Managing Public Fund Investment and Debt Portfolios in Distressed Markets

Presented By:
Brian Hextell: PMA Asset Management
Nikki Larson: Village of Glencoe
Andrew Kim: PMA Securities
Melinda Molloy: Village of Wilmette

2020
SEEING BEYOND
THE CHALLENGES

IGFOA 2020 ANNUAL CONFERENCE WEBINAR SERIES

Today’s Agenda Items

- Economic and Market Update
- Invest with a purpose
- Types of investments
- Types of investment providers
- Investment strategy
- Investment process
- Investment policy formulation
- Investment planning – cash flow
- Diversified portfolio
- Advantage of having a long-term strategy and process when markets are volatile

Learning Objectives

Investments

1. Discover the benefits of investing with a plan and aligning your investment goals with the appropriate strategy and financial services provider.
2. Investment risks are evolving and proper implementation of ESG into your investment policy and plan could help mitigate new risks.

Debt Issuance

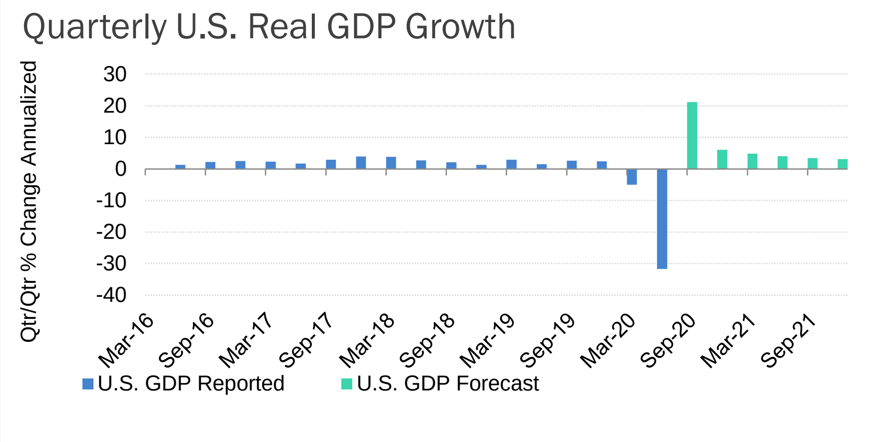
3. Implement a debt management policy that provides the guidelines for a manageable debt profile and the flexibility to adapt to an ever evolving economic climate.
4. Implement a strategic approach to forecast revenue and expenditure adjustments during an economic crisis that rating agencies find valuable in their credit assessment.

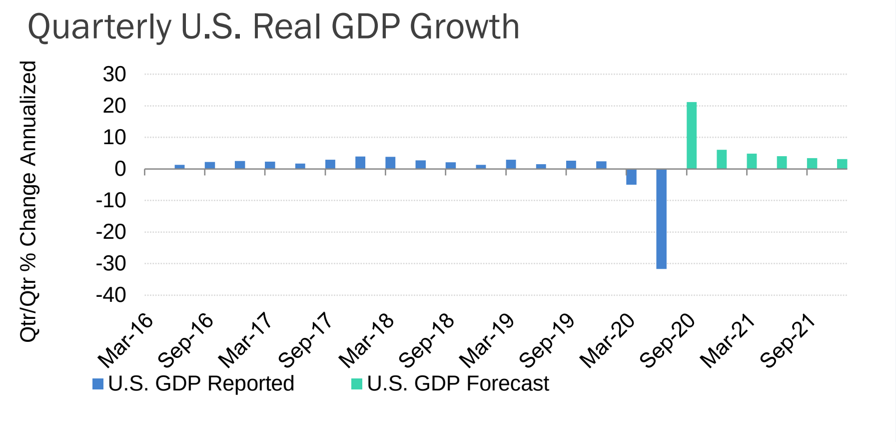
Each State Faces Unique Challenges

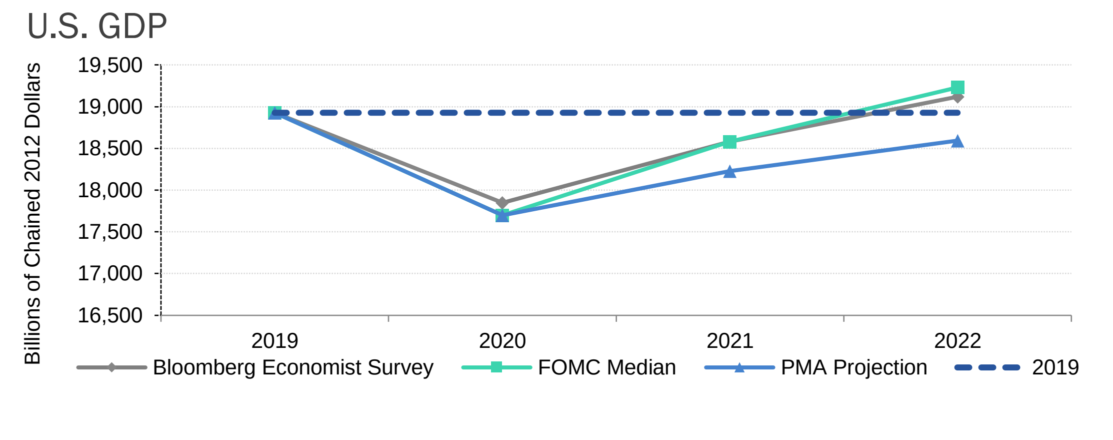
	4-day Average Daily Case Growth	Percent of Population	Daily Growth in COVID-19 Cases			
State	09/08/20	09/08/20	09/08/20	09/07/20	09/06/20	09/05/20
Texas	3,389	1.89%	0.4%	0.3%	0.4%	0.7%
Florida	2,769	2.30%	0.5%	0.1%	0.4%	0.7%
New York	2,470	3.04%	0.3%	0.3%	0.4%	0.6%
Arizona	1,745	2.02%	0.6%	0.5%	0.6%	1.1%
Illinois	1,499	2.71%	0.5%	0.2%	0.6%	0.8%
Louisiana	1,289	2.44%	0.4%	0.6%	1.1%	1.1%
Mississippi	1,238	1.59%	0.8%	1.0%	1.4%	2.1%
Tennessee	1,096	1.71%	0.4%	0.6%	0.6%	0.9%
South Carolina	903	1.51%	0.7%	0.5%	1.0%	0.8%
Virginia	887	1.14%	0.5%	0.6%	0.6%	1.0%
Ohio	803	2.74%	0.5%	0.5%	0.4%	1.1%
Minnesota	781	1.43%	0.9%	0.7%	1.1%	1.2%
Colorado	753	0.00%	1.3%	1.0%	0.7%	1.8%
Missouri	724	1.51%	0.4%	0.6%	0.9%	1.1%
Alabama	665	1.14%	0.4%	0.5%	0.4%	0.6%
Washington	661	1.45%	0.5%	0.8%	0.9%	1.2%
Georgia	652	2.27%	0.1%	0.1%	0.2%	0.2%
Maryland	652	1.20%	0.4%	1.0%	0.0%	0.8%
Massachusetts	646	2.45%	0.2%	0.5%	0.5%	0.8%
Arkansas	604	2.26%	0.7%	0.7%	0.7%	1.5%

Percent of Population represents total confirmed cases as a percent of each state's population Source: Bloomberg

