



## Who is Northern Trust?

A leading asset manager and asset servicer to institutional and private investors worldwide

### **Jacksonville Police and Fire Pension Fund**

March 14, 2016

Rich McConville  
Client Executive  
312-444-3322  
[rfm1@ntrs.com](mailto:rfm1@ntrs.com)



**Northern Trust**

[northerntrust.com](http://northerntrust.com)



# A Unique Business Focus

*Founded in 1889, Northern Trust is a market leader of asset servicing and asset management solutions for institutions and private clients around the globe.*



## Corporate & Institutional Services (C&IS)

WORLDWIDE INSTITUTIONAL INVESTORS

Asset Servicing

Asset Management

Wealth Management

U.S. and European PRIVATE CLIENTS

*Integrated operations and technology platform*

*A highly focused business model supporting two client bases across a single operating platform*

Assets under custody  
**US \$6.1 trillion**

Assets under administration  
**US \$3.8 trillion**

Assets under management  
**US \$875 billion**

As of 12/31/2015

Source: Northern Trust





# Focused on What We Do Best Providing Stability For You



*Northern Trust is sharply focused on asset management and asset servicing - we do not change our business model or risk profile to capitalize on shifting markets, giving you stability for your business.*

**Businesses Northern Trust is NOT in:**

- |                                          |                                       |
|------------------------------------------|---------------------------------------|
| ▪ Investment banking                     | ▪ Credit cards                        |
| ▪ Sub-prime mortgage underwriting        | ▪ Retail banking                      |
| ▪ Asset backed commercial paper conduits | ▪ Consumer finance                    |
| ▪ Private equity bridge financing        | ▪ Venture capital                     |
| ▪ Discount brokerage                     | ▪ Stock transfer                      |
| ▪ American depository receipts           | ▪ Defined contribution record keeping |



# First-class Financial Strength

*Strong financial performance in last two fiscal years.*

	<i>Full Year 2015 (USD)</i>	<i>Full Year 2014 (USD)</i>
Trust, investment and other servicing fees	<b>\$2,981 million</b>	<b>\$2,833 million</b>
Other non-interest income	<b>\$652 million</b>	<b>\$493 million</b>
Net interest income	<b>\$1,070 million</b>	<b>\$1,005 million</b>
Total revenues	<b>\$4,703 million</b>	<b>\$4,331 million</b>
Non-interest expenses	<b>\$3,281 million</b>	<b>\$3,135 million</b>
Net income	<b>\$974 million</b>	<b>\$812 million</b>
Earnings per share	<b>\$3.99</b>	<b>\$3.32</b>
Assets under custody	<b>\$6.1 trillion</b>	<b>\$5.97 trillion</b>
Global custody assets	<b>\$3.53 trillion</b>	<b>\$3.43 trillion</b>
Assets under management	<b>\$875 billion</b>	<b>\$934 billion</b>

- 60% of annual corporate revenues derived from fee-based activities over time
- A high predominance of fee-related income is conducive to consistent earnings
- This is different from many of our banking peers who are focused on more volatile activities



# Outstanding Capital Levels



*A strong capital position helps Northern Trust take advantage of profitable investment opportunities and withstand unforeseen adverse developments.*

## Common Equity(US\$ Billions)

**CAGR: +4%**



	Q4 2015 (USD)	Q4 2014 (USD)
Balance sheet assets	\$117 billion	\$110 billion
Loans and leases	\$33.2 billion	\$31.6 billion
Total equity	\$8.7 billion	\$8.4 billion

Northern Trust Corporation Capital Ratios	Q4Q15	"Well Capitalized " Guideline
<i>Advanced Approach</i>		
Common Equity Tier 1	11.9%	6.5%
Tier 1	12.5%	8.0%
Total	14.2%	10.0%
Supplementary Leverage	6.2%	N/A
<i>Standardized Approach</i>		
Common Equity Tier 1	10.8%	6.5%
Tier 1	11.4%	8.0%
Total	13.2%	10.0%
Leverage	7.5%	5.0%

Capital ratios are preliminary until financial statements have been filed with the Securities and Exchange Commission.



# Global Coverage, Local Expertise



As at 9/30/2015 (updated quarterly)

Source: Northern Trust

\*Total employees, 16,344 of which are permanent



Northern Trust



# Expertise in Key Client Segments

Through a focused, targeted business strategy we have built a significant presence and expertise in our chosen segments.

## Public funds/Taft-Hartley

<i>Of the top... Northern Trust serves:</i>	
25 Taft-Hartley Funds	44%
100 U.S. Public Pensions	32%
U.K. Local Authority Market	37%

## Foundations, endowments and healthcare

<i>Of the top... Northern Trust serves:</i>	
50 U.S. Foundations	32%
50 U.S. Endowments	46%
50 U.S. Healthcare Funds	50%

## Corporate/pensions

<i>Of the top... Northern Trust serves:</i>	
100 U.S. Corporate Plans	74%
100 U.K. Pensions Funds	35%

## Financial Services

<i>Of the top... Northern Trust serves:</i>	
100 U.S. Insurance Firms	61%
200 Global Asset Managers	24%

- Note: Statistics indicate the percentage of clients (not assets) we service in each segment, including asset servicing, asset mgmt, credit and banking. Sources for the lists of top plans include Pensions and Investments 4 February 2013 (all US Pensions), P&I 24 December 2012 (Investment Managers); NACUBO Year-End 2012 (Endowments); Money Market Directory 2013 (Foundations and Healthcare Funds); Pension Funds & Their Advisors, 2012 (UK Pension Funds); AsianInvestor, July 2012 (Asian Investors); A.M. Best Insurance Reports 2012 (Insurance); Investments & Pensions Europe Top 1000 Pension Funds, September 2012 (Dutch and Nordics); Alpha Magazine Top 100 Hedge Funds, May 2012; and Benefits Canada Top 100 Pension Funds, June 2012.





# Trends and Challenges Facing Corporate Retirement Plan Sponsors

Desire for increased transparency together with complexity in assets is driving demand for greater granularity in data and reporting

## Achieving financial growth

- Funding remains a challenge; sponsors respond by evaluating risk transfer options
- Growing use of diverse asset classes and strategies to increase alpha
- Continued pressure to lower costs or change cost structures
- Increasing in-house management, requiring new tools and capabilities

## Meeting regulatory requirements

- Increasingly complex regulations require monitoring, interpreting and compliance expertise to ensure informed decisions
- Sponsors have a fiduciary duty to ensure that DC costs are reasonable
- Complexity of investment programs creates a transparency challenge

## Demand for improved data solutions

- Enhanced data is key to monitoring and management of performance and risk
- Increased focus on plan governance
- Need for a platform that maximizes flexibility to provide clients their data, their way, rather than in rigid reports

## How Northern Trust adds value

- Global technology platform enables clients to capture opportunities in markets across the globe
- Integrated portfolio information delivered quickly and efficiently in your designated format
- Ability to deliver information about total holdings in any one entity across exposure types, asset types and accounts with Exposure Reporting
- Specialized tools for alternative assets – Private Monitor, Peek Through and cash flow analysis tools
- Strong history of financial strength and stability





# Jacksonville Police & Fire Pension Plan Service Team

## Investment Management

**Melissa Galla, CFA (mg48)**  
Vice President  
(312) 444-2429



**Peter Cherecwich (pbc1)\***  
Executive Vice President  
Corporate & Institutional Services  
Americas  
(312) 444-3366



## Securities Lending

**Don Anderson (dsa3)**  
Senior Vice President  
(312) 444-5386



## Accounting & Reporting

**Tamarra Lodge (tkl2)**  
Officer  
(312) 557-0259



**Marc Cosentino (mec3)**  
Senior Vice President  
Managing Director  
(312) 630-0730

**Jeff Porta (jmp6)**  
Senior Vice President  
Division Manager- Public Funds  
(312) 557-0474



## Class Actions

**Patrick Krull (pk)**  
Vice President, Manager  
(312) 557-0819

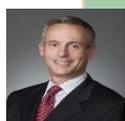
**Rich McConville (rfm1)**  
Senior Vice President  
Client Executive  
(312) 444-3322



**Claudiu Besoaga**  
2<sup>nd</sup> Vice President (cb73)  
Account Manager  
(312) 557-4049



**Bob Ernst (rae)**  
Senior Vice President  
Client Executive Back-up  
(312) 444-5498



**Myra Baldwin (mb14)**  
Second Vice President  
Account Manager Back-up  
(312) 444-5987



**Client Servicing Fax**  
**(312) 557-2710**

\* E-mail addresses are the initials indicated next to the team members name adding '@ntrs.com'. Example pbc1@ntrs.com



# JACKSONVILLE POLICE AND FIRE PENSION FUND



CASH ACCOUNT	
Paid Receipts	22-00919

DOMESTIC EQUITY		
GAMCO Asset Management	22-00924	SA
Eagle Capital Management	22-03680	SA
DePrince, Race & Zollo	22-08041	SA
Brown Advisory	22-34360	SA
Sawgrass Asset Management	22-34361	SA
Pinnacle Associates, LTD	22-51416	SA
NTGI S&P500 Fd	22-55608	CF
Tortoise Capital	22-67792	SA
Harvest Fund Advisors	22-67809	SA

DOMESTIC FIXED		
Thompson Siegel	22-00927	SA
NTGI Agg Bond	22-62969	CF
Eaton Vance	22-62978	CF

REAL ESTATE/OTHER		
JPMCB Strategic Property Fd	22-18407	CF
Principal	22-29937	CF

ACCOUNT NOT FUNDED		
Master Limited Partnership	22-25557	LP

INT'L EQUITY		
NTGI EAFE Index	22-69497	CF
Baillie Gifford EAFE	22-83756	CF
Sichester Int'l Value	22-31198	CF
Acadian Emerging Market	22-04713	CF

