

Cash Flow Portfolio Laddering



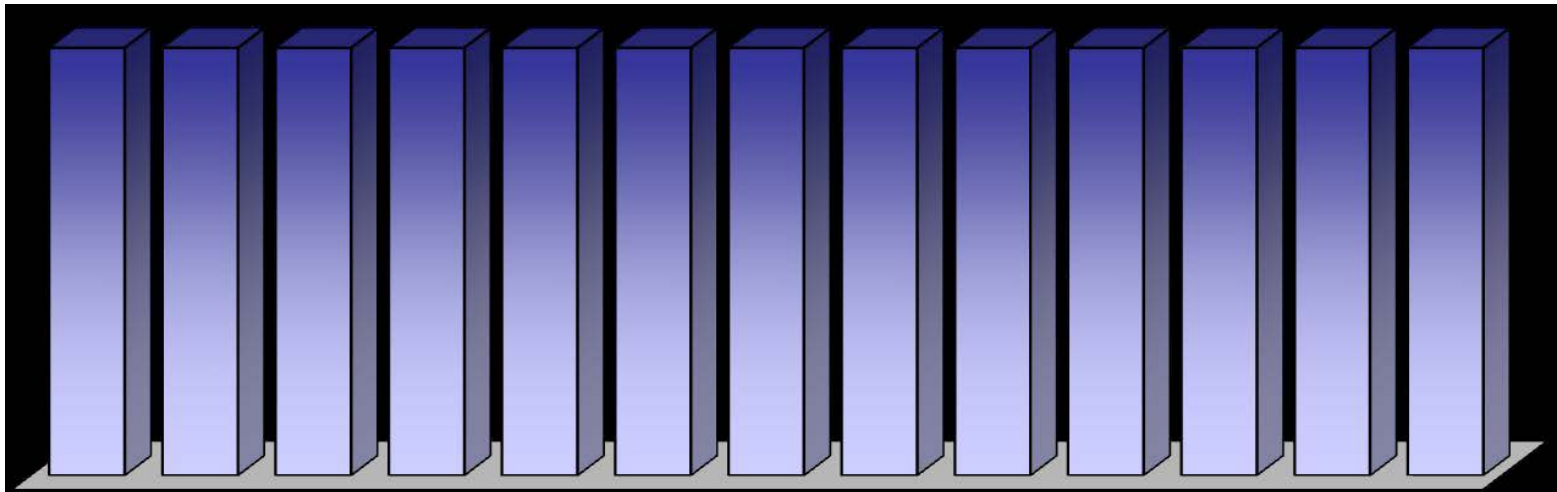
NEVADA COUNTY TREASURER PORTFOLIO

Cash Flow Portfolio Laddering

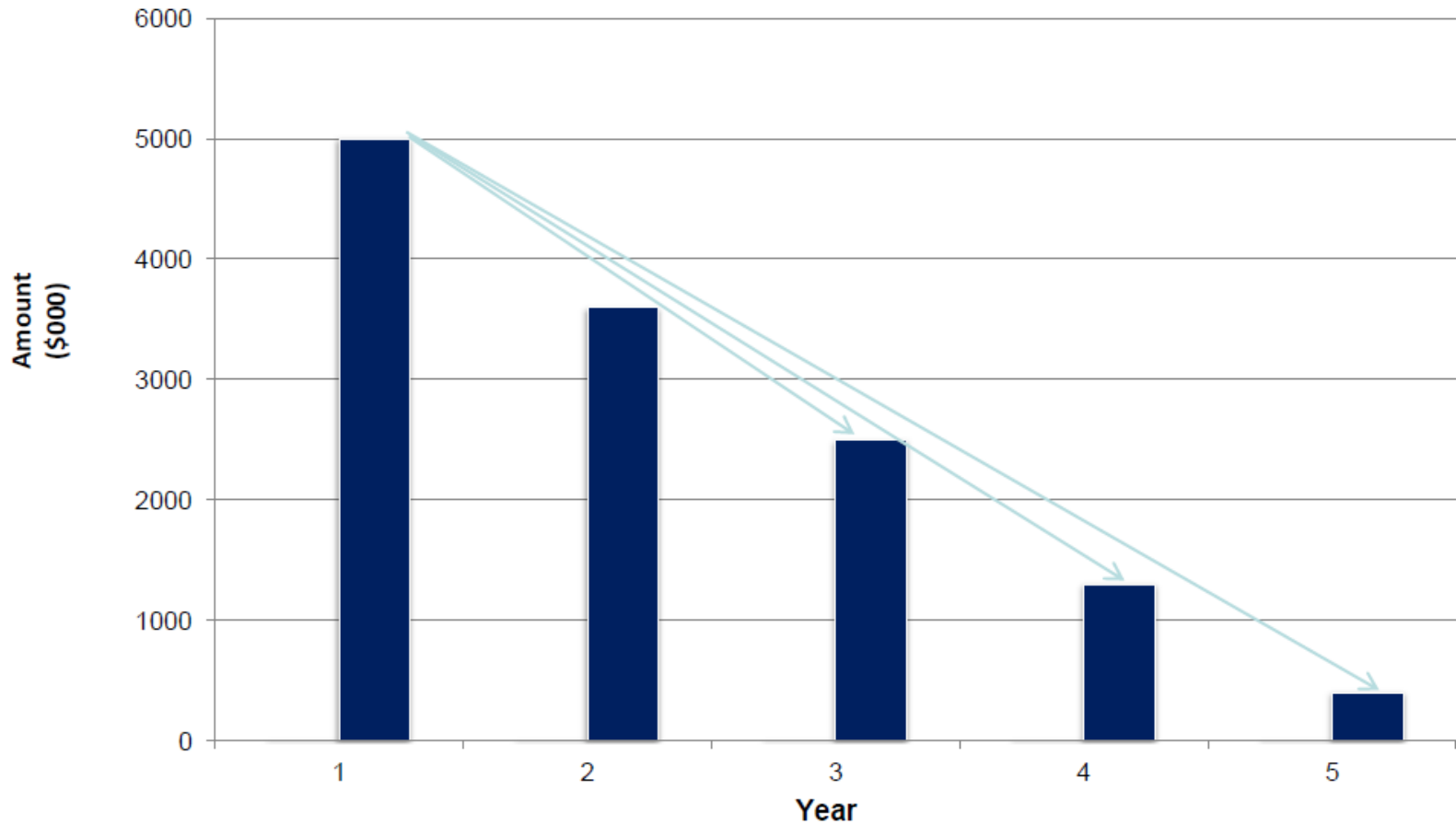
- Transactions typically occur when securities mature
- Provides liquidity through maturing investments
- Minimizes investment activity
- More fluctuation in security types due to rebalancing when investments mature

Traditional Cash Flow Portfolio Ladder

- A simple approach in creating a fixed income portfolio is to design an even cash flow across the maturity spectrum.



