Operational Risk Assessments

Torchlight Loan Services, LLC

March 2018

Operational Classification:	Commercial Mortgage Special Servicer
Ranking:	MOR CS1 (Affirmed)
Forecast:	Stable (Revised)
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Rationale

Morningstar Credit Ratings, LLC affirmed its MOR CS1 commercial mortgage special-servicer ranking for Torchlight Loan Services, LLC (Torchlight), a wholly owned subsidiary of Torchlight Investors, LLC. Morningstar also revised the forecast for the ranking to Stable from Negative. Torchlight projects lower special-servicing activity emanating from its legacy and future investment portfolios. Accordingly, it operates as a smaller-scale special servicer with easing portfolio volume relative to past years. Morningstar affirmed its ranking based on the following factors:

- Asset-Recovery Performance: Torchlight has been among the more active special servicers handling legacy commercial mortgage-backed securities transactions. Although its real estate owned volume has remained sizable, Torchlight's total active portfolio continues to shrink because of asset resolutions and fewer transfers. The company had another year of solid asset-recovery results in 2017, including the resolution of some large, complex CMBS loans and REO properties. The affirmed ranking also considers Torchlight Investors' management and resolution of other problematic non-CMBS assets in its debt opportunity funds.
- Organizational Stability and Professional Depth: Torchlight has a solidly experienced executive and professional team, although asset managers' average industry experience is lower compared with some other special servicers. To support the special-servicing operation, Torchlight Investors provides designated staff for compliance, asset accounting, and portfolio surveillance. In addition, a former head of special servicing now serves as in-house legal counsel to support investment-fund management and CMBS special servicing. Additionally, it has investment-fund portfolio managers with real estate and loan workout expertise, including some who worked at other CMBS special servicers, available to support CMBS specially serviced assets. During 2017, Torchlight had minimal employee turnover.
- Technology and Reporting Capabilities: Torchlight uses the Backshop™ asset-management application, which has strong asset-tracking, investor-reporting, and workflow-control capabilities. In 2017, the vendor enhanced the application's tickler capabilities with automated emails to request appraisals and inspections. Torchlight handles its network support and disaster-recovery management through a third-party vendor. This approach is acceptable based on the vendor's stated capabilities, testing protocols with Torchlight, and satisfactory security-infrastructure audits and Service Organization Control, or SOC 1 and 2, reports of its data centers.
- Asset Analytics and Management: Torchlight has diligent asset-analysis practices and well-delineated policies and procedures for effective and controlled CMBS special servicing. The asset-management system further facilitates the company's analytics and asset-

resolution processes. As an added control supporting steady REO activity in the past two years, Torchlight has a robust property-management company audit program.

- Internal-Audit Function: Torchlight has sound auditing and compliance practices. The company engages a nationally known firm to conduct audits that examine a range of asset- and portfolio-level processes, including cash controls, investor reporting, and servicing-agreement compliance. While making a few recommendations that Torchlight has already addressed, the latest available audit report issued in May 2017 did not identify any significant control weaknesses. Commensurate with shrinking active-asset volume, Torchlight plans to undergo similar audits approximately every 18-24 months. Additionally, Torchlight provides an annual Regulation AB attestation, which has not contained any exceptions for the past several calendar years. The asset-management system also facilitates the company's ability to monitor procedural and servicing-agreement compliance.
- Conflicts of Interest Management: For many of the CMBS transactions in which Torchlight is the named special servicer, Torchlight Investors holds the first-loss bond positions and is the controlling classholder. Torchlight does not use affiliates for its special-servicing work, but its parent has acquired a few assets from CMBS trusts using permitted purchase-option procedures on legacy CMBS. As an SEC registered investment advisor, Torchlight Investors has a compliance department to review Torchlight's activities vis-à-vis its parent relative to information sharing and other potential conflicts of interest. Based on Torchlight's compliance and asset-management practices, the company appropriately controls its conflicts of interest and seeks to uphold the servicing standard.

As of Dec. 31, 2017, Torchlight was the named special servicer for 35 CMBS securitizations (including three Freddie Mac transactions) with a combined remaining unpaid principal balance of $16.69 billion consisting of 1,028 loans. Eighteen of these transactions were issued before 2011. Excluding a few non-CMBS distressed-assets in affiliated debt-opportunity funds, the active special-servicing portfolio contained 22 loans and 21 REO properties with a combined UPB of approximately $889.7 million. Transactions issued in or after 2011 included five active assets (three loans and two REO properties).

