I. Bank Account Overview

II. Bank Analysis Statement

III. Banking RFP Process

IV. Cash Flow is King

V. School Code – What am I allowed to invest in?
Account types – Demand Deposit

- **Basic Checking**
  - Non interest bearing demand deposit account. Typically low/no cost with limited transactions and minimum balance requirements.

- **Analyzed Checking**
  - Non interest bearing demand deposit account. All transaction and service fee volumes calculated monthly, quarterly or annually with potential for compensating balance (Earnings Credit) offset.

- **NOW/Money Market Checking Account**
  - Interest bearing deposit account on which drafts (checks) may be written. Currently, limited to non-profits, sole proprietor and governmental agencies. Typically low/no cost with limited transactions and minimum balance requirements.

Account types – Interest Bearing

- **Money Market Account (MMA)**
  - A deposit account offered by banks. Interest rates are typically higher than regular savings accounts, therefore higher balance requirements are typical. There are strict limits on transactions, with a maximum of 6 withdrawals allowed per month.

- **Certificate of Deposit (CD)**
  - Interest bearing time deposit, typically with fixed term and fixed rate. Rates usually increase as term increases. A penalty fee is standard for redemption prior to maturity date.

- **Investment Sweep**
  - A service that automatically transfers funds over a set target balance in checking account to an investment account. The service is valuable to entities with limited resources to manage the daily cash position. Investment accounts options can vary but are typically Money Market Accounts, Mutual Funds or Repurchase Agreements (REPO's).

FDIC Coverage – Interest Bearing Accounts

<table>
<thead>
<tr>
<th>Bank Account Type</th>
<th>In State (bank is located in the same state as the public entity)</th>
<th>Out of State (bank is located outside of the state of the public entity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand Deposits including NIIB and Interest</td>
<td>$250,000</td>
<td>Not separated</td>
</tr>
<tr>
<td>Bearing Transaction Accounts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venues &amp; Sweepages including Negotiable Order</td>
<td>$250,000</td>
<td>Not separated</td>
</tr>
<tr>
<td>of Warrant (NOW) and Money Market account</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$500,000</td>
<td>$250,000</td>
</tr>
</tbody>
</table>

*Note: Public entities are not allowed to invest in banks without a physical place of deposit in Michigan.*
Deposit Assessments

- FDIC charges banks for deposit insurance
- Assessments typically passed on and vary by bank
- Description of fee varies by bank
  - “Deposit coverage”
  - “Deposit fee”
- Assessment calculation as of April 1, 2011
  - Based on net assets instead of domestic deposits
  - Rates will vary from 0.05% - 0.35%

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Risk Category II</th>
<th>Risk Category III</th>
<th>Risk Category IV</th>
<th>Large &amp; Highly Complex Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Base Assessment Rate</td>
<td>5 – 9</td>
<td>10 – 14</td>
<td>25 – 35</td>
<td>5 – 35</td>
</tr>
<tr>
<td>Adjusted Debt Adjustment Factor</td>
<td>-4.5 to -2</td>
<td>-5.5 to -2</td>
<td>-6.5 to -2</td>
<td>-5 to -2</td>
</tr>
<tr>
<td>Brokered Deposit Adjustment</td>
<td>N/A</td>
<td>0 to 10</td>
<td>0 to 10</td>
<td>0 to 10</td>
</tr>
<tr>
<td>Total Base Assessment Rate</td>
<td>2.5 to 4</td>
<td>9 to 24</td>
<td>18 to 33</td>
<td>30 to 45</td>
</tr>
</tbody>
</table>

* Most recent methodology. Source: FDIC.org

Bank Analysis Statement

Fee Frequency

- Frequency of Fee Settlement
  - How often are fees paid to the Bank

See Page 1, Line 9
Available Balance Required – determined by fees and earnings credit
Balance for Earnings Credit – monthly average balance
Reserves – no fee since 2008 (when the Federal Reserve began paying interest on reserves)

Earnings Credit
- Stated as an annual rate
- Divide rate by #calendar days / #days in reported month
  - Ex. 0.25%/365/31 = 0.000212% monthly credit
- Arbitrarily determined by the bank
- Excess credit is lost at the end of settlement period
- Used to calculate “Balance Required” to offset service charges
  - Service Charge / Monthly Earnings Credit = Balance Required