ACCOUNT IS CLOSING: TAX RECLAIMS REMAIN	
Transition	PFP02

## General Plan/Trust Information

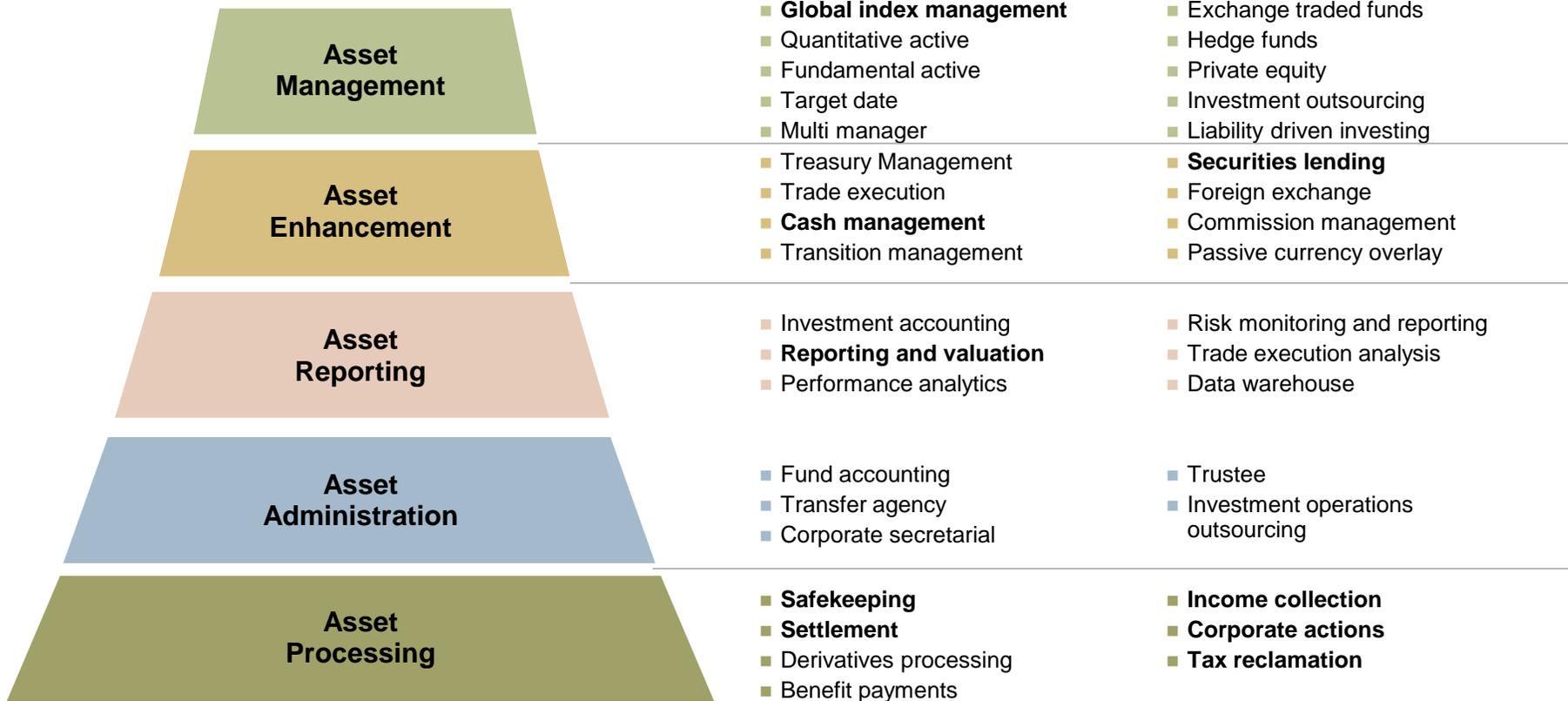
Client Sponsor Code: JAXPF  
 Year-end: September 30  
 Monthly Acct Deadline: 7<sup>th</sup> bd

## Account Code Legend

SM = Separately Managed  
 CF = Commingled Fund  
 LP = Limited Partnership

# Delivering A Broad Range of Solutions

*Full array of capabilities to meet needs of sophisticated institutional investors.*





# Expertise Across The Full Custody Spectrum

**Emphasis on automation, straight-through processing (STP), accuracy and timeliness...**

*reducing risk, enhancing efficiency, minimizing cost and ensuring transparency.*

## Trade receipt and capture

- Over 21 million trades processed globally annually
- A dedicated global team servicing alternative assets and non-STP investments

## Safekeeping

- US \$6.1 trillion in assets under custody, US \$1.9 trillion in cross-border assets
- Covering 105 markets

## Class actions

- Gathering information, providing timely notifications, filing claims and posting disbursements

## Web trade services

- Connected to over 2,700 end-points in the global brokerage community with automated communications to over 40 major custodians globally
- Hitting > 770,000 trades/month

## Income collection and tax reclamation

- Income on payable date in 35 markets
- Tax reclamation and relief at source

## Proxy voting

- On-line proxy voting in 54 markets

## Trade settlement

- 98% of trades captured electronically across 105 markets
- Contractual settlement in 47 countries

## Corporate actions

- Global processing in excess of 80,000 corporate actions across 105 markets every year

## Accounting and reporting

- Single global, integrated, multi-currency platform servicing all investment participants

As at 12/31/2015  
Source: Northern Trust





# Reconciling Your Assets

*Employing automated daily reconciliations for securities and cash with sub-custodians and/or depositories.*

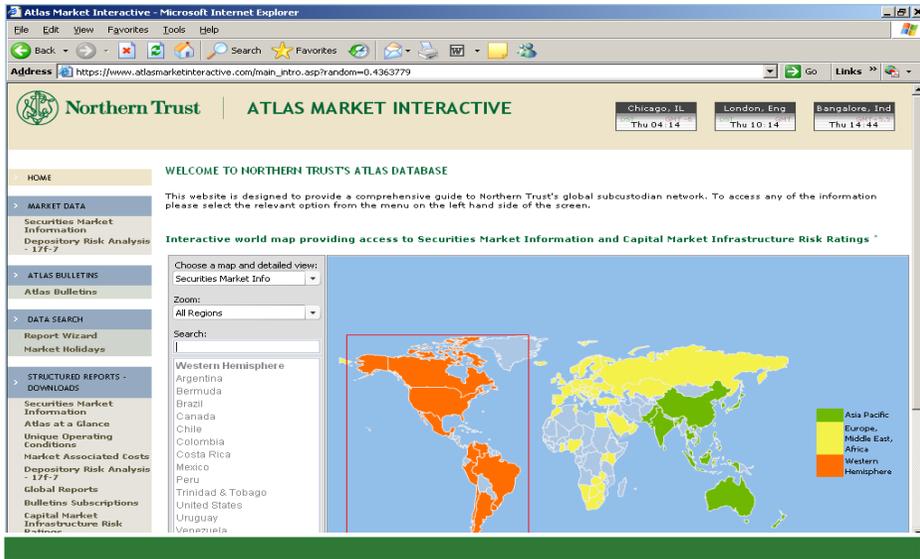
## Tightly controlled reconciliation procedures

- We operate a daily, rolling reconciliation process for managing, controlling and monitoring our clients' stock and cash positions
- We reconcile, in many cases automatically, the securities and cash positions held on our custody system against the positions reflected by our subcustodians and local market depositories



# Keeping You Up-to-date With Market Events

We keep you apprised of market events and subcustodian changes via our Atlas Bulletin.



Date: June 06, 2012

Atlas Bulletin: A Special Report from Northern Trust

**Market:** France

**Title:** Proposal to Introduce a Financial Transaction Tax – Update 5

**Summary:** Further information has been provided regarding the implementation of a Financial Transaction Tax (FTT)

**Impact:** Clients should note changes in tax legislation, pending further confirmation

■ 799 Atlas Bulletins sent in 2012

**Market:** France

**Proposal to Introduce a Financial Transaction Tax – Update 5**  
Further information has been provided regarding the implementation of a Financial Transaction Tax (FTT)  
**Impact:** Clients should note changes in tax legislation, pending further confirmation.

Further to our Atlas Bulletin dated April 20, 2012 (copy attached), Northern Trust has received further information from our subcustodian in France (BNP Paribas Securities Services) regarding the implementation of a Financial Transaction Tax (FTT).

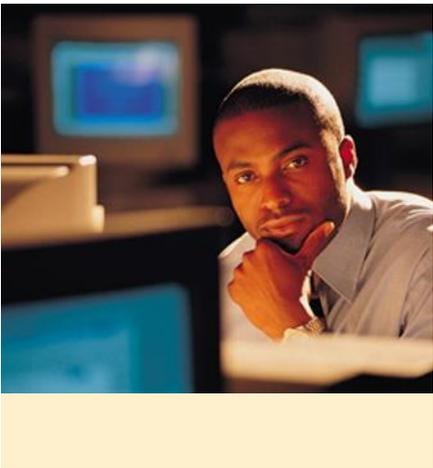
The French Tax Authorities (FTA) met with representatives from the financial sector at a conference on May 24, 2012. Verbal clarification was provided on several outstanding issues regarding the application of the FTT. Northern Trust understands that final confirmation will be provided in the next Statement of Practice (SOP – Instruction Fiscale). Please note that a publication date for the SOP has yet to be determined.

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## *Daily trade date accounting and multi-currency reporting solutions tailored to meet individual needs.*

- Trade date accounting and multi-currency reporting
- Accounting and performance from a single integrated data source, facilitating data accuracy and consistency
- Extensive range of derivatives reporting
- Specialized, custom reporting per your requirements with flexible reporting periods
- Daily information audits using Web-based automation tools
- A single source for all your information and reporting requirements through Northern Trust Passport®
- Unitization and plan accounting reporting
- Suite of reports to help you meet the reporting requirements set by the International Financial Reporting Standards (IFRS), Generally Accepted Accounting Principles (GAAP), Governmental Accounting Standards Board (GASB), Department of Labor's (DOL) 5500, FAS (Financial Accounting Standards), Office of National Statistics and Statement of Recommended Practice (SORP)
- Workshops and 'toolkits' to help you understand and meet reporting requirements e.g. GASB 72 and FAS 157 'toolkit'





# Technology

**Global Operating Model** A single operating model across all business lines, undistracted by siloed technology or legacy platforms



## Global

- Open architecture leverages technology investments across all client types.
- Data managed centrally and accessed globally.
- Consistent, accurate data across geographies and services.

## Secure

- Data protected with extensive physical and cyber security.
- Big data and cloud tools help detect network threats.
- Anti-fraud and information security training for every Northern Trust employee.

## Resilient

- 1,000+ connection points help our network stay up when something goes wrong.
- Continuous data mirroring protects against loss.
- Private fiber network between centers offers more security than public.

