DOWNSTATE CHAPTER CONFERENCE

February 27 - 28, 2020

Illinois Government Finance Officers Association
Learning • Connecting • Progressing
AGENDA

THURSDAY, FEBRUARY 27, 2020

9:30 – 9:55 AM  Check-in and Networking

9:55 – 10:00 AM  Welcome and Opening Remarks
  Sandy Evans, Finance Director, City of O’Fallon and President, IGFOA Downstate Chapter
  Elizabeth Beaty, Administrative Services Manager, City of Urbana and Treasurer, IGFOA Downstate Chapter

10:00 – 11:15 AM  Understanding Behavioral Styles – Building Productive and Impactful Relationships
  Speaker: Loren Sanders, Senior Manager, Enterprise Learning and Development at CVS Health

Establishing genuine personal connections with others is the key to building productive and impactful relationships. In order to do this, we must be able to communicate effectively. Understanding the different behavioral styles helps individuals and groups better recognize the personality types that exist, brings better self-awareness to groups and helps establish common ground as a place to begin. We all have different thought patterns. These are reflected in our personalities. How we create these thoughts impacts our behavior. Much of our thinking leads us to quickly judge people and situations.

Learning Objectives - Participants completing this session will be able to:

1. Discern their predominant behavioral style as well as its strengths and challenges;
2. Increase the ability to adapt to the style of others and speak their style language;
3. Respect the differences and contributions of other styles to see how they contribute to overall team effectiveness; and,
4. Learn about the shadow they cast within a team and how it impacts others.

11:15 – 11:30 AM  Break

11:30 – 12:20 PM  Overseeing Your Investment Program – Best Practices for Fiduciaries
  Speakers: Michelle Binns, Senior Managing Consultant, PFM Asset Management LLC
  Spiro Hountalas, Senior Managing Consultant, PFM Asset Management LLC
Government officials have a fiduciary responsibility in managing their funds. While different types and sizes of governments require differing levels of complexity in their investment programs, all government officials need to recognize their fiduciary duty. This session will detail the steps needed in order to develop or refine your investment program in order to effectively set policy, make decisions, and safeguard taxpayer dollars.

**Learning Objectives** - Participants completing this session will be able to:

1. The steps needed to develop an effective investment program;
2. How to review and revise your Investment Policy to ensure its meeting your investment goals; and,
3. How the current interest rate environment can affect your strategy going forward.

12:20 – 12:30 PM  **Open Discussion/Q&A**

*Elizabeth Beaty*, Administrative Services Manager, City of Urbana and Treasurer, IGFOA Downstate Chapter

12:30 – 1:30 PM  **Networking Luncheon**

1:30 – 2:20 PM  **Process of Issuing Bonds for Illinois City or Village**

*Speakers:*

*James M Snyder*, Partner, Ice Miller LLP
*Kathy Thomas*, Municipal Disclosure Administrator, Ice Miller LLP
*Robert P. Vail*, Director of Public Finance, Bernardi Securities, Inc.
*Kevin Wills*, Investment Banking Specialist, Bernardi Securities, Inc.

This panel will discuss the process of an Illinois city or village bond issue, the disclosure obligation responsibility of a city or village, the pricing of a bond issue, and the responsibilities of a city or village and other participants before and after a bond issue, and will provide an update of SEC securities compliance and rules.

**Learning Objectives** - Participants completing this session should be able to:

1. Learn the steps involved in a bond financing and about how bonds are priced;
2. Gain an understanding of the on-going responsibilities an issuer has with its continuing disclosure;
3. Learn who the typical participants are and what they do; and,
4. Learn what the responsibilities are for the city or village throughout the issuance process.

2:20 – 2:30 PM  **Break**

2:30 – 3:20 PM  **Economic and Illinois Market Update**

*Speakers: Brian Hextell*, Senior V.P. Institutional Portfolio Manager, Prudent Man Advisors, Inc.
*Erik Stoltz*, Institutional Investment Sales Manager, PMA Financial Network, Inc.
In the U.S., two issues have dominated market headlines this year: effects of the trade tensions between the U.S and China and geopolitical events. How do these factors impact our community’s investment portfolio? How should we be reacting to increased market volatility? This session will seek to provide guidance on these questions while also addressing two recent changes to Illinois statutes. Public entities in Illinois now have greater flexibility with respect to investment in corporate obligations and need to balance this with proper credit risk management. In addition, under the Illinois Sustainable Investing Act, governments must consider sustainability factors in evaluating investment decisions.

**Learning Objectives** - Participants completing this session will be able to:

1. Learn what factors are driving economic and market developments nationally;
2. Understand the risks and benefits of investing in corporate obligations; and,

**3:20 – 3:30 PM** Break

**3:30 – 4:45 PM** Boosting Strategic Thinking - Readiness for the Pace of Change  
*Speaker: Greg Kuhn, PhD, Associate Director, NIU Center for Governmental Studies*

This workshop will serve as an exploration of “strategic thinking” as well as a “guided tour” of the dynamics that leaders must be aware of in a time of rapid change. The session will focus on introducing participants to the various dynamics and structural elements that are confronting leaders while offering a framework to enhance strategic thinking, envisioning the future and responding to change.

**Learning Objectives** - Participants completing this session should be able to:

1. Explore the need to spend more time doing “strategic thinking;”
2. Raise awareness of the pace of change;
3. Discuss approaches to resolve the conundrum that government was not built to change rapidly; and,
4. Be able to identify tensions.

**4:45 – 5:00 PM** Open Discussion/Q&A  
*Elizabeth Beaty, Administrative Services Manager, City of Urbana and Treasurer, IGFOA Downstate Chapter*

**5:30 – 8:30 PM** Flip, Flop & Fraud - Mystery Fraud Dinner  
*Speaker: Tim Hungerford, CPA, CIA, CFE, CMA, CISA, CGAP, CFM, Owner of Hungerford Vinton, LLC*

Peach Blossom Lane looks like just another ordinary housing tract. But as we zoom into the details, we will find a hot bed of red flags, relationships and issues that could lead to fraud. You will assist in weeding through the information and interviews to unearth the bad seeds.

With a focus on Mortgage, Bankruptcy, and Divorce Fraud, as well as general fraud techniques, the goals of this Mystery Fraud Training is to teach auditors through a simulated audit experience.
**Learning Objectives** - Participants completing this session should be able to:

1. Planning Techniques: Determining information needs, personnel to interview, review of next steps;
2. Interviewing Techniques: You will be interviewing key personnel throughout the event;
3. Documentation & Discovery Techniques: Examining evidence and understanding proper evidence management;
4. Data Analysis: Reviewing evidence to draw conclusions and understand multiple ways of evaluating data;
5. Mortgage Fraud: Understand the trends in mortgage fraud;
6. Bankruptcy Fraud: Understand the red flags and trends in Bankruptcy fraud;
7. Divorce Fraud: Understand the red flags and trends in Divorce Fraud; and,
8. Finally, you will experience or witness an admission, seeking interview to attempt to obtain a confession.

**FRIDAY, FEBRUARY 28, 2020**

8:00 – 8:50 AM  
**Breakfast**

8:50 – 9:00 AM  
**Announcements**  
*Elizabeth Beaty,* Administrative Services Manager, City of Urbana and Treasurer, IGFOA Downstate Chapter

9:00 – 10:15 AM  
**Understanding the Impact of Ethics and Fraud in Your Organization**  
*Speaker: Hope Wheeler,* CPA, Principal, Clifton Larson Allen LLP

This session discusses the challenges of ethical behavior in today’s society, and how personal accountability is key. Fraud will be defined and different types of fraud and the cost of fraud will be covered. We will also review how frauds are typically detected and some ideas on detecting and preventing fraud in a governmental entity.

**Learning Objectives:** Participants completing this session should be able to:

1. Understand ethical challenges in today’s society;
2. How can you help drive ethical behavior in the workplace;
3. Learn what fraud is, the various types, and the costs of fraud;
4. Understand how frauds are typically detected; and,
5. Gain knowledge on anti-fraud measures.

10:15 – 10:30 AM  
**Break**

10:30 – 11:20 AM  
**Legislative Update**  
*Speaker: William D. McCarty II,* Director - Office of Budget and Management, City of Springfield, IGFOA Treasurer and Legislative Committee Chair
This session will provide participants with an update on State legislative matters relevant to Illinois local governments.

**Learning Objectives** - Participants completing this session should be able to:

1. Gain knowledge of new Illinois Public Acts significantly affecting local governments;
2. Understand pending Illinois General Assembly legislative proposals that may significantly impact local governments; and,
3. Explore recent developments in legislation.

11:20 – 12:00 PM **Closing Remarks**  
*Elizabeth Beaty, Administrative Services Manager, City of Urbana and Treasurer, IGFOA Downstate Chapter*

12:00 – 12:45 PM **Luncheon with the IGFOA Executive Board**
Understanding Behavioral Styles:
The Key to Building Productive and Impactful Relationships

Loren Sanders lorenjsanders@gmail.com (847)961-0816

Which One?
<table>
<thead>
<tr>
<th></th>
<th>Formal</th>
<th>Informal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominant</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Go along .................. Take charge
D C B A
Quiet ........................ Talkative
D C B A
Supportive .................... Challenging
D C B A
Compliant .................... Dominant
D C B A
Asks questions ........ Makes statements
D C B A
Cooperative .................. Competitive
D C B A
Introverted ................ Extroverted
D C B A
Slow, studied ............... Fast-paced
D C B A
Non-assertive .............. Assertive
D C B A
Constrained ................ Open
D C B A

Aloof .................... Welcoming
1 2 3 4
Calm ........................ Excitable
1 2 3 4
Reserved ........................ Animated
1 2 3 4
Task-oriented ............. People-oriented
1 2 3 4
Serious .................. Friendly, attentive
1 2 3 4
Talks only business ........ personal
1 2 3
Reserved ..........................
1 2 3
Wants facts ............ Wants
1 2 3
Non-emotional ............ Emotion
1 2 3
Non-responsive .............. Responsive
1 2 3
In Your Groups

- Make a list of the strengths your behavioral style brings to a team
  - Once your list is complete, circle your top five
- Make a list of the things that make it difficult to work with someone who has your behavioral style
  - Once your list is complete, circle your top five

Characteristics of Controlling Style

- Takes charge
- Focused on the Return on Investment/Return on Expectation/Bottom line
- Might be perceived as micromanager, autocratic or insensitive
Characteristics of Supporting Style

- Empathetic
- Democratic Process/ Team Player
- May have a tendency to people please

Characteristics of Analyzing Style

- Organized, Planner
- Concerned with Facts
- Might be risk averse
Characteristics of Promoting Style

- Innovative/ Inspirational
- Charismatic
- May have trouble with follow through

At Your Table

- Complete the worksheet
- Wait for further direction
- Debrief the discussion questions at your table
Group Activity

- In your Behavioral Style Groups, make a list of the things the other styles should know about you in order to work most effectively with you.

