing model which was accepted by the State as a benchmark for selecting refunding candidates. She prepares rebate calculations and valuations of investments of bond proceeds, reviews requests for proposals received by the State and participates in a variety of other projects. Ms. Conley assists in negotiated pricings of bonds for all her clients and for PRAG's Florida clients. She has also assisted in the successful pricing of the West Virginia's Lottery bonds. Most recently, Ms. Conley assisted with the WDA Infrastructure Refunding Revenue Bonds (IJDC Program), 2016 Series A and WDA Water Development Refunding Revenue Bonds (Loan Program II) 2016 Series A-II in November and December 2016. Ms. Conley received her B.S. and M.S. degrees from the Central School of Planning and Statistics in Warsaw, and a Ph.D. from New York University. She also has a M.B.A. from the Columbia University Graduate School of Business.
Janet Lee, Senior Managing Director jlee@pragadvisors.com  ***Public Finance Experience:*** 25 years ***Licenses:*** Series 50 - Municipal Advisor Reg. Representative	***Ms. Lee will serve as Transportation Specialist for this engagement.*** Ms. Lee has been involved in the public finance field since 1990. She has served as financial advisor to the states of Alabama, California, Connecticut, Georgia, Maryland, Massachusetts, New Jersey and Virginia. She has also provided overall project management and quantitative analysis for several transportation entities including the Georgia Department of Transportation, the Georgia State Road and Tollway Authority, the Los Angeles County Metropolitan Transportation Authority, the New Jersey Transportation Trust Fund Authority, the Oregon Department of Transportation, the Virginia Department of Rail and Public Transportation, the Virginia Department of Transportation and the Washington State Department of Transportation. Ms. Lee has served as financial advisor to the Virginia Department of Transportation since 1995, providing a full range of services. She has successfully completed over $6 billion of financings for VDOT, including financings which are supported by the Transportation Trust Fund and GARVEEs. Ms. Lee was responsible for the overall transaction management, including developing the financing structure, managing the POS/OS process, developing the rating agency presentations, verifying bids and assisting in closing activities. She has assisted VDOT in developing a direct GARVEE program, subordinate to its indirect GARVEEs, where proceeds will be used for the public funds contribution for P3 projects. Ms. Lee has evaluated the public-private proposals received by VDOT from the standpoint of financial feasibility, risk allocation and strength of financial guarantees provided. Ms. Lee also advised the Georgia State Road and Tollway Authority on the issuance of its Guaranteed Revenue Bonds, which are secured by motor fuel taxes and other transportation related revenues. She also advised the State of Georgia in developing its $3 billion GARVEE program and structuring a direct and indirect program along with a variable rate component in the form of commercial paper. She has also assisted the Georgia Department of Transportation in evaluating public-private partnership proposals it has received and advised on the Northwest Corridor Managed Lanes project. She also assisted West Virginia, New Hampshire and District of Columbia in the development, structuring and implementation of their GARVEE programs. Most recently, Ms. Lee assisted the project team with the West Virginia GARVEE transaction in December 2016. Prior to joining the firm in 1992, Ms. Lee worked at Moody's Investors Service in the public finance department, rating letter of credit supported bond issues. Ms. Lee formerly worked at the City of New York's Office of Management and Budget in the Tax Policy, Revenue Forecasting and Economic Analysis Task Force. In addition to a M.B.A. from New York University, Ms. Lee holds a B.A. degree in Government from Cornell University at which she was a Cornell-in-Washington scholar.

Barry Valentinsen, Consultant bvalentinsen@pragadvisors.com ***Public Finance Experience:*** 34 years ***Licenses:*** Series 50 - Municipal Advisor Reg. Representative	***Mr. Valentinsen will serve as Tobacco Securitization Specialist for this engagement.*** Mr. Valentinsen formerly was a Senior Managing Director and Partner at PRAG. He joined the firm in 1997, retired in July 2015 and currently is engaged by PRAG as a consultant to assist on selected advisory engagements. Mr. Valentinsen worked on nearly all of the firm's tobacco engagements, where asset-backed bonds are issued secured by future payments made under the national tobacco Master Settlement Agreement. In addition to West Virginia, completed financings include the states of Louisiana, New York, California, South Carolina, New York City, Monroe County (NY), the District of Columbia, the County of Los Angeles, the County of San Diego and the City of San Diego. Mr. Valentinsen assisted in all aspects of these financings including transaction planning, management and execution, bond structuring, ratings and investment alternatives to maximize proceeds. In addition, he provided advice to several PRAG clients on the potential costs and benefits of securitizing their tobacco settlement revenue, including the states of Florida, Connecticut, Georgia, Maryland and New Hampshire, as well as a number of California localities. Prior to joining PRAG, Mr. Valentinsen worked 15 years in New York State Government, where he held positions that included Assistant Secretary to the Governor, Deputy Commissioner for Administration for the State Agriculture Department and Principal Fiscal Analyst for the Assembly Ways and Means Committee. He also holds an MBA in Finance from the University at Albany, an MA from the University at Albany and a BA from Temple University. Mr. Valentinsen is a Registered Municipal Advisor Representative and a Registered Investment Adviser Representative.
Andrew Evanchik, Senior Managing Director aevanchik@pragadvisors.com  ***Public Finance Experience:*** 13 years ***Licenses:*** Series 50 - Municipal Advisor Reg. Representative Series 65, Investment Advisor Representative	***Mr. Evanchik will serve as Derivatives Specialist for this engagement.*** Mr. Evanchik provides quantitative analysis for the derivatives transactions of PRAG clients, including West Virginia. His responsibilities include constructing and updating financial models, conducting risk analysis and assisting with negotiated and competitive sales. Mr. Evanchik has prepared quarterly swap valuation reports for the Parkways Authority and option value analyses for various bond issues for the State of West Virginia. His responsibilities also include constructing and updating financial models, conducting risk analysis and assisting with negotiated and competitive sales. He has constructed debt service models for the State of New York, LGAC, the State of New Hampshire and other PRAG's clients. He has constructed debt service models for the City of New York where he is responsible for the financing numbers related to new money and refunding transactions. He assisted the Empire State Development Corporation in structuring, analyzing the cost-effectiveness and implementing a negotiating pricing process for four swaps, each with four counterparties, totaling over $680 million. For the City of Phoenix, Mr. Evanchik has modeled a fixed/variable-rate refunding which involves a floating to fixed swap used in combination with VRDBs to achieve extra savings versus a fixed-rate refunding. Mr. Evanchik has also performed numerous swap termination/mid-market calculations for City of New York and State of New York. Mr. Evanchik graduated from Columbia University with a MS in Financial Engineering. Mr. Evanchik also holds a BS in Systems Engineering from the University of Virginia.
Ryan Killen, Associate rkillen@pragadvisors.com  ***Public Finance Experience:*** 6 years	***Mr. Killen will serve as Project Assistant for this engagement.*** Mr. Killen provides quantitative, analytical and project support for PRAG clients. His responsibilities include debt structuring and optimization, modeling and refunding analysis. Since his arrival at PRAG in March 2016, Mr. Killen has been involved in several financings for the State. Specifically, he verified the refunding numbers and reviewed legal documents for the Water Development Authority's Loan Program II and IJDC revenue bonds, calculated and reviewed the competitive bidding sales results for the State's Infrastructure General Obligation Bonds and provided comments to documents, such as the underwriters RFP and Memorandum of Understanding, for the recent GARVEE's issuance. Among other tasks not related to bond issues, he has collaborated with Moody's regarding details of the State's net tax supported debt calculations and reviewed and validated continuing disclosures with DAC in regards to specific bond transactions and the State's issuing agencies. Prior to joining PRAG, Mr. Killen worked for an international law firm within their public finance group serving municipalities and underwriters throughout the bond transaction process. Mr. Killen holds a B.S. in Finance from St. Joseph's University and a M.B.A. from St. Thomas University.

Lauren Weir, Analyst
lweir@pragadvisors.com

***Public Finance Experience*:**
1 year

Ms. Weir will serve as Project Assistant for this engagement. Ms. Weir joined PRAG in its Media, Pennsylvania office in 2016 as an Analyst. Ms. Weir provides analytical, project, and marketing support to PRAG's municipal financing engagements, encompassing research, drafting and editing documents, and general advisory support. Ms. Weir also engages in business development through preparing responses for requests for proposals. She assists the senior staff in all aspects of PRAG's financing engagements.

Ms. Weir has provided support in connection with the West Virginia (Commissioner of Highways) Surface Transportation Improvements Special Obligation Notes, Series 2016 A, the School Building Authority of West Virginia Lottery Capital Improvement Revenue Bonds, Series 2016B, and the West Virginia Infrastructure General Obligation Refunding Bonds Series 2017. She helped to assemble the pre-pricing and closing books for each issue, provided support on the day of bidding for the GO Infrastructure issue, summarized Underwriter proposals for the GARVEE issue, and provided general support throughout each of the transactions.

Ms. Weir received her MA Ed. from the College of William and Mary and her B.A. in History from the Pennsylvania State University.

Question 2. *Please list the total number of financial advisory consultants that your firm employs. Please describe the respective seniority of each consultant. Please indicate the number of clients for which each consultant is responsible.*

PRAG currently employs thirty (30) public finance professionals. The table below provides the name, title, years of public finance experience, years with PRAG, the number of clients each professional is responsible for and indicates the professionals that have provided financial advisory services to the State.

Financial Advisory Professionals	Title	Years of Experience	Years with Firm	Number of Clients Professional is Responsible For	Has Provided Service to the State of West Virginia
Steven Peyser*†	President	Over 32	31	13	✓
Edmund Soong*†	Executive Vice President	Over 29	20	8	
Thomas Huestis*†	Senior Managing Director	Over 26	14	9	✓
May Chau*†	Senior Managing Director	Over 19	5	10	
Louis M. Choi*†	Senior Managing Director	Over 14	12	8	
Monika Conley*†	Senior Managing Director	Over 25	25	6	✓
Ellyn Dinzey*	Managing Director	Over 15	14	6	✓
Jessica Donnelly*	Senior Managing Director	Over 16	2	12	✓
Marianne Edmonds*†	Senior Managing Director	Over 37	12	8	✓
Andrew M. Evanchik*†	Senior Managing Director	Over 13	13	8	✓
Christine Fay*	Senior Managing Director	Over 15	9	7	✓
Daniel Forman*	Managing Director	Over 6	5	6	✓
Wendell Gaertner*†	Senior Managing Director	Over 25	4	8	
Steve Goldfield*	Senior Counselor	Over 26	12	5	✓
D. Mark Gooding*†	Senior Managing Director	Over 31	14	8	✓
Wesley Hough*	Senior Counselor	Over 35	32	2	✓
Christine Ilarina*	Managing Director	14	11	7	✓
Michelle Issa*†	Senior Managing Director	Over 29	8	10	
Janet Lee*†	Senior Managing Director	Over 25	25	9	✓
Jocelyn Mortensen*†	Senior Managing Director	Over 29	11	11	✓
John Schopfer*	Senior Managing Director	Over 36	1	5	
Barry Valentinsen*	Senior Counselor	Over 34	19	3	✓
Daniel Fanger*	Assistant Vice President	11	1	As required	
Alexandra Hilgeman**	Associate	1	1	As required	
Ryan Killen**	Associate	Over 6	1	As required	✓

Xun Lin*	Vice President	Over 9	5	As required	✓
Benjamin Martin**	Analyst	1	1	As required	
Naomi Rinaldi**	Analyst	1	1	As required	
Heather Sutherland**	Analyst	5	5	As required	
Lauren Weir**	Analyst	1	1	As required	✓

*Represents senior PRAG professionals.
†Represents PRAG shareholders. Mr. Peyser, Mr. Thomas Huestis and Mr. Soong are members of PRAG's executive committee.
**Represents associate and analyst professionals.

Our reputation for outstanding client service is in part due to our team approach to staffing our engagements and our business model, which focuses on primarily serving clients either with complex long-term capital programs or with an ongoing need for financial advisory services. This allows the firm to assign fewer clients to each professional, which permits greater time and attention to be paid to each client. Each senior professional only serves approximately five to ten clients. Our business model is in contrast to other financial advisory firms, where senior professionals cover a large number of clients. PRAG has avoided that type of model, as we believe it results in the over-extension of senior professionals and an over-reliance on less experienced junior staff members. We are strategic and selective in our new business as we are always mindful of ensuring that the full resources of the firm are mobilized in any client engagement. For this engagement, senior personnel will be available at all times to devote the necessary time and resources to the engagement to ensure that the State receives prompt attention at any time. Our commitment to bring all the resources of PRAG is demonstrated by the table above. ***More than 72% of the senior professionals at the firm have provided financial advisory services to the State of West Virginia.***

B. Company Background

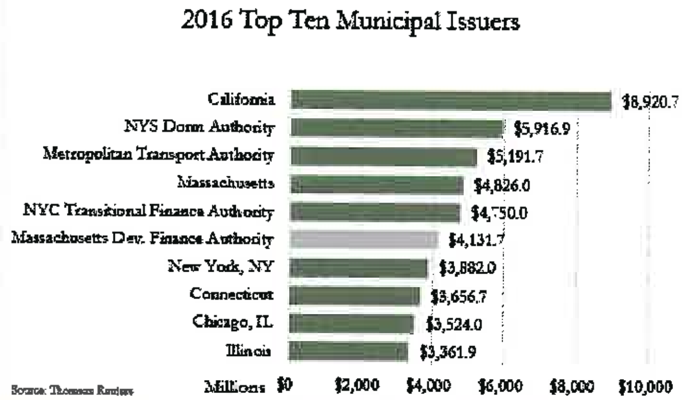
Question 1. *Describe your firm's background and history in providing services requested herein. This should include descriptions of past projects completed, the location of the projects, project manager names and contact information, type of projects, and what the project goals and objectives were and how they were met.*

PRAG is an independent financial advisory firm organized as a subchapter S corporation wholly-owned and managed by its employees. The firm was founded on May 1, 1985 to provide independent and comprehensive financing support to state and local governments and their authorities and has continuously served only governmental entities for the firm's entire 31 year history. PRAG has five offices across the country, including our headquarters in New York City, Philadelphia, Los Angeles, Oakland, and St. Petersburg. Our success is built on a history of high-quality independent advice, responsive service, commitment of experienced personnel, in-depth knowledge of the markets and the rating process, unmatched quantitative skills and unblemished integrity. PRAG is a registered Municipal Advisor with the Securities and Exchange Commission (Municipal Advisor Registration Number 867-00146) and the Municipal Securities Rulemaking Board (MSRB ID K0133) and is registered as an investment adviser under the New York Investment Advisers Act in the states of California, Florida, New York, Pennsylvania and the District of Columbia.

As an independent financial advisor not affiliated in any way with a broker/dealer, PRAG does not engage in any form of underwriting, trading, marketing, or investing in tax-exempt securities, nor does it act as an investment manager for governmental or other funds. This restriction eliminates the possibility that even the appearance of a conflict can ever exist within our organization between marketing and financial advisory services and we will always act in the best interests of our clients. This enables us to offer uncompromised service through independence.

PRAG Financial Advisory Rankings (2011 – 2016)			
Year	Total Long Term Municipal Issuance*	National Rank by Volume	Market Share by Volume
2016	$33.4	3	9.5%
2015	$30.9	3	9.9%
2014	$27.9	2	10.8%
2013	$30.9	2	10.2%
2012	$26.5	2	9.3%
2011	$20.9	2	9.7%
2010	$31.1	2	9.4%
2009	$42.5	2	13.5%
2008	$20.3	3	7.5%
2007	$27.3	3	6.4%
*$'s in billions. Source: Thomson Reuters			

LEADING NATIONAL FIRM. ***PRAG has been consistently ranked as one of the top three national financial advisory firms over each of the past ten years, as shown.*** The national expertise of a financial advisory firm does not, at face value, seem to provide direct benefits to a given issuer with individual and specific needs; however, PRAG personnel are able to leverage the collective experiences of the firm to provide insights that are not frequently available on a timely basis from smaller firms. With our client base including some of the nation's most frequent municipal issuers, PRAG is one of the first financial advisory firms introduced to the latest innovations in the marketplace. In addition, we are extremely active with primary offerings and can observe first hand shifting investor preferences.



Entities shaded in green represent issuers for which PRAG has provided financial advisory services.

LEADING FINANCIAL ADVISOR FOR LARGE ISSUERS. PRAG specializes in advising states, state agencies and other larger issuers across the country, such as the State. PRAG is engaged as financial advisor to nine of the top 10 most active issuers in the nation, as shown in the chart to the right.

The firm has built this client base by concentrating on issuers with large, complex financing programs for whom the debt management function is highly important. As noted above, we are often the first financial advisory firm to review the latest innovations and changes in the marketplace. PRAG leverages this information by informing our clients of the innovative developments and through our analytical and quantitative expertise to form our own independent views on market developments and how they may impact our clients. This state-of-the-art analysis and information is valuable to the State as a regular market issuer.

PRAG's General Obligation Long Term Municipal Issues Experience Since January 2007 ($'s in millions)			
Calendar Year	# of Issues	Principal Amount	FA Ranking
2007	57	22,799.80	1
2008	60	12,773.30	1
2009	84	29,631.70	1
2010	82	21,095.50	1
2011	58	11,650.70	2
2012	69	14,405.90	2
2013	66	17,788.00	1
2014	59	14,165.30	1
2015	68	21,707.50	1
2016	73	19,039.10	3
Total	**676**	**$185,056.80**	
Source: Thompson Reuters			

LEADING GENERAL OBLIGATION FINANCIAL ADVISOR. ***For the last decade, PRAG has been a leading Financial Advisor for General Obligation Bond Issues having served as primary financial advisor for 676 general obligation bond issues totaling approximately $185 billion during that time.*** PRAG's general obligation experience includes general obligation financing programs for the cities of New York, Los Angeles, San Jose; District of Columbia; states of West Virginia, California, Georgia, Illinois, Maryland, Minnesota, New Hampshire, New York, South Carolina, Rhode Island, Vermont and the Commonwealth of Virginia, in addition to many counties. PRAG personnel are able to leverage the collective experiences of the firm to provide insights on the issues and state-of-the-art debt practices of other large issues that are not frequently available on a timely basis from firms without a large-issuer focus. As seen in this table, our firm has been a leading financial advisor to general obligation bond issuers over the past decade. This is of particular relevance to the State given the passage of Senate Joint Resolution 6, which authorizes the issuance of up to $1.6 billion in general obligation bonds to be used for improvement and construction of state roads. PRAG reviewed this legislation in various forms when it was being drafted and provided recommendations on the provisions in order to ensure that the State's rating and credit objectives were being met, and the bonds received the best execution, if and when issued. PRAG also has significant experience advising the State on the issuance of general obligation bonds for both state road and infrastructure projects. Our firm has advised the State on the issuance of six series of general obligation bond with an aggregate par amount of $381 million. All of these issuances were refunding bonds and PRAG helped save the State $52.4 million in net present value savings from the issuance of State general obligation refunding bonds.

UNRIVALED STATE AND STATE-LEVEL EXPERIENCE. ***PRAG is a leading financial advisor, independent or otherwise, to states as well as state agencies and authorities.*** No firm can match our experience in providing financial advisory services to states. We have assisted more than sixty states and state-level authorities and agencies on financings totaling over $490 billion. We have provided a full range of services, including advising on bonds and appropriation debt issuance, preparing plans of finance, maintaining debt databases, developing alternative bond structures, investing bond proceeds and debt service funds, developing capital and debt management plans, advising on credit and rating agency strategies, assisting with the development and implementation of marketing plans, providing legislative and public support and advising on new developments in the municipal marketplace. In the map to the right states shown in green indicate that PRAG has provided financial advisory services to that state or state-level issuer.

This experience means that we have developed unmatched knowledge of state legal structures and have unique relationships with state credit rating analysts and underwriting syndicate desks that will enable the state issuer to achieve the lowest borrowing cost. The table on the following page provides a list of the selected states and state level authorities and state agencies for which PRAG currently provides financial advice.

States and State-Level Authorities PRAG Currently Provides Service to

States	State-Level Authorities	
State of California	Alabama Department of Transportation	Northeast Maryland Waste Disposal Authority
State of Colorado	Dormitory Authority of the State of New York	Oregon Department of Energy
State of Connecticut	Empire State Development	Oregon Department of Education
State of Florida	Florida Department of Transportation Financing Corporation	Oregon Department of Transportation Financial Services
State of Georgia	Florida League of Cities / Florida Municipal Loan Council	Texas Department of Transportation
State of Illinois	Georgia Board of Regents	Vermont Economic Development Authority
State of Maryland	Georgia Department of Transportation	Virginia College Building Authority
Commonwealth of Massachusetts	Georgia Environmental Finance Authority	Virginia Department of Transportation
State of Minnesota	Georgia Higher Education Facilities Authority	West Virginia Department of Transportation
State of New Hampshire	Georgia State Road and Tollway Authority	West Virginia Economic Dev. Authority
State of New Mexico	Massachusetts School Building Authority	West Virginia Higher Education Policy Commission
State of New Jersey	New Hampshire Turnpike System	West Virginia Parkway Authority
State of New York	New Jersey Educational Facilities Authority	West Virginia School Building Authority
State of Oregon	New York Housing Finance Agency	West Virginia Water Development Authority
Commonwealth of Pennsylvania	New York Local Government Assistance Corporation	
State of Rhode Island	New York Municipal Bond Bank Agency	
State of South Carolina	New York State Thruway Authority	
State of Vermont		
Commonwealth of Virginia		
State of Washington		
State of West Virginia		
District of Columbia		

BROAD RANGE OF SERVICES. ***As a full-service municipal advisory firm, PRAG provides a comprehensive range of services and advises clients on all financial matters.*** PRAG serves as a general financial advisor to a wide variety of governmental entities, providing a comprehensive range of services and advising clients on all financial matters, including those highlighted within the State's Project Specifications. It is important to note that each of these services grew out of the specific needs of our clients. The common element they all share is the goal of improving overall financial performance and governmental effectiveness, while enabling essential projects to be funded. PRAG's services are individually tailored to our clients' needs. PRAG is not product driven. Our firm has a proven record of developing debt and investment advisory programs, providing detailed and in-depth quantitative analysis and financial product innovation. PRAG also has experience in structuring and marketing bond issues and presenting credits to credit rating agencies. In addition, PRAG provides a variety of other general financial advisory services including long-term capital planning, financial policy development, liability management advisory services (OPEB, pensions and workers' compensation), debt affordability analysis, cash-flow analysis, revenue and expenditure analysis, debt monitoring, legislative development and analysis, P3 project negotiation assistance, supporting investor and other stakeholder relationships, client staff training and development, assistance in selecting working group members, credit providers and more.

Highlights of PRAG's comprehensive financial advisory services provided to the State include: development of a "promise and performance" based rating agency strategy that yielded rating increases for the State from all three rating agencies in 2009 and 2010 reducing the cost of State borrowing and increasing refunding savings;

serving as advisor to the state in connection with i) reducing the workers' compensation unfunded accrued actuarial liability in excess of $2.8 billion, ii) capitalizing the employers' mutual insurance company at $400 million less than requested by BrickStreet, iii) developing a funding plan that avoided issuance of $1.5 billion of pension obligation bonds, and iv) reducing premium paid by all businesses and government by in excess of 35%; assisting with a comprehensive plan to re-focus the Parkways Authority on its core mission and to eliminate liabilities with respect to Tamarack; financings for State parks; assisted the Governor with a comprehensive review of the governance structure and risk profile being pursued by the Consolidated Public Retirement Board after the financial crisis; increasing the competition of investment banks that are covering West Virginia and have now participated in both negotiated and competitive offerings which we believe has also reduced the cost of capital for the State and increased the number of firms bringing ideas to the State; assisted the Department of Administration with the completion of the questionnaire for the Municipalities Continuing Disclosure Cooperation Initiative; developed financial models to determine bonding capacity related to the issuance of general obligation bonds, toll revenue bonds, and GARVEE notes for the Governor's Infrastructure Plan and reviewed and commented on proposed legislation, and ongoing rating strategy, including peer comparison of other state level issuers.

Provided below in tabular form are descriptions of some of the projects PRAG has completed for the State. Included in this summary are the Project Manager names, type of projects, what the project goals and objectives were and how they were met. Contact information is on previous resumes.

Location: State of West Virginia
Selected Descriptions of Past Projects Completed, Including Goals and Objectives

Project Type and PRAG Project Managers	Project Description, Goals and Objectives	How Goals and Objectives were Met
Debt Management Project Supervisor: Tom Huestis Project Managers: Christine Fay and Jessica Donnelly	Implementation of Best Practices in Debt Management	Developed a ***formalized, competitive procurement process*** for selection of underwriters through the Department of Administration: • Improved the State's request for proposal process • Expanded participation of local, regional and national investment banking firms • Enhanced criteria for selection committee • Prepared summaries of proposals containing salient features of responses • Provided requested training for selection committee members including an all day, comprehensive Bond School event for multiple agencies that participate in bond financings • Served in an advisory capacity at various stages of the procurement process • Developed interview questions for short listed candidates and provided quantitative support relating to responses and helping committee members to prioritize respondent capabilities. Assisted the State with ***negotiation of underwriters' fees*** prior to each negotiated bond sale. Assisted the State with negotiating the pricing of bonds (interest rates) to ***ensure optimal borrowing cost is achieved.*** Advised the State to sell general obligation bonds by ***competitive sale to achieve the lowest cost of borrowing.***

		Advised the State on investment of bond proceeds, always recommending a ***competitive procurement process*** to obtain an investment return within the State's legal and risk constraints.
Rating Agency and Credit Market Relationships Project Supervisor: Tom Huestis Project Managers: Christine Fay and Jessica Donnelly	Improve and Maintain the State's Credit Rating with all three Agencies	***Frequent communication*** between State leadership, PRAG and rating agencies as well as ***"promise and performance scorecard" (i.e. the State promised it would aggressively address unfunded liabilities and performed on those promises)*** were the center piece of the rating agency strategy. • The State's efforts coupled with conservative financial management and strong financial performance, including increasing reserves, diversifying economy and reduction in unfunded liabilities ***resulted in credit rating upgrades by Moody's and Standard & Poor's in 2009 and 2010***, respectively, the ***first upgrade of the State by Moody's since 1999*** and ***by Standard & Poor's since 1996.*** • In December 2014, PRAG organized in person meetings with all of the rating agencies and Governor Tomblin, Legislative leadership and State staff to discuss the administration's priorities and adherence to fiscally conservative principals. • In January 2017 at the request of the Governor's Office and the Department of Revenue PRAG attended in person meetings with the new administration to discuss rating strategy, rating triggers, and possible impact to the State's ratings based on different budget measures. • With the drop in natural resources prices and downturn in the State's economy the rating agencies have warned of pressure on the State's credit rating. While each rating agency has downgraded the State's rating one notch, the State with PRAG's assistance has maintained strong double A category ratings of Aa2/AA-/AA by Moody's, S&P and Fitch respectively as a result of ongoing communication with the analysts and continued emphasis on the State's high reserve levels, commitment to paying down its unfunded liabilities and history of strong financial management. • PRAG prepared a peer comparison that summarized the credit strengths and weaknesses, as well as certain debt and economic statistics and borrowing costs of 15 state issuers for the Department of Revenue and the Governor's Office. • ***High credit ratings*** directly ***translate into lower borrowing costs*** for the State.
Review of draft Legislation Project Supervisor: Tom Huestis Project Managers: Christine Fay, Jessica Donnelly,	Legislation drafted to ensure optimal credit and financing execution	PRAG has reviewed draft legislation at the request of multiple departments, authorities and agencies of the State to ***ensure the highest credit and best financing execution of proposed bond issuances. Examples of PRAG's review from recent legislative sessions:*** • Governor's Office - Joint Senate Resolution 6 related to the issuance of $1.6 billion in general obligation bonds for state roads. • Department of Revenue - Review of SB 484 and SB 335 related to tax reform.

and Steve Goldfield		• Parkways Authority - SB 482 related to the extension of turnpike tolling, bonding and a possible flat fee structure. • School Building Authority - Consultation on HB 2070 relating to funding operations of the SBA through the established appropriations statute of the Authority. • Department of Revenue and Lottery - HB 101 and 106 proposed to reduce statutory transfers and increase lottery and excess lottery revenues available for bonds securities by such revenue stream and bolster debt service coverage on the bonds to assuage rating agency concerns and protect the state's lottery and excess lottery ratings.
Continuing Disclosure Project Supervisor: Tom Huestis Project Managers: Christine Fay	Assist the State in self-disclosing late or missed continuing disclosure filings as required by certain bond issues through the MCDC Initiative	PRAG worked with the Department of Administration and the State's Disclosure Counsel to review past continuing disclosure compliance and to determine if it was necessary to self-report through the SEC's Municipalities Continuing Disclosure Cooperation (MCDC) Initiative. We found that the State had multiple missed or late filings stemming from staff turnover and dispersed bonding ability among a variety of State bond issuing agencies and authorities all with unique continuing disclosure requirements. • PRAG worked with the State and its Disclosure Counsel to complete the MCDC questionnaire to report all of the State's missed or late filings. • **The State was notified by the SEC in April, 2017 that the SEC did not take any enforcement action against the State for such *self-reported* failures.** • Given the multiple State's issuers and the inconsistencies of agency Continuing Disclosure Agreements (CDA), PRAG suggested that the State put in place a Securities Compliance policy to prevent future filing failures and that the State contract with Digital Assurance Corporation (DAC) to avoid future failed filings. PRAG assisted the State in drafting its Securities Compliance Policy which was executed in November 2014. PRAG, at the State's request, subcontracted with DAC in 2014. • DAC reviewed all of the State's continuing disclosure obligations and created a database summarizing its obligations for each bond issue. DAC now provides reminder emails to representatives of the State and State authorities of upcoming continuing disclosure deadlines and flags missing parts of the filed disclosures such as financial tables required by certain CDAs.
Financial Liability Management Project Manager: Steve Goldfield Project Assistants: Tom Huestis and Christine Fay	Addressing the State's Unfunded Teachers' Pension Liabilities using Tobacco Bond Proceeds	Assisted the State with ***landmark tobacco bond sale*** (largest taxable tobacco bond issue ever) resulting in savings to taxpayers of $2.8 billion and significantly improving the funding of the Teachers' Retirement System. • This financing enabled the State to amortize its unfunded debt on the TRS on a ***level, annual, affordable basis.*** • Assisted the State with the transfer of teachers from defined contribution plan back into defined benefit plan while ***actually***

		reducing the annual funding cost to the state for such transferees.
Financial Liability Management Project Manager: Steve Goldfield Project Assistants: Tom Huestis and Christine Fay	Addressing the State Workers' Compensation Unfunded Liabilities	Developed (with an actuarial firm), a model that enabled the ***Old Fund to be closed without having to issue $1.5 billion of bonds – savings*** of approximately ***$50 million per year*** for life of bonds. • Supported the Offices of Insurance Commissioner in negotiations to fund BrickStreet's start-up operations reducing BrickStreet's request from $650 million to $220 million ***subject to stringent requirements to protect the State.*** The entire note, along with interest has now been repaid, ahead of schedule and the ***Old Fund debt has been reduced by more than $2.8 billion***.
Financial Liability Management Project Manager: Steve Goldfield Project Assistants: Tom Huestis and Christine Fay	Addressing the State's Other Post Employment Benefits Unfunded Liabilities	Provided independent analysis of OPEB liability so the State would have higher degree of confidence when reviewing options. ***Comprehensive review of benefit structure and operational overview of PEIA*** led to a series of recommendations aimed at best practices in the area of delivery of post-employment health care benefits • Advised the State to shift healthcare cost to the Federal Government through the MAPD program which has ***saved the State well in excess of $100 million***; through a comprehensive effort by the State, its OPEB liability has been reduced from in excess of $8 billion to approximately $5 billion with funding potentially coming from, among other places, reprogrammed revenues currently flowing into the Old Fund. PRAG participated in joint meetings of Senate and House to present comparisons with other states and ideas being implemented in other states to assess benefits and reduce the unfunded liability.
Financial Asset Management Project Supervisor: Tom Huestis Project Managers: Steve Goldfield and Jessica Donnelly	Investment review to assess financial risk in the wake of the 2008 financial crisis.	Undertook a ***comprehensive review of the State's investment practices*** and investments • Assisted with improving communication among key State entities responsible for State investments (Treasurer's Office and CPRB) by sharing information and better coordinating investment decisions for certain investments. • The ***State altered its investment strategy for rainy day fund*** and the Workers' Compensation Old Fund to ensure ***preservation of principal and liquidity***. • An objective for ***Workers' Compensation Old Fund was to reduce its exposure to equities*** and ***eliminate hedge fund investments.*** • Advised the State on the procurement of new general investment consultant at IMB after this review. Assisted in the development of the request of proposals, the development of selection criteria and advising throughout the process. • Advised the State on investment changes prior to the implementation of the SEC money market investment reforms in October 2016.
Financial Asset Management	Independent Financial Operations and	***Prepared an 81 page report to assist the Governor, State Legislature and general public*** in the evaluation of the need for toll increases to

