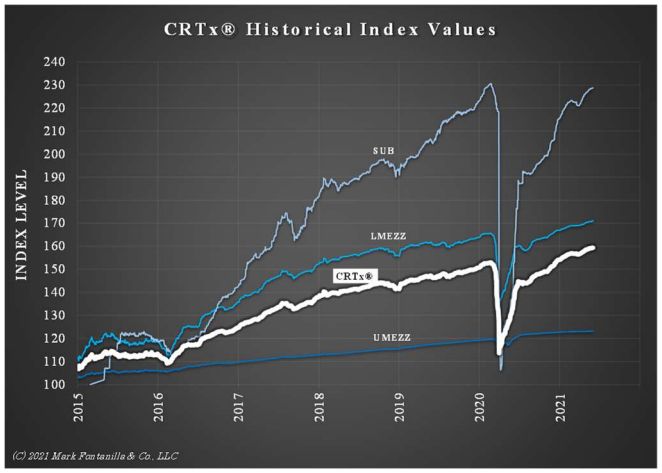
CRTx ®

Credit Risk Transfer Return Tracking Index www.markfontanilla.com/crtx-index

CRTx® Index Rebalancing Update: 5/28/21

The CRTx® Aggregate finished May up 0.51% MoM, so far returning 1.76% QTD, and 3.37% YTD. An incrementally flatter CRT credit curve, gently better credit/structure risk metrics, and continually supportive technicals helped extend the CRTx® win streak to 2 months in a row of positive total returns.



Return Rundown *Page 2*

SUBs (Bs) overall and newer LMEZZ (M2s) helped drive May's CRTx® AGG gain…of 0.51% as the CRT credit curve modestly bull flattened…CRT outpaced most major cross sectors…except IG…

Rebalancing Metrics *Page 3*

The CRTx® Aggregate Index basket for June starts at $47.98 billion in market value, down 2.0% MoM, made up of 235 securities from 97 deals. No new issues added from May, while 3 constituents paid off. MoM, WAvg market values were up ~1/4pt on avg. to a $103 handle, while the WAvg coupon…was little changed…

Latest Credit Performance *Page 3*

May statements showed reference pool credit/deal structure performance maintaining an improving trend, with 180+ DQs incrementally lower, while writedowns/interest shortfalls still nominal…

Relative Value Thoughts *Page 3*

Technicals are supportive…credit/structural risk improving…move to "risk-adjusted" carry is king…high coupon/higher carry mid-COVID B1s/B2s…recent M2s…seasoned <=2016 MEZZ/SUB if you can find them…top/mid-structure MILNs…

May 2021 CRTx® AGG Tot Ret	+51 bps
Price Attribution	*+23 bps*
Paydown Attribution	*-2 bps*
Cpn Accr&Pmt Attribution	*+30 bps*
Writedown+Int Shortfall Attribution	*-0.07 bps*
Excess Return	+51 bps
Volatility (Annualized)	0.47%
UPB Paydown %	2.22%
QTD Total Return	**1.76%**
YTD Total Return	**3.37%**

CRTx® AGG Rebalancing For Jun 2021

As of 5/28/2021

June 2021 Aggregate Constituency (w/MoM Δ):

• **Beg. UPB ($B):**	**$46.56**	-2.2%
• **Beg. Market Value ($B):**	**$47.98**	-2.0%
• **Constituents:**	**235**	-3
• **WAvg Constituent Value:**	**103.05**	+0.27 pts
• **WAvg Constituent Coupon:**	**3.90%**	+1 bps

Index (+) Entries* & (-) Exits

(+) None

(-) STACR 2015-DN1 M3 (paid off)

(-) CAS 2020-R02 2M1 (paid off)

(-) STACR 2020-HQA4 M1 (paid off)

** 0.00% of Beg. Aggregate Index Market Value*

CRTx® Mkt Val Breakdown 6/2021

Deal Vintage	Aggregate	UMEZZ	LMEZZ	SUB
All	**100%**	**3.7%**	**63.9%**	**32.4%**
2021	**9.4%**	***2.1%***	***3.3%***	***3.9%***
2020	**19.3%**	***1.2%***	***9.1%***	***9.1%***
2019	**13.1%**	***0.0%***	***6.8%***	***6.4%***
2018	**16.1%**	***0.1%***	***11.2%***	***4.8%***
2017	**18.1%**	***0.2%***	***13.2%***	***4.6%***
2016	**11.8%**	***0.0%***	***9.7%***	***2.1%***
2015	**6.0%**	***0.0%***	***4.4%***	***1.6%***
<=2014	**6.2%**	***0.0%***	***6.2%***	***0.0%***

5/28/2021 Index Rebalancing Update (continued)

CRTx® RNI™ (Rolling New Issues)

May 2021 CRTx® RNI™ AGG Tot Ret	+88 bps
Price Attribution	*+60 bps*
Paydown Attribution	*-1 bps*
Cpn Accr&Pmt Attribution	*+29 bps*
Writedown+Int Shortfall Attribution	*+0 bps*
Excess Return	+88 bps
Volatility (Annualized)	0.70%
UPB Paydown %	2.25%
QTD Total Return	**2.53%**
YTD Total Return	**3.29%**

CRTx® RNI™ AGG Rebalancing For Jun 2021

As of 5/28/2021

June 2021 Aggregate Constituency (w/MoM Δ):

• **Beg. UPB ($B):**	**$9.37**	-2.2%
• **Beg. Market Value ($B):**	**$9.68**	-1.6%
• **Constituents:**	**40**	-1
• **WAvg Constituent Value:**	**103.29**	+0.67 pts
• **WAvg Constituent Coupon:**	**3.81%**	+2 bps

Index (+) Entries* & (-) Exits

(+) None

(-) STACR 2020-HQA4 M1 (paid off)

** 0.00% of Beg. Aggregate Index Market Value*

CRTx® RNI™ Mkt Val Breakdown 6/2021

Deal Vintage	Aggregate	UMEZZ	LMEZZ	SUB
All	**100%**	**14.9%**	**36.3%**	**48.7%**
2021	**46.5%**	***10.5%***	***16.6%***	***19.4%***
2020	**53.5%**	***4.4%***	***19.7%***	***29.3%***
2019	**0.0%**	***0.0%***	***0.0%***	***0.0%***
2018	**0.0%**	***0.0%***	***0.0%***	***0.0%***
2017	**0.0%**	***0.0%***	***0.0%***	***0.0%***
2016	**0.0%**	***0.0%***	***0.0%***	***0.0%***
2015	**0.0%**	***0.0%***	***0.0%***	***0.0%***
<=2014	**0.0%**	***0.0%***	***0.0%***	***0.0%***

Return Rundown

SUBs (Bs) overall and newer-issue LMEZZ (M2s) helped drive May's CRTx® AGG gain (in excess of carry for 29 accrual days) of 0.51% as the CRT credit curve modestly bull flattened.

