

# GreenTop CAPITAL

## Fund I Investor Presentation

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**Sustainable Non-Traditional Real Estate Equity Fund**

*Bridging Farm and City for Maximum Impact*





# The Opportunity

## Increased awareness of climate change

- Metropolitan areas especially concerned
- Efforts to reduce heat islands & storm water runoff

## Rooftop greenhouses beneficial to buildings

- Energy costs reduced by 25%
- Roof lives doubled

## Increased demand for fresh local food

- Grew by 5.4% in 2014 to \$134 billion
- 30%+ of total supermarket sales
- Demand growth 6% – 7% CAGR



## Our Solution: Construct Rooftop Farms

- Greenhouses built on currently unutilized roofs of industrial buildings
- Crops grown through hydroponic methods
- Pesticide-free fresh foods through integrated pest management techniques

# The Problem

## Misaligned Incentives

- ❖ Benefits accrue mainly to the general public and not to the building owner
- ❖ Building owners are unable to reap the tax benefits and monetize environmental benefits
- ❖ Building owners face high risks of capital expenditure



## High Costs

- ❖ Large construction and startup costs of about \$600,000 for each 20,000 sq. ft. greenhouse
- ❖ Annual maintenance costs of over \$50,000
- ❖ No economies of scale with small, unrelated farmers





# Our Solution : GreenTop Fund I

## GreenTop Fund I

- Raise \$20 million fund to construct 30 greenhouses on industrial rooftops
- Leased to entrepreneurial farmers
- 10 sites constructed in each of the first 3 years
- Sites based in New York City, Boston, and Philadelphia

### Incentive Alignment

- Fund covers costs of zoning changes
- Building owners enjoy lower energy costs
- Incremental tax benefits captured by fund
- Fund oversees the creation and management of the farm

### Capital & Economies Of Scale

- Fund construction costs & subsidize maintenance costs
- Offer legal counsel to farmers for grant and loan apps
- Assist farmers in negotiating contracts with supermarkets, restaurants, and CSAs





# Fund Characteristics

## Key Investment Terms

- Target Capital Commitments: \$20 Million
- Minimum Investment: \$500,000
- Commitment Period: 12 Years
- Term: 12 Years
- Management Fee: 2%
- GP Interest in Cash Flows: 20%
- Number of Farmers Employed: 120

## Forecast Returns

- Target IRR (Net of GP Interest): 15.5%
- Target Multiple: 2.3x
- Performance Benchmark: S&P US REIT Index
- 3 Yr Benchmark Return: 11.7%