Project Supervisor: Tom Huestis Project Managers: Jo Mortensen and Steve Goldfield	Capital Review and Analysis of West Virginia Parkways	maintain a safe system of roads with acceptable levels of service for its users. • Led to decision to have Parkways focus on transportation and exit the economic development and tourism business. • ***Paid off remaining Tamarack bonds*** reducing operating losses by $1.2 million per year. • First toll increase since 1981 was implemented in 2009. • The Parkways was able to efficiently refund its variable rate debt and maintain a strong credit position.
Transportation Funding Plans Project Supervisor: Thomas Huestis Project Managers: Christine Fay and Jessica Donnelly Project Assistant: Janet Lee and Steve Goldfield	Enable funding acceleration of essential transportation projects	PRAG assisted the State in developing, structuring and implementing a $200 million debt program to leverage future Federal and highway reimbursements through the issuance of GARVEEs bonds. The program has consisted of four financings, the first issuance of bonds ($76.0 million) were sold in October 2006 and most recent issuance of bonds ($53.4 million) were sold in December 2016. PRAG advised on all aspects of the financings, including the structuring of bonds, developing the credit structure that originally resulted in ratings of Aa3 for Moody's and AA- from Standards & Poor's with current ratings of A2 and AA, respectively. PRAG assisted the State in negotiating the pricing of the bonds, which resulted in lower debt service costs, drafting of the disclosure document, development of the rating strategy and presentation, participated in the investor presentation, presented to the five-member transportation board, reviewed and advised on the drafting of the MOU with FHWA and structured the bonds. PRAG is familiar with the Governor's Infrastructure plan and has been working with the Department of Transportation and Parkways Authority to run financial capacity numbers based on assumed revenue streams and authorization caps for general obligation bonds, toll revenue bonds and GARVEE notes.
School Capital Funding Plan Project Supervisor: Tom Huestis Project Managers: Christine Fay, Jessica Donnelly and Steve Goldfield	Develop a multi-year approach to school building funding that is affordable and sustainable.	PRAG and the WV School Building Authority developed a structure that optimizes the use of bond proceeds of the Excess Lottery Fund, State Lottery Fund and other appropriations and leverages only certain portions of the Excess Lottery and Lottery revenues. PRAG built a funding model to provide regular updates to the Plan. The model is currently being used by the both the SBA and the Governor's office for planning and to evaluate school construction plans. ***The SBA has successfully issued regular financings for school construction needs and maintains on-going bonding capacity.***
Financing of State Office Buildings and Renovations Project Supervisor: Tom Huestis	Finance State Office Building and lowest cost of borrowing	In 2015, PRAG advised the State on all phases of issuance of its lease revenue bonds for its Fairmont, Clarksburg and Building 3 projects. This included recommendations regarding the execution of a reimbursement resolution, selecting working group members, structuring the bonds based on the lease payments projected from the respective projects rentable square footage, formulating the rating strategy and presentation, reviewing the preliminary official statement and bond documents, pricing and closing the bonds and developing the building lease schedules.

Project Managers: Christine Fay and Jessica Donnelly		The Building 3 bonds priced on August 20, 2015. After PRAG's recommendation to reduce the pricing scale by as much as five basis points in certain maturities based on the strength of the market and spreads of recent comparable transaction in the market, the transaction was oversubscribed and PRAG and the State were able negotiate additional adjustments to the scale. ***The transaction ultimately achieved a true interest cost of 3.74%.***
Parkways Direct Bank Loan Project Supervisor: Tom Huestis Project Managers: Christine Fay and Steve Goldfield	Eliminated liquidity and basis risk related to variable rate bonds	PRAG prepared and distributed a Request for Proposal for liquidity facilities for the Parkways variable rate demand bonds (VRDBs). PRAG summarized and evaluated the proposals and in conjunction with the Authority determined that a Direct Bank Loan allowed for reduced risks at a comparable cost to other alternative products in the market. PRAG assisted with all aspects of the mandatory tender of the variable rate demand bonds and negotiation of the direct bank loan with Wells Fargo bank. This transaction eliminated significant risks to Parkways Authority through the maturity of its VRDBs in 2019.
Refunding Bond Issues Project Supervisor: Tom Huestis Project Managers: Christine Fay and Jessica Donnelly	Refinance debt in order to achieve debt service savings in excess of 3%	The twenty refundings below resulted in over ***$130.861.5 million of savings on a present value basis.*** Each of the refundings achieved ***a savings percentage*** of the refunded bonds ***well above the 3% benchmark*** typically used by municipal issuers. • $28.215 million Infrastructure General Obligation Refunding Bonds were sold on January 5, 2017 and resulted in ***$3.8 million in present value savings*** (or 12% of the refunded bonds). • $51.105 million Water Revenue Refunding Bonds were priced on December 7, 2016. As a result of the refunding, the WDA obtained over ***$5.8 million in present value savings*** (or 11.3% of the refunded bonds). • $74.32 million Infrastructure Water Refunding Revenue Bonds were priced on November 30, 2016. As a result of the refunding, the WDA obtained over ***$5.8 million in present value savings*** (or 7.8% of the refunded bonds). • $63.64 million Excess Lottery Revenue Refunding bonds were priced on November 4, 2015. As a result of the refunding, the State obtained over ***$5.6 million in present value savings*** (or 8.8% of the refunded bonds). • $133.71 million State Road General Obligation Refunding Bonds were sold competitively on April 16, 2015 and resulted in ***$25.92 million in present value savings*** (or 19.4% of the refunded bonds). • $71.655 million Infrastructure General Obligation Refunding Bonds were sold on January 22, 2015 and resulted in ***$5.6 million in present value savings*** (or 13.3% of the refunded bonds). • $40.245 million Water Revenue Refunding Bonds were priced on October 29, 2013. As a result of the refunding, the WDA obtained over ***$5.8 million in present value savings*** (or 11.3% of the refunded bonds). • $27.435 million Infrastructure Water Refunding Revenue Bonds were priced on December 7, 2012. As a result of the refunding, the

		WDA obtained over ***$5.1 million in present value savings*** (or 18.7% of the refunded bonds). • $25.79 Water Refunding Bonds were priced on December 4, 2012. As a result of the refunding, the WDA obtained over ***$8.3 million in present value savings*** (or 32.5% of the refunded bonds). • $20.67 Water Refunding Bonds were priced on December 4, 2012. As a result of the refunding, the WDA obtained over ***$3.4 million in present value savings*** (or 16.5% of the refunded bonds). • $20.395 Water Refunding Bonds were priced on December 4, 2012. As a result of the refunding, the WDA obtained over ***$3.9 million in present value savings*** (or 17.7% of the refunded bonds). • $94.3 million Water Revenue Refunding Bonds were priced on October 27, 2011. As a result of the refunding, the WDA obtained over ***$27.5 million in present value savings*** (or 21.9% of the refunded bonds).$132.165 million Higher Education Facilities Revenue Bonds were priced on June 12, 2912. As a result of the refunding, the State obtained over **$6.0 million in present value savings** (or 4.8% of the refunded bonds). • $104.535 million Lease Revenue Refunding Bonds were priced on April 4, 2012. As a result of the refunding, the State obtained over ***$6.8 million in present value savings*** (or 6.0% of the refunded bonds). • $3.6812.0 million Lease Revenue Refunding Bonds were priced on October 27, 2011. As a result of the refunding, the State obtained over ***$1.6 million in present value savings*** (or 18.613.4% of the refunded bonds). • $8.34 million Lease Revenue Refunding Bonds were priced on October 27, 2011. As a result of the refunding, the State obtained over ***$1.6 million in present value savings*** (or 10.8% of the refunded bonds). • $18.6 million Infrastructure General Obligation Refunding Bonds were sold competitively on September 14, 2011 and resulted in ***$2.6 million in present value savings*** (or 13.6% of the refunded bonds). As a result of this refunding the State will realize approximately $260 thousand in annual savings in fiscal years 2013 through 2023. • $90.8 million EDA Lease Revenue Refunding Bonds for Correctional, Juvenile and Public Safety Facilities were priced on July 13, 2011 and resulted in over ***$6.3 million in present value savings*** (or 6.9% of the refunded bonds). As a result of this refunding the State will realize $630,000 in average annual savings in fiscal years 2012 through 2024. • $35.1 million General Obligation State Road refunding bonds were sold competitively on July 8, 2010. The State ***received a rating upgrade*** the day before it went to market on these bonds. As a result of the refunding, ***aided by the rating upgrade,*** the State obtained over ***$4million in present value savings*** (or $5.8 million in savings over the life of the bonds) and $2.2 million in FY2011. • $186.0 million Capital Improvement Refunding Bonds sold on February 8, 2007 resulted in over ***$14 million of present value***

		savings or 7.32% of refunded bonds. The savings were obtained in fiscal years 2007 and 2008 to increase the funding of school construction. • $94.2 million Infrastructure General Obligation Refunding Bonds sold on November 1, 2006 resulted in ***$6.3 million in present value savings*** (or 6.6% of the refunded bonds).

Question 2. *Provide a broad overview of your firm, including a functional description of any parent, affiliated, or subsidiary company, and any business partners. Provide an organization chart of your firm and describe the working relationships between each component and your consulting group.*

As stated above, PRAG is an employee owned and managed firm. PRAG has no parent, affiliated or subsidiary companies and no corporate business partners or component units. PRAG does not retain business consulting/marketing firms.

Our Organizational Chart is shown below. ***PRAG maintains a flat organizational structure consistent with our team oriented approach to providing service.*** Unlike our competitors, we do not have profit centers or separate business units that affect our staffing decisions due to financial incentives or organizational conflicts. During our twelve years of service to the State of West Virginia, we have assigned to the State resources throughout our firm to meet the State's changing needs, specifically bringing in firm specialists and industry experts, as needed, for specific projects. By hiring PRAG, West Virginia not only gets a top-notch team dedicated to servicing the State but also all of the firm's specialists at its disposal. **Highlighted** individuals have worked on projects for the State – ***including 16 out of the 22 senior advisors in the firm.***

President
Steven Peyser

Executive Vice President
Edmund Soong

Senior Managing Director
Thomas Huestis

Senior Level Advisors

May Chau	Marianne Edmonds	Steven Goldfield	Janet Lee
Louis Choi	Andrew Evanchik	Mark Gooding	Jocelyn Mortensen
Monika Conley	Christine Fay	Wes Hough	John Schopfer
Ellyn Dinzey	Daniel Forman	Christine Ilarina	Barry Valentinsen
Jessica Donnelly	Wendell Gaertner	Michelle Issa	

Mid and Junior Level Advisors

Daniel Fanger	Ryan Killen	Benjamin Martin	Heather Sutherland
Alexandra Hilgeman	Xun Lin	Naomi Rinaldi	Lauren Weir

As mentioned above in our response to Section 3.A, Question 1., at our clients' request, on certain projects, PRAG has worked with other independent financial services firms such as actuaries, benefit consulting firms, investment consultants, continuing disclosure firms with specialty industry expertise to meet our clients' goals and objectives.

For specific projects and depending on our client's preferences, these firms will subcontract with PRAG, PRAG will subcontract with these firms or PRAG and the service firms will provide services via separate client contracts. Consistent with our independent approach to client service and our desire to eliminate any conflicts or perceived conflict of interest, PRAG has no long-term contractual relationships with these firms. For example, in our work with the State of West Virginia, PRAG has entered into subcontracting arrangements with Digital Assurance Certification ("DAC"), to provide the post-issuance compliance for the State's bond issues.

Question 3. *Provide copies of any written Code of Conduct, Ethics Policy, or Conflict of Interest Policy. If your firm does not have such a policy please so state.*

PRAG's Code of Conduct policies and Conflict of Interest policy are included in PRAG's Employment Handbook (the "Handbook"), which each PRAG employee is obligated to sign and agree to its provisions as a condition of employment. We have included the abridged version of the Handbook, which excluded provisions not related code of conduct or conflict of interest, as Appendix 1. Please see Appendix 2 for our Code of Ethics Policy which also includes Conflict of Interest provisions.

Question 4. *Disclose in full detail anything that may create a conflict or appearance of a conflict of interest. Please include any financial investment by you or your firm in any underwriting activity and any joint venture, partnership, or similar arrangement for any product or service with any underwriter.*

PRAG does not have any known or potential conflicts of interest with the State. As an independent financial advisor not affiliated in any way with any broker/dealer, PRAG does not engage in any form of underwriting, trading, marketing, or investing in tax-exempt securities, nor does it act as an investment manager for governmental or other funds. This restriction eliminates the possibility that a conflict can ever exist within our organization between marketing and financial advisory services and we will always act on the best interest of our clients.

Question 5. *Please provide an explanation and indicate the current status or disposition of any business litigation, legal, regulatory, or other proceedings that your organization or an officer or principal been involved in within the last five years. If none, please so state.*

Our success is built on a history of high-quality independent advice, responsive service, commitment of experienced personnel, in-depth knowledge of the markets and the rating process, unmatched quantitative skills and ***unblemished integrity.*** There has been no business litigation, legal, regulatory or other proceedings against PRAG or any officer or principal of PRAG within the last five years.

Question 6. *Please describe the level of coverage for errors and omissions insurance and any fiduciary or professional liability insurance your firm carries. List the insurance carrier(s) supplying the coverage.*

PRAG has Errors and Omissions Insurance with a limit of $2,000,000. We carry General Lability Insurance with a limit of $1,000,000 and an Umbrella Liability Insurance (excess Liability) with a limit of $4,000,000.

Our professional Liability Insurance (errors and omissions) carrier is XL Specialty Insurance Company. Our General Liability carrier is – Pacific Indemnity Company. Our Auto and Umbrella Liability insurance carrier is Federal Insurance Company.

Question 7. *List the percentage of your firm's revenues that are derived from financial advisory services. Please list any other services that your firm provides.*

As an independent financial advisor, PRAG does not underwrite, trade or sell securities – our sole business is to advise clients in structuring and implementing the financing of economically feasible projects and in securing capital at the lowest possible cost. ***As a result, 100% of our revenues are derived from financial advisory services*** consistent with the Project Specifications provided in the State's request for proposals.

C. Management Summary

Question 1. *Please describe the underlying philosophy of your firm in providing financial advisory services. Also list any particular strengths that your firm may have.*

Fundamental Philosophy in Providing Services: ***PRAG's fundamental philosophy as financial advisor is to consider all assignments from a comprehensive viewpoint and to provide a balance between the client's short and long-term objectives, rather than focusing on a single transaction.*** Not only do we offer all of the necessary services to efficiently structure, price, and close a transaction, but we also examine other aspects of our client's finances and operations to ensure that each assignment is efficiently executed, and takes into account the overall financial profile, goals and objectives of the client. PRAG typically considers its role as an advisor an on-going responsibility to our clients, rather than simply a task-driven role. Our long-term engagement with the State is one of the best examples of us putting this philosophy to work. Our work for the State has branched out from the typical scope of work related to bond issuances into a variety of areas as illustrated in the table below.

	Financial Planning and Policy Development	Development of Financing Plans	Debt Transaction Management	Rating Agency and Investor Relations	Budget and Operational Issues	Liability Management Services	Swaps and Interest Rate Hedging	Investment Advisory Services	Communication and Negotiation Support	Legislative Review
Governor's Office Initiatives	x	x		x	x	x		x	x	x
School Construction Financing	x	x	x	x	x		x	x	x	x
Water and Wastewater Financing	x	x	x	x						x
Public Facilities Financing	x	x	x	x	x				x	x
Parks Funding	x	x	x	x	x				x	x
Higher Education Funding (Lottery)	x	x	x	x					x	
Parkway Authority	x	x	x	x	x	x	x	x	x	x
Division of Highways Funding	x	x	x	x	x				x	x
Workers' Comp. - Brickstreet	x	x		x	x	x		x	x	x
Workers' Compensation Old Fund	x	x		x	x	x		x	x	x
Teachers' Retirement System	x	x	x	x	x	x		x	x	x
Other Post Employment Benefits	x	x	x	x	x	x		x	x	x
Stonewall Jackson Park	x			x	x	x			x	x
Investment Risk Management	x			x	x			x	x	x

FIRM STRENGTHS. PRAG's success has been built on ***five pillars of expertise: (i) exceptional quantitative capabilities, (ii) understanding of credit analysis and rating agency relationships, (iii) knowledge of markets, (iv) service commitment, and (v) integrity***. These strengths have enable PRAG to continue to be one of the leading financial advisory firms since its inception.

Quantitative Capabilities: PRAG is one of the most sophisticated technical and analytical firms in the municipal industry and PRAG's models inform our clients' decisions. Our quantitative skills, including such techniques as linear optimization and call option modeling, are equal to any offered by investment banking firms. When appropriate, we use DBC software for structuring. In cases in which DBC software is not flexible enough to produce optimal solutions, we often use DBC to verify results. We have found that Excel is much more effective in structuring complex bond financings, which we augment with a linear optimization module called What's Best where appropriate. In addition, our swap modeling software is based in Excel and its results have been confirmed with industry standard swap pricing models.

Knowledge of Credit: PRAG serves as our clients' "advocate" with rating agencies and works to maintain and improve their credit position. PRAG offers unrivaled credit advice to the State of West Virginia due to our intimate knowledge of the State's finances and credit and our relationship with the credit analysts at Moody's, S&P, and Fitch.

Knowledge of Markets. PRAG's market experience, combined with independent analysis, ensure that the State will secure the lowest cost of funds. PRAG makes it a standard practice to have an active understanding of daily market developments. We have access to the latest economic data and capital market prices from real-time information sources. In addition, as a result of advising on various complex financing programs and frequent large debt issuances nationwide, we are aware of trends in interest rates, changes in investor sentiment, and the newest innovations in the capital markets.

Service and Commitment: Our firm is known for service; indeed ***Service is Our Signature***. PRAG's focus is on service and current clients always come before new revenue development. The emphasis we place on service can be seen in the senior level team that we offer the State as well as our record of ongoing communication and responsiveness to the State.

Integrity: Our success has been built on high-quality independent advice, market expertise, responsive service, the commitment of experienced personnel and integrity.

Question 2. *List all current clients covered by the individual(s) that your firm includes in its staffing plan for the State of West Virginia account. Include a brief description of the scope of work performed for each client.*

Team Member	Clients	Scope of Work
Thomas Huestis	1. State of West Virginia and its agencies 2. State of Minnesota 3. State of Illinois 4. State of Vermont 5. State of Rhode Island 6. Union Station Redevelopment Corporation (DC) 7. Montgomery County (MD) 8. Capital Region Water (PA) 9. Vermont Economic Development Authority	1. Project Supervisor for the State and State agency projects. 2. Project Supervisor for all State general obligation bonds, notes and general advisory assignments. 3. Project Supervisor on bond issues as assigned by the State. 4. Project Supervisor for all aspects of the engagement. 5. Assistant Project Manager for State projects. 6. Project Supervisor for all aspects of the engagement. 7. Project Supervisor for projects assigned by the County. 8. Project Supervisor for all aspects of the engagement. 9. Project Supervisor for all aspects of the engagement.
Christine Fay	1. State of West Virginia and its agencies 2. State of Minnesota 3. State of Illinois 4. State of Vermont 5. Hampton School District (PA) 6. Montgomery County (MD) 7. New Jersey Higher Education Facilities Authority	1. Project Manager for the State and State agency projects. 2. Project Manager for all State issued general obligation bonds and notes and general advisory work. 3. Project Manager on bond issues as assigned by the State. 4. Project Manager for debt issued by the State. 5. Project Manager for all School District financings. 6. Project Manager for projects assigned by the County. 7. Co-Project Manager for all aspects of engagement.
Jessica Donnelly	1. State of West Virginia and its agencies 2. State of Illinois 3. State of Rhode Island 4. Vermont Economic Development Authority 5. Union Station Redevelopment Corporation (DC) 6. Montgomery County (MD) 7. Capital Region Water (PA) 8. Exeter Township (PA) 9. New York Law School	1. Co-Project Manager for the State and State agency projects. 2. Co-Assistant Project Manager for all State issued general obligation bonds and notes and general advisory work. 3. Asst. Project Manager on bond issues as assigned by the State. 4. Project Manager for all aspects of engagement. 5. Project Manager for all aspects of engagement. 6. Co-Project Manager for all County financings. 7. Project Manager for all aspects of the engagement. 8. Project Manager for all aspects of engagement. 9. Project Manager for all aspects of engagement. 10. Project Manager for all aspects of engagement. 11. Assistant Project Manager for refunding transaction. 12. Co-Project Manager for all aspects of engagement.

	10. New York Institute of Technology 11. Georgia Higher Education Facilities Authority 12. New Jersey Higher Education Facilities Authority	
Steven Goldfield	1. State of West Virginia and its agencies 2. Commonwealth of PA, Office of the Receiver of Harrisburg 3. State of New York 4. Bethlehem Authority (PA) 5. Exeter Township (PA)	1. Special Project Specialist for the State and State agency projects. 2. Project Manager for advisory work related to the City of Harrisburg financial recovery project. 3. Project Manager for Workers' Compensation projects. 4. Project Manager for authority's general advisory work. 5. Project Manager for all aspects of the engagement.
Monika Conley	1. State of New York, OSC 2. State of Maryland 3. New York State Thruway Authority 4. State of New Hampshire 5. New Hampshire Turnpike System 6. Baltimore County (MD) 7. Monmouth County (NJ) 6. Northeast Maryland Waste Disposal Authority	1. Project Manager for all State issued GO bonds and general advisory work. 2. Project Manager on all projects assigned by the State. 3. Project Manager for revenue bonds and BANs; investment of bonds and BANs proceeds; special projects. 4. Project Manager for all State issued GO bonds, debt studies and general advisory work. 5. Project Manager for new money and refunding transactions. 6. Project Manager for all County issued GO bonds and COPs, new money and refundings, CP program, Debt Studies and general advisory work. 7. Project Manager for all County issued GO bonds, debt studies and general advisory work. 6. Project Manager for revenue bond issues and special projects.
Janet Lee	1. State of Virginia 2. Virginia Department of Transportation 3. Virginia College Building Authority 4. State of Georgia, Georgia State Road and Tollway Authority, Georgia Department of Transportation 5. University System of Georgia 6. City of Virginia Beach 7. State of Rhode Island 8. Alabama Department of Transportation 9. Texas Department of Transportation	1. Project Manager for the State's projects. 2. Project Manager for the Department's projects. 3. Project Manager for the Authority's projects. 4. Project Manager for the State's and State Agencies' projects. 5. Project Manager for USG's projects. 6. Project Manager for City's projects. 7. Project Manager for the State's projects. 8. Project Manager for the Department's projects. 9. Project Manager for the Department's projects.
Barry Valentinsen	1. City of Phoenix 2. Jefferson County (AL) 3. New York Institute of Technology	1. Senior Project Assistant on Excise Tax Refunding and GO Refunding. 2. Senior Project Assistant on Sales Tax Refunding. 3. Senior Project Assistant on a P3 analysis for a planned dormitory project.
Andrew Evanchik	1. West Virginia Parkways Authority 2. New York City 3. New York State DOB 4. New York State Comptroller 5. State of Georgia 6. Hampton Township School District 7. New Hampshire 8. Connecticut	1. Project Assistant/Quantitative Specialist for the Authority's swap portfolio. 2. Project Assistant/Quantitaive Specialist for the City's GO and TFA work. 3. Project Assistant/Quantitaive Specialist on all work for the State's Division of Budget. 4. Project Assistant/Quantitaive Specialist on all work for the State's Office of the Comptroller and related issuers. 5. Project Assistant/Quantitaive Specialist on all work for the State's projects.

		6. Project Assistant/Quantitaive Specialist for the District's swap portfolio. 7. Project Assistant/Quantitaive Specialist for the State's GO and Turnpike projects. 8. Project Assistant/Quantitaive Specialist for the State's Special Tax Obligation work.
Wesley Hough	1. City of Sanata Monica 2. Burbank-Glendale-Pasadena Airport Authority	1. Senior Project Assistant for the City's Projects. 2. Senior Project Assistant for the Authority's Projects.
Ryan Killen	1. State of West Virginia and its agencies 2. State of Minnesota 3. State of Vermont 4. State of Illinois 5. State of Rhode Island 6. Montgomery County (MD) 7. Capital Region Water 8. Exeter Township (PA) 9. Hampton Township School District	Project Support on projects as assigned.
Lauren Weir	1. State of West Virginia and its agencies 2. State of Illinois 3. State of Vermont 4. State of Rhode Island 5. Capital Region Water 6. The Village of Tuxedo Park (NY) 7. Exeter Township (PA) 8. New York Law School 9. New York Institute of Technology	Project Support on projects as assigned.

Question 3. *Please provide references **that can attest to prior work performed by your firm and by the individuals** that are included in the staffing plan.*

State of Minnesota	State of Vermont
Myron Frans Commissioner of Management and Budget Minnesota Management & Budget 658 Cedar Street – 4th Floor St. Paul, MN 55155 Phone: (651) 201-8011 myron.frans@state.mn.us	Beth Pearce State Treasurer Pavilion Building 109 State Street – 4th Floor Montpelier, VT 05609 Phone: (802) 828-1452 Fax: (802) 828-2772 beth.pearce@vermont.gov
State of Rhode Island	**State of Illinois**
Kelly Rogers Deputy Treasurer for Policy & Public Finance Office of the General Treasurer 102 State House Providence, RI 02908 Phone: (401) 222-5126 Fax: (401) 222-6140 krogers@treasury.ri.gov	Kelly Hutchinson Director of Capital Markets Governor's Office of Management and Budget 100 W. Randolph – Suite 15-100 Chicago, IL 60601 Phone: (312) 814-0023 Fax: (312) 814-5104 kelly.hutchinson@illinois.gov

D. Process and Experience

Question 1. *Describe in detail your process for developing and structuring procedures for the issuance of tax exempt bonds. Describe in detail how this process differs with credit enhancement, lease financings, asset-backed, or taxable issuance.*

Given our in-depth understanding of market conditions, active involvement advising issuers on bond sales and our bond structuring expertise, our firm takes responsibility for developing and structuring procedures for municipal bonds.

Debt Profile and Debt Policies: In order to structure our clients' tax-exempt bonds in the most cost effective manner and to meet the client's needs, PRAG gains a thorough understanding of the client's capital plan, debt profile and debt policies. Based on the publicly available documents as well as input from client staff, PRAG builds a debt database/profile that summarizes our client's outstanding debt. Since we were hired in 2005, PRAG has built and maintained the State of West Virginia debt database. The database is organized by credit type and issuer and includes debt issued by the State directly, the School Building Authority, the Economic Development Authority, the Water Development Authority, Parkways Authority, Department of Transportation, Higher Education Policy Commission, and Tobacco Settlement Finance Corporation. With this model, PRAG monitors the State's debt regularly for refunding opportunities. In addition, we manage the State's debt affordability analysis by constructing a comprehensive and flexible model that allows a review of the effects of various assumptions related to debt issuance on future capital plans and budgets and on debt ratios that are commonly used by credit analysts to determine credit strength. In recent years, we have also used our debt profile to confirm Moody's net tax supported debt calculation.

Schedule: PRAG generally prepares and maintains a financing timetable showing the key deliverables and milestones for each transaction and assigning responsibility for accomplishing those tasks, and works with the State to ensure timely progress is made by the finance team. PRAG also assists the State with scheduling and leading meetings and calls throughout the development and implementation of the financing.

Selection of Team Members: PRAG routinely prepares or comments on requests for proposals and produces summaries of responses to assist its clients in selecting various financing team members, including bond counsels, underwriters, remarketing agents/dealers, trustees, escrow agents, printers, verification agents, and other vendors relevant to the financing. Since being retained, PRAG has consistently assisted the State with the selection of financing team members to ensure an efficient and effective transaction.

Evaluation of Bond Structures: Our knowledge of the municipal bond market and our quantitative modeling capabilities are central to our effectiveness. By applying this knowledge, we fully evaluate all alternatives to develop the optimal structure in accordance with the State's goals and debt management policies, not the objectives of other parties to generate the largest fees. We work with the State and its bond counsel to identify the need for the issuance of taxable bonds and if such bonds are issued together with tax-exempt bonds, we structure the entire issue to get the lowest cost of borrowing within the legal and policy framework of the State. Our recommendations on structure encompass a variety of options, including maturity design and couponing, call provisions and the use of linear optimization techniques, if appropriate, to develop the optimal plan of finance. An example of our work with the State on an optimal plan of finance is the structuring of the lease revenue bonds issued in 2015 for the Fairmont Building. In 2014 and 2015, the State used cash on hand to fund the early phases of construction of the Fairmont Building with the intention of reimbursing itself with bond proceeds, however the State did not execute a reimbursement resolution in advance of making expenditures on the project. As soon as PRAG was advised of the project, we recommended the State execute a reimbursement resolution immediately for the Fairmont Building as well as the Clarksburg Building which construction was also recently underway and the Building 3 project which was planned to commence construction in the near future. PRAG, in conjunction with bond counsel, reviewed every project expenditure on the Fairmont project to determine its eligibility for tax-exempt financing. After identifying preliminary expenditures and applying the 60 day look back test, it was determined that 79% of the lease revenue bonds to be issued for the Fairmont project ("Fairmont Bonds") could be issued on a tax-exempt basis. Since 21% of the Fairmont Bonds had to be issued as taxable we recommended amortizing the taxable Fairmont Bonds first in years 2016-2023 and wrapping the lower cost tax-exempt Fairmont Bonds around the taxable in years 2023-2040. This allowed the State to lock in the lowest possible cost of borrowing of 3.805% on the Fairmont Bonds.