The CRTx® SUB sub-index returned 0.89% in May, followed by 0.34% for LMEZZ, and .07% for the UMEZZ sub-indexes, respectively. Pre-COVID 2020 M2s were a notable complex lagger, with relative carry on the lower end of sector M2s right now.

For May, major fixed income sectors benefited mostly from the 7bp rally in the belly of the curve as credit spreads were generally stable to marginally changed. But cross sector, **CRT outpaced rates, HY, and the bond aggregates, while IG generally saw similar monthly gains.**

YTD the CRTx® Aggregate is up 3.87%, continuing to beat most other broad fixed income benchmarks as 5s/10s yields are still higher by 40-65bps for 2021. Q2 to date, CRT total return is roughly in line with long-duration IG so far.

Supply demand technicals remained supportive in May. The $1.06B (2.22% of AGG) in **sector paydowns for the month** was distributed across the CRT complex as follows:

- UMEZZ$197M
- **LMEZZ $855M**
- SUB $6M

With an increasing amount of the LMEZZ/M2 float again becoming front-pay classes, sector reinvestment needs in the absence of ample offsetting M2 new issue supply currently supports middle- to down-in-structure demand for the time being.

Select New Issuer Pricing Margins: STACR®

	Issuance Pd./Close Dt.	Deal	Index	Pricing Margins M1	M2	B1	B2
	04/23/21	**STACR 21-DNA3**	**SOFR**	**75**	**210**	**350**	**625**
	03/09/21	STACR 21-DNA2	SOFR	80	230	340	600
	02/23/21	STACR 21-HQA1	SOFR	70	225	300	500
	01/29/21	STACR 21-DNA1	SOFR	65	180	265	475
	12/18/20	STACR 20-DNA6	SOFR	90	200	300	565
Mid-COVID	11/20/20	STACR 20-HQA5	SOFR	110	260	400	740
	10/20/20	STACR 20-DNA5	SOFR	130	280	480	1,150
	09/29/20	STACR 20-HQA4	1mL	130	315	525	940
	08/25/20	STACR 20-DNA4	1mL	150	375	600	1,000
	07/28/20	STACR 20-HQA3	1mL	155	360	575	1,000
	07/08/20	STACR 20-DNA3	1mL	150	300	510	935
Pre-COVID	03/18/20	STACR 20-HQA2	1mL	110	310	410	760
	02/19/20	STACR 20-DNA2	1mL	75	110	250	480

5/28/2021 Index Rebalancing Update (continued)

Rebalancing Metrics

The CRTx® Aggregate Index basket for June starts at $47.98 billion in market value, **down 2.0% MoM, made up of 235 securities from 97 deals**. No new issues added from May, while 3 constituents paid off. MoM, WAvg market values were up ~1/4 pt to a $103 handle, while the WAvg Index coupon was again little changed at 3.90%.

Benchmark CRT float composition continued to move proportionately towards more SUBs (Bs), **which now represents 32.4% of the CRT complex**, while LMEZZ (M2s/M3s) is now below 64% of the CRTx® Aggregate, and UMEZZ (M1s) is less than 4%. Elevated paydowns and lack of new issue drove May's float technical.

Latest Credit Performance

Both CAS and STACR May statements showed reference pool credit/deal structure performance maintaining an improving trend, with 180+ DQs incrementally lower, while writedowns/interest shortfalls still nominal, helping CEs stay flat to modestly higher.

Credit

- Total DQs slightly lower: early stage again modestly lower, **pre-COVID deal 180+ DQ loan counts/balances unanimously lower MoM (CAS -5% to -6%, STACR -8% on average).**
- Both tranche and reference pool realized write-downs/shortfalls are still nominal (only 1st B-pieces have been hit). **CRTx® 1st Loss Sub-Index (2015/2016 B-pieces only): Less than 2bp in write-downs/shortfalls for May.**

Prepayments

- **May factor speeds down** moderately for STACR (**now low/mid 40s on average**).
- May CRTx® AGG paydown percentage (2.22%) was 12% lower vs March (2.52%).
  - **Total May Index/Sector Paydowns: $1.06B**

Latest Credit Performance (continued)

Structure

- LIBOR coupon resets -1bp, SOFR coupon resets unchanged for June payment day accruals.
- 72 reference pool groups were still failing their DQ Test in May (unchanged vs. April).
- **All 16 pre-COVID REMIC deals (10 CAS/6 STACR) continue to get front-pay paydowns despite still failing their DQ triggers**.
- **Sector-wide class C/Es were stable to improved MoM, on average flat to up 5%.**
- **STACR 2015-HQ1 B becomes the 2nd B class in GSE CRT history to start paying down.**

Relative Value Thoughts

- **Technicals are still supportive** - Paydowns are currently coming primarily from LMEZZ/M2s (80%+ of May aggregate paydowns), which should continue to provide a supporting supply/demand reinvestment technical for M2s, with a knock-on effect for B1s, so long as new issue size and composition does not counter the current technical, all else equal.
- **Credit/structural risk continues to moderately improve**. Housing and rates remain at the core of this trend, with realized writedowns/interest shortfalls currently muted.
- **Move to "risk-adjusted" carry is king for relative value. Continue to look for:**
  - **Higher coupon, relatively higher carry mid-COVID 2020 issued B1s/B2s (DQs <2%, 180+ <1%)**
  - **Given still-fast CPRs, more recent issue M2s with current-market margins and less convexity worry, as related M1s have been paying off quickly.**
  - **Seasoned <=2016 MEZZ/SUB (still if you can get them).**
  - **MILNs as alternative supply, especially top/middle of capital structure.**

