## Swap No. 1 - Conversion

## Convert From 68\% 10Yr LIBOR less 36.5 bps to $68 \% 1$ Month LIBOR

Assuming 5/13/2014 Rates:

| Option | Fixed Rate | Fixed Rate Reduction | First Year Cash Flow <br> Savings | Present Value Benefit |
| :--- | :---: | :---: | :---: | :---: |
| Current | $3.224 \%$ | $\mathrm{~N} / \mathrm{A}$ | $\mathrm{N} / \mathrm{A}$ | N/A |
| 2-Year Conversion | $1.814 \%$ | $1.410 \%$ | $\$ 552,139$ | $\$ 1,055,894$ |
| 3-Year Conversion | $1.956 \%$ | $1.268 \%$ | $\$ 496,523$ | $\$ 1,339,092$ |
| 5-Year Conversion | $2.195 \%$ | $1.029 \%$ | $\$ 402,703$ | $\$ 1,567,254$ |
| Full Conversion | $2.430 \%$ | $0.794 \%$ | $\$ 310,851$ | $\$ 1,630,912$ |
| Comparison-68\% 10Yr | $\mathrm{N} / \mathrm{A}$ | 5/2014 Rates $=$ <br> LIBOR to 68\% 1Mth <br> LIBOR | Historical $=0.88 \%$ | $\mathrm{~N} / \mathrm{A}$ |

Note: Annual Cash Flow Savings Decrease as Swap Notional Amortizes

- The table shows the impact of converting the CMS rate ( $68 \%$ * 10 -year LIBOR less $0.365 \%$ ) back to the swaps original index of 68\% of 1-month LIBOR.
- Depending on the period picked the new fixed rate will be reduced by an amount which can be included in GRU's budget for each year.
- Converting back to 1-month LIBOR reduces the benefit to GRU while reducing the yield curve risk in the transaction for the period picked.
- RECOMMENDATION - Amend Swap Agreement to convert to 68\% of 1-month LIBOR index for a five year conversion to lock-in lower fixed interest rate paid by GRU.


## Swap No. 2 - Conversion

Convert the CMS Rate Back to the Original Index of 68\% of 1-Month LIBOR
Assuming 5/13/2014 Rates:

| Option | Fixed Rate | Fixed Rate Reduction | First Year Cash Flow <br> Savings | Present Value Benefit |
| :--- | :---: | :---: | :---: | :---: |
| Current | $3.200 \%$ | $\mathrm{~N} / \mathrm{A}$ | $\mathrm{N} / \mathrm{A}$ | $\mathrm{N} / \mathrm{A}$ |
| 2-Year Conversion | $1.666 \%$ | $1.534 \%$ | $\$ 620,504$ | $\$ 1,186,648$ |
| 3-Year Conversion | $1.819 \%$ | $1.381 \%$ | $\$ 558,532$ | $\$ 1,506,356$ |
| 5-Year Conversion | $2.078 \%$ | $1.122 \%$ | $\$ 453,767$ | $\$ 1,765,185$ |
| Full Conversion | $2.328 \%$ | $0.872 \%$ | $\$ 352,913$ | $\$ 1,852,154$ |
| Comparison | N/A | $5 / 2014$ Rates $=1.53 \%$ <br> Historical $=0.82 \%$ | N/A |  |

Note: Annual Cash Flow Savings Decrease as Swap Notional Amortizes

- The table shows the impact of converting the CMS rate (60.36\% * 10-year LIBOR) back to the swaps original index of $68 \%$ of 1-month LIBOR.
- Depending on the period picked the new fixed rate will be reduced by an amount which can be included in GRU's budget for each year.
- Converting back to 1-month LIBOR reduces the benefit to GRU while reducing the yield curve risk in the transaction for the period picked.
- RECOMMENDATION - Amend Swap Agreement to convert to 68\% of 1-month LIBOR for a five-year conversion to lock-in lower fixed interest rate paid by GRU.


## Swap Fees and Termination Costs

| Swap No. | Counter Party | Underlying Debt | Notional Amount | Bank Bid/Offer Cost Included in Fixed Rate Reduction | Fixed Rate Reduction | NPV of Fixed Rate Reduction | External Legal and Consulting Fees | Termination (Cost) Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Goldman | 2006A | \$41.145 Million | \$65,000 | $\begin{gathered} 1.029 \% \\ \text { (5-Year Conversion) } \end{gathered}$ | \$1.57 Million | \$30,000 | (\$2.18M) 5/13/2014 |
| 2 | JP Morgan | 2005C | \$42.525 Million | \$65,000 | $\begin{gathered} 1.122 \% \\ (5-Y e a r \text { Conversion) } \end{gathered}$ | \$1.76 Million | \$30,000 | (\$2.04M) 5/13/2014 |
| 3 | Goldman | 2007A | \$137.875 Million | \$800,000 | 0.700\% | \$13.31 Million | \$60,000 | (\$21.79M) 5/13/2014 |

All data as of 5/13/2014

## Swap Conversion Risk Comparison

| Swap No. | Current Index | Current Fixed <br> Rate | Proposed Index | Proposed <br> Fixed Rate | Current Risks | Risks Under Proposed <br> Conversion |
| :---: | :---: | :---: | :---: | :---: | :--- | :--- |
| $\mathbf{1}$ | 68\% 10-Year LIBOR <br> Less 0.365\% | $3.224 \%$ | $68 \% 1-$ Month LIBOR |  |  |  |

*Market currently not at this rate, would convert only if market improves to provide this lower fixed rate.

## MMD and GRU's Estimated Yield curve

Rates as of June 13, 2014


| Year | "AAA" <br> MMD | GRU's Spread to <br> "AAA" MMD | Estimated <br> Yield |
| :---: | :---: | :---: | :---: |
| 1 | $0.140 \%$ | 5 bps | $0.19 \%$ |
| 5 | $1.300 \%$ | 22 bps | $1.52 \%$ |
| 10 | $2.330 \%$ | 38 bps | $2.71 \%$ |
| 15 | $2.820 \%$ | 40 bps | $3.22 \%$ |
| 20 | $3.150 \%$ | 40 bps | $3.55 \%$ |
| 25 | $3.320 \%$ | 40 bps | $3.72 \%$ |
| 30 | $3.370 \%$ | 40 bps | $3.77 \%$ |

- The MMD Yield Curve is a high grade municipal yield curve published daily by Municipal Market Data.
- It is one of the most commonly used benchmarks in municipal finance.
- The yields within the curve reflect the current yields for each maturity year at which bondholders would likely to sell high quality (AAA rated) general obligation backed bonds.
- The yield curve is typically influenced by new issuances in the primary market as well as post-issuance trading in the secondary market.
- Municipal bonds (like GRU issues) typically trade at a "spread to AAA MMD", meaning the difference between the yield in a specific year of a bond issue and the respective yield in the MMD Yield Curve.
- Spreads vary over time based on market conditions and investor preferences