Maturity Design: Principal amortization can have a significant impact on the financial operations of an issuer. Greater near-term debt service can mean overall interest cost savings, but also increased pressure to raise near-term revenues. Our capabilities have allowed the State to explore the full range of bond structuring options and to understand the future impact of these options. An example of our work with the State on maturity design was the PRAG analysis related to the maturity structure of the School Building Authority's Lottery Fund debt capacity model that has resulted in transactions with shorter terms compared to its original 2004 issuance in order to meet the State's goal of having approximately $50 million in bond proceeds and pay-go dollars to fund school construction projects in the State.

Couponing and Call Options: While the vast majority of municipal bonds are sold with an optional 10-year redemption at par provision, in the past we have also recommended other call features to our clients (e.g., shorter calls, call premiums or make-whole/non-callable bonds) when it has been economically beneficial to do so. The analysis to make this determination requires an understanding of municipal bond pricing conventions and of binomial option modeling techniques to accurately evaluate the net cost and benefit of these alternatives. Our analysis of call option value also assists in negotiated sales to ensure that issuers are compensated adequately for issuing lower-coupon callable bonds, on which the option value is greatly reduced. For example, PRAG conducted analysis related to the call features of the Tobacco Settlement Bonds (a taxable securitization issue) that balanced the goals of achieving maximum upfront proceeds while at the same time providing opportunities for the State to refinance the securities in the future.

Evaluation Capabilities: PRAG developed a sophisticated model that calculates the option value of tax-exempt bonds by assuming the issuer can sell a SIFMA-based swaption at the time of the issuance of the bonds. The swaption is then valued using a Black Scholes option pricing model with volatilities, LIBOR curves and SIFMA ratios from Bloomberg screens. The results of our call option model allow our clients, such as the State, to make informed decisions regarding use of premium, discount and non-callable bonds. We have utilized this call option model and analytic approach for the State, as well as the states of Florida, Georgia, New Hampshire and New York, the City of New York, among others.

Document Review and Comment: PRAG always takes an active role in carefully reviewing and commenting on all documents, and manages the process of document preparation and approval to ensure that financings stay on schedule. West Virginia attorneys frequently tell us that we give substantive insightful comments on documents. Although the ultimate responsibility for preparing and reviewing bond and disclosure documents falls on bond and disclosure counsel, we would provide a careful and experienced eye in the review process. An example of our work on document review includes the restructuring of the Lottery and Excess Lottery credit discussion presented in the various lottery official statement after the passage of HB 101 and 106, which reduced statutory transfers and increased lottery and excess lottery revenues available for bonds securities and bolstered debt service coverage on the bonds to assuage rating agency concerns and protect the state's lottery and excess lottery ratings.

Ratings/Credit Enhancement Process. PRAG often is at the forefront in developing its clients' ratings strategies. We have a thorough understanding of the rating agencies' rating criteria which we use to help structure bond issues – particularly first time credits. We can often anticipate the questions the rating analysts will have and try to incorporate this information into our clients bond structuring decisions. In terms of credit enhancement, we analyze the cost-effectiveness of credit-enhancement on fixed rate bonds during negotiated sales and we would advise on including the insurance option on the competitive sales. PRAG has assisted the State in taking a proactive approach to rating agencies relationships – keeping the agencies informed and up to dates on State issues and trends.

Timing: With regard to bond sale timing, we provide the State market data and information on interest rates, market supply, the timing of the release of key indicators as well as other technical market information. PRAG has unlimited access to industry-standard research and pricing resources, such as Thomson Municipal Market (TM3), Bloomberg, The Bond Buyer and the Wall Street Journal to track and monitor the tax-exempt and taxable bond markets, the swap market, and the government securities market. The availability of these resources allows our professionals to provide the full breadth of service to our clients, particularly with regard to the timing of bond sales. We assist the State with the timing of bond issuances by using market data from these sources.

Refundings: In refundings, we always participate in review of reports prepared by verification agents. We check the refunded issues, amounts, dates, coupons, redemption provisions, escrow cash flows, escrow yield, refunding bond information, arbitrage yield and savings calculations. In both competitive and negotiated refundings, the numbers should be pre-verified, before the POS is posted. In competitive refundings, we run the refunding numbers. In negotiated refundings, we generally recommend that the senior underwriter run the primary numbers and we run shadow numbers in order to fully protect the issuer.

Choice of Competitive or Negotiated Sale. Issuers choose to issue bonds on a negotiated or a competitive basis for a variety of reasons. In general, PRAG has found that, all things being equal, a competitive sale provides issuers with the lowest cost of funds on fixed rate issues with strong credit ratings and a straight forward security structure, such as the State's general obligation bonds. A brief summary of our role in competitive and negotiated sales is shown to the right.

PRAG's Role in Bond Financings
Both Sale Types
❑ Make recommendations on bond structure, plan of finance, and market timing
❑ Develop financing schedule and allocate tasks and responsibilities
❑ Review and assist in preparation of documents
❑ Assist in rating and bond insurance process
❑ Prepare financing cash flows
❑ Assist in coordinating closing
Negotiated Sale Only
❑ Assist in underwriter selection process
❑ Advise on fee structure
❑ Advise on interest rates and takedowns
Competitive Sale Only
❑ Recommend sale parameters
❑ Prepare Notice of Sale
❑ Perform pre-sale marketing activities (contact trading desks; and arrange investor meetings)
❑ Coordinate competitive bidding process

Comprehensive Review of Pricing Data. PRAG recognizes that the fees, spreads, pricing levels, syndication rules, and even the bond issue structure itself, may be altered to impact the net compensation to underwriters. From our frequent participation as financial advisor in the municipal market, we have extensive experience working with underwriters in determining the appropriate levels for each of these characteristics in a negotiated sale. For negotiated sales, PRAG prepares detailed market analyses of fees, spreads and interest rates for other issues with similar terms and conditions priced close to the date of negotiation. In addition, PRAG examines any available timely secondary market trading data for blocks of significant size, as reported by the MSRB, for the State's bonds.

Real-Time Analysis During Pricing. During the actual pricing of the bonds, PRAG uses customized templates that interface with Parity electronic order entry data to provide real-time summaries of pricing data relationships, such as yield to call spreads to MMD, yield to maturity spreads to MMD, yield curve acceleration, basis point value of call options, and orders as a percentage of available bonds (retail, priority, and member). PRAG immediately distills this information which allows issuers to be better informed and able to negotiate more favorable pricing terms. We constantly monitor order flow, rather than passively wait for the underwriter to share select information. Having real-time access is only as good as the ability to interpret such data and PRAG utilizes such information to its fullest extent in order to best prepare issuers in advance of price negotiations with underwriters. Our approach is discussed in more detail below in our response to Question 4. Project Goals and Objectives.

Closing Transactions. PRAG regularly manages, as much or as little as our clients desire, of the transaction process on their behalf, and has a solid record of completing transactions. We frequently step forward to assist other financing team members with their responsibilities to ensure successful completion.

Post-Sale Analysis. After each negotiated issue, we generally provide the State with a summary of the sale which includes a narrative describing the results of the sale and market conditions, data on coupons, yields and takedowns, retail and institutional orders, an analysis of orders by category (i.e., net designated and member orders) and by underwriter, investor meetings, retentions, allotments and a comparison of yields to various indices and similar issues. PRAG has extensive experience in the development of post-sale evaluation processes for underwriting syndicates. We believe this analysis has been helpful to the State in evaluating the efficiency of the sale.

Provided below is a summary of the tax-exempt bond sale process. Provided in bold are the additional steps associated with bonds that use lease financings, asset-backed and taxable issuance and transactions that are credit enhanced.

Coordinating Transaction Team →

- Prepare financing schedule
- Schedule milestones
- Monitor transaction progress
- Draft RFPs for other working group members & questions
- Summarize proposals
- Provide unbiased analysis of financing ideas
- Develop guidelines for rating responses
- Participate at interviews
- Participate in all Issuer requested meetings

Structuring and Analysis →

- Review debt portfolio
- Develop plan of finance including identifying refunding candidates
- **Consider Lien, credit structure, tax status, fixed versus variable structures for lease financings and asset back issues**
- Recommend Comp vs Neg. sale
- Redemption features
- Escrow structuring

Document Preparation →

- Recommend necessary provisions and covenants
- Share "best practices" in disclosure
- Review and comment on OS and NOS
- Suggest bidding parameters in NOS based on market Arrange for distribution
- Ensure timely delivery
- **Structure lease and asset backed terms and conditions**

Credit Ratings

- Define realistic goals
- Develop rating strategy
- **Review asset backed structure with agencies**
- Coordinate and attend meetings with rating agencies
- Prepare presentations
- **Conduct credit provider outreach and solicit bids**
- Post meeting follow-up
- Facilitate ongoing communications
- **Evaluate benefit of credit enhancement**

Pricing/Marketing (Negotiated Sale) →

- Negotiate takedowns, expenses and syndicate rules simultaneously
- Pricing comparables
- **For taxable issues, monitor US Treasury and other taxable issues.**
- Secondary market trading
- Negotiate coupons, yields and redemption features
- Evaluate couponing and amortization strategy
- Monitor order flow via real time Parity EOE
- Review bond allocations
- Bidding of OMS or subscribe for SLGS.

Pricing/Marketing (Competitive Sale) →

- Develop bid parameters
- Survey potential bidders to generate interest
- **Solicit interest from taxable bidders and underwriting desks**
- Coordinate pre-bid process (e.g., good faith deposits, pre-bid forms)
- Receive and verify competitive bids
- Restructure transaction
- Recommend award to winning bidder
- Coordinate all details with winning bidder
- Bidding of OMS or subscribe for SLGS.

Pre-closing and Closing →

- Procure investments for bond proceeds
- Review all bond documents
- Ensure closing certificates are consistent with requirements
- Detailed review of tax certificate
- Review / prepare closing wiring and settlement instructions
- Coordinate settlement
- Prepare closing memo
- Attend pre closing or closing, if needed

Post-Closing Evaluation

- Detailed bond-by-bond analysis of underwriting marketing performance
- Prepare comprehensive bond sale report/ closing book
- Analysis of economics
- Post-sale compliance
- Continue monitoring transaction, including secondary market trading
- Assist with preparation of subsequent issues

Our experience with leased equipment financings, asset-backed financings such as tobacco bonds or rate reduction bonds, pension obligation bonds and private placements allow us to assess the costs and benefits of these structures and to advise the issuers on implementation of such forms of financings.

Question 2. *Provide a summary chart of competitive, negotiated, or private placement of debt for which you played the senior financial advisory role in the past three years.*

PRAG's Financial Advisory Experience Issues in Past Three Years				
Number of Issues	**Par Amount ($)**	**Competitive**	**Negotiated**	**Private Placement**
228	47,512,869,000	✓		
210	78,789,372,461		✓	
3	331,271,000			✓
441	$126,633,512,461			

Question 3. *Describe any experience your firm has had with other forms of public debt besides General Obligation Bonds such as GARVEE Bonds, Pension Obligation Bonds, or Revenue Bonds. If none, please so state.*

We are familiar with all forms of public project financing and debt structuring including general obligation bonds, lease revenue bonds, special tax revenue bonds, lottery and gaming revenue bonds, certificates of participation, pension obligation bonds, tax and revenue anticipation notes, GARVEE Bonds, enterprise revenue bonds, special assessment revenue bonds, tax allocation bonds, taxable bonds, direct bank loans, variable rate bonds, commercial paper, refunding, lease equipment financings, asset-backed bonds and short-term financings. In fact, PRAG is a leading financial advisor to issuers for revenue bond financings. Over the past three years we have acted as financial advisor to over 450 transactions with a par value in excess of $126.6 billion for revenue bonds. PRAG's experience with Lottery revenue bonds, a substantial source of State bond funded capital is discussed in our response to Question 4. Project Goals and Objectives (4.2).

Grant Anticipation Revenue Bonds ("GAR VEE") notes have been often used to accelerate capital programs that include a substantial amount of federal grant funding. PRAG takes a methodical, systematic and analytic approach to designing alternative plans of finance for transportation and other grant funding projects, which often includes building a financial capacity model which would assist the client to identify all potential funding and borrowing sources, to incorporation the fact that if the grants are used to leverage bonds, that that the grants used to pay debt service would not be available for future projects. PRAG has substantial transportation experience, including advising the states of Georgia, New Hampshire, the District of Columbia and Virginia in addition to the State on their GARVEE programs. Most recently, PRAG worked on the West Virginia (Commissioner of Highways) Surface Transportation Improvements Special Obligation Notes, Series 2016 A.

The following case studies illustrate the depth and breadth of our experience with the State and other issuers in regards to GARVEE's.

State of West Virginia (Commissioner of Highways). PRAG assisted the State with four transactions totaling $240 million of GARVEE bonds which enabled acceleration of funding of essential transportation projects. Most recently, the Division of Highways issued $53.38 million of GARVEES in December 2016 to help finance an access road for the Rock Creek Development project. The GARVEES were rated AA and A2, respectively by S&P and Moody's. PRAG assisted in all aspects of the financing, including (i) developing and issuing an RFP for underwriter(s); (ii) prepared a summary and assisted with the evaluation of underwriters; (iii) assisted in the drafting and coordination of the Memorandum of Understanding for the project; (iv) assisted in the development of the rating presentation; (v) worked with the working group to establish the key security provisions (including the additional bonds test), (vi) structured the notes with a six-year maturity; and ultimately (vii) ensured the successful execution of the financing including the marketing and pricing of the issue. In addition, PRAG members conducted and took part in several presentations in relation to this transaction, including to the Five Member Transportation Advisory Group in December 2016. Provided below are screenshots of the presentation PRAG presented to the Five Member Transportation Advisory Group.

Prior to the issuance of the State's most recent GARVEE issuance in December 2016 all of the State's previously issued GARVEE notes had matured. With no existing legal framework in place, PRAG worked with the Division of Highways to evaluate alternative legal provisions (Additional Bonds Test, Debt Service Reserve Fund, final maturity) in order to maximize the ratings on the bonds. Additionally the Division of Highways provided the following bond covenants:

- At the beginning of each federal fiscal year (FFY), the Division will convert the amount of advance construction (AC) necessary to pay debt service for that FFY for the Notes, and the conversion of AC must be the first obligation in that FFY of funds legally available for that purpose
- The Division will not request obligation for any other Federal-aid project until this obligation is met, unless only a portion of annual obligation authority (OA) is received at the beginning of the FFY
- In the event only a portion of annual OA is provided at the beginning of the FFY, until the full annual OA is received, the Division will reserve a pro-rata share of the OA at least equal to the ratio of debt service and total OA to be received for the year
- The Division will bill FHWA for debt service due on the Notes at least seven (7) business days prior to each Interest Payment Date
- If the amount required to pay debt service is not included in the FHWA obligation by January 1 of each year, the Commissioner shall notify the Governor and shall request that the Governor submit a supplemental appropriation for such amount from the federal reimbursement money in the State Road Fund or from other legally available funds to the Legislature during the next regular or special legislative session.

The bonds were ultimately structured with a six-year maturity, three times ABT and had 39.9x coverage and received a AA rating from S&P and A2 rating from Moody's. PRAG recommended only requesting ratings from S&P and Moody's (not Fitch) in order to save on cost of issuance fees since there was not an expected pricing benefit from a third rating.

As part of developing the legal framework for the State's GARVEE program, PRAG compared and reviewed with the Division of Highways other state level GARVEE programs as summarized in the table below.

STATE	CREDIT RATINGS[1] MOODY'S	S&P	FITCH	ABT[2]	FINAL MATURITY	DSRF	PRO FORMA COVERAGE[3,4]	BACK-UP PLEDGE
Stand-Alone GARVEE Programs (No Back-Up Security of State Revenues)								
Ohio	Aa2	AA	NR	5.0x	12	None	7.9x	None
Mississippi	Aa3	AA-	NR	$375mm	20	None	6.6x	None
Delaware	A1	AA	NR	3.0x	15	None	13.3x	None
West Virginia	A2	AA	NR	3.0x	6	None	39.9x	None
California	A2	AA	A+	4.0x	12	None	41.1x	None
Kentucky	A2	AA	A+	4.0x	12	None	6.5x	None
N. Carolina	A2	AA	A+	3.0x	15	None	9.9x	None
Montana	A2	AA	NR	3.0x	7	None	24.6x	None
New Hampshire	A2	AA	NR	3.0x	15	None	8.2x	None
Michigan	A2	AA	NR	3.0x	11	None	7.7x	None
Washington	A2	AA	NR	3.5x	12	None	6.3x	None
District of Columbia[6]	A2	AA	NR	3.0x	15	None	12.8x	None
Georgia	A2	AA-	A+	3.0x	12	None	6.6x	None
Rhode Island	A2	AA-	NR	3.0x	7	None	3.5x	None
Idaho	A2	NR	A+	3.33x	18	None	4.5x	None
Oklahoma	A2	NR	A+	3.0x	13	None	21.6x	None
Maine	A2	NR	A+	3.0x	12	None	9.2x	None
New Jersey	A3	A-	NR	3.0x	12	None	2.8x	None

[1] Reflects ratings as of 2/14/17.

[2] ABT with regard to federal funds only.

[3] Pro Forma Coverage ratios are based on Federal-Aid Highway Program Obligation Limitation for FY2016. Pro Forma Coverage calculated by dividing Obligation Limitation by MADS, as displayed in the latest Official Statement. Note that mismatch may occur between FFY and individual state FY.

[4] Source for FFY 2016 OL: https://www.fhwa.dot.gov/legsregs/directives/notices/n4520240/n4520240_t1.cfm

[5] Reflects Series 2012. Series 2011 is secured by a DSRF and is rated A1/AA/NR.

We understand that during the 2017 legislative session the GARVEE cap was increased from $200 million to $500 million leaving approximately $446 million in GARVEE capacity. Given the need for road improvements in the State and the Governor's prioritization of the Transportation Infrastructure Plan we expect GARVEE notes to continue to be an important financing tool to the State to accelerate FHWA funds for transportation projects. We understand the legal framework and market for the State's GARVEE notes and are best positioned to advise the State in the continued implementation of its GARVEE program. Please see our response to Question 4.8 for additional considerations and bond capacity projections for the State's GARVEE program.

Virginia Department of Transportation. PRAG has served as financial advisor to the Virginia Department of Transportation ("VDOT") since 1995. We have successfully completed over 30 transactions totaling over $7.7 billion of financings for VDOT since that time, including financings and refundings for the Northern Virginia Transportation District Program, the U.S. Route 58 Corridor Development Program, and Route 28 Improvement District. We also advised VDOT on developing its GARVEE program and have advised on all aspects of the five series of bonds, totaling $1.7 billion that have been issued. In developing its GARVEE program, we analyzed the Commonwealth's historical and projected federal and highway reimbursements to determine, preliminarily, how much the Commonwealth could borrow under the GARVEE structure. During the legislative process, we were called upon to analyze different scenarios, mainly concerning the size, term and timing of the issuance of the bonds. The GARVEEs were rated Aa2/AA/AA without an explicit pledge of other Commonwealth funds. As part of the rating process, we prepared term sheets and had ongoing discussion with rating agencies. We assisted the Commonwealth in developing a structure that mitigates the reauthorization risk, including a (i) soft "back-up" pledge of the transportation trust fund and other legally available funds designated by the General Assembly, (ii) conservative additional bonds test of 3.0x of projected reimbursements and (iii) final maturity of 10 years.

New Hampshire Turnpike System. PRAG has served as financial advisor to the New Hampshire Turnpike System, a component part of the New Hampshire Department of Transportation ("NHDOT") for over twenty years. Since the beginning of our engagement, we have assisted on the development of the revenue (toll) bond program and have advised on $1.4 billion of debt issuance to either expand the system or refinance outstanding obligations. PRAG currently provides a range of financial advisory and strategic planning services to the NHDOT and its Bureau of Turnpikes from reviewing the capital plan model to analyzing financing options. In 2010, PRAG assisted the State in the issuance of its first GARVEE bonds, which consisted of BABs and RZEDBs, for the expansion of Interstate 93. The second series of GARVEE bonds were issued in 2012. We have assisted in review of the proposed legislation, prepared several versions of financial analysis of this project and testified before legislative committees and commissions on the legislation as well on the construction time frame for the expansion of Interstate 93. We provided strategic advice regarding the development of rest areas and state run liquor stores on Interstate 93 and analyzed the use of some form of "public-public" or "public private" partnership to develop and operate these locations versus simply operating a service center at either location.

PRAG has also assisted a variety of issuers considering the issuance of ***Pension Obligation Bonds ("POBs")***. The potential benefits of POBs including: (1) achieving potential budgetary savings through risk arbitrage, (2) reshaping future cash flow requirements for payment of UAAL, and (3) providing short-term budgetary relief, which must carefully weighed against the investment-related and flexibility risks in assessing whether the issuance of POBs is appropriate. PRAG provided this type of analysis and has successfully managed POB transactions for clients that have chosen to issue POBs.

Consistent with our core financial advisory approach, we would carefully evaluate various funding options, examine current benefit levels, and explore alternative benefit design changes that could be implemented before recommending the issuance of POBs or proceeding with a particular financing solution. PRAG has assisted issuers in expanding and improving their pension disclosure language as well as assisting clients in communicating the impact of changes brought about by pension reform (both local and state-wide) to rating agencies and the capital markets. This effort also extends to communications with the rating agencies, as well as sharing information among our municipal clients about the pension reform efforts of other municipalities. PRAG has served on various large and complex POB financings for state or local governments nationwide, including the states of West Virginia and Connecticut. Please see the following for more detailed case studies involving pensions:

State of West Virginia (WV) - Funding Employees' Pension Systems. In 2004, the State of West Virginia had one of the nations' most under-funded public employees' pension systems. The annual payments over the next several years were going to put an extreme strain on the State's general fund budget. The newly elected Governor wanted to address this challenge head on and PRAG was retained by then Governor-elect Joe Manchin to help him and his staff analyze and structure a traditional pension obligation bond. Although the ballot question for this bond issue was ultimately defeated, over the past three years, PRAG has worked continuously with the State in its effort to improve the funding of its retirement systems. The goal has been to achieve a sustainable contribution level that would not adversely impact the general fund budget and could contribute to a strong perception of the state's credit position on Wall Street.

In 2007, PRAG was the sole financial advisor to the State in connection with a $911.1 million taxable tobacco settlement receipt securitization. Proceeds of this issue were eventually used to provide additional funding to the Teachers' Retirement System, after analysis of the best use of these funds amongst the State's unfunded accrued actuarial liabilities (OPEB, Pension and Workers' Compensation). PRAG has worked closely with the Consolidated Public Retirement Board's actuaries and with the State's outside actuarial firms (Buck Consultants, Inc., Ernst and Young, and CCRC) and has brought in outside actuarial expertise as a subcontractor (Milliman, Inc.) in order to ensure that the state was provided with the best information and an array of opinions upon which to base its decisions. We have found that being able to translate actuarial assumptions and projections into terms that can be used by policy-makers and legislators has been valuable to our clients. While the actuaries do an excellent job at providing predictions and calculations under the applicable GASB rules and regulations, we have been able to take their models and merge them with five-year budget planning models and then discuss the options with legislative leaders and policy makers in a way that makes sense to them. Over the next three years, with PRAG's assistance, West Virginia has succeeded in increasing its funding ratio from 22% to over 50% and more importantly, the State is now able to amortize its UAAL at a level payment that is affordable and sustainable (as opposed to a level percentage of payroll which would have neither been affordable nor sustainable). Later in 2010, PRAG also assisted with a mechanism to help the state and West Virginia senior teachers in an under-funded defined contribution system to transfer into the defined benefit system without increasing the unfunded percentage.

State of Connecticut. PRAG assisted the State of Connecticut with a $2.3 billion pension obligation bond (POB) financing. First, PRAG assisted the State with reviewing and preparing authorizing legislation enabling the POB financing. The POB legislation requires that the State of Connecticut fund 100 percent of its actuarially required contributions each year as long as the POB bonds are outstanding, so the State does not undermine the benefit of the POB financing by failing to contribute to the pension fund in the future. Next, PRAG professionals prepared presentations and participated in Legislative hearings describing the advantages and risks of the proposed POB financing. Connecticut is particularly interested in securing a POB borrowing cost that is sufficiently lower than the Connecticut pension fund's historic investment return to assure a profitable investment spread on the POB bond proceeds invested in the pension fund. PRAG helped to develop the underwriter request for proposal process and prepared summaries of the responses which were then used by the evaluation committee in connection with their selection process.

PRAG helped to develop cash flows for the Treasurer's Office and Governor's Office. We participated in meetings of the State Bond Commission, which gave final approval to proceed with the financing in early 2008. PRAG also assisted the State in developing the financing structure, which included looking at the State's existing general obligation bond portfolio and additional general obligation bonds expected to be issued in the future, so that the general obligation POB bond repayments could be best fit within the State's debt service profile and expected tax receipts. Many structuring options were reviewed including variable rate debt, LIBOR notes, stepped-coupon bonds, swaps and capital appreciation bonds (CAB), but given taxable market volatility that existed at the time of pricing, the State issued fixed rate current interest and CAB general obligation POBs without credit enhancement. The bonds were marketed in the United States and Europe based on the State's Aa3/AA/AA ratings which would have the lowest capital charge for investors. PRAG assisted the State on obtaining and using a global scale Aaa rating in order to reduce the cost of capital.

The State held a European investor internet road show and physical investor meetings in Boston, Hartford and New York City for bonds priced in April 2008 using a large syndicate. PRAG assisted the State with its preparation of the investor and rating presentations and assisted the State with pricing, by providing comparables and market data. PRAG participated in person at the CT POB pricing which was complicated by pending problems at Bear Stearns, the lead manager on the financing. JP Morgan was added to syndicate just before pricing due to their planned purchase of a nearly bankrupt Bear Stearns. Working with both the Bear and JP Morgan desks, PRAG assisted the State successfully price the $2.3 billion POB financing. The CT POB was oversubscribed in certain maturities and enjoyed almost $1 billion of orders from institutions in the European Union. The final taxable true interest cost was 5.88% which compares favorably with the Connecticut Pension Fund's long term return of approximately 9 percent. The financing closed on April 30, 2008 and the State pension fund manager placed the money into the pension fund's liquidity pool pending investment in equities. The Stock market fell dramatically later in 2008. Fortunately, the pension fund bond proceeds were still in short term liquid investments when the stock market corrected preventing the State from losses on bond proceeds. In late 2008 and 2009, after the market correction, the State invested the POB proceeds enjoying returns well above the 5.88% borrowing cost when the equities market recovered in late 2009 and 2010. To date, the CT POB has been a highly beneficial transaction with the State earning more than 400 basis points above its borrowing costs on the funds.

Los Angeles, California. PRAG has provided periodic POB analyses to the City since PRAG began serving as Los Angeles' General Financial Advisor in the 1990's and has regularly assisted the City in evaluating pension funding options. Over this time period, PRAG has assisted the City in analyzing pension funding options for the City's pension systems with an eye toward providing budgetary relief.

PRAG's has been creative in assisting the City in applying pension funding concepts in non-traditional ways to provide economic benefits. When working with the City on its pension funding, the City desired to take advantage of the high rates of return earned by their two pension systems but did not want to issue POBs and incur the risk that the high current returns would fall below the yield on the pension bonds. The budget practice in the City was to make the pension contribution from the General Fund on a monthly basis during the fiscal year in order to even out the cash flow impact of the contribution. The City negotiated an arrangement with its pension system whereby the City could pay the annual contribution in one lump sum at the start of the fiscal year in exchange for a significant reduction in the amount of the contribution. The pension system agreed to use its actuarial assumed earnings rate of 8.50% to discount the monthly payments that would otherwise be made. This resulted in an effective reduction of approximately 5% in the amount of the pension contribution that would need to be budgeted by the City. The City financed the up-front payment of its payment to the pension systems through the issuance of tax-exempt tax and revenue anticipation notes with a one-year maturity. After accounting for payment of the interest on the tax-exempt notes, Los Angeles saved approximately $7.0 million (approximately 2.5%) through this financing arrangement. This dollar savings represented approximately two-thirds of the "savings" that the City thought it could achieve through a large pension obligation bond offering without the risk associated with a long-term financing.

Baltimore County, Maryland. PRAG has advised Baltimore County on debt issues totaling over $7.5 billion since 1985. PRAG assisted the County with the issuance of $256.29 million of taxable Pension Obligation Bonds to fund the present value of the increased liabilities of a closed portion of its Retirement System Plan resulting from the reduction in the valuation rate from 7.875% to 7.25%. The County expects to benefit by investing the proceeds of the bonds at a rate of return in excess of the debt cost which has the all-in TIC of 3.44%. For every 1% difference in spread between the borrowing cost of the bonds and the long-term rate of return on the Baltimore County Employee Retirement System, the County expects to realize approximately $85 million of cash flow savings.

Asset Backed Financings: Our firm has been at the forefront of the municipal asset-backed finance market. We served as financial advisor on the State's landmark $991 million tobacco bond sale (largest taxable tobacco bond at that time) resulting in savings to taxpayers of $2.8 billion and significantly improving the funding level of the Teachers' Retirement System. This financing enabled the State to amortize its unfunded debt on the TRS on a level, annual, affordable basis. This allowed for the transfer of teachers from defined contribution plan back into defined benefit plan while actually reducing the overall annual funding cost to the state for such transferees.

We served as financial advisor to some of the other largest municipal asset-backed programs to date such as the State of California's program to securitize the State's share of revenue from tobacco settlements and New York City Transitional Finance Authority's program securitizing personal income tax payments. In addition to the State of West Virginia, we also assisted the states of South Carolina, Louisiana, Virginia and New York City TSASC, the District of Columbia and Monroe County MTASC with their tobacco securitization financings. We were financial advisor on the California Infrastructure and Economic Development Bank's $6.0 billion program securitizing special ratepayer fees mandated by the California Public Utilities Commission to finance the stranded costs of California investor owned utilities. We advised the states of Connecticut and New Hampshire on over $2.0 billion of rate reduction bonds. PRAG also assisted the Ohio Public Utility Commission to on the issuance of Ohio Power Company's Senior Secured Phase-In Recovery Securitization. This is a record unmatched by any other financial advisory firm and consequently we have thorough knowledge of rating agency requirements relating legal documents and opinions, as well as stress tests for proposed financing structures -- knowledge that can be cost effective and beneficial to a client.

PRAG served as financial advisor to the West Virginia Public Service Commission regarding an application filed in 2012 by Appalachian Power Company (APCo) and Wheeling Power Company (WPCo) (both owned by American Electric Power (AEP) for a financing order to permit APCo and WPCo to recover Expanded Net Energy Costs (ENEC) through the issuance of Consumer Rate Relief Bonds (the "CRR Bonds"). PRAG has advised the PSC and staff on reviewing the application for a financing order, which was ultimately approved. In reviewing the draft financing order, PRAG proposed changes in the language related to the servicing in order to protect the bondholders in the case of a change in servicer and to protect the ratepayers. We also noted some inconsistencies between draft financing order and the Joint Stipulation between the WV PSC and AEP that could be modified. Additional comments included the possibility of requesting more testimony regarding why the wording of the draft included the possibility of extending the weighted average life of the transaction. Finally, PRAG commented on the provision for the possible use of credit enhancement on the CRR Bond and proposed a different discount rate for evaluation compared to the discount rate specified for calculating rate payer savings.