CRTx® Index Suite Total Return Performance (as of Month End 5/28/2021)

CRTx® (Credit Risk Transfer Return Tracking Index) Return Summary							
		RETURNS					
		Period			Annualized		
		MTD	QTD	YTD	1-YR	3-YR	As of Date
Aggregate		**0.51%**	**1.76%**	**3.37%**	**20.97%**	**4.16%**	**5/28/2021**
Upper Mezzanine		0.07%	0.13%	0.33%	3.32%	2.63%	5/28/2021
Lower Mezzanine		0.34%	1.10%	2.39%	11.98%	3.10%	5/28/2021
Subordinate		0.89%	3.40%	6.12%	66.81%	6.71%	5/28/2021
Upper/Lower Mezz.		0.33%	1.04%	2.25%	11.36%	3.24%	5/28/2021
Lower Mezz./Sub.		0.52%	1.83%	3.52%	22.06%	4.06%	5/28/2021
CAS		0.46%	1.37%	3.34%	19.32%	4.06%	5/28/2021
STACR		0.54%	2.05%	3.37%	22.95%	4.26%	5/28/2021
LLTV		0.54%	1.79%	3.26%	20.18%	3.98%	5/28/2021
HLTV		0.46%	1.71%	3.54%	22.25%	4.43%	5/28/2021
Upper Mezzanine	**2021**	0.06%	0.13%	0.19%	-	-	5/28/2021
	2020	0.06%	0.12%	0.31%	3.94%	-	5/28/2021
	2019	-	-	-	-	-	5/28/2021
	2018	0.12%	0.21%	0.42%	1.77%	2.43%	5/28/2021
	2017	0.17%	0.27%	0.54%	1.71%	2.42%	5/28/2021
	2016	0.13%	0.29%	0.75%	2.41%	2.75%	5/28/2021
	2015	-	-	-	-	-	5/28/2021
	<=2014	-	-	-	-	-	5/28/2021
Lower Mezzanine	**2021**	0.67%	2.20%	2.24%	-	-	5/28/2021
	2020	0.12%	0.74%	1.75%	23.50%	-	5/28/2021
	2019	0.18%	0.88%	1.96%	8.13%	-	5/28/2021
	2018	0.44%	1.48%	2.86%	10.59%	4.28%	5/28/2021
	2017	0.52%	1.18%	2.63%	8.80%	3.56%	5/28/2021
	2016	0.23%	0.74%	2.10%	6.17%	1.96%	5/28/2021
	2015	0.39%	0.67%	1.38%	6.97%	1.79%	5/28/2021
	<=2014	0.33%	1.40%	3.31%	32.31%	2.66%	5/28/2021
Subordinate	**2021**	1.24%	3.88%	-1.69%	-	-	5/28/2021
	2020	1.45%	4.79%	6.67%	91.45%	-	5/28/2021
	2019	0.37%	4.81%	8.55%	79.94%	-	5/28/2021
	2018	0.59%	1.65%	4.43%	60.53%	7.86%	5/28/2021
	2017	0.50%	1.70%	6.69%	40.98%	5.23%	5/28/2021
	2016	1.22%	2.67%	7.83%	64.67%	5.23%	5/28/2021
	2015	0.54%	0.36%	0.77%	66.03%	3.07%	5/28/2021
	<=2014						5/28/2021

CRTx® Index Suite Total Return Performance (as of Month End 5/28/2021 - Continued)

CRTx® RNI™ (Rolling New Issues*) Return Summary						
	RETURNS					
	Period			Annualized		
	MTD	QTD	YTD	1-YR	3-YR	As of Date
Aggregate	**0.88%**	**2.53%**	**3.29%**	**29.77%**	**5.96%**	**5/28/2021**
Upper Mezzanine	0.06%	0.13%	0.31%	3.60%	2.56%	5/28/2021
Lower Mezzanine	0.47%	1.37%	2.21%	15.02%	4.98%	5/28/2021
Subordinate	1.46%	4.34%	5.61%	94.37%	8.89%	5/28/2021
LLTV	0.91%	2.72%	2.85%	29.99%	5.70%	5/28/2021
HLTV	0.83%	2.25%	3.66%	29.46%	6.60%	5/28/2021

** Most recently issued securities within a "rolling" 12-month window*

CRTx® (Credit Risk Transfer Return Tracking Index) Return Summary						
	RETURNS					
Special Sub-Indexes (NEW)	Period			Annualized		
	MTD	QTD	YTD	1-YR	3-YR	As of Date
Fxd Severity - Type I*	0.51%	1.66%	3.77%	41.94%	3.22%	5/28/2021
Fxd Severity - Type II*	0.34%	0.79%	1.59%	16.76%	2.08%	5/28/2021
Actual Loss	0.51%	1.82%	3.46%	20.25%	4.47%	5/28/2021
CAS Fxd Severity - Type I*	0.07%	1.21%	3.34%	46.25%	3.11%	5/28/2021
STACR Fxd Severity - Type I*	0.89%	2.05%	4.14%	38.21%	3.32%	5/28/2021
CAS Fxd Severity - Type II*	0.37%	1.33%	2.60%	15.92%	2.35%	5/28/2021
STACR Fxd Severity - Type II*	0.29%	-0.33%	-0.43%	17.87%	1.51%	5/28/2021
CAS Act. Loss	0.49%	1.38%	3.41%	18.47%	4.35%	5/28/2021
STACR Act. Loss	0.53%	2.12%	3.47%	22.32%	4.58%	5/28/2021