Thank You

For more information or questions, contact me at
Loren Sanders (847)961-0816
LorenjSanders@gmail.com
Overseeing Your Investment Program: Best Practices for Fiduciaries

IGFOA Downstate Chapter Conference
February 27, 2020

Presenters

Michelle Binns
Senior Managing Consultant
PFM Asset Management LLC
(312) 523-2428
binnsm@pfm.com

Spiro Hountalas
Senior Managing Consultant
PFM Asset Management LLC
(312) 523-2440
hountalass@pfm.com
Agenda

- Operating/ Reserve Funds*
  - Review All Applicable Laws and Regulations
  - Develop an Investment Leadership Team
  - Create an Investment Policy
  - Determine the Portfolio Management Team
  - Establish Risk and Return Objectives
  - Identify the Funds Being Invested and Develop a Cash Flow Forecast for Each

- Market Update

*Based upon the GFOA Best Practice “Investment Program for Public Funds”
Applicable Laws for Public Funds

- Operating Funds
  - 1st priority = protect investment principal
  - Short to intermediate time horizon
  - Limited by the Illinois Public Funds Investment Act (30 ILCS 235)

Permitted Investments – Operating Funds

- Define general universe
- Complies with the Illinois Public Funds Investment Act (30 ILCS 235)
- Set diversification limits
  - Term
  - Sector
  - Credit Quality
- Restrictive clauses

<table>
<thead>
<tr>
<th>Sector</th>
<th>Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Treasuries</td>
<td>✓</td>
</tr>
<tr>
<td>Federal Agencies</td>
<td>✓</td>
</tr>
<tr>
<td>Certificates of Deposit</td>
<td>✓</td>
</tr>
<tr>
<td>Repurchase Agreements</td>
<td>✓</td>
</tr>
<tr>
<td>Local Government Investment Pools</td>
<td>✓</td>
</tr>
<tr>
<td>Municipal Securities</td>
<td>✓</td>
</tr>
<tr>
<td>Commercial Paper</td>
<td>✓</td>
</tr>
<tr>
<td>Corporate Notes</td>
<td>✓</td>
</tr>
<tr>
<td>Mutual Funds (Equity)</td>
<td>NO</td>
</tr>
</tbody>
</table>
Develop an Investment Leadership Team

This “fiduciary” thingy really complicates exploiting my job to get stinking rich.
Develop an Investment Leadership Team

- **Fiduciary responsibility** – Legal obligation of one party to act solely in the best interest of another party
  - Rests ultimately with the public entity
  - Investment advisors also have a fiduciary responsibility
  - Funds collected and invested on behalf of constituents
  - Stringent oversight by citizens and press

- **Explicit delegation of authority** to an investment officer, typically the treasurer

- **Investment Committee**
  - Define investment objectives
  - Develop adequate controls and oversight
  - Review your policies and practices periodically

- **Authorization of an outside Investment Advisor**

---

Create an Investment Policy
Define Investment Objectives

For general operating, reserves, and bond proceeds:

- Protect principal
- To meet ongoing and uncertain needs
- Maximize earnings
- While simultaneously providing safety and liquidity

Investment Policy Statement

Develop, Review, Amend, Improve … Then Review, Amend, and Improve again 😊

- Objectives
- Standard of Prudence
- Ethics & Conflicts
- Delegation of Authority
- Selection of Broker / Dealers
- Competitive Selection
- Safekeeping and Custody
- Internal Controls
- Authorized Investments
  - Specifically define
- Belts and Suspenders
- Diversification
  - Sector
  - Issuer
- Maximum Maturity
- Security Downgrades
  - What to do?
- Performance and Reporting Standards
- Sustainability Factors
Determine the Portfolio Management Team

Options for Illinois Public Entities

- **Internal management**
  - Staff purchasing individual securities through broker/dealer
  - Certificates of deposit (CDs)
  - Local Government Investment Pool

- **External management**
  - Hire an independent investment advisor

- **Combination of internal and external management**
Investment Advisor vs Broker/Dealer

**SEC Registered Investment Advisor**
- Fiduciary Responsibility
- Fees are fully disclosed
- Owns no portfolio or inventory of securities
- Fees based on assets under management

**Broker/Dealer**
- Suitability responsibility
- May be undisclosed fees
- Can set price and sell from own inventory of securities
- Fees based on transactions plus difference between bid and ask price

Potential Benefits of Utilizing an Investment Advisor

- Complement to Internal Resources.
- Independent Audit of Investment Program.
- Enhanced Internal Controls and Potential Audit Savings.
- Transaction Cost Savings.
- Enhanced Portfolio Return.
- Diversification.
- Continuity.
- Personnel Time.
- Access to Technology and Outside Data Sources.

*Source: GFOA's "An Introduction to Investment Advisers For State and Local Governments"
Potential Disadvantages of Utilizing an Investment Advisor

- Cost.
- Oversight and Responsibility.
- Reputational Risk.

*Source: GFOA's "An Introduction to Investment Advisers For State and Local Governments"

Establish a Risk Profile
Credit Risk
The risk of loss due to the failure of the security issuer or backer

Market Risk
The risk that changes in the market will reduce the value if sold prior to maturity

Custodial Risk
The risk that the custodian of the investment will not have funds available when requested

Interest Rate Risk
The risk that the market value of securities will fall due to changes in general interest rates

Liquidity Risk
The risk that the investment portfolio is not sufficiently liquid to meet cash flow needs

Reputational Risk
The risk that government officials will lose stature by making investment mistakes / errors

Public Funds – High Quality Fixed Income

- The overall market is made up of a broad spectrum of asset classes
- Most public funds are invested in conservative and liquid assets
- Diversified asset classes may be used for pensions, OPEBs, endowments, foundations, etc.
### Yield Environment as of February 6, 2020

<table>
<thead>
<tr>
<th>Maturity</th>
<th>Treasury</th>
<th>Federal Agency</th>
<th>AA Corporate</th>
<th>A Corporate</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Month</td>
<td>1.52%</td>
<td>1.54%</td>
<td>1.60%</td>
<td>1.67%</td>
</tr>
<tr>
<td>6-Month</td>
<td>1.52%</td>
<td>1.52%</td>
<td>1.60%</td>
<td>1.65%</td>
</tr>
<tr>
<td>1-Year</td>
<td>1.50%</td>
<td>1.52%</td>
<td>1.66%</td>
<td>1.73%</td>
</tr>
<tr>
<td>2-Year</td>
<td>1.44%</td>
<td>1.46%</td>
<td>1.61%</td>
<td>1.72%</td>
</tr>
<tr>
<td>3-Year</td>
<td>1.44%</td>
<td>1.44%</td>
<td>1.64%</td>
<td>1.77%</td>
</tr>
<tr>
<td>5-Year</td>
<td>1.46%</td>
<td>1.52%</td>
<td>1.81%</td>
<td>1.94%</td>
</tr>
</tbody>
</table>

Source: Bloomberg BVAL yield curves for Treasury and Corporate. TradeWeb for Federal Agency yields. 3 and 6 month corporate yields from commercial paper; A-1+ for AA and A-1 for A. Yields are for indicative purposes only; actual yields may vary by issue.

### Potential Benefits of Investing in Corporate Securities

- Potential for increased interest earnings and return
- Increased diversity can reduce volatility
- Changing face of fixed income universe

### Total Return of Fixed Income Sectors

**As of December 31, 2019**

- **Past Year**: U.S. Treasury 5.50%, Agency 3.00%, Corp A - AAA 2.50%
- **Past 3 Years**: U.S. Treasury 3.00%, Agency 2.00%, Corp A - AAA 1.50%
- **Past 5 Years**: U.S. Treasury 2.00%, Agency 1.00%, Corp A - AAA 0.50%

Source: 1-3 Year ICE BofA Merrill Lynch indices from Bloomberg as of 12/31/2019. Returns are presented on an annualized basis.
Sample Credit Screening Process

- Universe of Potential Issuers
  - Minimum rating requirements
  - Availability of supply
  - Relative value analysis

- Preliminary Screen
  - Improving or stable ratings
  - Diversity of revenue/profits
  - Capital structure
  - Strength of financial position
  - Industry leadership
  - Superior product
  - Management team

- Industry Screen
  - Economic outlook
  - Outlook for industry growth
  - Geographic exposure
  - Changes in regulatory environment

- Issuer Screen
  - Improving or stable ratings
  - Diversity of revenue/profits
  - Capital structure
  - Strength of financial position
  - Industry leadership
  - Superior product
  - Management team

- Approved Issuer List

Information Sources:
- Independent research
- Company releases
- Sell side analysis
- News releases
- Company financials
- Ratings reports
- Security valuation

Investment Opportunities in Longer Maturities

- Longer strategies can increase earnings potential, however they also come with increased risk

<table>
<thead>
<tr>
<th>Bank of America Merrill Lynch Treasury Index</th>
<th>Duration (years)</th>
<th>Annualized Total Return</th>
<th>Cumulative Value of $25 Million</th>
<th>Quarters With Negative Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>3M T Bill</td>
<td>0.23</td>
<td>1.78%</td>
<td>$35,554,687</td>
<td>0 out of 80</td>
</tr>
<tr>
<td>1 Yr Treasury</td>
<td>0.99</td>
<td>2.30%</td>
<td>$39,443,072</td>
<td>6 out of 80</td>
</tr>
<tr>
<td>1-3 Yr Treasury</td>
<td>1.87</td>
<td>2.84%</td>
<td>$43,766,020</td>
<td>12 out of 80</td>
</tr>
<tr>
<td>1-5 Yr Treasury</td>
<td>2.61</td>
<td>3.34%</td>
<td>$48,255,589</td>
<td>20 out of 80</td>
</tr>
<tr>
<td>1-10 Yr Treasury</td>
<td>3.72</td>
<td>3.95%</td>
<td>$54,315,914</td>
<td>23 out of 80</td>
</tr>
</tbody>
</table>

Source: Bloomberg, Bank of America / Merrill Lynch Global Indices; based on historical results – future results may vary. As of December 31, 2019.
Risk vs Reward: 20-Year Growth of a Dollar

<table>
<thead>
<tr>
<th>Index</th>
<th>Duration</th>
<th>Annualized Total Return</th>
<th>Cumulative $ of $25,000,000</th>
<th>Quarters with Negative Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Month Treasury Bill</td>
<td>0.23</td>
<td>1.78%</td>
<td>$35,554,687</td>
<td>0</td>
</tr>
<tr>
<td>1 Yr US Treasury</td>
<td>0.99</td>
<td>2.30%</td>
<td>$39,443,072</td>
<td>6</td>
</tr>
<tr>
<td>1-3 Yr US Treasury</td>
<td>1.87</td>
<td>2.84%</td>
<td>$43,766,020</td>
<td>12</td>
</tr>
<tr>
<td>1-5 Yr US Treasury</td>
<td>2.61</td>
<td>3.34%</td>
<td>$48,255,589</td>
<td>20</td>
</tr>
<tr>
<td>1-10 Yr US Treasury</td>
<td>3.72</td>
<td>3.95%</td>
<td>$54,315,914</td>
<td>23</td>
</tr>
</tbody>
</table>

Source: Bloomberg, Bank of America / Merrill Lynch Global Indices; based on historical results – future results may vary. As of December 31, 2019.
**Cash Flow is Key**

- Identifies “core” vs liquid funds
- Identifies trends in cash balances
- Ensures adequate liquidity and enhances cash management techniques
- Can increase investment income
  - Amounts available for investment
  - Period of time to hold the investment
- There are advantages to keeping money liquid
  - Money is available for unexpected expenses
  - Funds usually earn interest in fully-liquid accounts
- There are also costs to keeping cash on hand
  - Lost investment income
  - Market risk

**Cash Flow Analysis Leads to Prudent Investment Decisions**

- Excess liquidity in an investment management program can be an opportunity cost
- Detailed cash flow analysis can help prudently define fund balances that can be invested in intermediate – to longer-term investments at potentially higher yields.

**Sample Cash Flow Analysis**

*June 2018 through June 2021*

---

**Overnight Liquidity**
- 100% liquid
- Fully flexible
- Overnight

**Liquidity Surplus**
- Laddered investments to known upcoming cash flows

**Core Reserves**
- Intermediate and longer investments
- Potentially higher returns over time
- Employ active management tactics

---

*For Illustrative purposes only*
Cash Flow Information Sources

- Bank statements
- General ledger balances
- Budgets
- Capital project spending
- Schedule of investments
- Payroll Summary Reports
- A/P Schedules

Market Update
Yields Start the New Year Lower

U.S. Treasury Yield Curve

<table>
<thead>
<tr>
<th>Maturity</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 M</td>
<td>1.55%</td>
</tr>
<tr>
<td>1 Y</td>
<td>1.46%</td>
</tr>
<tr>
<td>2 Y</td>
<td>1.65%</td>
</tr>
<tr>
<td>3 Y</td>
<td></td>
</tr>
<tr>
<td>4 Y</td>
<td></td>
</tr>
<tr>
<td>5 Y</td>
<td></td>
</tr>
<tr>
<td>10 Y</td>
<td></td>
</tr>
<tr>
<td>30 Y</td>
<td></td>
</tr>
</tbody>
</table>

Source: Bloomberg, as of 2/5/2020.