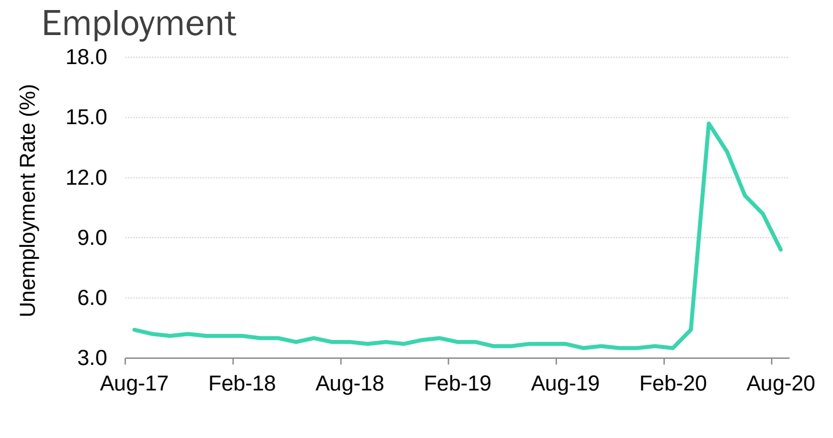
Economic Update

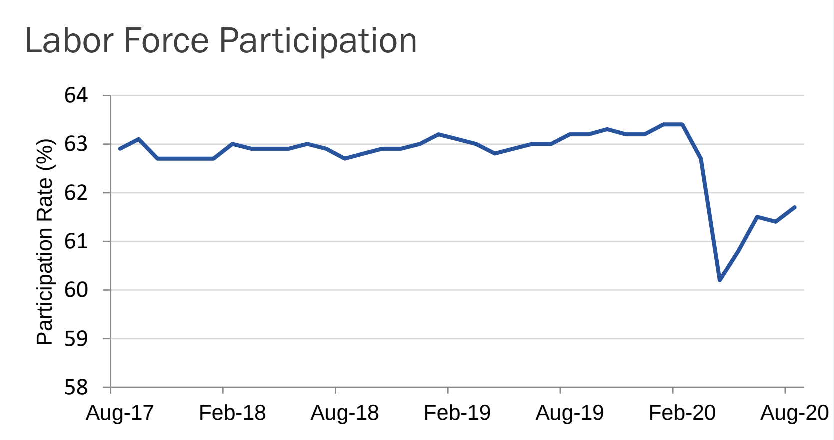


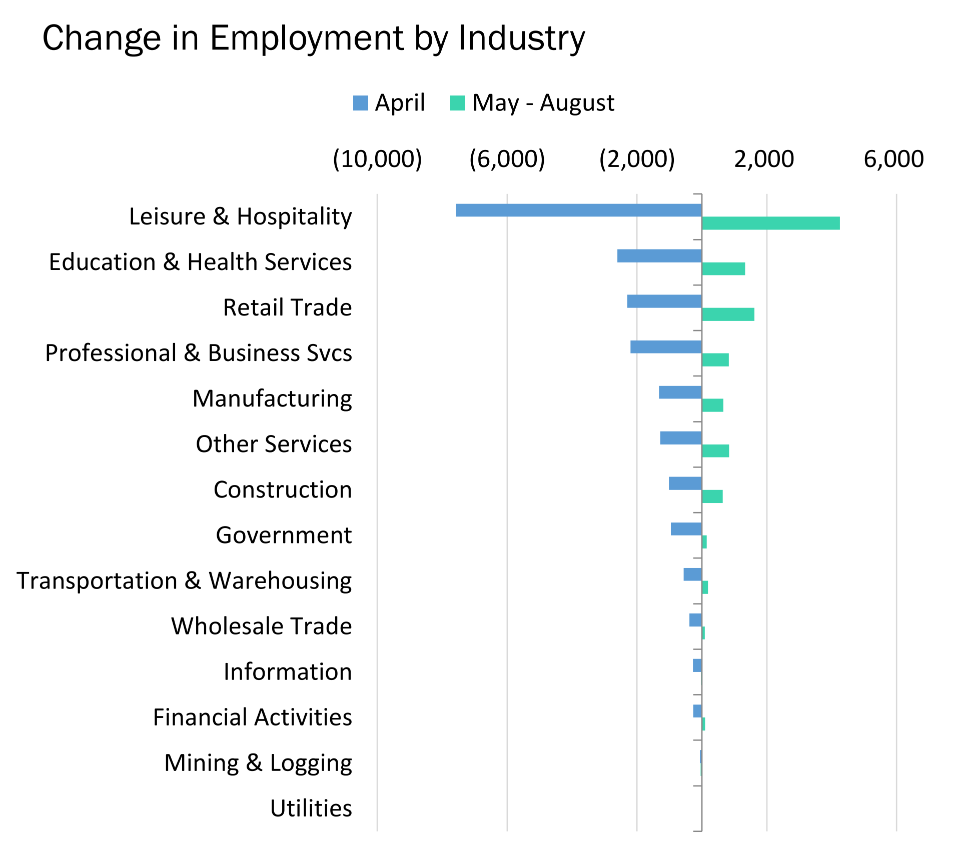




Economic Update







Source: Bloomberg as of 9/11/20

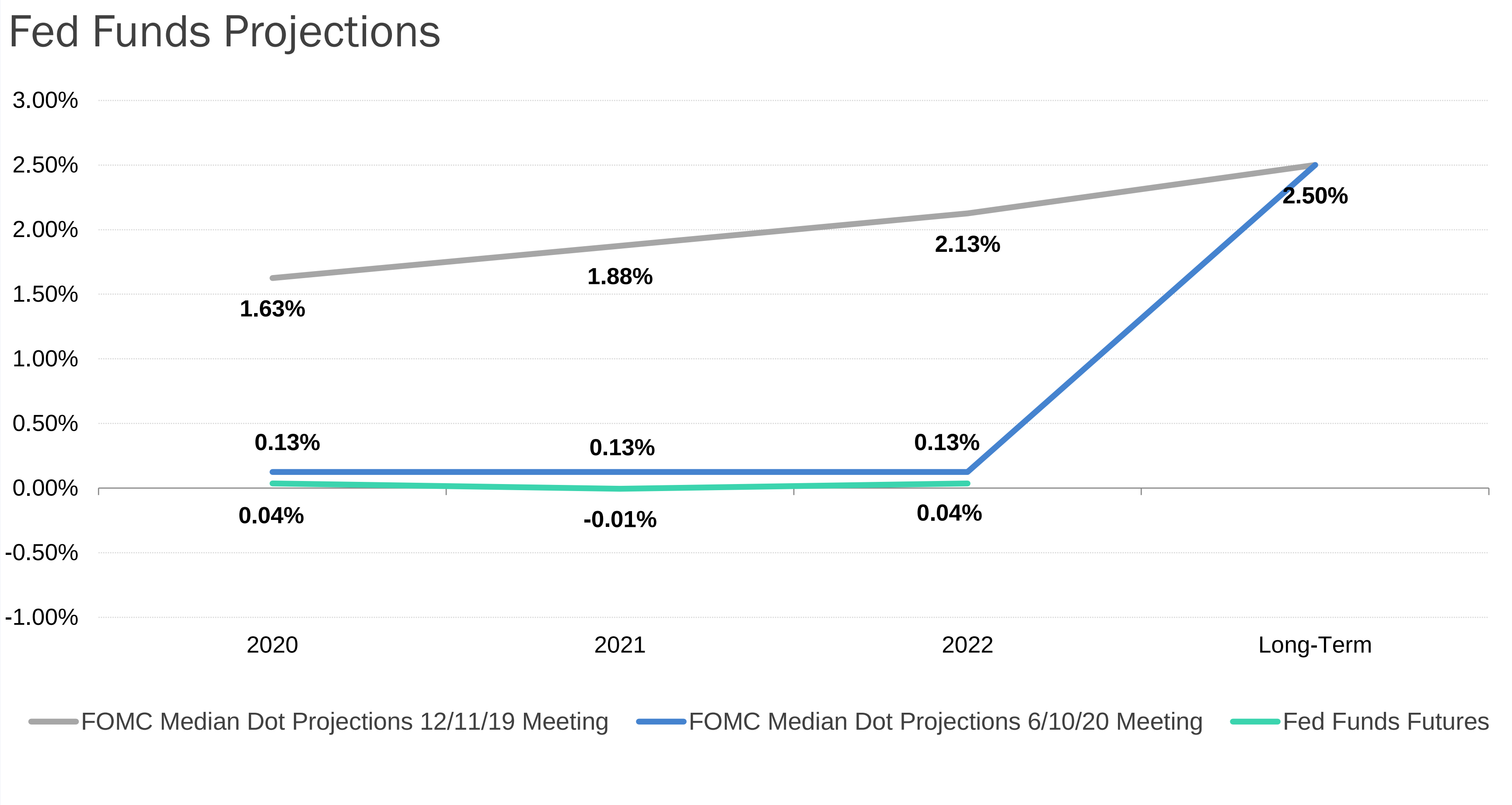
Challenges are Distinctly Different this Time