## Scalable

- More than 1,300+ IT staff worldwide.
- Distributed processing and cloud technologies to offer scale.
- Agile methodologies and “building block” code accelerate development.





## Securities Lending Update

Donald S. Anderson  
Senior Vice President  
Senior Relationship Manager  
Global Securities Lending  
DSA3@ntrs.com  
312-444-5386



# Program Overview

## Lendable Base

382 participating clients from 26 countries

\$835 billion of lendable securities

\$111 billion of loans outstanding on average (13.2% utilization)

## Distribution Network

Lending in 53 worldwide Equity & Fixed Income markets

**24-hour trading**  
(Hong Kong, London, Toronto and Chicago)

56 approved borrowers at parent level

## Collateral Structure

\$115 billion (\$64.3 billion cash and \$50.4 billion non-cash)

Cash managed by Northern Trust Asset Management\*

Flexible collateral options available

## Top Ten Borrowers\*\* (by loan volume)

Goldman Sachs

Morgan Stanley

Citigroup

J.P. Morgan Chase

Bank of America

Credit Suisse Group

Royal Bank of Scotland

Barclays PLC

Deutsche Bank AG

UBS AG

## Credit Ratings of Northern Trust

Top tier credit ratings and low level of long-term debt

Moody's Aa2

S&P AA-

Fitch Ratings AA

As at December 31, 2015  
Source: Northern Trust / Original Currency USD

\*\$260 billion in total AUM for Short Duration Fixed Income  
\*\* Representing 76% of the total volume



# Managing Risk



Risk Management is instrumental to our program

Risk	Definition	Mitigating Factors
<b>Borrower Risk</b>	Borrower default combined with insufficient collateral	<ul style="list-style-type: none"> <li>▪ Rigorous credit committee review of borrowers and exposure limits</li> <li>▪ Daily marking of loans/collateral (initially collateralized at 102% for same currency, 105% for cross currency.)</li> <li>▪ Borrower default indemnification</li> <li>▪ Risk analysis tools (MSCI Barra) to measure and calibrate exposure</li> </ul>
<b>Trade Settlement Risk</b>	Investment manager sells loaned security and borrower fails to return in time to settle the trade	<ul style="list-style-type: none"> <li>▪ Timely communication of trade</li> <li>▪ Robust automated reallocations</li> <li>▪ Trade settlement protection</li> </ul>
Additional Risks with Taking Cash as Collateral		
<b>Cash Collateral Reinvestment Risk</b>	Cash collateral investment becomes impaired or decreases in value	<ul style="list-style-type: none"> <li>▪ Client approved investment guidelines</li> <li>▪ Robust independent oversight of cash investments</li> <li>▪ Dedicated team of fixed income research analysts</li> <li>▪ Daily automated monitoring of portfolio guidelines and compliance</li> </ul>
<b>Interest Rate Risk</b>	Loan rebate rate exceeds earnings on cash collateral investments	<ul style="list-style-type: none"> <li>▪ Close daily communication between lending and cash management teams</li> <li>▪ Shared risk between Northern Trust and client</li> <li>▪ Weekly “gap analysis” and periodic stress testing of portfolio</li> </ul>

# General Recent Observations and Trends

## Market Drivers

- Global markets recovered from the prior quarter sell-off on improving economic conditions in China, ECB commitment to stimulating Eurozone growth and ongoing improvement in U.S. employment data.
- As was widely expected, the Federal Open Markets Committee increased the Federal Funds target rate by 25 basis points, the first increase in interest rates in over 9 years.
- Market volatility, as measured by the CBOE Volatility Index (VIX), declined 26% during the quarter.
- Increased demand from borrowers to pledge more and varied non-cash collateral types continues.

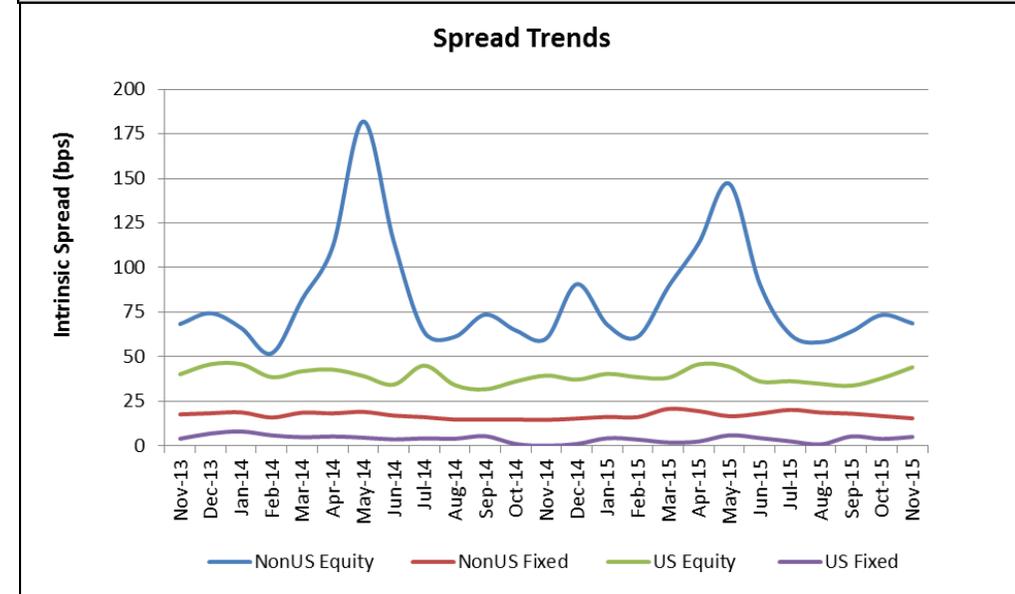
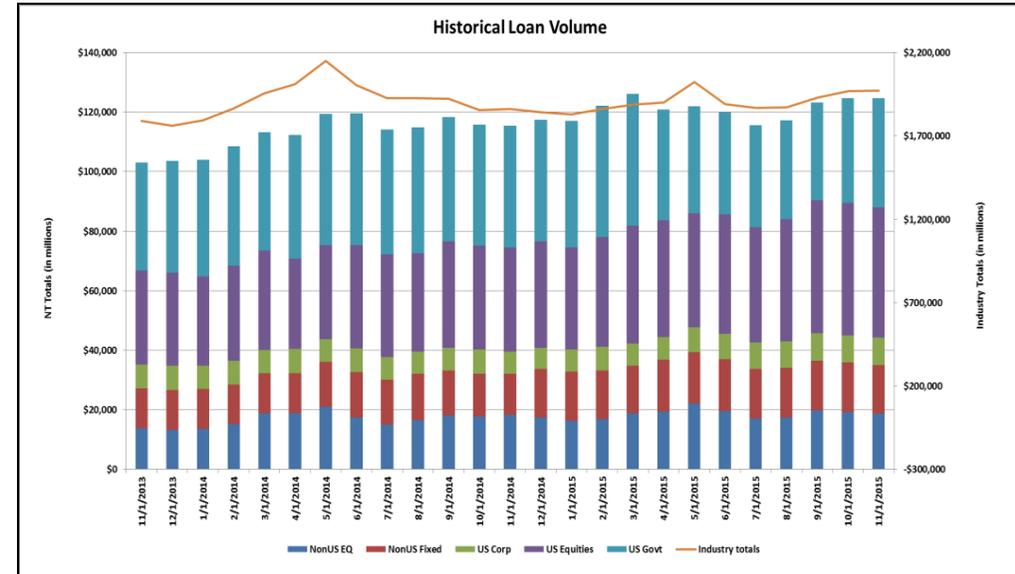
## Demand from the Borrower Community

### Equity Markets

- Loan volumes remained relatively stable as many hedge funds maintained exposures going into the final quarter of the year.
- The energy, commodities/materials, healthcare and consumer staples sectors continue to experience strong levels of borrower demand.
- Yield enhancement activity concentrated in France, Norway and Italy.

### Fixed Income Markets

- Changes in the regulatory environment continue to negatively impact demand for US Treasury and Agency loans, especially versus cash collateral, resulting in lower overall lending spreads on those securities.
- Demand to borrow on a term basis versus noncash collateral, including equities, is on the rise.
- Demand for corporate and emerging markets bonds was impacted by the same global macro factors as equities.



- Major Central Bank's have conflicting monetary policies due to opposing economic outlooks:
  - ◆ The European Central Bank (ECB):
    - ▶ At the December 3 meeting, the ECB announced a further reduction in the overnight deposit rate from -20 basis points to -30 basis points
    - ▶ The ECB announced an extension of their bond buying program (QE) from September 2016 to March 2017
    - ▶ Continues to promote a broadly accommodative monetary policy intended to fight deflationary pressures and slowing growth. However, the markets expected more from the meeting announcement regarding a rate decrease and broader measures relative to their bond buying program.
    - ▶ Yields denominated in the Euro are declining, but USD investments in European credit products have responded to the rate rise potentially driven by the US Federal Reserve
  - ◆ The US Federal Reserve (Fed):
    - ▶ At the December 15/16 meeting, the Fed raised rates for the first time in almost a decade
    - ▶ The new target range for the overnight rate is 25 to 50 basis points
    - ▶ The labor market continues to improve, but the Fed will closely monitor the slower than expected increase in the inflation rate
    - ▶ The Fed commented that the pace of future hikes will be gradual, as opposed to previous rate hike cycles that followed a set time pattern
    - ▶ Despite the increase in the short end of the duration curve, the long end of the USD government yield curve has flattened due to the lower inflation expectation
  - ◆ The Bank of England (BOE):
    - ▶ The BOE continues to monitor their recovering economy, but are not in a rush to follow the Fed and raise rates
    - ▶ There has been a quicker-than-expected reduction in unemployment, but the BOE is concerned about the low level of inflation
    - ▶ The expectation is that any rate increase will occur during mid 2016 at the earliest
  - ◆ Global central banks have revisited their view on worldwide growth and inflation as a result of decreased growth in China, low oil prices, and struggles in the Emerging Market due to US dollar strength.