Cash Flow Slopping Ladder

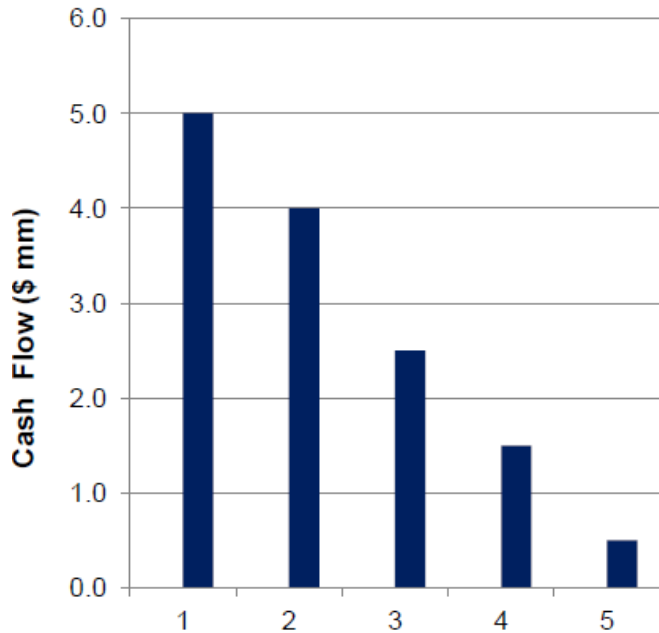


The “Wedge” Cash Flow Ladder

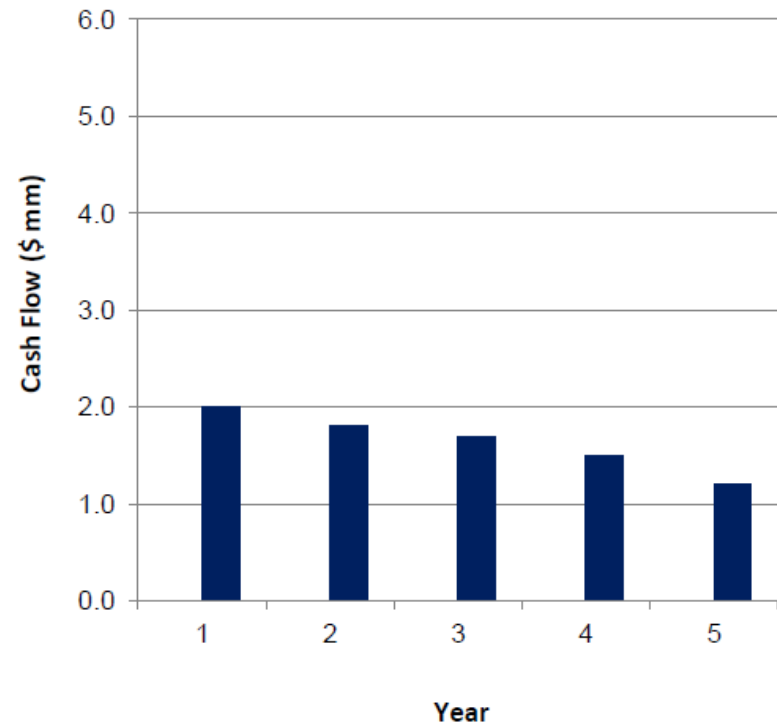
A “wedge” cash flow profile ladders all cash flows – both principal and interest – in a **descending** format to generate more cash flow in earlier periods. Yearly cash flows mimic a downward sloping right-hand triangle...