By comparison, as of Dec. 31, 2016, Torchlight was the named special servicer for 36 CMBS securitizations (including one Freddie Mac transaction) with a combined remaining UPB of $16.62 billion consisting of 1,114 loans. The total active CMBS special-servicing portfolio contained 21 loans and 42 REO properties with a combined UPB of approximately $999.7 million.

Forecast

Morningstar revised the forecast for the ranking to Stable from Negative. The revised forecast for 2018 reflects Torchlight's improved organizational stability after the closure of its Miami satellite office a year ago and its retention of an experienced management team and other requisite resources for effective CMBS-oriented special servicing. Although the company's special-servicing portfolio volume is shrinking, the forecast also considers Torchlight's extended record of excellent resolution results for legacy CMBS assets, its asset-management work for its affiliated debt opportunity funds, which has included other loan workouts, liquidations, and repositioning real estate, as well as its solid internal-control practices and robust technology capabilities.

Table of Contents **Page**

Company Profile and Business Overview

New York City-based Torchlight is a wholly owned subsidiary of Torchlight Investors, 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 investment positions in more than $20 billion of assets and launched nine opportunistic or value-add investment funds. As of Dec. 31, 2017, Torchlight Investors had approximately $3.93 billion of assets under management, including assets collateralizing bond investments in CMBS. It invests in CMBS transactions and manages assets on behalf of third-party institutional clients, largely comprising retirement and pension funds, principally through its debt opportunity funds. The company's non-CMBS managed portfolio included more than $1 billion of private commercial real estate debt and equity investments in 30 transactions diversified across property types including multifamily, office, lodging, industrial, and retail.

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. Torchlight Investors also has acquired first-loss positions in several Freddie Mac K-Series securitizations and continued to be an active buyer of these bonds in 2017.

In December 2014, Torchlight became an approved Freddie Mac special servicer and, as of December 2017, it was the named special servicer for three Freddie Mac securitizations (one issued in 2013 and two in 2014). As of Dec. 31, 2017, none of these transactions contained any specially serviced assets. Additionally, Torchlight is a consultant for its affiliate's position as the directing certificateholder for six other Freddie Mac transactions.

Between late 2013 and early 2014, Torchlight transitioned its special-servicing asset-management functions to Miami from its New York corporate headquarters. However, Torchlight moved the operation back to New York during the latter months of 2016. The company cited operating efficiencies and synergies as the rationale for shifting the operation back to 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 2018, Torchlight Investors had 55 employees across its business lines of real estate investment and asset management, special servicing, and securitization structuring. When factoring in senior management, portfolio managers, accounting/reporting, and other support functions, Torchlight's broader special-servicing platform consisted of approximately 20 employees including six debt-fund asset managers available for CMBS special servicing if needed.

Table 1 – Historical Active Special-Servicing Volume

	Dec. 31, 2017		Dec. 31, 2016		Dec. 31, 2015		Dec. 31, 2014	
	UPB ($000s)	Loans	UPB ($000s)	Loans	UPB ($000s)	Loans	UPB ($000s)	Loans
Loan Portfolio	549,524	22	536,186	21	1,053,573	69	1,148,908	79
REO Portfolio	340,133	21	463,548	42	658,647	58	770,628	74
Total Active Portfolio	889,657	43	999,734	63	1,712,220	127	1,919,536	153
Active CMBS Portfolio Only*	889,657	43	965,459	62	1,674,347	124	1,890,336	151
Named CMBS Special Servicer**	16,687,316	1,028	16,620,908	1,114	18,209,965	1,300	27,956,711	2,129
Number of Transactions**		35		36		33		35

*Loans and REO assets. **As of December 2017, included three Freddie Mac securitizations; as of December 2016, included one Freddie Mac securitization; and, as of December 2015, included one CRE CDO and one Freddie Mac securitization.

Operational Infrastructure

Organizational Structure

Torchlight Investors' executive team and investment committee consist of the CEO, three other managing partners, and the chief credit officer. They oversee the company's principal business of real estate debt investment and asset management, which involves its opportunity funds, the funds' related CMBS bond positions, and the operations of Torchlight, the special-servicer subsidiary. Torchlight Investors also has a COO, who oversees teams for accounting and finance, compliance, client services, and portfolio surveillance.

