

# City of Burlington, VT

May 9, 2014

# Investment management with a fiduciary focus

## Vanguard Institutional Advisory Services® (VIAS)

Portfolio management, asset allocation advice, and other advisory services



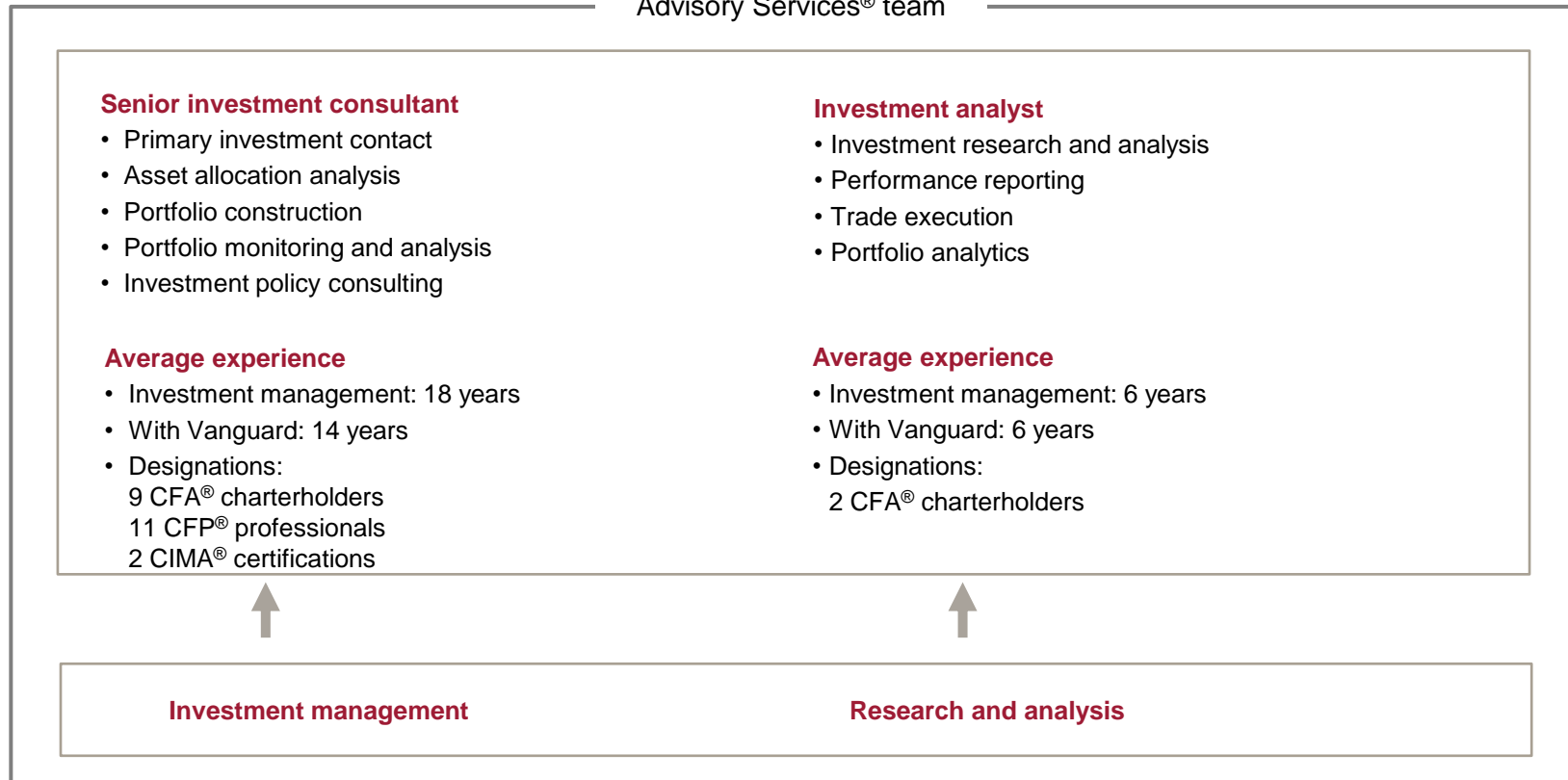
1. Investment policy consulting
  - Strategic framework development
  - Current investment policy statement review
2. Asset allocation analysis
  - Understanding of goals and objectives
  - Allocation matched to your risk profile
3. Portfolio construction
  - Diversified investment program
  - Indexing complemented with active management
4. Manager selection and oversight
  - Exceptional institutional money managers
  - Low negotiated fees as a result of scale
  - Oversight of underlying fund managers
5. Portfolio monitoring
  - Oversight of client portfolio
  - Quarterly performance report
  - Periodic rebalancing
  - Investment review meetings
6. Client service
  - Senior investment consultant

# Your Vanguard Institutional Advisory Services dedicated team

Providing you with a dedicated team that draws on Vanguard's vast resources

## City of Burlington, VT

Vanguard Institutional  
Advisory Services® team



As of March 31, 2014.