## Investment Team

- 3 Lawyers
- 3 Master Farmers
- 1 Accountant

## Potential Investors



**ATHENA**  
Capital Advisors

**C▷PRICORN**  
INVESTMENTGROUP



**ThresholdGroup**



**IMPACTASSETS**  
INVEST WITH MEANING

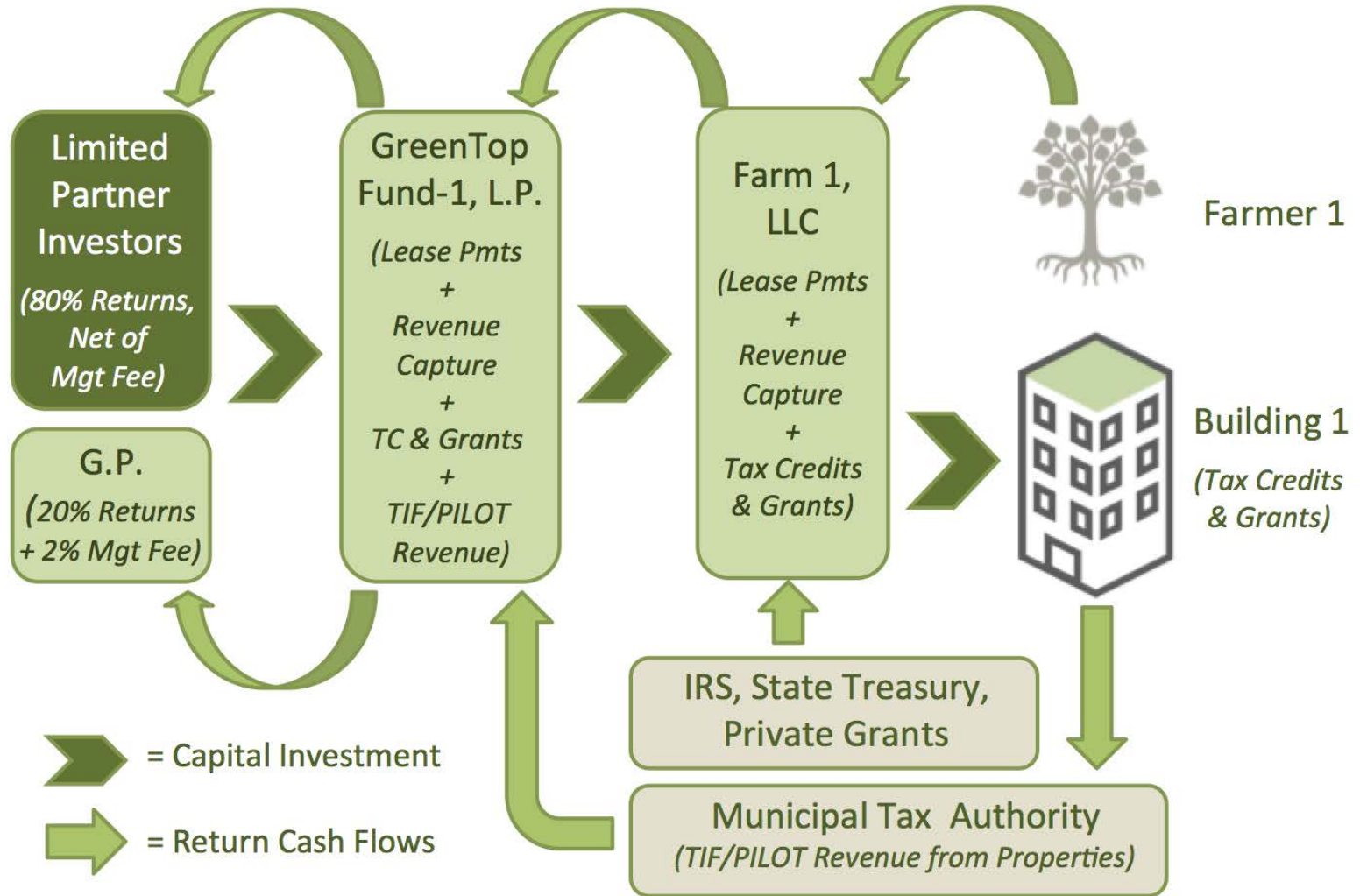


Robert Wood Johnson  
Foundation

- Endowments
- Social Impact Funds
- Family Offices
- High Net Worth Individuals



# Fund Flow Diagram





# Sources of Revenues

Distributions will come from multiple sources of revenue:

## Fixed Lease Revenue

- Fixed-rate lease agreement with monthly cash payments based on a 10-year amortization of farm construction costs — *paid by farmer to LLC*

## Farm Revenue Share

- Variable-rate lease agreement with monthly cash payments based on 15% of farm revenues — *paid by farmer to LLC*

## Tax-Increment Capture

- Incremental property tax revenue from increased building value through municipal TIF or PILOT structures — *paid by building owner to LP fund through municipal tax authority*