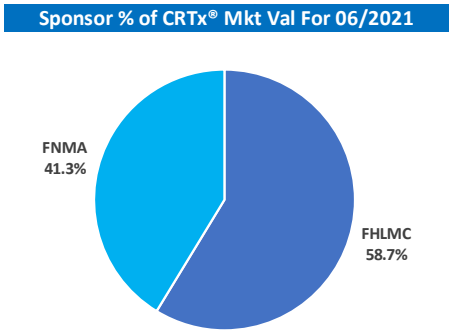
** Type I - No Credit Event Relief Provisions For Natural Disaster/Casualty Events*
Type II - Some Credit Event Relief Provisions For Natural Disaster/Casualty Events

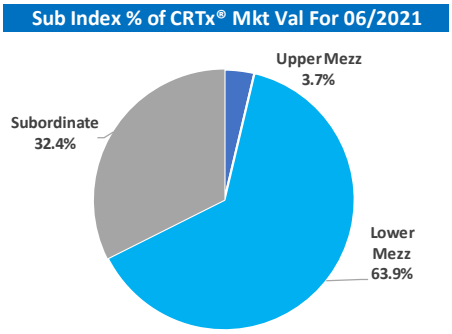
*** CRTx® Aggregate Index and Sub Index Constituency**

Aggregate	Upper Mezzanine	Lower Mezzanine	Subordinate	LLTV	HLTV
All Index-Eligible FNMA CAS shelf and FHLMC STACR shelf At-Issuance Classes	FNMA CAS Shelf: M1 Classes FHLMC STACR Shelf: M1 Classes (in M1/M2 structures) M1/M2 Classes (in M1/M2/M3 structures)	FNMA CAS Shelf: M2 Classes FHLMC STACR Shelf: M2 Classes (in M1/M2 structures) M3 Classes (in M1/M2/M3 structures)	FNMA CAS Shelf: All B Classes FHLMC STACR Shelf: All B Classes	All Index-Eligible FNMA CAS shelf and FHLMC STACR shelf At-Issuance Classes from deals referencing Low Loan to Value (LLTV) loans	All Index-Eligible FNMA CAS shelf and FHLMC STACR shelf At-Issuance Classes from deals referencing High Loan to Value (HLTV) loans
	Vintage Sub Index constituency determined by deal/security closing year (except 2013/2014 which are grouped as "2014").				

RNI™ (Rolling New Issues) versions of the standard CRTx® Aggregate and Sub-Indexes have dynamic constituent baskets made up exclusively of the most recently issued securities within a "rolling" 12-month look-back window.

CRTx® Select Constituent Metrics (as of June 2021 Starting Constituency)



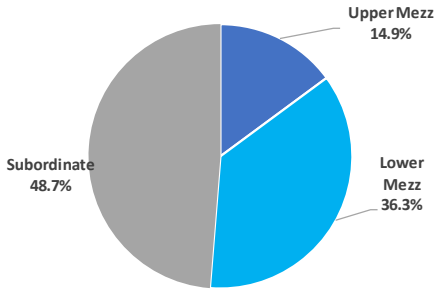


CRTx® AGG								
MONTH END CLOSINGS			BEGINNING MONTH BASKET					
Calculation Month	INDEX VALUE	Month to Date Total Return	# of Constituents	Beg Month UPB	Beg Month Total $ Market Value	WAvg Adj Beg Month Security Mkt Value	WTD Avg Current Coupon	WTD Avg Cpn Margin
Jun-2018	141.21	0.10%	174	42,864,967,271	46,548,011,728	108.59	5.53	357
Jul-2018	142.21	0.71%	175	43,499,746,985	47,020,352,767	108.09	5.64	355
Aug-2018	143.17	0.67%	178	43,951,183,222	47,607,311,601	108.32	5.60	354
Sep-2018	143.88	0.50%	181	44,461,531,990	48,228,311,665	108.47	5.59	353
Oct-2018	143.48	-0.28%	184	44,818,307,961	48,627,472,412	108.50	5.74	353
Nov-2018	142.93	-0.38%	194	46,292,107,661	49,742,058,694	107.45	5.79	351
Dec-2018	141.80	-0.79%	196	46,818,174,805	49,837,570,835	106.45	5.82	350
Jan-2019	144.38	1.82%	194	46,413,757,739	48,813,599,349	105.17	6.02	351
Feb-2019	145.35	0.67%	197	46,772,850,585	49,835,261,884	106.55	6.03	352
Mar-2019	145.38	0.03%	203	48,032,924,530	51,194,424,387	106.58	6.00	351
Apr-2019	146.85	1.01%	207	49,316,494,813	52,277,031,986	106.00	5.98	349
May-2019	146.57	-0.19%	209	49,790,890,759	53,037,404,665	106.52	5.96	348
Jun-2019	146.96	0.27%	213	49,953,468,597	52,833,120,553	105.77	5.92	349
Jul-2019	147.90	0.64%	209	49,366,797,803	52,160,276,911	105.66	5.91	350
Aug-2019	147.57	-0.22%	216	50,468,731,712	53,381,992,659	105.77	5.76	349
Sep-2019	148.53	0.65%	219	50,665,720,866	53,218,677,450	105.04	5.63	349
Oct-2019	149.04	0.34%	222	50,254,380,617	52,920,221,300	105.31	5.53	351
Nov-2019	149.76	0.48%	228	50,975,909,280	53,606,190,708	105.16	5.33	351
Dec-2019	150.73	0.65%	233	51,029,160,871	53,690,414,024	105.22	5.23	352
Jan-2020	152.55	1.21%	228	49,686,844,416	52,466,578,192	105.60	5.35	356
Feb-2020	152.31	-0.16%	232	50,374,851,983	53,578,983,475	106.36	5.20	354
Mar-2020	113.64	-25.39%	240	52,372,791,379	55,277,944,042	105.55	5.11	348
Apr-2020	123.83	8.97%	234	52,340,281,038	40,767,783,875	77.89	4.45	351
May-2020	132.53	7.03%	229	50,951,320,646	42,820,320,693	84.04	4.03	355
Jun-2020	144.50	9.04%	218	48,983,309,963	43,695,592,838	89.21	3.77	360
Jul-2020	143.94	-0.39%	214	46,718,914,995	45,227,362,482	96.81	3.83	365
Aug-2020	146.37	1.69%	217	46,681,772,649	44,843,108,762	96.06	3.87	370
Sep-2020	147.99	1.11%	217	46,076,349,850	44,862,684,449	97.37	3.92	374
Oct-2020	148.99	0.68%	220	45,735,370,315	44,865,412,741	98.10	3.90	375
Nov-2020	151.26	1.52%	224	46,269,817,211	45,566,172,083	98.48	3.93	378
Dec-2020	154.14	1.91%	228	46,924,624,650	46,772,793,230	99.68	3.93	378
Jan-2021	155.99	1.20%	230	47,148,362,895	47,722,154,982	101.22	3.92	377
Feb-2021	156.91	0.59%	232	47,277,423,099	48,281,726,799	102.12	3.90	377
Mar-2021	156.58	-0.21%	235	47,729,907,668	48,857,887,219	102.36	3.87	376
Apr-2021	158.54	1.25%	236	47,872,554,649	48,747,702,476	101.83	3.87	378
May-2021	159.34	0.51%	238	47,615,037,767	48,936,401,435	102.78	3.89	380