PRAG then participated in underwriter selection, the rating process, and the pricing of the bonds. Our work on the structuring of the Bonds began prior to the selection of the underwriters. The advisor to the AEP had presented alternative initial structures – a two tranche structure and a three tranche structure. PRAG reviewed and analyzed the two tranche and three tranche structures using its model and comparing it to AEP's advisor's numbers.

PRAG reviewed and commented on the draft request for proposals for underwriting services, as well as the distribution list used to solicit proposals. We reviewed all of the proposals and provided summary analyses. PRAG worked with AEP to (i) short-list firms for the book-running senior managing role for interviews, (ii) develop a list of questions used in the interviews. We participated in the interviews of the firms and jointly decided on the composition of the underwriters, including the joint book-running firms. We spent considerable time with each of the underwriters on the two vs. three tranche structure and the impact on pricing. PRAG and the AEP had significant discussions on the underwriting costs and made specific recommendations regarding the upfront fee amount, and the firms to be selected for book-running, co-book-running and co-managers designed to lower the true interest cost on the transaction and provide savings to the rate payers.

Following the selection of the underwriters, PRAG and the AEP set up regular conference calls with the two book-running underwriting firms to review alternative structuring and review recent pricings of comparable transactions. After the initial conference calls, the group agreed that a two tranche structure would likely provide a lower cost of capital and two separate two tranche structures were included for further analysis. PRAG worked with the AEP and the underwriters on preparing the transaction for pricing on an expedited but deliberate timeframe in order to take advantage of a perceived strong market for securitization bonds. This plan was successful given substantial increase in interest rates following the pricing of the CRR Bonds. PRAG reviewed and provided comments where necessary on all major documents, including preliminary and base prospectus, investor roadshow documents, issuance advice drafts, rating presentations, preliminary term sheet, rating agency pre-sale documents SEC comment letters.

PRAG was actively involved at all times and in all respects in the structuring, marketing and pricing of the CRR Bonds. PRAG analyzed historical pricings from utility securitizations and analyzed recent securitization pricings of other asset. PRAG also reviewed the forward economic calendar and underwriting issuance calendar. PRAG communicated frequently with the underwriters and commented on the underwriters' proposed pre-scale. Once the CRR Bonds were in the market, PRAG monitored the order book and reviewed the subscription by tranche. Following the end of the pricing period PRAG negotiated final changes in the rate and confirmed preliminary final pricing with the underwriters. PRAG independently verified the cash flows of the transaction using its own financial model. That verification process confirmed the expected nominal and present value savings calculation derived from the model used by AEP's advisor, using revenue assumptions based on the advisor's rate model, when it performed its savings calculation.

Post pricing, we reviewed all the financial terms and conditions of the CRR Bonds financing to ensure that they were consistent with the financing order and requisite statutory provisions of West Virginia Code. We also reviewed the up-front issuance costs and the estimated ongoing financing costs as provided in the Issuance Advice Letter to ensure that they consistent with our recommendations following our review and comments on the DRAFT Issuance Advice Letter. Finally, PRAG provided the West Virginia Public Service Commission a summary of our involvement in the deliberations related to the structuring, marketing and pricing of the Bonds, as supporting information regarding our advice and recommendation.

Question 4. *Describe the depth of your firm's analytical capabilities: personnel assigned to modeling and other quantitative analyses, use of unique proprietary and other financial models, ability to analyze and verify time sensitive and complex bids and other proposed financings, etc.*

PRAG believes that financial advice is ultimately dependent on numbers and that an in-depth understanding of quantitative modeling and analysis is integral to achieving optimal financial results. PRAG regularly designs and develops financial models for purposes ranging from broad perspective planning (e.g., long-term capital planning) to the narrow focus at the transaction and even the sub-transaction levels (e.g., bond financing cash flows and risk analysis for the investment options for bond proceeds). Taking a comprehensive approach, our long-term capital planning models encompass all aspects of our clients' financial operations and can be formulated to provide recommendations on important decision points, including revenue versus debt financing, the timing of bond versus commercial paper issuances, the structure of long-term bonds, revenue requirements and financial operating ratios, among other factors. In addition to modeling for long-term planning and for transactional cash flows, PRAG applies its expertise to analyze financing options and identifying market opportunities. We have developed models to analyze and calculate call options, hedging efficiency, relative pricing between couponing options, arbitrage opportunities, escrow optimizations, and swap valuations, among other municipal financial problems. PRAG will provide the expertise and personnel to analyze and verify proposed financings and/or bids quickly and efficiently as requested by the State.

Our firm personnel have strong backgrounds in both quantitative modeling and technical analysis. A very important service our firm will continue to provide the State is the ability to mathematically determine the lowest cost of borrowing using an assortment of financial instruments. PRAG has constructed linear optimization models which we use for our work with the State, typically on bond structuring and negotiated pricings. These models utilize advanced mathematical techniques to determine the optimal solutions to complex financing structures. Our proprietary model is customized for each client and is flexible in evaluating different products and costs. PRAG's linear optimization model could be used by the State in deciding the optimal mix and placement of credit enhancement, fixed rate bonds, capital appreciation bonds, synthetic fixed rate bonds, and any other products that may be considered for a particular bonding program. The model provides the optimal solution of minimizing debt service in targeted years, maximizing or minimizing the final maturity, minimizing the present value of total debt service, and minimizing or maximizing other structural constraints.

PRAG provides its clients with every kind of analysis needed to make proper financial decisions. In many instances, we develop customized computer programs using high-level languages for specific engagements. We have found the ability to design client-specific software extremely valuable and cost-effective. In addition to project-specific software, PRAG's software base currently includes programs and modules in the following areas:

Advance Refunding	Forward Delivery Analysis
Sinking Fund Development	Investment Optimization
Escrow Structuring & Restructuring	TIC/NIC/Spread Analysis
Call Option Pricing	Bid Optimization
Debt Structuring	Insurance Cost Effectiveness
Flow of Funds Analysis	Utilities Cash Flow
Project Finance	Derivative Products Pricing and Analysis
Cash Flow Analysis	Leasing
Debt/Equity Analysis	Asset-backed Products
Option Pricing Analysis	Rebate Analysis/Requirements

For each analytic tool, our firm has the capability to add an optimization module that allows us to advise clients on the structure to optimize a set of stated goals. For example, in structuring a bond issue under specific state law structuring constraints, our optimization module can solve for a structure, which meets state law constraints and provides the lowest debt service for a specific period of time. Another example of the use of our optimization module is the development of senior/mezzanine/junior financing structures that solve for the largest and least possible borrowing amount given differing coverage factors on each level of financing. We are dedicated to the use of optimization techniques, in conjunction with standard modeling practices, in order to assure clients that the structures that are ultimately implemented meet their goals in an optimal manner.

PRAG has a proven track record of success in applying our quantitative and analytical capabilities. The best representation of our technical and quantitative abilities is our past performance. Below are some examples of how we applied our analytical capabilities on State of West Virginia projects over the course of our engagement:

- ✓ *Transportation Infrastructure Plan-* Governor Justice formulated a multifaceted Transportation Infrastructure Plan that relies on leveraging multiple revenues streams through the issuance of general obligation bonds, toll revenue bonds and GARVEE notes to fund the State's deteriorating roads and bridges. At the request of the Division of Highways and Parkways Authority, PRAG developed financial models to project bonding capacity of each financing tool based on assumed revenue streams, debt service coverage targets, statutory authorization levels and fee structures. Given that the upfront proceeds generated from each financing tool is to be used to fund state road construction, it was important to consider the interrelated nature of the funding programs in developing these models. Please see a discussion on the Governor's Transportation Infrastructure Plan in our response to Question 4.8 herein, which includes a detailed description of our approach to developing the customized models for the Governor's plan and certain considerations in executing the plan as well as summaries of the models output.
- ✓ *SBA Multi-Year Capital Funding Model:* PRAG assisted the West Virginia School Building Authority (the "SBA") develop and implement a comprehensive plan of finance to permit an ongoing borrowing program to provide annual funding for the construction and maintenance of secondary schools throughout the State. Prior to the creation of the multi-year planning model developed by PRAG, the SBA had been funding school construction with ten year bond issues and on a pay-as-you go basis. Working with SBA staff, our firm assisted in the development of a model and presented to the SBA and Department of Administration a series of financing alternatives to meet its policy goals and funding needs. Based on our analyses, we presented a financing plan that leveraged the two fixed revenue streams to permit the SBA to optimize its funding needs by borrowing approximately every year combined with available general fund appropriations. PRAG updates this model on a regular basis.
- ✓ *West Virginia Parkways Swap Analysis:* We assisted the West Virginia Parkways in connection with $59.1 million of FGIC-insured VRDBs which were trading very poorly, due to the successive downgrades of FGIC. The integrated interest rate swap had provisions that exacerbated the Parkway's problem as the poor trading resulted in an Alternative Floating Rate Event occurring under the swap. PRAG was engaged to assess the alternatives, which included replacing the credit enhancement, replacing the liquidity, or replacing both. After extensive analysis, it was determined to avoid the other potential mono-line insurers, and to market the bonds based upon the underlying rating of the Parkways Authority ("AA-"), with a new liquidity facility. PRAG assisted with what amounted to a current refunding of the mono-line insured VRDBs with uninsured VRDBs using the Parkways underlying AA- credit and with the deemed termination calculations under the swap. The swap was maintained, notwithstanding the removal of what once was a triple-A rated Credit Support Provider under the ISDA documents. This helped the Parkways avoid a large swap termination payment. PRAG later assisted the Parkways in replacing the VRDBs with a variable rate direct loan with a commercial bank. The bank loan converted the bonds to a LIBOR index rate, reducing the swap basis risk and eliminated bank replacement risk as the term of the loan matched the final maturity of the bonds.
- ✓ *Workers Compensation Model:* PRAG was asked to assist the State with a long-standing economic problem caused by one of the State's most persistent unfunded liabilities. The state-run, exclusive, workers' compensation system had unfunded liabilities totaling in excess of $3.8 billion (on a present value basis). The State desired to defease its obligations on existing workers' compensation claims and capitalize a new, employers' mutual insurance company to take over future workers' compensation obligations as a first step towards opening up a competitive market. PRAG put together a team that included a nationally recognized workers' compensation life actuary and claim experts to provide the unique blend of services required by the State of West Virginia. The PRAG team was able to build a model that aided in creation of a tax package that was pledged to defease the prior obligations along with other available sources. The liabilities were then analyzed from a life actuary perspective, which was incorporated into the model giving the State a comprehensive set of tools with which to close up the old pool of liabilities and capitalize the new employers' mutual insurance company. The Governor had obtained the authorization to incur up to $1.5 billion in debt in order to fund the old workers'

compensation liabilities but in reliance on our analysis and the model that was created for the State, the State determined not to issue any debt. PRAG annually updated the workers' compensation liability model through last fiscal year when the fund approached sufficiency.

✓ *West Virginia Parkways Efficiency Report:* PRAG conducted an independent financial review and analysis of the Parkway to assist the Governor, State Legislature, Parkways, public and other stakeholders in the evaluation of the need for future proposed toll increases and the relationship of toll increases to maintaining the Turnpike in a manner that provides a safe facility and an acceptable level of service. PRAG reviewed the Parkways': (i) current financial practices, financial results and operations and capital budgeting practices; (ii) debt structure; (iii) legal constraints; (iv) past and projected revenues and expenditures; and (v) identified capital needs. The firm worked with the Parkways' consulting engineer, traffic and revenue consultants, Parkways staff, State elected officials and staff, and other stakeholder to gather information and present finding and recommendations.

4. Project Goals and Objectives

PRAG has served as the State of West Virginia's financial advisor since 2005 and over the course of our tenure with the State we have worked on numerous bonds issuances of varying size, structure and security and special projects that have run the gamut which allowed us the opportunity to work with State staff and elected officials, State agencies such as the School Building Authority, Higher Education Policy Commission, Water Development Authority, Economic Development Authority, Lottery Commission, Insurance Commission, Department of Transportation, Tobacco Finance Board, Parkways Authority, Legislative Finance Committees, State Board of Investment, Consolidated Public Retirement Board, Public Employees, Public Employees Insurance Agency and the State Treasurer's office. Over the years we have come to understand the State processes and have used such experience to coordinate and bring multiple projects to a successful completion. No other financial advisory firm has such first-hand experience and depth of knowledge of the State's complex debt portfolio, financial structure and statutes. We are familiar with the debt issuance approval process of agencies, board and commissions throughout the State seeking a directive from the Governor. We are familiar with the legislative and budgeting process. Over the years we have thoroughly reviewed debt and financing proposals, analyzed the structure of the transactions, ran independent numbers and worked on details with the proposed issuer prior to the final proposal reaching the Governor's desk. We are proud of the level of service we have provided to the State since we were hired as the State's first independent financial advisor. The State has always been a client we are proud to have, and we would be honored to continue as its financial advisor.

PRAG, as a firm, and the proposed project team specifically have the comprehensive set of skills, experience and expertise to successfully undertake the Project Specifications presented in the Project Goals and Objectives section of the State's request for proposals. These skills include monitoring the market relative to a client's database for refunding opportunities, tracking secondary trading levels for both fixed and variable rate debt, providing updates on general market trends and developments, monitoring levels of debt ratios required by bond covenants or debt policies, providing updates on ratings for both client-specific and sector-wide developments, and monitoring investments and investment agreements and arbitrage rebate analyses. We also evaluate the effects of proposed legislation, regulations and other initiatives, analyze unsolicited proposals from underwriters and provide briefings to staff and legislators as required or requested.

The following sections outline each of the items in the State's Project Specifications and details how PRAG will fulfill each of these objectives through relevant experience already deployed for the State.

4.1 Advise the State on general market conditions and outlook for financings, including: the issuance of bonds and other financing instruments, marketability, refunding opportunities, debt affordability, budgeting of debt service, and investor preferences;

PRAG analyzes the market conditions prior to, during, and subsequent to each bond sale: The firm summarizes the expected reception of the bonds in the market and evaluates performance relative to the market and other transactions of similar credit: As a result of our extensive client base and frequent participation in the market, PRAG is involved in the tax-exempt markets on a daily basis and we can obtain information on market conditions and pricing opinions from a wide variety of participants and sources such as Thomson Municipal Market Monitor (TM3), Bloomberg, PreBon Tullett, and all historical rating reports of Moody's Investors Service, Standard & Poor's and Fitch Ratings.

PRAG would continue to review the State's debt management practices, outstanding debt structures and financial resources to determine its available borrowing capacity and refunding opportunities, using our debt financing software and in-house created models. If a refinancing is pursued, our role would continue to include management of all aspects of the transaction – from initial review through the completion. The first step, developing a database of the State's debt, is complete and regularly updated. As the State's financial advisor, we would continue to review the database regularly to identify potential refunding opportunities.

As Financial Advisor, we assist and make recommendations on all aspects of financings (whether new money or refundings), including: type of debt or other financing instrument to issued, document preparation, method of sale, selection of financing team, timing of sale, economic considerations, market conditions, maturity structures, interest rates, redemption provisions, debt service requirements, evaluation of bond pricing, evaluation of underwriter performance, and any post-sale services as may be reasonably requested. Given our in-depth understanding of economic and market conditions and our active involvement in the municipal market, PRAG is able to interpret the most important market trends and can continue to assist the State in managing issue size, timing, structuring and choosing the optimal structure based on investor preferences and specific issue requirements. We have extensive experience in debt structuring, including maturity design, document preparation, couponing, call option and escrow structuring, and possess a high level of analytical capabilities, thereby enabling us to successfully develop and implement various financing programs.

Our knowledge of the municipal bond market and our quantitative modeling capabilities are central to the effectiveness and applicability of our advice. By applying this knowledge, we can fully evaluate all alternatives to develop the optimal structure that aligns with the State's goals rather than the objectives of other parties which may be to generate the largest fees. Our recommendations on structure encompass a variety of options, including size, maturity design, couponing and call provisions and the use of linear optimization techniques, if appropriate, to develop an optimal plan of finance.

PRAG understands the State's financial practices, operations and capital budgeting objectives. It is our practice for all our clients to prepare outstanding debt service schedules for both new money and refunding issuances and any other schedules as requested by our clients and would do so for the State. Our schedules provide our clients with calculations of principal, interest, debt service on a semi-annual and fiscal year basis, sources and uses the true interest cost, arbitrage yield and tax calculations such as the Form 8038, among other schedules. In the case of refunding issuances, we also include debt service schedules that show gross savings on present value and annual basis, prior debt service, summary of the bonds refunded, escrow costs, escrow sufficiency, among others. PRAG has the ability to customize any debt service schedule to fit the State's needs. PRAG has consistently provided these services to the Department of Administration, Department of Revenue and State Treasurer's office and is in regular contact before during and after bond transactions to be sure the State's systems are accurate and reflective of all transactions.

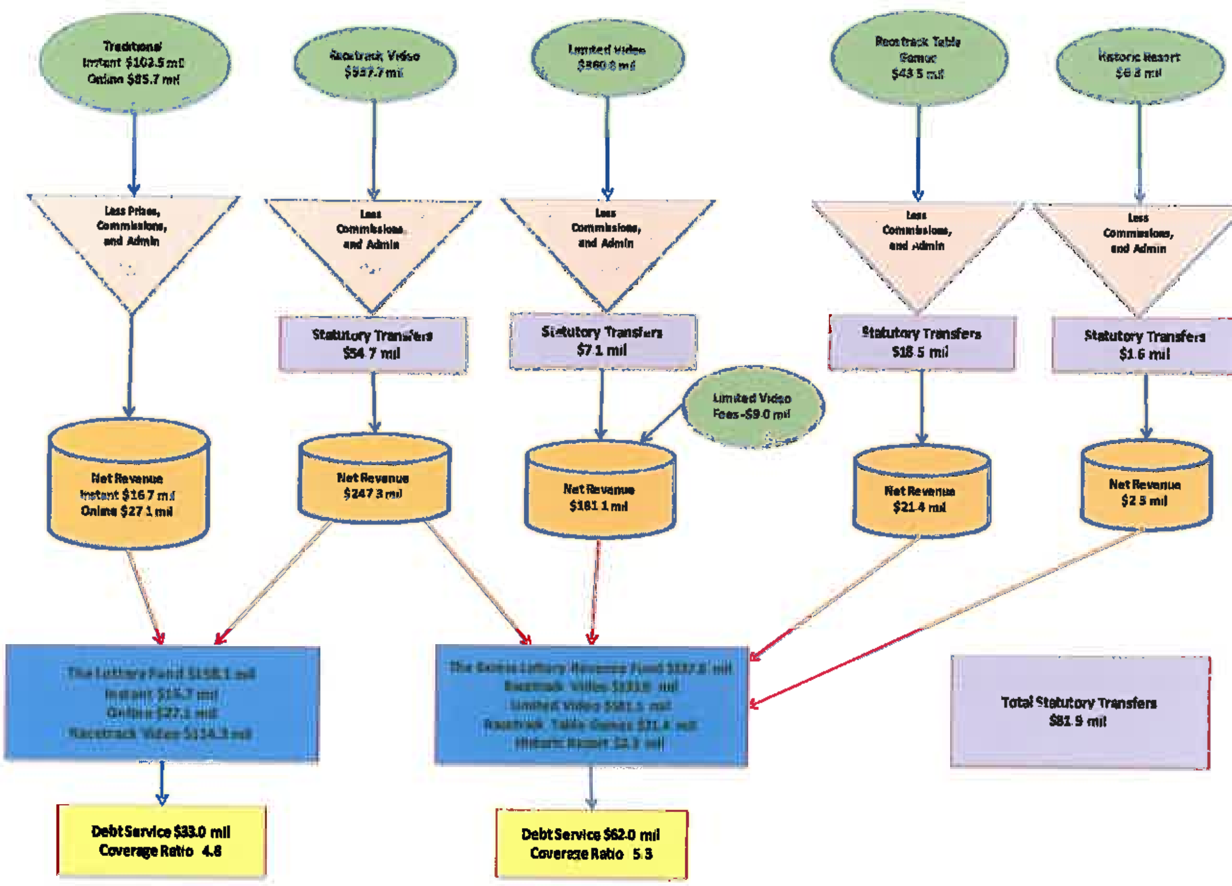
4.2 Advise the State on alternative mechanisms to finance projects, such as the use of public-private partnerships and securitization of revenue streams;

Since the Winkler case, leveraging the State of West Virginia's lottery revenues has become a substantial financing source for capital projects within the State. Until recently, this has been a growing revenue stream and has allowed for the financing of many capital projects that have bettered the lives of West Virginians in terms of school construction projects, higher education projects and parks and recreation projects. However, as the State is well aware, the stability and ability for future leveraging of this revenue stream is being threatened due to the increased out-of-state competition and online lottery competition. Having worked on eleven issues with the aggregate par amount of $459.0 million and most recently on the ***$21.255 million West Virginia School Building Authority, Lottery Capital Improvement Revenue Bonds, Series 2016B***, PRAG is very familiar with the State's Lottery and Excess Lottery financing programs. We understand the unique flow of funds, rate covenants, additional bonds test, and maybe most importantly, we understand the credit issues related to the program. We have relationships with each the State's lead rating analysts Genevieve Nolan at Moody's, Timothy Little (the recent replacement for John Sugden) at Standard and Poor's and Marcy Block at Fitch. These analysts call us regularly both during the bond issuance process as well as during their annual surveillance to ask questions

MOODY'S INVESTORS SERVICE	STANDARD & POOR'S RATINGS SERVICES
A1	AAA
Lottery Credit Strengths	
• First lien on net lottery revenues; • Strong debt service coverage; • Subordinate back-up pledges; • Importance of lottery revenues to State operation, which provides incentives; • Historically strong management of State's lottery enterprise.	• Very strong projected maximum debt service (MADS) coverage; • Lien of net revenue, providing 1.5x built-in coverage of debt service; • Rapid debt service repayment; • Strong coverage on all liens based on statutory limit of debt service; • Backup lottery and excess lottery pledges.
Lottery Credit Challenges	
• Lack of constitutional protection of the pledged revenue stream; • Continued competition from neighboring states; • Narrow source of pledged revenues; • Potential change in consumer interest towards gaming.	• Declining revenues due to increased competition and weakening economy.

regarding the nuances of the State's lottery program. We have established a rapport with the analysts and have encouraged open dialogue. The proposed PRAG team has assisted new rating analysts in understanding the nuances of the State's lottery and excess lottery credits. The open dialogue and transparency with both S&P and Moody's has helped the State to maintain their Lottery/Excess Lottery ratings despite the competition and uncertainty regarding future lottery revenues.

PRAG has a thorough understanding of the lottery credit and the flow of lottery funds. The Lottery Bonds receive the first 30% of racetrack video lottery dollars and the net profits of traditional lottery (instant and online games). The Excess Lottery Bonds receive limited video lottery revenues and a portion of the racetrack video lottery funds once the benchmark is reached. The flow of funds of the State's lottery program is extremely complex. The complexity was accentuated in 2014 when in an effort to bolster the coverage and ratings of the Excess Lottery credit the Legislature made amendments to the Lottery Act (HB 101 and HB 106). With the passage of HB 101, the State moved or eliminated various statutory transfers that occurred in the Lottery flow of funds. PRAG worked closely with the administration in developing the strategy and ultimately was responsible for communicating the changes to the rating agencies and the markets. This type of flow of funds requires a comprehensive understanding of the programs and the numbers in order to articulate the credit strengths and mitigating factors regarding any credit challenges. We worked with Lottery representatives to develop the graphic below to summarize the complex flow of funds with the FY 2016 revenues and transfers.



We know that the rating agencies are concerned about out-of-state competition but we also understand the protections and backstops inherent in the flow of funds of the programs. For example, the introduction of games and/or gaming facilities within such states of Ohio, Pennsylvania and Maryland have certainly impacted the revenues generated at the Mardi Gras, Greenbrier, Wheeling Island, Mountaineer and Hollywood casinos. See the proximity of competition in the map that follows.

Rather than focusing on the potential loss of racetrack lottery funds, we have emphasized the stability of the traditional lottery for the Lottery Bonds and the limited video lottery for Excess Lottery Bonds, both of which generate enough revenue to pay the debt service on the existing bonds in each respective program as demonstrated below. For example, the aggregate debt service coverage for the Lottery bonds (SBA, New East Lottery Bonds and CTC bonds) was 6.9x pledged revenues in FY 2016, but even if racetrack lottery revenue went to zero, the coverage would be ~1.3x. Likewise, if racetrack lottery revenue went to zero the aggregate debt service coverage for the Excess Lottery bonds (EDA. HEPC, SBA, Chesapeake and the authorized Park bonds) would decline to 3.2x from its existing FY 2016 coverage level of 5.3x (assumed debt service for the authorized bonds).

Periodically PRAG initiates calls with the rating agencies to get non-transaction related feedback, PRAG initiated such a call with John Sugden, to gauge the view of the rating commitment on the lottery credit. Due in part to our long relationship with Mr. Sugden and working with him on other States' credits, the discussion was forthright and frank. Based on this discussion and work with the other lottery credit rating analysts, we developed some ideas for the State's consideration with respect to future policies and practices related to the lottery program designed to maintain the existing ratings at the highest possible level. Many of our recommendations below are designed to alleviate these concerns and help to maintain the State's Lottery ratings. As the State's financial advisor, we are committed to working with it and the Lottery Commission to continue to carry out this rating strategy as outlined below.

- Consider providing longer-term projections given narrowing debt service coverages.
- Attempt to provide more detail on how specific competition is impacting various portion of the lottery revenue stream.
- Provide real-time revenue updates as new competitive facilities come online
- Review prior year expectations versus actual (instead of just original budget projections)
- Provide quarterly revenue updates in a format that shows effect on bond coverages.
- Participation from Governor's office during rating meeting to communicate:
    - Governor's/Administration's position on new games and supporting the Lottery and Excess Funds.
    - Governor's/Administration's position on new lottery debt
- Presentation from Lottery and/or Administration about strategy (change in law, business adjustments) the State is pursuing to protect lottery revenue
- Coverage scenarios created and stress test shown for the worst-case scenario.
- Consider shortening term of debt until effects of competition become clear.

- Consider the trade-offs of delaying certain new money bonds.

No firm is more qualified to advise the State on credit matters, discuss the credit strengths of the program with the analysts, do stress testing on the revenues and debt service coverage and strategically plan for future debt issuances.

Public Private Partnerships

Select PRAG P3 Clients
▪ Virginia Department of Transportation
▪ Georgia Department of Transportation
▪ Maryland Department of TransportationDistrict of Columbia Department of Transportation
▪ Denver Union Station Project Authority (CO)
▪ Transportation Corridor Agencies of Orange County (CA)
▪ City of Atlanta Water System (GA)
▪ Mercedes Benz (AL) Facility
▪ New York Mets Baseball Stadium (NY)
▪ Rochester (NY) Sports Stadium
▪ Miami-Dade Water and Sewer Department (CA)
▪ City of Los Angeles Wastewater System (CA)

PRAG has significant experience providing financial advisory services to the public sector for all aspects of public-private partnership ("PPP") projects. These services include feasibility analyses, development of models and sensitivity testing of economic assumptions for several public-private projects. PRAG has advised the Virginia Department of Transportation ("VDOT") on several projects utilizing the PPTA structure and has analyzed the risks and financial feasibility of a number public-private partnership projects related to transportation, resource recovery, housing and economic development, airports, correctional facilities and sports stadiums. PRAG has extensive experience in developing alternative financing structures for public-private issuers.

Any PPP project should represent added value from private participation, whether to relieve the government from continuing a function no longer considered part of its core responsibilities or through a decision that indicates that higher efficiencies will be achieved. The project may involve a trade-off between the loss of future cash flow and the gaining of a lump sum payment. Among the largest concerns are the terms of concession agreements. Very generous concessionaire compensation requirements, termination payments or indemnities for example could be detrimental to the State. If outstanding debt must be defeased, there should be a transparent plan that outlines the amount of debt involved and the process by which those bonds will be purchased.

Rating agencies should be involved in PPP projects and it is paramount that the state's general credit standard is maintained. Open and frequent communication with the agencies is necessary, including a dialogue about why the State decides to pursue a given transaction, the potential transaction itself and the specific terms of the concession agreement. Perception of the transaction as a one-time aid for financial stress could be harmful to the State's credit ratings.

Stonewall Jackson Lake State Park (WV)

The operator/developer of the Stonewall Jackson Lake State Park requested that the State budget and appropriate an additional $2 million subsidy for the project. The Office of the Governor specifically requested PRAG to analyze the long-term financial projections for the Project, and the credit implications and other effects the requested cash contribution might have, as well as reviewing possible debt restructuring options and various options for the infusion of State equity.

The Governor was concerned that a failure of the State to provide this additional money could adversely impact the State's credit rating, the resort's operations and would only lead to further requests without addressing the underlying problems.

PRAG concluded that:

➢ The project was overleveraged and without a significant reduction in the debt, the project would suffer significant additional operating deficits and would be unable to pay the full debt service requirements on the Bonds for the foreseeable future. Agreeing to make an additional contribution did not address the projected revenue and expense imbalance.

- Based on extensive discussions with the rating agencies, failure to subsidize the project was not expected to adversely impact the State's credit ratings because the security for the bondholders was solely from Resort net revenues, with no recourse to the State.

The Governor and the Legislative leaders agreed to follow PRAG's recommendation and not contribute additional funds to the Project. The State has saved millions of dollars by following this advice given that no additional state funds have been provided to the project.

4.3 Advise the State on rating agency matters and strategies for rating agency meetings, including: preparing material for rating agency visits or calls, or meetings; identifying identity and background of rating agency personnel and a synopsis of their likely concerns and questions; preparing the State participants, including providing outlines of talking points to be made by each State presenter;

As a result of representing many different clients, including West Virginia, with the rating agencies over a number of years, we have developed an understanding of the credit rating agency process, which we do not believe is present in any other financial advisory firm. No advisory firm, independent or otherwise, can offer the credit expertise and experience that PRAG has.

The State of West Virginia has a complex Net Tax Supported Debt portfolio which includes General Obligation Bonds, Lottery and Excess Lottery Bonds, and certain Lease Revenue Bonds. The State's respective ratings for the Net Tax Supported Debt, Moral Obligation Bonds, GARVEE Bonds and Municipal Bond Program are summarized in the table below.