During 2017, Torchlight Investors consolidated its special-servicing operation to become part of the asset-management division. Including designated staff from the parent, Torchlight's special-servicing platform consists of:

- The asset-management division head, who is also a Torchlight Investors managing partner;
- The three-person CMBS special-servicing asset-recovery team (department head, senior asset manager, and analyst);
- A two-person operations team (manager plus associate), which handles CMBS investor reporting, rating agency communications, and special-servicing compliance;
- A three-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;
- Shared resources from the parent: an in-house attorney, a five-person client services team, and a four-person portfolio surveillance team; and
- Six portfolio managers in the asset-management division, who are available for special servicing as needed, and a founding member of a Torchlight Investors predecessor company who serves as a special advisor and member of Torchlight's special-servicing credit committee.

Management and Staff Experience

As of January 2018, the CMBS special-servicing asset managers averaged 13 years of experience and the asset-management division head had 20 years of experience. The asset analyst supporting these managers had only three years of experience. Torchlight Investors' six debt opportunity fund portfolio managers, available to support CMBS work if needed, all have special-servicing backgrounds and averaged 11 years of experience. The company's in-house legal counsel and former special-servicing department head has 22 years of industry experience.

Table 2 – Management and Staff: Average Years of Experience

	December 2017		December 2016		December 2015		December 2014	
	Industry	Tenure	Industry	Tenure	Industry	Tenure	Industry	Tenure
Senior Management	23	5	20	6	21	7	20	6
Middle Management	10	5	11	4	15	5	14	4
CMBS Asset Managers*	10	4	11	1	12	2	11	1
Other Asset Managers**	11	6	11	5	N.A.	N.A.	N.A	N.A.

*Includes junior-level asset analysts. **Torchlight Investors' portfolio managers handling non-CMBS debt opportunity fund assets. N.A. – not available.

Management and Staff Turnover

Torchlight's employee turnover in it CMBS special-servicing operation during 2017 consisted of one managerial and one staff-level departure, compared with much higher, and mostly involuntary, employee turnover during the latter months of 2016 when the company transitioned its CMBS special-servicing asset management back to its New York headquarters. The current organization includes some personnel who relocated from Miami.

Table 3 – CMBS Special Servicing: Management and Staff Turnover Rates*

	2017	2016
Total Staff - Beginning of Period (# of Positions)	12	19
Total Turnover Rate (%)	16.6 (2 Positions)	42.1 (8 Positions)
Involuntary	8.3	36.8
Voluntary	8.3	5.3
Management Only	8.3	10.5
Staff Only	8.3	31.6
New Hires (# of Positions)	2	1
Total Staff- End of Period (# of Positions)	12	12

Workload Ratios

As of Dec. 31, 2017, Torchlight had a 14/1 ratio of assets per asset manager. Including the asset-management division head, who is directly involved in asset deliberations, the ratio was 11/1. By comparison, as of Dec. 31, 2016, Torchlight's assets/asset manager ratio was 20/1 excluding the division head.

> **Assessment:** Since closing its Miami office and consolidating all asset management to its New York headquarters in late 2016, Torchlight demonstrates the requisite organizational depth and capabilities to effectively address its CMBS-oriented special-servicing work. Benefiting from some employees relocating, Torchlight has retained experienced managers and demonstrates a return to operational stability. The average experience of Torchlight's asset managers is solid, although it is lower than most other Morningstar-ranked special servicers.
>
> Considering Torchlight's projections for its active special-servicing portfolio to continue shrinking as 2018 progresses, the company should have sufficient asset-management resources. Its ability to tap personnel from its parent's investment-management business further bolsters its capacity. In contrast to some other CMBS special servicers, the company no longer has asset managers dedicated strictly for borrower consent-request analysis. Torchlight noted that as it continues to acquire more special servicing rights on new-issue CMBS, which can lead to more consent-review volume, it will reassess its staffing for this function.

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, with support from an administrative assistant, 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 30-40 hours of training annually excluding participation at conferences. During 2017, Torchlight sponsored approximately 30 hours of scheduled training sessions covering case studies and topical issues.

> **Assessment:** Torchlight soundly addresses employee training through substantive session offerings, emphasizing a team-building and mentoring environment, and having a designated 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 operations-unit manager certifies portfolio transfers, serves as liaison with firms engaged to perform internal audits, and monitors compliance with pooling and servicing agreements. 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 scope includes a review of internal approvals, but it does not include a review of approved resolution terms to closing documents. Torchlight plans to undergo such audits approximately every 18-24 months based on its projections for decreased special-servicing portfolio volume. The most recently available May 2017 audit report contained some recommendations that Torchlight remedied, but the report did not identify any high risk or material control weaknesses. Additionally, Torchlight provides an annual Regulation AB attestation that has not contained any exceptions for the past six calendar years through 2017.