CRT x® RNI™ Select Constituent Metrics (as of June 2021 Starting Constituency)

Sponsor % of CRTx® RNI™ Mkt Val For 06/2021

Sub Index % of CRTx® RNI™ Mkt Val For 06/2021



CRTx® RNI™ AGG								
MONTH END CLOSINGS			BEGINNING MONTH BASKET					
Calculation Month	INDEX VALUE	Month to Date Total Return	# of Constituents	Beg Month UPB	Beg Month Total $ Market Value	WAvg Adj Beg Month Security Mkt Value	WTD Avg Current Coupon	WTD Avg Cpn Margin
Jun-2018	144.61	-0.14%	39	11,337,757,334	11,505,111,564	101.48	4.15	219
Jul-2018	145.92	0.90%	39	11,577,947,012	11,661,871,155	100.73	4.24	215
Aug-2018	147.50	1.08%	39	11,253,518,724	11,383,174,288	101.15	4.25	219
Sep-2018	148.40	0.61%	36	11,217,440,268	11,400,528,723	101.63	4.24	217
Oct-2018	147.29	-0.75%	40	12,003,066,631	12,221,099,442	101.82	4.43	221
Nov-2018	146.42	-0.59%	44	12,140,069,625	12,155,219,472	100.13	4.58	230
Dec-2018	144.77	-1.13%	41	11,905,003,810	11,780,986,539	98.96	4.63	232
Jan-2019	148.64	2.67%	41	11,878,828,384	11,576,357,066	97.45	4.83	232
Feb-2019	150.07	0.96%	42	11,690,163,411	11,668,711,493	99.82	4.95	244
Mar-2019	150.42	0.24%	46	11,805,116,972	11,843,264,036	100.32	5.04	255
Apr-2019	153.32	1.93%	47	11,496,051,271	11,521,401,714	100.22	5.11	263
May-2019	153.30	-0.01%	50	12,325,563,537	12,533,604,780	101.69	5.08	260
Jun-2019	154.99	1.10%	51	11,881,379,851	12,033,434,980	101.28	5.11	268
Jul-2019	156.84	1.19%	48	10,813,358,090	11,041,172,540	102.11	5.15	275
Aug-2019	157.60	0.49%	52	11,648,252,778	11,964,569,893	102.72	5.02	275
Sep-2019	158.58	0.62%	52	11,555,452,802	11,866,682,740	102.69	4.90	275
Oct-2019	158.98	0.25%	52	11,145,361,078	11,471,457,452	102.93	4.81	278
Nov-2019	159.70	0.45%	49	10,957,162,877	11,213,504,874	102.34	4.55	273
Dec-2019	161.24	0.96%	53	11,183,706,619	11,434,402,160	102.24	4.43	272
Jan-2020	163.27	1.26%	52	10,810,525,676	11,128,255,837	102.94	4.58	279
Feb-2020	163.04	-0.14%	54	11,749,620,247	12,143,765,616	103.36	4.32	266
Mar-2020	123.73	-24.11%	57	13,219,029,124	13,479,658,957	101.97	4.09	246
Apr-2020	120.70	-2.45%	55	12,791,770,386	9,863,362,399	77.11	3.43	249
May-2020	134.53	11.46%	51	11,841,276,956	8,721,408,098	73.65	3.01	252
Jun-2020	151.62	12.71%	46	10,917,819,539	8,842,509,887	80.99	2.69	253
Jul-2020	153.40	1.17%	45	10,409,152,540	9,432,905,082	90.62	2.78	259
Aug-2020	154.49	0.71%	46	10,724,189,826	9,890,825,093	92.23	2.99	282
Sep-2020	157.57	2.00%	47	10,980,427,286	10,237,992,004	93.24	3.19	301
Oct-2020	158.61	0.66%	48	11,105,630,257	10,559,393,889	95.08	3.25	310
Nov-2020	161.82	2.03%	47	10,696,965,880	10,283,123,737	96.13	3.47	333
Dec-2020	166.71	3.02%	46	10,736,337,604	10,542,306,038	98.19	3.53	339
Jan-2021	168.67	1.18%	50	11,324,184,451	11,415,597,441	100.81	3.50	337
Feb-2021	169.49	0.48%	47	10,504,416,039	10,712,665,142	101.98	3.61	350
Mar-2021	167.93	-0.92%	39	9,048,558,462	9,296,466,342	102.74	3.84	377
Apr-2021	170.69	1.64%	38	8,978,749,172	9,107,517,591	101.43	3.81	376
May-2021	172.18	0.88%	41	9,588,703,205	9,840,125,130	102.62	3.79	375

