Operational Risk Assessments

Torchlight Loan Services, LLC

March 2017

Operational Classifications:	Commercial Mortgage Special Servicer
Rankings:	MOR CS1 (Affirmed)
Forecast:	Negative
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Rationale

Morningstar Credit Ratings, LLC affirmed its MOR CS1 commercial mortgage special-servicer ranking for Torchlight Loan Services, LLC, a wholly owned subsidiary of Torchlight Investors, LLC. In the latter months of 2016, Torchlight transitioned its special-servicing asset-management function back to its New York corporate headquarters after moving it to Miami in 2013. The company expects the consolidation to provide operating cost efficiencies considering its revised projections for lower special-servicing activity based on its portfolio profile. Although Torchlight now operates as a smaller-scale special servicer, Morningstar affirmed its ranking based on the following factors:

- Asset-Recovery Performance During 2016: During the past few years, Torchlight has been among the more active special servicers handling legacy commercial mortgage-backed securities transactions. Its active portfolio continues to shrink because of lower asset-transfer activity and a brisk pace of resolutions. Torchlight had another year of solid asset-recovery results in 2016, including the resolution of many large, complex loans and real estate owned properties, although it had stronger REO-sales results in the first half of the year.
- Operational Continuity and Management Experience: As part of consolidating operations to New York, Torchlight downsized its asset-management team to two managers and an analyst. However, the three team members previously worked at Torchlight's former Miami office. Including the special-servicing department head, Torchlight has retained experienced personnel for asset management. Torchlight also has an experienced operations team for investor reporting and servicing-agreement compliance consisting of a manager and two associates, including a retained contract employee who continues to coordinate borrower consent requests. To support the special-servicing operation, Torchlight Investors provides designated staff for compliance, asset accounting, and portfolio surveillance. Additionally, it has four investment-management analysts with real estate and loan workout backgrounds, including some who worked at other CMBS special servicers, available to manage specially serviced assets.
- Technology and Reporting Capabilities: Torchlight uses the Backshop™ asset-management system, which has strong asset-tracking, investor-reporting, and workflow-control capabilities. Torchlight handles its network support and disaster-recovery management through a third-party vendor. This approach, while not common, is acceptable based on the vendor's stated capabilities, testing protocols with Torchlight, and satisfactory independent security audits to validate that its infrastructure meets best practices.
- Asset Analytics and Management: Torchlight has diligent asset-analysis practices and well-delineated policies and procedures covering essential elements of CMBS special servicing. The asset-management system facilitates the company's ability to monitor

procedural compliance and conduct asset-resolution analysis. As a control enhancement, Torchlight has a robust REO property-management company audit program.

- Internal Audit Function: Torchlight engages a nationally known firm to conduct audits that examine loan and real estate owned cash management, investor reporting, and servicing-agreement compliance. While making a few recommendations that Torchlight addressed, the latest available audit report issued in February 2016 did not identify any significant control weaknesses, and another audit is nearing completion. Torchlights plans to undergo similar audits at least every 12-18 months, with cash controls examined annually. Additionally, Torchlight provides an annual Regulation AB attestation, which has not contained any exceptions for the past four calendar years through 2016.
- Conflicts of Interest Management: For many of the CMBS transactions in which Torchlight is the named special servicer, Torchlight Investors holds first-loss bond positions and is the controlling class holder. Torchlight does not use affiliates for its special-servicing work, but its parent has acquired a few assets from CMBS trusts using permitted purchase options. Based on Torchlight's compliance and asset-resolution practices, Morningstar has concluded that the company appropriately manages its conflicts of interest and seeks to uphold the servicing standard.

As of Dec. 31, 2016, Torchlight was the named special servicer for 35 CMBS transactions and one Freddie Mac securitization with a combined remaining unpaid principal balance of $16.62 billion consisting of 1,114 loans. The company's total active special-servicing portfolio contained 21 loans and 42 REO properties with a combined UPB of approximately $999.7 million. CMBS assets accounted for approximately 98% of the active portfolio by asset count and 97% by UPB. As of Feb. 28, 2016, the active portfolio contained 24 loans and 26 REO assets with a combined UPB of $897.9 million.

By comparison, as of Dec. 31, 2015, Torchlight was the named special servicer on 31 CMBS transactions and one Freddie Mac securitization with a combined remaining UPB of $17.91 billion consisting of 1,283 loans. It was also the named special servicer on one commercial real estate collateralized debt obligation with a remaining UPB of $297.5 million containing 17 assets. The company's total active special-servicing portfolio contained 69 loans and 58 REO properties with a combined UPB of approximately $1.71 billion. CMBS assets accounted for approximately 98% of the active portfolio by asset count and by UPB.

Forecast

Morningstar's forecast for the ranking is Negative, which reflects Torchlight's reduced operational scale and asset-management depth following the company's office relocation. Although the average experience of Torchlight's active and available asset managers is solid, it has declined and is lower than other Morningstar high-ranked special servicers. The forecast also considers Torchlight's projections for its active special-servicing portfolio to shrink to only a few assets by year-end. While declining special-servicing volume eases workloads and bodes well for bond investors, it can conversely limit our ability to assess asset-recovery performance in absolute terms and on a comparative basis with other, higher-volume special servicers.

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Company Profile and Business Overview

New York City-based Torchlight is a wholly owned subsidiary of Torchlight Investors, LLC, which began in 1995 as Jones Lang Wootton Realty Advisors. In 2002, ING Group purchased a minority equity stake in Jones Lang Wootton Realty Advisors and changed the name to ING Clarion Capital. In 2010, the management team acquired ING Group's investment position, and the company assumed its current name. Torchlight Investors is 100% management-owned.

Torchlight Investors' core businesses are investment advisory, which encompasses commercial real estate debt investment and asset management, and special servicing. To support its acquisitions and investment-management businesses, the company may provide senior or subordinated financing or preferred equity. Since 1995, the company has acquired more than $20 billion of assets and launched nine opportunistic or value-add investment funds. As of Dec. 31, 2016, Torchlight Investors had approximately $4.10 billion of assets under management. The company principally manages assets on behalf of third-party institutional clients, largely comprising retirement and pension funds.