Wedge Cash Flow Profile

The Wedge: Steep Slope
Avg. Life ~ 1.6, Est. Duration ~ .85



The Wedge: Shallow Slope
Avg. Life ~ 2.6, Est. Duration ~ 1.9

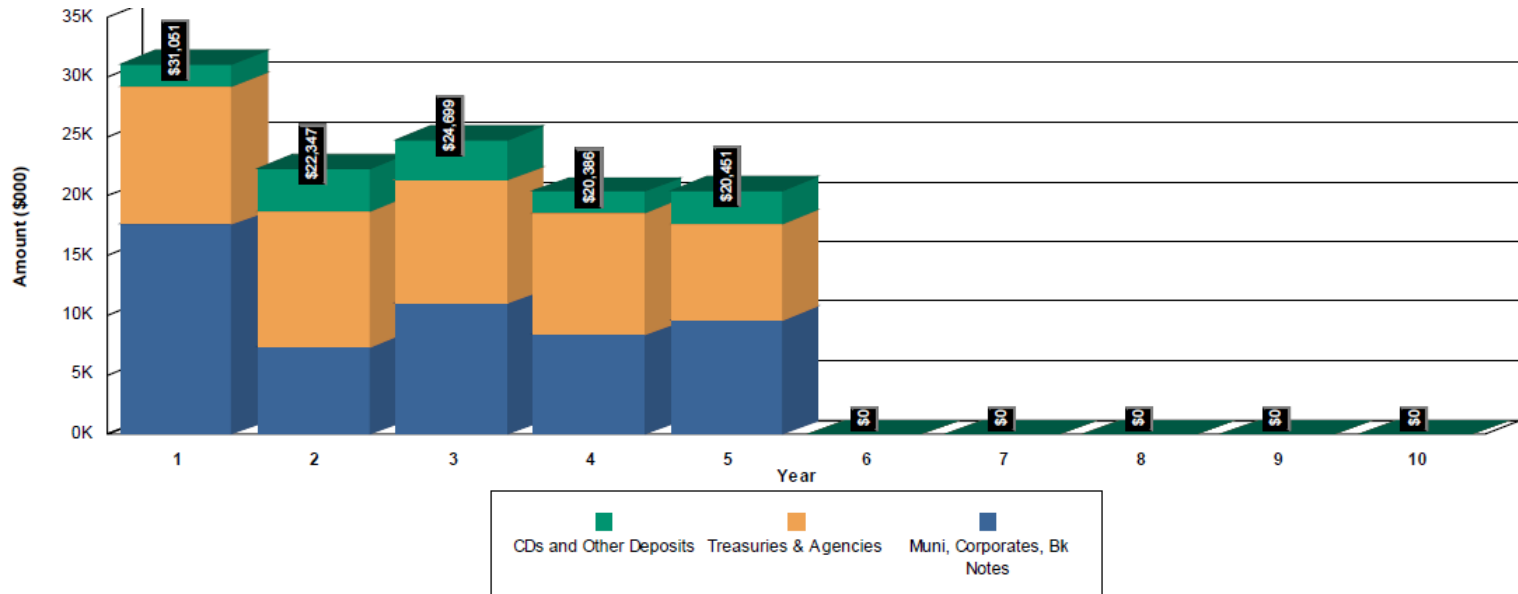


The “Slope” affect of Cash Flow Ladder

Increasing or decreasing the weighted average life (WAL) of the portfolio can affect the slope of the wedge.

A shorter WAL creates a steeper sloped wedge, while a longer WAL creates a shallower sloped wedge.

The Wedge: Shallow Slope



Year	Total Cashflow (\$000)	Percentage of Total
1	\$31,051	26.11%
2	\$22,347	18.79%
3	\$24,699	20.77%
4	\$20,386	17.14%
5	\$20,451	17.20%
6	\$0	0.00%
7	\$0	0.00%
8	\$0	0.00%
9	\$0	0.00%
10	\$0	0.00%

The “Wedge” Cash Flow Ladder Advantage

- Everybody likes “getting their money back.”
- Additional cash flow reduces near-term liquidity risk.
- A cash flow ladder can provide a “backstop” to extension risk.
- If and when interest rates rise, earlier cash flows enhance the ability to manage the portfolio.

Advantages in any Interest Rate Environment

Rising Rates: earlier cash flows represent reinvestment opportunity at higher yields.

Falling Rates: later cash flows lock in and maintain yield to offset reinvestment risk of earlier cash flows.

Flat Rates / Sideways Markets: given a positive sloping yield curve, the diversified portfolio's longer WAL leads to overall higher yield performance.

Nevada County Maturity Range



Nevada County Distribution by Maturity Range - Market Value Report Group: Investment Portfolio

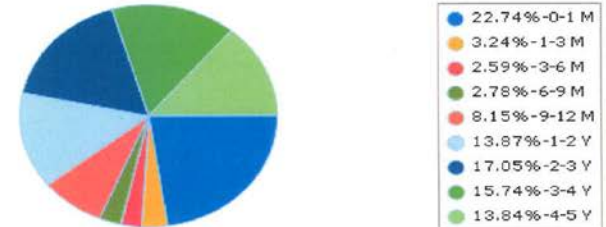
Begin Date: 7/31/2015, End Date: 8/31/2015

Maturity Range Allocation				
Maturity Range	Market Value 7/31/2015	% of Portfolio 7/31/2015	Market Value 8/31/2015	% of Portfolio 8/31/2015
0-1 Month	40,056,503.67	26.12	33,090,339.91	22.74
1-3 Months	6,003,180.00	3.91	4,707,351.79	3.24
3-6 Months	2,983,844.36	1.95	3,773,316.30	2.59
6-9 Months	1,503,660.00	0.98	4,047,320.00	2.78
9-12 Months	13,398,964.80	8.74	11,856,074.40	8.15
1-2 Years	19,586,527.10	12.77	20,188,052.80	13.87
2-3 Years	26,989,616.20	17.60	24,809,171.40	17.05
3-4 Years	23,198,454.54	15.13	22,900,469.83	15.74
4-5 Years	19,628,482.15	12.80	20,136,121.75	13.84
Total / Average	153,349,232.82	100.00	145,508,218.18	100.00