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# Access Vanguard's vast resources

## City of Burlington, VT

### Vanguard Institutional Advisory Services®

#### Equity investment

- 52 portfolio managers (PM) and traders
- Equity index and active quantitative strategies that track more than 50 benchmarks
- \$1.4 trillion AUM

#### Fixed Income Management

- 167 investment professionals
- Bond, money market, and stable value
- Index and active strategies that track more than 47 benchmarks
- \$728 billion AUM\*

#### Portfolio Review

- 72 investment professionals
- Manager selection due diligence
- Monitoring 30 external advisors, representing \$476 billion AUM\*\*
- Monitoring all internally managed index and fixed income funds

#### Investment Strategy Group

- 44 investment professionals (6 Ph.D.s)
- Empirical research on fiduciary and investment committee issues
- Economic analysis and insight
- Portfolio modeling

#### Risk Management

- 17 investment professionals
- Independent team reporting to the CIO
- Qualitative and quantitative analysis
- Thorough and conservative approach to risk control

#### Strategic Retirement Consulting

- 40 attorneys, actuaries, research and data analysts, and certified benefits professionals
- Center for Retirement Research plus analytics and benchmarking
- Fiduciary, plan design, and regulatory expertise for DC and DB plans

As of March 31, 2014.

\* Includes Vanguard Fixed Income Group internally managed assets only.

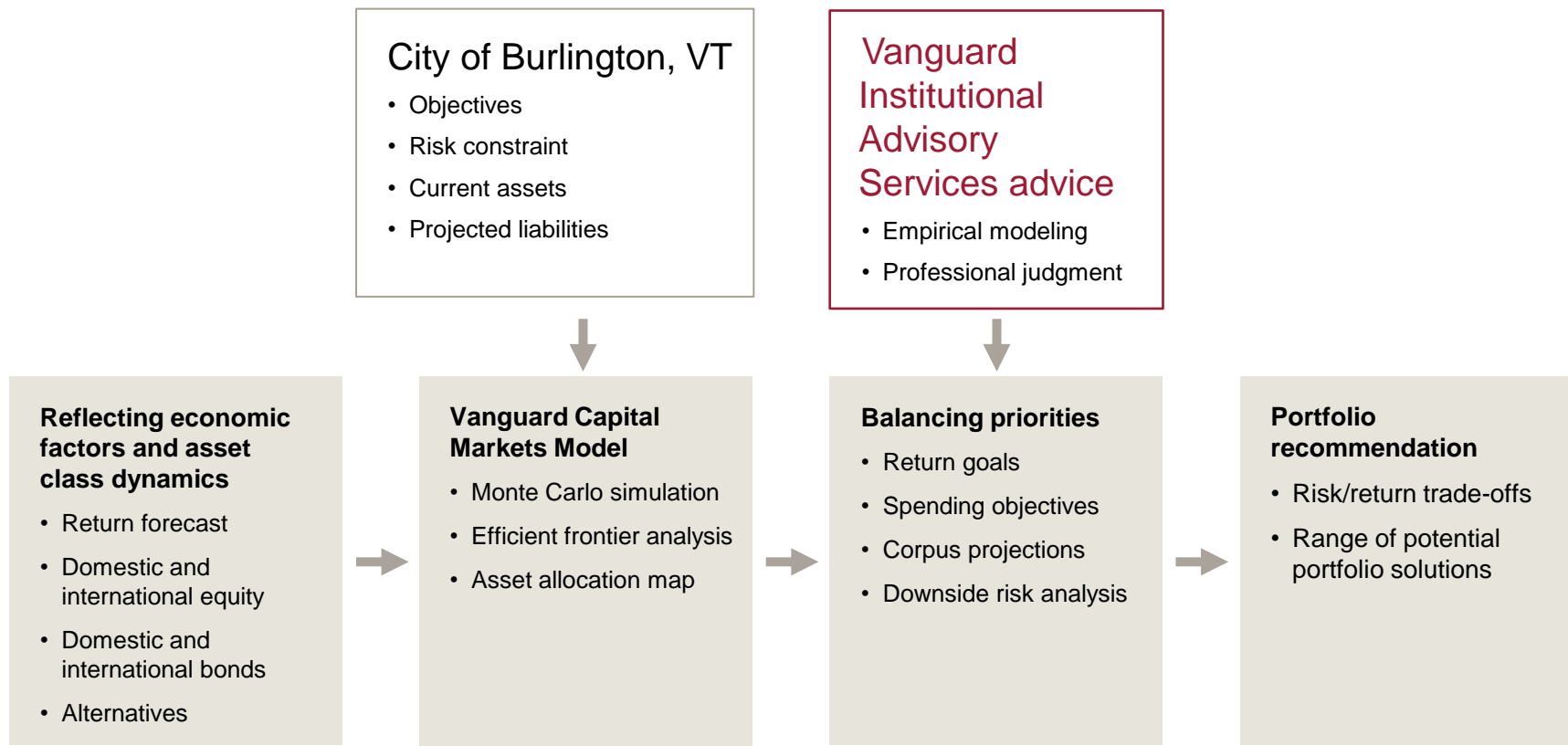
\*\* Externally managed, as of February 28, 2014.