Torchlight Investors was one of the most active CMBS B-piece investors in the years immediately preceding the 2008 financial crisis. As a result, Torchlight became one of the larger-volume special servicers for legacy CMBS. More recently, Torchlight Investors has been acquiring subordinate bond positions in new-issue CMBS and appointing Torchlight as the special servicer. During 2016, Torchlight Investors acquired such positions in four new CMBS conduit transactions, with a total UPB of $3.34 billion at issuance, and, during 2015, it acquired those positions in four new CMBS transactions, with a total UPB of $3.96 billion at issuance. Torchlight Investors also has acquired first-loss positions in several Freddie Mac K-Series securitizations and was one of the most active buyers of these bonds in 2016.

In December 2014, Torchlight became an approved Freddie Mac special servicer, and, in January 2015, became the replacement special servicer for one Freddie Mac-issued securitization, FREMF 2012-K705, which had no active specially serviced assets. Additionally, Torchlight is a consultant for its affiliate's position as the directing certificateholder for six other Freddie Mac transactions.

As of Dec. 31, 2016, Torchlight was the named special servicer for 35 CMBS transactions and one Freddie Mac securitization (FREMF 2012-K705) with a combined remaining UPB of $16.62 billion consisting of 1,114 loans. Fourteen of these 36 transactions, or 71.9% by UPB and 60.5% by loan count, were issued in 2011 or later.

Between late 2013 and early 2014, Torchlight transitioned its special-servicing asset-management functions to Miami from its New York corporate headquarters. However, as noted, Torchlight moved the operation back to New York during the latter months of 2016. The company cited operating efficiencies as the rationale for consolidating the business at its corporate offices considering much lower-than-expected asset transfer volume and revised projections for lower special-servicing activity based on its portfolio profile as a named special servicer and asset-performance expectations. Throughout the three-year period of establishing and subsequently closing the Miami office, Torchlight retained its investor reporting, portfolio investments and surveillance, finance and accounting, and human resources functions in New York.

As of February 2017, Torchlight Investors had approximately 50 employees across its business lines of real estate investment and asset management, special servicing, and securitization structuring. Excluding executive management and allocated support for finance and accounting, compliance, and surveillance, seven employees were directly involved in special-servicing-related asset management, operations, and reporting. When factoring executive management and other personnel involved in these support functions, Torchlight's broader special-servicing platform consisted of 18 employees excluding four investment analysts designated for special-servicing asset management if needed.

Table 1 – Historical Active Special-Servicing Volume

	Dec. 31, 2016		Dec. 31, 2015		Dec. 31, 2014		Dec. 31, 2013	
	UPB ($000s)	Loans	UPB ($000s)	Loans	UPB ($000s)	Loans	UPB ($000s)	Loans
Loan Portfolio	536,186	21	1,053,573	69	1,148,908	79	1,623,016	101
REO Portfolio	463,548	42	658,647	58	770,628	74	580,372	50
Total Active Portfolio	999,734	63	1,712,220	127	1,919,536	153	2,203,388	151
Active CMBS Portfolio Only*	965,459	62	1,674,347	124	1,890,336	151	2,195,742	150
Named CMBS Special Servicer**	16,620,908	1,114	18,209,965	1,300	27,956,711	2,129	27,114,223	2,135

*Loans and REO assets. **Number of transactions: 35 as of December 2016, including one Freddie Mac securitization; 33 as of December 2015, including one CRE CDO and one Freddie Mac securitization; 35 as of December 2014; 28 as of December 2013.

Operational Infrastructure

Organizational Structure

Torchlight Investors' executive team consists of the CEO, three other managing partners, and a senior vice president for asset management. They oversee the company's principal business of real estate debt investment and asset management, which involves its opportunity funds, related CMBS bond positions, and the operations of Torchlight, the special-servicer subsidiary.

As of January 2016, Torchlight's special-servicing platform, including designated resources from the parent, consisted of:

- The special-servicing division head who reports to Torchlight Investors' chief credit officer and managing partner;
- The three-person operations team (manager plus two associates), which manages CMBS investor reporting, rating agency communications, special-servicing compliance, and borrower consent requests;
- The three-person asset-management team (loan manager, REO manager, and shared analyst);
- A four-person accounting team from Torchlight Investors' finance, accounting, and treasury department for portfolio- and asset-level accounting, including property-level accounting on REO assets;
- Torchlight Investors' chief compliance officer, who exclusively serves the company on a contract basis to provide counsel regarding servicing-agreement issues and regulatory compliance, including conflicts-of-interest risk mitigation; and,
- Two portfolio surveillance analysts and a client services' manager.

Management and Staff Experience

As of January 2017, the loan and REO managers each had 12 years of experience and the special-servicing department head had 21 years of experience. The asset analyst supporting these managers had only two years of experience. To support asset management if needed, Torchlight Investors designated four investment-management analysts, including a group head, all with special-servicing backgrounds and who averaged

11 years of experience. However, as shown in Table 2, average industry experience and tenure declined during 2016 following the company's downsizing and office consolidation to New York. The averages also have moved generally lower during the past three years.

Table 2 – Management and Staff: Average Years of Experience

	December 2016		December 2015		December 2014		December 2013	
	Industry	Company Tenure	Industry	Company Tenure	Industry	Company Tenure	Industry	Company Tenure
Senior Management	20	6	21	7	20	6	27	9
Middle Management	11	4	15	5	14	4	16	5
Staff Positions	8	1	9	2	8	1	7	3
Asset Managers	11	1	12	2	11	1	13	2

Management and Staff Turnover

Torchlight incurred high, and mostly involuntary, employee turnover during the latter months of 2016 as it transitioned special-servicing asset management back to its New York headquarters. However, as noted, the post-transition organization includes some personnel who relocated.

Table 3 – Management and Staff Turnover Rates*

	2016	2015
Total Staff - Beginning of Period (# of Positions)	19**	27
Total Turnover Rate (%)	42.1 (8 Positions)	3.7 (1 Position)
Involuntary	36.8	0.0
Voluntary	5.3	3.7
Management Only	10.5	3.7
Staff Only	31.6	0.0
New Hires (# of Positions)	1	1
Total Staff- End of Period (# of Positions)	12	27

Workload Ratios

As of Dec. 31, 2016, Torchlight had a 20/1 ratio of assets per asset manager based on one loan manager, one REO manager, and one shared analyst. Including the special-servicing department head, who is directly involved in asset deliberations, the ratio was 15/1. As of Feb. 28, 2017, Torchlight's assets/asset manager ratio with the special-servicing department head was 13/1 based on 50 remaining loans and REO properties.