Latest Deal Performance Metrics (as of May 2021 Monthly Statements): CAS

CRTx® AGG Index Constituent Performance Data (May-2021 Monthly Statements)																
			Delinquency Pipeline								CPR	Cum Net Credit Event Test	Min CE Test	Cum Net Loss Test	DQ Test
Deal	Loss	Pool	30d	60d	90d	120d	150d	180d+	Total DQ%	MoM % Chg	1mth	Pass	Pass	Pass	Pass
CAS 2013-C01	FXD1	LLTV	0.37	0.08	0.09	0.08	0.07	-	0.69	-35%	45%	NA	YES	NA	NA
CAS 2014-C01	FXD1	LLTV	0.25	0.12	0.08	0.07	0.07	-	0.59	-34%	44%	NA	YES	NA	NA
CAS 2014-C02	FXD1	LLTV	0.33	0.14	0.11	0.06	0.08	-	0.72	-23%	42%	NA	NO	NA	NA
	FXD1	HLTV	0.45	0.15	0.10	0.08	0.12	-	0.90	-31%	41%	NA	YES	NA	NA
CAS 2014-C03	FXD2	LLTV	0.39	0.13	0.11	0.07	0.07	-	0.77	-35%	44%	NA	YES	NA	NA
	FXD2	HLTV	0.48	0.19	0.14	0.17	0.12	-	1.10	-30%	45%	NA	YES	NA	NA
CAS 2014-C04	FXD2	LLTV	0.42	0.20	0.14	0.14	0.09	-	0.99	-29%	43%	NA	YES	NA	NA
	FXD2	HLTV	0.63	0.23	0.15	0.18	0.14	-	1.33	-30%	46%	NA	YES	NA	NA
CAS 2015-C01	FXD2	LLTV	0.68	0.26	0.17	0.18	0.13	-	1.42	-29%	43%	NA	YES	NA	NA
	FXD2	HLTV	0.81	0.32	0.25	0.25	0.13	-	1.76	-32%	47%	NA	YES	NA	NA
CAS 2015-C02	FXD2	LLTV	0.82	0.29	0.22	0.19	0.17	-	1.69	-27%	44%	NA	YES	NA	NA
	FXD2	HLTV	0.93	0.44	0.26	0.21	0.24	-	2.08	-24%	46%	NA	YES	NA	NA
CAS 2015-C03	FXD2	LLTV	0.72	0.24	0.30	0.16	0.16	-	1.58	-29%	48%	NA	YES	NA	NA
	FXD2	HLTV	1.08	0.41	0.32	0.31	0.22	-	2.34	-29%	48%	NA	YES	NA	NA
CAS 2015-C04	ACT	LLTV	0.76	0.32	0.25	0.20	0.23	3.44	5.20	-11%	48%	NA	YES	NA	NO
	ACT	HLTV	0.97	0.40	0.39	0.37	0.34	4.16	6.63	-11%	50%	NA	YES	NA	NO
CAS 2016-C01	ACT	LLTV	0.64	0.26	0.23	0.19	0.24	3.38	4.94	-8%	49%	NA	YES	NA	NO
	ACT	HLTV	1.03	0.35	0.27	0.23	0.21	4.29	6.38	-11%	51%	NA	YES	NA	NO
CAS 2016-C02	ACT	LLTV	0.50	0.25	0.17	0.15	0.16	2.74	3.97	-10%	50%	NA	YES	NA	NO
CAS 2016-C03	ACT	LLTV	0.55	0.19	0.22	0.13	0.17	2.78	4.04	-10%	48%	NA	YES	NA	NO
	ACT	HLTV	0.78	0.28	0.26	0.26	0.27	3.40	5.25	-10%	51%	NA	YES	NA	NO
CAS 2016-C04	ACT	LLTV	0.64	0.27	0.26	0.18	0.18	3.13	4.66	-11%	48%	NA	YES	NA	NO
CAS 2016-C05	ACT	HLTV	0.93	0.40	0.32	0.30	0.26	3.84	6.05	-10%	49%	NA	YES	NA	NO
CAS 2016-C06	ACT	LLTV	0.65	0.26	0.25	0.21	0.18	3.26	4.81	-12%	50%	NA	YES	NA	NO
CAS 2016-C07	ACT	HLTV	0.88	0.45	0.33	0.30	0.30	4.23	6.49	-9%	53%	NA	YES	NA	NO
CAS 2017-C01	ACT	LLTV	0.62	0.27	0.19	0.18	0.18	3.24	4.68	-9%	51%	NA	YES	NA	NO
CAS 2017-C02	ACT	HLTV	0.71	0.33	0.29	0.26	0.20	3.63	5.42	-10%	49%	NA	YES	NA	NO
CAS 2017-C03	ACT	LLTV	0.61	0.21	0.19	0.18	0.14	2.82	4.15	-11%	48%	NA	YES	NA	NO
CAS 2017-C04	ACT	HLTV	0.74	0.36	0.30	0.29	0.26	3.94	5.89	-9%	46%	NA	YES	NA	NO
CAS 2017-C05	ACT	LLTV	0.49	0.23	0.21	0.21	0.14	2.90	4.18	-11%	47%	NA	YES	NA	NO
CAS 2017-C06	ACT	LLTV	0.67	0.29	0.35	0.24	0.26	3.86	5.67	-9%	47%	NA	YES	NA	NO
	ACT	HLTV	1.01	0.44	0.29	0.41	0.35	5.16	7.66	-10%	53%	NA	YES	NA	NO
CAS 2017-C07	ACT	LLTV	0.80	0.36	0.33	0.27	0.23	4.35	6.34	-7%	51%	NA	YES	NA	NO
	ACT	HLTV	1.02	0.48	0.42	0.38	0.41	5.48	8.19	-7%	55%	NA	YES	NA	NO
CAS 2018-C01	ACT	LLTV	0.72	0.33	0.24	0.27	0.22	4.16	5.94	-9%	52%	NA	YES	NA	NO
CAS 2018-C02	ACT	HLTV	0.92	0.48	0.36	0.35	0.34	4.87	7.32	-10%	52%	NA	YES	NA	NO
CAS 2018-C03	ACT	LLTV	0.83	0.38	0.29	0.25	0.29	4.40	6.44	-10%	51%	NA	YES	NA	NO
CAS 2018-C04	ACT	HLTV	1.02	0.51	0.44	0.41	0.41	5.80	8.59	-9%	52%	NA	YES	NA	NO
CAS 2018-C05	ACT	LLTV	0.78	0.42	0.27	0.33	0.28	4.84	6.92	-9%	52%	NA	YES	NA	NO
CAS 2018-C06	ACT	LLTV	0.93	0.38	0.41	0.33	0.34	5.84	8.23	-7%	54%	NA	YES	NA	NO
	ACT	HLTV	1.00	0.53	0.48	0.55	0.44	6.56	9.56	-7%	55%	NA	YES	NA	NO
CAS 2018-R07	ACT	LLTV	0.97	0.53	0.49	0.39	0.36	5.92	8.66	-6%	32%	NA	YES	NA	NO
CAS 2019-R01	ACT	HLTV	1.11	0.59	0.54	0.61	0.46	6.80	10.11	-8%	55%	NA	YES	NA	NO
CAS 2019-R02	ACT	LLTV	1.02	0.55	0.45	0.42	0.30	5.89	8.63	-7%	54%	NA	YES	NA	NO
CAS 2019-R03	ACT	LLTV	1.03	0.57	0.54	0.41	0.35	5.79	8.69	-7%	55%	NA	YES	NA	NO
CAS 2019-R04	ACT	HLTV	1.00	0.59	0.55	0.52	0.46	6.99	10.11	-7%	56%	NA	YES	NA	NO
CAS 2019-R05	ACT	LLTV	0.95	0.48	0.46	0.46	0.45	6.10	8.90	-7%	57%	NA	YES	NA	NO
CAS 2019-R06	ACT	HLTV	0.94	0.55	0.50	0.49	0.42	6.27	9.17	-6%	57%	NA	YES	NA	NO
CAS 2019-R07	ACT	LLTV	0.87	0.40	0.38	0.33	0.31	5.01	7.30	-7%	58%	NA	YES	NA	NO
CAS 2020-R01	ACT	LLTV	0.59	0.29	0.31	0.25	0.24	3.48	5.16	-9%	57%	NA	YES	NA	NO
CAS 2020-R02	ACT	HLTV	0.69	0.45	0.42	0.39	0.34	4.58	6.87	-9%	53%	NA	YES	NA	NO