- Market Dynamics:
  - ◆ Supply dynamics in the short-term markets continue to exert downward pressure on government yields, creating a potential widening of the spreads between credit products and government yields.
  - ◆ Regulations placed on financial institutions reduce the supply of short term investments such as repurchase agreements. This puts downward pressure on yields at the very front end of the short duration yield curve.
  - ◆ Money Market Reform in the US is slated for implementation in October of 2016. Many fund companies and investors have already reacted to the future changes, which has pushed cash into government securities and out of credit products.
  
- Current portfolio positioning:
  - ◆ Broadly neutral portfolio duration minimizes the impact of rising government rates, as well as widening credit spreads. Selectively long duration as opportunities arise on a relative value basis.
  - ◆ Strong overnight liquidity positions focused on repurchase agreements and time deposits of well-capitalized financial institutions.
  - ◆ Longer-dated trades of floating-rate credit instruments are preferred over fixed-rate offerings.

# Investment Profile: Core STIF Cash Collateral Fund December 31, 2015

## Characteristics

Total Book Value (in USD)	15,487,035,866
Weighted Average Maturity (Interest Reset Date)	29 Days
Weighted Average Maturity (Maturity Date)	82 Days
Average Equivalent Quality Rating	

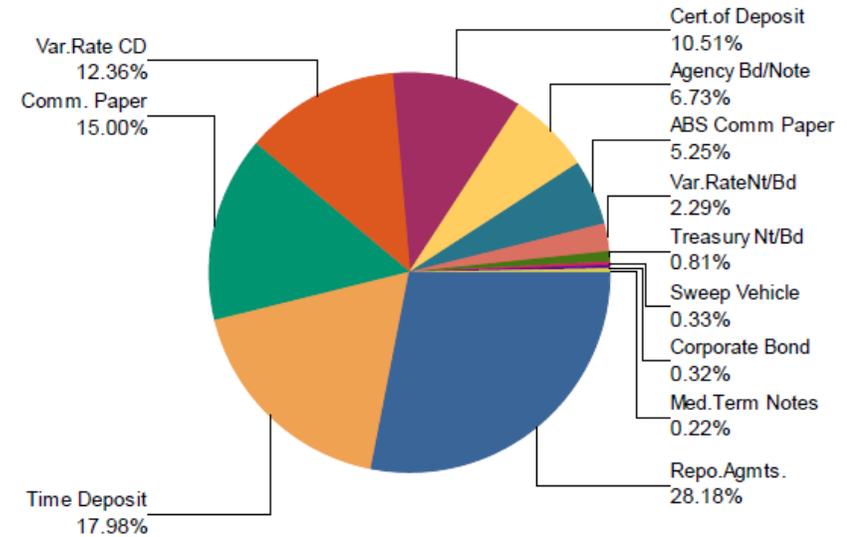
Total Number of Issues	148
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Quality Distribution	Percentage
A1+ (SHORT TERM)	73.49%
A1 (SHORT TERM)	15.81%
Treasury	.81%
Agency	6.73%
AA- (LONG TERM)	1.72%
A+ (LONG TERM)	.81%
A (LONG TERM)	.64%

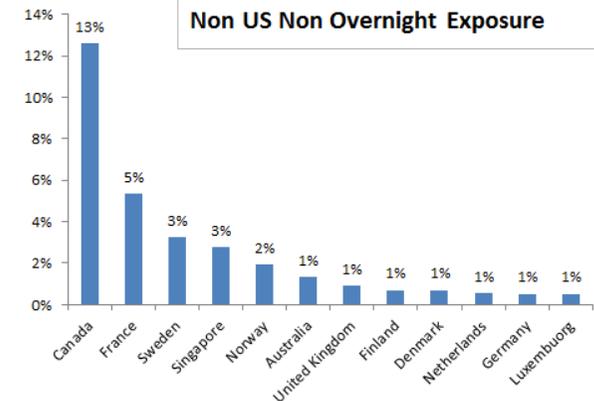
Maturity Breakdown Distribution	Interest Reset	Maturity Date
Overnight	50.69%	20.21%
2 - 15 Days	7.63%	3.41%
16 - 30 Days	11.37%	2.69%
31 - 60 Days	7.31%	14.55%
61 - 97 Days	19.68%	43.96%
98 - 180 Days	2.19%	6.49%
181 - 270 Days	0.32%	2.92%
271 - 366 Days	0.81%	2.38%
367 Days - 2Yrs	0.00%	3.41%

INVESTMENT TYPE BREAKDOWN	% of SECTION	MARKET VALUE*	MTB*
Govt Agencies	8.67%	1,341,880,897	0.3996241371
Banking Ind.	55.64%	8,617,576,116	0.3999825052
Broker/Dealer	29.13%	4,521,197,782	0.3999925361
Commercial&Ind	0.43%	66,379,010	0.3993466028
Finance & Ins	5.25%	813,436,604	1.0001847216
Treasuries	0.81%	125,665,344	0.3974767355

## Cash Collateral Asset Class Breakdown



## Non US Non Overnight Exposure



NOTE: This information was created using the best unaudited data available to us and may not be completely reliable, accurate, or timely. Data is prepared on a settled basis, which may differ from traded basis data on the Cash Collateral Holdings report. "Traded Basis" reflects pending trades.



Northern Trust

# Earnings Scorecard Year Ended 12/31/15

## Northern Trust Securities Lending

### Performance Scorecard - Lending and Investment Breakdown

From January, 2015 to December, 2015 ( USD ) \*\*

Page 1 of 1

#### ◆ JACKSONVILLE POLICE & FIRE

Security Type	Market Value ( USD )		% on Loan	Gross Earnings ( USD )			Spread (bps)			Gross BP Return (bp) *	Net Earnings ( USD )		
	Avg. on Loan	Avg. Available		Lending	Investment	Total	Lending	Investment	Overall		Lending	Investment	Total
US Treasuries	2,941,824	11,570,526	25.4%	-898	4,930	4,033	-3.0	16.5	13.5	3.4	-675	3,700	3,025
US Agencies	0	1,055,421	0.0%	0	0	0	0.0	0.0	0.0	0.0	0	0	0
US Corp Bonds	8,313,246	66,643,798	12.5%	18,247	14,451	32,698	21.6	17.1	38.8	4.8	13,687	10,842	24,529
US Equities	136,624,080	470,543,936	29.0%	551,965	228,570	780,535	39.8	16.5	56.3	16.4	414,017	171,477	585,494
Global Corp Bonds	566,828	5,281,544	10.7%	601	923	1,524	10.5	16.1	26.5	2.8	451	692	1,144
Global Equities	11,595,251	38,291,291	30.3%	14,519	16,910	31,430	12.4	14.4	26.7	8.1	10,892	12,686	23,578
Total	160,041,229	593,386,516	27.0%	584,435	265,784	850,220	36.0	16.4	52.4	14.1	438,373	199,397	637,771

Rebates for when USD cash is taken as collateral on applicable loans are based on the Fed Open benchmark rate.

Rebates for when EUR cash is taken as collateral on applicable loans are based on the EONIA benchmark rate.

Rebates for when CAD cash is taken as collateral on applicable loans are based on the Canadian Overnight benchmark rate.

\* Gross Basis Point Return equals On Loan Spread multiplied by % on Loan. GBPR is the measure of total return on a given asset class or portfolio.

\*\* Market Value and Earnings were converted using the month-end FX rate.



# Earnings Performance Comparison

## Year Ended 12/31/15 versus Year Ended 12/31/14

### Northern Trust Securities Lending Performance Scorecard - Client (Date Range Comparison)

( USD ) \*\*

Page 1 of 2

#### ◆ JACKSONVILLE POLICE & FIRE

Security Type	Market Value ( USD )		% on Loan	Gross Earnings ( USD )	On Loan Spread (bp)	Gross BP Return (bp) *	Net Earnings ( USD )
	Avg. on Loan	Avg. Available					
<b>From January, 2015 to December, 2015</b>							
US Treasuries	2,941,824	11,570,526	25.4%	4,033	13.5	3.4	3,025
US Agencies	0	1,055,421	0.0%	0	0.0	0.0	0
US Corp Bonds	8,313,246	66,643,798	12.5%	32,698	38.8	4.8	24,529
US Equities	136,624,080	470,543,936	29.0%	780,535	56.3	16.4	585,494
Global Fixed Income	566,828	5,281,544	10.7%	1,524	26.5	2.8	1,144
Global Equities	11,595,251	38,291,291	30.3%	31,430	26.7	8.1	23,578
<b>Total</b>	<b>160,041,229</b>	<b>593,386,516</b>	<b>27.0%</b>	<b>850,220</b>	<b>52.4</b>	<b>14.1</b>	<b>637,771</b>
<b>From January, 2014 to December, 2014</b>							
US Treasuries	3,629,063	8,173,338	44.4%	5,297	14.4	6.4	3,974
US Agencies	0	587,413	0.0%	0	0.0	0.0	0
US Corp Bonds	7,304,081	63,948,488	11.4%	37,418	50.5	5.8	28,068
US Equities	104,199,112	451,664,930	23.1%	447,161	42.3	9.8	335,439
Global Fixed Income	816,465	2,607,821	31.3%	2,220	26.8	8.4	1,665
Global Equities	7,766,851	39,357,993	19.7%	23,170	29.4	5.8	17,383
<b>Total</b>	<b>123,715,572</b>	<b>566,339,983</b>	<b>21.8%</b>	<b>515,266</b>	<b>41.1</b>	<b>9.0</b>	<b>386,529</b>
<b>Variance</b>							
US Treasuries	-687,238	3,397,188	-19.0%	-1,265	-0.9	-3.0	-948
US Agencies	0	468,008	0.0%	0	0.0	0.0	0
US Corp Bonds	1,009,164	2,695,310	1.1%	-4,721	-11.7	-0.9	-3,539
US Equities	32,424,969	18,879,006	6.0%	333,374	14.0	6.6	250,055
Global Fixed Income	-249,638	2,673,724	-20.6%	-695	-0.3	-5.5	-521
Global Equities	3,828,399	-1,066,702	10.5%	8,260	-2.7	2.3	6,196
<b>Total</b>	<b>36,325,657</b>	<b>27,046,532</b>	<b>5.1%</b>	<b>334,953</b>	<b>11.3</b>	<b>5.2</b>	<b>251,242</b>

