MANAGING INVESTMENT PORTFOLIOS WITH CONFIDENCE:

FOUNDATIONS & FRAMEWORKS

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PURPOSE

HOW CAN WE PRUDENTLY MANAGE OUR INVESTMENTS TO MAXIMIZE INCOME, KEEP OUR FUNDS SAFE AND PROVIDE FOR OUR CASH NEEDS?
• Identify our goals and limitations
• Establish our infrastructure
• Determine our cash flows
• Transition from policy to plan
• Communicate our process
SUMMARY

• We generally share the same goals and limitations
• Our infrastructure should work for us
• Cash flow is the key to prudent investing
• A policy is not a plan
• We should be able to share our challenges and successes with others
AGENDA

• Identify our goals and limitations
  • Establish our infrastructure
  • Determine our cash flows
  • Transition from policy to plan
  • Communicate our process
GOALS

• Safeguard principal
• Provide for liquidity
• Earn a reasonable market rate of return...with a portfolio that is:
  – Suitable
  – Marketable
  – Diversified
LIMITATIONS

- PFIA
- Investment Policy
- Risk!
  - Concentration
  - Default
  - Market
  - Liquidity
  - POLITICAL
## RATE COMPARISON

<table>
<thead>
<tr>
<th></th>
<th>7-DAY YIELD</th>
<th>6-MONTH</th>
<th>1-YEAR</th>
<th>2-YEARS</th>
<th>3-YEARS</th>
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<tbody>
<tr>
<td>TREASURY</td>
<td>-</td>
<td>2.31%</td>
<td>2.34%</td>
<td>2.28%</td>
<td>2.26%</td>
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<tr>
<td>CALLABLE AGENCY*</td>
<td>-</td>
<td>2.37%</td>
<td>2.45%</td>
<td>2.50%</td>
<td>2.63%</td>
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<tr>
<td>TAXABLE MUNI</td>
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<td>2.33%</td>
<td>2.47%</td>
<td>2.45%</td>
<td>2.47%</td>
</tr>
<tr>
<td>CD</td>
<td>-</td>
<td>2.35%</td>
<td>2.40%</td>
<td>2.50%</td>
<td>2.60%</td>
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<tr>
<td>GOV POOL</td>
<td>2.47%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>PRIME POOL</td>
<td>2.61%</td>
<td>-</td>
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WHAT’S THIS ABOUT DIVERSIFICATION?

• Various:
  – Issuers
  – Maturities
  – Security types
  – Credit quality

• The finished product of a well-executed plan:
  – Creates balance
  – Reduces risk
  – Enhances return
RISK REDUCTION

- Balance...risks are spread across:
  - Issuers
  - Maturities
  - Credit qualities
  - Security types
RETURN ENHANCEMENT

• Various security types and credit qualities
  – Changing yield spread relationships

• Various maturities
  – Changing yield movements
  – Changing yield curve
AGENDA

• Identify our goals and limitations
• **Establish our infrastructure**
• Determine our cash flows
• Transition from policy to plan
• Communicate our process
INFRASTRUCTURE

- Internal Controls
- Custody
- Investment Policy
INTERNAL CONTROLS

• Segregation of duties
• Completeness of documentation
• Compliance with laws and regulations
CUSTODY

• Accounting
• Trade settlement
• Cash management
INVESTMENT POLICY

• Define appropriate asset mix
• Establish compliance with existing laws
• Identify responsibilities
AGENDA

• Identify our goals and limitations
• Establish our infrastructure
• **Determine our cash flows**
• Transition from policy to plan
• Communicate our process
CASH FLOWS – ONE IDEA

• Total investment portfolio
  – Liquidity portfolio
    • Primary
    • Secondary
  – Income portfolio
LIQUIDITY CHECK – FINDING “NORMAL”

- Largest monthly deficit:
  - Past 12 months
  - Pas 36 months
LIQUIDITY CHECK – FINDING YOUR “PERFECT STORM”

• Lowest Fund Balance (previous 12-36 months)
• Largest disbursement
• Lowest revenue collected
AGENDA

• Identify our goals and limitations
• Establish our infrastructure
• Determine our cash flows
• Transition from policy to plan
• Communicate our process
FROM POLICY TO PLAN

• Determine a suitable risk tolerance
• Define a management style
• Create an investment plan
• Construct the portfolio
RISK TOLERANCE

- Ability to take on risk
- Willingness to take on risk
MANAGEMENT STYLE

• Passive
  – Liability Matching
  – Ladder
  – Barbell

• Active
  – Defensive
  – Opportunistic

• What is our outlook?
YIELD CURVE ANALYSIS
### Current Implied Probabilities

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<thead>
<tr>
<th>Meeting</th>
<th>Hike Prob</th>
<th>Cut Prob</th>
<th>1.25-1.5</th>
<th>1.5-1.75</th>
<th>1.75-2</th>
<th>2-2.25</th>
<th>2.25-2.5</th>
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<td>05/01/2019</td>
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<td>4.7%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
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<td>1.0%</td>
<td>9.1%</td>
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<td>01/29/2020</td>
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<td>0.6%</td>
<td>4.7%</td>
<td>19.3%</td>
<td>40.8%</td>
<td>34.4%</td>
<td>2.17</td>
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### Historical Analysis for Meeting 05/01/2019

- Probability of Hike: 0.0%
- Probability of No Change: 95.3%
- Probability of Cut: 4.7%

### Add/Remove Rates

- Calculated: 04/03/2019
- Based on rate: 2.25-2.50

### Add/Remove Series
THE PLAN

• Adapt rulebook to playbook
  – Is it realistic?
  – Is it dynamic?
THE PORTFOLIO

• Allowable investments
• Need for diversification
• Infrastructure in place AND translated to a plan of action
• Cash flows are known
AGENDA

• Identify our goals and limitations
• Establish our infrastructure
• Determine our cash flows
• Understand our investment choices
• Communicate our process
Communicate

• Safety, Liquidity, Yield
• Portfolio perspective
• Benchmark
• We share the same goals and limitations
• Our infrastructure should work for us
• Cash flow is the key to prudent investing
• A policy is not a plan
• We should be able to share our challenges and successes with others