Latest Deal Performance Metrics (as of May 2021 Monthly Statements): STACR

CRTx® AGG Index Constituent Performance Data (May-2021 Monthly Statements)																	
			Delinquency Pipeline								CPR	Cum Net Credit Event Test	Min CE Test	Cum Net Loss Test	DQ Test
Deal	Loss	Pool	30d	60d	90d	120d	150d	180d+	Total DQ%	MoM % Chg	1mth	Pass	Pass	Pass	Pass
STACR 2013-DN1	FXD1	LLTV	0.24	0.08	0.07	0.06	0.05	-	0.50	-23%	37%	YES	YES	NA	NA
STACR 2013-DN2	FXD1	LLTV	0.32	0.11	0.09	0.06	0.05	-	0.63	-11%	34%	YES	YES	NA	NA
STACR 2014-DN1	FXD1	LLTV	0.36	0.12	0.09	0.09	0.08	-	0.74	-10%	35%	YES	YES	NA	NA
STACR 2014-DN2	FXD1	LLTV	0.46	0.13	0.08	0.09	0.07	-	0.83	-3%	37%	YES	NO	NA	NA
STACR 2014-DN3	FXD2	LLTV	0.69	0.20	0.16	0.18	0.19	2.40	3.82	-4%	40%	YES	YES	NA	NA
STACR 2014-DN4	FXD2	LLTV	0.74	0.27	0.24	0.17	0.26	2.78	4.46	-3%	42%	YES	YES	NA	NA
STACR 2014-HQ1	FXD2	HLTV	0.91	0.18	0.21	0.19	0.24	2.71	4.44	-2%	44%	YES	YES	NA	NA
STACR 2014-HQ2	FXD2	HLTV	0.42	0.16	0.13	0.13	0.15	1.81	2.80	-8%	37%	YES	YES	NA	NA
STACR 2014-HQ3	FXD2	HLTV	0.99	0.35	0.22	0.12	0.28	3.41	5.37	-3%	43%	YES	YES	NA	NA
STACR 2015-DN1	FXD2	LLTV	0.74	0.23	0.15	0.26	0.19	2.77	4.34	-4%	43%	YES	YES	NA	NA
STACR 2015-HQ1	FXD2	HLTV	0.88	0.35	0.22	0.21	0.19	3.19	5.04	-7%	45%	YES	YES	NA	NA
STACR 2015-HQ2	FXD2	HLTV	0.40	0.15	0.12	0.12	0.14	1.76	2.69	-8%	37%	YES	YES	NA	NA
STACR 2015-DNA1	ACT	LLTV	0.33	0.11	0.10	0.15		1.48	2.17	-3%	34%	NA	YES	YES	YES
STACR 2015-DNA2	ACT	LLTV	0.77	0.25	0.19	0.34		3.25	4.80	-3%	42%	NA	YES	YES	NO
STACR 2015-DNA3	ACT	LLTV	0.75	0.19	0.19	0.35		3.19	4.67	-3%	42%	NA	YES	YES	NO
STACR 2015-HQA1	ACT	HLTV	0.91	0.35	0.26	0.54		3.70	5.76	-2%	44%	NA	YES	YES	NO
STACR 2015-HQA2	ACT	HLTV	0.84	0.28	0.25	0.51		3.82	5.70	-5%	44%	NA	YES	YES	NO
STACR 2016-DNA1	ACT	LLTV	0.60	0.22	0.16	0.33		2.82	4.13	-3%	42%	NA	YES	YES	NO
STACR 2016-DNA2	ACT	LLTV	0.85	0.24	0.24	0.36		3.39	5.08	0%	43%	NA	YES	YES	NO
STACR 2016-DNA3	ACT	LLTV	0.84	0.22	0.18	0.37		3.41	5.02	-1%	42%	NA	YES	YES	NO
STACR 2016-DNA4	ACT	LLTV	0.79	0.24	0.22	0.39		3.62	5.26	-4%	44%	NA	YES	YES	NO
STACR 2016-HQA1	ACT	HLTV	0.80	0.27	0.24	0.46		3.56	5.33	-3%	46%	NA	YES	YES	NO
STACR 2016-HQA2	ACT	HLTV	0.79	0.32	0.24	0.52		3.56	5.43	-6%	48%	NA	YES	YES	NO
STACR 2016-HQA3	ACT	HLTV	0.85	0.34	0.22	0.53		3.78	5.72	-3%	46%	NA	YES	YES	NO
STACR 2016-HQA4	ACT	HLTV	0.89	0.35	0.27	0.58		4.34	6.43	-6%	44%	NA	YES	YES	NO
STACR 2017-DNA1	ACT	LLTV	0.65	0.23	0.19	0.38		3.42	4.87	-2%	43%	NA	YES	YES	NO
STACR 2017-DNA2	ACT	LLTV	0.67	0.24	0.18	0.35		3.13	4.57	-3%	40%	NA	YES	YES	NO