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 servicers 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 focus on proactive and controlled special-servicing practices and especially CMBS requirements. The operations department, in conjunction with other senior management, controls updates to the company's policies and procedures. Torchlight plans to revise elements of its policies and procedures this year 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 CMBS special-servicing platform in 2016-17 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. Torchlight, as a licensee, uses the system in a hosted environment on Backshop's servers through a cloud-computing structure. Since Torchlight went live with the system in late 2015, the vendor, with Torchlight's input, has implemented numerous functional enhancements. 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 classholder changes. The application provides cloud-based document storage, a menu of standard reports, and the ability to generate ad hoc reports based on database queries. To facilitate surveillance and asset transfers, the application's database includes every loan for which Torchlight is the named special servicer.

Through the system's functionality enhancements, Torchlight can initiate and track work orders from vendors and track vendors' 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.

Torchlight Investors uses a third-party firm, Eze Castle Integration, Inc., 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 on-site engineer available three days per week at Torchlight's New York headquarters and additional on-site 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 August 2017 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. Eze Castle's data centers (through other vendors) also are SOC 1 and 2 compliant based on 2017 reports and subsequent attestations.

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. 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 technology platform 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 and cloud-based approach is acceptable because of the vendor's represented capabilities, its large client base, and audits of its infrastructure, data centers, and security protocols. Torchlight's business-continuity plan also is acceptable based on the company's current size and cloud-based computing environment; however, it may consider establishing a formal arrangement to ensure access to a sufficient alternative office location for a longer event duration.

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 the company has managed a few assets transferred from newer-vintage CMBS pools, most of its resolutions have consisted of loans originated between 2004 and 2007.