U.S. Recessions in History

Peak	Trough	Length	GDP Decline	Stock Market Decline*	Unemployment Rate Increase
Apr 1960	Feb 1961	10 mos	-1.3%	N/A	1.5%
Dec 1969	Nov 1970	11 mos	-1.3%	-32.1%	2.4%
Nov 1973	Mar 1975	16 mos	-3.1%	-41.2%	3.8%
Jan 1980	Jul 1980	6 mos	-2.2%	-13.4%	1.5%
Jul 1981	Nov 1982	16 mos	-2.6%	-15.5%	3.6%
Jul 1990	Mar 1991	8 mos	-1.4%	-15.6%	1.3%
Mar 2001	Nov 2001	8 mos	-0.4%	-20.3%	1.3%
Dec 2007	Jun 2009	18 mos	-4.0%	-41.1%	4.5%
Feb 2020**	TBD	TBD	-10.7%	-33.9%	11.2%

*S&P 500 reflects percentage change from the peak before the recession till the trough during the recession. **Preliminary estimates including 2020Q2 GDP decline, not annualized. Source: S&P Global Ratings, Bloomberg, PMA Asset Management, LLC

Market Update



Investment Strategy Overview

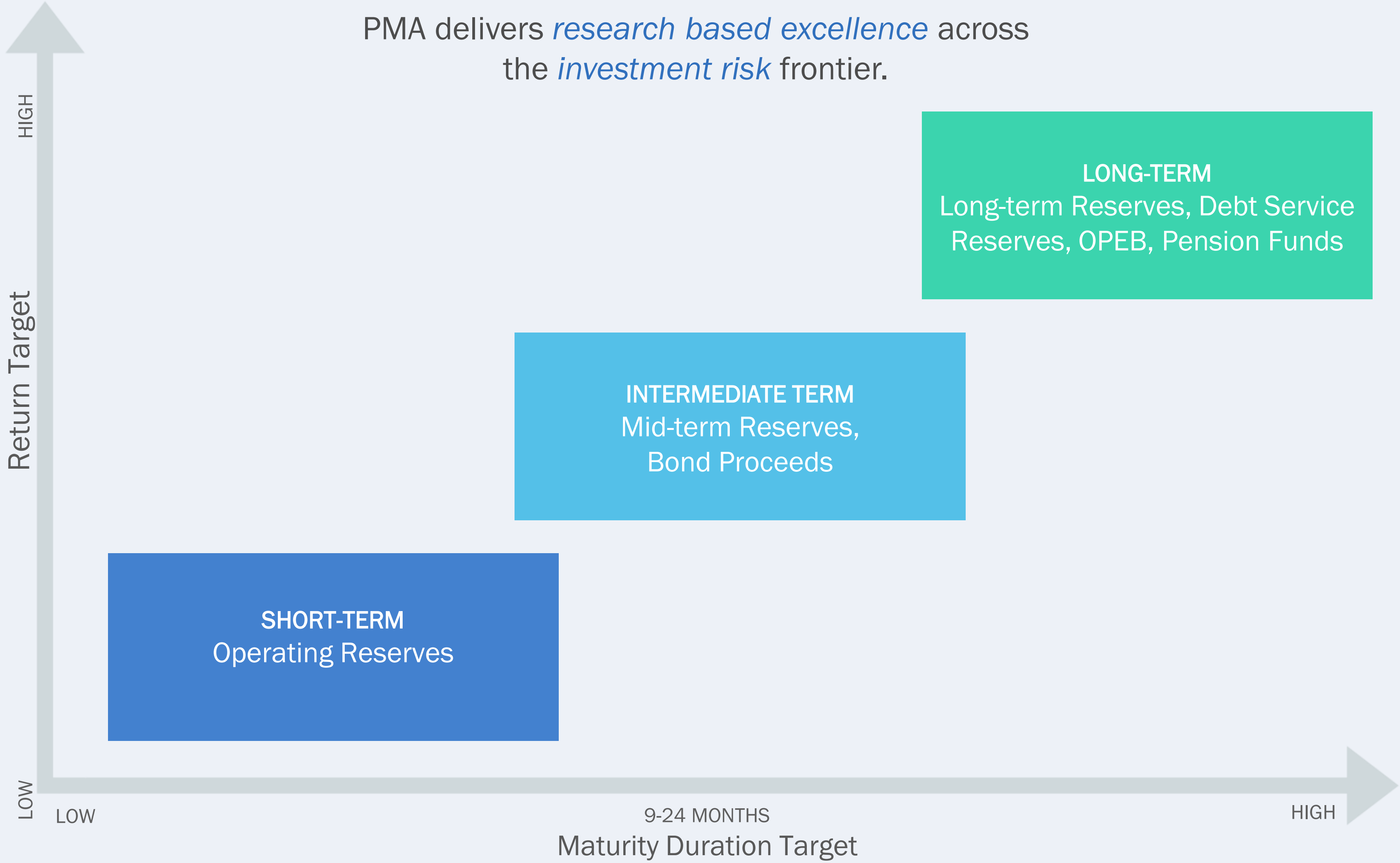
- Invest with a Purpose
- Utilize Full Spectrum of Allowable Investments
- Assess Goals and Objectives
- Cash Flow Planning
- Reduce Risk / Enhance Return

- Assess certainty of liability
- Evaluate liquidity risk
- Minimize reinvestment rate risk
- Optimize total return through market cycles
- Diversified portfolios outperform over long-term

Sources: Bloomberg, as of 06/23/20

Align Investments with Strategy

PMA delivers *research based excellence* across the *investment risk* frontier.