## Public Incentives

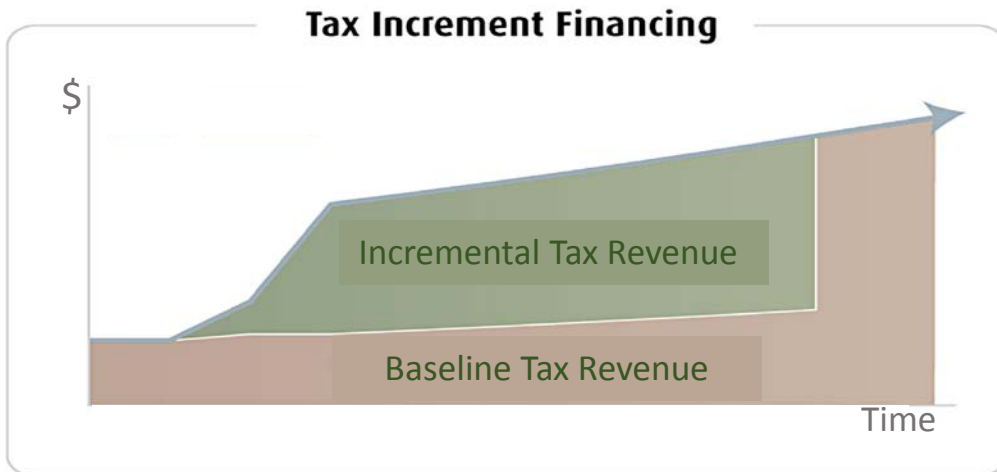
- IRS green roof tax credit, state tax credits, grants and other incentives — *paid by public entities to LLC*



# Tax Incentives

## TIF and PILOT Structure in Fund

- **Tax-Increment Financing (TIF)** – tax revenue paid by property but returned to fund
- **Payment-In-Lieu-of-Taxes (PILOT)**– tax abatement given to property; property pays fund
- **Same Goal and General Mechanics**
- Based on the *incremental* property tax increases from higher property value
- 10 to 20 year terms; between 50% and 100% savings on incremental revenue in year 1



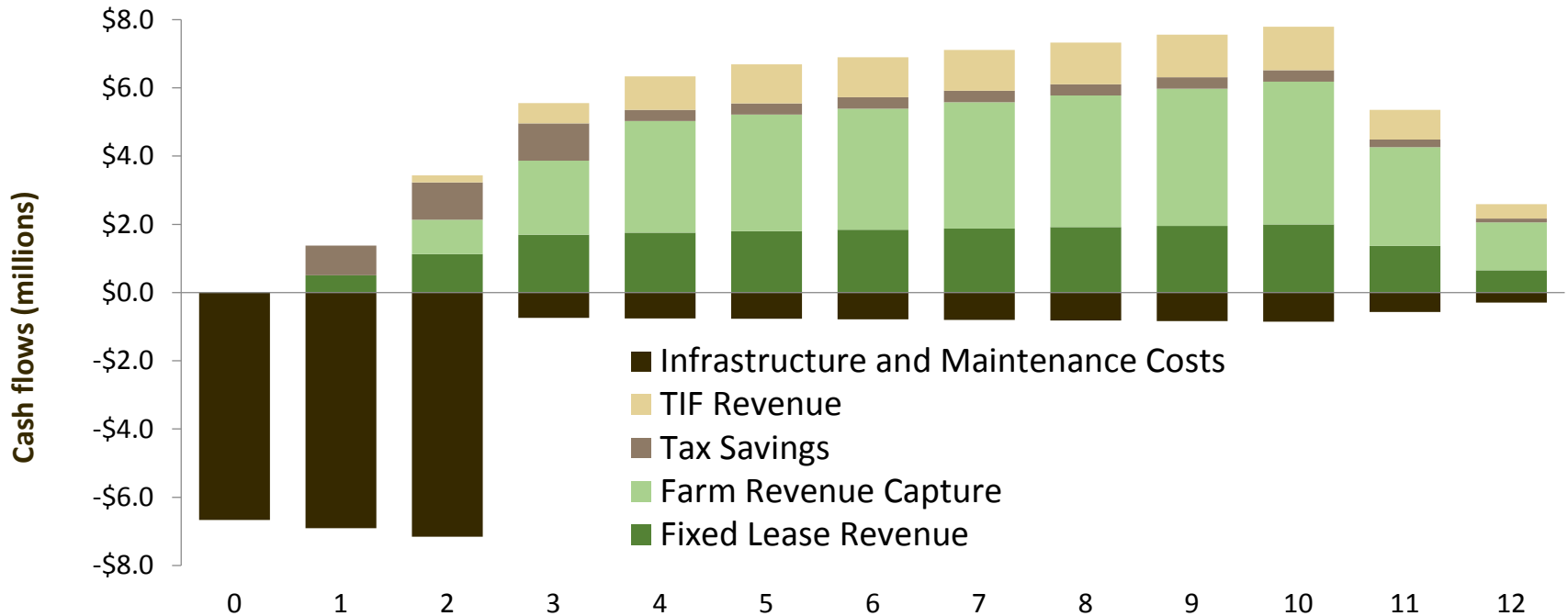
## Target Geography – Which Program?