Chart 1 – Active Portfolio by UPB (Dec. 31, 2017)*

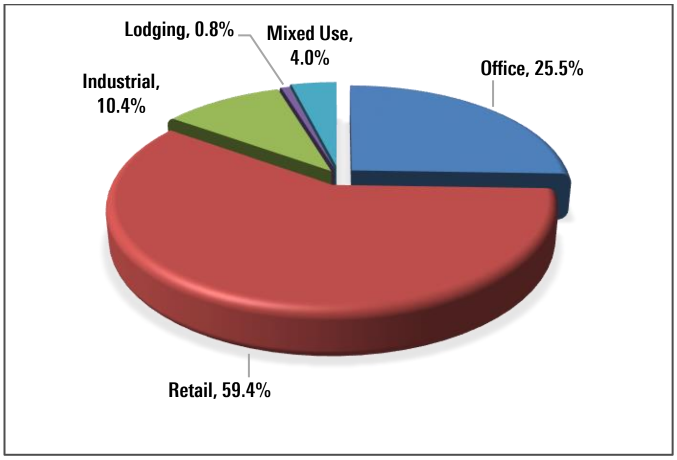


Chart 2 – Active Portfolio by Asset Count (Dec. 31, 2017)*

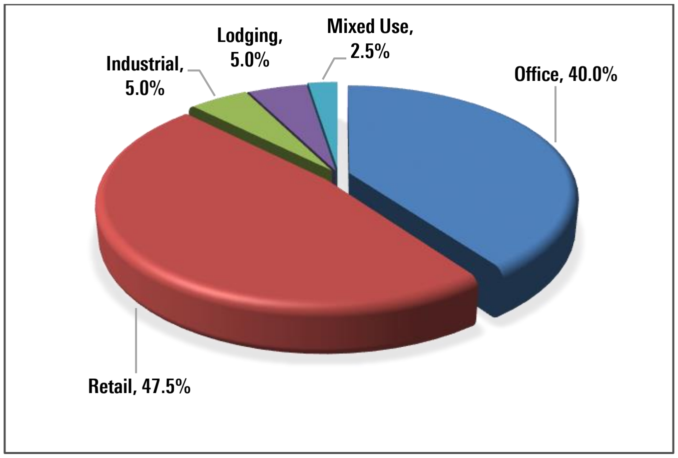


Chart 3 – Active Portfolio by State - UPB (Dec. 31, 2017)*

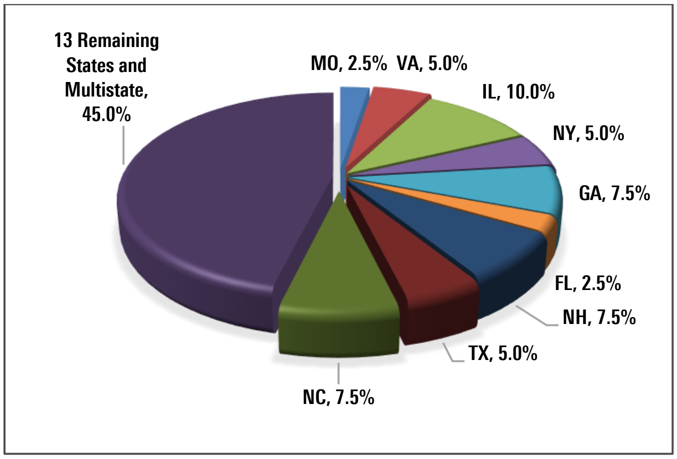
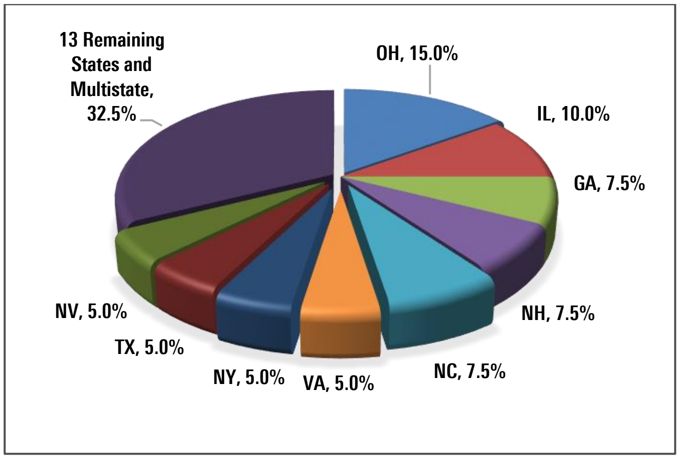


Chart 4 – Active Portfolio by State - Asset Count (Dec. 31, 2017)*



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

Asset-Review Process

Once an asset transfers to special servicing, the asset manager reviews the file records, examines PSA-related requirements and loan-level covenants, and orders a property inspection. If 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.

Asset managers prepare and obtain approval of a business plan within 60 days of an asset transferring to Torchlight for special servicing. 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 a month. They 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's special-servicing approval committee includes Torchlight Investors' head of asset management, a co-chief investment officer, and a former special-servicing department manager who now serves as in-house counsel.

The asset-management system tracks pending and approved asset plans and cases, issues alerts based on critical dates and trigger events, and provides for electronic signatures. As a recent enhancement, the system can initiate email requests to third-party vendors for updated appraisals and inspections based on tickler dates. 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 it consults with master servicers on their advancing decisions. 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:** Based on its stated policies and procedures, Torchlight has proactive and controlled loan-transfer, asset-analysis, and resolution-management practices especially geared for CMBS special servicing. The asset-management system's myriad features strengthen the company's asset analytics and data-management controls.

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 requirements and procedures. The company retains the 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. Additionally, asset managers do not have online access rights to the bank accounts. In 2015, the company launched an REO property-manager auditing program using a third-party accounting firm. Through the external firm, Torchlight completed three property-manager audits in 2017 with a fourth one currently in progress. It completed eight audits in 2016.

> **Assessment:** Torchlight has retained diligent practices for loan-to-REO transfers, overseeing property managers and brokers and formulating and executing property 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 further mitigates risk.

Legal and 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.

As a recent organizational enhancement, a former special-servicing department head now serves in a new position as Torchlight Investors' in-house counsel principally to support the company's investment-management business but also to advise on CMBS special-servicing matters. Torchlight uses an external general counsel to assist with CMBS servicing-agreement issues and to obtain legal opinions as needed on transactions. The senior asset manager approves law firm selections in consultation with the special-servicing manager who executes the engagement letters. The asset manager and special-servicing department manager, 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. Morningstar views the redeployment of Torchlight's former special-servicing manager to become in-house counsel as a positive organizational move to support portfolio management and asset-resolution deliberations. For Torchlight's consideration, some special servicers also have realized operational benefits by centralizing all law firm engagements and fee arrangements through their in-house counsel, who sometimes can provide standardized documents as well.

Managing Conflicts of Interest

Torchlight is a special servicer for several CMBS transactions in which Torchlight Investors holds the first-loss bond positions and is the controlling classholder. 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. Should Torchlight execute a loan-forbearance agreement, it stated that it will not recognize its fee until the loan pays off.