Allowable Investments by Term

Operating Funds
(0-12 Months)

- Treasury Bills
- Agency Discount Notes
- CDs
- Commercial Paper
- LGIPs

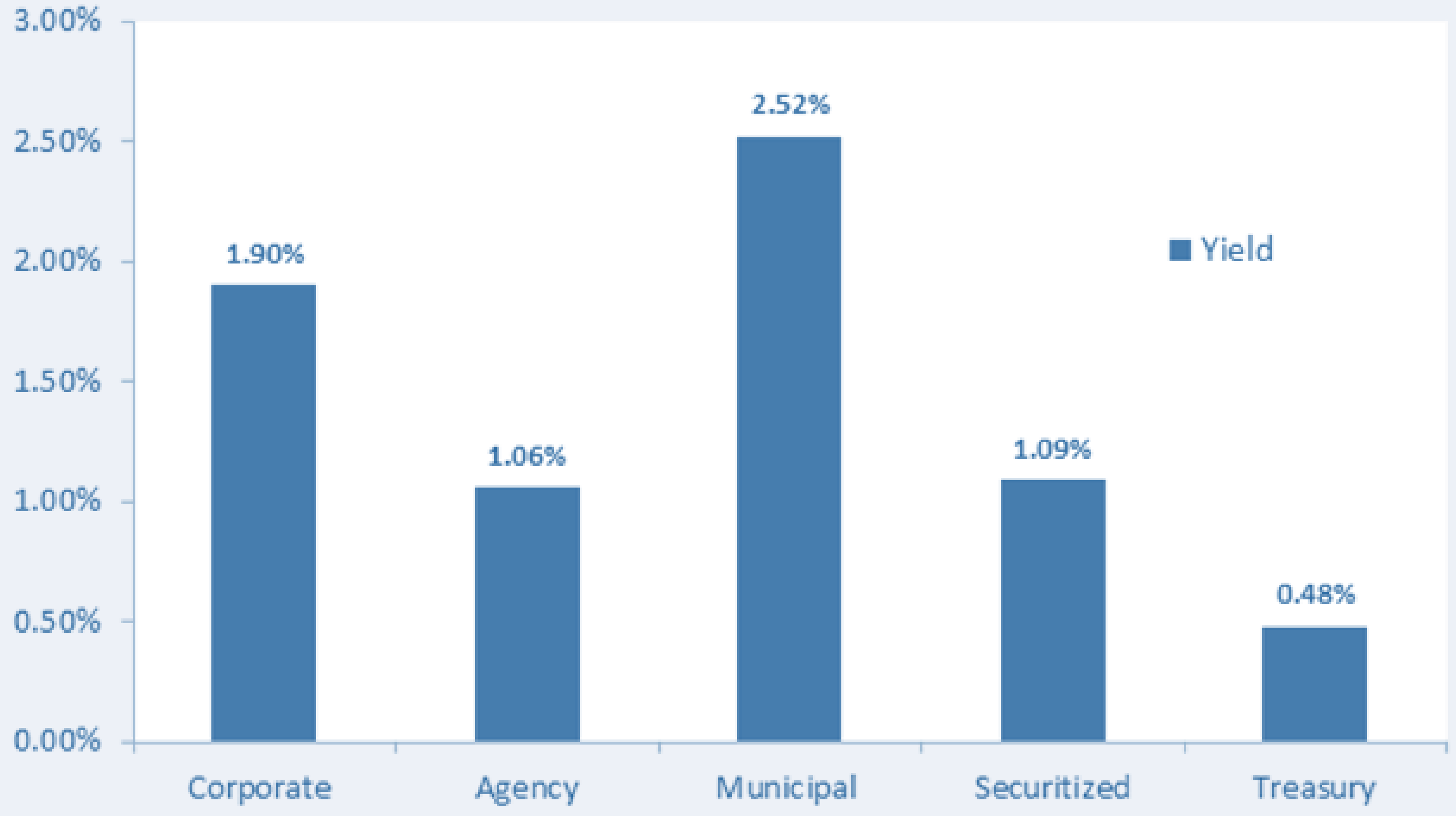
Intermediate-Term Reserves
(1-3 Years)

- CDs
- Treasury Notes
- Agency Notes
- Taxable Municipal Bonds
- Agency Mortgage-Backed Securities
- Corporate Notes

Long-Term Reserves
(>3 Years)

- Treasury Notes
- Agency Notes
- Taxable Municipal Bonds
- Agency Mortgage-Backed Securities
- Corporate Notes

Estimated Yield by Sector



Selecting an Investment Service Provider

Broker-Dealer – Self Directed Investments

- Non-Discretionary Management
- Suitability Standards
- Transaction Fee, Markup, or Commission

Investment Advisor – Managed Accounts

- Discretionary Management
- Fiduciary Duty
- Assets Under Management Fee

Polling Question?

- Have you implemented or considered implementing an *Investment Advisor* to oversee your municipality's investment program?

2020 SEEING BEYOND THE CHALLENGES

Investment Strategy

- Buy and Hold: Hold security to final maturity

- Active Management: Continuously monitor new market alternatives and opportunities
  - Credit Quality
    - What has value today?
    - Determine if we are getting paid to take credit risk
    - Diversification
  - Duration/Curve positioning
    - Evaluate best duration fit for investment objectives
    - Continuously evaluate yield curve for best return potential
  - Roll down the yield curve
    - Sell security as it ages and rolls to a lower yield (higher price)

Investment Strategy

- Power of a laddered bond portfolio
  - Reinvest over time
  - Similar to dollar cost averaging in stocks
  - Works in all rate environments
    - Rates Fall: Locked in higher yields in longer maturities
    - Rates Stable: Longer maturities will enhance yield
    - Rates Rise: Reinvest at higher yields as bonds mature

Agency Yields	
1 year	0.13%
2 year	0.13%
3 year	0.23%
4 year	0.26%
5 year	**0.35%**

Re-invest Here

2020 SEEING BEYOND THE CHALLENGES

Investment Risk Factors – Long Term Perspective

- Be aware of risks and rely on professional expertise
  - Credit risk
    - Will the investment be repaid by the issuer?
    - Will the investment be downgraded?
    - Are there potential administrative or headline risks?
  - Liquidity risk
    - Is there an active secondary market for the investment?
    - Could the secondary market be affected by economic or market developments?
- Understand market realities
  - You can't "beat" the market over time
  - Extending maturity increases yield and interest rate risk
  - Match assets and liabilities to reduce risk and provide efficient investing
  - Remember, the market is efficient

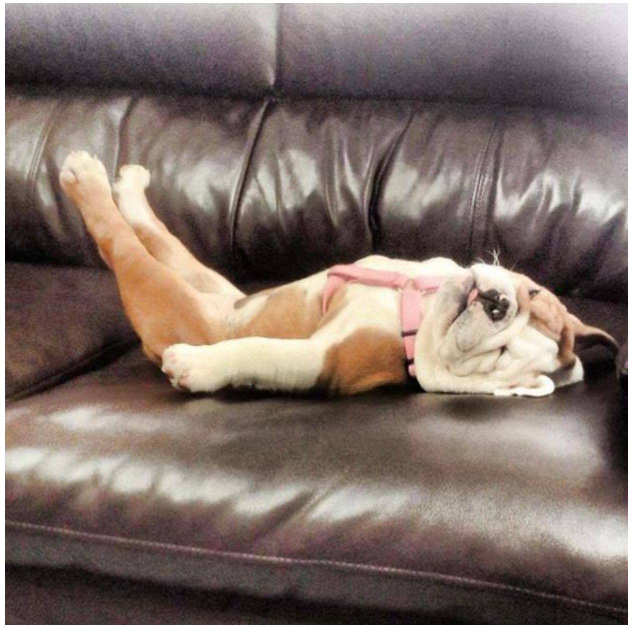
Investment Policy Review – Planning Process

