

# Structured Finance Esoteric Quarterly Roundup

Q1 2025

Jan. 27, 2025



This report does not constitute a rating action

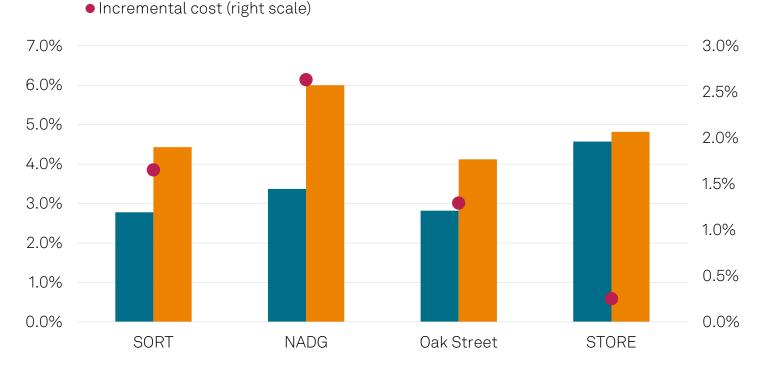
# Highlights | Triple Net Lease: Refinancing Prospects In Higher Interest Rate Environment

- Triple-net lease securitizations are typically structured with anticipated repayment dates (ARDs) that motivate issuers to refinance before rapid amortization kicks in. As of October 2024, approximately \$2.8 billion rated notes (15.2% by outstanding balance) had ARDs over the next 12 months.
- Given the current higher interest rate environment and considering the uncertainties around the timing and magnitude of rate cuts, we assessed how rated triplenet securitizations would fare in a hypothetical scenario of elevated interest rates.
- We tested 51 triple-net asset-backed securities (ABS) notes from four master trusts that have ARDs within the next 12 months to see if they have sufficient cushion to absorb elevated refinancing rates at their current rating levels with their existing collateral pools. The results show that 29 (about 57%) of the 51 notes, or three out of four master trusts, do not have sufficient cushion to absorb the higher interest rates without additional collateral or equity injection.

### Coupon at issuance versus hypothetical refinancing rate at the master trust level

■WA coupon at issuance (left scale)

WA refinancing rate (left scale)



WA—Weighted average. Source: S&P Global Ratings.

### Access Article >

S&P Global

Ratings

# Highlights | Corporate Securitization: How North American Corporate Securitizations Fare Amid Higher Refinancing Rates

- Refinancing costs have risen over the past two years for U.S. corporate securitization issuers, and they remain high relative to the current weighted average coupons of the notes issued by these master trusts. With a wave of corporate securitization debt maturing over the next few years and the uncertain interest rate levels despite recent and projected Fed easing, we assessed the potential rating impact of hypothetical increases to refinancing rates for the investment-grade corporate securitizations we publicly rate.
- We assumed that the notes with ARDs in 2025, 2026, and 2027 were refinanced (using the most recent system data from the second-quarter 2024 servicer reports) at their initial balance at fixed rates of 7%, 8%, and 9%, respectively.
- Overall, the impact was modest. Of the 16 investmentgrade securitizations with approaching ARDs over the next three years, only seven saw a decline in debt service coverage that was large enough to result in a reduction of the base-case anchor (which is the foundation for the determination of the rating).

### Access Article >

Potential rating impact from a change in base-case anchor

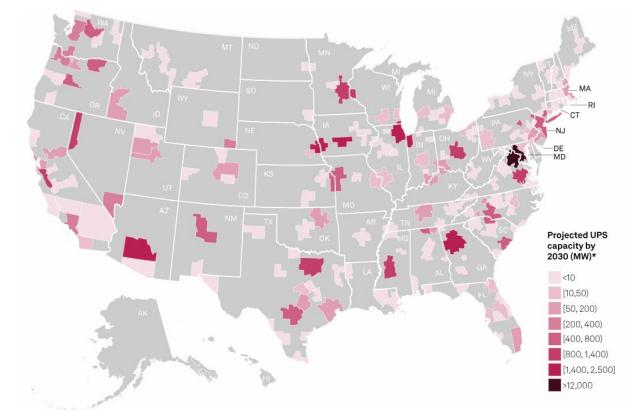
		<u>With ARD wi</u>	<u>thin three years (%)</u>		<u>Scenarios</u>	
Transaction name	Current anchor	% total of debt	Weighted average coupon of debt	7.00%	8.00%	9.00%
Applebees Funding LLC	bbb-	50	4.72	N.A	N.A	-1 notch
Arby's Funding LLC	bbb-	100	3.24	-2 notch	-2 notch	-3 notch
DB Master Finance LLC	bbb-	40	3.66	-2 notch	-2 notch	-2 notch
Domino's Pizza Master Issuer LLC	bbb+	50	4.26	-1 notch	-1 notch	-1 notch
Driven Brands Funding LLC	bbb-	54	5.16	N.A.	N.A	N.A.
GoTo Foods Funding LLC	bbb-	30	5.09	N.A.	N.A	N.A.
Hardee's Funding LLC	bbb-	33	3.98	N.A.	N.A	N.A.
Jack in the Box Funding LLC	bbb-	44	3.79	N.A.	N.A	N.A.
Jersey Mike's Funding LLC	bbb+	75	3.92	-1 notch	-1 notch	-1 notch
Jimmy John's Funding LLC	bbb-	40	4.59	-1 notch	-1 notch	-2 notch
Planet Fitness Master Issuer LLC	bbb-	19	3.25	N.A.	N.A.	N.A.
SEB Funding LLC	bbb-	49	4.97	N.A.	N.A.	N.A.
SERVPRO Master Issuer LLC	bbb-	32	3.88	N.A.	N.A.	N.A.
Sonic Capital LLC	bb	44	3.91	-1 notch	-1 notch	-1 notch
Taco Bell Funding LLC	bbb	49	3.50	N.A.	N.A.	N.A.
Wendy's Funding LLC	bbb-	13	3.78	N.A.	N.A.	N.A.

ARD-anticipated repayment date. N.A.-Not applicable. Source: S&P Global Ratings.

# Highlights | Data Centers: Computing Risks And Opportunities For U.S. Real Estate

- The data center sector has significant growth potential, with booming demand stemming from artificial intelligence and other cloud services. We expect this to support rent and overall top-line growth for U.S. data center operators.
- The surge in demand will create significant growth opportunities for data center entities. As projects multiply and average project sizes increase, power and water requirements, financing, tenant concentration, and cost inflation emerge as constraints. It is important to contemplate these risks when assessing the credit quality of data center owners and developers.
- Not all data center owners are the same: credit risks differ between hyperscalers and retail/colocation leasing models. While access to energy is an increasingly important consideration, obsolescence risk is less of a credit issue for the next two to five years.
- This report explores the risks and opportunities in data centers, and the potential credit implications across the corporate, project finance, and structured finance practices.

### Significant expansion of power capacity across key U.S. markets



Data as of first-quarter 2024. Note: 41 data centers could not be accurately mapped to an MSA. As a result, about 350 MW of projected UPS capacity were not assigned to an MSA. \*Projected UPS capacity is the sum of current operating UPS capacity, planned expansion to operating UPS capacity, and estimated UPS capacity of data centers in development and expected to be operational by 2030. These figures do not account for new data center construction we are unaware of, and we do not account for data center UPS capacity in Hawaii. Estimates may change as new information becomes available. MW--Megawatt. UPS--Uninterruptable power supply. MSA--Metropolitan statistical area. Sources: S&P Global Ratings and S&P Global Market Intelligence 451 Research.