- New York City → PILOT
- Philadelphia → TIF
- Boston → TIF





# Fund Cash Flows



- **Projected LP Investor Return:** 15.5% IRR, net of fees
- **Quarterly Distributions:** starting year 3; annual dividend yield = 20%
- **Fund Dissolution:** Year 12; expect to return a 2.3x cash multiple



# Investment Execution

## Investment Process

1. Identify sites



2. Create a legal entity and negotiate with building owners to obtain 10-year rooftop rights



3. Create the Tax Increment Financing (TIF) and PILOT structures to capture incremental tax revenue



4. Construct greenhouses with heat, electricity, and water connections. Lay out hydroponic and storm water purification systems



5. Lease farm space to entrepreneurial farmers for 10 years; assist farmers in negotiations with restaurants and supermarkets for contract growing

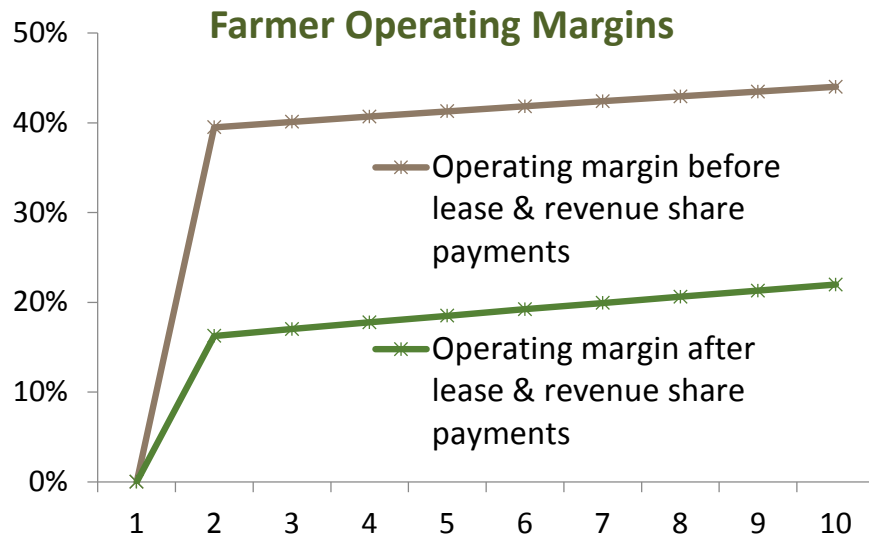
## Target Sites

- Industrial buildings built between 1900 and 1970
- 10 stories or less
- Reinforced roofs with usable roof space of at least 10,000 sq. ft.
- Sufficient electrical capacity
- Not used for heavy industry



# Farmer Incentives

- Lower capital needs
- Advanced NFT hydroponic farming technology
- Higher expected operating margins
- Shorter growing cycles generating higher revenues
- Legal assistance provided to apply for loans and grants
- In-house Master Farmers





# Investment Impact

## Economic Impact

- Building energy costs reduced by up to 25%
- Building property values increased by up to 10%
- Building roof lives increased by 2x
- Lower food storage and transportation costs

## Environmental Impact

- Heat island effects reduced by up to 36%
- Carbon footprint lowered through reduced energy consumption and transportation distance
- Storm water runoff decreased by 65% through rainwater capture and treatment systems

## Social Impact

- Create employment opportunities in underdeveloped neighborhoods
- Engage local schools and communities to use the farms for educational and recreational purposes