As an added control, Torchlight Investors' chief compliance officer monitors investment-fund activities and data access for potential conflicts between business lines. He also must approve any special-servicer fee not specified in the governing PSA. To assess resolution strategies relative to the servicing standard, Torchlight's special-servicing committee also compares on a monthly basis 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. Its 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

During 2017, Torchlight fully resolved 41 assets (seven discounted payoffs, one note sale, two modifications, 10 full payoffs, and 21 REO sales) with total resolution proceeds or UPB of approximately $490.1 million. During 2014-16, it fully resolved 228 assets (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 asset resolutions, and especially REO sales, combined with a slower inflow of loan transfers and some loss of portfolio volume resulting from CMBS controlling classholder changes, the active portfolio continues to decline. As a result, the company projects it may have fewer than 10 active special-servicing assets at year-end 2018 based on its surveillance of the CMBS portfolios for which it is the named special servicer.

Chart 5 – Resolutions by Disposition Methods (Dec. 31, 2016)*

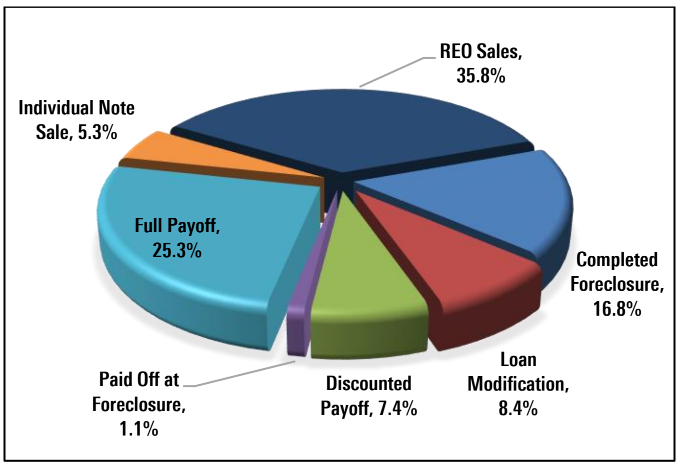
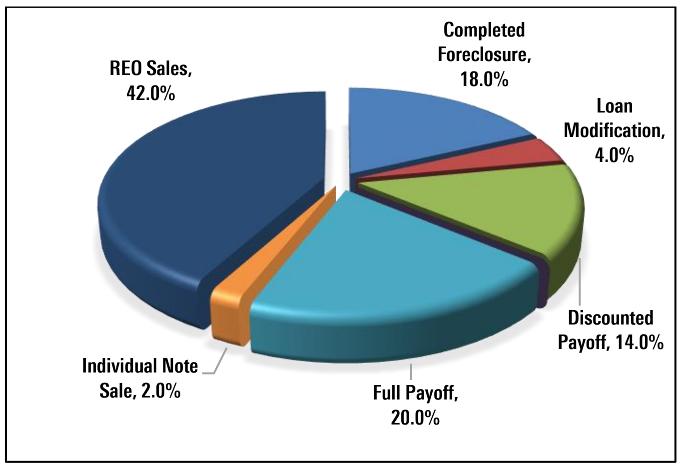


Chart 6 – Resolutions by Disposition Methods (Dec. 31, 2017)



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

Asset-Resolution Hold Times

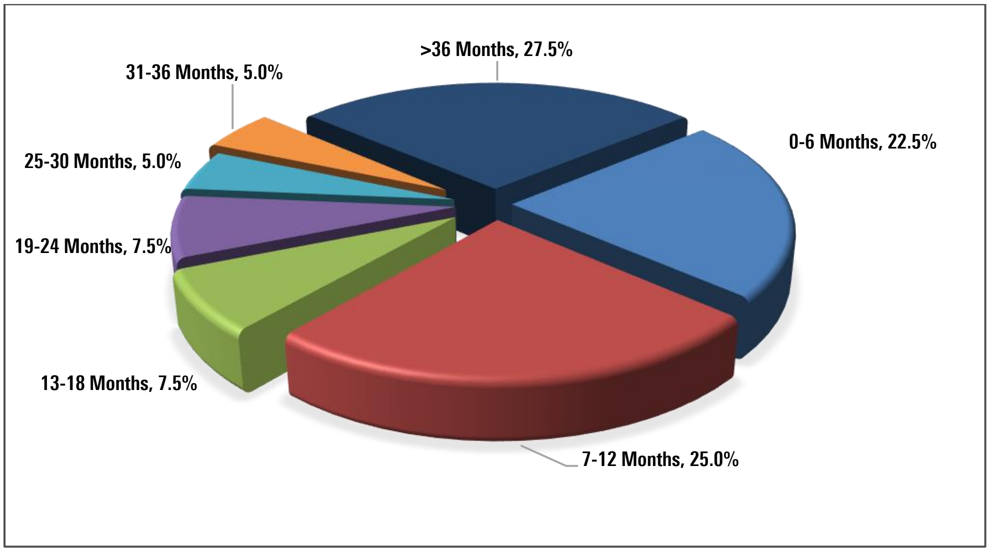
The company's average resolution times were mostly lower during 2016-17 compared with 2014-15 and appear to be in line with other highly ranked special servicers. As of Dec. 31, 2017, Torchlight held 62.5% of its unresolved assets (loans and REO) for two years or less, and the average age of all unresolved assets was 2.3 months. By comparison, 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.