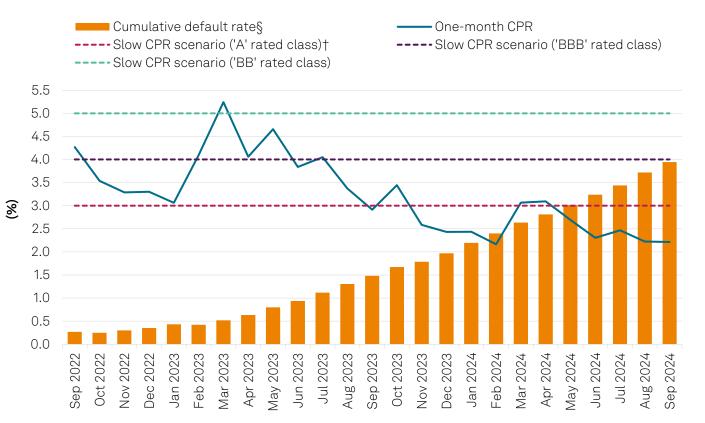
### Access Article >



# Highlights | Solar ABS Trends: Partially Cloudy Skies

- Solar loan default rates accelerated in 2024, while prepayment rates for the rated 2022 and 2023 transactions were slower than expected.
- If the borrower defaults, the lenders' most immediate recourse is that the solar panels can be remotely deactivated because it is often costly and time-consuming to repossess solar equipment or obtain a default judgement on the borrower. Given the uncertainty in both the timing and value of recoveries, we generally assume there will be no recoveries on defaulted loan balances.
- Our analyses on these transactions generally include factors that drive performance deterioration and the nuances of solar ABS structures. In the highlighted Credit FAQ, we provide a recent snapshot of the solar ABS sector related to the way solar panels are funded, how transactions are structured, and the solar panel market outside the U.S.

### Weighted average solar loan pool statistics\*



\*Weighted averages across six solar loan ABS transactions rated by S&P Global Ratings. §Net of any recoveries. †S&P Global Ratings' slow CPR stress scenario for notes initially assigned a rating in the 'A' category. CPR--Conditional prepayment rate. Source: S&P Global Ratings.

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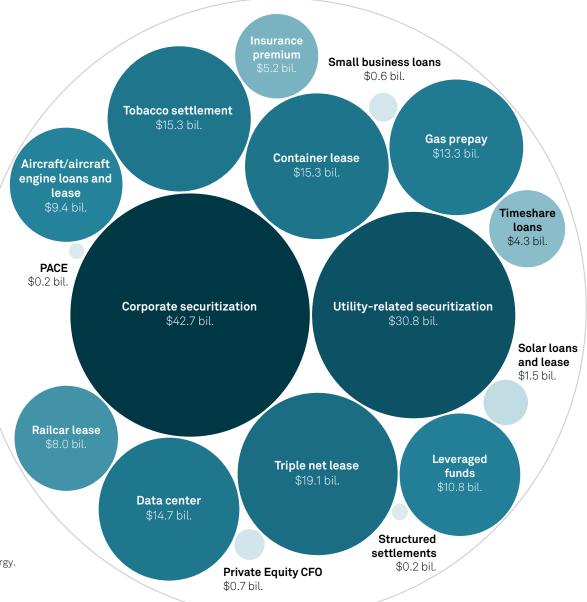
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# Esoteric ABS rated by S&P Global Ratings:

Current outstanding balance by sector

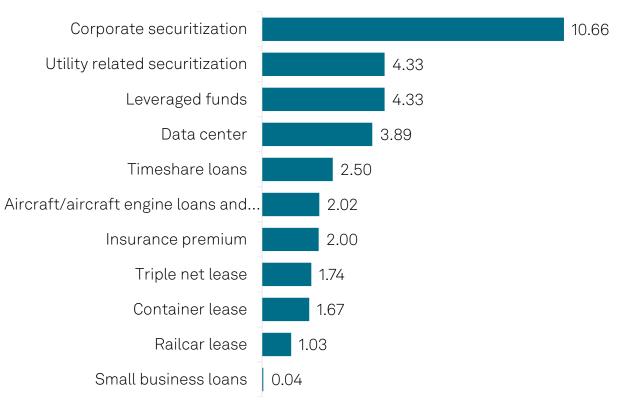


Data as of Jan. 4, 2025. CFO--Collateralized fund obligations. PACE--Property Assessed Clean Energy. Source: S&P Global Ratings.

# New Issuance Key Takeaways

- Esoteric ABS had a robust issuance year in 2024 as some sectors, such as digital infrastructure, became mainstream.
- Corporate securitizations rose to over \$10 billion in 2024 with Subway's entry into ABS market. We expect refinancing activities to fuel issuance in 2025 due to the approaching wave of ARDs over the next few years.
- Aircraft issuance picked up in the second half of 2024, despite limited volume during the year. We expect the momentum to accelerate in 2025 because the fundamentals are supported by stable asset utilization, lease rates, and residual values. Global air traffic has surpassed pre-COVID-19 levels.
- The data center sector continues to see a strong development pipeline for hyperscalers to meet AI deployment and cloud computing needs. The increasing capital demands should bring more opportunities for securitization. We expect more new issuers to access the global and U.S. ABS markets.
- Utilities-related securitization is poised for growth as utilities finance clean energy and infrastructure modernization projects and recover costs from climate-related disasters.

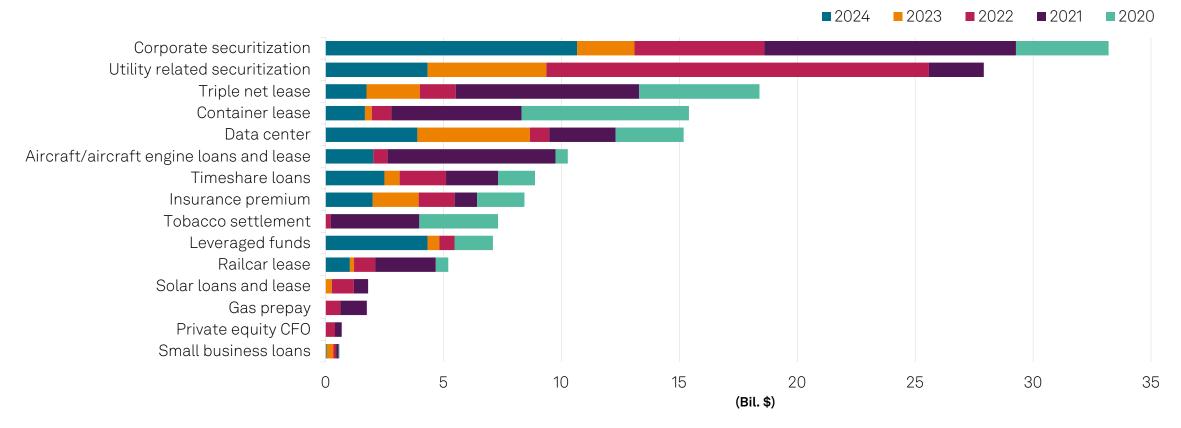
### 2024 new issuance (bil. \$)



Data as of Jan. 4, 2025. Source: S&P Global Ratings.

# **New Issuance Rating Activity**

### New issuance volume by sale amount (bil. \$)



Data as of Jan. 4, 2025. CFO--Collateralized fund obligations. PACE--Property Assessed Clean Energy. Source: S&P Global Ratings.



# **2024 Surveillance Rating Actions**

- Rating trends have been largely stable or stable to positive, except for solar and tobacco, which are performing slightly weaker than initial expectations.
- The transportation sectors are supported by stable asset utilization, lease rates, and residual values.
- We downgraded TGIF Funding LLC's series 2017-1 class A-2 notes to 'CC (sf)' after the operator filed for bankruptcy. While the bankruptcy in and of itself does not have a direct impact on the ABS notes, we do believe the liquidity could run out in the near term.
- Solar loans are shadowed by concerns regarding accelerated default rates and slow prepayment compressing overcollateralization levels on the subordinated tranches. We had seven downgrades last year and the rating trends remain stable to negative.
- We completed our review of outstanding data center ratings in November 2024, following the publication of our new criteria in June. The review resulted in seven downgrades on one master trust.

### Rating actions by asset class (no.)

Asset class	Affirmation	Downgrade	Upgrade	Total
Container lease	38		3	41
Triple net lease	23		1	24
Solar loans and lease	13	7	1	21
Corporate securitization	18	2		20
Aircraft/aircraft engine loans and lease	2		15	17
Leveraged funds		9	6	15
Data center	6	7		13
Railcar lease			8	8
Structured settlements	4		5	8
Small business loans	2		5	7
Gas prepay			3	3
f Private equity CFO	1			1
Total	107	25	47	178

Data as of Jan. 4, 2025. CFO--Collateralized fund obligation. Source: S&P Global Ratings.