Advice services offered through Vanguard Institutional Advisory Services are provided by Vanguard Advisers, Inc., a registered investment advisor.

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# The Vanguard Capital Markets Model<sup>®</sup> (VCMM):

Putting our process into action for your portfolio, your objectives

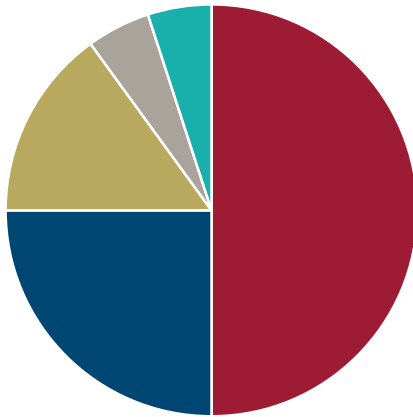


*IMPORTANT: The projections or other information generated by the Vanguard Capital Markets Model regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Please reference the Important information page for additional information on the Vanguard Capital Markets Model.*

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# Broad diversification across and within asset classes

## A total portfolio view sample



- **U.S. equities**
  - Broadly representative of the market
  - Avoiding market capitalization or investment style overweights
  - Combining index and active investment strategies
- **U.S. fixed income**
  - Broadly diversified
  - Duration customized based on portfolio objective
  - Modest corporate overweight
  - Combining index and active investment strategies
- **Non-U.S. equities**
  - Broadly diversified
  - Market proportional exposure to emerging markets
  - Combining index and active investment strategies
- **Non-U.S. fixed income**
  - Passive management , using sampling approach (Barclays Global Aggregate ex-US Float Adjusted RIC Capped Index (USD hedged))
    - Broadly diversified internationally
    - Intermediate-term duration
    - Currency hedged against the US Dollar
- **Nontraditional**
  - Explicit exposure to diversifying asset classes
    - REITs
    - Inflation-protected securities
    - Absolute return (market-neutral)

# Portfolio construction: City of Burlington, VT

## All index equity

Vanguard funds	Portfolio weight	Investment style	Underlying manager	Expense Ratio
<b>Total Stock Market Index</b>	42%	Index Broad Market	Vanguard Equity Investment Group	.04%
<b>Total International Stock Index</b>	18%	Index Broad Market International	Vanguard Equity Investment Group	.12%
<b>Long-Term Bond Index</b>	30%	Index Long-Term Bond	Vanguard Fixed Income Group	.07%
<b>Long-Term Investment-Grade Fund</b>	10%	Active Long-Term Bond	Wellington Management Company, LLP Vanguard Fixed Income Group	.12%
<b>Weighted annual expense ratio at \$200.0M</b>				<b>.07%</b>