FDIC Fee
- Deposit Insurance – Bank Assessment
- Fee is incurred by the bank, and usually passed along to client
Fee Considerations

Strategies to Reduce Fees / Increase Efficiency

- Negotiate with the bank to lower fees
- Evaluate usage of banking services to determine which services could be eliminated or replaced with more inexpensive services
- Look for opportunities to become more efficient / enhance internal controls through bank services (Positive Pay, Reconciliation Services, Data Exports)
- Re-bid banking services through a competitive RFP process

Banking RFP Process

When to Consider a RFP?

- Ownership change
- Staffing change
- Annual relationship reviews
- New technology
- Future banking needs
- Ensure competitive pricing & interest rates
- New ideas
- Increased Risk (Credit Rating Change or Litigation)
How is an RFP Organized?

- General Information
- Calendar of Events
- Minimum Proposer Requirements
- Scope of Services
- Evaluation Criteria
- Special Contract Provisions
- Exhibits and Attachments

CUSTOMIZE TO FIT YOUR NEEDS

Pre-Proposal Conference

- Valuable for large or complex operations
- Talk about intended operational changes
- Ensure a fair competitive environment
- Use specific prepared questions to generate audience interaction
- Clarify procurement rules
- Understand who’s interested

Evaluation Form

<table>
<thead>
<tr>
<th>Operational Requirements</th>
<th>Firm Experience</th>
<th>Financial Strength</th>
<th>Scope of Services Offered</th>
<th>Degree of Automation</th>
<th>Location (e.g. branches, operations center, account officers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>10</td>
<td>10</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>5</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

TOTAL SCORE 100

Transition

Compliance with the requirements of the RFP, completeness and quality of proposal.

<table>
<thead>
<tr>
<th>Compliance</th>
<th>Completeness</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Proposed fees and compensation

<table>
<thead>
<tr>
<th>Fees and Compensation</th>
<th>Total Before Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

TOTAL 100
Qualitative Criteria

- Financial strength (Safety First)
- Operational capabilities
- Experience
- Financials controls
- Location, location, location
- Quality of Proposal
- Creative or new approaches

Quantitative Evaluation - Fees

- Fee proposal
  - Bundled or unbundled
  - Volume levels
  - Maintenance and usage
- AFP (TMA) Service Codes
- Pro Forma
  - Existing and potential services
  - Define the format
- FDIC Charges
- Fee Waivers
- Other fees?

Quantitative Evaluation - Earnings

- Earnings Credit Rate
  - Index based
  - Application
  - Treatment of excess earnings
- Investment earnings
  - Structure
  - Historical rates
  - Additional fees
- Evaluate on Net Value
  - Interest Earnings +XX
  - Gross Fees -XX
  - Less: Earnings Credit -XX
  - Net Fees +XX
  - Net Value (Earnings-Net Fees) +/X
### Interviews

- Request key staff
- Define presentation content
- Discuss all major service needs
- Understand fee proposal
- Allow enough time

### RFP Time Line

<table>
<thead>
<tr>
<th>Week</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue RFP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receive Written Questions from Perspective Vendors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respond to Written Questions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receipt of Proposals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluate Proposals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Determine Finalists</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finalist Interviews</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negotiate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review &amp; Sign Contract</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Remember...

...Everything is negotiable

- Fees
- Earnings Credit
- Availability
- Coverage
- Earnings rates
- Contract terms
Cash Flow Is King

Benefits of Cash Flow Forecast

- Ensures liquidity
- Can increase investment income / decrease interest expense
  - Amounts available for investment
  - Period of time to hold the investment
  - Assists with investment strategies
- Forecasts problems – trend lines
  - Revenues not being collected properly
  - Expenditures exceed budget

Sample Cash Flow Spreadsheet
Declining Balances – Time to Borrow

Cash Flows Show Trends

- Fund balances sometimes show growth trends (Increase / Decrease)