Treasury Yields Falling Amid Global Growth Concerns

2020 YTD Change in Yield

<table>
<thead>
<tr>
<th></th>
<th>0.01%</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Month</td>
<td>-0.09%</td>
</tr>
<tr>
<td>12-Month</td>
<td>-0.19%</td>
</tr>
<tr>
<td>2-Year</td>
<td>-0.24%</td>
</tr>
<tr>
<td>3-Year</td>
<td>-0.31%</td>
</tr>
<tr>
<td>5-Year</td>
<td>-0.35%</td>
</tr>
<tr>
<td>7-Year</td>
<td>-0.36%</td>
</tr>
<tr>
<td>10-Year</td>
<td>-0.37%</td>
</tr>
<tr>
<td>30-Year</td>
<td></td>
</tr>
</tbody>
</table>

Source: Bloomberg, as of 2/10/2020.
The Fed Is on Hold, but the Market Expects a Rate Cut by Year-End

Target rate (mid-point)


“I would say now there are grounds for what I would call cautious optimism about the outlook for the global economy... We are not all assured of a global rebound, but there are signs and reasons to expect it – and then comes the coronavirus.” -- Fed Chair Jerome Powell January 29, 2020

Summary

- Follow your Investment Policy and review it annually
- Devote the time to develop an investment strategy
- Don't expect higher returns without higher risks
- Be proactive
- Engage your program partners/vendors for support
- Look to GFOA for Best Practices and sample documents
Links to GFOA Referenced Documents

- GFOA Best Practice “Investment Program for Public Funds”:
  http://www.gfoa.org/investment-program-public-funds

- GFOA’s Best Practice “Cash Flow Analysis”:
  http://www.gfoa.org/cash-flow-analysis

- GFOA’s Best Practice “Investment Policy”:
  http://www.gfoa.org/investment-policy

- GFOA’s “An Introduction to Investment Advisers For State and Local Governments”:

Disclaimers

PFM is the marketing name for a group of affiliated companies providing a range of services. All services are provided through separate agreements with each company.

This material is for general information purposes only and is not intended to provide specific advice or a specific recommendation, as it was prepared without regard to any specific objectives or financial circumstances. It is based on information obtained from sources generally believed to be reliable and available to the public; however, PFM’s asset management group cannot guarantee its accuracy, completeness or suitability. The views expressed within this material constitute the perspective and judgment of PFM’s asset management group at the time of distribution and are subject to change.

Investment advisory services are provided by PFM Asset Management LLC which is registered with the Securities and Exchange Commission under the Investment Advisers Act of 1940. The information contained is not an offer to purchase or sell any securities. Additional applicable regulatory information is available upon request.
Process of Issuing Bonds for an Illinois City or Village
Champaign, Illinois February 27, 2020

Bob Vail
Sr. Vice President
Bernardi Securities, Inc.

Kevin Wills
Investment Banking Specialist
Bernardi Securities, Inc.

Jim Snyder
Partner
Ice Miller LLP

Kathy Thomas
Municipal Disclosure Administrator
Ice Miller LLP

'That is Insane': Muni Yields at the Lowest Since Elvis Was King

- The bond market's oldest yield index hits lowest since 1956
- Steady influx of cash into market is keeping a rally going

By Danielle Moran and Mallika Mitra

(Bloomberg) — The last time municipal-bond yields were this low Dwight D. Eisenhower was the president, Elvis Presley released his second studio album and Grace Kelly married Monaco's Prince Rainier III.

The Bond Buyer's 20-year index of general-obligation bonds reset at 2.56% this week, the lowest since June 1956, according to Bloomberg's records. And for some context, that year some $5.4 billion of new long-term bonds were sold, a sum that's now considered a somewhat slow week.

The 20-bond index is the oldest gauge of yields in the tax-exempt securities market, started by the newspaper in 1917.

"That is insane," said Nisha Patel, the director of portfolio management at Parametric, an affiliate of Eaton Vance Management. She said the massive amounts of money that have been flowing into mutual funds have driven down absolute yields, most notably for long-dated debt, as investors hunt for bigger payouts.
- Bond Buyer Weekly 20 G.O. Index
- 10 Yr. History, January 2010 – January 2020

- Bond Buyer Weekly 20 G.O. Index
How an Illinois City or Village Can Issue Bonds

- Determine the need for financing
  - Project
  - Working Capital
  - Refinancing

<table>
<thead>
<tr>
<th>TYPE OF DEBT</th>
<th>SECURITY</th>
<th>GENERAL REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Obligation</td>
<td>Full faith and credit; backed by the ad valorem taxing power of the issuer.</td>
<td>No statutory debt limit and no need for voter approval to issue bonds. Flexibility to borrow, 40 year maximum term.</td>
</tr>
<tr>
<td>Home Rule</td>
<td></td>
<td>Referendum unless exception. Statutory debt limit of 8.625% of EAV. BINA hearing required. In tax-levied counties, non-voted general obligation bonds may be issued as limited bonds, payable from debt service extension on a county basis. Generally 20 year maximum term.</td>
</tr>
<tr>
<td>General Obligation</td>
<td>Full faith and credit; backed by the ad valorem taxing power of the issuer.</td>
<td>Referendum unless exception. Statutory debt limit of 8.625% of EAV. BINA hearing required. In tax-levied counties, non-voted general obligation bonds may be issued as limited bonds, payable from debt service extension on a county basis. Generally 20 year maximum term.</td>
</tr>
<tr>
<td>Non-Home Rule</td>
<td></td>
<td>Referendum unless exception. Statutory debt limit of 8.625% of EAV. BINA hearing required. In tax-levied counties, non-voted general obligation bonds may be issued as limited bonds, payable from debt service extension on a county basis. Generally 20 year maximum term.</td>
</tr>
<tr>
<td>Alternate Revenue Bonds</td>
<td>“Double-barreled” - payable from a specific revenue source with the general obligation of the municipality serving as backup security.</td>
<td>Pledged revenues must meet coverage requirement of 1.25 times debt service. Backdoor referendum procedures and BINA hearing required. 40 year maximum term.</td>
</tr>
<tr>
<td>Debt Certificates</td>
<td>No separate tax levy backing; obligation is a promise to pay from lawfully available funds.</td>
<td>Borrow money by entering into installment contract agreement. No backdoor referendum or BINA hearing required. Statutory debt limit of 8.625% of EAV. 20 year maximum term.</td>
</tr>
<tr>
<td>Revenue</td>
<td>Specific revenue source.</td>
<td>Varies by type of revenue. Referendum and BINA hearing not required. 40 year maximum term.</td>
</tr>
<tr>
<td>Special Service Area</td>
<td>Full faith and credit of the taxable real property in the special service area.</td>
<td>Need hearings, notice and various other requirements. 30 year maximum term.</td>
</tr>
<tr>
<td>Tax Increment Finance Revenue</td>
<td>Future incremental property tax growth from project, TIF area or contiguous TIF district.</td>
<td>Validly created TIF; TIF eligible costs only.</td>
</tr>
</tbody>
</table>
Hire the “Players”

Professionals Involved in a Negotiated Municipal Bond Financing Transaction

Players and Their Roles

- **Municipality**
  - Main participant
  - Generally responsible for the repayment of the debt

- **Underwriter**
  - A bank, investment banking firm or broker-dealer that purchases the debt from the municipality in a competitive or negotiated transaction
  - Assumes the risk of purchasing the bonds for re-sale to investors
  - In a negotiated sale
    - Assists in structuring the debt
    - Assists the financial/municipal advisor and municipality with the rating preparation
    - Reviews bond documents
    - May be sole manager, senior manager, co-manager, or in a selling group
  - In a competitive sale
    - Submits a bid based on the information presented in the Notice of Sale
    - Does not participate in preparing an issue for market

*Source: MSRB

*Participation depends upon type, size, and features of a transaction
Players and Their Roles (cont’d)

- **Financial/Municipal Advisor**
  - Represents the municipality in debt issuances

- **Placement Agent**
  - A broker-dealer that acts as agent to place a new issue directly with investors
  - May be used for small, risky, or more complex issues

- **Bond Counsel**

- **Disclosure Counsel**

- **Local Counsel**

- **Underwriter’s Counsel**

---

Players and Their Roles (cont’d)

- **Bond Registrar**
  - Bank that is responsible for maintaining records of the owners of the registered bonds

- **Paying Agent**
  - Bank that is responsible for transmitting payment of principal and interest from a municipality to the holder of the security
  - Typically the paying agent and the bond registrar are the same entity, but they do not have to be

- **Escrow Agent**
  - Bank that holds in escrow the securities purchased in a refunding issue or holds tax levy money pursuant to a tax depository agreement
Players and Their Roles (cont’d)

Rating Agency

- A company that provides ratings which indicate the relative credit quality or liquidity characteristics of a debt issue
- Moody's Investors Service, Standard & Poor's, Fitch Ratings, and Kroll Bond Rating Agency are the agencies which provide ratings on municipal debt issues
- Requires certain information from the municipality in order to conduct its analysis – audits, budgets, strategic plans, etc.

Bond Insurance Company

- Issues a bond insurance policy that guarantees the payment of principal and interest to the holders of the security
- Assured Guaranty and Build America Mutual are the only bond insurers currently in existence with investment grade ratings from the rating agencies
  - AGM’s financial strength is rated "AA" (stable outlook) by S&P, "AA+" (stable outlook) by Kroll and "A2" by Moody’s
    - AGC requested that Moody’s withdraw its financial strength ratings of AGC and AGUK in January 2017, but Moody’s declined that request. Moody’s continues to rate AGC and AGUK.
  - BAM’s financial strength is rated "AA/ Stable" by S&P
- Reduces interest cost to municipalities
- Provides security to investors
- Provides higher rating to a municipality than could be achieved on its own
- This industry has changed drastically in recent years
Players and Their Roles (cont’d)

- Depository Trust and Clearance Corporation – DTCC
  - DTCC, through its subsidiaries, provides clearing, settlement and information services for equities, corporate and municipal bonds, government and mortgage-backed securities, money market instruments and over-the-counter derivatives
  - Certain documents from most municipal debt issues must be submitted to DTCC in order to close the transaction
  - Serves as a central location or depository where bonds or certificates are maintained
  - Changes of ownership using "book-entry" accounting methods where no certificates actually change hands are recorded in a central location

Sample Timeline

- General Obligation Bonds
  - Debt limit
    - Cities/villages: 8.625%
    - Counties: 2.875% (non-voted debt)
    - 5.750% (voted and non-voted debt)
  - BINA hearing
  - Adopt bond ordinance
  - Close/Fund

- Alternate Revenue Bonds (not subject to debt limit)
  - Adopt authorizing ordinance
  - Publish authorizing ordinance and notice of intent
  - Wait 30 days
  - BINA hearing
  - Adopt bond ordinance
  - Close/Fund
Sample Timetable (cont’d)

- Voted Bonds
  - Adopt referendum ordinance
  - Publish and post election notice
  - Pass with majority vote of taxpayers
  - Adopt bond ordinance
  - Close/Fund

Official Statement Preparation

- Review term sheet and timeline provided by the municipal advisor or underwriter
  - It will have the amount and type of issue and appropriate legal authorizations required, and relevant due dates

- Review relevant ordinances for current and prior deal specifics

- Research outstanding debt for the issuer, and determine debt capacity, if a non-home rule issuer
  - Information found in the issuer’s audit, on EMMA at https://emma.msrb.org/ or on the State Comptroller’s website at https://illinoiscomptroller.gov/financial-data/local-government-division/local-government-data/searchform/?SearchType=AFRSWarch
Review issuer’s website to gather as much needed information as possible

Request issuer specific information from the issuer early in the process – review issuer’s website and audits first

Conduct on-line research on required relevant data

- Websites reviewed
  - U.S. Census at [data.census.gov](http://data.census.gov) for population, employment categories, income, and home values

- County research - County Clerk’s, Treasurer’s, and Assessor’s websites for equalized assessed values, tax rates, tax collections and extensions, large taxpayers

Once initial draft of the official statement is completed, send to attorneys internally for review and input on legal matters