# Questions





# Appendix



# Cash Flow Projections

## LP Cash Flow

Year		0	1	2	3	4	5	6	7	8	9	10	11	12
Tax Savings		-	867,750	1,091,502	1,092,760	331,421	332,776	333,139	333,504	333,871	334,240	334,610	226,574	107,949
TIF Revenue		-	-	208,305	593,793	977,604	1,147,711	1,171,943	1,196,692	1,221,968	1,247,784	1,274,149	871,683	419,218
Fixed Lease Revenue		-	510,441	1,131,195	1,692,088	1,758,884	1,801,290	1,839,322	1,878,164	1,917,836	1,958,352	1,999,731	1,368,076	657,947
Farm Revenue Capture		-	-	1,004,111	2,172,123	3,267,924	3,413,447	3,555,226	3,702,912	3,856,748	4,016,991	4,183,905	2,891,483	1,403,559
Infrastructure and Maintenance Costs		(6,666,667)	(6,908,476)	(7,155,122)	(740,033)	(754,834)	(769,931)	(785,329)	(801,036)	(817,057)	(833,398)	(850,066)	(572,303)	(288,985)
Fund Fees		-	(400,000)	(400,000)	(1,468,286)	(1,624,028)	(1,694,590)	(1,734,108)	(1,775,025)	(1,817,393)	(1,861,268)	(1,906,705)	(1,471,563)	(969,508)
<b>TOTAL CASH FLOWS (net of fees)</b>		<b>-6,666,667</b>	<b>-5,930,285</b>	<b>-4,120,009</b>	<b>3,342,443</b>	<b>3,956,970</b>	<b>4,230,703</b>	<b>4,380,192</b>	<b>4,535,212</b>	<b>4,695,974</b>	<b>4,862,701</b>	<b>5,035,624</b>	<b>3,313,950</b>	<b>1,330,181</b>
IRR	15.47%	-	241,809	301,462	530,702	539,144	547,657	556,239	564,887	573,599	582,370	591,198	572,303	547,852

## GP Cash Flow

Year		0	1	2	3	4	5	6	7	8	9	10	11	12
Inflation			2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Mgmt Fee		0	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
GP Interest		0	0	0	1,068,286	1,224,028	1,294,590	1,334,108	1,375,025	1,417,393	1,461,268	1,506,705	1,071,563	569,508
Office space		-360,000	-367,200	-374,544	-382,035	-389,676	-397,469	-405,418	-413,527	-421,797	-430,233	-438,838	-447,615	-456,567
Legal Fees		-575,000	-586,500	-598,230	-79,591	-81,182	-82,806	-84,462	-86,151	-87,874	-89,632	-91,425	-93,253	-95,118
Administration		-50,000	-51,000	-52,020	-53,060	-54,122	-55,204	-56,308	-57,434	-58,583	-59,755	-60,950	-62,169	-63,412
In-house farmer 1		-80,000	-81,600	-83,232	-84,897	-86,595	-88,326	-90,093	-91,895	-93,733	-95,607	-97,520	-99,470	-101,459
In-house farmer 2			-81,600	-83,232	-84,897	-86,595	-88,326	-90,093	-91,895	-93,733	-95,607	-97,520	-99,470	-101,459
In-house farmer 3				-83,232	-84,897	-86,595	-88,326	-90,093	-91,895	-93,733	-95,607	-97,520	-99,470	-101,459
<b>Total cash flow before loan</b>		<b>-1,065,000</b>	<b>-767,900</b>	<b>-874,490</b>	<b>698,911</b>	<b>839,265</b>	<b>894,131</b>	<b>917,640</b>	<b>942,228</b>	<b>967,940</b>	<b>994,826</b>	<b>1,022,935</b>	<b>570,117</b>	<b>50,033</b>
Interest payment			-208,000	-208,000	-208,000	-171,111	-127,681	-77,862	-23,276	0				
<b>Total cash flow after interest payment</b>		<b>-1,065,000</b>	<b>-975,900</b>	<b>-1,082,490</b>	<b>490,911</b>	<b>668,154</b>	<b>766,450</b>	<b>839,778</b>	<b>918,951</b>	<b>967,940</b>	<b>994,826</b>	<b>1,022,935</b>	<b>570,117</b>	<b>50,033</b>
Principal receipt		1,065,000	975,900	1,082,490	0	0	0	0	0	0	0	0	0	0
Loan balance	3,200,000	2,135,000	1,159,100	76,610	0	0	0	0	0	0	0	0	0	0
Principal payment					-567,521	-668,154	-766,450	-839,778	-358,097	0				
<b>TOTAL CASH FLOWS after loan rec</b>	<b>4,166,705</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>560,854</b>	<b>967,940</b>	<b>994,826</b>	<b>1,022,935</b>	<b>570,117</b>	<b>50,033</b>



