Once upon a time there was an idea for a building. The story of the life of a building project.

Shelby McQuay – Municipal Advisor
Ryan Miles – Senior Investment Advisor
Stephen Broden – Arbitrage Managing Director
The Story of the Life of a Building Project

Willow River School District, ISD No. 577 General Obligation Bonds, Series 2016A
Chapter 1 – The Project
Chapter 1 – The Project & The Project Timeline

- Health & Safety
- Deferred Maintenance
- Current Refunding

- LTFM Enacted; Backlog of Projects in ISD 577 Identified
- Sale of Bonds
- Project begins
- School board reviews other project
- Secondary project approval and completion

Refunding Estimates (Estimated Savings of $24,500)
Bond Proceeds Invested
Ends under budget
Ehlers discusses arbitrage with district
Chapter 2 — The Project and the Funding Sources

• “Pay as you go” LTFM
• Issue facilities maintenance bonds
• LTFM fund balance
Chapter 2 – The Project Totals

• Current Refunding of 2006 Bonds
  • $654,389
• Deferred Maintenance Project Budget
  • $1.30 m
• Health & Safety Project Budget
  • $5.16 m
## Chapter 2 – Project Sources & Uses

<table>
<thead>
<tr>
<th>Bond Amount</th>
<th>Number of Years</th>
<th>Sources of Funds</th>
<th>Uses of Funds</th>
<th>Combined Totals</th>
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<tbody>
<tr>
<td>$640,000</td>
<td>3.5</td>
<td>Current Refunding</td>
<td>Allowance for Discount Bidding **</td>
<td>$4,371</td>
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<tr>
<td>$1,260,000</td>
<td>15</td>
<td>FM Bonds/ Per Pupil</td>
<td>$8,605</td>
<td>$35,137</td>
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<tr>
<td>$5,145,000</td>
<td>21</td>
<td>FM Bonds/ Additional</td>
<td>$5,145,000</td>
<td>$192,481</td>
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<td>$7,045,000</td>
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<td>Combined Totals</td>
<td>$7,045,000</td>
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<td>9/13/2016</td>
<td>9/13/2016</td>
<td>Sources of Funds</td>
<td>Uses of Funds</td>
<td></td>
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<tr>
<td>9/13/2016</td>
<td>9/13/2016</td>
<td>Par Amount</td>
<td>Allowance for Discount Bidding **</td>
<td>$4,371</td>
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<td>9/13/2016</td>
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<td>Reoffering Premium</td>
<td>$8,605</td>
<td>$35,137</td>
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<td>9/13/2016</td>
<td>9/13/2016</td>
<td>Investment Earnings *</td>
<td>$5,145,000</td>
<td>$192,481</td>
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<td>9/13/2016</td>
<td>9/13/2016</td>
<td>Total Sources</td>
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<td>$1,335,758</td>
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<td>9/13/2016</td>
<td>9/13/2016</td>
<td>Uses of Funds</td>
<td>$666,314</td>
<td>$1,335,758</td>
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<td>9/13/2016</td>
<td>Total Uses</td>
<td>$666,314</td>
<td>$1,335,758</td>
</tr>
</tbody>
</table>
Chapter 3 – Investment Bond Proceeds Objectives

• Safety of Principal
• Liquidity
• Yield

Investment Suitability
Fiduciary responsibility
The Guide: Investment Policy
Chapter 3 – Bond Proceeds Investment Strategies

**Passive**
Bank Money Market/Local Government Investment Pool
Immediate availability
Minimal resources required to monitor
Zero market/interest rate risk
Inconsistent investment returns
Lowest return over time

**Active**
Managed portfolio of permitted investments
Consistent investment returns
Maximize returns over time
Availability of funds investment dependent
Additional resources required to monitor
Subject to market/interest rate risk
Chapter 3 – Investment Market Participants

Typical Participants:

- Broker / Dealer
- Registered Representative
- Bank
- Custodial Bank
- Registered Investment Advisor
Chapter 3 – Prudent Investor Rule – Fiduciary vs Suitability