- After initial draft has been thoroughly reviewed by attorneys, it is sent to the issuer and others on the team for their review
  - Multiple drafts may be required
- It is very important for the issuer to do its own thorough review of the document as in the end, it is their responsibility for its accuracy
- Issuer provides assurances in the due diligence call that it has reviewed it
A two-week turn around for the initial draft is generally preferred

Continuing disclosure review conducted, does not have to be done prior to sending out initial draft

Final Official Statement prepared

- Once the issue has priced, the final official statement is prepared and sent out for review by the issuer and bond team
- Once everyone signs off, the final official statement is made into a PDF and sent to the underwriter/purchaser for posting on EMMA

---

Municipal Bond Investors

- Investors in 2019 - 3rd Qtr.
- Investors in 2009

Source: Securities Industry and Financial Markets Association
Municipal Issuance

- 2019: $423.4 Billion
- 2018: $346.1 Billion
- 2017: $449.0 Billion

Why Investors Buy Municipal Bonds

- Investors buy municipal bonds for other reasons besides yield, primarily safety.
- Some municipalities are rated higher than the U.S. Government (S&P “AA+”) – for example Northbrook, Illinois (S&P “AAA”).
  - 10-Years after being rated “Aaa”:
    - Municipal Bond Default Rate: 0.00%
    - Corporate Bond Default Rate: 0.38%
  - 10-Years after being rated “Baa3 to Baa1”:
    - Municipal Bond Default Rate: 0.40%
    - Corporate Bond Default Rate: 3.93%
- BSI has recent seen increased investor demand:
  - Investors have become wary of stock market volatility
  - Fear economic cycle is in later stages
Marketing a Municipal Bond Issue

- Typical marketing period takes 3 to 5 days depending on the complexity of the issue:
  - **Presale Announcement:**
    - 3 to 5 days before the underwriting period.
    - Preliminary Official Statement sent to potential investors so they are aware of the upcoming issue and put on their calendars.
  - **Preliminary Pricing:**
    - Preliminary pricing information sent the day before underwriting.
    - Used to gather indications of interest and set preliminary pricing levels.
  - **Official Pricing:**
    - Specific order period is set to gather orders on the bonds.
    - After the order period, yield scale is adjusted depending on the strength weakness of orders.
    - Scale is finalized and Bond Purchase Agreement is executed.

Marketing Specifics – Local Investors

- **Marketing Focus on Local Investors**
  - To anchor the issuance and provide strong pricing levels.
  - No different than an anchor tenant for a real estate project (e.g. grocery store).

- **Illinois Penalty (State of Illinois rated S&P “BBB-“)**
  - Poor reputation from a credit perspective, especially from out-of-state, unfamiliar investors.
  - Even though an issuer is well run and fiscally sound, investors look for higher yields because they are located in Illinois.

- **Targeting Local Investors**
  - Other marketing strategies, including:
    - Local Investor Seminars
    - Ad in local newspapers
    - Postcard Mailings to local residents
Marketing - Example of Postcard Mailing

Local Issuer, IL has hired Bernardi Securities to underwrite new tax exempt bonds*.

To invest in bonds from this local underwriting or learn more about the offering, contact Bernardi Securities:

312-281-2015
matt.bernardi@bernardisecurities.com

* Securities described as tax-free or tax-exempt imply that the income is exempt from current federal income tax. These securities may be subject to state and local taxes, the federal alternative minimum tax (AMT), capital gains tax, or other taxes.

New Municipal Bond Issue
Local Issuer, IL

www.bernardisecurities.com
312-281-2015

Closing

January 24, 2019

Mr. George Bailey, Mayor
City of Decatur
P.O. Box 67
Decatur, IL 62526

Dear Mr. Bailey:

On February 25, 2019, the above referenced issue through Bernardi Securities, Inc. will delist

$1,000,000 General Obligation Bonds, Series 2019

We will transfer Mary F. Porter to work in the amount of $1,000,000 for payment from the City's

Bettefer Park Trust and Savings

ABA#: 062100022
Routing#: 053000022

Mary F. Porter will also make the following checks:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Cashier's Check)</td>
<td>$999,995.00</td>
</tr>
<tr>
<td>(Cashier's Check)</td>
<td>$5,000.00</td>
</tr>
<tr>
<td>(Cashier's Check)</td>
<td>$2,200.00</td>
</tr>
<tr>
<td>(Cashier's Check)</td>
<td>$1,300.00</td>
</tr>
<tr>
<td>(Cashier's Check)</td>
<td>$1,490.00</td>
</tr>
<tr>
<td>(Cashier's Check)</td>
<td>$1,490.00</td>
</tr>
<tr>
<td>(Cashier's Check)</td>
<td>$1,490.00</td>
</tr>
<tr>
<td>(Cashier's Check)</td>
<td>$1,490.00</td>
</tr>
<tr>
<td>(Cashier's Check)</td>
<td>$1,490.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$999,995.00</strong></td>
</tr>
</tbody>
</table>

It’s been a pleasure working with you. Please do not hesitate to call me at (515) 397-8972 if you have

Mary F. Porter

Bernardi Securities, Inc.
Legal Roles

■ Bond Counsel

- Law firm retained by the municipality to give a legal opinion stating that the municipality is authorized to issue the proposed debt, and that the municipality has met all legal requirements necessary for the issuance of the debt.
- Provides a legal opinion that the debt is a legal, valid, and binding obligation of the municipality.
- Provides a legal opinion as to the federal tax status of the interest on the debt – tax-exempt or taxable – and, where applicable, as to state and local taxation.
- Prepares authorizing ordinances, bond ordinances, trust indentures, and other legal proceedings of an issue.
- Represents the municipality but also drafts bond documents.

Legal Roles (cont’d)

■ Disclosure Counsel

- Prepares all necessary legal documents required for the marketing of the bonds to the public.
- Conducts due diligence and reviews relevant municipal disclosure information.
- Provides disclosure statement (10b-5 Statement).
- The SEC has intensified its regulation of municipal bond transactions in recent years. For example, its MCDC Initiative targeted Issuers who failed to comply with disclosure obligations. As part of its enforcement, the SEC has imposed numerous fines on municipalities and their employees and officers, and in a recent case a municipal official was sentenced to prison for misleading investors. The federal government takes municipal bond disclosure obligations very seriously and, therefore, Issuers must also. One way the Issuer can demonstrate this is to hire disclosure counsel to draft, or at a minimum, review, the official statement and provide other disclosure and due diligence services.
Legal Roles (cont’d)

- Local Counsel
  - Represents the municipality
  - May be on staff, or brought into the transaction for a specific issue – i.e. in-house attorney is not familiar with the transaction
  - Involvement varies depending on desire of municipality

- Underwriter's Counsel
  - Typically retained by the underwriter in a negotiated transaction
  - Represents the underwriter
  - Prepares the agreement among underwriters when more than one underwriter is part of the financing team
  - Often conducts due diligence as requested by the underwriter – reviews relevant municipality disclosure information
  - Reviews the municipality's bond ordinance and other documentation on behalf of the underwriter
  - Prepares the bond purchase agreement

Disclosure Obligation

- The obligation for the accuracy and completeness of the disclosure lies with the Issuer
  - Experts help, but cannot completely discharge the Issuer’s obligation
  - Issuer, Underwriter, Municipal Advisor and attorneys all have potential anti-fraud liability for material misstatements or omissions in official statements
  - Obligation goes beyond paying bonds - the SEC can bring an enforcement action even if debt service on bonds is being paid.
  - The process of revising and updating disclosure should not be viewed as a mechanical insertion of more current numbers.
Is Anybody Watching?

- Federal Income Tax
  - IRS
    - Audit of Bonds
      - IRS contacts Issuer
    - Post-Issuance Compliance Check Programs
    - Voluntary Closing Agreement Program (VCAP)

- Who Is Investigating Municipal Disclosure?
  - SEC Public Finance Abuse Unit
    - The Unit investigates and litigates cases involving violations of the federal securities laws, specifically those matters concerning municipal bonds and public pensions.
    - The Unit is made up of approximately 30 attorneys, experts, and staff from SEC offices around the country (with 4 people in Chicago).
    - Department of Justice

Disclosure Best Practices

- Due Diligence Calls
  - Process:
    - Issuer is provided a copy of the Preliminary Official Statement for review in advance of the call
    - Underwriter/Municipal Advisor, Counsel and the Issuer on the call
    - Review/acknowledge completed Due Diligence Questionnaire
  - Questions regarding:
    - Accuracy of POS
    - Changes in financial affairs since Financial Statements
    - Audits, investigations, litigation
    - Employees and employee relations
    - Major taxpayer/employer status
    - Compliance with prior continuing disclosure undertakings
    - Issuer should raise “material” issues not covered by questions
Disclosure Best Practices (cont’d.)

□ Adopt disclosure policies and procedures

□ In private or direct placement:
  ▪ Have purchaser sign an investor letter

□ In public offering subject to Rule 15c2-12:
  ▪ Establish (and follow) disclosure procedures
  ▪ Underwriter’s Counsel, Disclosure Counsel and “customary 10b-5 statement”

Rule 15c2-12 Compliance

□ Rule 15c2-12 requires the final official statement set forth a description of any instances in the previous five years in which the issuer/obligation person failed to comply, in all material respects, with any previous undertakings (e.g. failure to timely file annual financial information or reportable event notice).

□ As Disclosure Counsel, Ice Miller reviews the issuer’s previous filings for instances of noncompliance, drafts and makes any necessary remedial filings on EMMA, and includes any necessary disclosures in the official statement.

□ To review for instances of noncompliance, we use the issuer’s audits and EMMA to compile a list of the issuer’s debt obligations that were outstanding at any time within the previous five years.

□ Next, we review the issuer’s offering documents and continuing disclosure undertakings to determine certain information about the issuer and the obligations, such as the annual financial information required to be filed, the date such information is required to be filed, and the ratings assigned to the obligations.
Rule 15c2-12 Compliance (cont’d.)

- Finally, we review the issuer’s filings on EMMA, rating agency reports, and other publicly available data to ensure complete annual financial information and notices of the occurrence of any reportable events (e.g. rating changes, payment delinquencies, etc.) were filed in a timely manner.

- If any instances of noncompliance are discovered, we draft and file any necessary remedial filings and notices and craft the appropriate disclosure language for the official statement to bring the issuer into compliance.

After the effective date of the 2018 Amendments, issuers/obligated persons have become more involved in the process to determine if any reportable event filings are required for its financial obligations not posted on EMMA (e.g. private placements).

Recent 15c2-12 Amendment

The SEC adopted amendments to Rule 15c2-12 that require continuing disclosure agreements entered into on or after the compliance date (February 27, 2019) to include two new events for which notice must be provided within 10 business days of occurrence:

1. Incurrence of a financial obligation of the obligated person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the obligated person, any of which affect security holders, if material; and

2. Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of the financial obligation of the obligated person, any of which reflect financial difficulties.

HOW HAS THIS BEEN APPLIED IN PRACTICE?
Outlook 2020: SEC’s Enforcement Priorities

The Chief of the SEC’s Public Finance Abuse Unit expressed that municipal market enforcement activities will focus on offering and disclosure fraud, broker-dealer abuses (including abuses of retail order period), municipal adviser misconduct and breaches of fiduciary duty, municipal advisor registration and professional qualification requirements and conflicts of interest.