# Performance Scorecard: Top Ten Earning Securities

## Northern Trust Securities Lending

Page 1 of 1

### Top 10 Net Earnings Report

From January 2015 To December 2015

#### ◆ JACKSONVILLE POLICE & FIRE

Rank	Security Name	CUSIP/SEDOL	Net Earnings	% Of Total Net Earnings	Market Value On Loan (USD)	Average % Utilization	Average Spread
1	CARBO CERAMICS INC COM	140781105	175,766.60	27.56	2,294,884.63	95.57	976.47
2	MYRIAD GENETICS INC COM	62855J104	42,379.92	6.65	975,102.30	94.30	560.63
3	TIDEWATER INC COM	886423102	34,134.01	5.35	813,031.96	98.99	540.15
4	WORLD WRESTLING ENTMNT	98156Q108	23,787.43	3.73	757,031.83	94.53	403.47
5	U S SILICA HLDGS INC	90346E103	7,744.24	1.21	573,383.84	94.62	172.02
6	BUCKLE INC COM	118440106	6,907.42	1.08	434,006.08	96.12	203.57
7	CABLEVISION SYS CORP CL A COM ST	12686C109	6,221.69	0.98	2,348,050.95	74.36	34.13
8	WESTAMERICA BANCORPORATION CC	957090103	6,180.32	0.97	1,990,219.22	97.49	39.85
9	#REORG/ISIS PHARMACEUTICALS NAM	464330109	6,079.07	0.95	2,084,250.36	87.39	37.52
10	SINCLAIR BROADCAST GROUP INC CL	829226109	5,895.76	0.92	1,083,598.83	68.59	70.26
<b>Sub Total Of Top 10 Securities</b>			315,096.46	49.41	13,353,560.00	87.40	303.01
<b>All Other</b>			322,674.23	50.59	146,687,669.31	25.37	28.22
<b>Total</b>			637,770.69	100.00	160,041,229.31	26.97	51.13



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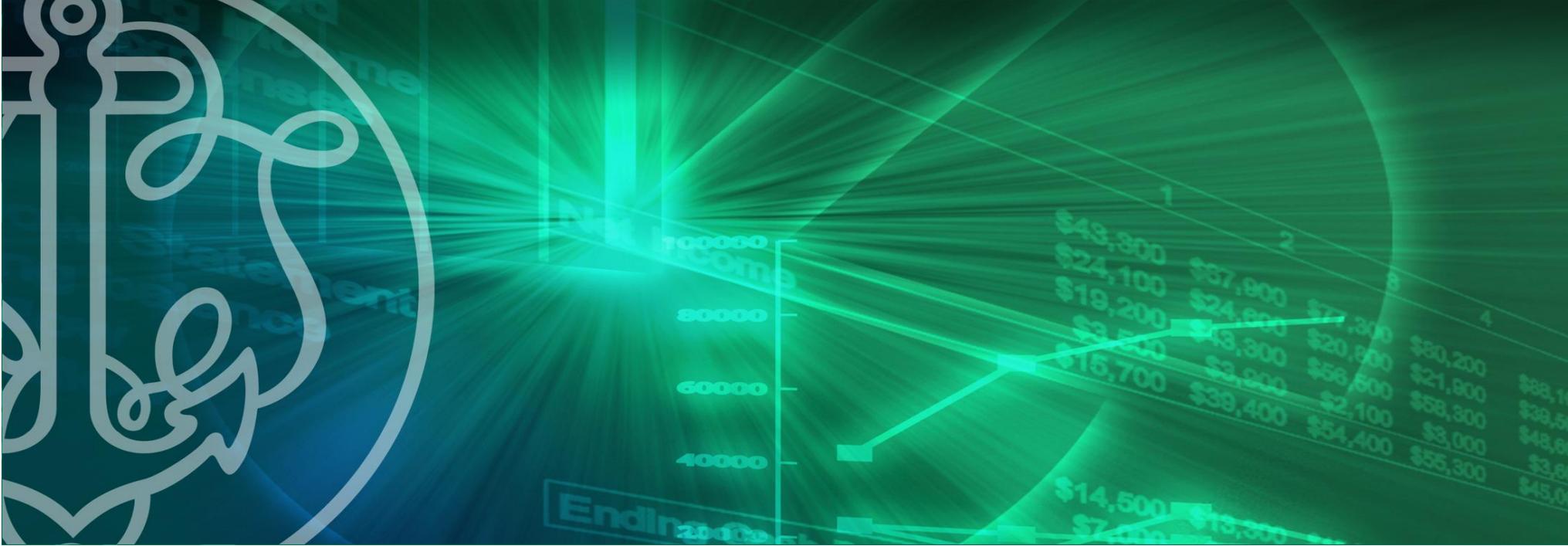
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June 2, 2015



## Northern Trust Asset Management

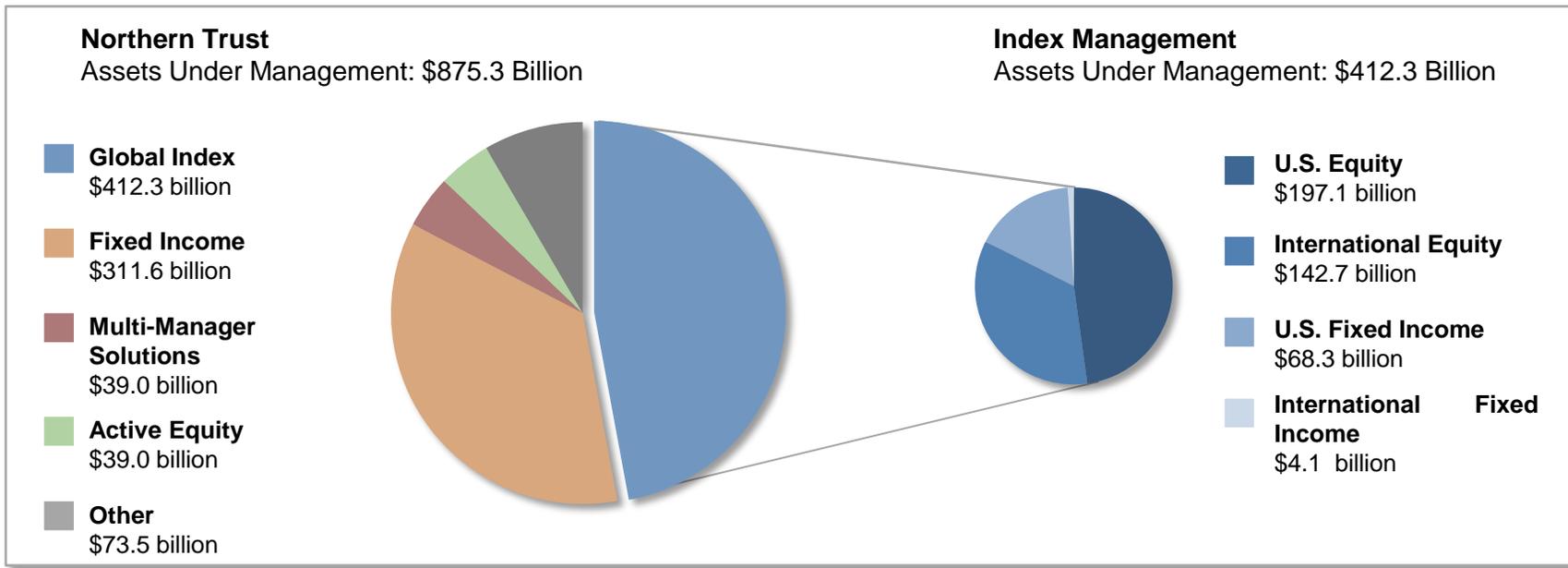




# Expertise in Asset Management

**Northern Trust is a multi-asset class investment manager with index management as a core business.**

Total firm assets under management: \$875.3 billion as of December 31, 2015



As of December 31, 2015 (updated quarterly). Source: Northern Trust Strategic Development

Northern Trust Asset Management is composed of Northern Trust Investments, Inc. Northern Trust Global Investments Limited, Northern Trust Global Investments Japan, K.K., NT Global Advisors Inc., 50 South Capital Advisors, LLC and personnel of The Northern Trust Company of Hong Kong Limited and the Northern Trust Company to offer investment products and services to personal and institutional markets.

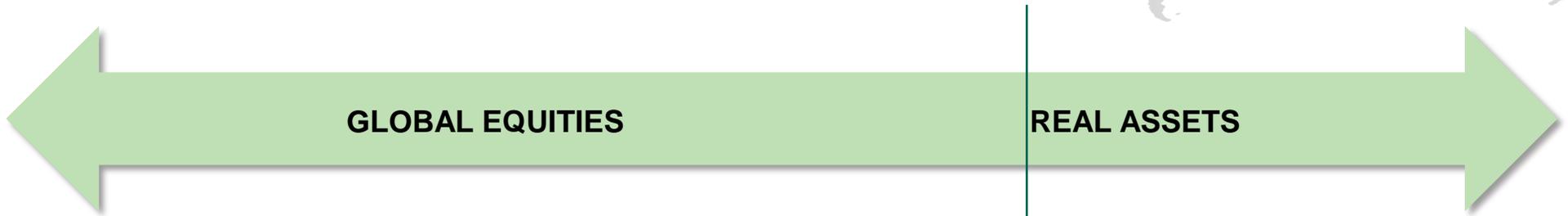
As of 12/31/2015, Northern Trust Corporation had assets under management totaling \$875.3 billion. For purposes of compliance with the Global Investment Performance Standards (GIPS®), we have defined our firm as Northern Trust Asset Management Services, a subset of Northern Trust Asset Management, and includes those investment products managed by NTI, NTGIL, NTGIJ, and TNTC that are distributed through national channels.