- Review / Establish Policy
- Evaluate Goals
    - Rate of Return
    - Allocations
  - Set Risk Tolerance
  - Safekeeping, Insurance Requirements
  - State and Federal Regulations

Village Of Glencoe | Case Study	
Investable Balance	$5M
Past Practice	Ad-Hoc, In-House
Investment Policy	Last Updated 1997

Public Funds Investment Act (30 ILCS 235)

- Investment Policy – Section 2.5
    - Safety, Liquidity and Return
    - Prudent Person Rule
    - Authorized Investments
    - Diversification
    - Collateral Requirements
    - Internal Controls
    - Performance Measures
    - Illinois Sustainable Investing Act



What is your *comfort level….?*

What are ESG Investment Factors?

Environmental, Social and Corporate Governance (ESG)

- Drive client or product-specific strategies and solutions or screens
- Support a manager’s broader business goals and philosophy
- Help respond to constituents and manage reputational risk

ESG is …	ESG is *NOT* …
Research based	“Socially Responsible Investing”
Values neutral	Reduced performance in exchange for ideals
Focused on materiality & market impact	Exclusion based – industry, specific goods
Expands on financial research analysis	About labeling good or bad
Identifies leaders and laggards in industry	Politically driven
Responds to broader stakeholder interest	

ESG Research Segments

Corporate Governance /Leadership	• Ethical Conduct • Separation of Duty • Legal and Regulatory Compliance
Environmental Factors	• Adverse or Positive impacts of Energy Management • Ecological Impacts
Social Capital	• Human Rights • Customer Security • Community Reinvestment
Human Capital	• Diversity & Inclusion • Fair Labor Practices • Employee Engagement
Innovation Factors	• Sustainability • Business Continuity • Long Term Company Vitality

Polling Question?

- Have you updated or started updating your Investment Policy to include *Sustainability* language?

ESG Considerations

- Helps Manage Risk and Creates New Research Insight
- Public Funds = Public Interest
- New Challenges Create Evolving Market Risk
- Integrating ESG Analysis

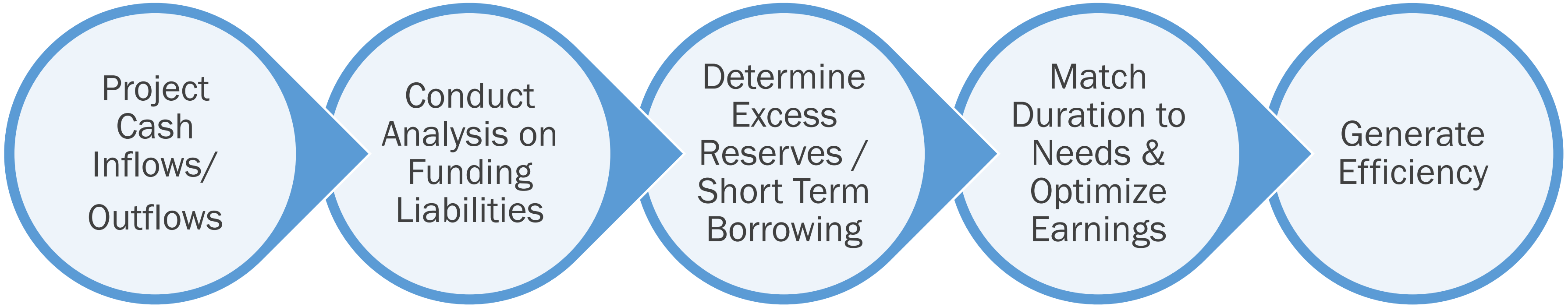
- Consider long-term sustainability, regulatory and reputational risk, in addition to return on investment
- Utilize external providers of data, scoring and ratings
- Form investment opinion based on available information combined with unique community preferences
- Disclosure in this area is developing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

Sources: Bloomberg, as of 06/23/20

Cash Flow Forecasting

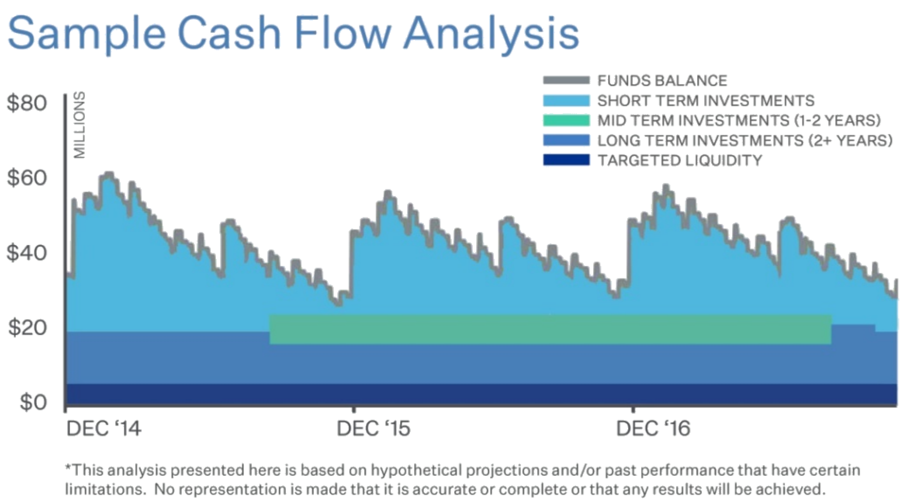
Next Steps

- Maximize Investment Policy
- Generate efficiency in process



Cash Flow Forecasting

- Maximize Efficiency & Income Potential
- Liability Matching
  - Revenue and Expense Projections
  - Avoid excess liquidity
- Maintains Liquidity Levels
  - Money market balances
  - Other liquid investments
- Identifies Balance Low Points
  - Timing and amount
  - Define short-term borrowings
  - Establish reserve amounts



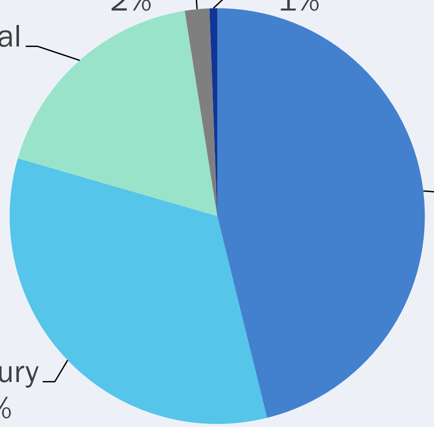
Case Study: Investment Advisory Services RFP

- Village of Glencoe – General Fund

- Identified Need
- Request for Proposals Process
- Strategy Formulation
- Finance Committee Discussions
- Final Implementation & Lessons Learned