How an Illinois City or Village Can Issue Bonds

<table>
<thead>
<tr>
<th>TYPE OF DEBT</th>
<th>SECURITY</th>
<th>GENERAL REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Obligation</td>
<td>Full faith and credit; backed by the ad valorem</td>
<td>No statutory debt limit and no need for voter approval to issue bonds. Flexibility. 40 Year maximum term.</td>
</tr>
<tr>
<td>Home Rule</td>
<td>taxing power of the Issuer.</td>
<td></td>
</tr>
<tr>
<td>General Obligation</td>
<td>Full faith and credit; backed by the ad valorem</td>
<td>Referendum unless exception. Statutory debt limit of 8.625% of EAV. BINA hearing required. In tax capped counties, non-voted general obligation bonds may be issued as limited bonds payable from debt service extension base. Generally 20 year maximum term.</td>
</tr>
<tr>
<td>Non-Home Rule</td>
<td>taxing power of the Issuer.</td>
<td></td>
</tr>
<tr>
<td>Alternate Revenue</td>
<td>“Double-barreled” – payable from a specific</td>
<td>Pledged revenues must meet coverage requirement of 1.25 times debt service. Backdoor referendum procedures and BINA hearing required. 40 year maximum term.</td>
</tr>
<tr>
<td>Bonds</td>
<td>revenue source with the general obligation of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the municipality serving as backup security.</td>
<td></td>
</tr>
<tr>
<td>Debt Certificates</td>
<td>No separate tax levy backing; obligation is a</td>
<td>Borrow money by entering into installment contract agreement. No backdoor referendum or BINA hearing required. Statutory debt limit of 8.625% of EAV. 20 year maximum term.</td>
</tr>
<tr>
<td></td>
<td>promise to pay from lawfully available funds.</td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td>Specific revenue source.</td>
<td>Varies by type of revenue. Referendum and BINA hearing not required. 40 year maximum term.</td>
</tr>
<tr>
<td>Special Service Area</td>
<td>Full faith and credit of the taxable real property in the special service area.</td>
<td>Need hearings, notice and various other requirements. 30 year maximum term.</td>
</tr>
<tr>
<td>Tax Increment Finance Revenue</td>
<td>Future incremental property tax growth from project, TIF area or contiguous TIF district.</td>
<td>Validly created TIF; TIF eligible costs only.</td>
</tr>
</tbody>
</table>
TIME FOR YOUR QUESTIONS

Bob Vail
Sr. Vice President
Bernardi Securities, Inc.
(312) 281-2014

Kevin Wills
Investment Banking Specialist
Bernardi Securities, Inc.
(309) 287-4703

Jim Snyder
Partner
Ice Miller LLP
(312) 726-7127

Kathy Thomas
Municipal Disclosure Administrator
Ice Miller LLP
(312) 726-7159
COMPANY OVERVIEW

Serving the Public Sector for 35 Years

• PMA Financial Network has been a leading provider of financial services to public entities since 1984

The PMA Companies (operating under common ownership)

• Prudent Man Advisors (SEC registered investment advisor)
• PMA Financial Network
• PMA Securities (Registered broker-dealer and municipal advisor member (FINRA and SIPC))

PMA Statistics

• Work almost exclusively with public funds
• The PMA companies collectively have 130+ employees to meet the ongoing needs of our clients

Over $27.5 billion in Assets Under Administration as of 12/31/2019*

• Prudent Man Advisors has over $7.5 billion in investment advisory assets under management (as of 12/31/19)

*Total assets under administration include both money market pool assets for which the PMA Companies serve as fund administrator/accountant, marketer/distributor, fixed income program provider (brokerage services), and/or investment advisory, or separate institutional accounts.
INVESTMENT APPROACH

ASSET ALLOCATION APPROACH

SPECIFY & QUANTIFY INVESTOR OBJECTIVES, CONSTRAINTS & PREFERENCES

PORTFOLIO POLICIES, GUIDELINES & STRATEGIES

EXPECTED RETURNS ACROSS AVAILABLE ASSET SECTORS

ECONOMIC, SOCIAL, POLITICAL & SECTOR CONSIDERATIONS

PORTFOLIO CONSTRUCTION & ASSET ALLOCATION

MONITOR CLIENT INPUT

MONITOR ECONOMIC & MARKET INPUT

PERFORMANCE MEASUREMENT

ECONOMIC & MARKET UPDATE
Quarterly GDP Growth

- Growth moderating
  - Strong consumer
  - Weakness in business spending & exports
- Risks:
  - Rising government debt
  - Contentious presidential election

Global GDP Growth

- Growth may have bottomed in 2019
- Risks:
  - Rising nationalism
  - Trade uncertainty
  - Geopolitical tension
  - Coronavirus

Contributions to %Change in Real GDP

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Change in Private Inventories</th>
<th>Net Exports</th>
<th>Residential Investment</th>
<th>Business Fixed Investment</th>
<th>Personal Consumption Expenditures</th>
<th>Real GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec-17</td>
<td>3.5</td>
<td>2.5</td>
<td>2.5</td>
<td>3.5</td>
<td>2.9</td>
<td>2.1</td>
</tr>
<tr>
<td>Mar-18</td>
<td>2.5</td>
<td>1.1</td>
<td>3.1</td>
<td>2.0</td>
<td>3.1</td>
<td>2.0</td>
</tr>
<tr>
<td>Jun-18</td>
<td>3.5</td>
<td>1.1</td>
<td>3.1</td>
<td>2.0</td>
<td>3.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Sep-18</td>
<td>2.5</td>
<td>1.1</td>
<td>3.1</td>
<td>2.0</td>
<td>3.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Dec-18</td>
<td>2.9</td>
<td>1.1</td>
<td>3.1</td>
<td>2.0</td>
<td>3.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Mar-19</td>
<td>3.1</td>
<td>1.1</td>
<td>3.1</td>
<td>2.0</td>
<td>3.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Jun-19</td>
<td>2.1</td>
<td>1.1</td>
<td>3.1</td>
<td>2.0</td>
<td>3.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Sep-19</td>
<td>1.1</td>
<td>1.1</td>
<td>3.1</td>
<td>2.0</td>
<td>3.1</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Global GDP Growth

- Growth may have bottomed in 2019
- Risks:
  - Rising nationalism
  - Trade uncertainty
  - Geopolitical tension
  - Coronavirus

Consumer Confidence Around Recessions

- Consumer Confidence Index

Employment

- Change in Nonfarm Payrolls
- Unemployment Rate (U-3)

Source: Bloomberg
• Yield curve steepening
• Fed likely on hold through first half 2020
• Rate volatility to continue in 2020
RARE SIMULTANEOUS RALLY ACROSS ALL ASSET CLASSES

BULL MARKET TURNS 10

Market Milestones

Source: TradingView
VOLATILITY EXPECTED TO INCREASE AS WE MOVE INTO ELECTION YEAR

MARKET IMPACT

- Wider range of likely market paths
- Monetary policy on hold
- Evolving trade war creates uncertainty
- U.S. and global growth decelerating
- Mature credit cycle concerns
- Prudent fiscal policy no longer in vogue
- Increasing geopolitical uncertainty
- Earnings growth slowing
## Market Impact on Public Fund Investments

### Asset Class Impact

| CD’s                  | • Banks issuing less certificates of deposit  
<table>
<thead>
<tr>
<th></th>
<th>• Rates lower as market yields have declined</th>
</tr>
</thead>
</table>
| Collateralized Deposits | • New post-crisis banking regulations make collateral more expensive for banks  
|                       | • Result is less issuance and lower rates     |
| Treasury, Agency and Municipal Securities | • Yields move daily on market news, supply and other factors  
|                       | • Mark-to-market impacts under GASB accounting |
| Corporate Securities  | • Yields move daily on market news, issuer news and other factors  
|                       | • Increased credit monitoring necessary       
|                       | • Mark-to-market impacts under GASB accounting |
Banks increasingly utilize Savings Accounts and Money Market Demand Accounts (MMDA’s) to fund their balance sheets.

**U.S. Bank Deposits**

Source: PMA Financial Network, SNL Financial

U.S. Banks include Commercial Banks, Savings Banks, and Savings & Loan Associations

---

**HOW WILL CHANGES IMPACT OUR INVESTMENT PROCESS?**
Invest with a Purpose
Cash Flow Forecasting
Assess Goals and Objectives
Utilize Full Spectrum of Allowable Investments
Reduce Risk / Enhance Return
• Assess certainty of liability
• Evaluate liquidity risk
• Minimize reinvestment rate risk
• Optimize total return through market cycles
• Diversified portfolios outperform over long-term

Maturity/Duration Target
0-12 Months
12 - 24 Months
>24 Months

Return Target

SHORT-TERM
Operating Reserves

INTERMEDIATE TERM
Mid-term Reserves, Bond Proceeds

LONG-TERM
Long-term Reserves, Debt Service Reserves, OPEB, Pension Funds
A Successful Investment Plan Aligns Strategy to Purpose

**Operating Funds:** (0-12 Months)
- Treasury Bills
- Agency Discount Notes
- CDs
- LGIPs

**Intermediate-Term Reserves:** (1-2 Years)
- CDs
- Treasury Notes
- Agency Notes
- Taxable Municipal Bonds
- Agency Mortgage-Backed Securities
- Corporate Notes

**Long-Term Reserves:** (>2 Years)
- Treasury Notes
- Agency Notes
- Taxable Municipal Bonds
- Agency Mortgage-Backed Securities
- Corporate Notes

**Corporate Securities**

RISK VS. REWARD
Benefits

- Higher yields and return potential
- Increased sector and issuer diversification
- Extend duration with maximum allowable maturities increased to 3 years from 270 days

Risks

- Credit
- Interest rate
- Liquidity
- Concentration

Managing Risk

- Credit research
- Market research
- Diversification
- Professional investment management

INDEX PERFORMANCE ANALYSIS

**Annual Returns**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>1-Year Total Return (%)</th>
<th>3-Year Total Return (%)</th>
<th>5-Year Total Return (%)</th>
<th>10-Year Total Return (%)</th>
<th>10-Year Standard Deviation</th>
<th>Sharpe Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tsy/Agy Index*</td>
<td>3.5</td>
<td>1.9</td>
<td>1.4</td>
<td>1.2</td>
<td>0.98</td>
<td>0.87</td>
</tr>
<tr>
<td>Corporate Index**</td>
<td>5.0</td>
<td>2.8</td>
<td>2.2</td>
<td>2.4</td>
<td>1.40</td>
<td>1.34</td>
</tr>
</tbody>
</table>

Source: Bloomberg, Prudent Man Advisors

* ICE BAML U.S. 1-3 Year Treasuries & Agency Index
** ICE BAML U.S. 1-3 Year AAA-A Corporate Index

Returns for periods greater than 1 year have been annualized. Past performance is no guarantee of future results.
Section 5. Findings and Purpose

(a) The General Assembly finds that consideration of factors relevant to the environmental impact, social impact, and governance of investments is vital for maximizing the safety and performance of public funds. Such sustainability factors are indicative of the overall performance of an investment and are strong indicators of its long-term value. Public agencies and governments have a duty to recognize and evaluate these materially relevant factors.

(b) It is the purpose of this Act to prudently integrate sustainability factors into the investment decision-making, investment analysis, portfolio construction, due diligence, and investment ownership of public funds to maximize anticipated financial returns, minimize projected risks, more effectively execute fiduciary duties, and contribute to a more just, accountable, and sustainable State of Illinois.
• The **investment policy shall include a statement** that material, relevant, and decision-useful sustainability factors have been or are **regularly considered** by the agency, within the bounds of financial and fiduciary prudence, in evaluating investment decisions. Such factors include, but are not limited to: (i) corporate governance and leadership factors; (ii) environmental factors; (iii) social capital factors; (iv) human capital factors; and (v) business model and innovation factors, as provided under the Illinois Sustainable Investing Act.
ESG Investment Planning

Helps Manage Risk and Creates New Research Insight

Public Funds = Public Interest

New Challenges Create Evolving Market Risk

Integrating ESG Analysis

- Consider long-term sustainability, regulatory and reputational risk, in addition to return on investment
- Utilize external providers of data, scoring and ratings
- Form investment opinion based on available information combined with unique community preferences
- Disclosure in this area is developing and variable so coverage for some issuers can be limited (e.g. smaller issuers, non-public companies, municipal issuers and certain banks)

Disclaimer

This document was prepared for clients of Prudent Man Advisors, LLC. It is being provided for informational and/or educational purposes only without regard to any particular user’s investment objectives, financial situation or means. The content of this document is not to be construed as a recommendation, solicitation or offer to buy or sell any security, financial product or instrument; or to participate in any particular trading strategy in any jurisdiction in which such an offer or solicitation, or trading strategy would be illegal. Nor does it constitute any legal, tax, accounting or investment advice or services regarding the suitability or profitability of any security or investment. Although the information contained in this Investment Advisory Report has been obtained from third-party sources believed to be reliable, PMA cannot guarantee the accuracy or completeness of such information. It is understood that PMA is not responsible for any errors or omissions in the content in this document and the information is being provided to you on an “as is” basis without warranties or representations of any kind.