By comparison, as of Dec. 31, 2015, Torchlight's assets/asset manager ratio was 14/1 based on nine people consisting of the department head, a shared analyst, two loan asset managers, two REO asset managers, and three asset managers handling a mix of loans and REO properties. Based on asset relationships, the consolidated ratio was 12/1.

> **Assessment:** Despite closing its Miami office, consolidating all asset management in New York, and reducing staff, Torchlight has maintained an acceptably designed organizational structure and operation to address its CMBS-oriented special-servicing work. Benefiting from some employees relocating, Torchlight has retained experienced managers and operational continuity. Morningstar also acknowledges the additional resources available through Torchlight Investors. However, with its reduced scale of operations, Torchlight has less asset-management depth relative to past years. Additionally, the average experience of Torchlight's active and available asset managers, although solid, is among the lowest of all Morningstar-ranked special servicers.
>
> Considering Torchlight's projections for its portfolio to continue shrinking as 2017 progresses, the company should have sufficient asset-management resources. The company's ability to tap personnel from its parent's investment-management business further bolsters capacity. However, in contrast to some other special servicers, the company no longer has any dedicated staff to facilitate borrower consent-request analysis. As Torchlight has become the named special servicer for several newer-issue CMBS, it may need to review its staffing should its consent-request volume increase.

Training

Torchlight provides formalized training for all staff, with scheduled sessions covering a range of special-servicing topics. The training regimen includes lectures by guest speakers and Torchlight managers, and recurring asset-management roundtable sessions that review case studies and procedural issues. The loan-department manager coordinates training-event logistics and tracks employee-participation hours. The manager also oversees asset-management system training and serves as liaison to the vendor supporting the system. The company expects all personnel to complete 40 hours of training annually excluding participation at conferences. Torchlight sponsored nearly 40 hours of scheduled training sessions during 2016 and noted that the employee-participation average for the year was 37 hours.

> **Assessment:** Although Torchlight is now smaller, it soundly addresses employee training through substantive session offerings, emphasizing a team-building and mentoring environment, and having a designated asset manager to coordinate scheduled events and track training hours. The company's required minimum and actual annual training hours are solid and appear to be in line with and even higher than some other Morningstar-ranked special servicers. Torchlight may benefit from developing an intranet portal, integrated with specialized software or leveraging the asset-management system, as feasible, to serve as a centralized tool for staff to access training materials and recorded sessions, register for sessions, and track hours.

Audit, Compliance, and Procedural Completeness

The manager of the special-servicing operations department certifies portfolio transfers, serves as liaison with firms engaged to perform internal audits, and monitors PSA compliance. Additionally, Torchlight Investors has its own corporate-level chief compliance and legal officer, who is employed as a consultant but is exclusive to the company.

Torchlight uses a nationally recognized accounting firm to conduct operational audits that examine a variety of areas and processes including cash management for loan and REO assets, technology security, related-party transactions, investor reporting, and servicing-agreement compliance. The audit includes a review of internal approvals, but does not include a review of approved resolution terms to closing documents.

Torchlight plans to undergo such audits at least every 18-24 months, with cash controls independently examined annually. The most recently available February 2016 audit report contained some recommendations that Torchlight remedied, but did not identify any significant control weaknesses. Torchlight stated that another audit is in process. Additionally, Torchlight provides an annual Regulation AB attestation that has not contained any exceptions for the past five calendar years through 2016.

The reporting, task-tickler, and workflow-management features of the asset-management system support Torchlight's quality-control and compliance efforts. In particular, the system has compliance checklists for asset transfers to and from master and other special servicers and for loan-to-REO transitions. As a special servicer focused on CMBS, Torchlight also may benefit by integrating its abstractions of PSA requirements into the system's workflow programming.

Torchlight has documented policies and procedures that denote proactive and controlled special-servicing practices and the company's focus on CMBS transactions. The operations department, in conjunction with other senior management, controls updates to the company's policies and procedures. Torchlight plans to revise its policies and procedures in 2017 with added references to the asset-management system. Additionally, employees must adhere to Torchlight Investors' separately documented policies and procedures covering corporate compliance and governance.

> **Assessment:** Although Torchlight downsized its special-servicing platform in recent months commensurate with shrinking asset volume, the company maintains a sound internal-audit function and has acceptable internal resources to monitor servicing-agreement compliance. The company operates with effective policies and procedures, many of which are embedded in its asset-management system, denoting proactive practices to address CMBS requirements.

Legal Liability and Corporate Insurance

Torchlight reported that it was not involved in any pending litigation directly related to its special-servicing operations. It also reported that it has directors and officers, errors and omissions, and fidelity bond insurance policies. As a special servicer, the company reported that it has not received any notices of PSA default or citations related to performance.

> **Assessment:** Torchlight's insurance coverage limits are reasonable based on the company's asset volume and relative to other special servicers. Based on Torchlight's representations, Morningstar is not aware of any material lawsuits related to, or which could potentially impair, the special servicer's operations.

Technology and Disaster Recovery

Torchlight uses CMBS.com, Inc.'s Backshop special-servicing/asset-management system, which it purchased in 2014. Torchlight, as a licensee, uses the system in a hosted environment on Backshop's servers through a cloud-computing structure. During the past two years, the vendor, in conjunction with Torchlight, has made functional enhancements to the system. Torchlight also can make minor programming alternations on its own. Additionally, Iron Mountain, Inc. holds in escrow the source codes and associated technology requirements for the entire application. In January 2017, Iron Mountain issued a report for Torchlight verifying the integrity of the escrowed intellectual property and deposit agreement.

Torchlight stated that Backshop can produce the latest CMBS investor-reporting package requirements established by the Commercial Real Estate Finance Council. The system has modules to prepare and store asset business plans, perform property cash flow modeling/valuation analysis and net present value recovery projections based on different scenarios, compare current performance with original underwriting, track property-level line item budgeted-to-actual income and expenses, produce asset-status reports, and shadow loan-administration activity such as payment histories, real estate tax payments, and insurance policy renewals using file downloads from master servicers. The system can provide business-volume forecasting/revenue tracking tied to expected losses and controlling class holder changes. The application provides cloud-based document storage, several standard reports, and the ability to generate ad hoc reports based on database queries. To facilitate surveillance and asset-transfers, Backshop includes every loan for which Torchlight is the named special servicer.