# 2024 Surveillance Rating Actions (Cont.)

As of Dec. 31, 2024, we took various rating actions on 178 classes from 88 esoteric ABS transactions: 47 upgrades, 25 downgrades, and 107 affirmations. The table below shows the rating actions by sector and the number of classes affected. (See the <u>Related Research</u> for related publications.)

### Surveillance rating actions by sector

		Γ	Downgrad	е					Upgrade			
Sectors	••••	<b></b>		••	▼	Affirmations						Total bonds
Container lease						38						41
Triple net lease						23		1				24
Solar loans and lease			2	1	4	13		1				21
Corporate securitization		1			1	18						20
Aircraft/aircraft engine loans and lease						2	5	5	3	1	1	17
Leveraged funds					9		6					15
୍ର୍ Data center					7	6						13
🖳 Railcar lease								4	4			8
Structured settlements						4			1			8
Small business loans						2	4			1		7
🕞 Gas prepay							3					3
Private equity CFO						1						1
Total		1	2	1	21	107	24	12	8	2	1	178

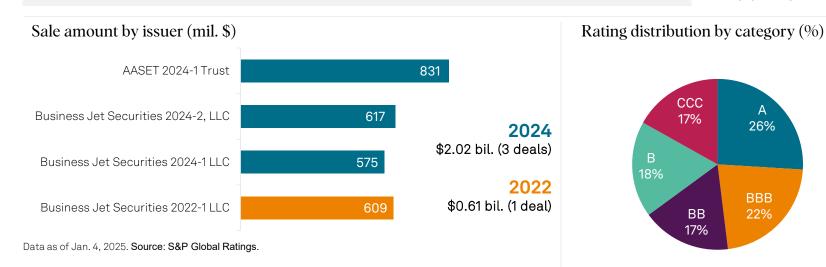
Data as of Jan. 4, 2025. CFO—Collateralized fund obligation. Source: S&P Global Ratings.

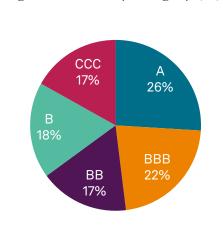
# **Surveillance Process Overview**

- Our surveillance process includes portfolio reviews (PRs) and annual reviews (ARs) on all outstanding ratings, as well as event-driven reviews (EDRs) and matters brought to our attention when a rating agency condition or a notification concerning existing ratings apply. For example, we typically conduct a no-harm analysis on outstanding transactions in a master trust when it issues a new transaction.
- PRs involve a high-level analysis of each sector, during which the analysts will determine if the current performance metrics warrant a referral to committee. Any transaction referred to committee must be reviewed within six months of the referral date.
- ARs are completed for each sector once per year and involve an up-to-date analysis of the five pillars we use in our structured finance committees: cash flow and payment structure, credit, legal, counterparty, and operational risk. During an AR, the analysts will determine if a transaction should be referred to committee. Any transaction referred to committee during an AR must be reviewed within six months of the referral date.
- EDRs are typically triggered by specific events and are usually held in a committee setting.



- Aircraft ABS generally exhibited strong performance throughout 2024 fueled by robust global air traffic.
- Strong base and utilization rents, along with opportunistic disposition activities, improved the paydown pace on rated notes in 2024. Half-life appraisal values, especially market values, remained strong, partially due to the supply disruption from aircraft manufacturers. We expect these trends to continue during the next 12-18 months.
- In 2024, we raised 15 ratings and affirmed two ratings based on these positive factors.
- Leases are increasingly extended at an early stage and, in some cases, for a longer-than-usual duration and at a higher base rent than the prior lease.





4,151

(7)

2016

4,688 (8) 3,517 (6) 2.023 1,430 (3) (3) 609 522 (1) (1) 2017 2018 2019 2020 2021 2022 2023 2024

7,042

(6)

Rating		Click here	for detail
category prior to action	Downgrades Aff	irmations	Upgrades
AAA			
AA			
A		1	1
BBB			7
BB			4
В			2
CCC		1	1
CC/C			

### S&P Global Ratings

Outstanding rated deal count

Outstanding rated bond balance \$9.44 bil.

30

New issuance (mil. \$; no. of deals)

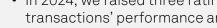
### S&P Global Ratings

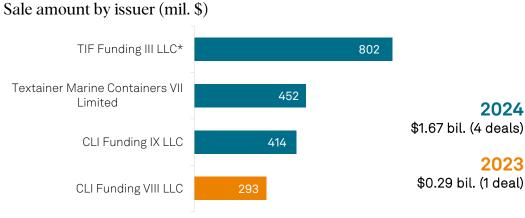


## **=** Container Lease

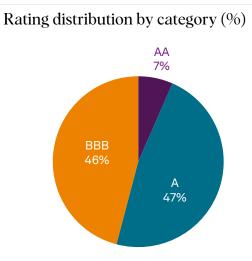
### Overview and outlook

- We expect utilization and lease rates to remain above our base-case levels and delinquency and default rates to remain below our base case.
- New lease composition is tilted toward longer lease terms, including a significant percentage of finance leases.
- In 2024, we raised three ratings and affirmed 38 ratings following our review of the transactions' performance and our updated container ABS criteria.
- There is some uncertainty in the sector due to the potential threat of tariffs under the new U.S. president's leadership and its potential impact on world trade and container demand. The rated transactions are largely backed by long-term leases with fixed contractual obligations that pay over the leases' tenure.

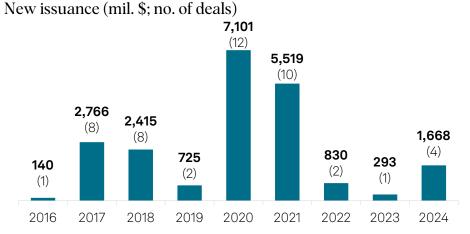




Data as of Jan. 4. 2025. \*Two transactions: \$450 million and \$352 million. Source: S&P Global Ratings.



Rating		Click here :	for detail
category prior to action	Downgrades	Affirmations	Upgrades
AAA			
AA			
A		20	1
BBB		18	2
BB			
В			
CCC			
CC/C			



Outstanding rated deal count

Outstanding rated bond balance

\$15.35 bil.



- We expect the quick-service restaurant (QSR) segment to remain lackluster in 2025 due to the compounded effect of years of elevated inflation. However, the casual dining sector should see some sustainable growth as the value offerings take hold. Both sectors likely won't see any substantive improvements until the second half of 2025. International growth should remain strong for U.S. restaurant chains.
- Services will likely remain stable because much of it is nondiscretionary.
- TGIF Funding LLC's series 2017-1 class A-2 notes were downgraded to 'CC (sf)' due to rapidly deteriorating conditions. We believe the existing credit enhancement may not be sufficient to prevent an almost certain default in the next one to two quarters.
- Eleven transactions totaling \$10.633 billion were issued in 2024, led by large deals from Subway Funding LLC. We expect the strong issuance volume to continue in 2025, based on the \$6 billion notes with ARDs in 2025 and 2026, as well as the increased leverage that usually accompanies the refinancings.

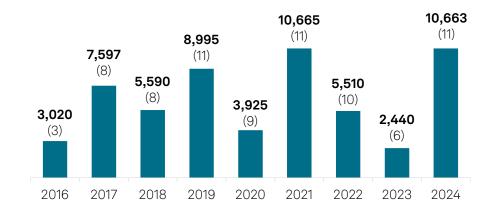


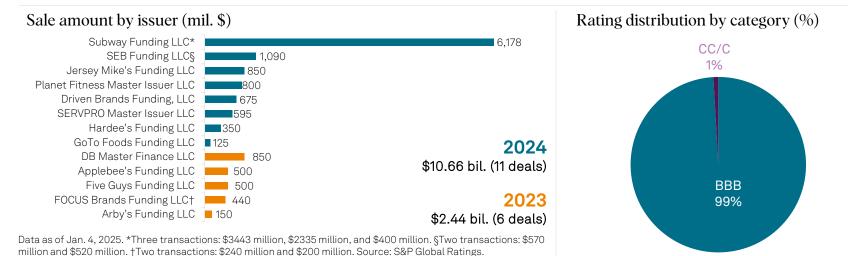
Outstanding rated bond balance

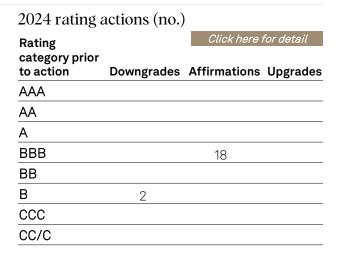
57

New issuance (mil. \$; no. of deals)

\$42.73 bil.