Cash Flows for Projections

- Historic data can be used to predict future balances
Cash Flow Segmentation

- Cash and cash equivalents – Overnight bank accounts
- Short-term Operational Funds – Need funds within 1 year
- Core portfolio – Consistently available for long-term investing

Sample Cash Flow

Portfolio Components

- Short-Term Portfolio
  ✓ Provide liquidity for short-term cash needs
  ✓ Money market funds and short-term investments
  ✓ Examples
    - Bank/Time Deposits
    - Certificates of Deposit
    - LGIP
- Core Portfolio or Reserve
  ✓ Funds not expected to be spent
  ✓ Can be invested in longer-term securities
    - U.S. Treasuries
    - Federal Agency Obligations
    - Certificates of Deposit

School Code
What Am I Allowed To Invest In
Treasury Yield Curve Comparison

- We saw significant steepening in response to the Fed's taper talks in 2013 (12/31/13)
- The Fed's updated timeline on the end of QE brought intermediate rates up while longer term rates have fallen (3/31/14)

![Treasury Yield Curve Comparisons](image)

Risk vs. Return

Comparison of Periodic Quarterly Returns
December 2003 – December 2013

<table>
<thead>
<tr>
<th>Periodic Total Returns</th>
<th>Merrill Lynch Index</th>
<th>Duration</th>
<th>Annual Return</th>
<th>Cumulative Value of $10,000,000</th>
<th>Quarters With Negative Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Month Treasury Bill</td>
<td>0.59 Years</td>
<td>1.37%</td>
<td>$29,012,086</td>
<td>0 out of 40</td>
<td></td>
</tr>
<tr>
<td>6-Month Treasury Bill</td>
<td>1.08 Years</td>
<td>1.02%</td>
<td>$29,585,237</td>
<td>0 out of 40</td>
<td></td>
</tr>
<tr>
<td>1-Year Treasury Index</td>
<td>1.00 Years</td>
<td>2.07%</td>
<td>$30,076,022</td>
<td>4 out of 40</td>
<td></td>
</tr>
<tr>
<td>1.5-Year Treasury Index</td>
<td>1.01 Years</td>
<td>2.58%</td>
<td>$32,209,810</td>
<td>7 out of 40</td>
<td></td>
</tr>
<tr>
<td>2-Year Treasury Index</td>
<td>2.79 Years</td>
<td>3.09%</td>
<td>$33,051,173</td>
<td>12 out of 40</td>
<td></td>
</tr>
<tr>
<td>3-Year Treasury Index</td>
<td>3.50 Years</td>
<td>3.72%</td>
<td>$35,686,887</td>
<td>15 out of 40</td>
<td></td>
</tr>
</tbody>
</table>

Source: Bloomberg

Revised School Code Section 1221

- Treasurer shall deposit funds in a “financial institution” or “joint investment authorized by Section 1223” and as designated by the board of education.

- “Financial institution” is defined as:
  - State or national chartered bank
  - State or federally chartered savings and loan association
  - Savings bank
  - Credit union whose deposits are insured by an agency of the U.S. government

- Must maintain a principal office or branch office located in this state under the laws of the state of Michigan or U.S.

- Be an eligible depository for state funds as well.
**Revised School Code**

**Section 1223 Permitted Investments**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Maximum Maturity</th>
<th>Minimum Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Treasuries</td>
<td>No Limit</td>
<td>n/a</td>
</tr>
<tr>
<td>Federal Agencies</td>
<td>No Limit</td>
<td>n/a</td>
</tr>
<tr>
<td>Obligations of the State of Michigan</td>
<td>5 years</td>
<td>n/a</td>
</tr>
<tr>
<td>Certificates of Deposit</td>
<td>No Limit</td>
<td>n/a</td>
</tr>
<tr>
<td>Repurchase Agreements*</td>
<td>No Limit</td>
<td>n/a</td>
</tr>
<tr>
<td>Bankers’ Acceptances</td>
<td>No Limit</td>
<td>n/a</td>
</tr>
<tr>
<td>Mutual Funds**</td>
<td>No Limit</td>
<td>n/a</td>
</tr>
<tr>
<td>Investment Pools**</td>
<td>No Limit</td>
<td>n/a</td>
</tr>
</tbody>
</table>