State of West Virginia Credit Ratings
As of May 1, 2017

Security	Moody's Rating	Moody's Outlook	S&P Rating	S&P Outlook	Fitch Rating	Fitch Outlook
General Obligation Bonds[1]	Aa2[9]	Stable[9]	AA-[10]	Stable	AA[12]	Negative
Lease Revenue/Appropriation Bonds[2]	Aa3[9]	Stable[9]	A+[10]	Stable	AA-[12]	Negative
Lottery and Excess Lottery Bonds[3]	A1	Stable	AAA	Stable[11]	A+	Stable
Higher Ed. Double Barrel Bonds (Lottery/Ed Fees)[4]	Aa3	Stable	A+	Stable	N/A	N/A
Moral Obligation Rating[5,6]	A1[9]	Stable[9]	A-[10]	Stable	A+[12]	Negative
Municipal Bond Program[7]	N/A	N/A	AA-[10]	Stable	N/A	N/A
GARVEE Bonds[8]	A2	Stable	AA	Stable	N/A	N/A

[1] Issuer includes the State of West Virginia for State Road and Infrastructure Bonds.
[2] Issuers include the Economic Development Authority and School Building Authority.
[3] Issuers include the Economic Development Authority, Higher Education Policy Commission, School Building Authority and Water Development Authority.
[4] Issuer includes the Higher Education Policy Commission.
[5] Issuer includes the Water Development Authority.
[6] Moral Obligation is notched two notches off the State's general obligation rating for Moody's and Fitch and three notches for S&P.
[7] Issuers primarily include county school boards.
[8] Issuer includes the Commissioner of Highways.
[9] Downgraded rating and revised outlook on February 21, 2017.
[10] Downgraded rating on April 21, 2016.
[11] Revised outlook on October 28, 2015.
[12] Downgraded ratings on September 27, 2016.

Each credit comes with unique strengths and challenges and requires a tailored rating strategy. PRAG has worked with the Governor's Office, Department of Administration, Department of Revenue, Department of Highways and State authorities and agencies in addition to other members of the State's working group to develop customized rating strategies for each of its credits. We are familiar with all of the State's general government credits. As previously stated, we have established relationships with each of the State's rating analysts and are familiar with their approach and concerns. These analysts call us regularly both during a bond issuance as well as during their annual surveillance to ask questions regarding the fine distinctions of the State's debt programs. We have established a rapport with the analysts and have encouraged open dialogue.

Since 2005, when we started as the State's financial advisor, improving the State's credit ratings was one of our primary objectives. At the time the State was rated Aa3/AA-/AA- by Moody's, Standard and Poor's and Fitch respectively. While the majority of other states in the country suffered through the Great Recession in the late 2000's, West Virginia fared well generating year over year revenue growth and achieving substantial operating surpluses. During this time period, the Manchin administration, consistent with PRAG's advice, tackled many of the State's liabilities by dedicating revenues to paying down the state's workers compensation debt, securitizing the state's tobacco revenues to improve the state's pension funding status and building up the State's rainy day fund. PRAG worked intimately with the state to communicate to the rating analysts the steps the State had taken to reduce these liabilities and build up the State's reserves. The rating agencies acknowledged the strong governance and financial discipline of the state during this time with rating upgrades. Moody's upgraded the State to "Aa1" in 2010, Standard & Poor's to "AA" in 2009 and by Fitch to "AA+" in 2011, the first upgrades of the State by Moody's since 1999 and by Standard & Poor's and Fitch since 1996.

While we are certainly proud of the rating strategy that resulted in multiple upgrades to the State's ratings in the late 2000's, often times the overarching strategy is to maintain/protect a rating from multiple notch downgrades in difficult times.

With the significant drop in natural resource prices, including coal and natural gas in the fall of 2014 there was significant impact to the State's general revenues and a rippling effect to the State's other revenues such as income tax and sales tax due to higher unemployment levels and less disposable income. The Tomblin administration used a variety of measures to manage through this period of time such as hiring freezes, no pay raises, across the board spending cuts, new revenues (redirection of workers' compensation fund revenue and lottery surplus) in conjunction with tempered use of the State's rainy day funds.

The rating agencies view rainy day funds as a resource for states to manage through cyclical downturns. Rating agencies expect states to use their rainy day funds during these times, however it is critical that the use of rainy day funds and other one-time measures are used in conjunction with ongoing and sustainable budget enhancements (such as spending cuts or new revenue measures) to achieve a more structurally balanced budget. Going into the 2017 Legislative Session, the State was facing a $400+ million budget gap for FY 2018 and annual gaps ranging from $250 million to $380 million through the out years in the States six year plan. Further, given the magnitude of the projected budget gaps, the State cannot rely on the rainy day fund because, if applied, the draws required would completely drain the rainy day fund in a matter of years while still leaving the large structural imbalance and limited source funds to assist with short term/liquidity needs. Further, we recognize that expense reductions of critical services and/or the introduction of new taxes at a time when so many citizens of the State are struggling are politically difficult.

Suffice it to say the Justice administration inherited an extremely difficult budget situation facing a current year FY 2017 budget gap of $200 million and an even more significant FY 2018 budget gap, as described above, on the heels of rating downgrades from each of the agencies over the last year and a need to spur economic development and fix the State's infrastructure.

The new administration recognized PRAG's long-term history of working with the State and unmatched knowledge of the State's credit. Having served as the State's financial advisor since 2005, we have advised the State through many economic cycles and have had multiple conversations about the rating agencies views on the State's credit strengths and challenges. PRAG was willing and able to meet with the new administration on less than a week's notice and do a half day debrief on the State's credit.

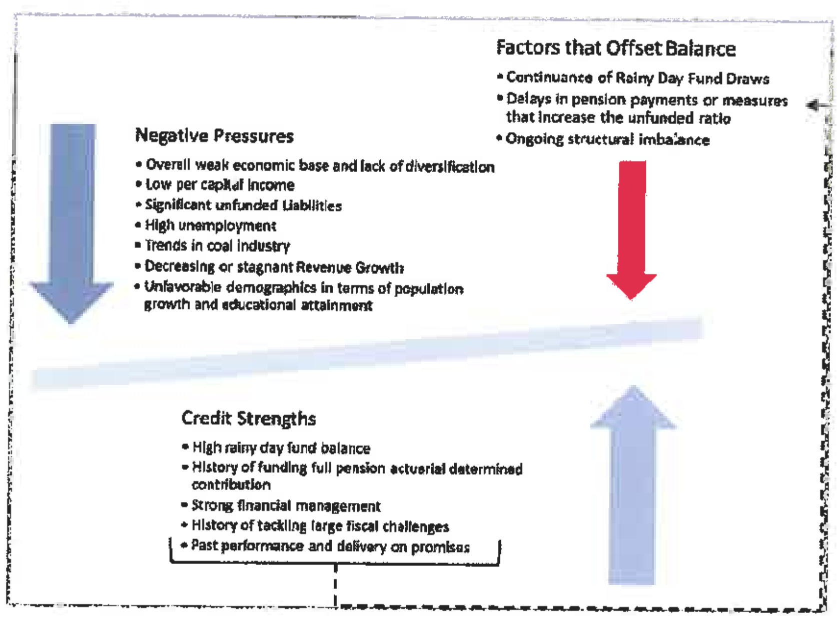
As part of this conversation and in follow up materials we covered:

- State's ratings at the time and implications of further downgrades,
- State's credit strengths and weaknesses,
- Use of rainy day fund and appropriate rainy day fund balances,

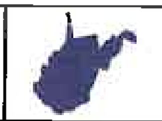
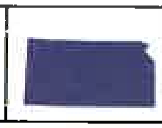
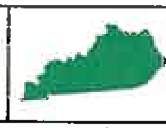
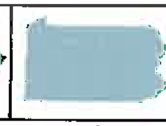
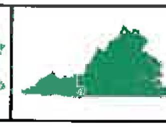
- Implications of certain changes to the State's pension funding and actuarial assumptions,
- Possible financing mechanisms for the State's roads,
- Refunding opportunity to generate significant FY 2018 budget relief,
- Peer comparison of other states.

As noted above, in preparation for the credit rating debrief meeting, PRAG prepared an extensive analysis of the State's ratings including the existing and historical strengths and weakness, the actions that could lead to both positive and negative rating actions and ultimately worked with the Department of Revenue to develop a schematic that clearly demonstrated the factors needed to balance the State's credit profile in order to maintain its existing ratings. Provided below is an updated summary of the State's credit strengths and weaknesses as well as the schematic we developed earlier this year which still memorializes the credit factors the Administration is considering as the develop the current Fiscal Year 2018 Budget.

Moody's Investors Service	Standard & Poor's Ratings Services	
Moody's	**S&P**	**Fitch**
General Obligation Credit Strengths		
• Track record of fiscal conservatism; • Financial cushion provided by the State's rainy day fund; • Strong executive power to make mid-year spending adjustments.	• Strong rainy day fund balances that provide flexibility to weather temporary revenue shortfalls; • Statutory provisions that allow payment of debt service in absence of a budget; • Demonstrated willingness and ability to tackle large-scale financial challenges.	• Ample expenditure flexibility with a low burden of carrying costs; • Sizeable level of reserves; • Strong ability to control revenue and spending policy.
General Obligation Credit Challenges		
• Above-average concentration in the coal industry; • Below-average income and low labor force participation rate; • Persistent structural imbalance, aggravated by significant unfunded pension liabilities.	• Challenged economic base that has suffered significant deterioration year over year given global weakness in demand for mineral and ore products; • Reliance on one-time sources of revenue to close budgetary gaps • Significant pension liabilities.	• Downturn in the natural resource market, particularly for the State's coal; • Significant unfunded pension obligation.



Further, as a follow up to the credit debrief meeting, the Department of Revenue and Governor's office requested PRAG prepare an in-depth peer comparison that could be used as reference for the State as they evaluated different budget initiatives for Fiscal Year 2018. The analysis provided a single source comparison of 15 states, largely considered West Virginia's peers, and has enabled the Administration to clearly understand which policies are in place in other States and how those policies may impact their credit profile. Please find a select number of the peer comparisons in the table below.

					
State	West Virginia	Kansas	Kentucky	Pennsylvania	Virginia
Ratings (Moody's/S&P/Fitch)	Aa1 (Negative) AA- (Stable) AA (Negative)	Aa2 (Negative) AA-(Stable) NR	Aa2 (Stable) A+ (Negative) AA- (Stable)	Aa3 (Stable) AA-(Negative) AA- (Stable)	Aaa (Stable) AAA (Stable) AAA (Stable)
Credit Strengths	-Track Record of Fiscal Conservatism and discipline, -Strong Rainy Day Fund balances, -Demonstrated willingness to tackle large scale financial challenges, - Strong executive power for mid-year cuts.	- Low unemployment rate and other favorable economic indicators, - Diverse economy, - Large amount of budgetary flexibility on revenue and expenditures sides of budget.	- Strong economic and revenue growth, - Willingness to cut expenditures to balance budget, - Conservative revenue forecasting.	- Stable economy that is less volatile than the US economy overall, - Above-average income levels, - Pension reform placing Commonwealth on a path to full funding.	- Long standing history of conservative fiscal management, - Strong debt management practices controlled through sophisticated debt affordability model, - Strong and diverse economy.
Credit Weaknesses	-Significant unfunded pension liabilities, -Below average per-capita income levels, -Declining revenues, creating structural imbalance, -Demographic profile comparatively weak and steady loss of population.	- History of underfunding pensions, leading to above-average unfunded pension liabilities, - Depleted Rainy Day Fund, - On-going difficulties balancing budget with recurring measures after tax cuts, - Pension payment deferrals.	- Low per-capita income, - Above-average debt ratios and large unfunded pension liabilities, - Fluctuations in employment growth, - Lagging the nation's levels on demographic indicators and projected growth, - Structural imbalance.	- Negative fiscal position following years of deficits and large structural imbalance, - Contentious political environment making it difficult to chart a long-term fiscal path, - Poorly funded pension plans and historical practice of underfunding.	- Managing finances through a slow economic recovery and federal downsizing while trying to rebuild reserves, - Limited resources.
Industrial diversity ranking (1 best)[1]	47	24	27	7	21
Per Capita Income[2]	$36,758	$47,161	$38,588	$49,745	$52,052
Unemployment Rate, Rank[3]	6.0%, Rank: 47	4.3%, Rank: 20	4.8%, Rank: 26	5.7%, Rank: 44	4.2%, Rank: 17
General Revenue Growth for FY 2016/2017[4]	-2.2%/2.0%	2.4%/4.2%	4.0%/2.6%	3.1%/7.9%	3.4%/10.7%
Rainy Day Fund Balance ($ in Millions) for FY 2016/2017[4]	779/742	0/0	209/236	69/70	237/845
Rainy Day Fund Balance as a % of Expenditures[4]	17.5%	N/A	2.1%	0.2%	4.2%
Pension Liability Funding Ratio[5]	76.9%	65.2%	37.4%	57.6%	74.6%
% of Pension Annual Required Contribution Paid[6]	107.02	74.5	77.46	83.3	83.5
Pricing Spread to MMD	+11 bps	+40 bps[8]	+65 bps[8]	+70 bps	0 bps
Borrowing Cost[7]	2.43%	2.72%	2.97%	3.02%	2.3200%

[1] "U.S. Regional Diversity, Volatility and Vitality," Moody's Analytics, November 2012.

[2] U.S. Department of Commerce / Bureau of Economic Analysis / Regional Income Div

[3] Bureau of Labor Statistics, November 2016.

[4] The Fiscal Survey of States Fall 2016.

[5] "U.S. State Pensions," S&P Global Ratings, September 2016.

[6] Amount calculated based on a weighted average of the amounts reported in the Fitch Ratings, "2016 State Pension Update."

[7] Approximate ten year borrowing cost was calculated by PRAG by applying the State's or Commonwealth's pricing spread for their most recent general obligation or appropriation bonds to the ten year Municipal Market Data (MMD) as of January 23, 2017 .

[8] State does not issue general obligation bonds. State does issue appropriation bonds. Appropriation pricing spreads were adjusted 20 bps to approximate the respective borrowing cost of a general obligation credit.

[9] State has not issued general obligation or appropriation bonds over the past ten years.

On February 8, 2017 Governor Justice introduced what we viewed as a strong Executive Budget given the combination of spending cuts, new revenue measures and ending the use of the rainy day fund to balance the budget, in addition to plans to spur economic development in the "Save our State" fund and investment into the State's infrastructure.

During the 2017 Legislative Session, we were asked to review a variety of proposed bills and provided advice and drafted memorandums summarizing possible rating implications and credit considerations on future financings that may result from the passage of the following bills and resolutions:

- Joint Senate Resolution 6 related to the issuance of State Road General Obligation Bonds,
- Senate Bill 482 related to the Parkways,
- Senate Bill 335 related to various tax changes and amendment to the Constitution.

Part of our review included calls to and discussions with rating analysts on an anonymous basis to discuss certain implications of the proposed legislation. We relayed this information to staff and many times memorialized it in a memorandum to be used for further discussions throughout the State.

With Governor Justice's April 15th veto on the Budget Bill, and the current status of the Special session which began on May 4, we expect the budget discussions/negotiations to continue similar to last year. The rating agencies have been following the legislative session and will be interested in receiving an update about the State's budget, once an agreement is reached or budget is passed.

Given our long-term relationship with the State, we view our responsibilities as an extension of staff and have strived to provide timely and thorough analysis to all requests. We have advised the State through three administrations and over multiple economic cycles. We understand the credit sticking points with the rating agencies. In our recommendations, we are mindful to the economic, credit and political environment in which State officials are operating. No other financial advisor has the understanding of the State's credit profile and sensitivity to the State's position. At such a pivotal credit point for the State, it is important for the State to have a trusted advisor who is familiar with its rating analysts to help craft and deliver its message. We feel strongly we are the best firm suited to serve the State in this capacity and would be proud to continue as the State's financial advisor.

4.4 Develop and maintain a model of all of the State's outstanding debt issuances on a maturity-by-maturity basis, with all relevant descriptive information for each maturity (CUSIP, series, dated date, sale date, maturity date, original par, outstanding par, coupon, call provisions, refunded status, type of issue, debt service, etc.), to allow, among other purposes, for graphical depictions of the State's debt profile, and scenario analyses of the impact of future debt issuance and for use in State budgeting processes and official statements (NOTE: All data collected, models developed, and output produced by the Financial Advisor during the engagement with the State shall become property of the State. This does not include purchased software, or proprietary models already developed and/or maintained by the Financial Advisor prior to this engagement.);

PRAG builds and maintains comprehensive debt profiles for all of our clients that incorporate all the relevant bond details. The purpose of the debt database is to provide effective summaries of the client's debt position, allow for efficient projections of future debt and debt ratio analyses and to be able to monitor refunding opportunities. Each security type is summarized on a different tab in the database. When we were retained as the State's financial advisor in 2005 we started to build this database and now the database consists of 17 workbooks and includes all the details of 123 bond issues. A snap shot of the West Virginia General Obligation Infrastructure Bonds is provided below. The color code represents and relates to "bonds that have been refunded" with the associated "refunding bonds" assists the State, PRAG and bond counsel with tracking the allocation of proceeds for refunding and tax-law purposes. We review and update the database regularly to identify potential refunding opportunities and provide written reports to the State including maturity by maturity refunding reports and suggest refunding candidates and transactions that meet the State's minimum refunding policy of greater than 3% net present value savings and generally recommend that the State achieve at least a 5% present value saving threshold, which has served the State well during a time of historically low interest rates.

Original Par:	[illegible]		$14,700,000		[illegible]		[illegible]		[illegible]	
Issue:	1996 Series A (Non-AMT) Infrastructure General Obligation Bonds		1996 Series B (AMT) Infrastructure General Obligation Bond		1998 Series D (Non AMT Bonds) Infrastructure GO Bonds		1999 Series A (Non AMT) Bonds Infrastructure GO Bonds		1999 Series B (AMT) Infrastructure GO Bonds	
Insurer:	FGIC		FGIC		FGIC		FGIC		FGIC	
Due:	November 1		November 1		November 1		November 1		November 1	
	Principal	Coupon	Principal	Coupon	Principal	Coupon	Principal	Coupon	Principal	Coupon
2012			[illegible]	[illegible]	1,745,000	[illegible]	1,795,000	4.800%	[illegible]	[illegible]
2013			[illegible]	[illegible]	1,840,000	5.250%	[illegible]	4.500%	[illegible]	[illegible]
2014			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.900%	[illegible]	[illegible]
2015	665,000	7.625%	[illegible]	[illegible]	2,065,000	[illegible]	2,165,000	5.000%	[illegible]	[illegible]
2016	2,300,000	7.625%			[illegible]	[illegible]	[illegible]	5.000%	[illegible]	[illegible]
2017	2,440,000	7.625%			[illegible]	[illegible]	[illegible]	5.000%	[illegible]	[illegible]
2018	2,590,000	7.625%			[illegible]	[illegible]	[illegible]	5.000%		
2019	2,745,000	5.750%			[illegible]	[illegible]	4,245,000	5.000%		
2020	2,915,000	5.750%			2,710,000	[illegible]	4,435,000	5.000%		
2021	[illegible]	5.750%			[illegible]	[illegible]	[illegible]	5.000%		
2022	3,250,000	7.250%			[illegible]	[illegible]	[illegible]	[illegible]		
2023	3,455,000	5.250%			[illegible]	[illegible]	[illegible]	[illegible]		
2024	3,665,000	5.250%			3,450,000	5.500%	[illegible]	[illegible]		
2025	3,925,000	5.250%			3,639,000	5.500%	[illegible]	[illegible]		
2026	4,160,000	5.250%			3,840,000	5.500%	[illegible]	[illegible]		
2027										
2028										
2029										
2030										
2031										
2032										
2033										
2034										
2035										
2036										
2037										
2038										
2039										
2040										
Outstanding:	6,030,000		0		0		0		0	
Callable:	0		0		0		0		0	
Non-Callable:	6,030,000		0		0		0		0	
Advance Refundable:	No		No		No		No		No	
Call Provisions:	Non callable		11/1/2006 @ 102% 11/1/2007 @ 101% 11/1/2008 @ 100%		For bonds maturing on or after 11/1/07 and prior to 11/1/22 11/1/2006 @ 102% DTP 11/1/2008 For bonds maturing on 11/1/2023 and 11/1/2026 11/1/2018 @ 102%, DTP 11/2018		11/1/2018 @ 102% 11/1/2019 @ 101% 11/1/2020 @ 100%		11/1/2008 @ 102% 11/1/2009 @ 101% 11/1/2010 @ 100%	
Purpose:	New Money		New Money		New Money		New Money		New Money	
Notes:	Provide Loans and Grants		Provide Loans and Grants		To provide Loans and Grants		To provide Loans and Grants		To provide Loans and Grants	
Dated:	4/1/1996		4/1/1996		12/1/1998		2/1/1999		2/1/1999	
Interest Payment:	5/1 and 11/1		5/1 and 11/1		5/1 and 11/1		5/1 and 11/1		5/1 and 11/1	

Original Par:	[illegible]		$94,185,000			
Issue:	1999 Series A (Non-AMT) Infrastructure GO Bonds		Series 2009 Infrastructure GO Refunding Bonds			
Insurer:	None		FGIC			
Due:	November 1		November 1			
	Principal	Coupon	Principal	Prerefunded	Difference*	Coupon
2012	7,150,000.00	5.200%	3,575,000			5.000%
2013	7,150,000.00	5.250%	3,760,000			5.000%
2014	7,100,000.00	5.300%	4,005,000			5.000%
2015	7,050,000.00	5.300%	4,280,000			5.000%
2016	7,125,000.00	5.350%	[illegible]	[illegible]	[illegible]	[illegible]
2017	6,775,885.08	5.450%	[illegible]	[illegible]	[illegible]	[illegible]
2018	6,268,940.82	5.500%	[illegible]	[illegible]	[illegible]	[illegible]
2019	7,385,742.82	5.500%	[illegible]	[illegible]	[illegible]	[illegible]
2020	7,017,000.00	5.500%	[illegible]	[illegible]	[illegible]	[illegible]
2021	6,721,103.76	5.500%	[illegible]	[illegible]	[illegible]	[illegible]
2022	6,349,608.85	5.500%	[illegible]	[illegible]	[illegible]	[illegible]
2023	6,500,671.38	5.500%	[illegible]	[illegible]	[illegible]	[illegible]
2024	6,156,824.81	5.500%	[illegible]	[illegible]	[illegible]	[illegible]
2025	5,739,245.41	5.500%	[illegible]	[illegible]	[illegible]	[illegible]
2026	5,556,809.21	5.500%	[illegible]	[illegible]	[illegible]	[illegible]
2027						
2028						
2029						
2030						
2031						
2032						
2033						
2034						
2035						
2036						
2037						
2038						
2039						
2040						
Outstanding:	64,551,541		0			
Callable:	0		0			
Non-Callable:	64,551,541		0			
Advance Refundable:	Yes		Yes (in part). Approx 57% of 2017-2026			
Call Provisions:	Non callable		11/1/2016 @ 100%			
Purpose:	New Money		Refunding			
Notes:	To provide Loans and Grants		Current Refund parts of 1996 Series A. Advance refunding parts of 1998 Series D. Advance refunding parts of 1999 Series A.			
Dated:	6/1/1999		11/1/2009			
Interest Payment:	5/1 and 11/1		5/1 and 11/1			

Original Par:	[illegible]		[illegible]		$5,690,000		$28,215,000	
Issue:	Series 2011 A WV Infrastructure GO Refunding Bonds		2015 Series A (Tax-Exempt) Infrastructure GO Refunding Bonds		2015 Series B (Taxable) Infrastructure GO Refunding Bonds		Series 2017 Infrastructure GO Refunding Bonds	
Insurer:	Uninsured		Uninsured		Uninsured		Uninsured	
Due:	November 1		November 1		November 1		November 1	
	Principal	Coupon	Principal	Coupon	Principal	Coupon	Principal	Coupon
2012	3,020,000	3.300%						
2013	3,470,000	3.000%						
2014	3,580,000	3.000%						
2015	3,050,000	4.000%			1,370,000	2.000%		
2016	1,500,000	3.000%			1,410,000	2.000%		
2017	1,950,000	3.000%	2,300,000	4.000%	1,440,000	2.000%		
2018	325,000	3.000%	5,210,000	5.000%	1,470,000	2.000%	1,860,000	2.000%
2019	355,000	3.000%	4,920,000	5.000%			4,430,000	2.000%
2020	365,000	3.000%	6,130,000	5.000%			4,525,000	4.000%
2021	370,000	3.000%	5,350,000	5.000%			4,700,000	5.000%
2022	375,000	3.000%	9,150,000	5.000%			1,400,000	5.000%
2023			8,578,000	5.000%			1,490,000	5.000%
2024			8,445,000	3.000%			3,110,000	5.000%
2025			8,860,000	3.000%			3,265,000	5.000%
2026			9,005,000	5.000%			3,435,000	5.000%
2027								
2028								
2029								
2030								
2031								
2032								
2033								
2034								
2035								
2036								
2037								
2038								
2039								
2040								
Outstanding:	3,420,000		65,865,000		2,910,000		28,215,000	
Callable:	0		0		0		0	
Non-Callable:	3,420,000		65,865,000		2,910,000		28,215,000	
Advance Refundable:	No		Yes		No		Yes	
Call Provisions:	Non callable		Non callable		Non callable		Non callable	
Purpose:	Refunding		Refunding		Refunding		Refunding	
Notes:	[illegible]		[illegible]		[illegible]		[illegible]	
Dated:	9/29/2011		1/22/2015		1/22/2015		1/5/2017	
Interest Payment:	5/1 and 11/2		5/1 and 11/1		5/1 and 11/1		5/1 and 11/1	

PRAG agrees that in its current contract with the State, and with any future contract with the State, all data collected, models developed, and output produced by PRAG during its past or future engagement with the State is property of the State and available upon request.

4.5 Maintain and regularly update a "refunding screen" which uses current municipal bond and reinvestment rates, as well as call option values, to provide a maturity- by-maturity listing of refunding candidates, rank-ordered by present-value savings both in dollars and as a percentage of refunded principal;

We review our debt database for the State regularly to identify refunding opportunities. PRAG uses DBC, the same software used by top Wall Street banks, to run refunding analysis that looks at refunding a series of bonds both on a maturity-by-maturity basis and on a series basis. We always carefully analyze if a certain series of bonds can be advance refunded or if we need to wait to do a current refunding, 90 days prior to the call date of the bonds or if the use of taxable bonds is a viable option. Most recently in January 2017 PRAG advised the State on its $28.2 million Infrastructure General Obligation refunding bonds that generated approximately $3.8 million in net present value savings. This is the most recent refunding among a significant number of refundings that we have advised the State on. The following table summarizes the 20 refunding transactions with an aggregate par amount of $1.0 billion that PRAG has advised the State and State agencies on since FY 2006 that generated an aggregated $130.8 million in net present value savings.

Date	Issuer	Par Amount	Description	Bond Type	Final Maturity	Average Life	TIC	Avg Annual Debt Service	PV Savings
1/5/2017	State of West Virginia	28,215,000	General Obligation Refinding Bonds (Infrastructure)	Refunding	11/1/2026	5.688	2.1%	3,631,048	$3,791,410
12/07/16	West Virginia Water Development Authority	51,105,000	Water Development Refunding Revenue Bonds (Loan Program II)	Refunding	11/1/2039	11.93	3.6%	3,403,586	5,812,520
11/30/16	West Virginia Water Development Authority	74,320,000	Infrastructure Refunding Revenue Bonds (IJDC Program)	Refunding	10/1/2045	13.68	4.0%	4,241,298	5,826,728
11/04/15	West Virginia School Building Authority	63,640,000	Excess Lottery Revenue Refunding Bonds	Refunding	7/1/2028	8.49	2.5%	7,171,074	5,608,204
04/16/15	State of West Virginia	133,710,000	General Obligation Bonds (Road Fund)	Refunding	6/1/2025	6.4	1.7%	17,462,858	25,917,634
01/22/15	State of West Virginia	71,655,000	General Obligation Bonds (Infrastructure)	Refunding	11/1/2026	7.8	1.8%	9,210,172	9,552,580
10/29/13	West Virginia Water Development Authority	40,245,000	Water Development Refunding Revenue Bonds (Loan Program II)	Refunding	11/1/2029	8.4	3.1%	3,511,382	5,459,342
12/07/12	West Virginia Water Development Authority	27,435,000	Infrastructure Refunding Revenue Bonds (IJDC Program)	Refunding	10/1/2039	16.8	3.1%	1,566,165	5,142,269
12/04/12	West Virginia Water Development Authority	25,790,000	Water Development Refunding Revenue Bonds (Loan Program III)	Refunding	7/1/2040	16.0	3.5%	1,505,780	8,349,599
12/04/12	West Virginia Water Development Authority	20,670,000	Water Development Refunding Revenue Bonds (Loan Program II)	Refunding	11/1/2033	10.2	2.5%	1,605,714	3,433,933
12/04/12	West Virginia Water Development Authority	20,395,000	Water Development Refunding Revenue Bonds (Loan Program I)	Refunding	11/1/2026	7.3	2.0%	1,913,079	3,919,551
06/12/12	State of West Virginia Higher Education Policy Commission	132,165,000	Revenue Bonds (Lottery and Student Fees)	New Money/ Refunding	4/1/2034	13.6	3.7%	9,757,067	6,026,761
04/04/12	West Virginia Economic Development Authority	104,535,000	Lease Revenue Bonds (Jails and DEP Building)	Refunding	11/1/2029	13.0	3.7%	9,662,025	6,809,048
10/27/11	West Virginia Economic Development Authority	3,680,000	Lease Revenue Bonds (Capital Parking Garage)	Refunding	6/1/2024	7.1	3.1%	359,350	764,021
10/27/11	West Virginia Economic Development Authority	8,340,000	Lease Revenue Bonds (State Office Building)	Refunding	10/1/2026	8.4	3.2%	703,500	883,671
09/14/11	State of West Virginia	18,615,000	General Obligation Bonds (Infrastructure)	Refunding	11/1/2022	3.7	1.6%	1,867,018	2,614,879
07/13/11	West Virginia Economic Development Authority	90,790,000	Lease Revenue Bonds (Jails Bonds)	Refunding	6/1/2024	7.8	3.3%	9,423,197	6,372,956
07/08/10	State of West Virginia	35,135,000	General Obligation Bonds (Road Fund)	Refunding	6/1/2023	10.9	3.2%	3,927,873	4,265,159
02/08/07	West Virginia School Building Authority	185,980,000	Capital Improvement Bonds	Refunding	7/1/2022	9.0	4.0%	17,566,453	13,970,362
11/01/06	State of West Virginia	94,180,000	General Obligation Bonds (Infrastructure)	Refunding	11/1/2026	13.3	4.2%	7,712,368	6,290,084
		$1,009,485,000							$130,810,713

We are also currently advising the School Building Authority on the refunding of its outstanding Series 2007 Capital Improvement Refunding Revenue Bonds ("Series 2007 Bonds") that generates approximately $4.3 million in net present value savings based on current market rates. The SBA's Series 2007 Bonds were originally sold with a cash funded debt service reserve fund ("DSRF"). Given the State's strong ratings the refunding bonds can be sold without a cash funded reserve and the balance in the DSRF of over $23 million can be used to downsize the par amount of the 2017 refunding bonds and generate significant cash flow savings in FY 2018.

PRAG is also currently advising the Water Development Authority on the refunding of its Loan Program IV 2005 Series A and B bonds. Based on current market rates a refunding of these two series of bonds generates approximately $4.7 million net present value savings which is in excess of 11% of the refunded bonds.