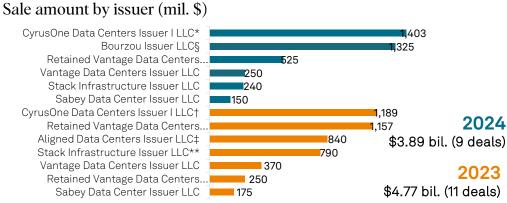




# **& Data Center**

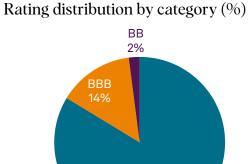
#### Overview and outlook

- Data center demand is accelerating, and we expect it to remain strong for the foreseeable future as computing needs, especially AI deployments, continue to increase.
- A record amount of new leases for data center capacity were signed in 2024, with the U.S. representing the bulk of the demand. We expect the pace to continue in 2025.
- New data center development is somewhat limited in certain markets due to site availability, global supply chain issues, and power constraints, which support lease rates, occupancy levels, and valuations. Delivery timelines for new properties exceed two years.
- We lowered seven ratings and affirmed six ratings on two master trusts following the publication of our global framework for rating data center securitizations, "<u>Data Center Securitizations: Global Methodology And Assumptions</u>," on June 13, 2024.



Data as of Jan. 4, 2025. \*Three transactions: \$228 million, \$485 million, and \$690 million. §Two transactions: \$1,075 million and \$250 million. †Two transactions: \$701 million and \$488 million. ‡Two transactions: \$540 million and \$300 million. \*\*Three transactions: \$290 million, \$250 million, and \$250 million. Source: S&P Global Ratings.





84%

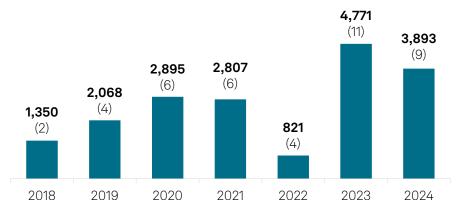
#### Outstanding rated deal count Outstandi

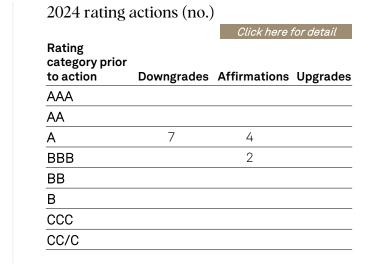
Outstanding rated bond balance

31

New issuance (mil. \$; no. of deals)

\$14.75 bil.





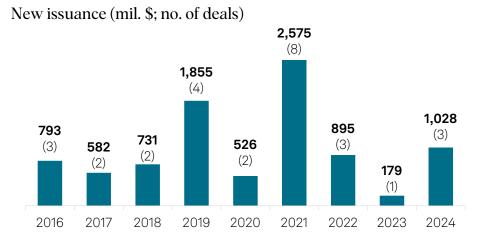


- Overall delinquency and default rates will likely remain low, though some transactions show pockets of delinquency associated with their weakest lessees.
- Utilization and lease rates may soften for railcars in certain sectors (e.g., railcars carrying petroleum products and fracking sand).
- Precision-scheduled railroading implementation may continue to pressure demand for intermodal railcars. However, these represent only a small portion of ABS pools.
- Inflationary pressures may lead to increases in operating expenses.



Outstanding rated bond balance

\$7.96 bil.





Rating distribution by category (%)

Rating		Click here	for detail
Category prior to action	Downgrade	Affirmation	Upgrade
AAA			
AA			
A			4
BBB			4
BB			
В			
CCC			
CC/C			



long-term performance.

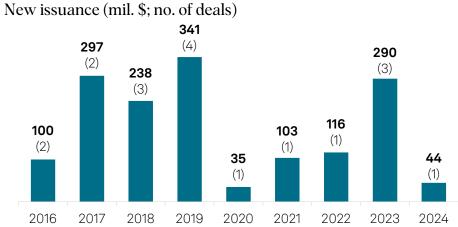
higher interest rates.

Outstanding rated deal count

Outstanding rated bond balance

20

\$597.01 mil.

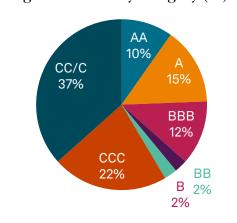


### with the Fed's rate increases, putting pressure on smaller businesses. Even though rates have dropped some recently, many of these borrowers are still paying interest rates well above those at origination. • We expect transactions backed by SBA loans to exhibit stable performance due to the strength of the structures that pay down note principal faster than the collateral, thus building overcollateralization. • SBA 7(a) lending has increased over the past few years, and we expect this trend to continue. Four new nonbank lenders came to market in fall and, due to policy changes in 2023 that streamlined lending criteria and processes, non-banks and small banks could increase issuance activity. Meanwhile, delinguencies have increased, and we believe these new standards will likely lead to increased supply of 7(a) loans and weaker Rating distribution by category (%)

Sale amount by issuer (mil. \$) Centerstone SBA Trust 2023-1 44 ReadyCap Lending Small Business Loan Trust 2023-3 2024 Newtek Small Business Loan Trust 2023-1 \$0.04 bil. (1 deal) 2023 CIM Small Business Loan Trust 2023-1 \$0.29 bil. (3 deals) Data as of Jan. 4, 2025. Source: S&P Global Ratings.

• Delinguencies have increased to pre-COVID-19 levels, primarily due to inflation, higher operating costs, and

• Small Business Association (SBA) loan rates are floating and have increased over the past few years in line



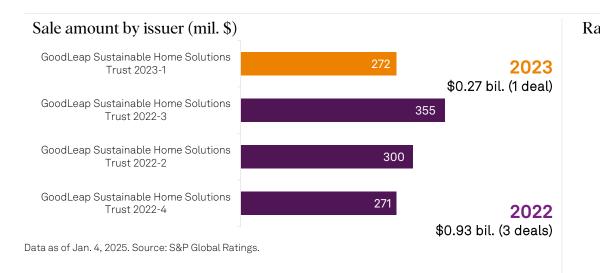
Rating		Click here :	for detail
category prior to action	Downgrades	Affirmations	Upgrades
AAA			
AA			
A		1	2
BBB		1	3
BB			
В			
CCC			
CC/C			

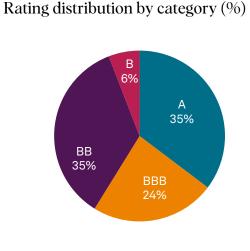


S&P Global

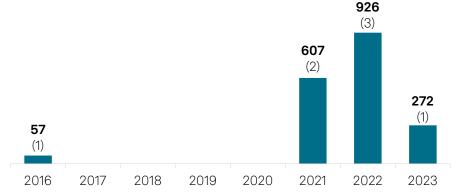
Ratings

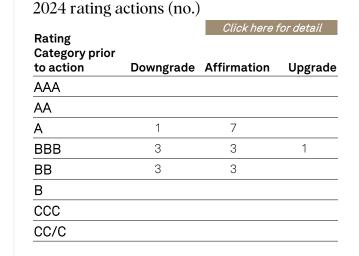
- New installation and financing shrank in the U.S. residential solar market in 2024, driven by high interest rates, California's adoption of net energy metering (NEM) 3.0, and tariffs policy changes. However, utility-scale solar installation saw record-breaking volumes.
- Solar loan ABS prepayments have slowed materially since 2023 and generally remain below the 3% annualized rate in the transactions we rate, primarily due to low mortgage refinance activities and house turnover rate.
- The Inflation Reduction Act of August 2022, which extended and raised the tax credit for the installation of solar energy property to 30% from 26% (with a step-down beginning in 2033), continues to provide economic incentives and boost to the solar industry.
- In October 2024, we reviewed outstanding solar ABS transactions and took rating actions on SolarCity LMC Series I (upgrades) and six GoodLeap Sustainable Home Solutions trusts (downgrades and affirmations).





# New issuance (mil. \$; no. of deals)





Outstanding rated deal count

Outstanding rated bond balance

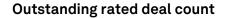
\$1.48 bil.