- Act in Good Faith
- Put Client Interest First
- Disclose All Conflicts of Interest
- Never Mislead Client
- Provide Full Disclosure
## Opportunity Cost of Lack of Investment Strategy

<table>
<thead>
<tr>
<th>Bond Issue</th>
<th>Avg Bond Portfolio Return (%)</th>
<th>Weighted Avg Maturity 2yr Issue (yrs)</th>
<th>Projected Total Return ($)</th>
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<tbody>
<tr>
<td>$7,045,000</td>
<td>0.50%</td>
<td>1.1</td>
<td>$38,748</td>
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<td>$7,045,000</td>
<td>0.75%</td>
<td>1.1</td>
<td>$58,121</td>
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<tr>
<td>$7,045,000</td>
<td>1.00%</td>
<td>1.1</td>
<td>$77,495</td>
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<td>$7,045,000</td>
<td>1.25%</td>
<td>1.1</td>
<td>$96,869</td>
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<tr>
<td>$7,045,000</td>
<td>1.50%</td>
<td>1.1</td>
<td>$116,243</td>
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<tr>
<td>$7,045,000</td>
<td>1.75%</td>
<td>1.1</td>
<td>$135,616</td>
</tr>
<tr>
<td>$7,045,000</td>
<td>2.00%</td>
<td>1.1</td>
<td>$154,990</td>
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<tr>
<td>$7,045,000</td>
<td>2.25%</td>
<td>1.1</td>
<td>$174,364</td>
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<tr>
<td>$7,045,000</td>
<td>2.50%</td>
<td>1.1</td>
<td>$193,738</td>
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</tbody>
</table>

Chapter 3 – Importance of a Strategy
Chapter 3 – Bond Proceeds Investing Roadmap

1. Analyze and Construct Cash Forecast to Support Project Cash Flow Needs
2. Develop Optimal Investment Strategy between Municipal Advisor, District, and Construction Company
3. Investments Mature and Disbursed in Accordance with Construction Draw Needs
4. Investments are Purchased Based on Strategy in Accordance with State Statute
5. Portfolio is Monitored to meet Arbitrage Spending and to Enhance Earnings
Chapter 3 – Common Investment Types - MN Statute 118A

Local Government Investment Pools
Time Deposit or CD
Money Market Mutual Fund
Commercial Paper
Repurchase Agreement (aka Repos)
Obligations of Federal Government (T-Bills / Notes / Bonds)
Obligations guaranteed by the Federal Government (GNMA, SBA, etc.)
Obligations of Federal Agencies (FNMA, FHLMC, FHLB, FFCB, etc.)
Mortgage Backed Securities
Municipal Bonds
Chapter 3 – Bond Proceeds portfolio construction

### Willow River Public Schools
**2016A Bond Proceeds - Portfolio**
**9/13/2016**

<table>
<thead>
<tr>
<th>Investment Security/Type</th>
<th>Amount</th>
<th>YTM</th>
<th>Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northpointe Bank CD</td>
<td>130,000</td>
<td>0.6000%</td>
<td>5/22/2017</td>
</tr>
<tr>
<td>Bank Leumi CD</td>
<td>248,000</td>
<td>0.7000%</td>
<td>6/21/2017</td>
</tr>
<tr>
<td>First Financial Bank CD</td>
<td>248,000</td>
<td>0.7000%</td>
<td>6/21/2017</td>
</tr>
<tr>
<td>Pacific Western Bank CD</td>
<td>229,000</td>
<td>0.6500%</td>
<td>6/16/2017</td>
</tr>
<tr>
<td>Southern First Bank CD</td>
<td>248,000</td>
<td>0.7000%</td>
<td>7/21/2017</td>
</tr>
<tr>
<td>USAmerbank CD</td>
<td>248,000</td>
<td>0.6500%</td>
<td>7/24/2017</td>
</tr>
<tr>
<td>FNMA 0.65</td>
<td>704,000</td>
<td>0.6500%</td>
<td>8/10/2017</td>
</tr>
<tr>
<td>Fidelity Bank CD</td>
<td>248,000</td>
<td>0.7000%</td>
<td>8/23/2017</td>
</tr>
<tr>
<td>United Bankers Bank CD</td>
<td>62,000</td>
<td>0.8000%</td>
<td>12/22/2017</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6,360,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Average Weighted YTM: 0.7255%
Average Weighted Maturity (Duration): 0.97 years
Estimated Earnings: $44,809.39