Securities, public finance services and institutional brokerage services are offered through PMA Securities, LLC. PMA Securities, LLC, is a broker-dealer and municipal advisor registered with the SEC and MSRB, and is a member of FINRA and SIPC. Prudent Man Advisors, LLC., an SEC registered investment advisor, provides investment advisory services to local government investment pools and other institutional clients. All other products and services are provided by PMA Financial Network, LLC. PMA Financial Network, LLC, PMA Securities, LLC and Prudent Man Advisors (collectively “PMA”) are under common ownership.

Securities and public finance services offered through PMA Securities, LLC are available in CA, CO, FL, IL, IN, IA, MI, MN, MO, NE, OH, OK, PA, SD, TX and WI. This document is not an offer of services available in any state other than those listed above, has been prepared for informational and educational purposes and does not constitute a solicitation to purchase or sell securities, which may be done only after client suitability is reviewed and determined. All investments mentioned herein may have varying levels of risk, and may not be suitable for every investor. PMA and its employees do not offer tax or legal advice. Individuals and organizations should consult with their own tax and/or legal advisors before making any tax or legal related investment decisions. Additional information is available upon request.

©2020 Prudent Man Advisors, LLC
Did you know?

• Prof. Jose Esteves @IE.EDU
  • PhD in Software – Information Systems, Universidad Politecnica de Catalunya, Barcelona, Spain; Master in Information Systems, Universidade do Minho, Braga, Portugal; Diploma in Business Administration, minor in financial management, Instituto Superior de Tecnologia Empresarial, Porto, Portugal; Engineer in informatics and systems, Universidade do Minho, Braga, Portugal. Focusing on areas such as knowledge management, the implementation of enterprise systems and, more recently, enterprise risk management, Prof Esteves believes it is the way people interact with information technology that will determine the success or failure of its implementation.
  
  2019 version

  https://youtu.be/bTM06NZOyDQ
You cannot discover new oceans unless you have the courage to lose sight of the shore...

author Unknown

Strategic Thinking is Fundamental to Leading-

What’s Ahead?
What Do I Notice?
What Do I Know?
What Can I Learn?

Being a Strategic Leader Is About Asking the Right Questions-

The Future – Our Communities, Our Infrastructure, Our Lifestyle Might Look Like This? ....

https://youtu.be/FaBPoiMNlK

https://youtu.be/J0YM_CGjL0

What might the pace of change mean for the next generation?

10 Things Children Born in 2018 May Never Experience

The world they grow up might be a different place than the one we navigated. One futurist’s view includes no...

- Drivers licenses
- Paper Currency
- Long boring travel
- Language barriers
- Human/biologic monopoly on intelligence
- Non-secure digital interactions
- World hunger
- Quiet spaces
- Single screen computing
- Humanity as a single-planet species

By Patrick Caughill - January 3, 2018, Futurism.com
“Five Lessons for the 21st Century” Barker

"More than anything else, leaders build bridges that help us move from where we are to where we want to be." --Joel Barker

What are strategic issues? Can we define?
NACCHO MAPP Framework

• According to various authors, strategic issues or goals usually follow this pattern of key indicators:
  (*ref. NACCHO MAPP Framework: www.naccho.org/topics/infrastructure/mapp/upload/strategic_issues.pdf)

  • Strategic issues usually include a tension or conflict about a particular issue or ways of doing things that must be resolved.

  • Strategic issues tend to have no obvious best solution.

  • Strategic issues represent a fundamental choice or paradigm shift that must be made at the highest levels of the organization.
What are strategic issues?

• What fits the NACCHO framework? Think of your organization and think of the following:

  ▪ Mandates?
  ▪ Unsolved or unaddressed lingering issues?
  ▪ Things postponed?
  ▪ Things undone?
  ▪ Significant change?
  ▪ Elusive solution?
  ▪ Deep resource deficiency?

Let’s Look at some of the Strategic Changes Around Us-

• What are some of the strategic issues on your civic agenda that might benefit from strategic thinking?

  ▪ Development Patterns
  ▪ Service Changes
  ▪ Changing Demographics
  ▪ Economics
  ▪ Technology
  ▪ Infrastructure
  ▪ Workplace/workforce Dynamics
“Leader-shifting” — J. Barker

For Example, Changing Populations & the Built Environment

• Where will we all live, work and play?
  ▪ People, people, people
  ▪ In October of 2006 the U.S. population topped 300 million (now est. @ 329 million Feb. 2020)
    • We added 100+ million people in the past 40 years
    • Around 2050 we will have added another 40 million

  Source: U.S. Census Bureau Est.

Strategic Changes Example: The Evolving Built Environment

• Land Use Analysis by Virginia Tech
  • Each American uses 20% more land today than 25 years ago
  • By 2000, median size of a single family home was nearly 2,500 square feet [2,520 today—US Census]
  • More than 50% of Americans live within 50 miles of the Atlantic, Pacific, Gulf and Great Lakes coasts on just 1/5th of the land area of the U.S.

  Source: Center for Environment & Population 2011
Strategic Changes Continued-
Projected Impacts of Changes in the Built Environment

- Impact
  - Over the next 25-35 years, additional growth in the U.S. population and built environment will result in about…
    - 60-70 million (est.) new jobs will be created
    - 60-70 million (est.) new homes will be built
    - 100 +/- billion square feet of non-residential structures will be built out
    - Approx. 40-50% of the built environment that will be in place by 2040/50 does not exist today
      - Source: Metropolitan Institute, Virginia Tech and Center for Environment & Population A.C. Nelson 2011

Strategic Changes & Changing Dynamics in Local Government

- Boston and Cincinnati have put collection/load sensors in trash bins
- U of Minnesota is Researching Self-healing Asphalt
- Scientists in the Netherlands, U.S. and Canada are Researching Self-healing Concrete
- South Bend, Indiana has put 115 sensors in 500 miles of sewers
- The rebuilt I-35 Bridge in Minneapolis has 350 built-in sensors (U. Minn. Supercomputing Institute)
Robots Collecting Garbage?

- 2015: Volvo is working on a project that has robots pick up trash while a human oversees everything from the relative comfort of the garbage truck.

2014: Waste Management's Automated Collection System makes trash collection more efficient, safe, and sanitary than old bag and can collection systems.

Fire-fighting Robot Could Change The Game For Local Fire Departments

Posted 5:51 PM, June 20, 2013, by Matt Adams, Web Producer and Kent Erdahl, FOX Local Channel 59 TV.

- “A fire-fighting robot is changing the way an Indiana fire department is attacking industrial fires, and Purdue researchers say it could have helped with the Indianapolis warehouse fire that burned for days last weekend.”

- “A research team at Purdue is trying to help change the way firefighters attack dangerous warehouse fires.” FOX 59 2013
Sewer System and Water Meters Online
Self-driving plows?

“Before EmNet fully installed its network of 115 self-reporting sewer sensors — called CSOnet — in the City’s 500 miles of subterranean tubes and tanks, one pair of city employees traversed South Bend in a pickup truck for 40 hours a week, lifting manhole covers to eyeball water levels and potential problems”
Source: ND Magazine 2010-11

Law Enforcement of the Future?

- One California police agency ran a pilot program to use drones for general law enforcement as a part of their proof-of-concept effort in 2018.
- The Chula Vista Police Department, 250,000 pop. tested the viability of UAVs for in-progress calls.
- Their initial results were encouraging; UAV’s could soon become a part of police deployment in the very near future.
- After just four days, the test resulted in the UAV being deployed 29 times for in-progress calls. Of these deployments, 30 percent were for disturbance-related calls; about 17 percent of the time, UAV pilots were able to check the area and clear the call without patrol officers having to respond. Source: Chief of Police Magazine, 2019
Ok—Things Are Changing, But...

How do we do strategy? How do we make strategy work?

- Strategy is complex.
- Leadership is complex.
- Leaders are asked and expected to develop and execute strategy.

*The reality is that strategy succeeds or fails based on how well leaders, at every level of an organization, integrate strategic thinking into day-to-day operations.* [Lisa Lai, HBR]
Back to the 5 questions that can drive clarity, alignment, and strategic insight…


1) What are we doing today?
2) Why are you doing the work your doing? Why today?
3) How does what you’re doing today align with the bigger picture?
4) What does success look like for our team?
5) What else could we do to achieve more, better, faster?

Source: L. Lai-HBR, 2017

Strategic Thinking—Recognize Barriers
Ron Carucci-Harvard Business Review

“I’m spending all my time managing trivial and tactical problems, and I don’t have time to get to the big-picture stuff.” Ron Carucci, Oct. 2016

Conducted a 10 year study of over 2,700 newly appointed executives:

- 67% of them said they struggled with letting go of work from previous roles.
- More than half (58%) said they were expected to know details about work and projects they believed were beneath their level.
- More than half also felt they were involved in decisions that those below them should be making.
- This suggests that the problem of too little strategic leadership may be as much a function of doing as of thinking.
Strategic Thinking Is Not That Common:

Rich Horwath, CEO of the Strategic Thinking Institute, found in his research that …

• 44% of managers spent most of their time firefighting in cultures that rewarded reactivity and discouraged thoughtfulness.

• Nearly all leaders (96%) claimed they lacked time for strategic thinking, because they were too busy putting out fires.

Source: Ron Carucci, HBR 2016

The Bottom Line [Lisa Lai, HBR]

• Being a strategic leader is about the future…, asking the right questions and then guiding/shaping the right conversation and exchange of ideas

• When you ask the right questions, you stay connected with your team, … and, you raise the team’s collective ability to be ‘strategic thinkers’
How Can You Be More Strategic as a Leader?

• Lisa Lai suggests that leaders need to…

  get in the habit of asking themselves
  the 5 key questions

  they can drive strategic insight…

---

Five Lessons For Leaders In the 21st Century - by Joel Barker

• Focus the majority of your efforts on the future.

• Understand the nature of fundamental change.

• Appreciate complex systems and how they work.

• Examine your leadership style to see how it impacts productivity.

• Create a shared vision to build bridges to the future.

  -Source: Leadershift by Joel Barker
The Future is Coming…

…make time for Strategic Thinking

Resources and Sources

- [https://www.policechiefmagazine.org/remote-drone-dispatch](https://www.policechiefmagazine.org/remote-drone-dispatch) 2019
Understanding the Impact of Ethics and Fraud in Your Organization

February 28, 2020

Introduction
Speaker Introduction

- Principal in assurance practice
- Focus on governments
- 29 years experience

Agenda

- **Ethics in today’s society**
  - Is a culture of high ethics and integrity in an organization even possible in today’s society?
  - Personal and organizational accountability
- **Fraud**
  - Fraud defined, cost and awareness
  - How frauds are detected
  - Fraud examples
  - Anti-fraud measures
Ethics in Today’s Society

Is a Culture of High Ethics and Integrity in an Organization even Possible in Today’s Society?

Raise your hand if you think so!
Definition of High Ethics and Integrity

- Doing the right thing!
- Best interest of the organization.
- Perception matters!
- Transparency matters!

Two Key Concepts to Ensure High Ethics and Integrity

- Personal accountability
  - Begins with YOU making the right choices!

- Organizational accountability
  - Tone at the Top
  - Code of Ethics
Code of Ethics

• Giving employees a general idea of what types of behavior and decisions are acceptable and encouraged at a business.
• Written code helps guide ethical behavior:
  – Can be referred to in decision making
  – Communicates values and expectations to new employees
• Ethical entities will attract and retain better employees.

Sample Code of Ethics

– Hersey
  ◊ No matter what job you do or where you do it, you are Hershey. Think about that as you watch over every business relationship, every transaction, and every product, and make sure your actions always reflect our values.