Through the system's functionality enhancements, Torchlight can track approved-vendor orders and performance; conduct all essential loan-level tickler management; obtain automated realized loss, fee, and advancing calculations; populate information into form documents and notification-letter templates; and track internal workflows and approvals. The system also has links to each asset's corresponding PSA and PSA abstraction, but there is not a direct feed of the PSA requirements for each asset-management task to the system's workflow features of credit-management action alerts and procedural checklists. Planned enhancements include a payment-alert mechanism from master servicers to approve cash allocations to curb undue suspense-account activity.

Torchlight Investors uses a third-party firm, Eze Castle Integration Ltd., to provide information-technology support for all business lines. The IT vendor, which has offices in seven U.S. cities, London, and Asia, has a 24-hour help desk and an onsite engineer three days per week at Torchlight's New York headquarters and additional onsite support as needed. Torchlight stated that the vendor provides a dedicated network with ample storage capacity through a cloud-based server structure, handles network access, and performs real-time data backups to an alternate data center. The vendor, which also provides Torchlight with disaster-recovery services, completed its most recent recovery tests in December 2016 with successful results. Additionally, Torchlight commissions recurring independent audits to ensure that the technology vendor's data security and infrastructure meet accepted industry standards and best practices. The most recent audit report of Eze Castle, issued in December 2016, was satisfactory.

Torchlight's former Miami office had served as a reciprocal location for business continuity purposes. However, with the closure of that office, Torchlight's business-continuity plan for the New York office is predicated on staff working remotely. The company also recently established a small office in Greenwich, Connecticut, which can accommodate a few people. As another option, Torchlight has an informal arrangement permitting some people temporarily to relocate to the Atlanta office of its external general counsel. Morningstar noted in its 2016 assessment that Torchlight's documented business-continuity plan, which considered the Miami office, was sufficiently detailed, but the employee-notification calling list was not shown in a cascading, or calling-tree, format. Through its technology vendors, Torchlight indicated that it should have access to all business-critical systems and data and resume all special-servicing functions within four hours of a declared disaster event or business interruption. Employees have access to all network applications remotely.

> **Assessment:** Torchlight's asset-management system provides workflow and data-management efficiency for detailed asset-level tracking and reporting for CMBS transactions and other investor clients. Although most special servicers have their own technology-support staff and networks, Torchlight's outsourcing of this function is acceptable because of the vendor's represented capabilities, its large client base, and the independent audits of its infrastructure and security protocols. However, Torchlight acknowledged that its own business-continuity plan may need strengthening following the closure of its Miami office.

Special-Servicing Administration

As a large-volume special servicer in the years following the 2008-09 financial crisis, Torchlight has managed many large, complex assets collateralized by a range of property types throughout the United States. Although Torchlight, as of Dec. 31, 2016, was the named special servicer for 13 CMBS and one Freddie Mac securitization issued in 2011 or later, and has managed a few assets transferred from some of these CMBS, approximately 98% of its active portfolio by asset count, as of that date, consisted of loans originated between 2004 and 2007.