7





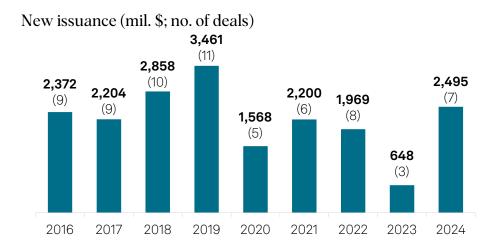
- Delinquencies have exceeded pre-pandemic levels, likely due to inflation, which continues to squeeze consumer savings. Slower growth, continued inflation, and higher interest rates have pushed HOA dues higher in recent years, increasing borrower stress. Receding inflationary pressures and falling interest rates may mitigate this effect.
- The fixed interest rates on timeshare loans have remained in the 14%-15% range despite interest rate increases. Declines in the cost of funds on recent transactions will likely result in higher excess spread levels, all else being equal.
- We expect outstanding ratings to remain stable and issuers to continue utilizing their option to substitute or repurchase defaulted loans in securitization pools.
- Issuance volume should remain steady as developers focus more on attracting new owners by leveraging the value proposition of the timeshare product versus higher hotel costs. Risks to timeshare sales exist in the form of consumer uncertainty regarding inflation and weaker consumer balance sheets.

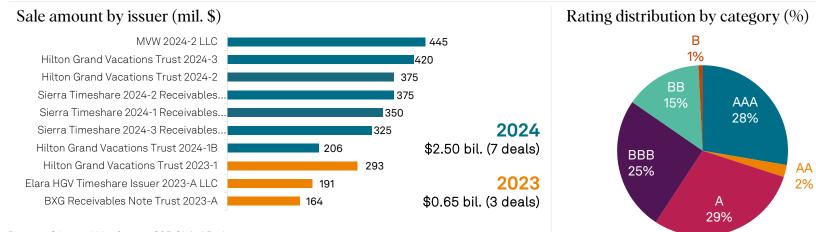


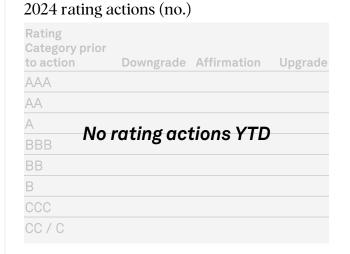
Outstanding rated bond balance

46

\$4.30 bil.





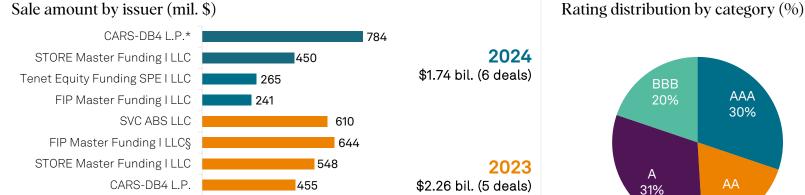


Data as of Jan. 4, 2025. Source: S&P Global Ratings.

# **Triple-Net Lease**

#### Overview and outlook

- Triple-net lease ABS benefits from various forms of diversification, including property type, industry, and tenant mix, which help to minimize the impact from any one credit event.
- Some retail-oriented portfolios experienced delinguencies or vacancies in 2024, which we partially attributed to tenant bankruptcies and consumers cutting back on discretionary spending. We expect some tenants' weakened performance to continue in 2025. However, non-discretionary retail lessees should better withstand potential economic fluctuations.
- Elevated interest rates have caused general capitalization-rate expansion across most real estate markets. Given the current higher interest rate environment and considering the uncertainties around the timing and magnitude of rate cuts, we expect capitalization rates to widen more for assets with weaker growth prospects. However, properties with long-term leases are less exposed to mark-to-market risk.



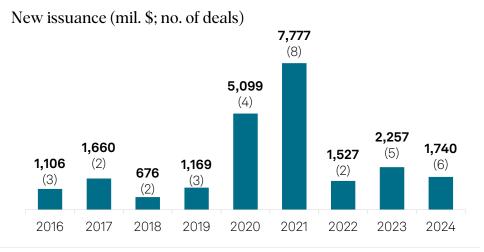
Data as of Jan. 4, 2025. \*Three transactions: \$100 million, \$305 million, and \$379 million. §Two transactions: \$328 million and \$314 million. Source: S&P Global Ratings.

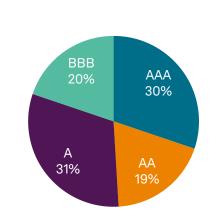
Outstanding rated deal count

Outstanding rated bond balance

26

# \$19.06 bil.

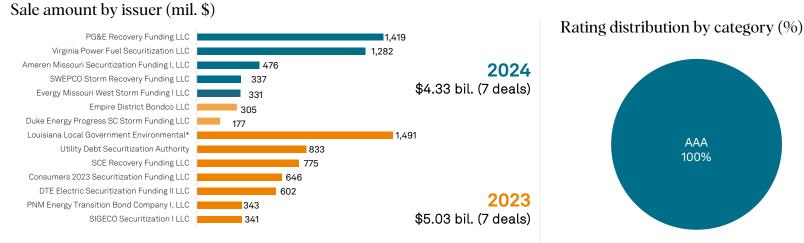




Rating		Click here :	for detail
Category prior to action	Downgrade	Affirmation	Upgrade
AAA		6	
AA		3	1
A		2	
BBB		12	
BB			
В			
CCC			
CC/C			



- We expect the performance of utility-related securitizations to remain stable in 2025 due to the strength of the true-up, which periodically recalculates utility billing rates if necessary to ensure timely payment of debt service and related fees and expenses.
- The growth in issuance of utility related securitizations is driven by a combination of factors, including recovering costs associated with natural disasters and severe weather events.
- We don't expect the Los Angeles wildfire to directly impact the rated transactions because the credit is collateralized by all the accounts in the service area and protected by the true-up mechanism and funds held in the excess funds sub-account.
- On March 4, 2024, we published "Credit FAQ: The Rationale Behind U.S. Utility Securitization And Reasons For Recent Growth."



Data as of Jan. 4, 2025. \*Louisiana Local Government Environmental Facilities and Community Development Authority. Source: S&P Global Ratings.

**Outstanding rated deal count** 

369

(1)

2017

(1)

2018

2,751

(6)

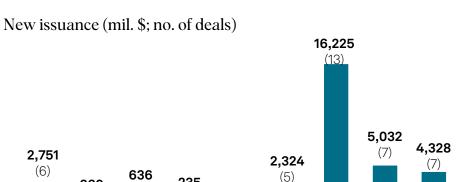
2016

AAA

100%

**Outstanding rated bond balance** \$30.76 bil.

48



2021

2022

2023

2024

### 2024 rating actions (no.) Rating

2020

235

(1)

2019



# Related Research (Page 1 of 2)

### Rating actions

Date	Title
Jan-13-2025	Ratings On 119 Classes From Eight Tobacco Settlement-Backed ABS Transactions Placed On CreditWatch Negative
Dec-17-2024	Four Ratings Raised From Three Railcar ABS Transactions
Nov-27-2024	Various Rating Actions Taken On Eight Classes From Sabey Data Center Issuer LLC; Ratings Removed From UCO
Nov-27-2024	Three Ratings Raised On Three Gas Prepay Transactions
Nov-22-2024	Three Ratings Raised On Two Leveraged Funds
Nov-19-2024	Various Rating Actions Taken On Eight Classes From Three Aircraft ABS Transactions
Nov-04-2024	TGIF Funding LLC Series 2017-1 Class A-2 Rating Lowered; Removed From CreditWatch
Nov-04-2024	TGIF Funding LLC Series 2017-1 Class A-2 Rating Lowered; Removed From CreditWatch
Oct-18-2024	Rating Raised On SolarCity LMC I Series 2013-1
Oct-18-2024	Nine Ratings Lowered On Nine Leveraged Funds
Oct-18-2024	Five Ratings Lowered, 11 Affirmed From Six GoodLeap Sustainable Home Solutions Trust Transactions
Oct-17-2024	FIP Master Funding Series 2024-1 Notes Assigned Ratings; Various Rating Actions Taken On Series 2023-1 And Series 2023-2