STACR 2017-DNA3	ACT	LLTV	0.69	0.21	0.18	0.35		3.48	4.91	-4%	41%	NA	YES	YES	NO
STACR 2017-HQA1	ACT	HLTV	0.79	0.31	0.30	0.54		3.93	5.87	-5%	44%	NA	YES	YES	NO
STACR 2017-HQA2	ACT	HLTV	0.78	0.30	0.28	0.50		4.01	5.87	-4%	40%	NA	YES	YES	NO
STACR 2017-HQA3	ACT	HLTV	0.92	0.32	0.31	0.30	0.29	4.41	6.55	-4%	45%	NA	YES	YES	NO
STACR 2018-DNA1	ACT	LLTV	0.75	0.32	0.29	0.45		4.28	6.09	-3%	48%	NA	YES	YES	NO
STACR 2018-HQA1	ACT	HLTV	0.93	0.40	0.34	0.30	0.35	5.22	7.54	-3%	49%	NA	YES	YES	NO
STACR 2018-DNA2	ACT	LLTV	0.72	0.28	0.23	0.46		3.85	5.54	-4%	45%	NA	YES	YES	NO
STACR 2018-DNA3	ACT	LLTV	0.83	0.33	0.21	0.30	0.25	4.48	6.40	-4%	45%	NA	YES	YES	NO
STACR 2018-HQA2	ACT	HLTV	0.84	0.41	0.32	0.32	0.35	5.12	7.36	-5%	47%	NA	YES	YES	NO
STACR 2019-DNA1	ACT	LLTV	0.87	0.33	0.32	0.30	0.30	5.15	7.27	-4%	50%	NA	YES	YES	NO
STACR 2019-DNA2	ACT	LLTV	0.76	0.35	0.37	0.59		4.87	6.94	-4%	52%	NA	YES	YES	NO
STACR 2019-DNA3	ACT	LLTV	0.75	0.32	0.24	0.59		4.45	6.35	-3%	51%	NA	YES	YES	NO
STACR 2019-HQA1	ACT	HLTV	0.99	0.41	0.40	0.41	0.43	6.25	8.89	-2%	54%	NA	YES	YES	NO
STACR 2019-HQA2	ACT	HLTV	1.00	0.41	0.41	0.87		6.14	8.83	-5%	53%	NA	YES	YES	NO
STACR 2019-HQA3	ACT	HLTV	1.08	0.42	0.41	0.78		6.18	8.87	-2%	53%	NA	YES	YES	NO
STACR 2019-DNA4	ACT	LLTV	0.77	0.31	0.22	0.50		4.41	6.21	-5%	53%	NA	YES	YES	NO
STACR 2019-HQA4	ACT	HLTV	0.84	0.53	0.44	0.92		5.95	8.68	-5%	54%	NA	YES	YES	NO
STACR 2020-DNA1	ACT	LLTV	0.55	0.25	0.29	0.21	0.24	3.70	5.24	-5%	52%	NA	YES	YES	NO
STACR 2020-DNA2	ACT	LLTV	0.51	0.25	0.22	0.42		2.98	4.38	-7%	46%	NA	YES	YES	NO
STACR 2020-DNA3	ACT	LLTV	0.37	0.13	0.12	0.29		0.91	1.82	-2%	43%	NA	YES	YES	YES
STACR 2020-DNA4	ACT	LLTV	0.36	0.15	0.12	0.29		0.56	1.48	-1%	44%	NA	YES	YES	YES
STACR 2020-DNA5	ACT	LLTV	0.26	0.10	0.09	0.19		0.25	0.89	0%	33%	NA	YES	YES	YES
STACR 2020-DNA6	ACT	LLTV	0.24	0.07	0.08	0.09	0.08	0.04	0.60	9%	26%	NA	YES	YES	YES
STACR 2020-HQA1	ACT	HLTV	0.72	0.40	0.30	0.31	0.33	4.58	6.64	-6%	53%	NA	YES	YES	NO
STACR 2020-HQA2	ACT	HLTV	0.65	0.29	0.27	0.60		3.70	5.51	-5%	45%	NA	YES	YES	NO
STACR 2020-HQA3	ACT	HLTV	0.41	0.17	0.15	0.32		0.90	1.95	-1%	42%	NA	YES	YES	YES
STACR 2020-HQA4	ACT	HLTV	0.40	0.18	0.15	0.20	0.16	0.45	1.54	1%	42%	NA	YES	YES	YES
STACR 2020-HQA5	ACT	HLTV	0.27	0.13	0.14	0.26		0.17	0.97	3%	25%	NA	YES	YES	YES
STACR 2021-DNA1	ACT	LLTV	0.20	0.07	0.06	0.03	-	-	0.36	13%	19%	NA	NO	YES	YES
STACR 2021-DNA2	ACT	LLTV	0.15	0.06	0.02	-	-	-	0.23	15%	14%	NA	NO	YES	YES
STACR 2021-DNA3	ACT	LLTV	0.11	-	-			-	0.11		11%	NA	NO	YES	YES
STACR 2021-HQA1	ACT	HLTV	0.22	0.11	0.09	0.04	-	-	0.46	15%	13%	NA	NO	YES	YES

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