– Under Armour
  ◊ Make the Right Call. It’s as simple as it sounds. Whenever you’re faced with a decision - big or small - always do what you know is ethically right, and, of course, always follow the law.
Fraud and Ethical Lapses

Association of Certified Fraud Examiners (ACFE)

- World’s largest anti-fraud organization and premier provider of anti-fraud training and education
- Reducing business fraud worldwide and inspiring public confidence in the integrity and objectivity of/within the profession
- Provides Certified Fraud Examiner (CFE) credential
  - Requires meeting professional, educational, and ethical standards and passing rigorous exam on the four major disciplines that comprise the fraud examination body of knowledge: fraud prevention and deterrence, financial transactions and fraud schemes, investigation, and law
- Headquartered in Austin, TX
- 80,000+ members
ACFE Report to the Nations 2018

- Report to the Nations on Occupational Fraud and Abuse, 2018 Global Fraud Study
- Bi-annual report (came out in April 2019)
- Analysis of 2,690 cases of occupational fraud across 125 countries in 23 industries
- Results based on 2017 Global Fraud Survey; opened to 41,788 CFEs about their largest fraud case investigation completed between January 2016 and October 2017
- Facts about: cost of fraud, how fraud is committed, detected, victim organizations, and perpetrators

Seven Key Facts from the Report to the Nations and Our Experience

I. Loss To Organizations

- Typical organizations lose 5% of revenue in a given year as a result of fraud
- Occupational Fraud:
  - The use of one’s occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization’s resources or assets
  - The key to occupational fraud is that the activity:
    - Is clandestine
    - Violates the employee's fiduciary duties to the organization
    - Is committed for the purpose of direct or indirect financial benefit to the employee
II. Fraud Exists in Every Industry and Organization Type

Seven Key Facts from the *Report to the Nations* and Our Experience

![Graph showing median losses in different industries](image-url)

FIG. 15 How does occupational fraud affect organizations in different industries?

- Banking and financial services: Median Loss: $110,000
- Manufacturing: Median Loss: $240,000
- Government and public administration: Median Loss: $125,000
- Health: Median Loss: $100,000
- Retail: Median Loss: $50,000
- Insurance: Median Loss: $153,000
- Education: Median Loss: $68,000
- Orange: Median Loss: $300,000
- Construction: Median Loss: $227,000
- Other: Median Loss: $70,000
- Transportation and warehousing: Median Loss: $140,000
- Food service and hospitality: Median Loss: $90,000
- Technology: Median Loss: $150,000
- Religious, charitable, or social services: Median Loss: $90,000
- Services: Median Loss: $258,000
- Arts, entertainment, and recreation: Median Loss: $88,000
- Telecommunications: Median Loss: $100,000
- Real estate: Median Loss: $180,000
- Agriculture, forestry, fishing, and hunting: Median Loss: $136,000
- Wholesale: Median Loss: $150,000
- Communications and publishing: Median Loss: $208,000
- Wholesale trade: Median Loss: $525,000
- Wholesale: Median Loss: $110,000

![Graph showing percent of cases and median loss by sector](image-url)

FIG. 14 How does an organization’s size relate to its occupational fraud risk?

- Private company: Median Loss: $117,000
- Public company: Median Loss: $118,000
- Government: Median Loss: $75,000
- Not-for-profit: Median Loss: $120,000
- Other: Median Loss: $164,000
Seven Key Facts from the *Report to the Nations* and Our Experience

**III. Prominent Organizational Weakness – Lack of Internal Controls**

**IV. Misappropriation of Assets**

- Most common form of occupational fraud
Seven Key Facts from the *Report to the Nations* and Our Experience

V. Misappropriation of Assets

Billing schemes and check tampering present the greatest risk to organizations.

**Fig. 6** What asset misappropriation schemes present the greatest risk?

VI. First Time Offenders

**Fig. 36** Do perpetrators tend to have prior fraud convictions?
Seven Key Facts from the *Report to the Nations* and Our Experience

**VII. Origin – Accounting Department**

Fig. 28 What departments pose the greatest risk for occupational fraud?

How are Frauds Detected?
What is the most common way that fraud is detected?

Initial Detection of Occupational Frauds

- Tip: 39.1% (2016), 42.2% (2014), 43.3% (2012)
- Internal Audit: 16.5% (2016), 14.1% (2014), 14.4% (2012)
- By Accident: 5.6% (2016), 6.6% (2014), 7.0% (2012)
- Account Reconciliation: 5.5% (2016), 6.6% (2014), 4.8% (2012)
- Other: 0.5% (2016), 0.9% (2014), 1.1% (2012)
- Document Examination: 3.8% (2016), 4.2% (2014), 4.1% (2012)
- External Audit: 3.8% (2016), 3.0% (2014), 3.3% (2012)
Susceptibility to Fraud

• No entity is immune to fraud
• Leaders hire the best and most trustworthy individuals, conduct background checks, implement internal controls, and things still go wrong

Maintaining Professional Skepticism

• Acknowledge that fraud risk exists
• Encourage open and candid discussion – Know your employees
• If I were to try to commit fraud, how would I do it?
• Continuously assess the risk of management and control override (think about collusion)
• Openly display your skepticism to set the tone at the top and spread awareness
• Take swift action when fraud event occurs and make the response action (not the details) known internally
Profile of a Fraudster

What does a fraudster look like?
Who Can Commit Fraud?

Report to The Nations – Some Statistics on Perpetrators

- Perpetrator’s level of authority has been strongly correlated with the size of the fraud
  - Only 19% of frauds in the current study were committed by owners/executives, but the median loss in these cases was $850,000
  - Employees and managers were much more likely to commit occupational fraud, but, the losses in these schemes were much lower—though still substantial

- Correlation between the fraudster’s level of authority and the duration of the occupational fraud scheme
  - The typical fraud committed by an employee lasted 12 months before it was detected, whereas the typical fraud committed by an owner/executive lasted 24 months. Frauds committed by managers had a median duration of 18 months.

The Fraud Triangle

Understanding the Fraud Triangle is critical to:
- Minimize the risk of abuse
- Minimize the risk of fraud
- Develop strong internal controls
The Fraud Triangle

Pressure

- Serious problem (financial) that requires immediate attention and cannot be resolved by ordinary financial resources:
  - Gambling, drinking, other addictions
  - Divorce, bankruptcy, medical issues
  - Unforeseen life change
  - Family emergency
  - Pressures from organization to perform well

Opportunity

- Aware that financial problem can be solved by stealing from organization or falsifying organization’s records:
  - Weaknesses in internal control
  - Lack of or poor documentation
  - Lack of or poor supervision
  - Poor segregation of duties
The Fraud Triangle

**Rationalization**

- Mindset that fraudulent action undertaken is justified:
  - “It’s just temporary, I’ll pay it back”
  - “Management doesn’t care”
  - “It’s just a little bit, no one will miss it”
  - “No one else is hurt”
  - “I deserve it”

---

Victim | Private | Health Care

**Check Misappropriation**

<table>
<thead>
<tr>
<th>Organization Size</th>
<th>3,500 employees</th>
<th>$12.5 billion in revenue in 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perpetrator</td>
<td>Trusted long-term employee, customer service rep, female, married</td>
<td>Single income earner with family medical problems (Pressure) Prior criminal history for theft from employer (Rationalization)</td>
</tr>
<tr>
<td>Scheme</td>
<td>• Submitted fictitious claims reimbursement forms and requested that checks be sent back to her office mailbox (Opportunity)</td>
<td>• Supervisors did minimal review of check request forms (Opportunity) • Did not mail checks out but instead deposited into her bank account • Forged and used stamp endorsements to deceive bank tellers • Nearly $700,000 loss over a period of 15 years</td>
</tr>
<tr>
<td>Results of Investigation</td>
<td>Administrative: Employee was terminated; company had to reimburse self-funded groups $680,000 for the amounts billed to them; implemented new internal controls</td>
<td>Criminal: Referred to law enforcement; employee arrested; criminal proceedings underway</td>
</tr>
</tbody>
</table>
### Check Misappropriation/Fictitious Vendor/False Personal Expenses

| **Organization Size** | $1.5 million Public Works Department budget  
Serves a population of over 190,000 customers |
|-----------------------|--------------------------------------------------------------------------------------------------|
| **Perpetrator**       | Accountant, long-term trusted employee, female, divorced, adult children  
Alleged drug addiction and medical issues, financial issues *(Pressures)*  
Initially thought she would pay back *(Rationalization)* |
| **Scheme**            | Various schemes including:  
- Targeted multiple County programs in three funds to generate refund checks by falsifying documents and having checks mailed to addresses perpetrator had access to for eventual deposit into personal accounts (used several accomplices outside of the County)  
- Use of purchase order system to generate checks/wire transfers paid for contracted services the County did not receive (fictitious vendor)  
- Personal expenses charged to County credit cards and theft of petty cash  
- Given access to various systems with minimal oversight *(Opportunity)*  
- **$2.05 million** loss |
| **Results of Investigation** | Administrative: Employee terminated  
Criminal: Referred to law enforcement; employee arrested; criminal investigation ongoing  
Civil: No civil action taken; insurance claim submitted |
**FRAUD PROGRAM BEST PRACTICES**

- Management ethical commitment.
- Fraud Hotlines, reporting procedure and protection.
- Fraud awareness training.
- Completion of a fraud risk assessment.
- Conflict disclosure process.
- Key Human Resources policies and procedures (e.g. background checks).
- Investigation Process.

**Key Policies and Procedures**

---

**Strong Internal Controls (Hot Topics)**

- **Segregation of Duties**
  - This is a form of risk management
  - Require separate people to complete critical tasks to avoid incompatible duties
  - Review current staffing model to align staff to correct responsibilities
  - Review user access for potential conflicts
  - Review controls; controls that can be circumvented or overridden may as well not exist
Strong Internal Controls (Hot Topics)

- Credit Cards and P-Cards
  - Written policies and training on credit card and P-Card usage
  - Robust review of monthly card statements
  - Periodic use of data analytics to evaluate P-Card activity to user listing

- Payroll
  - Segregating duties between HR and payroll processing
  - Restricted access to modifying pay rates
  - Restricted access for individuals responsible for reviewing payroll registers
  - Review and approval of pay adjustments
  - Careful review of timesheet by other than preparer
Strong Internal Controls (Hot Topics)

• Procurement
  – Written policies and procedures—thresholds for approval--monitor this
  – Evaluate invoice review/payment approval process
  – Segregate recording, authorizing and processing cash disbursements
  – Approved vendor list with access restrictions
  – Expense report review

Strong Internal Controls (Hot Topics)

• Cash
  – Minimize cash collections with no means of reconciliation
  – Two people involved in process
  – Cameras
  – Periodic analytical reviews of revenues received from various sources and investigate anomalies
  – Bank reconciliation review
Summary

We have discussed....

- Ethics and accountability
- Statistics on fraud and examples
- Fraud program best practices and internal controls

Fraud continues to grow in today’s environment and there is an increased focus on addressing fraud.
Thank you!

Questions?

Hope Wheeler, CPA
Principal, CliftonLarsonAllen
217-373-3139
Hope.Wheeler@CLAconnect.com
LEGISLATIVE UPDATE

William D. McCarty II
Director - Office of Budget & Management
City of Springfield, IL

QUESTIONS

William D. McCarty II
Director - Office of Budget & Management
City of Springfield, IL
william.mccarty@springfield.il.us
Michelle Binns, Senior Managing Consultant, PFM Asset Management LLC
Michelle Binns joined PFM in July 2006 and is currently a senior managing consultant staffed in the Chicago office. In her current capacity, she works closely with public sector clients to develop and implement prudent investment strategies for short, intermediate, and long-term funds, including fixed income and multi-asset class portfolios, for a variety of government clients in Illinois. Her responsibilities include investment performance analysis, cash flow modeling, portfolio structuring and restructuring, providing economic summaries and research, and evaluating investment policies and practices for compliance with state and local investment statutes. Ms. Binns earned a Bachelor of Science degree in Finance from The Pennsylvania State University. Michelle is also a Financial Industry Regulatory Authority (FINRA) registered representative and holds Series 6 and 63 licenses.