Investment Process

Portfolio Summary



Sector Analysis				
Industry Group	Base Market Value + Accrued	% Base Market Value + Accrued	Market Yield %	Duration
Agency Mortgage-Backed Securities	2,401,242	46%	0.70	2.2
U.S. Treasury	1,740,577	33%	0.17	1.9
Municipal	940,865	18%	0.77	3.0
Agency	100,509	2%	0.42	4.7
Cash	29,740	1%	0.04	0.0

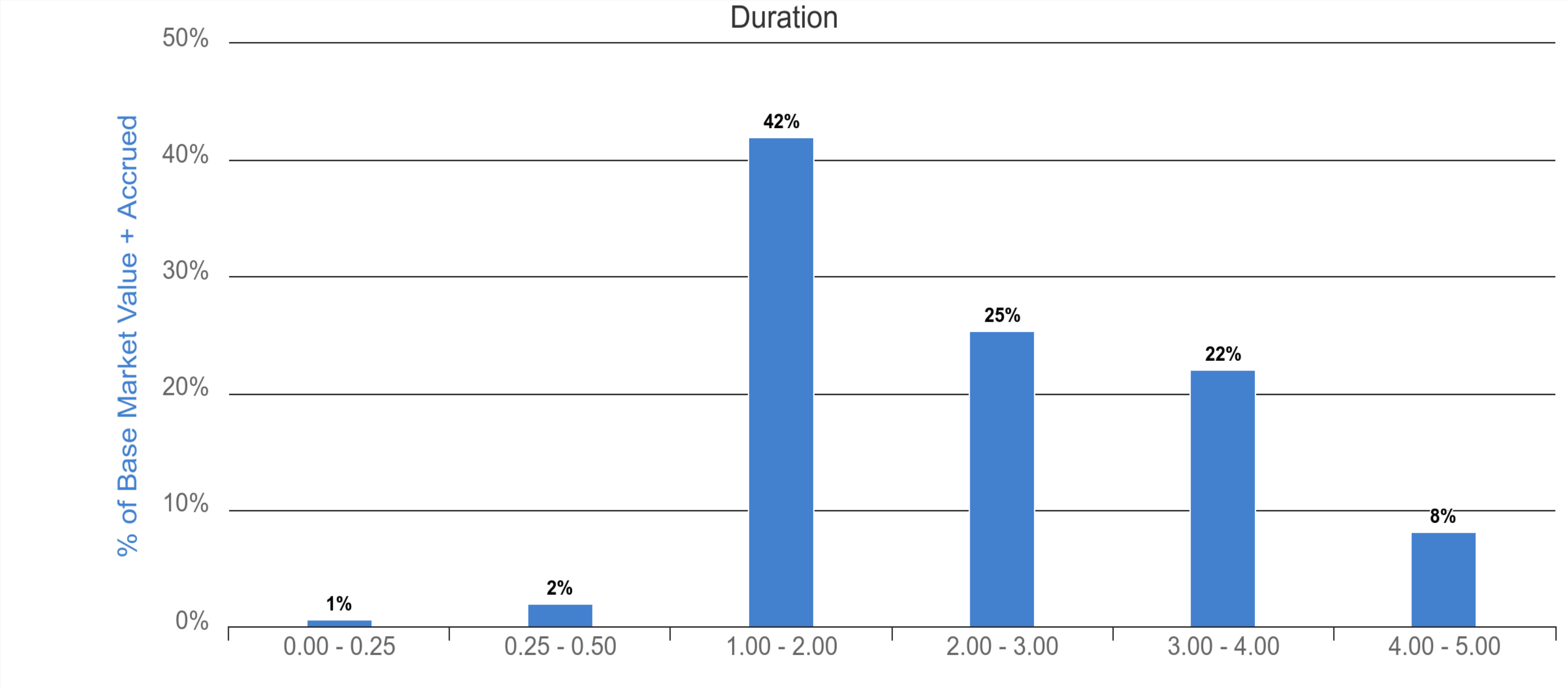
Goals/Objectives

- Strategically diversify across allowable income-producing sectors
- Maintain high-quality portfolio
- Align duration with benchmark
- Actively manage portfolio to meet investment goals

Portfolio Characteristics	Current Portfolio	Benchmark
Yield	0.53	0.18
Duration	2.5	2.6
Quality	AA+	AAA

Index: ICE BofA US Treasury & Agency 1-5yr
Source: Clearwater Analytics; As of: 9/10/20

Diversification by Maturity



Source: Clearwater Analytics

Investing Long Term Reserves

- Strategically diversify across allowable fixed income sectors
- Maintain high quality portfolio aligned with State Statute, Investment Policy and portfolio goals & objectives
- Do not time the market

Debt Management Policy

GFOA Recommended Financial Policies

Benefits of Adopting Formal Financial Policies

- Institutionalize good financial management practices
- Clarify and crystalize strategic intent at the organizational level
- Define boundaries for actions that staff may take
- Support good bond ratings
- Promote long-term and strategic thinking
- Manage risk to financial condition

Basic Financial Policy Categories

- General Fund Reserves
- Reserves in Other funds
- Grants
- Debt
- Investments
- Economic Development
- Accounting and Financial Reporting
- Risk Management
- Procurement
- Long-Term Financial Planning
- Structurally Balanced Budget
- Capital
- Operating Budget

Components of a Debt Management Policy

Key Components of a Debt Management Policy

- Through the issuance process
    - Scope and Purpose
    - Uses of Debt
    - Types of Debt Permitted
    - Debt and Debt Repayment Structure
    - Debt Issuance Practices
- Post-Issuance
    - Ongoing Post-Issuance Administrative Activities

Scope and Purpose

Debt management policies typically start with a statement of purpose to explain the overall objective of adoption and debt management policy

Example

"The purpose of this policy is to establish a framework for debt management to work in conjunction with the Capital Improvement Program Development. These guidelines will enhance the quality of decisions, rationalize the decision making process, identify objectives for staff, and demonstrate a commitment to long-term planning.

This Policy will be a positive factor in the municipal market's assessment of the City's credit quality. The City's financial condition and credit ratings should always be the primary considerations when considering the issuance of debt. It should be recognized that <u>these guidelines are not immutable; changing circumstances require flexibility and revision. Anticipation of every future contingency is unrealistic.</u> When adjustments are necessary, the reasons for such policy changes need to be well documented if the City wishes to demonstrate to the credit markets and its citizens that its commitment to sound debt management principles is unchanged"

Uses of Debt

- The debt policy should consider when it is appropriate to use debt and when it is not appropriate
    - However, this policy does not exist in isolation.
    - Other Policies intrinsic to Debt Management include:
        - Capital Improvement Planning
        - Economic Development
        - Fund Balance Policy
        - Long-term Financial Planning, etc.
- Capital and Equipment
    - When is it appropriate to use debt for capital projects?
    - When is it appropriate to use debt for equipment?
    - When is it appropriate to use other funding sources?
        - Operating Levy (PAY GO)
        - General Fund balance
        - Equipment Replacement fund balances

Types of Debt Permitted

- General Obligation (GO)
  - Unlimited GO Bonds
  - Limited GO Bonds
- Direct Revenue Bonds
  - Typically utilities (water, sewer, electric, stormwater)
  - Could include other revenues (TIF)
- Alternate Revenue Bonds
  - Typically utilities (water, sewer, electric, stormwater)
  - Could include other revenues (TIF)
  - In addition, the municipality pledges its GO credit
- Other Financing Options
  - Special Assessment Bonds
  - Tax Securitization Bonds

Debt Limitations

- Debt limitations exist for both:
    - Amount of debt
    - Debt service requirements
- Sources of these limits include:
    - Limits imposed by law (for non-home rule units of government)
        - Statutory debt limit: 8.625% of EAV
        - Non-referendum debt limit: 0.5% of EAV
    - Limits imposed by contract
        - Revenue debt – additional bonds test for new debt to be issued “on a parity” with existing debt
        - Revenue debt – debt service coverage requirements
    - Limits imposed by rating agency reaction
        - Increases to debt or debt service can affect financial ratios that are correlated with a given rating
    - Limits imposed by policymakers
        - Stricter limits intended to promote fiscal discipline
        - Can be modified as circumstances change

GO Rating Methodology – Moody's

Moody's released a G.O. rating methodology in January 2014 (updated Dec. 2016). There are a number of adjustments to the "simple" scorecard shown below.