# Sample Portfolio

## All index equity

	Total Stock Market Index	Total International Stock Index	Long-Term Bond Index	Long-Term Investment Grade	Sample Portfolio	Sample Benchmark
Weight	42.0%	18.0%	30.0%	10.0%	100%	
<b>CUMULATIVE PERIODS</b>						
Last Three Months	4.18	1.61	5.27	5.70	4.34	4.24
Year To Date	1.50	0.36	6.22	5.90	3.16	3.07
<b>ANNUALIZED PERIODS</b>						
1 Year	26.82	13.12	-2.04	0.14	13.15	12.58
3 Years	14.62	4.06	8.60	9.18	10.97	10.83
5 Years	23.99	17.34	9.25	11.43	17.65	17.59
10 Years	7.89	6.86	6.50	6.73	7.89	7.61
<b>CALENDAR YEARS</b>						
2013	33.49	15.04	-9.13	-5.77	12.73	12.31
2012	16.42	18.14	8.49	11.77	13.93	14.17
2011	1.09	-14.56	22.06	17.30	6.31	6.26
2010	17.23	11.12	10.27	10.85	14.48	14.04
2009	28.83	36.73	1.76	8.89	19.76	21.01
2008	-36.94	-44.10	8.64	2.40	-21.59	-23.96
2007	5.56	15.52	6.59	3.86	7.64	7.56
2006	15.69	26.64	2.67	2.99	12.34	12.43
2005	6.12	15.57	5.32	5.27	7.72	7.63
2004	12.60	20.84	8.40	9.06	12.45	12.65
<b>Expense Ratio</b>	<b>0.04%</b>	<b>0.12%</b>	<b>0.07%</b>	<b>0.12%</b>	<b>0.07%</b>	
Approx. Dollars:	\$84,000,000	\$36,000,000	\$60,000,000	\$20,000,000	\$200,000,000	



# Portfolio construction: City of Burlington, VT

## Diversified active equity

Vanguard funds	Portfolio weight	Investment style	Underlying manager	Expense Ratio
<b>Total Stock Market Index</b>	21%	Index Broad Market	Vanguard Equity Investment Group	.04%
<b>Morgan Growth</b>	7.4%	Active Multi-Cap Growth	Vanguard Equity Investment Group Wellington Management Company, LLP Kalmar Investment Advisors Jennison Associates LLC Frontier Capital Management Co., LLC	.25%
<b>Windsor II</b>	7.4%	Active Large Cap Value	Barrow, Hanley, Mewhinney & Strauss, LLC Vanguard Equity Investment Group Hotchkis and Wiley Capital Management, LLC Lazard Asset Management LLC Sanders Capital, LLC	.28%
<b>Mid-Cap Growth</b>	3.2%	Active Mid/Small Growth	Chartwell Investment Partners, L.P. William Blair & Company, L.L.C.	.51%
<b>Strategic Equity</b>	3.2%	Active Mid-Cap Value	Vanguard Equity Investment Group	.29%
<b>Total International Stock Index</b>	9%	Index Broad Market International	Vanguard Equity Investment Group	.12%
<b>International Growth</b>	4.5%	Active Foreign Large Growth	Baillie Gifford Overseas Ltd. M&G Investment Management Limited Schroder Investment Management NA Inc.	.35%
<b>International Value</b>	4.5%	Active Foreign Large Value	Lazard Asset Management LLC Edinburgh Partners Limited ARGA Investment Management, LP	.43%
<b>Long-Term Bond Index</b>	30%	Index Long-Term Bond	Vanguard Fixed Income Group	.07%
<b>Long-Term Investment-Grade Fund</b>	10%	Active Long-Term Bond	Wellington Management Company, LLP Vanguard Fixed Income Group	.12%
<b>Weighted annual expense ratio at \$200.0M</b>				<b>.15%</b>