**As of 12/31/2015 Northern Trust Asset Management Services had assets under management totaling \$721.4 billion.**



# Global Equity Index Capabilities

*Our index capabilities span the full suite of the leading index providers covering global developed, emerging, and frontier markets. We also offer solutions for all specific style, capitalization weighted, and alternatively weighted indexes.*



- |         |              |      |                     |                  |                    |                  |                    |                       |                   |
|---------|--------------|------|---------------------|------------------|--------------------|------------------|--------------------|-----------------------|-------------------|
| S&P 500 | Russell 2000 | EAFE | Developed Small Cap | Emerging Markets | Emerging Small Cap | Frontier Markets | Global Real Estate | Listed Infrastructure | Natural Resources |
|---------|--------------|------|---------------------|------------------|--------------------|------------------|--------------------|-----------------------|-------------------|

## Services and Solutions

**Securities Lending**

**Target Date Retirement**

**Overlay Management**

**Custom Reporting**

**Transition Management**





# Jacksonville Police & Fire Pension Fund

## Portfolio and Market Value Summary - as of February 29, 2016

	Market Value Month	Performance (Values in %)							Since
		1 Months	3 Date	Year To Year	1 Years	3 Years	5 Years	10 Inception	
<b>Legal Agreement: Jacksonville Police &amp; Fire Pension Board of Trustees Trust</b>									
JAXPF-NTQA S&P 500-(2255608)									<b>09/01/1973</b>
Northern Trust S&P 500 Index Fund – Lending	\$78,789,185.96								
Total Fund Gross of Fees		-0.13	-6.57	-5.07	-6.08	10.84	10.21	6.43	
S&P 500		-0.13	-6.59	-5.09	-6.19	10.75	10.13	6.44	
<b>JAXPF-NT EAFE INDEX FUND-(2269497)</b>									
Northern Trust EAFE Index Fund – Lending	\$112,546,377.52								<b>08/01/2014</b>
Total Fund Gross of Fees		-1.83	-10.15	-8.92	-14.90				-10.45
MSCI EAFE		-1.83	-10.16	-8.93	-15.18				-10.68
<b>JAXPF-NT COLL AGG BOND-(2262969)</b>									
Northern Trust Aggregate Bond Index Fund – Lending	\$163,384,324.37								<b>08/01/2014</b>
Total Fund Gross of Fees		0.69	1.75	2.12	1.56				3.15
Barclays Capital Agg		0.71	1.77	2.10	1.50				3.09
<b>Total MV of Jacksonville Police &amp; Fire Pension Board of Trustees Trust</b>	<b>\$354,719,887.85</b>								
<b>Total MV of Assets</b>	<b>\$354,719,887.85</b>								

Past performance is no guarantee of future results. Index performance returns do not reflect any management fees, transaction costs or expenses. It is not possible to invest directly in any index

# Northern Trust S&P 500 Index Fund - Lending Performance as of February 29, 2016

**Market Value:**

\$78,789,185.96

**Performance for Periods Ended  
February 29, 2016**



Past performance does not guarantee future results. Periods greater than one year are annualized except where indicated. Returns reflect the reinvestment of dividends and other earnings and are shown before the deduction of investment management fees, unless indicated otherwise. Returns of the indexes also do not typically reflect the deduction of investment management fees, trading costs or other expenses. It is not possible to invest directly in an index. Indexes are the property of their respective owners, all rights reserved.

Actual portfolio returns would be reduced by investment management fees and other expenses relating to the management of your account. To illustrate the effect of the compounding of fees, a \$50 million account which earned a 10% annual return and paid an annual fee of 0.07% would grow in value over five years to \$80.5 million before fees and \$80.3 million after deduction of fees. For additional information on fees, please read Part II of the Form ADV or consult your Northern Trust Representative.

The Total Administrative Expenses of .01% reflects the maximum level at which the direct expenses as well as external audit fees for the Fund will be assessed and indirectly impact the Fund. The trustee does not assess or charge any fee in connection with the purchase or redemption of units of the Fund. NTI may at any time modify or discontinue the above-described caps on Total Administrative Expenses.

The fund is a collective investment trust (CIT) and is privately offered. Prices are not available in publication and a fund prospectus is not required. Please contact your service representative for further information.

There are risks involved in investing including possible loss of principal. All material has been obtained from sources believed to be reliable, but the accuracy, completeness and interpretation cannot be guaranteed.

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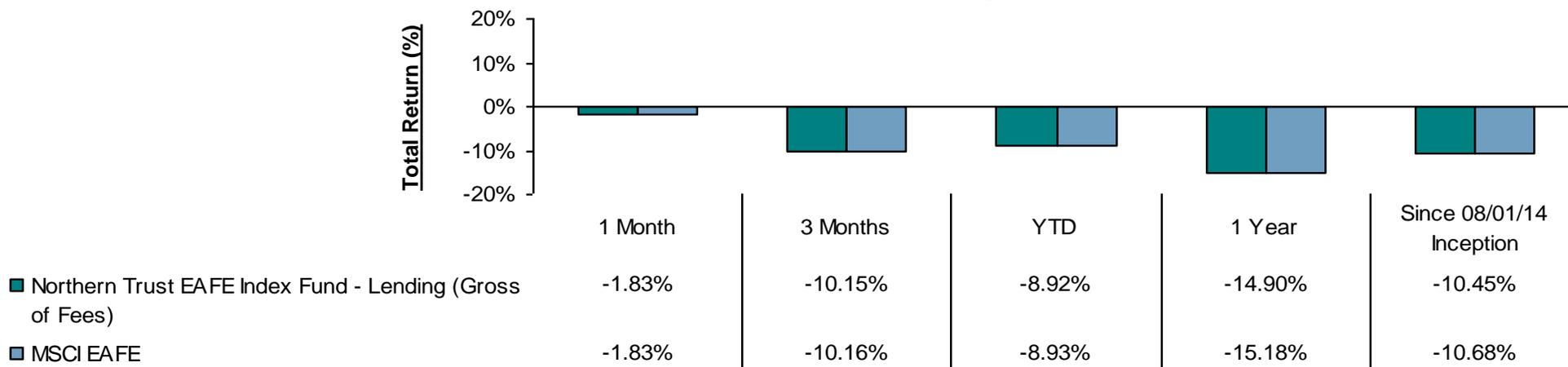
Annual Total Returns		
Year	Fund	Index
2015	1.49%	1.38%
2014	13.77%	13.69%
2013	32.46%	32.39%
2012	16.07%	16.00%
2011	2.19%	2.11%
2010	15.08%	15.06%
2009	27.12%	26.46%
2008	-37.62%	-37.00%
2007	5.48%	5.49%
2006	15.87%	15.80%

# Northern Trust EAFE Index Fund - Lending Performance as of February 29, 2016

**Market Value:**

\$112,546,377.52

**Performance for Periods Ended  
February 29, 2016**



Past performance does not guarantee future results. Periods greater than one year are annualized except where indicated. Returns reflect the reinvestment of dividends and other earnings and are shown before the deduction of investment management fees, unless indicated otherwise. Returns of the indexes also do not typically reflect the deduction of investment management fees, trading costs or other expenses. It is not possible to invest directly in an index. Indexes are the property of their respective owners, all rights reserved.

Actual portfolio returns would be reduced by investment management fees and other expenses relating to the management of your account. To illustrate the effect of the compounding of fees, a \$50 million account which earned a 10% annual return and paid an annual fee of 0.07% would grow in value over five years to \$80.5 million before fees and \$80.3 million after deduction of fees. For additional information on fees, please read Part II of the Form ADV or consult your Northern Trust Representative.

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Annual Total Returns		
Year	Fund	Index
2015	-0.46%	-0.81%
2014	-4.57%	-4.90%
2013	23.24%	22.78%
2012	17.84%	17.32%
2011	-11.80%	-12.14%
2010	8.08%	7.75%
2009	32.44%	31.78%
2008	-43.16%	-43.38%
2007	11.58%	11.17%
2006	26.68%	26.34%

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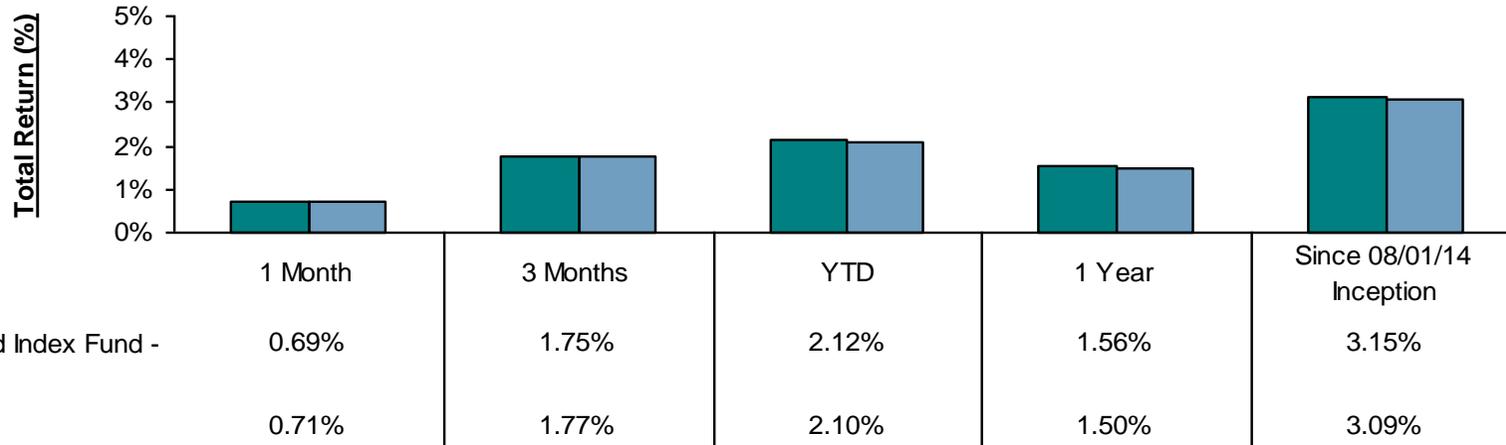


# Northern Trust Aggregate Bond Index Fund - Lending Performance as of February 29, 2016

**Market Value:**

\$163,384,324.37

**Performance for Periods Ended  
February 29, 2016**



Past performance does not guarantee future results. Periods greater than one year are annualized except where indicated. Returns reflect the reinvestment of dividends and other earnings and are shown before the deduction of investment management fees, unless indicated otherwise. Returns of the indexes also do not typically reflect the deduction of investment management fees, trading costs or other expenses. It is not possible to invest directly in an index. Indexes are the property of their respective owners, all rights reserved.

Actual portfolio returns would be reduced by investment management fees and other expenses relating to the management of your account. To illustrate the effect of the compounding of fees, a \$50 million account which earned a 10% annual return and paid an annual fee of 0.07% would grow in value over five years to \$80.5 million before fees and \$80.3 million after deduction of fees. For additional information on fees, please read Part II of the Form ADV or consult your Northern Trust Representative.