Chart 1 – Active Portfolio by UPB (Dec. 31, 2016)*

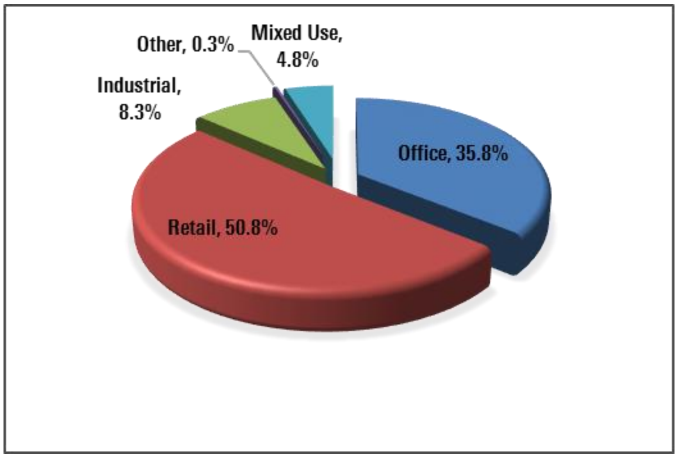


Chart 2 – Active Portfolio by Asset Count (Dec. 31, 2016)*

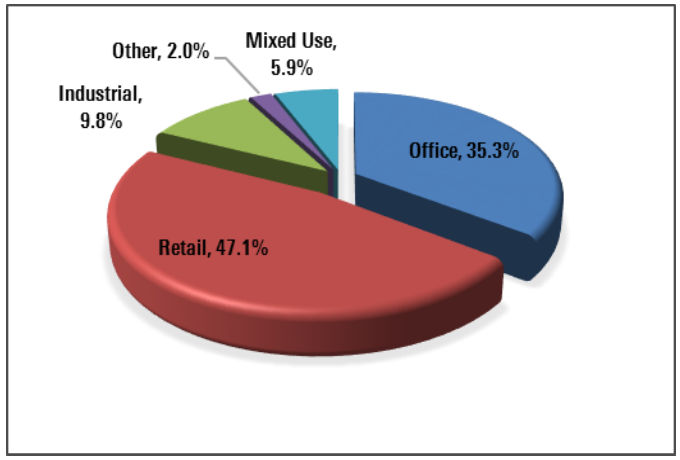


Chart 3 – Active Portfolio by State - UPB (Dec. 31, 2016)*

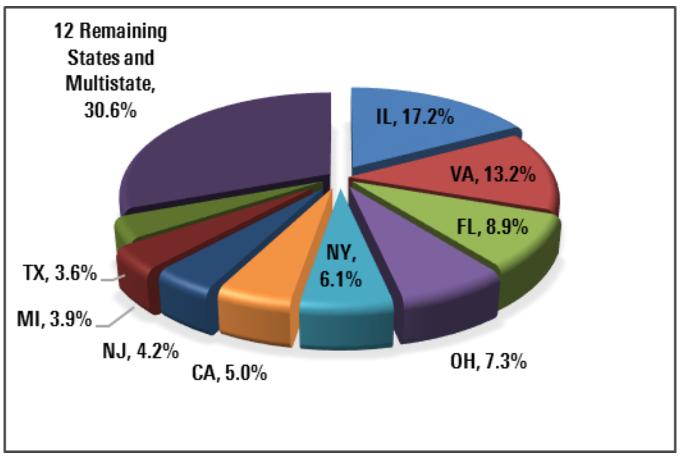
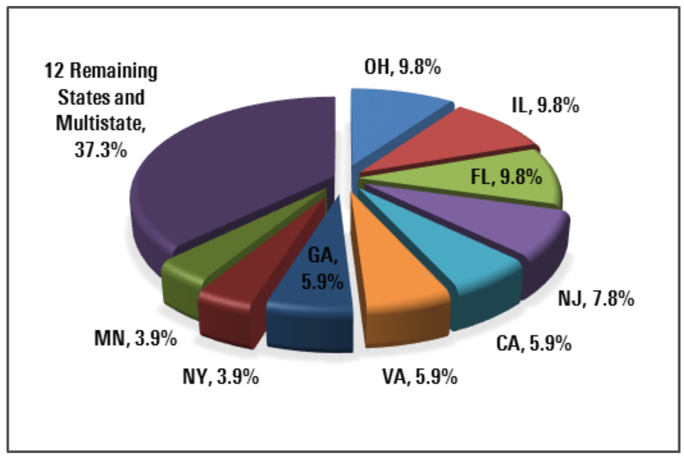


Chart 4 – Active Portfolio by State - Asset Count (Dec. 31,2016)*



*Includes loans and REO assets. Percentages may not equal 100% because of rounding.

Asset-Review Process

Once an asset transfers to special servicing, the loan asset manager conducts a file review, reviews PSA-related requirements and loan-level covenants, and orders a property inspection. As needed, the manager also may visit the property. Through the file review, the asset manager formulates recovery options and strategies. Before engaging in workout discussions, Torchlight requires borrowers to sign prenegotiation agreements and pursues updated financial statements. As noted, the asset-management system houses data for all CMBS transactions in which Torchlight is the special servicer. This enables the company to have access to core information if a loan requires special servicing.

Torchlight requires asset managers to prepare and obtain approval of business plans for all assets within 60 days of transfer. For CMBS loans, asset managers also prepare an initial asset status report for investor reports as required by PSAs. Asset managers must update their asset-status comments twice per month. Asset managers must submit action-approval cases to initiate foreclosure, when they have negotiated specific resolution terms, or before committing to other major asset decisions. Initial business plans and updated cases include a net present value analysis of each alternative resolution scenario. Asset managers prepare their business plans and approval cases directly in the asset-management system. As noted, the system also serves as the central tracking, compliance, and asset-analysis tool for the entire lifecycle of each specially serviced asset; its functionality includes cash flow modeling and workout scenario analysis.

The company has delegations of authority that require senior management signoff and a committee-type approval structure for asset business plans and most resolution cases. Torchlight expanded the voting members of its asset-approval committee to include the operations-department manager and the recently appointed special-servicing division head who transferred from the parent's investment-management area.

The asset-management system tracks pending and approved asset plans and cases, issues alerts when items have been submitted, and provides for electronic signatures. Torchlight also holds weekly asset-review meetings. Torchlight stated that it formally monitors outstanding advances against property values and expected recovery amounts through the asset-management system, and consults with master servicers on their advancing decisions. Also through the asset-management system, Torchlight uses checklists to manage loan transfers from master/primary servicers and portfolio transfers to and from other special servicers.

> **Assessment:** Torchlight has proactive and controlled loan-transfer, asset-analysis, and resolution-management practices based on its stated policies and procedures. The asset-management system's myriad features strengthen the company's asset analytics and data-management controls. Additionally, based on information relayed by a large-volume master servicer, Morningstar acknowledges Torchlight's high success rate of obtaining borrower financial statements.

REO Property Management

Torchlight uses a property-takeover checklist when transitioning an asset to REO status. The REO asset manager addresses any immediate property issues and engages a property-management company and listing broker. The selected companies must qualify for or already be on Torchlight's approved-vendor lists. Once a loan becomes an REO asset, the REO asset manager prepares and obtains approval of a business plan within 60 days, with subsequent business cases submitted to obtain approval of specific sales offer terms or other major decisions. In preparation for taking title, the manager must ensure that the property is added to Torchlight's blanket insurance program.

Torchlight's property-management agreement contains specific monthly reporting package requirements and procedures. The company retains property-management company reports on its shared drive and uploads the information into the asset-management system to track budget-to-actual property performance and to prepare operating statement analysis reports. Torchlight controls property-level cash management through dual operating accounts: one for rent collections and one to fund expenses based on approved budgets. Torchlight requires multiple levels of approval authorizations involving accounting and management personnel to establish REO property bank accounts, fund expenses, and move excess cash to investor custodial accounts. Although the REO asset manager reviews monthly property manager reporting packages and the property manager's bank account reconciliations, Torchlight's accounting staff independently reconciles property manager bank account activity. In 2015, the company launched an REO property-manager auditing program using a third-party auditing firm. Torchlight completed eight property-manager audits in 2016 and has three more scheduled for completion during the first half of this year.

> **Assessment:** Although Torchlight has scaled back its REO management staff in response to declining volume from a brisk sales pace and projections for lower activity, the company has retained diligent practices for loan-to-REO transfers, overseeing property managers and brokers, and executing resolution plans. Torchlight demonstrates sound practices for monitoring property performance

and reconciling monthly property manager operating accounts. Torchlight's robust property-manager audit program also is a best practice that can further mitigate risk.

Vendor Oversight

Torchlight controls vendor selection through a centralized list of approved vendors for appraisals, environmental and engineering assessments, legal counsel, property management, and brokerage services. It also conducts a request-for-proposal bidding process to engage a vendor. For most engagements, Torchlight requires vendors to use its own standardized agreements. Torchlight uses a designated external law firm to review environmental assessments. The asset-management system tracks all pending and completed vendor work orders; the system's vendor-tracking features also enable Torchlight to revise its approved lists based on vendors' delivery performance and work quality.

Torchlight does not have in-house legal staff but consults with external counsel to assist with CMBS servicing-agreement issues and to obtain formal legal opinions as needed on transactions. The loan-department manager approves law firm selections in consultation with the special-servicing division manager who executes the engagement letters. The respective loan and REO department managers, along with accounting staff, review and approve legal invoices before issuing payment.