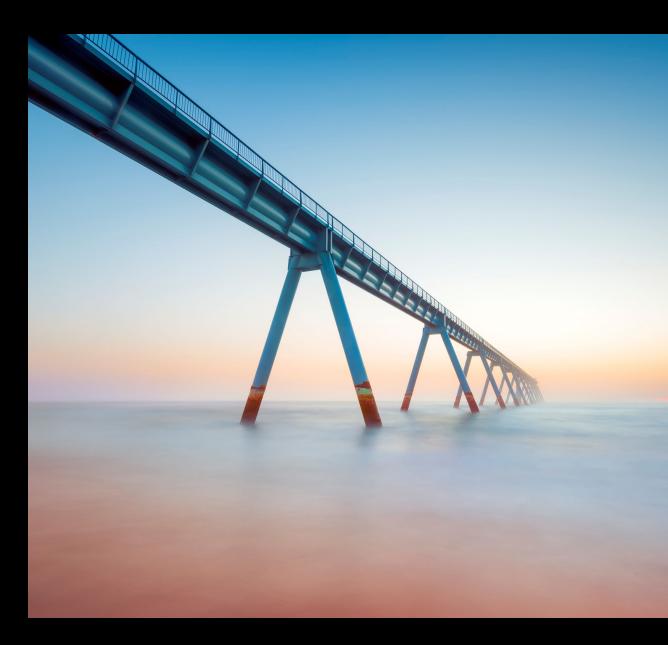
# Related Research (Page 2 of 2)

### Criteria and commentaries

Date	Title
Jan-09-2025	U.S. Tobacco Settlement Securitization: Ratings Methodology And Assumptions
Dec-12-2024	North America Triple-Net-Lease ABS Newsletter December 2024
Nov-20-2024	How North American Corporate Securitizations Fare Amid Higher Refinancing Rates
Oct-17-2024	Solar ABS Trends: Partially Cloudy Skies
Oct-11-2024	U.S. Corporate Securitization Newsletter October 2024
Sep-09-2024	ABS Frontiers: Digging Our Way To Fiber Securitizations
Jul-26-2024	North America Railcar Lease-Backed ABS Methodology And Assumptions
Jul-24-2024	Structured Finance Esoteric Quarterly Roundup: Q3 2024
Jul-09-2024	Aircraft Index Report June 2024
Jun-14-2024	The Four Main Approaches For Rating Data Center Financings
Jun-14-2024	Criteria: Data Center Securitizations: Global Methodology And Assumptions
Jun-14-2024	RFC Process Summary: Data Center Securitizations: Global Methodology And Assumptions
Apr-24-2024	Structured Finance Esoteric Quarterly Roundup: Q2 2024
Mar-29-2024	Continued High U.S. Cigarette Shipment Volume Decline Not Expected To Affect Tobacco Settlement-Backed Bond Ratings
Mar-28-2024	North America Triple-Net Lease ABS Newsletter March 2024
Mar-04-2024	Credit FAQ: The Rationale Behind U.S. Utility Securitization And Reasons For Recent Growth
Feb-20-2024	ABS Frontiers: Music Royalty Securitizations Are Getting The Band Back Together
Feb-13-2024	Structured Finance Esoteric Quarterly Roundup: Q1 2024
Feb-06-2024	Scenario Analysis: Performance Of Aircraft ABS Transactions At ARD And Final Maturity Date Under Three Hypothetical Scenarios

# Appendix

(ARDs And YTD New Issues)





# Aircraft Lease ARDs

ssuer	2025	2026	2027	2028	2029 and beyond		
AASET 2021-1 Trust				✓		2025	
AASET 2024-1 Trust					$\checkmark$		
Business Jet Securities 2022-1 LLC				~			
Business Jet Securities 2024-1 LLC					$\checkmark$		
Business Jet Securities 2024-2, LLC					$\checkmark$	2026	
Castlelake Aircraft Structured Trust 2017-1R				$\checkmark$			
JOL Air 2019-1		$\checkmark$					
MAPS 2018-1 Ltd.	$\checkmark$					2027	
MAPS 2019-1 Ltd		$\checkmark$				- 2027	
MAPS 2021-1 Trust				$\checkmark$			
Raptor Aircraft Finance I Limited		$\checkmark$					
Sprite 2021-1 Ltd.				✓		2028	
START Ltd.	$\checkmark$						
Tailwind 2019-1 Limited		$\checkmark$					
Turbine Engines Securitization Ltd.		$\checkmark$					
WAVE 2019-1 LLC			$\checkmark$			2029 and beyond	
Zephyrus Capital Aviation Partners 2018-1 Ltd	✓						

Total no. of classes by ARD

# **Corporate Securitization ARDs**

2025 2026 2027 2028 2029 and beyond Issuer Applebee's Funding LLC  $\checkmark$  $\checkmark$ 2025 Arby's Funding LLC  $\checkmark$  $\checkmark$ DB Master Finance LLC  $\checkmark$  $\checkmark$  $\checkmark$  $\checkmark$ Domino's Pizza Master Issuer LLC  $\checkmark$  $\checkmark$  $\checkmark$  $\checkmark$ Driven Brands Funding, LLC  $\checkmark$  $\checkmark$  $\checkmark$  $\checkmark$  $\checkmark$ 2026 11 Five Guys Funding LLC  $\checkmark$  $\checkmark$ GoTo Foods Funding LLC  $\checkmark$  $\checkmark$ Hardee's Funding LLC  $\checkmark$  $\checkmark$  $\checkmark$ Jack in the Box Funding LLC  $\checkmark$  $\checkmark$  $\checkmark$ Jersey Mike's Funding LLC  $\checkmark$  $\checkmark$ 2027 16 Jimmy John's Funding LLC  $\checkmark$  $\checkmark$ Planet Fitness Master Issuer LLC  $\checkmark$  $\checkmark$  $\checkmark$ SEB Funding LLC  $\checkmark$ ServiceMaster Funding LLC  $\checkmark$  $\checkmark$ 2028 21 SERVPRO Master Issuer LLC  $\checkmark$  $\checkmark$  $\checkmark$ Sonic Capital LLC  $\checkmark$  $\checkmark$  $\checkmark$ Subway Funding LLC  $\checkmark$ Taco Bell Funding, LLC  $\checkmark$  $\checkmark$  $\checkmark$  $\checkmark$ 2029 and beyond 49 Wendy's Funding LLC  $\checkmark$  $\checkmark$  $\checkmark$ 

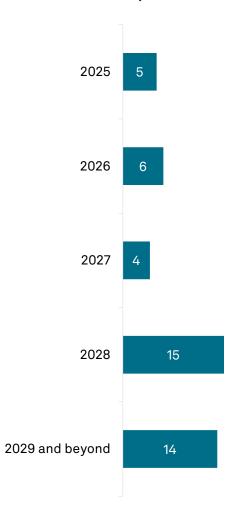
Total no. of classes by ARD

Dates assume variable-funding notes are extended per the terms of the document.

# **Data Center ARDs**

Issuer	2025	2026	2027	2028	2029 and beyond
Aligned Data Centers Issuer, LLC		$\checkmark$	$\checkmark$	$\checkmark$	
Bourzou Issuer LLC					$\checkmark$
Compass Datacenters Issuer LLC	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$
CyrusOne Data Centers Issuer I LLC				$\checkmark$	$\checkmark$
Retained Vantage Data Centers Issuer LLC				$\checkmark$	$\checkmark$
Sabey Data Center Issuer LLC	✓	$\checkmark$	$\checkmark$	✓	$\checkmark$
Stack Infrastructure Issuer LLC	$\checkmark$	$\checkmark$		✓	$\checkmark$
Vantage Data Centers Issuer LLC	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	

Total no. of classes by ARD



# **Railcar Lease ARDs**

Issuer	2026	2027	2028	2029 and beyond			
GBX Leasing 2022-1 LLC				$\checkmark$			
NP SPE II LLC	$\checkmark$	$\checkmark$				2026	12
NP SPE IX LP	✓						
NP SPE X LP	✓			$\checkmark$			
Signal Rail I LLC			$\checkmark$	$\checkmark$			
Tribute Rail LLC	✓					2027	12
Trinity Rail Leasing 2018 LLC			$\checkmark$				
Trinity Rail Leasing 2019 LLC	$\checkmark$						
Trinity Rail Leasing 2020 LLC		$\checkmark$					
Trinity Rail Leasing 2021 LLC			$\checkmark$	$\checkmark$		2028	8
Trinity Rail Leasing 2022 LLC				$\checkmark$			
Triumph Rail LLC		$\checkmark$					
TRP 2021 LLC		$\checkmark$					
USQ Rail I LLC			$\checkmark$				
USQ Rail II LLC		$\checkmark$			2029 and	beyond	14
USQ Rail III LLC				✓			