There are currently other series of bonds that can be refunded for savings in excess of the State's refunding objectives. Specifically, HEPC's 2009 Series A Community and Technical Colleges Capital Improvement Revenue Bonds, that are secured by State lottery funds, can be advance refunded and based on current market rates generates $5.4 million in net present value savings which is in excess of 8% of the refunded bonds. HEPC can also achieved notable savings on its 2007 Series A and 2010 Series A bonds secured by a limited pledge of the state's excess lottery funds and certain registration and tuition fees of the Commission. The 2007 Series A bonds are currently callable, as the call date recently passed on April 1, 2017, while the 2010 Series A bonds have a call date of April 1, 2020 and would have to be advance refunded. The State can refund both the 2007A and 2010 bonds to generate approximately $1.8 million net present value saving, which is in excess of 6% of the refunded bonds. Finally, the Economic Development Authority's Series 2010A East Lottery Bonds generates $5.6 million, or over 4.4% of the refunded bonds, if advanced refunded based on current market conditions as summarized in the table below.

Provided below is a summary of the refunding savings on a maturity by maturity basis.

BOND SERIES SAVINGS SUMMARY

Program	Series	Status	Refunded Par	NPV Savings ($)	NPV Savings (%)
WV HEPC Lottery	2009A	Tax-exempt	62,690,000	5,409,000.00	8.63%
WV HEPC Excess Lottery	2010A	Tax-exempt	12,750,000	429,000.00	3.36%
WV HEPC Excess Lottery	2007A	Tax-exempt	15,765,000	1,362,000.00	8.64%
WV EDA Lottery	2010A	Tax-exempt	125,290,000	5,572,000.00	4.45%
WV SBA Appropriation	2007A	Tax-exempt	72,105,000	4,282,000.00	5.94%
WV WDA	2005 AIV	Tax-exempt	32,200,000	3,692,000.00	11.47%
WV WDA	2005 BIV	Tax-exempt	9,495,000	914,000.00	9.63%

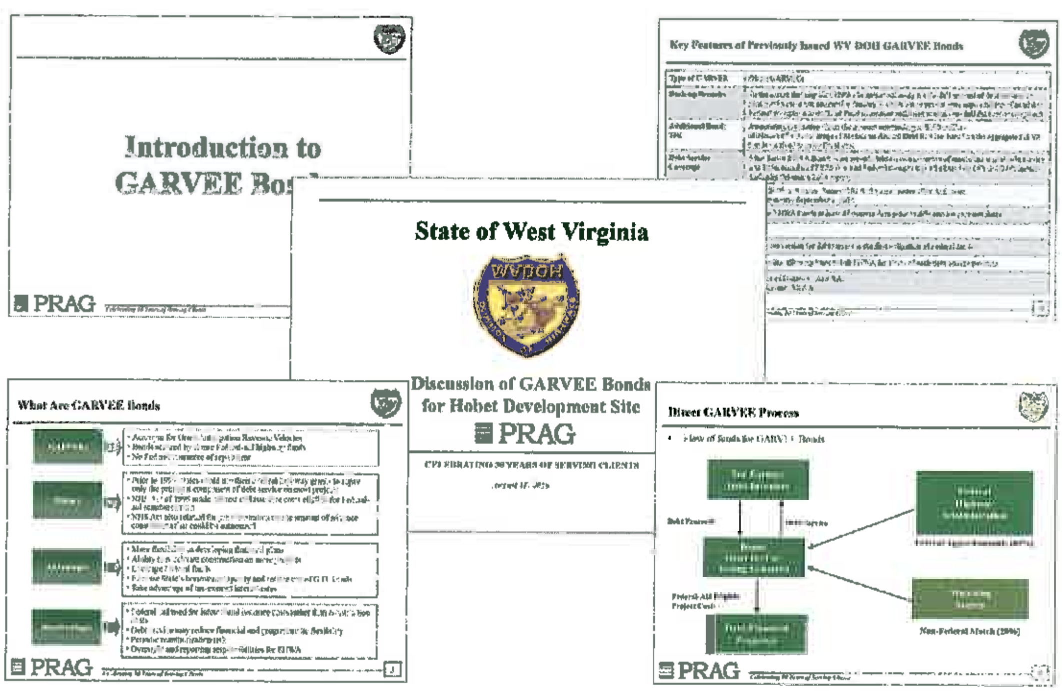
Series	Maturity	Coupon	Par Amount	Call Date	NPV Savings	Negative Arbitrage	NPV Savings % of Ref Bonds
Economic Development Authority Lottery - Tax-exempt							
2010A	6/15/2021	5.000%	3,860,000	6/15/2020	87,000	15,000	2.254%
2010A	6/15/2022	5.000%	4,055,000	6/15/2020	186,000	37,000	4.587%
2010A	6/15/2023	3.750%	1,760,000	6/15/2020	55,000	24,000	3.125%
2010A	6/15/2023	5.000%	2,495,000	6/15/2020	162,000	35,000	6.493%
2010A	6/15/2024	5.000%	4,445,000	6/15/2020	357,000	85,000	8.031%
2010A	6/15/2025	4.000%	1,175,000	6/15/2020	51,000	30,000	4.340%
2010A	6/15/2025	5.000%	3,495,000	6/15/2020	303,000	90,000	8.670%
2010A	6/15/2026	4.000%	4,890,000	6/15/2020	200,000	151,000	4.090%
2010A	6/15/2027	5.000%	5,085,000	6/15/2020	498,000	180,000	9.794%
2010A	6/15/2028	5.000%	5,340,000	6/15/2020	462,000	209,000	8.652%
2010A	6/15/2029	5.000%	5,605,000	6/15/2020	435,000	236,000	7.761%
2010A	6/15/2030	4.250%	5,885,000	6/15/2020	70,000	259,000	1.189%
2010A	6/15/2035	5.000%	33,915,000	6/15/2020	1,643,000	1,735,000	4.844%
2010A	6/15/2040	5.000%	43,285,000	6/15/2020	1,062,000	2,523,000	2.454%
Higher Education Policy Commission Lottery - Tax-exempt							
2009A	7/1/2020	5.000%	1,945,000	7/1/2019	56,000	(2,000)	2.879%

2009A	7/1/2023	4.375%	1,500,000	7/1/2019	120,000	15,000	8.000%
2009A	7/1/2024	4.250%	7,195,000	7/1/2019	470,000	56,000	6.532%
2009A	7/1/2028	5.250%	10,105,000	7/1/2019	1,487,000	234,000	14.715%
2009A	7/1/2028	4.500%	325,000	7/1/2019	29,000	9,000	8.923%
2009A	7/1/2033	4.750%	16,255,000	7/1/2019	1,279,000	533,000	7.868%
2009A	7/1/2039	5.000%	25,365,000	7/1/2019	1,969,000	992,000	7.763%
Higher Education Policy Commission Excess Lottery - Tax-exempt							
2010A	4/1/2026	5.000%	12,750,000	4/1/2020	429,000	391,000	3.365%
2007A	4/1/2018	4.000%	1,415,000	Anytime	15,000	0	1.060%
2007A	4/1/2019	4.000%	1,475,000	Anytime	47,000	0	3.186%
2007A	4/1/2020	4.000%	1,530,000	Anytime	77,000	0	5.033%
2007A	4/1/2021	4.125%	1,590,000	Anytime	108,000	0	6.792%
2007A	4/1/2022	4.250%	1,660,000	Anytime	139,000	0	8.373%
2007A	4/1/2023	4.250%	1,730,000	Anytime	158,000	0	9.133%
2007A	4/1/2024	4.250%	1,805,000	Anytime	171,000	0	9.474%
2007A	4/1/2027	5.000%	4,560,000	Anytime	646,000	0	14.167%
School Building Authority Appropriation - Tax-exempt							
2007A	7/1/2018	4.000%	2,500,000	7/1/2017	49,000.00	0	1.960%
2007A	7/1/2018	5.000%	17,385,000	7/1/2017	512,000.00	0	2.945%
2007A	7/1/2019	5.000%	20,850,000	7/1/2017	1,169,000.00	0	5.607%
2007A	7/1/2020	5.000%	21,905,000	7/1/2017	1,754,000.00	0	8.007%
2007A	7/1/2021	4.000%	2,520,000	7/1/2017	154,000.00	0	6.111%
2007A	7/1/2021	5.000%	5,035,000	7/1/2017	500,000.00	0	9.930%
2007A	7/1/2022	4.200%	1,910,000	7/1/2017	144,000.00	0	7.539%
Water Development Authority - Tax-exempt							
2005AIV	11/1/2019	5.000%	1,970,000	Anytime	64,000	1,000	3.249%
2005AIV	11/1/2025	4.375%	2,365,000	Anytime	225,000	3,000	9.514%
2005AIV	11/1/2025	4.750%	2,500,000	Anytime	288,000	3,000	11.520%
2005AIV	11/1/2035	5.000%	10,445,000	Anytime	1,182,000	24,000	11.316%
2005AIV	11/1/2044	5.000%	14,920,000	Anytime	1,933,000	40,000	12.956%
2005 BIV	11/1/2024	5.125%	2,945,000	Anytime	291,000	3,000	9.881%
2005 BIV	11/1/2035	4.750%	5,930,000	Anytime	531,000	13,000	8.954%
2005 BIV	11/1/2044	5.125%	620,000	Anytime	92,000	2,000	14.839%

4.6 *Present on proposed bond issues and financings to rating agencies and potential purchasers of the securities;* PRAG prepares presentations summarizing the details of a particular financing and overall credit of the issuer both to brief rating agencies and potential investors. The presentations typically take into account debt, financial and economic factors and include projected population and income growth, employment, business activity, revenue growth, unfunded liabilities, financial performance, debt burden, security structure and debt issuance details. Provided are snapshots of two recent presentations that PRAG advised on in regards to the issuance of the State's issuances of GARVEE notes and SBA bonds. The first is the investor presentation that was given in December 2016 on the State's Surface Transportation Improvements Special Obligation Notes Series 2016A. PRAG participated in the presentation, which included representatives from the State, PRAG, and bond counsel. The second presentation was prepared by PRAG in October 2016 for the West Virginia School Building Authority's Lottery Revenue Capital Improvement Bonds, Series 2016B, which were rated "A1" and "AAA" by Moody's and S&P, respectively, maintaining the SBA's credit rating.

4.7 *Provide the State with any training, newsletters, and other informational material routinely provided to clients or on request as necessary to enhance State capacity for financing-related activities;*

PRAG believes the best way to assure that our clients are making informed decisions is to empower them through education and training. To that end, PRAG professionals have conducted training seminars for both decision-makers and staff within our client organizations. Some of our issuer clients, who have received training in the areas of bond pricing fundamentals, financial analysis techniques, and interest rate swaps, include the State, the states of California, Virginia, Minnesota and the cities of New York and Los Angeles. Shown below are screenshots from a GARVEE bond information session that PRAG team members prepared and presented to the Division of Highways in August 2016 in preparation for the issuance of its 2016A GARVEE notes issued for the access road for the Rock Creek Development Project



4.8 Advise the State in the development, structure, and timing of issuance of bonds and other modes of financing including, but not limited to refundings, credit- enhancements, leased financings, asset-backed financings, GARVEE bonds, and private placements and in accordance with applicable Federal and State laws, regulations, customs, and practices governing such issuance;

PRAG looks forward to the opportunity to continue to assist the State in the development and structure of its tax-exempt bonds. One hallmark of PRAG's financial advisory services is our extensive technical knowledge. A majority of our senior and junior personnel have strong backgrounds in quantitative modeling and technical analysis. PRAG believes that an in-depth understanding of quantitative modeling and analysis is integral to achieving optimal financial results. Firm professionals keep abreast of market developments and advances in technology to ensure that our clients receive the most sophisticated financial analysis available. We use DBC software, customized Excel spreadsheets and templates, Excel optimization modules (What's Best!) as well as linear optimization models to generate optimal debt structures. This makes it possible for PRAG to combine quantitative models with qualitative analysis to formulate the very best possible advice for the State.

PRAG analyzes the market conditions prior to the sale and provides recommendations for timing of the sale. As a result of our extensive experience in bond sales, particularly for State issuers, and frequent participation in the market, PRAG can obtain information on market conditions and pricing opinions from a wide variety of participants as well as online sources such as Thomson Municipal Market Monitor (TM3) and Bloomberg.

PRAG has developed considerable expertise with regard to the Federal tax law, State laws and regulations and their application to the issuance of municipal debt having advised state and local governments in tax exempt bond issuances since 1985. During the past 31 years, we have worked with each of the top bond counsel firms in the country and since 2005 we have worked with all the major West Virginia bond counsel firms. Our familiarity with these firms enables us to add value in two key ways. First, we are able to help structure optimal solutions for our clients anticipating what we know to be the restrictions that may be imposed by the particular firm's interpretation of the Internal Revenue Code of 1986, as amended or by State law. Second, in many cases a legal issue itself may be subject to interpretation – leading to different firms taking different positions. Our depth of experience with West Virginia bond counsel firms, knowledge of how issues are resolved in the State, and ability to introduce ideas that we have seen in different areas of municipal finance often enables us to provide a path for the answer that serves the State best. We understand the regulations, customs and practices of West Virginia public finance and we can often tailor solutions in advance to satisfy the concerns of the Bond Counsel and then present the solution with support from other transactions and firms.

In addition, PRAG regularly monitors pending and new federal legislation, IRS regulations, and IRS private letter rulings to ascertain any impact on our client's ability to implement cost-effective transactions. Our firm also takes an active role in monitoring municipal debt disclosure rules and best practices.

Justice Administration Transportation Funding - Debt Initiatives

In regards to the current status of the State, Governor Justice's State of the State addressed the deficient conditions of the State's roads and bridges and need for investments to improve the condition in order to spur economic growth in the State through improving employment conditions and increasing tourism.

The need for investment in infrastructure in West Virginia was further confirmed by a recently released Moody's report that cites West Virginia as one of the top ten states with a backlog of infrastructure capital improvements needed as measured by percentage comparing the backlog needs versus the state's general revenues (in FY2014).

Given the Administration's prioritization of transportation infrastructure, it is imperative that the State's financial advisor has experience with state-level transportation issuers around the county and an understanding the State financing mechanisms available and the associated conditions and limitations. We have significant experience working with the West Virginia Department of Transportation and the West Virginia Parkways Authority in evaluating the following financing programs. We are familiar with the related credits, approvals needed and process to issuing the bonds.

The Administration has proposed three programs to finance its transportation infrastructure needs:

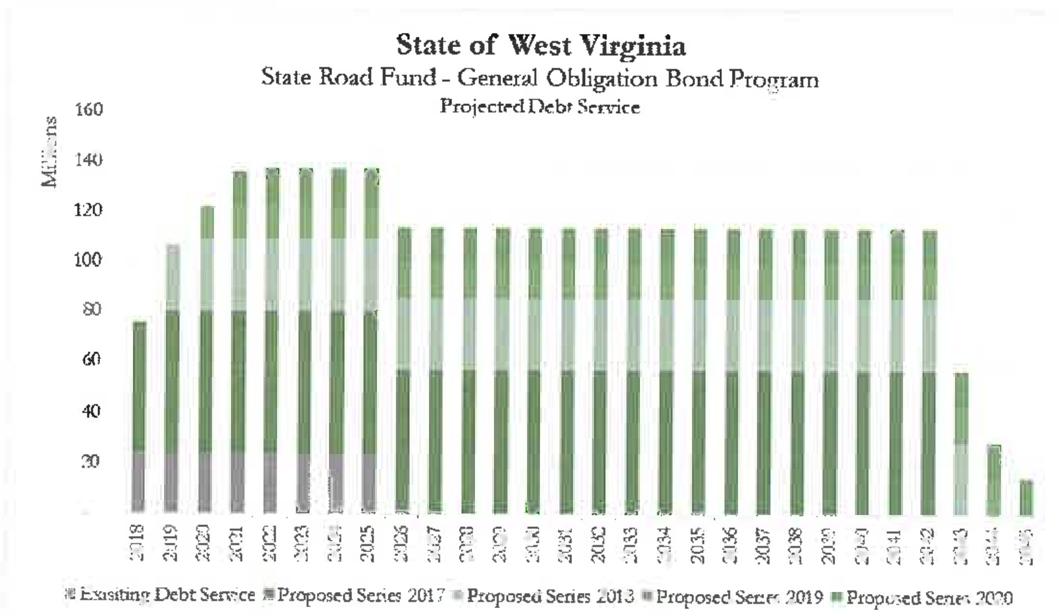
1) <u>State Road General Obligation Bonds</u> - The State may issue general obligation bonds secured by the State's full faith and credit however an Amendment to the State's constitution is needed which would

require broad support including two third approval of both houses of the legislature as well as voter approval. The last time the State received such approval was the Safe Roads Amendment of 1996, which amended the Bond Act to allow for the issuance of $550 million of bonds to fund transportation capital projects over 5 years. Currently there are $166.4 million in State Road General Obligation Bonds outstanding with a final maturity on June 1, 2025 and average annual debt service of approximately $23.2 million.

During the 2017 Legislative Session, Senate Joint Resolution 6 was introduced and approved by both houses. The resolution calls for the issuance of $1.6 billion of General Obligation Bonds over a four-year period from July 1, 2018 to July 1, 2021 for the improvement and construction of state roads and bridges. Now that the legislature has passed the resolution, the proposed amendment is subject voter approval.

If the State were to issue General Obligation Bonds consistent with SJR6 it is estimated that the State will have maximum annual debt service of $136.9 million by Fiscal Year 2022. Please see graphic depiction of the currently proposed State Road Fund General Obligation Bond Program. While the additional debt service will increase the State's overall debt burden, it is not expected to erode the State's general obligation credit as we understand it is the Administration's intent to establish and identify additional revenues from increased DMV fees as well as increased gas taxes to be levied in order to generate additional revenues to pay the incremental debt service.

PRAG has significant experience advising the State with the issuance of General Obligation Bonds as further demonstrated in our response to Section 3B, Question 1, herein.



2) State Special Obligation Transportation Notes – Otherwise known as GARVEEs, this financing tool allows issuers to accelerate highway construction by securitizing federal highway reimbursement funds. PRAG has advised the State on its prior issuance of GARVEES for Route 35 and the Rock Creek Development Access Road. With the passage of House Bill 2878, the amount of GARVEEs the State can issue was increased from $200 million to $500 million. Currently, the State has $53.38 million in outstanding GARVEEs, leaving $446.62 million in available GARVEE capacity. Debt service on these notes are paid from federal grant reimbursements. While the State has plenty of bonding capacity to issue additional GARVEE notes to fund transportation projects throughout the State, we understand that much of the federal grant reimbursements have already been committed to other projects, and thus, additional revenue would need to be identified to pay the incremental debt service on the additional notes for the State to be able to issue up to the additional authorized capacity. Additionally, in order to issue GARVEEs, selected projects need to be eligible for Federal reimbursement, bid out and an executed contract in place, and have the prerequisite EPA and NEPA approvals. As the State's financial advisor, we would also assess the impact to the coverage of issuing additional GARVEEs and advise on appropriate target coverage levels in order to maintain its A2/AA ratings on its GARVEE program. Based on current market conditions, the Division of Highways could issue the remaining $446.6 million in GARVEE capacity to generate $506 million in note proceeds for transportation projects that would require $55.4 million in aggregate debt service and allow for a strong 7.1x coverage.

	Series 2016A Notes	Remaining Capacity Under $500MM Statutory Cap
Maturity	6 years	12 years
Par	$53,380,000	$446,620,000
Project Funds	57,800,000	506,329,851
Aggregate MADS	10,363,500	55,450,250
Aggregate Minimum Cov.	38.3	7.1

FFY	FFY 2016 Total Reimbursements	Existing 2016A Notes DS	Cov.	Agg DS after Issuance	Cov.
2017	396,425,814	10,361,058	38.3		
2018	396,425,814	10,363,250	38.3	55,454,250	7.1
2019	396,425,814	10,362,250	38.3	55,450,250	7.1
2020	396,425,814	10,361,000	38.3	55,454,250	7.1
2021	396,425,814	10,363,500	38.3	55,452,000	7.1
2022	396,425,814	10,363,500	38.3	55,449,750	7.1
2023	396,425,814			55,453,250	7.1
2024	396,425,814			55,452,750	7.1
2025	396,425,814			55,453,750	7.1
2026	396,425,814			55,451,250	7.1
2027	396,425,814			55,450,250	7.1
2028	396,425,814			55,450,250	7.1
2029	396,425,814			55,450,500	7.1

PRAG has significant experience advising the State with the issuance of GARVEE notes as further demonstrated in our response to Section D, Question 3 herein.

3) West Virginia Parkways Authority Toll Revenue Bonds – Parkways Toll Revenue Bonds are the third financing mechanism proposed to fund transportation projects. However, the tolls on the WV Turnpike are due to expire in 2019 commensurate with the maturity of the outstanding Parkway Authority debt. West Virginia Parkways Authority has two series of bonds outstanding - Series 2008 and Series 2002. Currently there is $29.4 million outstanding with a final maturity in FY 2019. The average annual debt service is approximately $10.9 million. In recent months, the Parkways Authority called upon PRAG to develop a model that evaluates bonding capacity for any proposed tolling extension and/or the development of tolling programs (i.e. the single fee program). PRAG evaluated multiple analyses for the Authority and prepared various summaries and memos for the Authority as they worked with the Administration on developing the proposed legislation and transportation plan. Provided below is a snapshot of the output of the bonding capacity model PRAG developed and reviewed with the Authority in March. Ultimately, during the 2017 Legislative Session, Senate Bill 482 was introduced and included the extension of the Parkway Authority power, continuation of the tolling, and authorization to issue additional toll revenue bonds, the proceeds of which could be used for the construction and rehabilitation of State roads in addition to the parkway itself. The bill was passed by the Senate but was pulled from the House Finance committee during the last week of the regular session. If similar legislation is approved in a Special Session we would work with the Parkways Authority to structure the credit to achieve the highest possible rating and achieve the lowest cost of borrowing.

				Existing WV Parkways Debt Service	Debt Capacity with Toll Extension with 20 year Maturity			Debt Capacity with Toll Extension with 25 year Maturity			Debt Capacity with Toll Extension with 30 year Maturity		
Maturity				3 years	20 years			25 years			30 years		
Par*				$29,400,000	$562,475,000			$635,530,000			$692,810,000		
Project Funds*				--	**$544,060,657**			**$614,793,090**			**$669,382,541**		
Aggregate MADS*				$10,958,272	$44,999,750			$45,000,000			$45,000,000		
Total Aggregate DS*				$32,709,284	$899,948,400			$1,124,936,000			$1,349,922,250		
All-in TIC*				--	4.245%			4.471%			4.606%		
Aggregate Minimum Cov.*				--	2.2			2.2			2.2		
	TOLL REVENUES			Existing DS	D/S through FY2037			Annual D/S through FY2042			Annual D/S through FY2047		
FY	**FY 2016 Net Revenues**	**Additional Revenue**	**FY 2016 R&R Funding**	**Series 2008 and 2002 DS**	**Aggregate D/S Post Issuance**	**Cov.**	**Cov. With R&R**	**Aggregate D/S Post Issuance**	**Cov.**	**Cov. With R&R**	**Aggregate D/S Post Issuance**	**Cov.**	**Cov. With R&R**
2017	54,100,000		13,952,000	10,958,272									
2018	54,100,000	45,000,000	13,952,000	10,909,576	44,999,400	2.2	1.7	44,999,000	2.2	1.7	44,996,200	2.2	1.7
2019	54,100,000	45,000,000	13,952,000	10,841,436	44,995,000	2.2	1.7	44,997,400	2.2	1.7	44,995,200	2.2	1.7
2020	54,100,000	45,000,000	13,952,000		44,995,250	2.2	1.7	44,996,600	2.2	1.7	44,998,600	2.2	1.7
2021	54,100,000	45,000,000	13,952,000		44,995,250	2.2	1.7	45,000,000	2.2	1.7	45,000,000	2.2	1.7
2022	54,100,000	45,000,000	13,952,000		44,998,750	2.2	1.7	44,995,750	2.2	1.7	44,997,250	2.2	1.7
2023	54,100,000	45,000,000	13,952,000		44,998,000	2.2	1.7	44,998,250	2.2	1.7	44,999,500	2.2	1.7
2024	54,100,000	45,000,000	13,952,000		44,995,750	2.2	1.7	44,995,250	2.2	1.7	44,995,000	2.2	1.7
2025	54,100,000	45,000,000	13,952,000		44,999,500	2.2	1.7	44,995,000	2.2	1.7	44,997,500	2.2	1.7
2026	54,100,000	45,000,000	13,952,000		44,996,250	2.2	1.7	44,995,250	2.2	1.7	45,000,000	2.2	1.7
2027	54,100,000	45,000,000	13,952,000		44,998,500	2.2	1.7	44,998,750	2.2	1.7	44,995,750	2.2	1.7
2028	54,100,000	45,000,000	13,952,000		44,998,000	2.2	1.7	44,998,000	2.2	1.7	44,998,250	2.2	1.7
2029	54,100,000	45,000,000	13,952,000		44,996,750	2.2	1.7	44,995,750	2.2	1.7	44,995,250	2.2	1.7
2030	54,100,000	45,000,000	13,952,000		44,996,500	2.2	1.7	44,999,500	2.2	1.7	44,995,000	2.2	1.7
2031	54,100,000	45,000,000	13,952,000		44,998,750	2.2	1.7	44,996,250	2.2	1.7	44,995,250	2.2	1.7
2032	54,100,000	45,000,000	13,952,000		44,999,750	2.2	1.7	44,998,500	2.2	1.7	44,998,750	2.2	1.7
2033	54,100,000	45,000,000	13,952,000		44,995,750	2.2	1.7	44,998,000	2.2	1.7	44,998,000	2.2	1.7
2034	54,100,000	45,000,000	13,952,000		44,998,000	2.2	1.7	44,996,750	2.2	1.7	44,995,750	2.2	1.7
2035	54,100,000	45,000,000	13,952,000		44,997,000	2.2	1.7	44,996,500	2.2	1.7	44,999,500	2.2	1.7
2036	54,100,000	45,000,000	13,952,000		44,998,500	2.2	1.7	44,998,750	2.2	1.7	44,996,250	2.2	1.7
2037	54,100,000	45,000,000	13,952,000		44,997,750	2.2	1.7	44,999,750	2.2	1.7	44,998,500	2.2	1.7
2038	54,100,000	45,000,000	13,952,000					44,995,750	2.2	1.7	44,998,000	2.2	1.7
2039	54,100,000	45,000,000	13,952,000					44,998,000	2.2	1.7	44,996,750	2.2	1.7
2040	54,100,000	45,000,000	13,952,000					44,997,000	2.2	1.7	44,996,500	2.2	1.7
2041	54,100,000	45,000,000	13,952,000					44,998,500	2.2	1.7	44,998,750	2.2	1.7
2042	54,100,000	45,000,000	13,952,000					44,997,750	2.2	1.7	44,999,750	2.2	1.7
2043	54,100,000	45,000,000	13,952,000								44,995,750	2.2	1.7
2044	54,100,000	45,000,000	13,952,000								44,998,000	2.2	1.7
2045	54,100,000	45,000,000	13,952,000								44,997,000	2.2	1.7
2046	54,100,000	45,000,000	13,952,000								44,998,500	2.2	1.7
2047	54,100,000	45,000,000	13,952,000								44,997,750	2.2	1.7

Preliminary, subject to change. Assumes rates as of 2/3/2017.

See our response to Section D, Question 1 above, for additional information related to the development, structure, and timing of issuance of bonds and other modes of financing including, but not limited to refundings, credit enhancements, leased financings, asset-backed financings and see our response to Section D Question 3 for additional information related to our approach to GARVEE bonds.

4.9 Advise on the amount, timing, and nature of borrowings, as well as the credit structure, maturity schedule, call provisions and other items, as needed;

The amount of bonds to be issued depends on several factors. For new money bonds, it is determined by the issuer's capital needs but also by its long-term capital plans and debt affordability analyses. For refundings, it depends on the objectives to be accomplished by the refunding, an issuer's savings targets and other debt policy considerations. The timing of the issue should include a market analysis, as described above, but generally we do not recommend "timing of the market" for new money bond issuance when a state is a regular issuer of debt. In terms of the nature of borrowing and its credit structure, our goal is to achieve the lowest borrowing cost and we would analyze the options available to the State at the time of financing. PRAG assisted the West Virginia Higher Education Policy Commission in analyzing the benefits associated with issuing earlier than originally planned to achieve pricing benefits that were available in 2010 from the Federal Stimulus "Build America Bonds" program.

Principal amortization should be determined based on the goals of the State, considering the State's budget parameters, debt load considerations and market trends. Our capabilities have allowed the State to explore the full range of bond structuring options and to understand the future impact of these options on the State's debt position.

The vast majority of municipal bonds are sold with an optional 10-year par redemption provision and at this time we would recommend this approach, but we would also analyze other call features such as shorter calls, call premiums or make-whole/non-callable bonds and recommend changes if it would be economically beneficial to do so, as previously discussed. (See our response to Section D Question 1., above, for additional information related to our advice on amount, timing, and nature of borrowings, as well as the credit structure, maturity schedule, call provisions and other items.)