# Single Farm Cost Breakout

- Initial costs include structural support systems to strengthen roof load in addition to constructing the greenhouse
- Ongoing maintenance costs include upkeep of the greenhouse structure improvements to the amenities
- Farmer will bear remaining operational costs such as cost of equipment, additional labor costs, packaging costs, etc

Single Farm Cost Breakout (20,000 sqft)	
Structural improvements to building:	\$380,000
Hydroponic systems:	
Electric Wiring and Heating:	\$150,000
Nutrition Storage Unit:	\$1,000
NFT Rail System:	\$44,000
Growing Medium:	\$42,000
Maintenance Costs (annual):	\$50,000
<b>Total Startup Costs</b>	<b>\$667,000</b>



# Risks & Mitigants

## Risks:

### Real Estate Pricing

- ✧ Factors in addition to rooftop building improvements/energy efficient drive real estate pricing and therefore affect the TIF revenue stream

### Unstable Farm Revenue

- ✧ Organic food pricing, farm productivity, and general demand factors lead to variable farm revenues and therefore affect the revenue share component of the lease revenue stream

### Public Incentive Regime

- ✧ IRR and cash flow projects are based partially on tax credits and incentives available in current tax codes but could change and therefore affect the public incentives revenue stream

### Legal/Regulatory

- ✧ Construction of rooftop greenhouse is contingent on compliance with local zoning codes

## Mitigants:

- ✓ Negative real estate price changes will not result in losses to the fund, while positive changes will increase revenue; TIF revenue has a floor of zero
- ✓ The revenue share provides financial stake in the success of the farm, and the fund GP will provide technological and best-practice expertise to maximize value; the fixed rate lease payments provide stable cash flows to hedge the revenue share risk
- ✓ The fund GP has an incentive to maximize public funding and will work with local and national authorities to capture a share of social/public gains delivered by the fund
- ✓ NYC and many other cities have expedited the approval process for green roofs; the fund GP will work to obtain block approvals for multiple buildings



# Sensitivity Analysis

## Single Farm Revenue vs. Revenue Growth

Baseline Revenue <b>15.47%</b>	Revenue Growth (without inflation)				
	0.00%	1.00%	<b>2.00%</b>	3.00%	4.00%
250,000	9.07%	9.78%	10.51%	11.24%	11.99%
300,000	11.53%	12.30%	13.08%	13.87%	14.68%
<b>350,000</b>	13.82%	14.64%	<b>15.47%</b>	16.32%	17.17%
400,000	15.98%	16.84%	17.72%	18.61%	19.50%
450,000	18.02%	18.93%	19.84%	20.77%	21.70%

## Fixed-Rate Lease vs. Revenue Capture

Fixed Lease <b>15.47%</b>	Revenue Capture				
	5.00%	10.00%	<b>15.00%</b>	20.00%	25.00%
13,333	-7.75%	2.12%	9.12%	14.82%	19.75%
23,333	-2.28%	6.01%	12.37%	17.72%	22.42%
<b>33,333</b>	2.32%	9.60%	<b>15.47%</b>	20.53%	25.05%
43,333	6.39%	12.97%	18.46%	23.28%	27.63%
53,333	10.12%	16.17%	21.36%	25.97%	30.19%