Assessment: Torchlight has soundly controlled vendor engagement and oversight practices, which are delineated in the company's policies and procedures. The asset-management system also facilitates Torchlight's vendor-tracking capabilities. Considering its declining asset volume, Torchlight acceptably manages its legal needs through external counsel. However, other CMBS special servicers, particularly those with larger portfolios, gain control and efficiency benefits by having in-house legal resources to support asset-resolution deliberations, manage external law firm engagements, monitor fees, and prepare standardized documents.

Managing Conflicts of Interest

Torchlight is a special servicer for several CMBS transactions in which Torchlight Investors holds first-loss bond positions and is the controlling class holder. Torchlight does not use affiliates for its special-servicing work, but its parent has acquired a few assets from CMBS trusts using permitted purchase options. Torchlight also stated that it does not seek an additional fee from the CMBS trust if it has already obtained an equivalent fee from the borrower and collecting such a fee from the trust would create or increase a loss to a trust. Torchlight's internal compliance policies require borrowers' loan-modification fees to be at or below market rates, which Torchlight tracks. As an added control, Torchlight Investors' chief compliance officer must approve any special-servicer fee not specified in the governing PSA. Should Torchlight execute a loan-forbearance agreement, it stated that it will not recognize its fee until the loan pays off. Monthly, Torchlight's special-servicing committee, to assess resolution strategies relative to the servicing standard, also compares the aging and projected realized losses of its specially serviced assets with the broader CMBS market.

Assessment: Based on its stated compliance procedures and practices, Torchlight effectively manages its conflicts of interest. Torchlight's asset-resolution results during the past two years are consistent with the company's stated commitment to the servicing standard of working for the entirety of the CMBS trust and minimizing realized losses whenever possible.

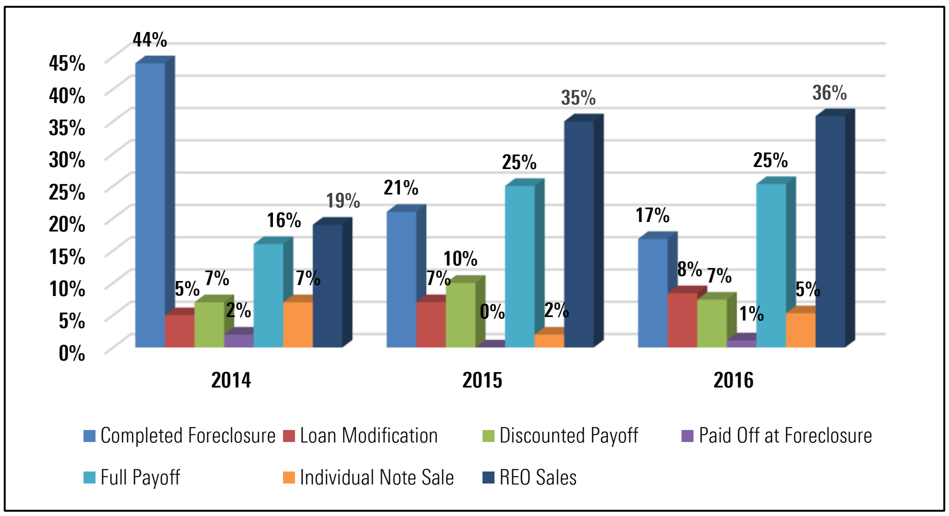
Asset Resolution and Recovery Performance

Asset-Resolution Volume and Disposition Methods

Torchlight's resolved assets have mostly been in legacy CMBS transactions issued between 2004 and 2007. During 2014-16, it completed 228 asset resolutions (25 discounted payoffs, 17 note sales, 29 modified or corrected loans, 67 full payoffs, and 90 REO sales) with total resolution proceeds or UPB of approximately $2.36 billion.

Through a brisk pace of asset resolutions, and especially REO sales, combined with a slower inflow of loan transfers and some loss of portfolio resulting from CMBS controlling classholder changes, the active portfolio has been rapidly declining. As a result, the company projects it may have fewer than 10 active special-servicing assets at year-end 2017 based on its surveillance of the CMBS portfolios for which it is the named special servicer.

Chart 5 – Asset Resolutions by Disposition Methods (2014-16)*



*Does not total 100% for 2016 because of rounding.

Asset-Resolution Hold Times

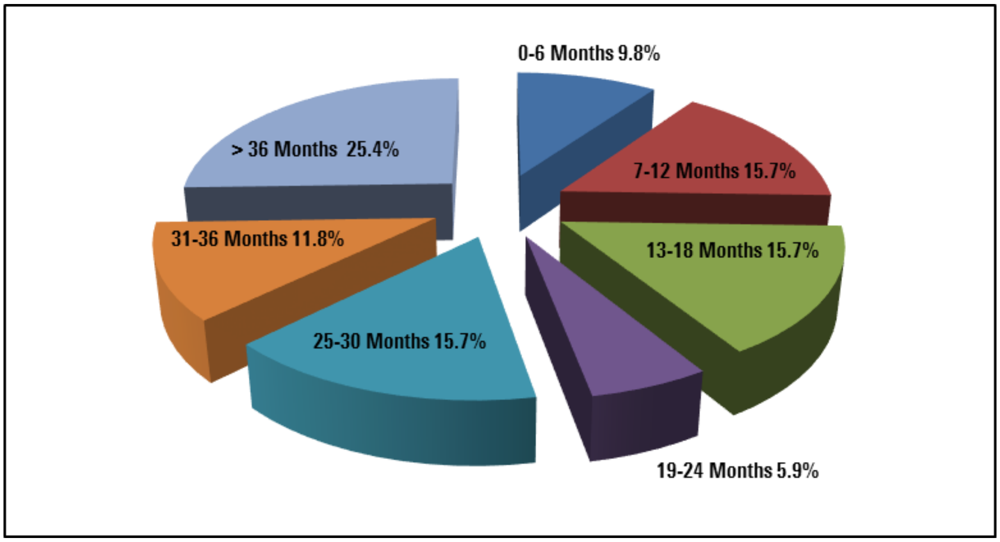
The company's average resolution times appear to be in line with other special servicers Morningstar ranks. Except for REO sales, Torchlight's average hold times for fully resolved assets also declined in 2016. As of Dec. 31, 2016, Torchlight held 47% of its unresolved assets (loans and REO) for two years or less and the average age of all unresolved assets was 29.4 months. By comparison, as of Dec. 31, 2015, 76% of unresolved assets by count were held for two years or less and the average age of all unresolved assets was 19.5 months. The lengthened average age of unresolved assets reflects a combination of factors: fewer new loan transfers, portfolio reductions from asset resolutions, and the more problematic assets becoming a greater share of the remaining portfolio.