*Agreements must be collateralized with U.S. Treasury or Federal Agency Obligations

**Mutual funds and investment pools must be composed entirely of investment vehicles legal for direct investment by a school district.**

---

**Helpful Hints**

- **Safeguarding of assets – Safety comes first**
  - No award for high earnings, but public flogging for loss
  - Calculate your credit exposure (uninsured portion)
  - If uninsured or not backed by U.S. – need to do credit analysis on bank
  - Take steps to mitigate risk through informed investing

- **Understand your bank relationship to gain efficiencies and lower costs**
  - Analysis statement identifies all of your
  - Consider a banking RFP to help keep your pricing competitive (realize – ton of work)

- **Cash Flow analysis is fundamental to managing district funds**
  - Whether you are borrowing or investing, need to know ebb and flow of funds

- **Historically, yield curve provides higher earnings longer-term**
  - Avoid timing market by consistently investing

- **One of your best resources is sitting right next to you**
  - Shake hands with your Uncle Mike me boy and here’s your sister Kate
  - ISBO / MEM
  - Vendors you trust

---

**References**

- Deposit insurance coverage & banks under supervisory watch

- Michigan State Treasury - State Aid Note Program
  - http://www.michigan.gov/treasury/0,4679,7-121-1753_55952-5719=00.html

- Michigan Revised School Code – Act 451, Section 380.1223
Questions ???

Brian Quinn
PFM Asset Management
Director
quinnb@pfm.com
(616) 304-5200

Glossary

- **ACH** - growing in use; settlement 1-2 days after origination
- **Average Ledger Balance** - The net sum of the daily positive and negative ledger balances for the month, divided by the number of days in the month. The balance of the last preceding business day is used for weekends and holidays.
- **Average Ledger Balance** - The net sum of the daily positive and negative ledger balances for the month, divided by the number of days in the month. The balance of the last preceding business day is used for weekends and holidays.
- **Check** - used for most corporate and consumer bill payments
- **Collected Balance** - Ledger balance less float.
- **Depository Bank** - bank which accepts an item for deposit
- **Drawn Bank** - bank on which check is drawn
- **Excess Earnings Allowance** - Difference between the earnings credit allowance and the balance-based service charges.
- **Float** - The dollar amount of deposited items that have been given immediate, provisional credit but are in the process of collection from drawee banks. This is also called uncollected funds.
- **Ledger Balance** - End of day balance after all accounting entries (debits and credits) have posted to your account.
- **On-us item** - check deposited to same bank on which it was drawn
- **Payor** - party who issues the check
- **Payee** - party to whom check is payable
- **Payment Cards** - credit, debit, purchasing and Smart cards
- **Provisional Credit** - payee receives ledger credit when the check is deposited
- **Reserve Requirement** - The portion of the DDA balances that must be set aside by the bank to meet reserve requirements. This amount is calculated by multiplying the average positive collected balance by the current reserve requirement rate.
- **Return item** - check the drawee bank rejects and returns
- **Settlement Date** - When the analysis billing period is greater than one month, this represents the day for which the analysis billing cycle will be complete.
- **Wire** - primarily used in LARGE $ payments - immediate funds

Important Disclosures and Disclaimers

This presentation is only intended for institutional and/or sophisticated professional investors. This material is intended for informational purposes only and should not be relied upon to make an investment decision. It was prepared without regard to any specific investor's financial objectives or circumstances. Past performance is not a guarantee of future results. Market conditions and investment performance may change over any period of time. The information presented does not constitute an offer or solicitation to buy or sell any investment. The PFM Group, its members, representatives, and associates may have interests in securities or investments referenced in this presentation. The views expressed within this presentation constitute the perspective and judgment of PFM at the time of distribution and are subject to change. Any forecast, projection, or prediction of the market, the economy, or equity or fixed income markets is based upon current opinion as of the date of issue, and is also subject to change. Any errors or omissions, and any inaccurate or misleading statements or representations are not intended to constitute a warranty or representation. No further distribution is permissible unless written consent is obtained from the PFM Group. Important Disclosures and Disclaimers.