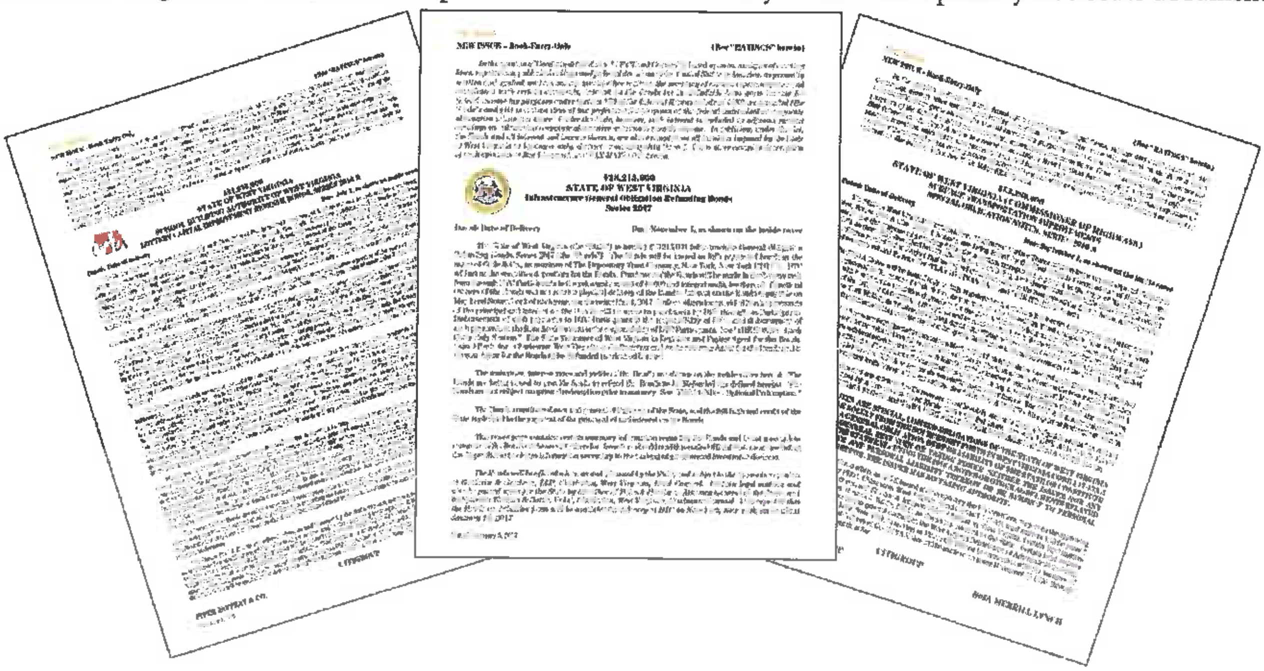
4.10 Assist in preparation of official statements, notices of sale, bond documents and other appropriate information to prospective bond and note investors;

PRAG always takes an active role in carefully reviewing and commenting on all bond sale documents and would manage the process of document preparation and approval to ensure that financings stay on schedule. For each competitive sale, PRAG will structure a Notice of Sale which conforms to the State's financial goals and provides sufficient structuring flexibility to potential bidders to obtain an aggressive market-level bid for the State's bonds. We are aware of the US Treasury's new issue price regulations that become effective on June 7, 2017 and will require certain disclosures and changes to the competitive sale process. PRAG has been a consistent innovator in the competitive sale process, successfully incorporating features into the bid process which afford the issuer more flexibility than was previously thought possible in competitive sales. For example, we introduced the adjustment of principal amounts before and after the sale within broad limits of the aggregate amounts of bonds rather than annual amounts and we allow for changes to the Notice of Sale an hour before the sale. This way, the issuer can postpone the sale if market conditions deteriorate. We contact the market participants to define the optimal bid parameters that allow the bidders flexibility within the legal and financial constraints of the issuer. For example, due to constraints on how refunding savings had to be realized, in the recent Infrastructure General Obligation Bond notice of sale we limited the maximum coupon in certain maturities to 2.00%, 3.00% and 4.00% after underwriters told us that such limitations would not impair their bids and ultimately maximized the savings the State was able to realize. Further, the General Obligation Bonds were scheduled to price shortly after the November 2016 election. Following the unexpected results of the election, the markets went into a tailspin forcing rates much higher. PRAG used the provisions of the Notice of the Sale to postpone the refunding until a time when the markets had settled and conditions were once again attractive for the State to execute the refunding.

We would also review and comment on preliminary and final official statements as well as all other legal and financial bond sale documents including ordinances, indentures, and resolutions. We believe that this practice is essential to insuring that the best interests of the State are represented, as we have discovered that an active financial advisor who is intimately involved with the preparation of legal documents is a key safeguard to preserve the financial interests of municipal issuers.

PRAG has also been active at assisting clients with communicating directly with potential investors. In fact for all competitive sales that PRAG advises on, we take a very active approach with underwriters and potential investors. For the time the sale is announced (with the POS), we contact all of the desks so that they are aware of the transaction but also so they understand that we are available to address any questions or concerns raised by their clients.

PRAG's expertise, resources and commitment to State related to the preparation of documents is also illustrated by PRAG's recent work on the State's Infrastructure General Obligation Bonds. The transaction represented the first transaction to require the State to update its Appendix A in over 18 months. As such, the Appendix required a substantial amount of revisions and updating. The PRAG team assisted the State's disclosure counsel in coordinating with all of the relevant parties to ensure the accuracy of the State's primary disclosure document.



4.11 Assist in preparing and presenting timely and adequate information on proposed financings and the State's finances and operations to the bond rating agencies and institutions providing credit enhancement;

Credit issues are very important to the State. The State's current general obligation ratings of AA by Fitch, Aa2 by Moody's and AA- by Standard & Poor's reflect the State's historically strong financial performance, conservative budgeting, high reserve levels, moderate debt levels and high, but improving unfunded liabilities. However, each of the agencies have taken negative actions on the State in the last year as a result of the more recent revenue pressures associated with declining severance and personal income taxes. As such, it is particularly important during this time to keep the rating agencies informed of ongoing and specific actions by the State related to its financial condition and credit position. As previously noted, before any meetings with rating agencies, we would assist the State with anticipating the questions and the concerns of the analysts, developing a PowerPoint presentation for the meetings, and conducting any follow-up discussions. The presentations typically take into account debt, financial and economic factors and include projected population and income growth, employment, business activity, property values, unfunded liabilities, financial performance, debt burden, and debt issuance. We would also help foster an on-going dialogue between the State officials and rating analysts. Please see our response to questions 4.6 above for an example of information previously presented to the rating agencies on State financings.

We would provide similar information to bond insurers in preparation for a sale of fixed rate bonds. At this time, however, none of the bond insurers would be able to improve the cost effectiveness of the State's transactions given the State's strong general obligation, lottery revenue, lease revenue or moral obligation pledges.

*4.12 **Evaluate** the terms and recommendation of acceptance, rejection or renegotiation with respect to sale bids or final pricing;*

For competitive sales PRAG uses its software to independently verify the true interest cost ("TIC") of each bid received, determine the winning bid, verify the winning bidder's compliance with the terms of the Notice of Sale and make recommendation of accepting the winning bid. For each competitive sale, we modify an Excel-based TIC calculation template to conform to the bid specifications and, either at the State's offices or remotely, we conduct the bid evaluation on the day of the sale. Once the bids are verified – a process which takes approximately 10 minutes -- and the apparent winner is identified, we facilitate the communication and coordination between the State and the "back office" of the underwriter that won the bid. We prepare the bond cash flows with the coupons and yields of the winning bidder and resize the issue, if necessary. The State typically sells its General Obligation refunding bonds competitively. Below is a snap-shot of the 9 bids received on the State's last competitive sale. After verifying all the bids, PRAG recommended awarding the bonds to Jefferies LLC as the low bidder.

Bid Results

West Virginia
$27,540,000 Infrastructure General Obligation Refunding Bonds
Series 2017

The following bids were submitted using *PARITY*® and displayed ranked by lowest TIC.
Click on the name of each bidder to see the respective bids.

Bid Award*	Bidder Name	TIC
[ ]	Jefferies LLC	2.069525
[ ]	Citigroup Global Markets Inc.	2.078692
[ ]	Hilltop Securities Inc.	2.127747
[ ]	Hutchinson, Shockey, Erley & Co.	2.130435
[ ]	Robert W. Baird & Co., Inc.	2.144215
[ ]	Janney Montgomery Scott LLC	2.155805
[ ]	J.P. Morgan Securities LLC	2.190369
[ ]	Bank of America Merrill Lynch	2.212930
[ ]	Wells Fargo Bank, National Association	2.220007

*Awarding the Bonds to a specific bidder will provide you with the Reoffering Prices and Yields.

Bids Comparison

PARITY®

West Virginia
$27,540,000 Infrastructure General Obligation Refunding Bonds
Series 2017

Jefferies LLC - New York, NY

Maturity	Amount	Coupon
11/01/2018	1,230M	2.0000
11/01/2019	4,385M	4.0000
11/01/2020	4,525M	4.0000
11/01/2021	4,700M	5.0000
11/01/2022	1,400M	5.0000
11/01/2023	1,490M	5.0000
11/01/2024	3,110M	5.0000
11/01/2025	3,265M	5.0000
11/01/2026	3,435M	5.0000

Purchase Price$31,521,007.75

Citigroup Global Markets Inc. - Dallas, TX

Maturity	Amount	Coupon
11/01/2018	1,230M	2.0000
11/01/2019	4,385M	2.0000
11/01/2020	4,525M	4.0000
11/01/2021	4,700M	5.0000
11/01/2022	1,400M	5.0000
11/01/2023	1,490M	5.0000
11/01/2024	3,110M	5.0000
11/01/2025	3,265M	5.0000
11/01/2026	3,435M	5.0000

Purchase Price$31,288,487.44

Hilltop Securities Inc. - Chicago, IL

Maturity	Amount	Coupon
11/01/2018	1,230M	2.0000
11/01/2019	4,385M	2.0000
11/01/2020	4,525M	4.0000
11/01/2021	4,700M	5.0000
11/01/2022	1,400M	5.0000
11/01/2023	1,490M	5.0000
11/01/2024	3,110M	5.0000
11/01/2025	3,265M	5.0000
11/01/2026	3,435M	5.0000

Purchase Price$31,189,182.55

Hutchinson, Shockey, Erley & Co. - Chicago, IL

Maturity	Amount	Coupon
11/01/2018	1,230M	2.0000
11/01/2019	4,385M	4.0000
11/01/2020	4,525M	4.0000
11/01/2021	4,700M	5.0000
11/01/2022	1,400M	5.0000
11/01/2023	1,490M	5.0000
11/01/2024	3,110M	5.0000
11/01/2025	3,265M	5.0000
11/01/2026	3,435M	5.0000

Purchase Price$31,422,277.31

Robert W. Baird & Co., Inc. - Red Bank, NJ

Maturity	Amount	Coupon
11/01/2018	1,230M	2.0000
11/01/2019	4,385M	2.0000
11/01/2020	4,525M	4.0000
11/01/2021	4,700M	5.0000
11/01/2022	1,400M	5.0000
11/01/2023	1,490M	5.0000
11/01/2024	3,110M	5.0000
11/01/2025	3,265M	5.0000
11/01/2026	3,435M	5.0000

Purchase Price$31,162,614.79

Janney Montgomery Scott LLC - Philadelphia, PA

Maturity	Amount	Coupon
11/01/2018	1,230M	2.0000
11/01/2019	4,385M	2.0000
11/01/2020	4,525M	4.0000
11/01/2021	4,700M	5.0000
11/01/2022	1,400M	5.0000
11/01/2023	1,490M	5.0000
11/01/2024	3,110M	5.0000
11/01/2025	3,265M	5.0000
11/01/2026	3,435M	5.0000

Purchase Price$31,143,945.29

J.P. Morgan Securities LLC - New York, NY

Maturity	Amount	Coupon
11/01/2018	1,230M	2.0000
11/01/2019	4,385M	2.0000
11/01/2020	4,525M	4.0000
11/01/2021	4,700M	5.0000
11/01/2022	1,400M	5.0000
11/01/2023	1,490M	5.0000
11/01/2024	3,110M	5.0000
11/01/2025	3,265M	5.0000
11/01/2026	3,435M	5.0000

Purchase Price$31,088,339.55

Bank of America Merrill Lynch - New York, NY

Maturity	Amount	Coupon
11/01/2018	1,230M	2.0000
11/01/2019	4,385M	2.0000
11/01/2020	4,525M	4.0000
11/01/2021	4,700M	5.0000
11/01/2022	1,400M	5.0000
11/01/2023	1,490M	5.0000
11/01/2024	3,110M	5.0000
11/01/2025	3,265M	5.0000
11/01/2026	3,435M	5.0000

Purchase Price$31,052,115.20

Wells Fargo Bank, National Association - Charlotte, NC

Maturity	Amount	Coupon
11/01/2018	1,230M	2.0000
11/01/2019	4,385M	2.0000
11/01/2020	4,525M	4.0000
11/01/2021	4,700M	5.0000
11/01/2022	1,400M	5.0000
11/01/2023	1,490M	5.0000
11/01/2024	3,110M	5.0000
11/01/2025	3,265M	5.0000
11/01/2026	3,435M	5.0000

Purchase Price$31,040,754.44

For negotiated sales, PRAG recognizes that the fees, spreads, pricing levels, syndication rules, and even the bond issue structure itself, may be altered to impact the net compensation to underwriters. From our frequent participation as financial advisor in the municipal market, we have extensive experience working with underwriters in determining the appropriate levels for each of these characteristics. PRAG provides detailed market analyses of fees, spreads and interest rates for other issues with similar terms and conditions priced close to the date of negotiation. In addition, PRAG would examine any secondary market trading data for blocks of significant size, as reported by the MSRB, for the State's bonds. PRAG compiles this information in a pre-pricing book see our response to Question D.4.17 below.

During the actual pricing of the bonds, PRAG uses customized templates that interface with Parity electronic order entry data to provide real-time summaries of pricing data relationships – spreads to MMD, yields to maturity spreads to MMD, and orders as a percentage of available bonds (retail, priority, and member). PRAG immediately distills this information which allows the State to be better informed and able to negotiate more favorable pricing terms. We constantly monitor order flow, rather than passively wait for the underwriter to share select information. Having real-time access is only as good as the ability to interpret such data and PRAG utilizes such information to its fullest extent in order to best prepare issuers in advance of price negotiations with underwriters. As financial advisor, we would make recommendations to the State to accept or reject the underwriter's pricing proposals. We have an exceptional track record in pricing negotiated bond transactions and we are often invited by certain issuers, such as the State of Florida, to assist them in this process.

Monika Conley, PRAG Project Team member and proposed Pricing Specialist for the State, will use her extensive relationships with the most active municipal trading desks and has leveraged such relationships and knowledge of the market to achieve the best pricing result for the State. Many times underwriters are anchored to the spreads of prior bond issuances and this was the case in the proposed pricing of the School Building Authority's Series

Issuer: Series:	State of West Virginia School Building Authority of West Virginia Excess Lottery Revenue Bonds Series 2010 B	State of West Virginia School Building Authority of West Virginia Lottery Capital Improvement Revenue Bonds Series 2013 A
Amount:	$25,000,000	$24,425,000
Ratings (M/S/F):	A1/AAA/A+	A1/AAA/--
Insurance:	None	None
Call Features:	7/1/2020 @ 100.0	7/1/2023 @ 100.0
Type of Sale:	Negotiated	Negotiated
Underwriter:	Citi	Citi
Maturity Date:	July 1	July 1
Sale Date:	7/14/2010	4/4/2013

Year	Amount ($000)	Coupon	Yield	Mid MMD (7/14/10)	Spread to MMD	Amount ($000)	Coupon	Final Pricing	Mid MMD (4/4/13)	Final Spread to MMD (4/4/13)	Pre-Pricing Spread to MMD (4/3/13)	Proposed Spread to MMD (4/2/13)
2010												
2011	$880	2.000%	0.900%	0.300%	60							
2012	$545	2.000%	1.030%	0.440%	59							
2013	$555	2.000%	1.340%	0.710%	63							
2014	$570	2.000%	1.640%	0.990%	65							
2015	$580	2.500%	2.040%	1.410%	63	$1,330	3.000%	0.630%	0.330%	30	40	45
2016	$595	3.000%	2.460%	1.780%	68	$1,365	3.000%	0.840%	0.470%	37	45	55
2017	$615	3.000%	2.780%	2.050%	73	$1,410	4.000%	1.030%	0.610%	42	50	60
2018	$635	3.000%	3.000%	2.260%	74	$1,465	4.000%	1.230%	0.810%	42	50	65
2019	$650	3.500%	3.230%	2.450%	78	$1,525	4.000%	1.520%	1.010%	51	55	70
2020	$615	3.500%	3.410%	2.640%	77	$1,585	4.000%	1.740%	1.230%	51	55	70
2021	$695	3.500%	3.610%	2.790%	82	$1,650	5.000%	1.970%	1.450%	52	55	70
2022	$715	4.000%	3.770%	2.920%	85	$1,730	5.000%	2.180%	1.660%	52	55	70
2023	$745	4.000%	3.890%	3.040%	85	$1,815	5.000%	2.410%	1.820%	59	60	75
2024	$780	4.000%	4.000%	3.170%	83	$1,910	5.000%	2.550%	1.950%	60	60	75
2025	$810	4.000%	4.090%	3.280%	81	$2,005	5.000%	2.680%	2.090%	59	60	75
2026	$840	5.000%	4.520%	3.380%	114	$2,105	5.000%	2.810%	2.220%	59	60	75
2027	$3,290	5.000%	4.520%	3.480%	104	$2,210	5.000%	2.910%	2.330%	58	60	75
2028	$3,455	5.000%	4.520%	3.560%	96	$2,320	5.000%	3.000%	2.420%	58	60	75
2029	$3,625	5.000%	4.520%	3.630%	89							
2030	$3,805	5.000%	4.520%	3.700%	82							

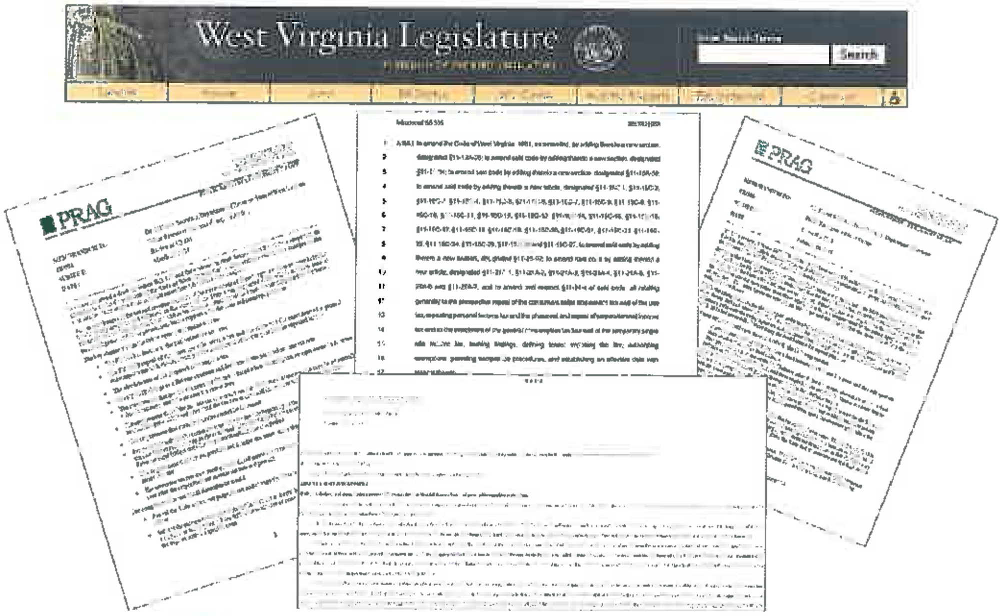
2013A Bonds. In 2010, the SBA's 2010B bonds priced at spreads to MMD with a low of 60 basis points in the front years and as high as 100 basis points over MMD in some of the out years. Based on the Project Team's knowledge of the State's lottery credit, secondary market trading of similar bonds and improved market dynamics, we strongly encouraged the reluctant underwriters to enter the market 15 basis points lower than the rates they proposed. As we suspected, the bonds were received very well with certain maturities being as much as 10 times oversubscribed. With the overwhelming demand for the bonds PRAG negotiated another 5 to 10 basis point reduction in yields over the 15 year term of the bonds with the improvement of the MMD index during the day. The end result was an All-in TIC of 2.77%. A summary of the SBA's 2013A Bonds pricing results compared to the pricing of the SBA's 2010B Bonds is shown below.

4.13 Participate in meetings related to debt offerings including, due diligence, rating agency presentations, pricings, and closings;

We are prepared to attend all meetings related to debt offerings in person or by telephone. In terms of the rating agency meetings we typically coordinate with all the members of the working group and take the lead in scheduling the meeting with the analyst. We have done this on behalf of the State for all of the financings we have been involved in over the period of our engagement. In fact, we often times coordinate the timing of financings so that the rating processes came be completed in one meeting with each of the agencies rather than multiple meetings in a short period of time. This ensures the Administration's time and focus can be optimized and not over burdened with duplicating meetings. We have arranged with the rating agencies: (i) formal presentations by State officials and the financing team members, (ii) informal question and answer sessions with State officials and the financing team members, and (iii) individual conference calls with State staff to discuss or clarify particular credit issues. Also, from time to time we have joined State officials for formal face-to-face presentations in New York. Please see our response to Question 4.3 above for our role in preparing for rating agency meetings. We participate in all working group meetings, due diligence calls and pre-pricing calls, pricing calls or meetings and closing calls. Please see our response to question 4.12 above for a more detailed description in our role in pricing the State's bonds.

4.14 Review proposed rules, proposed legislation, and other documents relating to the State's financing programs;

PRAG always takes an active role in carefully reviewing and commenting on all transaction legal documents, and, as requested, we can manage the process of document preparation and approval to ensure that financings stay on schedule. Attorneys frequently tell us that we are the only financial advisor they work with who provide substantive comments on documents. Although the ultimate responsibility for preparing, reviewing and providing opinions on bond and disclosure documents would, as is industry practice, fall on bond and disclosure counsel, we provide a careful and experienced eye in the review process and advise the State on the advantages, disadvantages and risks presented by the documents. PRAG also assists in reviewing regulation, rules, proposed legislation and other documents as they relate to an issuer's financing programs. For example, the PRAG team was recently called upon during the State of West Virginia legislative session and has been requested in the past to review and comment on an array of legislation relating to debt issuance including the proposed Amendment to the General Obligation Bond Act, the administrations initiatives as it relations to funding transportation infrastructure, school funding initiatives and the implementation of revised taxing provisions.



4.15 Resolve issues regarding the sale and issuance of bonds that are raised by prospective purchasers, rating agencies, or public officials;

During the course of preparation for any financing, we discuss issues and answer questions raised by market participants. We are familiar with our clients and the proposed financings and able to assist in resolving issues regarding the financing. If we cannot answer the question immediately – for example, if a rating agency asks for information that needs to be compiled – we will make every effort to follow up and provide an answer as soon as possible. For example, at the end of Fiscal Year 2016, the rating agencies inquired about the State's ability to fund debt service in the absence of an adopted budget. We were not able to answer this question during the call but afterwards we researched the State's constitutional and statutory provisions, consulted with the Department of Administration and concluded that the State has the authority to make such payments. We then responded to the rating analyst's question in a timely fashion.

4.16 Participate in public forums as the State's Financial Advisor to explain financial aspects of borrowings or debt;

Personnel of PRAG participate in public forums as needed, to explain financial aspects of borrowings or debt and to answer any questions, often posed by persons not familiar with the industry. For example, PRAG professionals have given presentations before legislative committees in West Virginia on OPEBs, pensions and tobacco securitization as well as how to avoid borrowing $1.5 billion to privatize the workers' compensation insurance system. We have also presented at public finance industry events as well as to legislative bodies and boards. We would continue to be available to participate in public forums as the State's Financial Advisor as requested.

4.17 Prepare pre-pricing books to provide estimates of the State's true interest cost for upcoming bond sales, and provide a financial advisory memorandum following each sale to demonstrate how the State's bond issues priced compared to expectations;

As stated above, PRAG analyzes the market conditions prior to, during, and subsequent to each bond sale: When assisting on the pricing a bond issue, we gather the primary market pricing data of all similar bond issues and provide this information on these comparable issues relative to market indices such as Municipal Market Data Index ("MMD") or Securities Industry and Financial Markets Association Index ("SIFMA") in order to assist our clients negotiate favorable pricing terms with underwriters. We also prepare debt service schedules and estimate the expected true interest cost of the transaction. During the sale process, we also monitor changes in market rates and compile real time pricing information for the State to review before the finalization of fees and terms of a transaction, working diligently to ensure that the State receives optimal pricing.

After the closing of each transaction, we provide the State with an analysis of the sale which includes a narrative describing the results of the sale and market conditions, data on coupons and yields and comparison of the State's yields to various indices, similar issues in the market, and historical State spreads to triple-A MMD scale. Similarly after the closing of each negotiated transaction, we provide the State with an analysis of the sale which includes a narrative describing the results of the sale and market conditions, data on coupons, yields and takedowns, retail and institutional orders, an analysis of orders by category (i.e., net designated and member orders including retail) and by underwriter, investor meetings, allotments and a comparison of yields to various indices and similar issues. We produce final debt service schedules and compare the true interest cost to the expected pre-sale true interest cost estimate. This report also contains rating agency reports, final numbers, copy of the closing memorandum, final wire by the underwriter, and other information related to the transaction. PRAG has regularly prepared this information for many of its clients, including the State.

4.18 Analyze various financing proposals that are presented by state and local agencies, investment bankers, and other outside entities;

As financial advisor, PRAG regularly evaluates unsolicited financing proposals submitted to an issuer by underwriters, agencies and other entities. Typically, our firm prepares a memorandum for a client such as the State describing the proposals, the reasonableness of the assumptions and the risks, if any, associated with the structure and prepare a comparison of all such proposals. We would replicate and verify the cash flows using our own computer model and provide this as an attachment to our memorandum. Depending on the complexity of the financing proposal, PRAG project team members would be available either in person or on the phone to respond to questions from the State.

4.19 Assist the State in the procurement and selection of agents and services necessary or desirable for the sale and issuance of bonds and other financing instruments, including but not limited to verification agents, underwriters, remarketing agents, dealers, tender agents, insurers, liquidity providers, counterparties, printers, electronic bidding and posting services, and advertisers;

As a financial advisor to numerous issuers, we have templates for Request for Proposals (RFPs) for credit enhancers, reinvestment of proceeds, OS printing, Trustee and Paying Agent, Escrow Agent and Verification Agent, as well as the corresponding provider lists. These templates are adjusted as market conditions change. For example, Preliminary Official Statements are often distributed electronically only and the number of printed copies of the final Official Statements is smaller and smaller. We are able to conduct the RFP process quickly and efficiently, to prepare a summary of responses and to recommend the winner. For services such as official statement printing, paying agent, trustee, escrow agent services our recommendation is usually based on the

State of West Virginia
West Virginia GARVEE Bonds
Summary of Senior & Co-Manager Underwriter Proposals

BE READ IN CONJUNCTION WITH THE RESPONSES TO THE RFP September 26, 2016

	BAML	Citigroup	JP Morgan
		Experience	
Personnel	Primary Contact: James Calpin Tel: 646-743-1314 Email: james.calpin@baml.com Underwriter: Brendan Troy Tel: 212-449-5081 Email: brendan.troy@baml.com GARVEE Bond and WV Experience. Gene Spinelli Tel: 215-446-7018 Email: eugene.spinelli@baml.com	Primary Contacts: Paul Creedon Tel: 212-723-5589 Email: paul.t.creedon@citi.com Underwriter: Marc Livolsi Tel: 212-723-7093 Email: marc.livolsi@citi.com GARVEE Bond Expert: Ron Marino Tel: 212-723-5643 Email: ronald.j.marino@citi.com WV Finance Expertise: Kirsten Krug Tel: 215-854-6036 Email: kirsten.krug@citi.com	Primary Contacts: Jamison Feheley (GARVEE coverage) Tel: 212-270-1156 Email: Jamison.feheley@jpmorgan.com Mary DiMartino (WV coverage) Tel: 212-648-3455 Email: mary.i.dimartino@jpmorgan.com Vincent Jannetti (WV coverage) Tel: 212-272-9771 Email: Vincent.jannetti@jpmorgan.com Underwriter: Peter Clarke Tel: 212-834-7154 Email: peter.t.clarke@jpmorgan.com
Senior Manager/ book-runner for GARVEE bonds - for last 5 years	• 13 transactions totaling over $2.5 billion in par (35.4% of market share).	• 14 transactions totaling over $2 billion in par (27% market share). • 19 inaugural GARVEE financings. • Standalone GARVEE experience. (Kentucky and Alaska Railroad Corp.) • Road fund back up pledge. (Massachusetts and Virginia)	• 7 transactions totaling over $1.4 billion in par. • Co-managed 13 transactions totaling over $2.6 billion in par. • Combined GARVEEs and GANs transactions since 1998 – 19 totaling over $4 billion. • In 2012, was SM for State of Washington's $500.4M inaugural GARVEE.
Role in current engagements relating to GARVEE bonds	• Since passage of FAST Act, two senior managed GARVEE refunding transactions totaling over $387M in par – North Carolina and Maine. • Senior managed Rhode Island Commerce Corporation's refunding and restructuring bonds. • Senior managed Michigan DOT refunding, including cross-over refunding of BABs.	• Senior book-running manager of the Alabama Federal Aid Highway Finance Authority's upcoming issuance of Special Obligation Revenue Bonds and Revenue Refunding Bonds (double barrel credit). • Co-senior managing underwriter on the Tri-County Metropolitan Transportation District of Oregon's upcoming issuance of Capital Grant Receipt Revenue Refunding Bonds.	• Senior manager on $250mm Direct GARVEE transaction ratings for the State of Rhode Island – expected A2/AA/A+ rating and pricing in October 2016. • Co-manager for direct GARVEE offering anticipated this fall which has not been publicly announced.

Public Resources Advisory Group
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In addition to summarizing the content of the proposals PRAG also replicates and verifies all the proposed fees and borrowing costs using the same underlying assumptions with the only variables being the firms proposed fees and spreads. We prepare tables such as the one below that allows the State's decision makers to easily compare costs between firms.

State of West Virginia (Division of Highways)
GARVEE Bonds
Summary of Proposals for Underwriter Services - Takedowns
Senior and Co-Manager Responses

		BAML	Citi	Crews	JPM	Piper	Wells
	Year	($)	($)	($)	($)	($)	($)
	Series	Tax-exempt	Tax-exempt	Tax-exempt	Tax-exempt	Tax-exempt	Tax-exempt
1	2016						
2	2017	0.50	2.50	2.83	SB	2.50	1.00
3	2018	1.25	2.50	2.83	1.25	2.50	1.00
4	2019	1.25	2.50	2.83	1.25	2.50	1.00
5	2020	1.25	2.50	2.83	1.50	2.50	1.00
6	2021	2.50	2.50	2.83	1.50	2.50	1.00
7	2022	2.50	2.50	2.83	1.50	2.50	1.00
8	2023	2.50	2.50	2.83	1.50	2.50	1.00
9	2024	2.50	2.50	2.83	1.50	2.50	1.00
10	2025	3.00	2.50	2.83	1.50	2.50	1.00
11	2026	3.00	2.50	2.83	1.50	2.50	1.00
12	2027	3.00	2.50	2.83	1.75	2.50	1.00
13	2028	3.00	2.50	2.83	1.75	2.50	1.00
Proposed Fees		($ per bond)	($ per bond)	($ per bond)	($ per bond)	($ per bond)	($ per bond)
Takedown		$2.317	$2.500	$2.830	$1.442	$2.500	$1.000
Mgt Fee		$0.000	$0.000	$0.000	$0.000	$0.000	$0.000
Expenses*		$0.519	$0.565	$0.160	$0.512	$0.400	$0.466
Total per bond		$2.836	$3.065	$2.990	$1.954	$2.900	$1.466
Total		$235,520.860	$257,031.320	$249,084.300	$163,050.250	$243,551.070	$122,242.000
Notes		*Includes $30,000 for Counsel	*Includes $35,000 for Counsel	*Does not Include $25,000 for Counsel	*Includes $30,000 for Counsel	*Includes $25,000 for Counsel	*Includes $30,000 for Counsel

4.20 Advise the State of continuing disclosure requirements and best practices;

PRAG has assisted many of its State and governmental local clients with meeting their continuing disclosure obligations and implementing best practices as disclosures standards have evolved through the use of voluntary market disclosure using the Municipal Securities Rulemaking Board (MSRB) EMMA system. PRAG regularly monitors MSRB rules and industry whitepaper, such as the National Association of Bond Lawyers, National Association of Municipal Analysts, Government Financial Officers Association for best continuing disclosure best practices.