Total no. of classes by ARD

# **Triple-Net Lease ARDs**

Issuer	2025	2026	2027	2028	2029 and beyond		
AFN ABSPROP001 LLC		$\checkmark$		$\checkmark$	$\checkmark$		
CARS MTI-1 LP			$\checkmark$		$\checkmark$	202	25
CARS-DB4, L.P.		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
CF Hippolyta Issuer LLC	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$			
CMFT Net Lease Master Issuer, LLC				$\checkmark$	$\checkmark$		
FIP Master Funding I LLC				$\checkmark$	$\checkmark$	202	26
New Economy Assets – Phase 1 Issuer LLC		$\checkmark$					
Oak Street Investment Grade Net Lease Fund LP	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$			
STORE Master Funding I, LLC	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	202	27
SVC ABS LLC				$\checkmark$		202	<u>.</u> /
					✓		

Total no. of classes by ARD

2029 and beyond

2028



28

# 2024 New Issuance

Subasset class	No. of deals YTD 2024	Transaction	Sale amount (mil. \$)	Presale/new issue	Date
				Presale: AASET 2024-1 Trust	Jun-03-2024
		AASET 2024-1 Trust	830.7	Presale: AASET 2024-1 Trust (Class A-2)	Jun-27-2024
Aircraft/aircraft engine loans and lease	3			Presale: AASET 2024-1 Trust (Class B)	Aug-09-2024
		Business Jet Securities 2024-2 LLC	617.1	Presale: Business Jet Securities 2024-2 LLC	Sep-05-2024
		Business Jet Securities 2024-1 LLC	574.8	Presale: Business Jet Securities 2024-1 LLC	Apr-03-2024
		Textainer Marine Containers VII Limited 2024-1	452.1	<u>Presale: Textainer Marine Containers VII Ltd. (Series</u> 2024-1)	Aug-03-2024
Container lease	4	TIF Funding III LLC 2024-1	450.0	Presale: TIF Funding III LLC (Series 2024-1)	Mar-21-2024
Container tease	4	CLI Funding IX LLC 2024-1	413.9	Presale: CLI Funding IX LLC (Series 2024-1)	Jul-18-2024
		TIF Funding III LLC 2024-2	351.9	Presale: TIF Funding III LLC (Series 2024-2)	Jun-24-2024

# 2024 New Issuance (Cont.)

Subasset class	No. of deals YTD 2024	Transaction	Sale amount (mil. \$)	Presale/new issue	Date
		Subway Funding LLC 2024-1	3,443.0	Presale: Subway Funding LLC (Series 2024-1)	May-29-2024
		Subway Funding LLC 2024-3	2,335.0	Presale: Subway Funding LLC (Series 2024-3)	Sep-03-2024
		Jersey Mike's Funding LLC	850.0	Presale: Jersey Mike's Funding LLC (2024-1)	Dec-05-2024
		Planet Fitness Master Issuer LLC 2024-1	800.0	Presale: Planet Fitness Master Issuer LLC (Series 2024- 1)	May-31-2024
		Driven Brands Funding, LLC 2024-1	675.0	<u>Presale: Driven Brands Funding LLC/Driven Brands</u> <u>Canada FundingCorp. (Series 2024-1)</u>	Jun-24-2024
Corporate securitization	11	SERVPRO Master Issuer LLC 2024-1	595.0	Presale: Servpro Master Issuer LLC (Series 2024-1)	Jan-10-2024
		SEB Funding LLC 2024-1	570.0	Presale: SEB Funding LLC (Series 2024-1)	Mar-14-2024
		SEB Funding LLC 2021-1	519.8	SEB Funding LLC Series 2024-1 And Series 2021-1 Notes Assigned Ratings	Apr-02-2024
		Subway Funding LLC 2024-2	400.0	New Issue: Subway Funding LLC (Series 2024-2)	Jul-25-2024
		Hardee's Funding LLC 2024-1	350.0	<u>Presale: Hardee's Funding LLC/Carl's Jr. Funding LLC</u> (Series 2024-1)	Mar-05-2024
		GoTo Foods Funding LLC	125.0	New Issue: New Issue: GoTo Foods Funding LLC	Oct-21-2024

# 2024 New Issuance (Cont.)

Subasset class	No. of deals YTD 2024	Transaction	Sale amount (mil. \$)	Presale/new issue	Date
		Bourzou Issuer LLC 2024-1	1,075.0	Presale: Bourzou Issuer LLC, Jamshid Issuer LLC, Cristobal Issuer LLC, And COPT DC-6 Issuer LLC (Series 2024-1 &	Nov-21-2024
		Bourzou Issuer LLC 2024-2	250.0	<u>2024-2)</u>	1107-21-2024
		CyrusOne Data Centers Issuer I LLC 2024-2	690.0	Presale: CyrusOne Data Centers Issuer I LLC (Series 2024-2	Apr-25-2024
		CyrusOne Data Centers Issuer I LLC 2024-3	485.0	And Series 2024-3)	Αρι-25-2024
Data center	9	Retained Vantage Data Centers Issuer LLC 2024-1	525.0	Presale: Retained Vantage Data Centers Issuer LLC/Vantage Data Centers Canada QC4 L.P. (Series 2024-1)	Sep-03-2024
		Vantage Data Centers Issuer LLC	250.0	<u>Presale: Vantage Data Centers Issuer LLC/Vantage Data</u> <u>Centers Canada L.P. (Series 2024-1)</u>	Sep-23-2024
		Stack Infrastructure Issuer LLC 2024-1	240.0	Presale: Stack Infrastructure Issuer LLC (Series 2024-1)	Mar-11-2024
		CyrusOne Data Centers Issuer I LLC 2024-1	228.0	<u>Presale: CyrusOne Data Centers Issuer I LLC (Series 2024-</u> <u>1)</u>	Mar-06-2024
		Sabey Data Center Issuer LLC 2024-1	150.0	Presale: Sabey Data Center Issuer LLC (Series 2024-1)	Apr-20-2024
		PFS Financing Corp. Series 2024-B	650.0		
		PFS Financing Corp. Series 2024-A	350.0	Presale: PFS Financing Corp. (Series 2024-A And 2024-B)	Jan-26-2024
Insurance premium	C C	PFS Financing Corp. Series 2024-D	425.0		
	6	PFS Financing Corp. Series 2024-C	175.0	Presale: PFS Financing Corp. (Series 2024-C And 2024-D)	Apr-03-2024
		PFS Financing Corp. Series 2024-F	300.0		A
		PFS Financing Corp. Series 2024-E	100.0	Presale: PFS Financing Corp. (Series 2024-E And 2024-F)	Aug-01-2024