Brian Hextell, Senior V.P. - Institutional Portfolio Manager, Prudent Man Advisors, Inc.
Brian D. Hextell is an Institutional Portfolio Manager and is a registered Investment Advisor Representative with Prudent Man Advisors. He is responsible for developing investment strategies for institutional client portfolios to meet client objectives. In addition, Mr. Hextell works with the portfolio management team to execute investment strategies and deliver exceptional client service.

Spiro C. Hountalas, Senior Managing Consultant, PFM Asset Management LLC
Spiro C. Hountalas joined the Chicago office of PFM in January 2018. His main focus is understanding what is important to the individual needs of local government and other public sector finance officials regarding cash management and investments. This includes educating the group in the benefits of investing in the Illinois Trust, a Local Government Investment Pool for which PFM serves as investment advisor, short/intermediate term fixed income products, separately managed accounts and longer term multiasset class portfolio offerings that are appropriate for pension funds, OPEB and self-insurance pools. Spiro has served as a finance official at the City of Naperville, Village of Morton Grove and Fox Metro Water Reclamation District where he developed investment policies and received several GFOA certificates of achievement for excellence in financial reporting and distinguished budget awards. He also was a Business Development Relationship Manager for Standard & Poor’s serving the Public Finance Sector. During his career, Spiro has served as President of the Illinois GFOA, its executive board, education and program committee and legislative committee chair as well as being active in other State GFOA’s. Spiro currently serves on the IASBO cash & debt management committee.

Timothy Hungerford, CPA, CIA, CFE, CMA, CISA, CGAP, CFM
For the past 22 years, Timothy Hungerford has been owner of Hungerford Vinton, LLC. The firm performs specialized audits, such as contract compliance, recovery audits, fraud examination and internal controls. Tim has recovered tens of millions of dollars for his clients during that timeframe. In addition, he has identified several grey market schemes, and helped shutdown fraudulent relationships for his clients. His work experience includes both the public accounting field and several corporate finance roles within a Fortune 500 prior to starting Hungerford Vinton, LLC. He received his bachelor’s in Accounting from Niagara University, and his MBA in Finance from the Rochester Institute of Technology. Tim serves on Board Member of the Rochester Chapter of the Institute of Internal Auditors. He is also an adjunct professor at SUNY Brockport teaching in the master’s in forensic accounting program.

Greg Kuhn, Ph.D., Associate Director of Northern Illinois University’s Center for Governmental Studies.
Dr. Kuhn is a former village manager who changed career direction 25 years ago to conduct research, teach, and consult to governmental units in Illinois and across the Midwest and the U.S. Dr. Kuhn completed his doctoral studies mid-career at Northern Illinois University with emphases in Public Administration, Organization Development, and Public Policy. Greg earned his Bachelor’s degree in Political Science at Marquette University and his MPA Degree at NIU. Greg served as Village Manager in Clarendon Hills, Illinois and Asst. to the Manager in Skokie, Illinois. Greg has also provided organizational and leadership services to governments across Illinois, the Midwest and the U.S. via his position at NIU’s CGS, as well as Director of Local Government Management Services at Sikich, LLp., and, Managing Vice-President of the PAR Group. Greg has taught a variety of courses at both NIU and Northwestern including graduate courses in leadership, public policy, local government, strategic planning, budgeting, human resources, and intergovernmental relations. In total, Dr. Kuhn has over 38 years of public management experience as an administrator, consultant, and
instructor. Greg is a specialist in organizational development and design, strategic planning, budgeting, governance, leadership and training. He has conducted over 200 technical assistance, training or consulting projects for public and non-profit organizations during his career.

William D McCarty II, Director of Budget and Management (OBM), City of Springfield
William D McCarty II became Director of Budget and Management (OBM) on May 2, 2011. As Director of OBM, Director McCarty is responsible for overseeing tax administration, accounting, accounts payable, budgeting, payroll, purchasing, and citywide fleet maintenance services. From October 2007 through May 2011, Bill was Chief Financial Officer, Bureau of Property Management for the State of Illinois Central Management Services (CMS). Other State service includes federal finance manager for CMS and lead Medicaid analyst for the Governor’s Office of Management and Budget. From April 2005 through April 2009, he served as Village President of Williamsville, Illinois and prior to that spent three years as Village Trustee in Williamsville. He received a bachelor’s degree in finance from the University of Notre Dame and holds a master’s degree in public administration from the University of Illinois – Springfield. Currently, Bill is Treasurer of the Illinois Government Finance Officers Association Executive Board and is Chair of the IGFOA Legislative Committee. He is also a member of the Illinois Municipal League (IML) Legislative Committee, a member of IML’s Personnel and Pensions Policy Committee and is Chair of the National Association of Fleet Administrators (NAFA) U.S. Government Affairs Committee.

Loren Sanders
Loren Sanders is a professional synergist who focuses on building better teams and better outcomes. Her passion is focused on leveraging knowledge and connecting people to create solutions. She is motivational, inspirational, and intuitive. Her approach consists of identifying goals and talents, isolating opportunities for growth; guiding people to realizations, and helping people create action plans for change. Loren has a B.S. in Community Health from University of Illinois and an MBA in Organizational Behavior from Lake Forest Graduate School of Management, where she also teaches Strategic Talent Management, Organizational Communications and is the Faculty Senate Lead for the HR Academic Discipline Committee. Loren is in her 11th year on the Board of Directors of Northern Illinois Society for Human Resource Management She is an active member of the National Society for Human Resource Management (SHRM), is the Senior Manager for Enterprise Learning and Development at CVS Health and is the President of Professional Practice Training and Consulting, which focuses on bringing strategy and content design as well as training and facilitation to nonprofit, public and private sector organizations who want to focus on making real and lasting changes on how work gets done.

Jim Snyder, Partner, Ice Miller LLP
Jim Snyder is head of the Illinois Municipal Finance Group. He acts as bond counsel and disclosure counsel to hundreds of governmental entities throughout the state of Illinois, including school districts, cities, villages, counties, park districts and special districts and as underwriters counsel to dozens of municipal bond underwriters. Jim regularly serves clients on municipal finance transactions including issuers of general obligation bonds, revenue bonds, special service area bonds, tax increment bond bonds, industrial development revenue bonds, multifamily housing bonds and Section 501(c)(3) revenue bonds. Jim is a frequent speaker on public finance issues and is a Board Member of the Council of the Development Finance Authorities and has acted as a member of the Steering Committee for the National Association of Bond Lawyers Bond Attorney Workshop. Jim was also named The Best Lawyers® 2016 “Lawyer of the Year” for Public Finance Law.

Erik Stoltz, Institutional Investment Sales Manager, PMA Financial Network, Inc.
Erik joined PMA Financial Network, Inc. in 2013. Erik is responsible for the sales and marketing efforts of PMA products and services in the Illinois municipal space. His previous role at PMA was as a portfolio advisor serving Illinois school districts and municipalities with cash flow analysis, investment planning and arbitrage rebate management. Prior to joining PMA Financial Network, Inc., Erik was a trade operations analyst with The Northern Trust Co. Erik received his bachelor’s degree from Kenyon College and his MBA from the Kellstadt Graduate School of Business at DePaul University. His FINRA licenses include the Series 7, 50 & 66.

Kathy Thomas, Municipal Disclosure Administrator, Ice Miller
Kathy Thomas is a municipal disclosure administrator in Ice Miller’s Municipal Finance Group, where she works with the Illinois bond lawyers when they serve as underwriter’s or disclosure counsel on bond issues for cities, villages, parks, schools and counties on a variety of finance transactions. These include general obligation bonds, alternate revenue bonds, water and sewer revenue bonds, TIF bonds, special service area bonds, and debt certificates. Prior to joining Ice Miller, Kathy regularly advised clients on their bond issues and other special projects and served as financial advisor and investment banker exclusively to local governments in Illinois and neighboring states. She has been in public finance since 1983 and participated in more than $9.5 billion in debt issuances while serving on the financing side of bond transactions. Kathy is not registered as a municipal advisor she will not be providing municipal advisory services to Ice Miller clients. Kathy Thomas is not licensed to practice law in any state and does not provide legal services.

**Bob Vail, Director of Public Finance, Bernardi Securities, Inc.**
Mr. Vail joined the firm in 1998 and manages the Public Finance Department. Bob leads the municipal bond underwriting team. Bob is responsible for structuring general obligation and revenue-backed bond issues for client’s in both capped and non-tax capped counties. Bob has assisted numerous municipalities, counties, school districts, and park districts throughout Illinois with their financing, refinancing and debt restructuring needs. He has extensive knowledge in advanced and current refunding bond issues, alternate revenue source bonds, enterprise system revenue issues, and debt and levy structuring. Bob holds a B.S. in Finance from the University of Kentucky and the Series 52, Series 53 and Series 63 securities licenses.

**Hope E. Wheeler, CPA, CliftonLarsonAllen LLP**
Hope is a principal with CliftonLarsonAllen LLP, located in the Champaign, Illinois office, and has more than 25 years of experience providing assurance and consulting services to governments. She leads numerous governmental audits, from small entities to large entities, including single audits. She helps clients improve their financial reporting and internal controls. In addition, she helps in training clients on new accounting standards. Hope leads CLA’s Illinois State and Local Government growth group. Hope is a graduate of the University of Illinois with a Bachelor of Science in accounting and graduated with high honors. She is a member of the American Institute of Certified Public Accountants, the Illinois CPA Society, Government Finance Officers’ Association, and the Illinois Government Finance Officers’ Association. Along with her professional affiliations, Hope has served on the Board of Directors for Champaign West Rotary and the Executive Club of Champaign County. Hope has been involved with the Don Moyer Boys & Girls Club since 2013 and is currently Past-President of the Board and on the board of the Don Moyer Boys & Girls Club Foundation.

**Kevin Wills, Investment Banking Specialist, Bernardi Securities, Inc.**
Kevin joined Bernardi Securities in December 2018. He has over 15 years of financial services experience with over 11 years of experience in Illinois public finance. Kevin is responsible for structuring taxable and tax-exempt bond issues in tax capped and non-tax capped counties. He has served as lead banker on hundreds of Illinois bond issues and has assisted many types of issuers including cities/villages, public school districts, community college districts, airport authorities, park districts, forest preserve districts, counties, public building commissions, and water/sewer districts. Kevin’s extensive knowledge in all types of school bonds, debt certificates, alternate revenue bonds, advanced and current refunding bonds, public building commission revenue bonds, and non-referendum bonds for municipalities, park and forest preserve districts helps him routinely meet the issuers financing needs. He holds a B.A. in Finance and Economics from Illinois State University and is Series 7 and Series 66 licensed.
DISCLAIMERS AND COPYRIGHT NOTICE
The information and opinions conveyed at IGFOA conferences, institutes, and seminars are obtained from sources believed to be reliable, but IGFOA makes no guarantee of accuracy. Opinions, forecasts and recommendations are offered by individuals and do not represent official IGFOA policy positions. Nothing herein should be construed as a specific recommendation to buy or sell a financial security. The IGFOA and speakers specifically disclaim any personal liability for loss or risk incurred as a consequence of the use and application, either directly or indirectly, of any advice or information presented herein.

Unless otherwise indicated, all materials are copyrighted by the Illinois Government Finance Officers Association 2020. The enclosed materials may not be reprinted, reproduced, or presented in any format without express written authorization.

HOW TO ACCESS CPE CERTIFICATES
CPE Certificates will be available in your IGFOA on-line profile within 30 days of the training event. This profile was created either when you became a member of the IGFOA or if you are a non-member when registering for an event. To access, sign-in to the IGFOA site at www.igfoa.org/login with your username and password. Click on “Your profile” in the upper right and on the next page, click on “Track your CPE”.

Your username is your email address. To retrieve your password, use the “Forgot your password” option at https://www.igfoa.org/members/forgot-my-password or contact the IGFOA office. Please note that CPE certificates will only be issued to attendees that meet the CPE participation requirements.

© 2020
Illinois Government Finance Officers Association
800 Roosevelt Road, Building C, Suite 312
Glen Ellyn, IL 60137
Phone: 630-942-6587
Email: info@igfoa.org
Visit http://www.igfoa.org