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

Resolution Type	2014	2015	2016	2017	Four-Year Average (Unweighted)
Corrected/Restructured	25	23	14	17	20
Note Sales	21	24	17	5	17
Discounted Payoffs	31	24	12	13	20
Full Payoffs	12	10	7	8	9
Paid Off at Foreclosure	12	N/A	11	N/A	15
REO Sales**	17	19	20	21	19
Completed Foreclosures	12	14	16	8	13

*Rounded to nearest whole number. **Based on time held as an REO. N/A - Not applicable.

Chart 7 – Active Special-Servicing Portfolio Aging by Asset Count (Dec. 31, 2017)*



*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 2017, Torchlight's aggregate net proceeds relative to principal balances and/or collateral values have been high for most asset liquidations involving discounted payoffs and note sales. For several years through 2017, Torchlight's net recoveries from most REO sales have been above 90% of estimated value. Torchlight noted that its average net proceeds/value dipped to 82.4% for 2016 because some of the later-year sales involved valuation-loss considerations not addressed in the latest available appraisals.

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

	2014	2015	2016	2017
Net Recovery Proceeds-to-Value				
Note Sales	112.1 (10)	79.4 (2)	87.8 (5)	64.0 (1)
Discounted Payoffs	97.1 (10)	101.2 (8)	94.0 (7)	103.2 (7)
Paid Off at Foreclosure	88.6 (3)	N/A	58.7 (1)	N/A
REO Sales	103.4 (27)	101.2 (29)	82.4 (34)	90.7 (21)
Net Recovery Proceeds-to-UPB				
Note Sales	80.0	104.2	77.9	100.9
Discounted Payoffs	46.2	58.0	90.6	74.8
Paid Off at Foreclosure	95.2	N/A	139.9	N/A
Full Payoffs	113.7 (22)	106.6 (21)	105.1 (24)	105.2 (10)

*Number of assets shown in parentheses.

Table 6 – Torchlight Investors: Select Non-CMBS Loan Workouts (2016-17)

Property Type	State	Original Balance ($ Mil)	Original Investment Type	Outcome/Status
Industrial Portfolio	Various	149.1	Distressed First Mortgage Note	A performing asset through a third-party refinancing with Torchlight Investors retaining a mezzanine loan and preferred equity.
Office Portfolio	Various	36.0	Mezzanine Loan	Loan modification and subsequent deed-in-lieu and sale of a remaining property.
Student Housing	Michigan	18.0	Preferred Equity	Torchlight Investors controls the asset and working toward stabilization.
Hotel	Maryland	27.5	Senior/Mezzanine Loans	Maturity default and in foreclosure.
Hotel	Florida	41.6	Senior/Mezzanine Loans	Equity real estate through a deed-in-Lieu. Renovated and reflagged the hotel (brand upgrade). Working toward stabilization.
Total		272.2		

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 asset-resolution fees in recent years match with that policy. Moreover, 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 several occasions, Torchlight Investors has exercised its permitted fair market value purchase option to buy assets out of legacy CMBS deals in which Torchlight was the special servicer. Torchlight Investors acquired one loan through option rights in 2017, but none in 2016. During 2014-15, Torchlight Investors purchased six loans using its FMV option rights and purchased five REO properties out of CMBS trusts in 2014. Torchlight's stated recovery results for the trusts, based on net proceeds-to-value and realized losses, for these total CMBS asset purchases exceeded its results for asset liquidations to third parties. Torchlight noted that it obtained independent validations of the values for the assets purchased by its affiliate, as required by its servicing agreements.