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Annual Total Returns		
Year	Fund	Index
2015	0.58%	0.55%
2014	6.12%	5.97%
2013	-2.15%	-2.02%
2012	4.31%	4.21%
2011	7.84%	7.84%
2010	6.60%	6.54%
2009	6.65%	5.93%
2008	3.88%	5.24%
2007	7.12%	6.97%
2006	4.40%	4.33%

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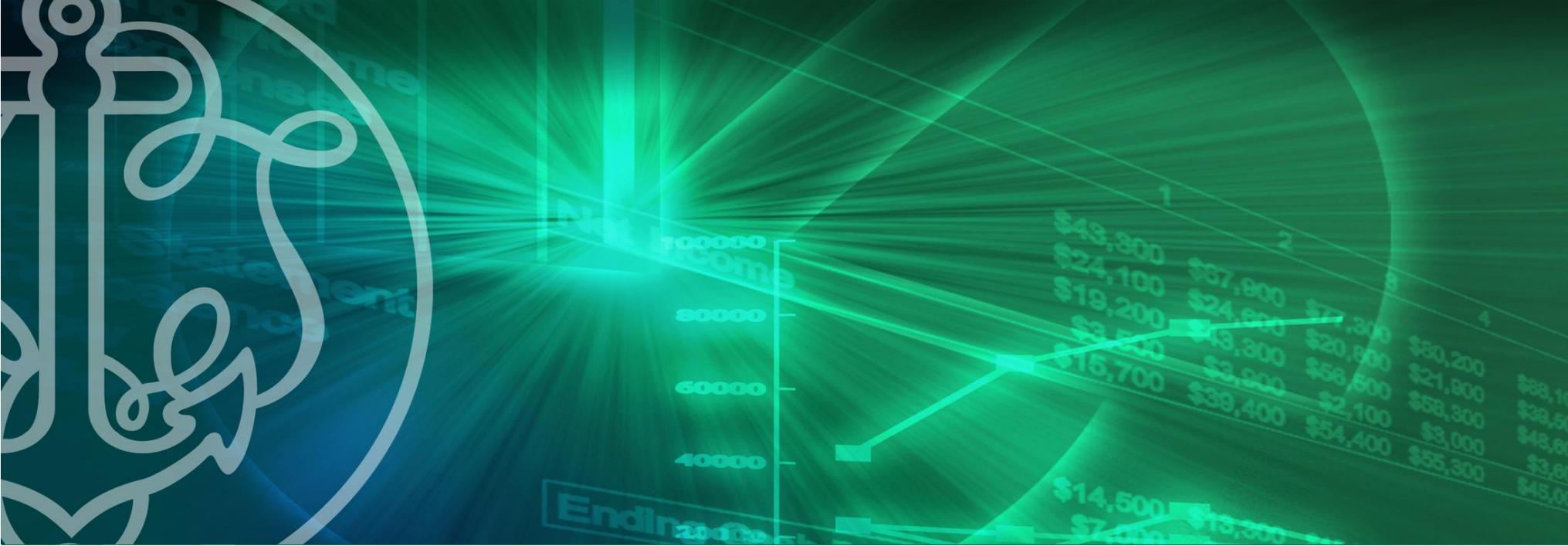
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## Commission Management

*A flexible program to help you unbundle commissions and manage expenses*

Kurt D Palmer, Senior Vice President  
Northern Trust Securities, Inc.  
50 South LaSalle Street  
Chicago, IL 60603 USA  
Email: Kdp1@ntrs.com  
Tel 312 444 3650

Rich McConville, Senior Vice President & Client Executive  
Northern Trust Company  
50 South LaSalle Street  
Chicago, IL 60603 USA  
Email: Rfm1@ntrs.com  
Tel 312 444 3322



**Northern Trust**

[northerntrust.com](http://northerntrust.com)



# Commission Recapture

*A flexible Commission Recapture program to help you unbundle commissions and manage expenses.*



- ☑ Unbundles commissions
- ☑ Reduces transaction expenses by measurable savings
- ☑ Enhances fund performance
- ☑ Helps fulfill fiduciary obligations
- ☑ Fully supported by a team of dedicated specialists
- ☑ Online management tools and tailored analysis reports

## Extensive Broker Network

- Extensive network of brokers comprised of more than 25 broker-dealers, including some of the largest in the world
- Meet best execution obligations and enhance broker relationships

## Centralized Client Servicing

- Centralized servicing of responsibilities ensuring a coordinated approach
- Coordination of enrollment of new managers optimizing rebate potential
- Manager calling program to support CR program success and solicit feedback for future broker additions

## Timely Crediting of Rebates

- Credits provided for trades executed in the prior month
- Seamless rebate crediting process and streamlined program administration allowing ease of audit

## Proven Expertise

- More than 280 clients currently participate in NTSI's Commission Recapture program

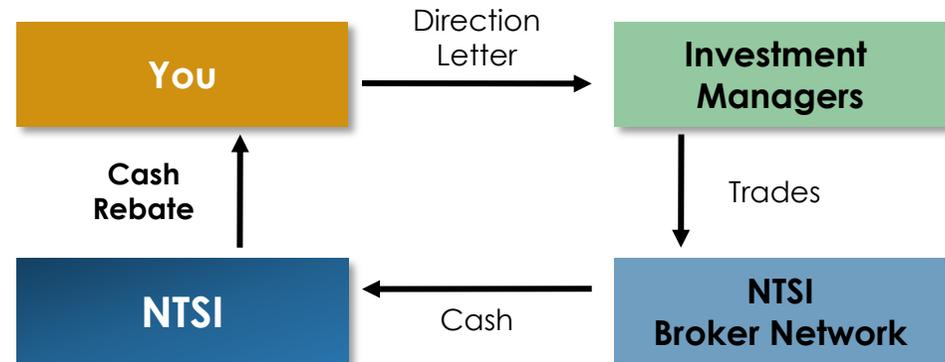




# Easy Implementation

*With client servicing and long-lasting partnerships in mind, NTSI's Commission Recapture program offers quick and easy implementation.*

- You direct managers to trade with specified brokers who rebate a percentage of the commission.
- You can use rebates to offset qualifying expenses such as trust/custody and performance measurement fees, or to reinvest in the fund.



\* NTSI must be the executing broker

## Northern Trust Securities, Inc. Commission Recapture Broker Dealer Network



NTSI offers Fix Connectivity,  
please contact our Institutional  
Client Service team for further  
details at 866-704-2030.

**When trading with NTSI  
directly, please call our Equity  
Trading desk at 312-557-4113.**

### Domestic

- \* Blaylock Robert Van, LLC
- \* CF Global
- \* Capital Institutional Services, Inc. (CAPIS)
- \* Convergenx
- \* Cowen and Company, LLC
- \* Fidelity
- \* Floor Broker Network
- \* Heflin & Co. LLC
- \* HSBC
- \* Imperial Capital
- \* Instinet
- \* ITG
- \* Knight Equity Markets
- \* Liquidnet
- \* Loop Capital
- \* Melvin Securities
- \* Bank of America/Merrill Lynch
- \* Mischler Financial
- \* M.R. Beal
- \* NTSI (Northern Trust Securities Inc.)
- \* Pershing
- \* Piper Jaffray
- \* Ramirez & Company
- \* Russell Implementation Services
- \* Weeden

### International

- \* CF Global
- \* Capital Institutional Services, Inc. (CAPIS)
- \* Convergenx
- \* CIBC World Market - *Canadian Markets Only - Canadian Money Managers Only*
- \* Commission Direct - *Canadian Markets Only - Canadian Money Managers Only*
- \* Cowen and Company, LLC
- \* Eden Financial
- \* Floor Broker Network
- \* Heflin & Co. LLC
- \* HSBC
- \* Instinet
- \* ITG
- \* Knight Equity Markets
- \* Liquidnet
- \* Mischler Financial
- \* NTSI
- \* Pershing
- \* Russell Implementation Services
- \* Societe Generale

We also welcome *domestic step-out* trades which allow you to trade with the trading partner of your choice. To simplify the process, step-out trades can be sent directly to National Financial, our clearing firm, via OASYS. Trades sent via OASYS should be sent to the acronym NTRC. You may also email step-out trade details to us at [ntsi\\_ips@ntrs.com](mailto:ntsi_ips@ntrs.com).



# NTSI Reporting Advantages



Fully integrated with Northern Trust Passport®, our online monitoring and reporting tool. The report includes a monthly summary, with analysis of the brokers being used, their participation rates in the program and the commission rates charged.

- NTSI calculates the Investment Manager's commission participation rate using total custody commissions, which are only available when Northern Trust is the global custody provider.
- Trade Cost Analysis report is provided free of charge when NTSI is hired as the sole Commission Management provider.
- Flexibility to run detailed online reports for any time period back to program inception.
- 24-hour reporting to enhance program oversight.



# Comprehensive Reporting – Effective Commission Rate

## Effective

01 JAN XX – 31 MAR XX

Consolidation ABCD

ABCD CORPORATION

Page 1 of 1

### Effective Commission Rates

Fund Manager	Account Number	A Total Custody Account Commissions	B Manager Directed Commissions	C Total Rebate Basis	D % of Trading NTSI/Network	E Client Rebate Amount	Effective Commission Rate			
							Before Rebate		After Rebate	
							F Per Share	G Basis Point Cost	H Per Share	I Basis Point Cost
ABCD CORPORATION I	22-555555	189,591.50	147,277.00	147,277.00	77.68%	95,730.05	2.3	7.6	1.1	3.7
ABCD CORPORATION II	22-666666	12,532.04	7,502.60	7,502.60	59.87%	4,876.69	3.5	10.8	2.2	6.6
ABCD CORPORATION III	22-777777	55,297.50	17,800.00	17,800.00	32.19%	11,570.00	4.3	14.3	3.4	11.3
ABCD CORPORATION IV	22-888888	80,752.42	24,150.10	16,905.12	29.91%	10,988.33	1.8	13.9	1.5	12.0
<b>Grand Total</b>		<b>338,173.46</b>	<b>196,729.70</b>	<b>189,484.72</b>	<b>58.17%</b>	<b>123,165.37</b>	<b>2.4</b>	<b>10.2</b>	<b>1.5</b>	<b>6.5</b>

**Total Custody Account Commissions** is the total commissions paid by each investment manager.

**A** **Manager Directed Commissions** is the total gross commissions paid to Northern Trust's Commission Management broker network.