Broad Rating Factors	Factor Weighting	Rating Sub-factors	Sub-factor Weighting
I. Economy/Tax Base	30%	Tax Base Size (Equalized Value)	10%
		Equalized Value Per Capita	10%
		Wealth (median family income)	10%
II. Finances	30%	Fund Balance (% of Operating Revenues)	10%
		Fund Balance Trend (5-year change)	5%
		Cash Balance (% of Operating Revenues)	10%
		Cash Balance Trend (5-year change)	5%
III. Management	20%	Institutional Framework	10%
		Operating History	10%
IV. Debt/Pensions	20%	Debt to Equalized Value	5%
		Debt to Revenue	5%
		Moody's ANPL* (3-yr avg.) to Equalized Value	5%
		Moody's ANPL* (3-yr avg.) to Revenue	5%

* Adjusted Net Pension Liability

GO Rating Methodology – Moody's

S&P Global Ratings

S&P released a GO rating methodology in September 2013.

There are a number of adjustments to the "simple" scorecard shown below.

S&P's Management score includes a Financial Management Assessment (FMA), which assesses the policies and practices of a local government (not individual managerial quality, organizational efficiency, or any other performance indicators).

Broad Rating Factors	Factor Weighting
I. Institutional Framework*	10%
II. Economy	30%
III. Management	20%
IV. Liquidity	10%
V. Budgetary Performance	10%
VI. Budgetary Flexibility	10%
VII. Debt & Contingent Liabilities	10%

III. Management Financial Management Assessment
Revenue/Expenditure Assumptions
Budget Amendment/Updates
Long Term Financial Planning
Capital Improvement Plan
Investment Policy and Reporting
Debt Management Policy
Reserve (Fund Balance) Policy

* Illinois municipalities that are home rule receive a "2" (Strong)
Illinois municipalities that are non-home rule, but subject to PTELL also receive a "2" (Strong)
Illinois municipalities that are non-home rule, and not subject to PTELL receive a "3" (Adequate)

Debt Issuance Practices

Per the GFOA, a Debt Management Policy should include guidance on the issuance process including:

- Selection and use of professional service providers, including an independent financial advisor, to assist with determining the method of sale and the selection of other financing team members.
  - Disclosure Counsel for assistance with preparing and documenting the Official Statement?
- Criteria for determining the sale method (competitive, negotiated, private placement) and investment of proceeds.
- Use of comparative bond pricing services or market indices as a benchmark in negotiated transactions, as well as to evaluate final bond pricing results.
- Criteria for issuance of advance refunding and current refunding bonds. (no more tax-exempt advance refundings post Tax Cut and Jobs Act of 2017, effective 12/31/17)
- Use of credit ratings, minimum bond ratings, determination of the number of ratings, and selection of rating services.

Example Debt and Debt Service Limits

Below are example debt and **debt service limitation** policies from medium-sized Illinois municipalities.

Example No. 1

Direct Debt to Equalized Value

- Guideline: 1.0% to 3.0% limit
- 75% of Guideline: 2.5%

Direct Debt per Capita

- Guideline: $500 to $1,000 per capita
- 75% of Guideline: $875 per capita

Debt Service Expenditures as a % of General Fund Expenditures

- Guideline: 5% to 10%
- 75% of Guideline: 8.75%

Impact on Credit Rating

- The Village will seek to maintain or improve its current bond rating and will specifically discuss with the Board any proposal which might cause that rating to be lowered

Example No. 2

The City should not exceed credit industry benchmarks where applicable. Therefore, the following factors should be considered in developing debt issuance plans:

Ratio of Net Bond Debt to Estimated Full Value

- The formula for this is Net Bonded Debt, which is the total outstanding debt divided by the current Estimated Full Value as determined by the most recent EAV

Net Bonded Debt per Capita

- The formula for this is Net Bonded Debt divided by the current population as determined by most recent census information available

Ratio of Annual Debt Service to General Governmental Expenditures

- The formula for this is annual debt service expenditures divided by General Government expenditures

Example Debt and Debt Service Limits

Below are example **debt issuance practice** policies from medium-sized Illinois municipalities.

Example No. 1

Professional Team
To provide assistance in debt issuance, the Village will select a financial advisor and/or investment banker and bond counsel on a competitive basis; these advisors will be retained for several years to provide continuity and allow them to develop an understanding of the Village's needs.

Method of Sale

The Village will generally conduct financing on a competitive basis; however, a negotiated financing may be used where **market volatility** or the use of an unusual or complex financing or security structure causes a concern with regard to marketability.

Example No. 2

Structure of Debt Issuances
The duration of a debt issue shall not exceed the economic or useful life of the improvement or asset that the issue is financing. The City shall design the financing schedule and repayment of debt so as to take best advantage of market conditions and, as practical, to recapture or maximize its credit capacity for future use, and moderate the impact to the taxpayer.

Method of Sale

Indebtedness to be issued by the City will be offered through the competitive bidding process except as expressly approved by the Mayor and City Council. If it is proposed that debt not be issued through competitive bidding, such request will state the compelling reasons why the competitive bidding process is not deemed suitable for the particular issuance of debt.

Competitive Sale - Underwriter is not known ahead of time.

- Financial Advisor conducts open bid and Bonds are awarded to the Underwriter with the lowest average rate

Negotiated Sale - Underwriter is selected ahead of time by the issuer.

- A formal selection process can be facilitated by a Financial Advisor or the issuer can proceed by itself

Polling Question?

- Does your policy distinguish between guidelines and absolutes and allow for flexibility to exceed recommended guidelines?