Historical returns are not a guarantee of future results. Information obtained is from sources we believe to be reliable but we do not guarantee accuracy. Neither the information, nor any opinion expressed, constitutes a solicitation by us of the purchase or sale of any security. Yields, rates, securities, and prices are subject to change and availability.
Chapter 3 – Bond Proceeds Projected Cashflows

### Projected Cash Flows

<table>
<thead>
<tr>
<th>Security Name (Ticker/Symbol)</th>
<th>Quantity</th>
<th>03/2017</th>
<th>04/2017</th>
<th>05/2017</th>
<th>06/2017</th>
<th>07/2017</th>
<th>08/2017</th>
<th>09/2017</th>
<th>10/2017</th>
<th>11/2017</th>
<th>12/2017</th>
<th>01/2018</th>
<th>02/2018</th>
<th>Total</th>
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<tbody>
<tr>
<td>MERRICK BK SOUTH JORDAN UTAH CD MTHLY (59013.JU6)</td>
<td>248,000.00</td>
<td>165</td>
<td>165</td>
<td>165</td>
<td>165</td>
<td>165</td>
<td>165</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,157</td>
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<tr>
<td>PACIFIC WESTERN BANK CA CD (055061DC0)</td>
<td>229,000.00</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>744</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>744</td>
</tr>
<tr>
<td>SAFRA NATL BK NEW YORK CD (785580W77 -)</td>
<td>180,000.00</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,440</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,440</td>
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<tr>
<td>SANTANDER BK NATL ASSN CD 0% (80261J-CE4)</td>
<td>248,000.00</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<td>1,984</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,984</td>
</tr>
<tr>
<td>SOUTHERN MO BK &amp; TR CO CD MTHLY (8433-89AU4)</td>
<td>115,000.00</td>
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<td>77</td>
<td>77</td>
<td>77</td>
<td>77</td>
<td>77</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>690</td>
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<tr>
<td>UNITED BANKERS BANK CD MTHLY (90955F-28)</td>
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<td>41</td>
<td>41</td>
<td>41</td>
<td>41</td>
<td>41</td>
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<td>413</td>
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<tr>
<td>USAMERIBANK LARGO FL CD MTHLY (917312-DU1)</td>
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<td>134</td>
<td>134</td>
<td>134</td>
<td>269</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>806</td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>1,048</strong></td>
<td><strong>1,048</strong></td>
<td><strong>5,288</strong></td>
<td><strong>1,182</strong></td>
<td><strong>2,512</strong></td>
<td><strong>17,409</strong></td>
<td><strong>2,107</strong></td>
<td><strong>204</strong></td>
<td><strong>217</strong></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
<td><strong>35,857</strong></td>
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</table>
# Chapter 3 — Annual GASB 72 reporting

<table>
<thead>
<tr>
<th>Account</th>
<th>Identifier</th>
<th>Description</th>
<th>Basis Current Units</th>
<th>Fair Value Level (2)</th>
<th>Security Type</th>
<th>R.S. Class</th>
<th>Basis Net Total Unrealized Gain/Loss</th>
<th>Unrealized Price</th>
<th>Basis Market Value</th>
<th>Basis Market Value + Accumulated Other Comprehensive Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willow Rvr Bond Proceeds 2016A</td>
<td>8336158100</td>
<td>—</td>
<td>546,600.00</td>
<td>332,724.00</td>
<td>—</td>
<td>—</td>
<td>0.00</td>
<td>0.00</td>
<td>546,600.00</td>
<td>546,600.00</td>
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</table>