# Sample Portfolio

## Diversified active equity

	Total Stock Market Index	Morgan Growth	Windsor II	Mid-Cap Growth	Strategic Equity	Int'l Growth	Int'l Value	Total Int'l Stock Index	L-T Bond Index	L-T Investment Grade	Sample Portfolio	Sample Benchmark
Weight	21.0%	7.4%	7.4%	3.2%	3.2%	4.5%	4.5%	9.0%	30.0%	10.0%	100%	
<b>CUMULATIVE PERIODS</b>												
Last Three Months	4.18	6.80	2.81	6.69	7.12	1.78	1.80	1.61	5.27	5.70	4.62	4.24
Year To Date	1.50	3.52	0.90	3.03	3.87	-0.57	-0.19	0.36	6.22	5.90	3.31	3.07
<b>ANNUALIZED PERIODS</b>												
1 Year	26.82	32.43	24.82	28.68	35.46	18.91	19.24	13.12	-2.04	0.14	14.23	12.58
3 Years	14.62	14.25	14.24	15.00	18.24	7.57	6.21	4.06	8.60	9.18	11.33	10.83
5 Years	23.99	23.45	22.73	25.33	28.53	20.43	17.39	17.34	9.25	11.43	17.88	17.59
10 Years	7.89	8.02	7.52	9.82	8.85	8.27	7.32	6.86	6.50	6.73	8.10	7.61
<b>CALENDAR YEARS</b>												
2013	33.49	34.92	30.80	34.15	41.54	23.12	22.15	15.04	-9.13	-5.77	13.57	12.31
2012	16.42	15.25	16.80	14.84	18.90	20.18	20.18	18.14	8.49	11.77	14.08	14.17
2011	1.09	-2.42	2.78	1.17	1.17	-13.58	-14.58	-14.56	22.06	17.30	6.26	6.26
2010	17.23	18.90	10.70	23.83	21.38	15.81	7.31	11.12	10.27	10.85	14.53	14.04
2009	28.83	36.31	27.17	38.42	32.06	41.88	33.77	36.73	1.76	8.89	20.64	21.01
2008	-36.94	-41.33	-36.63	-39.59	-41.51	-44.83	-41.74	-44.10	8.64	2.40	-22.02	-23.96
2007	5.56	11.36	2.32	14.69	-1.84	16.25	12.66	15.52	6.59	3.86	7.83	7.56
2006	15.69	11.32	18.37	12.72	13.43	26.17	27.37	26.64	2.67	2.99	12.08	12.43
2005	6.12	9.32	7.15	9.13	9.97	15.21	17.96	15.57	5.32	5.27	8.35	7.63
2004	12.60	10.61	18.44	11.38	20.49	19.16	19.77	20.84	8.40	9.06	12.81	12.65
<b>Expense Ratio</b>	<b>0.04%</b>	<b>0.25%</b>	<b>0.28%</b>	<b>0.51%</b>	<b>0.29%</b>	<b>0.35%</b>	<b>0.43%</b>	<b>0.12%</b>	<b>0.07%</b>	<b>0.12%</b>	<b>0.15%</b>	
Approx. Dollars:	\$42,000,000	\$14,700,000	\$14,700,000	\$6,300,000	\$6,300,000	\$9,000,000	\$9,000,000	\$18,000,000	\$60,000,000	\$20,000,000	\$200,000,000	

# All-in fee review

Annualized Advisory Fees <sup>^</sup>			
Asset Level	Advisory Fee	Assets in Break Point	\$
First \$10 million	0.15%	\$10,000,000	\$15,000
Next \$10 million	0.12%	\$10,000,000	\$12,000
Next \$30 million	0.08%	\$30,000,000	\$24,000
Next \$50 million	0.03%	\$50,000,000	\$15,000
Over \$100 million	0.02%	\$100,000,000	\$20,000
<b>Approximate Net Annual Advisory Fee</b>	<b>0.04%</b>		<b>\$86,000</b>

All-In Fee Summary		
Net Advisory Fee	0.04%	\$86,000
Weighted Average Expense Ratio	0.07% - 0.15%	\$140,000 - \$300,000
Commingled Funds/Partnership Expense	0.00%	\$0
Incentive Fees		\$0
Custodial Fees		\$0
Additional Travel Fees		\$0
<b>Total</b>	<b>0.11% - 0.19%</b>	<b>\$226,000 - \$386,000</b>

Management expenses associated and disclosed.

\* Approximate investment management fees are based on the sample portfolios.

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# Important information

**IMPORTANT: The projections or other information generated by the Vanguard Capital Markets Model regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. VCMM results will vary with each use and over time.**

The VCMM projections are based on a statistical analysis of historical data. Future returns may behave differently from the historical patterns captured in the VCMM. More important, the VCMM may be underestimating extreme negative scenarios unobserved in the historical period on which the model estimation is based.

The Vanguard Capital Markets Model<sup>®</sup> is a proprietary financial simulation tool developed and maintained by Vanguard's primary investment research and advice teams. The model forecasts distributions of future returns for a wide array of broad asset classes. Those asset classes include U.S. and international equity markets, several maturities of the U.S. Treasury and corporate fixed income markets, international fixed income markets, U.S. money markets, commodities, and certain alternative investment strategies. The theoretical and empirical foundation for the Vanguard Capital Markets Model is that the returns of various asset classes reflect the compensation investors require for bearing different types of systematic risk (beta). At the core of the model are estimates of the dynamic statistical relationship between risk factors and asset returns, obtained from statistical analysis based on available monthly financial and economic data from as early as 1960. Using a system of estimated equations, the model then applies a Monte Carlo simulation method to project the estimated interrelationships among risk factors and asset classes as well as uncertainty and randomness over time. The model generates a large set of simulated outcomes for each asset class over several time horizons. Forecasts are obtained by computing measures of central tendency in these simulations. Results produced by the tool will vary with each use and over time.