**Total Rebate Basis** is the amount of commissions paid to Northern Trust's Commission Management broker network.

**C** **% of Trading NTSI/Network** is the total manager directed commissions divided by total commissions, or B / A.

**D** **Client Rebate Amount** is the sum of all rebates received during the time period selected.

**E** **Per Share Commission Rate Before Rebate** is calculated as A / Number of shares traded in the period for the trades in which a commission was paid i.e. agency trades.

**F** **Basis Point Cost Before Rebate** is calculated as (A / Principal amount traded) \* 10,000.

**G** **Per Share Commission Rate After Rebate** is calculated as (A – Rebate amount) / # of shares traded in the period for trades in which a commission was paid.

**H** **Basis Point Cost After Rebate** is calculated as (A – Rebate amount) / (principal amount \* 10,000).

**I**

# Comprehensive Reporting – Effective Commission Rate

## Effective

01 JAN XX – 31 MAR XX

Consolidation ABCD

ABCD CORPORATION

Page 1 of 1

### Effective Commission Rates

Fund Manager	Account Number	Effective Commission Rate									
		A Total Custody Account Commissions	B Manager Directed Commissions	C Total Rebate Basis	D % of Trading NTSI/Network	E Client Rebate Amount	Before Rebate		After Rebate		I Basis Point Cost
							F Per Share	G Basis Point Cost	H Per Share	I Basis Point Cost	
ABCD CORPORATION I	22-555555	189,591.50	147,277.00	147,277.00	77.68%	95,730.05	2.3	7.6	1.1	3.7	
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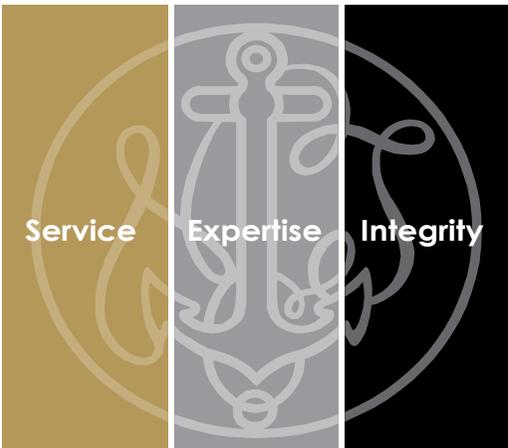
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**I**



# Why Northern Trust Securities, Inc.?



*As part of Northern Trust, NTSI adheres to our founding principles of:*

## Service

- Fully integrated brokerage and custody service platform with the ability to offer customized capital markets solutions
- Extensive product offering
- Highly skilled specialists and experienced sales teams to understand your unique situation and provide fresh thinking and innovative solutions

## Expertise

- Focus on measuring execution quality and ensuring transparency
- Industry experts provide insights and analysis to keep you abreast of the latest trends
- Advanced technology with highly sophisticated reporting

## Integrity

- A heritage of acting with the highest ethics
- Wisdom earned through generations of relationships with successful families and institutions
- The stability to weather change and uncertainty



## Class Actions Overview For Jacksonville Police And Fire Pension Fund

March 14, 2016

Pat Krull, Vice President



**Northern Trust**

[northerntrust.com](http://northerntrust.com)



# Overview of Class Action Processing

- Northern Trust processes securities litigation that settled through the U.S. Courts, where claim administration is handled by U.S. claim administrator
- If allowed by the courts, Northern Trust will also file claims within settled class action cases outside of the US (Canada and the Netherlands)
- Northern Trust handles three primary functions:
  - ◆ Tracking of settled lawsuits and client notification
  - ◆ Filing of claims
  - ◆ Posting of disbursements to client portfolios
- A Chicago Operations team, managed by Brett Malowitz, processes class actions for clients worldwide





# Tracking of Settled Lawsuits

- Northern Trust receives notification of settlements:
  - ◆ Security Class Action Services LLC (SCAS) alerts from Riskmetrics ([www.riskmetrics.com/scas](http://www.riskmetrics.com/scas))
  - ◆ Interactive Data
  - ◆ Court Appointed Claims Administrators
  - ◆ Legal, Consultancy, and Accounting Newsletter from Mondaq.com
  - ◆ Stanford Law School Securities Class Action Clearinghouse ([www.securities.stanford.edu/filings.html](http://www.securities.stanford.edu/filings.html))
- Notifications include:
  - ◆ Name of class action and description of settlement
  - ◆ Court-appointed claims administrator
  - ◆ Web site with all court documents and claim forms
  - ◆ Class Period and eligible assets (security identifiers)
  - ◆ Filing and objection deadlines





# Client Notification

- Northern Trust retrieves holdings and transactions:
  - ◆ All eligible securities
  - ◆ All client accounts
  - ◆ Entire class period
- Northern Trust distributes notifications to all open accounts with activity via CDR
  - ◆ Notifications sent to Corp Action recipients and “Class Action Only” recipients
- Client or Investment Manager returns decision if they wish to opt out
  - ◆ Client may choose to file separate lawsuit
  - ◆ Investment Manager may file claims directly, and does not want NT to duplicate
- If no opt out is received, Northern Trust files claims for current and former clients to ensure that no proceeds are missed.
- CDR can hold standing instructions/permanent opt out
- Will send informational notifications for “Opt In” or “Group Action” events primarily outside of the US, for which Northern doesn’t typically have the authority to file.





# Filing of Claims

- Northern Trust prepares all data required by claims administrator
  - ◆ Positions at start and end of class period
  - ◆ Reconciled investment activity during the class period
  - ◆ Specific Holdings may be required
- On or before filing deadline, Northern Trust submits claims
  - ◆ Generally, we file electronically; occasionally via paper proof of claim
  - ◆ Northern Trust must certify that all activity included in the filing is valid
- Retain record of claim filing
- Respond to inquiries from claims administrator
- Receive some notices of rejected claims (and reason)
- Wait ..... and wait ..... Settlement fund proceeds may not be distributed for 18-24 months after claim filing





# Posting Proceeds to Client Portfolios

- Elapsed time for settlement fund distributions may be 1 to 5 years (until all proceeds are received)
- Generally cash payments; occasionally securities
- Cash may be received in a single wire, or via thousands of individual checks sent by postal mail
- Northern Trust does not receive the formulas used to calculate proceeds. Northern Trust does not know how settlement fund was distributed across claimants.
- Northern Trust posts proceeds as quickly and efficiently as possible
- NT maintains standing instructions for closed accounts:
  - ◆ Institutional clients restructure and close accounts
  - ◆ Proceeds redirected to another account, or paid to client
- NT saves and researches unclaimed class action proceeds





# Closing the Class Action Event

- Settlement fund distributed in 2 or 3 payouts
- Northern Trust also receives proceeds forwarded to us
  - ◆ Investment Manager filings
  - ◆ Prior custodians
- Final payout by the claims administrator brings the settlement fund to \$0
- Northern Trust audits to ensure we have received proceeds or a rejection notice for every claim that was submitted
- Northern Trust pursues data from claims administrator as needed
- Northern Trust closes class action event after audit is complete





# Use of Other Vendors

- Northern Trust does not offer these services:
  - ◆ Tracking of pending lawsuits
  - ◆ Calculation of projected proceeds from settlement funds
  - ◆ Advising clients on whether to file with the class or not
  - ◆ Filing claims for client activity at prior custodian
- Northern Trust can supply other vendors with data to:
  - ◆ Track pending lawsuits
  - ◆ Advise clients on how to approach securities litigation
- NT can introduce assist clients seeking solutions for prior custodian data storage, research and claim filing





# Total Northern Trust Volumes

## Total Cash Proceeds

■ Year	Events Filed	Events Paid	Total Amount Paid*
■ 2008	132	181	\$450,160,604.77
■ 2009	131	283	\$381,734,418.05
■ 2010	169	236	\$297,375,860.59
■ 2011	106	182	\$209,511,012.10
■ 2012	93	190	\$209,885,565.03
■ 2013	107	210	\$124,549,732.15
■ 2014	94	167	\$188,715,911.22
■ 2015	109	171	\$193,368,964.63
■ 2016 (YTD)	14	21	\$ 14,506,527.08

\*All Amounts Are Reflected in USD

Volumes vary based on market fluctuations





# Total Jacksonville Police And Fire Pension Fund Volumes

## Total Cash Proceeds

■ Year	Claims Filed	Events Paid	Total Amount Paid*
■ 2008	102	34	\$117,360.60
■ 2009	99	50	\$159,269.51
■ 2010	69	55	\$136,933.01
■ 2011	53	31	\$ 36,342.90
■ 2012	50	28	\$ 41,195.20
■ 2013	65	33	\$152,961.75
■ 2014	21	40	\$193,595.28
■ 2015	34	16	\$281,974.60
■ 2016 (YTD)	2	2	\$ 4,753.67

\*All Amounts Are Reflected in USD

Volumes vary based on market fluctuations





# Class Action Reporting

- Class Action Industry trends
  - ◆ Bigger settlements → Growing worldwide awareness and inquiries
  - ◆ Increasing number of securities eligible to file claims
  - ◆ Organizations electing to opt out of the class and file separate suits
  - ◆ Clients want more detail on claim rejection reasons
  - ◆ Auditors and Trustees checking participation
- New templates in Management Reporting / IIP
  - ◆ Class Action Event Summary
  - ◆ Class Action Event Detail
  - ◆ Class Action Filed Activity
  - ◆ Class Action Activity Detail
  - ◆ Class Action Proceeds Received
  - ◆ Class Action Tran Hist Non-Filed





## 2016 / 2017 Enhancements

- Continue to enhance processing platform
  - ◆ Increase automation, as claim filing volumes continue to grow
  - ◆ Continue improvements for client reporting
- Expand the product to include more non-US class actions
  - ◆ Movement towards additional class action filings within additional court systems.

Northern Trust continues to invest in Class Actions, recognizing this service is important to sophisticated investors worldwide.





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January 2016