Strategic Approach to Financial Crisis

Strategic Approach to Financial Crisis

Background

- The Village of Wilmette (the "Village") recognized that the coronavirus (COVID-19) would place a significant impact on the financials of the Village.
- The State of Illinois implemented a 'Stay at Home' order that started on Saturday, March 21, 2020.
- This order placed economic pressure on the village and its budget.
- Staff conducted an analysis of the potential financial impact of the 'Stay at Home' order on the Village's major funds
- The remainder of the presentation will focus on the Village's approach to its General Fund

Revenue Projections

- The Village placed its primary focus of the impact of COVID-19 on Village revenues
- The Village created its projections based on two different scenarios
  - Scenario 1: Local economy reopens in 3rd quarter of calendar year
  - Scenario 2: Local economy reopens in 4th quarter of calendar year

Sources for Revenue Projections

Four primary sources for revenue projections

- Analysis of prior period performance relative to initial projections; below is analysis of Period 4 (April)

	Amount	Over/(Under)
P04 Actual	$2,186,407	
P04 Projection	$2,184,002	$2,405
P04 Scenario 1	$1,917,613	$268,794
P04 Scenario 2	$1,878,612	$307,795

- Information provided by the Illinois Municipal League (IML)
  - The IML provided projection updates for income tax, personal property replacement tax (PPRT), motor fuel tax (MFT), and local use tax.
  - The financial model was updated to match the projection information provided by IML

Sources for Revenue Projections

Four primary sources for revenue projections (cont'd)

- Information provided by Cook County
  - Cook County delayed property tax deadline from August to October.
  - Projected to have minimal impact on the total collection of Village property taxes, but is expected to delay the revenue.
  - Staff projected that one-third (1/3) of the revenues originally scheduled for August will be shifted to October based upon comments from the Cook County Board of Review
- Survey of regional communities
  - Ensured revenue projections were reasonably aligned with regional municipalities
  - Clarified how the Village was unique or different from other municipalities regarding its dependency on various revenue streams
  - For example, less dependent on sales tax revenue given absence of car dealerships or other large retailers

Major Revenues in General Fund

- Income Tax
  - IML projected 15% overall decrease in income tax
  - Village's initial projections ranged from 8% to 14% decrease
  - Village revised assumption for both scenarios to reduce income tax revenue to IML's 15% overall reduction
- Fuel Tax
  - IML projected 15% overall decrease in fuel
  - Village's initial projections ranged from 18% to 26% decrease for the year
  - Village assumed a 40% reduction in period 4 in the original scenarios and fuel tax receipts were down 43.5% in period 4
  - Based upon these two data points (IML projection and period 4 outcome), the Village will be more conservative and follow the local trend
  - The existing assumptions for both scenarios were maintained

Major Revenues in General Fund

- Hotel Tax
  - Original reduction assumption for period 4 ranged from 50% to 75%
  - In period 4, revenue was down 30%
  - Village revised assumptions for both scenarios
    - Increase revenues by an additional 5% per quarter in scenario #1
    - Increase revenues by an additional 10% per quarter in scenario #2
- Sales Tax
  - The original assumption for April projected a 5% decrease in State sales tax and a 7.5% reduction in home rule sales tax.
  - In April, revenue increased 16% and 7% respectively.
    - However, the revenues received in April were related to January sales
    - Therefore, the impacts of COVID-19 would have had minimal impact on this collection period
  - Additionally, local use tax, which is driven by online sales, was up 36% for the month of April
  - While these were positive signs of growth, the Village maintained a conservative approach.
  - The current assumptions for both scenarios were maintained

Major Revenues in General Fund

- Utility Tax
  - Original assumption for utility taxes included no reduction to revenues.
  - However, utility taxes were trending 11% under budget at the time;
    - Caused primarily by the telecommunications tax
    - Revenue reduction is not directly related to COVID-19
    - Has been trending downward for several years.
  - Village revised assumption for both scenarios to reduce telecommunications tax by an additional 15% per quarter
- Property Tax
  - Village projected that one-third (1/3) of the revenues originally projected in August would be shifted to October
  - The existing assumption for both scenarios were maintained

Revised Projected Revenue Outcomes

- Revised revenue outcomes combined both period 4 performance and updated revenue assumptions for both scenarios
  - The 2020 budget for General Fund revenues is $34.17 million
  - During the first 4 periods of 2020, revenues tracked in line with that value.
  - The chart on the following slide layers in updated impacts of scenario #1 and scenario #2.
  - Arrows indicate the change from original scenario assumptions
    - Yellow arrows indicate no change
    - Red arrows indicate the revenue assumptions decreased
    - Green arrows indicate revenue assumptions improved

Revised Projected Revenue Outcomes

Revenue Type	Budget*	Scenario #1 Reduction*	Scenario #2 Reduction*
Grant/Contributions	$0.13	--	--
Income Tax	$2.90	$(0.43)	$(0.43)
Licenses	$1.65	$(0.02)	$(0.03)
Other	$4.22	$(0.39)	$(0.47)
Permits	$2.08	$(0.50)	$(0.67)
Property Tax	$10.46	--	--
Real Estate Transfer Tax	$1.12	$(0.24)	$(0.33)
Sales Tax	$5.38	$(0.74)	$(0.88)
Service Charges	$3.18	$(0.07)	$(0.15)
Utility Tax	$2.00	$(0.09)	$(0.09)
Water Fund Transfer	$1.05	--	--
Totals	**$34.17**	**$(2.48)**	**$(3.04)**
Total Revenue	***$34.17***	***$31.69***	***$31.13***

*in millions

Approach to Expense Revisions

- Analysis of prior period performance

	Amount	Over/(Under)
P04 Actual	$2,557,470	
P04 Projection	$2,648,160	$(90,690)

- Savings
  - $300,000 in operating expenditures
    - Includes savings for street lighting, winter operations, vehicle costs, urban forest management, training, and a variety of other line items
  - $150,000 for the engineering program
    - Includes bid savings for street resurfacing program, alley maintenance, and brick street
  - $242,000 for capital equipment replacement fund (CERF)
    - Consists of deferral of the sidewalk snowplow and the council chambers audio visual equipment
  - $200,000 for deferral of comprehensive plan

Approach to Expense Revisions

- Additional Costs
  - $531,000 for economic grant program, which includes:
  - $375,000 for sales tax rebate grant
  - $156,000 for service business grant
- Other Expenses
  - $200,000 for additional contribution for the public safety pension program
- Survey of Regional Communities
  - Survey of neighboring communities that includes information regarding expenditure review

Revised Projected Expense Outcomes

- 2020 budget for General Fund expenses is $35.54 million
  - Overall, Village was in alignment with budgeted expenditure estimates
  - The chart below layers in savings options and additional expenses
  - Updated expense projection was $35.18 million
    - $170,000 decrease from prior period projections
    - Overall savings of approximately $370,000 in 2020

	Amount
2020 Budget	$35.54
2020 Updated Projection	$35.18 ⬇
Differential	**$(0.37)**

Impact on Fund Balance Reserves

- 2020 budget for General Fund expenses is $35.54 million
  - Overall, Village was in alignment with budgeted expenditure estimates
  - The chart below layers in savings options and additional expenses
  - Updated expense projection was $35.18 million
    - $170,000 decrease from prior period projections
    - Overall savings of approximately $370,000 in 2020

	Budget	Scenario #1	Scenario #2
2020 Beginning Reserve	$15.01	$15.01	$15.01
Revenues	$34.17	$31.69	$31.13
Expenses	$(35.54)	$(35.18)	$(35.18)
Projected Ending Reserve	**$13.64**	**$11.52** ⬆	**$10.96** ⬆
% of Operating Expense	38.4%	32.4%	30.8%

Polling Question?

- Yes or No:

My unit of government’s fund balance is strong enough to weather a 10% decrease and still maintain a healthy level

Disclaimer

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. PMA Asset Management, LLC, an SEC registered investment adviser, provides investment advisory services to local government investment pools. All other products and services are provided by PMA Financial Network, LLC. PMA Financial Network, LLC, PMA Securities, LLC and PMA Asset Management, LLC (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.

For more information visit www.pmanetwork.com