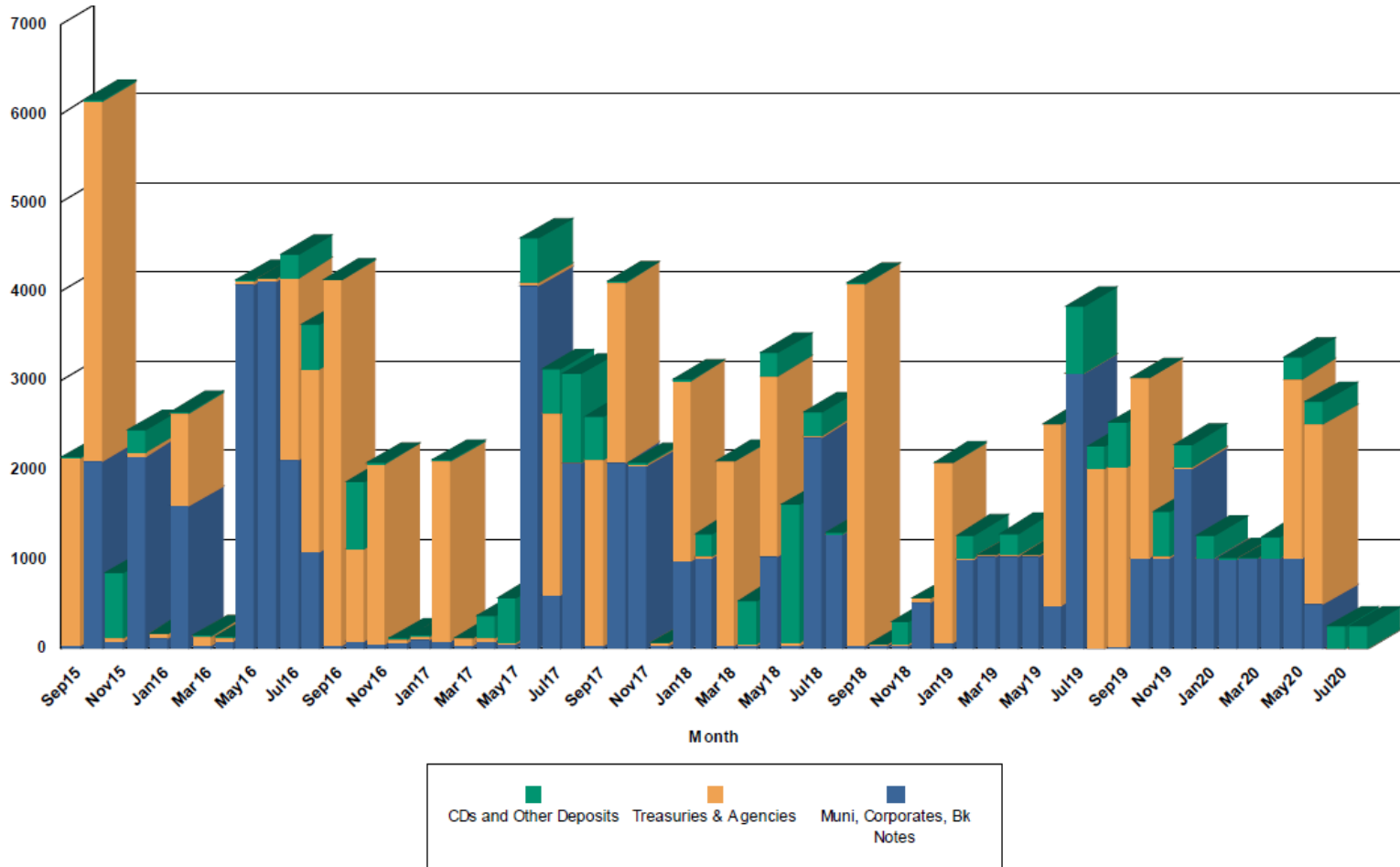
Portfolio Holdings as of 7/31/2015



Portfolio Holdings as of 8/31/2015

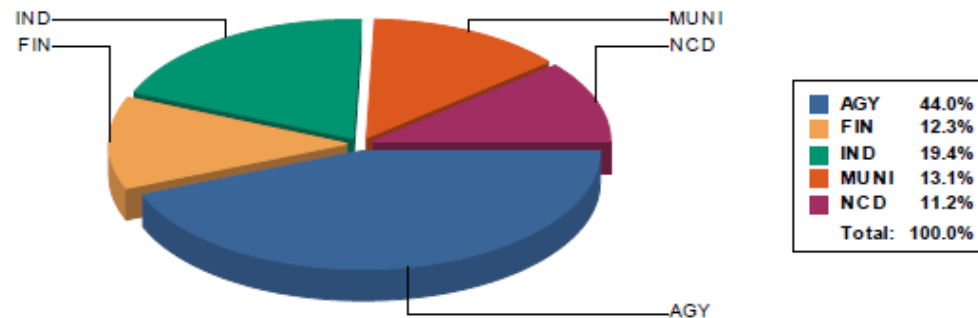


Projected Cash Flow-5yr Monthly



Cash Flow Portfolio Diversification

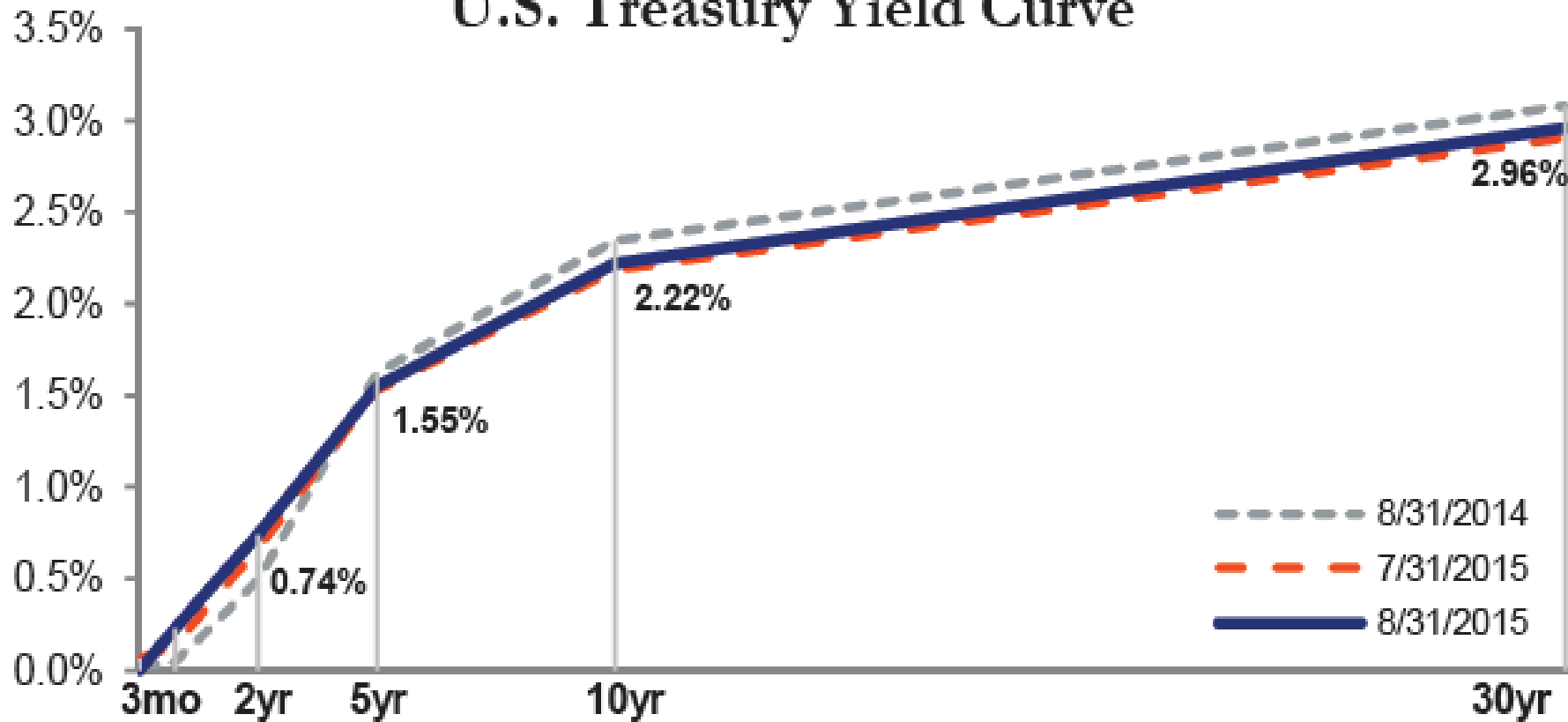
Sector Distribution



Sector	Par (\$000)	% of Total	Coupon (%)	Book Yield (%)	Avg Life (yrs)	Eff Dur
AGY	\$50,000	43.99%	1.19%	1.18%	2.32	2.28
FIN	\$14,000	12.32%	2.74%	1.60%	2.58	2.29
IND	\$22,000	19.36%	2.06%	1.08%	1.79	1.59
MUNI	\$14,920	13.13%	2.51%	1.70%	3.23	2.82
NCD	\$12,734	11.20%	1.44%	1.40%	2.71	2.42
Inv. Total:	\$113,654	100.00%	1.75%	1.30%	2.42	2.23
Totals:	\$113,654	100.00%	1.75%	1.30%	2.42	2.23

Yield Curve

U.S. Treasury Yield Curve



Putting Excess Liquidity to Work

Opportunity Cost of waiting to put money to work

If I wait in fed funds, at what yield do I need to invest in the future?								
				Assumed Investment:	\$10,000,000			