Marianne Edmonds, a Senior Managing Director of PRAG, is a former member of the Board of Directors of the Municipal Securities Rulemaking Board and is still active with the Board currently. Ms. Edmonds provides PRAG a unique insight into state and national regulatory changes and best practices, which we share with our clients.

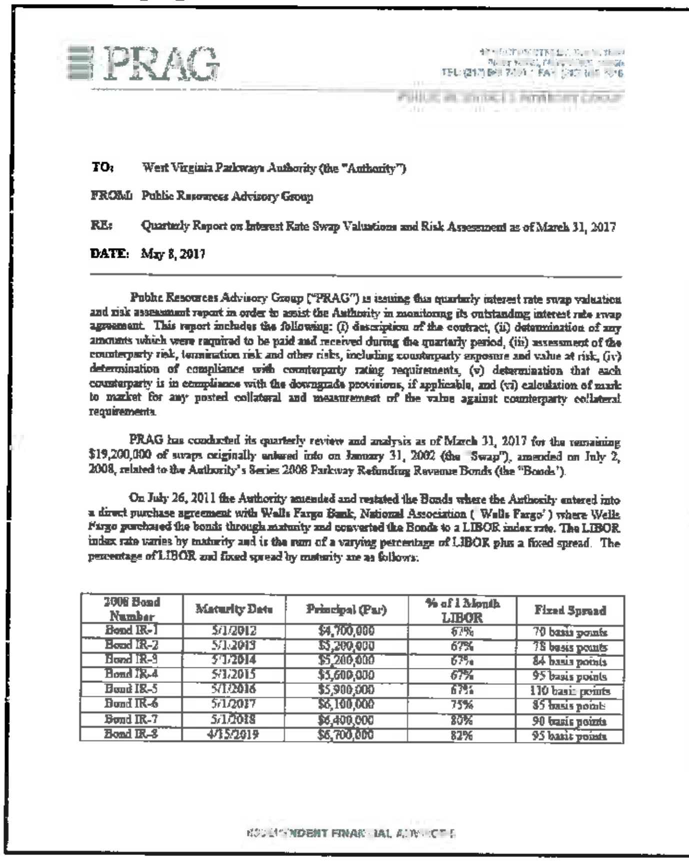
An example of our work on continuing disclosure, PRAG worked with the Department of Administration and the State's Disclosure Counsel to review past continuing disclosure compliance and to determine if it was necessary to self-report through the SEC's Municipalities Continuing Disclosure Cooperation (MCDC) Initiative. We found that the State had multiple missed or late filings stemming from staff turnover and dispersed bonding ability among a variety of State bond issuing agencies and authorities all with unique continuing disclosure requirements. PRAG worked with the State and its Disclosure Counsel to complete the MCDC questionnaire to report all of the State's missed or late filings.

Further, given the multiple State's issuers and the inconsistence of agency Continuing Disclosure Agreements (CDA), PRAG suggested that the State put in place a Securities Compliance policy to prevent future filing failures and that the State contract with Digital Assurance Corporation (DAC) to avoid future failed filings. PRAG assisted the State in drafting its Securities Compliance Policy which was executed in November 2014. PRAG, at the State's request, subcontracted with DAC 2014. DAC reviewed all of the State's continuing disclosure obligations and created a database summarizing its obligations for each bond issue. DAC now provides reminder emails to representatives of the State and State authorities of upcoming continuing disclosure deadlines and flags missing parts of the filed disclosures such as financial tables required by certain CDAs.

4.21 *Advise the State on issuing, monitoring, revising and updating debt, swap and disclosure policies and options related to variable interest rate bonds and interest rate exchange agreements*

PRAG has experience with all types of synthetic products--interest rate swaps, forward swaps, interest rate caps, collars and floors, swaptions and cross currency swaps. The professionals specializing in derivatives are unmatched in evaluating, negotiating and completing derivative transactions and are well versed in the most recently developed products and are active in the capital alternatives market. To that end, we have developed issuer guidelines for swaps as it is important to consider how these financial products relate to overall borrowing needs. Although derivatives can offer attractive savings, the complexity and risks of these transactions require a cautious and full evaluation of the options. We have developed state of the art computer models to determine swap rates, option values and termination values. The outputs from these models are used to compare the economics of the products to "natural" alternatives, adjusting for call features that may be available on bonds but not on swaps, and to determine the market pricing for the swaps on both competitive and negotiated transactions. In addition, our models determine a client's peak exposure to each of its counterparties so that the client can evaluate a counterparty risk in its swap portfolio. We also advise on the preparation of the documents to reduce risks and provide flexibility to the issuer and assist in determining the tax treatment of the cash flow.

PRAG has extensive analytical expertise in the area of municipal swaps and derivatives and we have developed analytical tools to assist our clients with monitoring and providing analysis with respect to swaps and derivative products. We have developed Excel based in-house software for pricing swaps and swaptions. The software uses industry standard methodology by creating the cash flows for the fixed legs and the floating legs of the swaps. The cash flows of the floating legs are based on forward yield rates that our model calculates based on live inputs from swap screens such as Tullet/Prebon and Swap PX available on Bloomberg. In addition to forward rates, the model calculates discount factors and then determines the swap rate that results in the present value of the fixed leg and present value of the floating leg being equal. The model takes into account day count, payment frequency, notional amortization and the index and formula used to calculate the floating rates. We also use proprietary software from Bloomberg to verify our models.



PRAG

TO: West Virginia Parkways Authority (the "Authority")

FROM: Public Resources Advisory Group

RE: Quarterly Report on Interest Rate Swap Valuations and Risk Assessment as of March 31, 2017

DATE: May 8, 2017

Public Resources Advisory Group ("PRAG") is issuing this quarterly interest rate swap valuation and risk assessment report in order to assist the Authority in monitoring its outstanding interest rate swap agreement. This report includes the following: (i) description of the contract, (ii) determination of any amounts which were required to be paid and received during the quarterly period, (iii) assessment of the counterparty risk, termination risk and other risks, including counterparty exposure and value at risk, (iv) determination of compliance with counterparty rating requirements, (v) determination that each counterparty is in compliance with the downgrade provisions, if applicable, and (vi) calculation of mark to market for any posted collateral and measurement of the value against counterparty collateral requirements.

PRAG has conducted its quarterly review and analysis as of March 31, 2017 for the remaining $19,200,000 of swaps originally entered into on January 31, 2002 (the "Swap"), amended on July 2, 2008, related to the Authority's Series 2008 Parkway Refunding Revenue Bonds (the "Bonds").

On July 26, 2011 the Authority amended and restated the Bonds where the Authority entered into a direct purchase agreement with Wells Fargo Bank, National Association ("Wells Fargo") where Wells Fargo purchased the bonds through maturity and converted the Bonds to a LIBOR index rate. The LIBOR index rate varies by maturity and is the sum of a varying percentage of LIBOR plus a fixed spread. The percentage of LIBOR and fixed spread by maturity are as follows:

2008 Bond Number	Maturity Date	Principal (Par)	% of 1 Month LIBOR	Fixed Spread
Bond IR-1	5/1/2012	$4,700,000	67%	70 basis points
Bond IR-2	5/1/2013	$5,200,000	67%	78 basis points
Bond IR-3	5/1/2014	$5,200,000	67%	84 basis points
Bond IR-4	5/1/2015	$5,600,000	67%	95 basis points
Bond IR-5	5/1/2016	$5,900,000	67%	110 basis points
Bond IR-6	5/1/2017	$6,100,000	75%	85 basis points
Bond IR-7	5/1/2018	$6,400,000	80%	90 basis points
Bond IR-8	4/15/2019	$6,700,000	82%	95 basis points

Andrew Evanchik, proposed derivative specialist on the State's engagement, has been regularly monitoring the Parkway's Authority remaining $13,100,000 of interest rate swaps related to the Authority's original 2003 Parkway Refunding Revenue Bonds and has been working with the PRAG project managers to provide quarterly swap monitoring reports. Mr. Evanchik will continue to provide the West Virginia Parkway Authority a quarterly report. These quarterly reports include:

(i) description of the contract,

(ii) determination of any amounts which were required to be paid and received during the quarterly period,

(iii) assessment of the counterparty risk, termination risk and other risks, including counterparty exposure and value at risk,

(iv) determination of compliance with counterparty rating requirements,

(v) determination that each counterparty is in compliance with the downgrade provisions, if applicable, and

(vi) calculation of mark to market for any posted collateral and measurement of the value against counterparty collateral requirements.

In PRAG's independent financial review and analysis of the West Virginia Parkways, Economic Development and Tourism Authority, PRAG noted that the Authority did not have a formal swap policy. The Authority has an interest rate swap outstanding, associated with the Series 2003 Bonds. PRAG recommended that the Authority adopt a formal debt policy and a swap policy to both (i) frame the decision-making and parameters surrounding the future use of variable rate bonds and derivative products and (ii) improve its then current S&P swap credit score which affects its outstanding rating. PRAG project managers at the time, Tom Huestis and Steve Goldfield, then worked with the Authority to implement its "Interest Rate Exchange Agreement Policy" which was adopted in 2007.

4.22 Review the performance of verification agents, underwriters, remarketing agents, dealers, tender agents, insurers, liquidity providers, counterparties, printers, electronic bidding and posting services, and advertisers;

As stated previously, PRAG is a national firm working daily with some of the top issuers in the country. As such, we regularly work with and perform due diligence on a variety of market participants. As noted in 4.19, we review and analyze proposals prior to hiring firms and providers. We monitor developments concerning investment banks that could influence whether a firm should be selected to run a negotiated transaction and, when a firm is selected, ensure that a transaction runs smoothly. We routinely monitor the financial press and information services for articles and information about firms doing business with our clients for any developments that could affect their ability to perform, negatively or positively. This could include regulatory investigations or actions as well as potential changes in a firm's financial condition or credit position. During a transaction, we review all numbers and other materials prepared by the underwriter for accuracy and reasonableness. It is not unusual to catch mistakes and to identify alternatives that could lead to a more cost-effect transaction. Our approach is to be in contact with all participants in a transaction to ensure the best outcome for our clients. If our or our clients' experience with any service provider is subpar we remove them from our provider list and do not send them additional RFPs.

4.23 Assist the State in any response to inquiries or audits from any governmental entity;

Should the State have any inquiries or audits to respond to, PRAG would be willing to assist in any way requested.

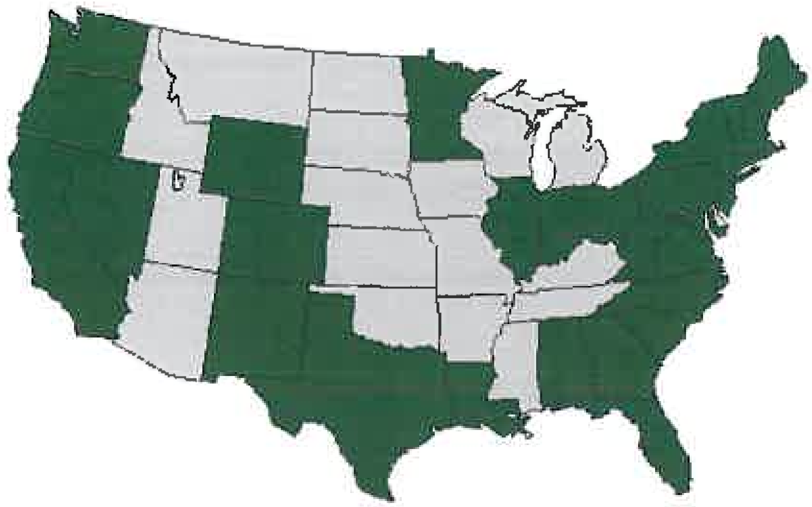
4.24 Perform other tasks consistent with the purpose of this Procurement as may be specified by the State including any other service necessary, customary, or incidental to the sale of the issuance of debt and the financing of projects.

We were hired as the State's first independent financial advisor as a result of a solicitation done in 2005. Over the past 12 years, we have provided the State a broad range of financial advisory services, many of which did not fall within our standard scope of services but instead rose out of a specific need of the State. We adapted our services to meet the State's needs and have strived for excellence on all projects. We think of ourselves as part of the West Virginia team and we are proud to be a part of this team. We value the State's business and would be pleased to continue our relationship.

5. Mandatory Requirements.

5.1 As a firm, the Vendor must have performed work in a minimum of ten states;

PRAG currently serves as financial advisor in 21 states in addition to West Virginia. Since inception, we have performed work with more than sixty state-level authorities, states and agencies on the issuance of securities. Below, the states shown in green indicate the states or state-level issuers for which PRAG has provided financial advisory services.



5.2 The Vendor must have served as the Financial Advisor to a minimum of five states or municipalities with populations in excess of one million citizens;

PRAG is currently serving as financial advisor to all the States and municipalities listed in the table below with populations in excess of one million citizens.

State / Municipality	Population (as of July 1, 2016)*
California	39,250,017
Florida	20,612,439
New York	19,745,289
Illinois	12,801,539
Georgia	10,310,371
Los Angeles County, CA	10,137,915
New York City, NY	8,550,405
Virginia	8,411,808
Minnesota	5,519,952
South Carolina	4,961,119
Oregon	4,093,465
Connecticut	3,576,452
Miami-Dade County, FL	2,712,945
New Mexico	2,081,015
West Virginia	1,831,102
Phoenix City, AZ	1,563,025

Hillsborough County, FL	1,376,238
New Hampshire	1,334,795
Montgomery County, MD	1,043,863
San Jose City, CA	1,026,908

Source: U.S. Census Bureau State Population Totals Tables: 2010-2016

5.3 The Vendor must have provided financial advice on over $50 billion dollars in debt issuances, including $10 billion since January 1, 2008;

PRAG has advised on over $263 billion in transactions since January 1, 2008. Please see tables in 5.4 below.

5.4 The Vendor must have transaction experience with complex taxable and tax-exempt public financings;

Public Resources Advisory Group
Long-Term Municipal Issue Financial Advisory Rankings
Source: Thomson Reuters

Year	Par Value of Bonds ($'s in million)	Number of Issues	PRAG's FA Ranking
Tax-Exempt Issues			
2008	$18,636.10	101	3
2009	$26,186.50	107	2
2010	$14,394.80	87	3
2011	$19,450.60	96	2
2012	$25,114.10	143	2
2013	$28,819.60	103	2
2014	$26,019.50	120	2
2015	$28,842.30	126	3
2016	$31,335.80	128	3
Total Tax-Exempt:	**$218,799.30**	**1,011**	
Taxable Issues			
2008	$1,668.40	15	2
2009	$16,302.50	65	1
2010	$16,696.90	78	2
2011	$1,404.20	23	5
2012	$1,361.20	23	3
2013	$2,140.00	18	2
2014	$1,844.20	19	3
2015	$2,059.70	29	3
2016	$2,151.40	31	3
Total Taxable:	**$45,628.50**	**301**	

5.5 The Vendor must have credit experience resulting in upgrades by rating agencies;

PRAG has provided rating agency and credit advice to a variety of PRAG clients who have been upgraded by one or more of the national rating agencies, including the State of West Virginia, which was upgraded in 2009, 2010 and 2011 by Moody's, Standard & Poor's and Fitch, respectively. In addition, our firm has been involved with the national rating agency upgrades for the State of Minnesota, the State of California and the State of Vermont.

5.6 The Vendor must have no affiliation with any investment bank, commercial bank, or law firm.

PRAG is an independent financial advisory firm and does not have an affiliation with any investment bank, commercial bank or law firm.

APPENDIX 1

PRAG's Abridged Employee Handbook

MEMORANDUM TO:	All Employees of Public Resources Advisory Group, Inc.
DATE:	January 1, 2016
SUBJECT:	[*ABRIDGED*] Benefits, Policies and Procedures for Employees

This Benefit, Policies and Procedures for Employees Memorandum ("Memorandum") describes benefits, policies and procedures for all employees of Public Resources Advisory Group, Inc. ("PRAG" or the "Firm") and updates and amends the previous version dated June 15, 2013. It is an employee's responsibility to read the memorandum in its entirety and to comply with all policies, procedures, and rules and regulations of PRAG at all times.

<u>Acknowledgment of Receipt</u>

All employees will be required to sign the Acknowledgement of Receipt of this Memorandum. Such signature is a requirement of their employment.

<u>Firm Rights to Modify Memorandum</u>

Additional information regarding PRAG benefits, policies and procedures may be provided separately or issued from time to time and should be read in their entirety and followed. PRAG reserves the right to change any of its policies, procedures, rules or regulations, or employee benefit plans at any time, at the sole discretion of the management of PRAG (the "Management"), to the extent allowed by applicable state and federal laws and regulations.

<u>Equal Opportunity</u>

Management believes that all persons are entitled to Equal Employment Opportunity and prohibits any form of discrimination against its employees or applicants for employment because of race, color, creed, religion, sex (including pregnancy), age, marital status, partnership status, disability, national origin, ancestry, sexual orientation, gender identity, alienage, citizenship status, predisposing genetic characteristic, military status, or any individual's status in any group or class protected by applicable federal, state or local law or regulation. The Firm will attempt to provide accommodations to an employee who may request an accommodation based on disability or religious beliefs or practices, unless doing so will result in an undue hardship to the Firm.

[Section Related to Benefits Deleted]

<u>Sexual and Other Forms of Unlawful Harassment</u>

It is the policy of PRAG to maintain a work environment in which all individuals are treated with respect and dignity and which prohibits discriminatory practices, including sexual harassment and

The Firm will not retaliate in any way against an individual who makes a report of perceived discrimination or harassment or who participates in an investigation; nor will it permit any supervisor or employee to do so. Retaliation is a serious violation of the Firm's harassment policy and anyone who feels he or she has been subjected to any retaliation should immediately report such conduct. Any person who retaliates against another individual for reporting any perceived acts of harassment will be subject to disciplinary action up to and including discharge.

All allegations of harassment will be promptly investigated. The Firm will endeavor to maintain confidentiality throughout the investigatory process to the extent practical and appropriate under the circumstances. The Firm, however, has a legal obligation to act on all information received if it believes an individual may be engaging in wrongful conduct or violation of law.

If the Firm finds that this harassment policy has been violated, the harasser will be subject to appropriate disciplinary action. Although the specific corrective and disciplinary actions against the alleged harasser will be within the Firm's discretion, it may include: verbal or written reprimand; referral to appropriate counseling; withholding of a promotion or bonus; reassignment; temporary suspension; and/or discharge.

The Firm recognizes that false accusations of harassment can cause serious harm to innocent persons. If an investigation results in a finding that the complainant knowingly, falsely accused another person of discrimination or harassment, the complainant will be subject to disciplinary action, up to and including discharge.

The Firm has developed this policy to ensure that all its employees can work in an environment free from sexual harassment and from harassment based on any protected class status. We ask all employees to work with us to accomplish that goal.

[Sections related to Benefits and Compensation deleted]

Drug and Alcohol Free Workplace

It is the policy of PRAG to maintain a drug-free workplace. All employees should be advised that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in this organization's workplace. The Firm also prohibits employees from consuming alcoholic beverages on its premises, except where authorized by senior management, and from reporting to work (on the Firm's premises or elsewhere) under the influence of alcohol or drugs. Anyone who violates this policy will be subject to disciplinary procedures. If an employee of PRAG has a problem with substance abuse, assistance may be available under the Firm benefit plans.

The Firm may access its electronic communications and information systems and obtain the communications within these systems, with or without notice to users of the systems, when Management deems it appropriate to do so. The reasons for which the Firm may obtain such access include, but are not limited to: maintaining the systems, preventing or investigating allegations of system abuse or misuse, assuring compliance with software copyright laws, complying with legal and regulatory requests for information, testing compliance with regulatory requirements, investigation of possible Firm policy violations, insuring that the Firm's operations continue to appropriately during an employee's absence, and any other purpose deemed appropriate by the Firm.

All system passwords must be available to management and the information technology department ("IT") and no employee may use passwords that are unknown to the Firm or IT. All pass codes, passwords and encrypted information are the property of the Firm. No employee may use a pass code, password or method of encryption that has not been issued to the employee or that is not made known in advance to the Firm.

The equipment, services and technology provided to access the Internet or other electronic communication devices remain at all times the property of the Firm. The Firm expressly prohibits the unauthorized use, installation, downloading, copying or distribution of copyrighted, trademarked, or patented material on the Internet or any software or hardware on the Firm's systems.

The Firm's Equal Opportunity, Sexual Harassment and Anti-Harassment policies (collectively the "Anti-Discrimination Policies") in their entirety apply to the use of our electronic communications systems. No one may use electronic communications in a manner that may be construed by others as contravening the Anti-Discrimination Policies.

Since our electronic communications and information systems are for business use, these systems may not be used to solicit for any causes, including but not limited to religious or political causes, outside organizations or other or other personal matters unrelated to the Firm's business, except as prohibited by law. All e-mail messages are the Firm's records and property and, as such, may be disclosed or used by the Firm without the employee's permission. Therefore, employees should not assume that any e-mail or hard copy correspondence is "private," even if the employee labels the message or correspondence as such.

In using internal or external e-mail, as with any other form of electronic communication, employees must maintain security and confidentiality of all information that is sensitive, personal and/or proprietary to the Firm, its clients, suppliers, vendors, and employees (and/or their dependents if applicable), in accordance with this policy and any other Firm policy concerning the confidentiality and security of information. All employees should take caution to the sensitivity of information before transmission of external electronic communications. When in doubt, use an alternate method of transmission.

The Firm's electronic communications and information systems are provided primarily for the job related and approved for other business purposes. The Firm does recognize, however, that as with the Firm's telephone system, employees may from time to time utilize these systems for non-business related purposes. Such use is acceptable if kept to a minimum, if it does not interfere with work performance, and if it does not involve any inappropriate activity including, but not limited to:

- sending or receiving, or encouraging the sending or receipt of, communication possibly violating the Firm's Anti-Discrimination Policies, including but not limited to information of a racist, sexual, religious, ethnic or otherwise offensive or inappropriate nature;

Gifts

Employees must comply with MSRB Rule G-20 as of the date of this Memorandum, regardless of the effective date of MSRB Rule G-20 to Municipal Advisors.

In addition, the Firm prohibits paying for an outside party's entertainment or having an outside party pay for an employee's entertainment. Entertainment, as used herein, includes theater, sporting or other recreational sporting events, sightseeing tours, and transportation related to attending such entertainment events. Meals are excluding from this prohibition, as long as they comply with the provisions of MSRB Rule G-20.

Political Contribution Policy

Pursuant to a resolution adopted by the Board of Directors on October 1, 1993, PRAG does not contribute to political activities, including political campaigns, of elected officials for elected offices. In addition, PRAG employees must follow the guidelines of MSRB, Rule G-37 regarding individual contributions, which generally prohibit contributions to issuers and political parties of states and political subdivisions unless the contribution is for an issuer for whom such person is entitled to vote and the contributions by such person to such official of an issuer, in total, do not exceed $250 per election. The purpose of this policy is to avoid any appearance of conflicts of interest with PRAG's current or prospective clients. Please see the MSRB, Rule G-37 for additional information.

Contributions

PRAG and PRAG professionals shall not make contributions, donations, pay for sponsorships or give anything else of value to charitable or professional organizations that are: (i) aimed at influencing decision-making or making a client feel beholden to such person or to PRAG or (ii) so frequent, extensive or overly generous as to raise any question of propriety. Nothing in the foregoing shall prevent any professionals at PRAG from making contributions or donations on their individual behalf, provided that such contributions or donations are not intended to influence the decision-making process or make a client or potential client feel beholden to such person or to PRAG.

If, as a result of a proposed contribution or sponsorship, PRAG will receive something of value, such as a table at or admission to an event that includes meals, or entertainment of any kind, and the value is expected to inure to clients or potential clients (such as invitees to the table that is purchased), such invitations shall be reviewed under the firm's Gifts and Gratuities policy separately for compliance with PRAG's Code of Ethics.

Press Statements

PRAG discourages employees from talking to the press, unless instructed to do so by a client. In addition, employees are prohibited from talking to the press regarding PRAG's business, unless granted permission from the President or Executive Vice President.

APPENDIX 2

PRAG's Code of Ethics

CODE OF ETHICS

Public Resources Advisory Group, Inc.

December 2016

I. GENERAL PRINCIPLES

Public Resources Advisory Group, Inc. (the "PRAG") has an overarching fiduciary duty to its municipal advisory and investment advisory clients and it is the obligation of PRAG personnel to uphold that fundamental duty. PRAG believes the following principles ("General Principles") are a significant component of maintaining an ethical culture:

Municipal Advisors and investment advisory Supervised Persons of PRAG must at all times:

- Conduct themselves in such a manner as to be consistent with this Code of Ethics.
- Deal honestly and with the upmost good faith with the client.
- Act in the best interest of the client without regard to the interest of PRAG.
- Not engage in advisory activity if PRAG cannot manage or mitigate its conflicts of interest in a manner that will permit it to act in its client's best interest.
- Comply with Federal Securities Laws.
- Abide by PRAG's Employee Handbook and Written Supervisory Procedures.

The General Principles, discussed in this section, govern all aspects of PRAG's and its employees' business conduct, whether or not the conduct also is covered by more specific standards and procedures set forth below. This Code of Ethics applies to all Supervised Persons of PRAG (which includes Municipal Advisors).

Failure to comply with this (or any separately maintained policies and procedures referred to by this Code of Ethics) may result in disciplinary action, including termination of employment.

For additional information about this Code of Ethics or any other ethics-related questions, please contact the following individuals:

For investment advisory work:	For municipal advisory work:
THOMAS HUESTIS, Chief Compliance Officer (IA CCO) 610-565-5990/ thuestis@pragadvisors.com	KIMBERLY MCMANUS, Chief Compliance Officer (MA CCO) 973-618-9500 / kmcmanus@alternativereg.com

which requires PRAG to make full and fair disclosure, in writing, of all material conflicts of interest and all legal and disciplinary events that are material to a client's evaluation of PRAG. The disclosures must be provided prior to or upon engaging in municipal advisory activities for or on behalf of the client.

3. Insider Information.

Supervised Persons are prohibited from trading either personally or on behalf of others for any client security, while in possession of material, nonpublic information. Personnel are also prohibited from communicating material, nonpublic information to others in violation of the law.

4. Gifts and Entertainment.

PRAG and its Supervised Persons are prohibited from giving, or permitting to be given, anything of value in excess of $100 per recipient per year to any person, principal, proprietor, employee, agent or representative of another person, client or prospective client when the gift is in relation to business of the employer of the recipient of the gift. This excludes business related meals where a Supervised Person is present, as long as the guest's total costs are not excessive. Note: excessive gifts and entertainment are not permitted. PRAG's policy is to monitor and record all gifts given and received. Supervised Persons must abide by the provisions of MSRB G-20 and PRAG's Written Supervisory Procedures, which defines inappropriate gifts and exceptions to the limitations in detail.

5. Political Contributions.

PRAG is committed to competing for the award of municipal and investment advisory business on the basis of merit, rather than political favoritism. As such, Supervised Persons must not engage in municipal advisor business with municipal entities if certain political contributions are made to officials of such municipal entities and Supervised Persons must disclose certain political contributions to allow public scrutiny of PRAG's political contributions and its municipal advisory business. In addition, Supervised Persons must abide by the provisions of (i) PRAG's *Employee Handbook (Benefits, Policies and Procedures for Employees Memorandum)* and MSRB G-37 and PRAG's Written Supervisory Procedures (which became effective August 17, 2016), and which defines contributions and exceptions.

6. Confidentiality.

Supervised Persons must keep all non-public information about clients (including former clients) in strict confidence, including the client's financial circumstances, client transactional information and the client's security issuance plans. In addition, PRAG's contracts with clients require may require PRAG to keep certain specified information confidential. Supervised Persons are required to sign a confidentiality agreement and to abide by the confidentiality policy, which includes maintaining security and confidentiality of all information that is sensitive, personal and/or proprietary to PRAG, its clients, suppliers, vendors, and employees (and/or their dependents if applicable), in accordance with this policy and any other PRAG policy concerning the confidentiality and security of client information.

APPENDIX 3

Required Forms

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Public Resources Advisory Group, Inc.

Authorized Signature: ______________________ Date: April 11, 2017

State of New York

County of New York, to-wit:

Taken, subscribed, and sworn to before me this 11 day of April, 2017.

My Commission expires August 6, 2017.

AFFIX SEAL HERE

NOTARY PUBLIC ______________________

Purchasing Affidavit (Revised 08/01/2015)

PATRICE L. LEONARD
Notary Public, State of New York
No. 01LE6062300
Qualified in Kings County
Certificate filed in New York County
Commission Expires Aug. 6. 20

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Name, Title)

Thomas Huestis, Senior Managing Director
(Printed Name and Title)

117 Gayley Street, Suite 200, Media, PA 19063
(Address)

610-565-5990 / 610-565-4188
(Phone Number) / (Fax Number)

thuestis@pragadvisors.com
(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Public Resources Advisory Group, Inc.
(Company)

Thomas F. Huestis, Senior Mng Director
(Authorized Signature) (Representative Name, Title)

Thomas Huestis, Senior Managing Director
(Printed Name and Title of Authorized Representative)

5/8/2017
(Date)

610-565-5990 / 610-565-4188
(Phone Number) (Fax Number)

REQUEST FOR PROPOSAL
Financial Advisory Services

By signing below, I certify that I have reviewed this Request for Proposal in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that, to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Public Resources Advisory Group, Inc.
(Company)

Thomas Huestis, Senior Managing Director
(Representative Name, Title)

610-565-5990 / 610-565-4188
(Contact Phone/Fax Number)

5/8/2017
(Date)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.:

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

- [x] Addendum No. 1
- [ ] Addendum No. 2
- [ ] Addendum No. 3
- [ ] Addendum No. 4
- [ ] Addendum No. 5
- [ ] Addendum No. 6
- [ ] Addendum No. 7
- [ ] Addendum No. 8
- [ ] Addendum No. 9
- [ ] Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Public Resources Advisory Group, Inc.
Company

Authorized Signature

5/8/2017
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

WV-10
Approved / Revised
08/01/15

State of West Virginia
VENDOR PREFERENCE CERTIFICATE

Certification and application is hereby made for Preference in accordance with ***West Virginia Code***, §5A-3-37. (Does not apply to construction contracts). ***West Virginia Code***, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the ***West Virginia Code***. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Vendor Preference, if applicable.

1. ☐ **Application is made for 2.5% vendor preference for the reason checked:**
Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or,**
☐ Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or,**
☐ Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **or,**

2. ☐ **Application is made for 2.5% vendor preference for the reason checked:**
Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or,**

3. ☐ **Application is made for 2.5% vendor preference for the reason checked:**
Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or,**

4. ☐ **Application is made for 5% vendor preference for the reason checked:**
Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; **or,**

5. ☐ **Application is made for 3.5% vendor preference who is a veteran for the reason checked:**
Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or,**

6. ☐ **Application is made for 3.5% vendor preference who is a veteran for the reason checked:**
Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

7. ☐ **Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with *West Virginia Code* §5A-3-59 and *West Virginia Code of State Rules*.**
Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: Public Resources Advisory Group, Inc. **Signed:** ____________

Date: 5/8/2017 **Title:** Senior Managing Director