**Level 1**

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<th>Basis Current Units</th>
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<th>Security Type</th>
<th>R.S. Class</th>
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<td>Willow Rvr Bond Proceeds 2016A</td>
<td>8336158100</td>
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<td>546,600.00</td>
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**Level 2**

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<th>Basis Current Units</th>
<th>Fair Value Level (2)</th>
<th>Security Type</th>
<th>R.S. Class</th>
<th>Basis Net Total Unrealized Gain/Loss</th>
<th>Unrealized Price</th>
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<th>Basis Market Value + Accumulated Other Comprehensive Income</th>
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<td>546,600.00</td>
<td>332,724.00</td>
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<td>0.00</td>
<td>546,600.00</td>
<td>546,600.00</td>
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**Summary**

<table>
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<th>Identifier</th>
<th>Description</th>
<th>Basis Current Units</th>
<th>Fair Value Level (2)</th>
<th>Security Type</th>
<th>R.S. Class</th>
<th>Basis Net Total Unrealized Gain/Loss</th>
<th>Unrealized Price</th>
<th>Basis Market Value</th>
<th>Basis Market Value + Accumulated Other Comprehensive Income</th>
</tr>
</thead>
</table>
Chapter 4 – Investment Risk Factors

Arbitrage Risk
Market/Interest Rate Risk
Custodial Credit Risk
Credit Risk
Reputation Risk
Concentration Risk
Liquidity Risk
Chapter 4 – Risk Historical Market Conditions – Fed Interest Rate Watch
Chapter 4 – Risk Current Market Conditions – Treasury Yield Curve
Chapter 4 – Risk Current Market Conditions Fed Funds Rate Projections

Compare projections between: June 2018 and Dec 2018

- Number of governors voting
- Oldest/newer projection
- Median of projections

Rate

Source: U.S. Federal Reserve
Chapter 5 – Arbitrage and the IRS

• IRS limitations prevent tax exemption abuse:
  • Issuing earlier than necessary
  • Issuing more than necessary
  • Keeping longer than necessary

• Limitations clarified to deter issuers from creation of arbitrage profits from higher yielding investments

*These limitations are known generally as the IRS arbitrage rules.*
Chapter 5 – Arbitrage and District Responsibilities

- Legal documents for tax-exempt bonds create District obligation to follow IRS arbitrage rules
- IRS has filing requirement for each tax-exempt bond issue after 5 years and final maturity
  - Analyze difference in bond interest cost versus investment earnings
Chapter 5 – Arbitrage and District Specific Responsibilities

- Annual bond amounts dictate arbitrage rules
- Most arbitrage regulation if issuing over $15 million per year
  - (for construction projects specifically)
  - $5 million for refinancing purpose
- Willow River
  - Total issue $7.045 million
  - Mainly construction
  - Reduced arbitrage rules
For Willow River:

- **Current Refunding of 2006 Bonds**
  - $654,389 – Spend within 90 days

- **Deferred Maintenance and Health & Safety Projects**
  - Spend within 3 years, most within 2 years (timing in financing documents)
  - $1,300,000 for Deferred Maintenance
  - $5,160,000 for Health & Safety
Chapter 5 – Arbitrage and District Specific Responsibilities

• Summer 2018
  • Project came in $680,000 under budget
  • Nearing 2 year mark (expected completion date)

✓ District spent 85% of proceeds
  • Key IRS indicator

• Next Steps Options
  • Return to taxpayers through debt excess adjustment
  • Find more projects
Chapter 5 – Arbitrage and School District Specific Responsibilities

- Maintain sale and investment records for bond issue life plus 3 tax years
- Willow River:
  - Closed September 13, 2016
  - Bonds paid off February 1, 2038
  - Maintain records through tax year 2041
Chapter 5 — School District Specific Responsibilities

• Rely on internal / external expertise for arbitrage rules
• Understand when arbitrage rules are necessary, documentation requirements, deadlines for analysis
• Use external experts for analysis, making timely payments, and IRS inquiry responses
Epilogue

- Projects CAN be under budget
- Investments can create additional resources
- Investing in taxable investments will generally create arbitrage review requirements
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