# 2024 New Issuance (Cont.)

Subasset class	No. of deals YTD 2024	Transaction	Sale amount (mil. \$)	Presale/new issue	Date
		BlackRock Municipal 2030 Target Term Trust	1,500.0	BlackRock Municipal 2030 Target Term Trust Series W-7 Variable Rate Demand Preferred Shares Assigned Rating	Aug-09-2024
		BlackRock MuniHoldings California Quality Fund, Inc	526.4	<u>BlackRock MuniHoldings California Quality Fund Inc. Series W-7</u> Variable-Rate Demand Preferred Shares Assigned Rating	Sep-25-2024
		BlackRock MuniYield Quality Fund, Inc.	450.3	<u>BlackRock MuniYield Quality Fund Inc. Series W-7 And Series W-7A</u> Variable Rate Demand Preferred Shares Assigned Ratings	Jun-05-2024
		BlackRock MuniHoldings New Jersey Quality Fund, Inc	417.1	<u>BlackRock MuniHoldings New Jersey Quality Fund Inc. Series W-7</u> Variable-Rate Demand Preferred Shares Assigned Rating	Nov-07-2024
		BlackRock MuniYield Fund, Inc.	251.4	<u>BlackRock MuniYield Fund Inc. Series W-7 Variable Rate Demand</u> Preferred Shares Assigned Rating	Nov-14-2024
		BlackRock MuniHoldings New York Quality Fund, Inc	243.6	<u>BlackRock MuniHoldings New York Quality Fund Inc. Series W-7</u> Variable-Rate Demand Preferred Shares Assigned Rating	Nov-07-2024
Leveraged funds	13	BlackRock New York Municipal Income Trust	179.5	<u>BlackRock New York Municipal Income Trust Series W-7 Variable Rate</u> <u>Demand Preferred Shares Assigned Rating</u>	Nov-14-2024
		BlackRock MuniAssets Fund Inc.	175.0	<u>BlackRock MuniAssets Fund Inc. Series W-7 Variable-Rate Demand</u> Preferred Shares Assigned Rating	Apr-17-2024
		BlackRock California Municipal Income Trust	171.3	BlackRock California Municipal Income Trust Series W-7 Variable-Rate Demand Preferred Shares Assigned Rating	Sep-25-2024
		Nuveen AMT-Free Quality Municipal Income Fund	135.0	Nuveen AMT-Free Quality Municipal Income Fund Series A Variable Rate Demand Mode Preferred Shares Assigned Rating	Dec-12-2024
		Invesco Senior Income Trust	100.0	Invesco Senior Income Trust Series A And Series B Variable Rate Demand Mode Preferred Shares Assigned Ratings	Oct-24-2024
		AllianceBernstein National Municipal Income Fund, Inc.	100.0	<u>AllianceBernstein National Municipal Fund Inc. Series 2024 Variable</u> Rate Demand Preferred Shares Assigned Rating	Jun-06-2024
		BlackRock Long-Term Municipal Advantage Trust	76.0	<u>BlackRock Long-Term Municipal Advantage Trust Series W-7 Variable</u> Rate Demand Preferred Shares Assigned Rating	Nov-14-2024

# YTD 2024 New Issue (Cont.)

Subasset class	No. of deals YTD 2024	Transaction	Sale amount (mil. \$)	Presale/new issue	Date
		USQ Rail III LLC 2024-1	470.5	Presale: USQ Rail III LLC/USQ Canada Rail III L.P. (Series 2024-1)	Sep-19-2024
Railcar lease	3	Trinity Rail Leasing 2021 LLC	432.4	Presale: Trinity Rail Leasing 2021 LLC (Series 2024-1)	May-15-2024
		Signal Rail I LLC 2024-1	125.4	Presale: Signal Rail I LLC (Series 2024-1)	May-10-2024
Small business loans	1	Centerstone SBA Trust 2023-1	44.5	Presale: Centerstone SBA Trust 2023-1	Jan-16-2024
		MVW 2024-2 LLC	445.0	Presale: MVW 2024-2 LLC	Sep-19-2024
		Hilton Grand Vacations Trust 2024-3	419.7	Presale: Hilton Grand Vacations Trust 2024-3	Oct-24-2024
		Hilton Grand Vacations Trust 2024-2	375.0	Presale: Hilton Grand Vacations Trust 2024-2	May-17-2024
Timeshare loans	7	Sierra Timeshare 2024-2 Receivables Funding LLC	375.0	Presale: Sierra Timeshare 2024-2 Receivables Funding LLC	Jul-11-2024
		Sierra Timeshare 2024-1 Receivables Funding LLC	350.0	Presale: Sierra Timeshare 2024-1 Receivables Funding LLC	Mar-07-2024
		Sierra Timeshare 2024-3 Receivables Funding LLC	325.0	Presale: Sierra Timeshare 2024-3 Receivables Funding LLC	Oct-03-2024
		Hilton Grand Vacations Trust 2024-1B	205.5	Presale: Hilton Grand Vacations Trust 2024-1B	Apr-11-2024



# YTD 2024 New Issue (Cont.)

			Sale		
Subasset class	No. of deals YTD 2024	Transaction	amount (mil. \$)	Presale/new issue	Date
		STORE Master Funding I, LLC 2024-1	450.0	Presale: STORE Master Funding I-VII, XIV, XIX, XX, XXII, And XXIV LLC (Series 2024-1)	Apr-18-2024
		CARS-DB4, L.P. 2024-3	379.4	Presale: CARS-DB4 L.P./CARS-DB5 L.P./CARS-DB6 L.P./CARS-DB7 LLC/CARS-DB8 LLC/CARS-DB10 L.P./CARS CNI-2 L.P. (Series 2024-3)	Sep-24-2024
		CARS-DB4, L.P. 2024-2	305.0	Presale: CARS-DB4 L.P./CARS-DB5 L.P./CARS-DB6 L.P./CARS-DB7 LLC/CARS-DB8 LLC/CARS-DB10 L.P./CARS CNI-2 L.P. (Series 2024-2)	May-29-2024
Triple net lease	6	Tenet Equity Funding SPE I, LLC	264.9	Presale: Tenet Equity Funding SPE I LLC And Tenet Equity Funding SPE III LLC (Series 2024-1)	Oct-08-2024
		FIP Master Funding I LLC	241.0	Presale: FIP Master Funding I-VI, VIII-XIV, XVI, XVII, XIX, XXIV, FIP Cranston, 401 Collins Boulevard LLC, And FIP Ontario Investments ULC (Series 2024-1)	Sep-25-2024
		CARS-DB4, L.P. 2024-1	100.0	<u>New Issue: CARS-DB4 L.P./CARS-DB5 L.P./CARS-DB6</u> L.P./CARS-DB7 LLC/CARS-DB8 LLC/CARS-DB10 L.P./CARS CNI-2 L.P. (Series 2024-1)	May-28-2024
		PG&E Recovery Funding LLC 2024-A	1,419.3	Presale: PG&E Recovery Funding LLC (Series 2024-A)	Jul-18-2024
		Virginia Power Fuel Securitization LLC 2024	1,281.9	Presale: Virginia Power Fuel Securitization LLC (2024 Senior Secured Bonds)	Jan-29-2024
		Ameren Missouri Securitization Funding I, LLC	476.1	Presale: Ameren Missouri Securitization Funding I LLC	Dec-04-2024
Utility related securitization	7	SWEPCO Storm Recovery Funding LLC	336.7	Presale: SWEPCO Storm Recovery Funding LLC (Series 2024-A)	Dec-04-2024
		Evergy Missouri West Storm Funding I LLC 2024-A	331.1	<u>Presale: Evergy Missouri West Storm Funding I LLC (Series</u> <u>2024-A)</u>	Feb-08-2024
		Empire District Bondco LLC 2024-A	305.5	Presale: Empire District Bondco LLC (Series 2024-A)	Jan-11-2024
		Duke Energy Progress SC Storm Funding LLC	177.4	Presale: Duke Energy Progress SC Storm Funding LLC	Apr-11-2024

# **Key Contacts By Sector**

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Asset type	Analytical manager	Team lead
Aircraft	Deborah Newman	Rajesh Subramanian
Container	Deborah Newman	Rajesh Subramanian
Corporate securitization	Deborah Newman	Christine Dalton
Data center	Ryan Butler	Samson Joy
DPC	Ryan Butler	Steven Margetis
Gas prepay	Ryan Butler	Steven Margetis
Insurance premium	Ryan Butler	Srabani Chandra-Lal
Leveraged funds	Ryan Butler	Steven Margetis
Music royalty	Deborah Newman	Christine Dalton
PACE	Ryan Butler	Srabani Chandra-Lal
Private equity CFO	Ryan Butler	Steven Margetis
Railcar	Deborah Newman	Rajesh Subramanian
Small business loan	Deborah Newman	Nichol Merritt
Solar loans and lease	Ryan Butler	Steven Margetis
Structured settlements	Deborah Newman	Nichol Merritt
Timeshare loans	Deborah Newman	Nichol Merritt
Tobacco settlement	Deborah Newman	Christine Dalton
Triple-net lease	Ryan Butler	Samson Joy
Utility-related securitization	Ryan Butler	Srabani Chandra-Lal

# **Key Contacts By Sector (Continued)**

Who should I contact?

- For all escalations Analytical Manager
- For new proposal feasibility Analytical Manager and Sector Lead
- For rating methodology-related questions Sector Lead
- For transaction-specific questions Team Leads
- For commercial questions Commercial Contacts

### Commercial contacts

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