Table 4 – Special-Servicing Average Resolution Times (Months)*

Resolution Type	2013	2014	2015	2016	Four-Year Average (Unweighted)
Corrected/Restructured	17	25	23	14	20
Note Sales	20	21	24	17	21
Discounted Payoffs	28	31	24	12	24
Full Payoffs	14	12	10	7	11
Paid Off at Foreclosure	23	12	N/A	11	15
REO Sales**	14	17	19	20	18
Completed Foreclosures	23	12	14	16	16

*Rounded to nearest whole number. **Based on time held as an REO.

Chart 6 – Active Special-Servicing Portfolio Aging by Asset Count (Dec. 31, 2016)*



*Includes assets received from other special servicers, but aging based only on the time Torchlight held the asset.

Asset-Resolution Recovery Proceeds

For the past several years through 2016, Torchlight's aggregate net proceeds-to-collateral values for most asset liquidations involving discounted payoffs and note sales have been high. The lower aggregate proceeds-to-value for the two note sales in 2015 was offset by the fact that the aggregate net recovery exceeded the assets' combined UPB. For several years through 2015, Torchlight's net recoveries from REO sales have been well above 90% of estimated value. In 2016, Torchlight sold 34 REO properties and its net proceeds/value averaged 82.4% based on stronger results from its 13 sales in the first half of the year. However, Torchlight noted that some of the later 2016 sales involved valuation considerations not addressed in the latest available appraisals.

Table 5 – Asset Recoveries Relative to Collateral Value and UPB (%)

	2013	2014	2015	2016
Net Recovery Proceeds-to-Value				
Note Sales	99.6	112.1	79.4	87.8
Discounted Payoffs	90.6	97.1	101.2	94.0
Paid Off at Foreclosure	98.2	88.6	N/A	58.7
REO Sales	92.6	103.4	101.2	82.4
Net Recovery Proceeds-to-UPB				
Note Sales	99.0	80.0	104.2	77.9
Discounted Payoffs	80.0	46.2	58.0	90.6
Paid Off at Foreclosure	108.4	95.2	N/A	139.9
Full Payoffs	105.3	113.7	106.6	105.1

Fees Collected From CMBS Trusts Versus Borrowers

Torchlight stated that it retains liquidation or modification fees that exceed the fee collected from the CMBS trust only if retaining such excess fees does not create or increase a realized loss. Morningstar found that the company's collected and retained fees for all resolved assets for the years 2013-16 matched with that policy. And, as noted, Torchlight Investors' chief compliance officer must approve any special-servicer fee not specified in the governing PSA.

Torchlight Investors' Asset Purchases from CMBS Trusts

On a few occasions, Torchlight Investors has exercised its permitted fair market value purchase option to buy loans out of CMBS deals in which Torchlight was the special servicer. During 2016, Torchlight Investors did not execute any such purchases. However, during 2014-15, Torchlight Investors purchased six loans using its FMV option rights. In 2014, it also purchased five REO properties from CMBS trusts in which Torchlight was the special servicer. Th average broker fee paid on these REO purchases was 0.6% compared with 3.1% for Torchlight's other REO sales that year. Morningstar determined that the recovery results to the trust, based on net proceeds-to-value and realized losses, for these sales exceeded Torchlight's results for asset liquidations to third parties. Torchlight noted that it obtained independent validations of the values for the assets it purchased, as required by its servicing agreements.

Table 6 – Torchlight Investors Fair Market Value Purchase Option Activity and Results*

	2014			2015		
	Assets (#)	Average Realized Loss (%)	Net Proceeds/Value (%)	Assets (#)	Average Realized Loss (%)	Net Proceeds/Value (%)
FMV Loan Purchases	4	9.3	114.2 (92.0 of UPB)	2	0	72.8 (117.0 of UPB)
Other Loan Liquidations	19	48.5	101.2	14	40.5	93.5
Torchlight REO Purchases	5	12.5	102.4	0	N/A	N/A
Third-Party REO Sales	20	12.5	96.5	27	63.2	101.2

*No loan purchase-option activity or affiliated REO sales in 2016. Asset liquidations to third parties include only those with realized losses.

Table 7 – Special-Servicing Loan Portfolio Activity (Full-Year 2016)

	Total Portfolio			CMBS-Only Portfolio		
	Vol ($ Mil)	Loans (#)	Properties (#)	Vol ($ Mil)	Loans(#)	Properties (#)
Loan Portfolio at Beginning of Period	1,053.6	69	110	1,023.3	67	106
Loans Transferred Into Portfolio:						
Retransferred/Redefaulted Loans	18.9	2	2	18.9	2	2
New Nonmonetary/Imminent Default	178.9	18	18	178.9	18	18
New Monetary Default	116.3	12	13	82.0	11	11
Total Transfers Into Special Servicing	314.1	32	33	279.8	31	31
Loans Fully Resolved:						
Modified or Corrected Loans	(90.0)	(8)	(8)	(38.3)	(6)	(6)
Individual Note Sales	(76.3)	(5)	(5)	(76.3)	(5)	(5)
Discounted Payoffs (Excludes Note Sales)	(96.2)	(7)	(10)	(96.2)	(7)	(10)
Full Payoffs	(250.5)	(24)	(24)	(250.5)	(24)	(24)
Loan Paid Off at Foreclosure	(1.4)	(1)	(1)	(1.4)	(1)	(1)
Total Loan Resolutions	(514.4)	(45)	(48)	(462.7)	(43)	(46)
Completed Foreclosures	(183.3)	(16)	(22)	(183.3)	(16)	(22)
Adjustments or Other Loans Transferred Out	(133.8)	(19)	(33)	(155.2)	(19)	(31)
Loan Portfolio at End of Period	536.2	21	40	501.9	20	38
Average Loan Size	25.5			25.1		

Table 8 – Special-Servicing REO Portfolio Activity (Full-Year 2016)

	Total Portfolio		CMBS-Only Portfolio	
	Vol ($ Mil)	Properties (#)	Vol ($ Mil)	Properties (#)
REO Portfolio at Beginning of Period	658.7	58	651.1	57
Completed Foreclosures	183.3	22	183.3	22
REO Sold During Period	(198.8)	(34)	(197.1)	(33)
Other REO Transferred Out and Adjustments	(179.7)	(4)	(173.8)	(4)
REO Portfolio at End of Period	463.5	42	463.5	42
Average REO Size	11.0			