				Overnight Funds Rate	0.25%			
				Alternative Investment Yield:	1.25%			
				Alternative Final Maturity	3.00			
Months Waiting	Assumed Fed Funds Rate	Accumulated Income	Alt Inv Yield	Accumulated Income	Foregone Income	Remaining term (Yrs)	Inc Needed through Maturity to "Breakeven"	Yield Needed to BE
3	0.25%	\$6,250	1.250%	\$31,250	(\$25,000)	2.75	\$368,750	1.34%
6	0.25%	\$12,500	1.250%	\$62,500	(\$50,000)	2.50	\$362,500	1.45%
9	0.25%	\$18,750	1.250%	\$93,750	(\$75,000)	2.25	\$356,250	1.58%
12	0.25%	\$25,000	1.250%	\$125,000	(\$100,000)	2.00	\$350,000	1.75%
15	0.25%	\$31,250	1.250%	\$156,250	(\$125,000)	1.75	\$343,750	1.96%
18	0.25%	\$37,500	1.250%	\$187,500	(\$150,000)	1.50	\$337,500	2.25%
21	0.25%	\$43,750	1.250%	\$218,750	(\$175,000)	1.25	\$331,250	2.65%
24	0.25%	\$50,000	1.250%	\$250,000	(\$200,000)	1.00	\$325,000	3.25%
27	0.25%	\$56,250	1.250%	\$281,250	(\$225,000)	0.75	\$318,750	4.25%
30	0.25%	\$62,500	1.250%	\$312,500	(\$250,000)	0.50	\$312,500	6.25%

** This "breakeven" calculator is based on several assumptions including but not limited to assuming the fed funds rate remains constant, and the alternative investment is held to maturity. The sale of any security prior to maturity may result in a capital gain or loss which may affect its total return. The risk of the alternative investment may be greater than fed funds. These risks include but are not limited to market risk, liquidity risk, prepayment risk, credit risk, basis risk, interest rate risk, and reinvestment risk.*

Cash Flow Portfolio Management

Seven Approaches for Any Market

- Have a strategy.
- Be comfortable with your investments.
- Understand **WHY** the investment fits into your portfolio.
- Review the performance of your portfolio.
- Diversify.
- Do not try to time the market.
- Invest regularly.