Table 7 – Torchlight Investors Fair Market Value Purchase Option Activity and Results*

	2015			**2016-17***		
	Assets (#)	Average Realized Loss (%)	Net Proceeds/Value (%)	Assets (#)	Average Realized Loss (%)	Net Proceeds/Value (%)
FMV Loan Purchases	2	0	72.8 (117.0 of UPB)	1	0	64.0 (100.9 of UPB)
Other Note Sales or DPOs**	14	40.5	93.5 (67.0 of UPB)	7	20.6	102.8 (89.6 of UPB)
Torchlight REO Purchases	0	N/A	N/A	0	N/A	N/A
Third-Party REO Sales	27	63.2	101.2	21	53.3	90.7 (99.3 gross proceeds/value)

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

Table 8 – Special-Servicing Loan Portfolio Activity (Full-Year 2017)

	Total Portfolio			CMBS-Only Portfolio		
	Vol ($ Mil)	Loans (#)	Properties (#)	Vol ($ Mil)	Loans (#)	Properties (#)
Loan Portfolio at Beginning of Period	536.2	21	40	501.9	20	38
Loans Transferred into Portfolio:						
Retransferred/Redefaulted Loans	4.2	1	1	4.2	1	1
New Nonmonetary/Imminent Default	395.5	19	22	395.5	19	22
New Monetary Default	60.3	6	6	60.3	6	6
Total Transfers into Special Servicing	460.0	26	29	460.0	26	29
Loans Fully Resolved:						
Modified or Corrected Loans	(152.7)	(2)	(2)	(152.7)	(2)	(2)
Individual Note Sales	(24.7)	(1)	(1)	(24.7)	(1)	(1)
Discounted Payoffs (Excludes Note Sales)	(98.0)	(7)	(7)	(98.0)	(7)	(7)
Full Payoffs	(76.4)	(10)	(10)	(50.4)	(9)	(9)
Total Loan Resolutions	(351.8)	(20)	(20)	(325.8)	(19)	(19)
Completed Foreclosures	(102.3)	(9)	(10)	(68.0)	(8)	(8)
Adjustments or Other Loans Transferred Out	7.4	4	4	(18.6)	3	3
Loan Portfolio at End of Period	549.5	22	43	549.5	22	43
Average Loan Size	25.0			25.0		

Table 9 – Special-Servicing REO Portfolio Activity (Full-Year 2017)

	Total Portfolio		CMBS-Only Portfolio	
	Vol ($ Mil)	Properties (#)	Vol ($ Mil)	Properties (#)
REO Portfolio at Beginning of Period	463.5	42	463.5	42
Completed Foreclosures	102.3	10	68.0	8
REO Sold During Period	(138.4)	(21)	(138.4)	(21)
Other REO Transferred Out and Adjustments	(87.3)	(10)	(53.0)	(8)
REO Portfolio at End of Period	340.1	21	340.1	21
Average REO Size	16.2		16.2	

Table 10 – 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 11 – 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			

Assessment: Although some of Torchlight's resolved assets during the past few years have had extended hold periods, the company continued to demonstrate solid recovery results through 2017. Torchlight, which has principally managed legacy CMBS loans often having challenging workout issues, has liquidated many loans 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 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. The company also demonstrates expertise and success resolving retail assets, which now make up much of its active portfolio.

Borrower Consent Requests

Asset managers underwrite and obtain approvals for 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 underwrite the request as though it were the primary servicer.

Assessment: With shrinking special-servicing activity, Torchlight should have sufficient staff resources for borrower consents. However, as it acquires special-servicing rights on new-issue CMBS transactions, the company could experience increased consent-request volume and may need to add resources for this function. For its leasing and assumption requests completed in 2017, Torchlight demonstrated timeliness based on its average review times, which were also lower compared with the year before.

Table 12 – Torchlight Borrower-Consent Request Volume and Average Processing Times (Days)

	2016				2017			
	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	16	15	28	29	5	4	13	13
Leasing	42	39	27	28	37	0	18	N/A
Defeasance	0	0	N/A	N/A	0	0	0	0
Total	58	54	---	---	42	4	---	---

Investor and Master-Servicer Reporting

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

Assessment: Torchlight has reporting expertise with legacy CMBS transactions as well as with newer-issue transactions. Its experienced operations unit, procedures, and technology capabilities indicate that the company remains soundly positioned to provide effective special-servicer reporting for CMBS trusts and investors in Torchlight Investors' debt opportunity funds.

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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