Table 9 – Special-Servicing Loan Portfolio Activity (Full-Year 2015)

	Total Portfolio			CMBS-Only Portfolio		
	Vol ($ Mil)	Loans (#)	Properties (#)	Vol ($ Mil)	Loans (#)	Properties (#)
Loan Portfolio at Beginning of Period	1,148.9	79	135	1,119.7	77	133
Loans Transferred Into Portfolio:						
Pre-Existing From Another Special Servicer	3.6	1	1	3.6	1	1
New Nonmonetary/Imminent Default	676.3	48	56	676.3	48	56
New Monetary Default	166.6	8	13	157.9	7	10
Total Transfers Into Special Servicing	846.5	57	70	837.8	56	67
Loans Fully Resolved:						
Modified or Corrected Loans	(84.9)	(6)	(6)	(84.9)	(6)	(6)
Individual Note Sales	(25.7)	(2)	(2)	(25.7)	(2)	(2)
Discounted Payoffs (Excludes Note Sales)	(109.2)	(8)	(13)	(109.2)	(8)	(13)
Full Payoffs	(225.1)	(21)	(31)	(225.1)	(21)	(31)
Total Loan Resolutions	(444.9)	(37)	(52)	(444.9)	(37)	(52)
Completed Foreclosures	(174.4)	(18)	(23)	(166.8)	(17)	(22)
Adjustments or Other Loans Transferred Out	(322.5)	(12)	(20)	(322.5)	(12)	(20)
Loan Portfolio at End of Period	1,053.6	69	110	1,023.3	67	106
Average Loan Size	15.3			15.3		

Table 10 – Special-Servicing REO Portfolio Activity (Full-Year 2015)

	Total Portfolio		CMBS-Only Portfolio	
	Vol ($ Mil)	Properties (#)	Vol ($ Mil)	Properties (#)
REO Portfolio at Beginning of Period	770.6	74	770.6	74
Completed Foreclosures	174.4	23	166.8	22
REO Sold During Period	(223.1)	(29)	(223.1)	(29)
Other REO Transferred Out and Adjustments	(63.2)	(10)	(63.2)	(10)
REO Portfolio at End of Period	658.7	58	651.1	57
Average REO Size	11.4		11.4	

Assessment: Although some of Torchlight's resolved assets during the past few years have had long hold periods, the company continued to demonstrate solid recovery results through 2016 based on net recovery proceeds measured against collateral values or UPB, as applicable. Morningstar also recognizes that Torchlight, which has principally managed legacy CMBS loans often having challenging workout issues, liquidated many loans during 2016 with either negligible or zero realized losses. Although Torchlight reported especially large realized losses for some 2016 REO sales, the corresponding net recoveries were generally high based on Torchlight's estimated collateral values. Several of these sales involved smaller properties, which historically can be more prone to higher losses, or the outlay of advances deemed essential for cash-flow and collateral preservation.

Borrower Consent Requests

As part of Torchlight's organizational realignment and operational downsizing, the New York-based contract employee who managed borrower credit-related consent-requests transferred to the operations team to assist with reporting compliance. However, that person continues to oversee borrower consents in conjunction with the loan asset manager. Torchlight approves consent requests through delegations of management authority, which usually require signoff from the special-servicing division head and, for larger transactions, committee approval. Some legacy CMBS portfolios that Torchlight received because of controlling classholder changes require Torchlight to coordinate the entire process directly with the borrower and underwrites the request as though it were the primary servicer.

Assessment: With a shrinking special-servicing portfolio, Torchlight should have sufficient staffing resources for borrower consents. However, as a named special servicer for many newer-issue CMBS transactions, the company could experience more consent-request volume and may need to devote more resources for this function. Additionally, in its role as a special servicer, Torchlight's average review times for assumptions and leasing consents have been lengthier than some other Morningstar-ranked special servicers.

Table 11 – Torchlight Borrower-Consent Request Volume and Average Processing Times (Days)

	2015				2016			
	Total Volume (#)	Special Servicer Role Only (#)	Internal Time - All Consents	Internal Time - As Special Servicer Only	Total Volume (#)	Special Servicer Role Only (#)	Internal Time - All Consents	Internal Time - As Special Servicer Only
Assumptions	23	20	*50	*49	16	15	28	29
Leasing	86	70	22	21	42	39	27	28
Defeasance	0	0	N/A	N/A	0	0	N/A	N/A
Total	109	90	---	---	58	54	---	---

*36 and 32 days, respectively, excluding two assumptions that took 148 and 240 days each. Torchlight noted that insufficient information from the proposed new borrowers delayed the completion of these two transactions.

Investor and Master-Servicer Reporting

The operations unit coordinates monthly reporting for the company's investment funds and securitized transactions. Torchlight's procedures address CREFC-compliant content including asset status reports, property protection advances, appraisal subordination entitlement reduction calculations, and realized loss calculations. Torchlight noted that it communicates closely with master servicers on asset advances, transfers, and resolution decisions. The operations team also coordinates portfolio transfers arising from CMBS bond holder controlling-class changes. The operations manager certifies the accuracy of transfers and reviews Torchlight's adherence to servicing agreements.

> **Assessment:** Torchlight has substantial special-servicer reporting experience with legacy CMBS transactions having many specially serviced assets and with newer-issue CMBS transactions. As noted, the operations unit, which oversees investor reporting, was already based in New York and not materially affected by the Miami office closure. Torchlight's operations staff, procedures, and capabilities available through the asset-management system indicate that the company remains soundly positioned to provide effective special-servicer reporting for CMBS investors, the company's business niche.

Ranking Definitions

The numerical scale of MOR CS1 to MOR CS4 is defined as follows:

1	Exceeds prudent loan servicing standards in key areas of risk
2	Demonstrates proficiency in key areas of risk
3	Demonstrates compliance in key areas of risk
4	Demonstrates lack of compliance in one or more key areas of risk

A servicer assigned a ranking of at least MOR CS3 is deemed to comply with what we view as the minimum prudent loan servicing standards and requirements for the servicer's operational category and role. For access to Morningstar's Operational Risk Assessments of Commercial Servicers: Methodology and Process and other published reports, please visit www.morningstarcreditratings.com

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