## Vacancy Rate vs. Revenue Growth

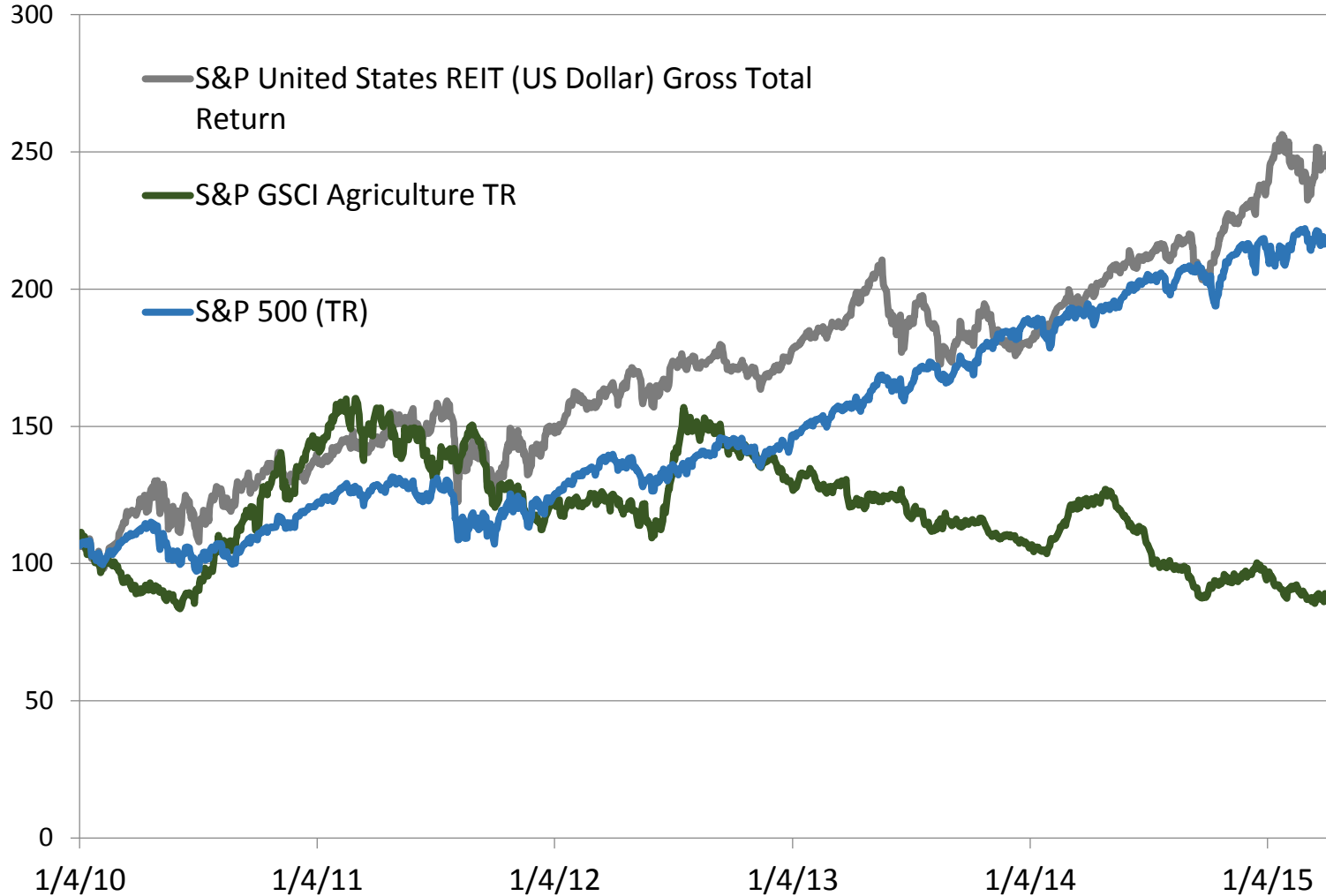
Vacancy Rate <b>15.47%</b>	Revenue Growth (without inflation)				
	-2.00%	0.00%	<b>2.00%</b>	4.00%	6.00%
30.00%	9.66%	11.41%	13.19%	15.00%	16.85%
20.00%	10.95%	12.62%	14.34%	16.09%	17.88%
<b>10.00%</b>	12.21%	13.82%	<b>15.47%</b>	17.17%	18.91%
0.00%	13.45%	14.99%	16.59%	18.23%	19.92%
-10.00%	14.66%	16.15%	17.69%	19.29%	20.93%

\* Benchmark IRR: 11.70%





# 5-Year Benchmark Performance





# Benchmark Regression

**Blended S&P REIT & Agriculture Indices  
Monthly Returns vs. S&P 500**

