CRSP ZIMAN/REAL ESTATE DATA SERIES RELEASE NOTES

DECEMBER 2023 ANNUAL UPDATE

FILE VERSION SPECIFICS

- The CRSP/Ziman Real Estate Data Series contains data through December 2023, available in January 2024.
- The data series contains 679 securities of which 194 are currently trading. The date range is from 19800102-20231229.
- This release may be installed on Windows and Linux. ASCII, SAS and R versions of the data series are available for all three platforms. The Zip files available for download include a version for each different set of files, found in the table in the zip file structure section below.

RESEARCH AND PROGRAMMING NOTES

Prices and indexes in this product begin in January of 1980. This is true even when the Ziman REIT Info table states that the REIT was in existence prior to 1980.

The base year for the CRSP/Ziman Indexes is 12/30/1994, at which point they are set to a value of 100. This differs from CRSP Market Indexes which are set to 100 on 12/29/1972.

Due to some inconsistent trading early in the time series, a few additional rules were implemented to improve the continuity of the portfolios used to calculate the indexes. Please refer to Chapter 2 of the CRSP/Ziman Real Estate Data Series Guide for an explanation of universe and price selection criteria.

202312 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE	
DELISTS	DELISTS					
13401	WESTERN ASSET MORTGAGE CAP COR	WMC	95790D20	20120510	20231205	
85653	ARLINGTON ASSET INVESTMENT CORP	AAIC	04135620	19971223	20231213	
91801	CORENERGY INFRASTRUCTURE TR INC	CORR	21870U50	20070202	20231201	

CRSP DATABASE CHANGES

PERMNO	COMPANY NAME	DESCRIPTION
19858	PRESIDIO PROPERTY TRUST INC	SHARES OUTSTANDING CHANGE FROM 11860 TO 13130 FOR 20231113 – PRESENT
46703	HOST HOTELS & RESORTS INC	SHARES OUTSTANDING CHANGE FROM 705400 TO 705437 FOR 20231101 – PRESENT
86996	S B A COMMUNICATIONS CORP NEW	SHARES OUTSTANDING CHANGE FROM 108120 TO 107887 FOR 20231025 – PRESENT

202311 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE	
ADDS						
24298	NET LEASE OFFICE PROPERTIES	NLOP	64110Y10	20231102	20231130	
DELISTS	DELISTS					
86563	HERSHA HOSPITALITY TRUST	HT	42782550	19990121	20231127	

CRSP DATABASE CHANGES

PERMNO	COMPANY NAME	DESCRIPTION
15279	UNITI GROUP INC	SHARES OUTSTANDING CHANGE FROM 236540 TO 238672 FOR 20231031 – PRESENT
49744	POTLATCHDELTIC CORP	SHARES OUTSTANDING CHANGE FROM 79628 TO 79364 FOR 20231031 – PRESENT
87289	DIVERSIFIED HEALTHCARE TRUST	SHARES OUTSTANDING CHANGE FROM 240458 TO 240450 FOR 20231031 – PRESENT
90214	NEW YORK MORTGAGE TRUST INC	SHARES OUTSTANDING CHANGE FROM 90684 TO 90683 FOR 20231031 – PRESENT
92680	A G N C INVESTMENT CORP	SHARES OUTSTANDING CHANGE FROM 648000 TO 671106 FOR 20231031 – PRESENT

202310 REIT SUMMARY

CRSP DATABASE CHANGES

PERMNO	COMPANY NAME	DESCRIPTION
14252	GAMING & LEISURE PROPERTIES	SHARES OUTSTANDING CHANGE FROM 262640 TO 267016 FOR 20230929 – PRESENT
17222	INDUSTRIAL LOGISTICS PPTYS T	SHARES OUTSTANDING CHANGE FROM 65697 TO 65945 FOR 20230929 – PRESENT
89617	EQUINIX INC	SHARES OUTSTANDING CHANGE FROM 93565 TO 93883 FOR 20230929 – PRESENT
92343	RETAIL OPPORTUNITY INVST COR	SHARES OUTSTANDING CHANGE FROM 126004 TO 126002 FOR 20230929 – PRESENT
92680	A G N C INVESTMENT CORP	SHARES OUTSTANDING CHANGE FROM 606077 TO 640172 FOR 20230929 – PRESENT
92948	OFFICE PROPERTIES INCOME TRU	SHARES OUTSTANDING CHANGE FROM 48587 TO 48757 FOR 20230929 – PRESENT
92966	SEVEN HILLS REALTY TRUST	SHARES OUTSTANDING CHANGE FROM 14745 TO 14816 FOR 20230929 – PRESENT

202309 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE	
DELISTS						
17952	NECESSITY RETAIL REIT INC	RTL	02607T10	20180719	20230911	

CRSP DATABASE CHANGES

PERMNO	COMPANY NAME	DESCRIPTION
46703	HOST HOTELS & RESORTS INC	SHARES OUTSTANDING CHANGE FROM 711400 TO 711605 FOR 20230802 – PRESENT
79782	REGENCY CENTERS CORP	SHARES OUTSTANDING CHANGE FROM 171003 TO 184571 FOR 20230818 – PRESENT
86996	S B A COMMUNICATIONS CORP NEW	SHARES OUTSTANDING CHANGE FROM 108381 TO 108383 FOR 20230726 - PRESENT

202308 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE
DELISTS					
86313	URSTADT BIDDLE PROPERTIES INC	UBA	91728620	19980817	20230817
50585	URSTADT BIDDLE PROPERTIES INC	UBP	91728610	19700518	20230817

CRSP DATABASE CHANGES

PERMNO	COMPANY NAME	DESCRIPTION
13756	GLADSTONE LAND CORP	SHARES OUTSTANDING CHANGE FROM 35714 TO 35780 FOR 20230630 – 20230803 AND FROM 35780 TO 35838 FOR 20230804 - PRESENT
15279	UNITI GROUP INC	SHARES OUTSTANDING CHANGE FROM 238583 TO 236431 FOR 20230630 – 20230726 AND FROM 236431 TO 238689 FOR 20230727 - PRESENT
17222	INDUSTRIAL LOGISTICS PPTYS TR	SHARES OUTSTANDING CHANGE FROM 65698 TO 65697 FOR 20230721 - PRESENT
17952	NECESSITY RETAIL REIT INC	SHARES OUTSTANDING CHANGE FROM 134191 TO 134534 FOR 20230630 – PRESENT
18259	MEDALIST DIVERSIFIED REIT INC	SHARES OUTSTANDING CHANGE FROM 2220 TO 2219 FOR 20230605 - PRESENT
19858	PRESIDIO PROPERTY TRUST INC	SHARES OUTSTANDING CHANGE FROM 13075 TO 11850 FOR 20230630 - PRESENT
22207	GENERATION INCOME PROPERTIES INC	SHARES OUTSTANDING CHANGE FROM 2616 TO 2618 FOR 20230630 - PRESENT
22595	CHICAGO ATLANTIC REAL ES FIN INC	SHARES OUTSTANDING CHANGE FROM 18089 TO 18175 FOR 20230630 - PRESENT
23742	STAR HOLDINGS	SHARES OUTSTANDING CHANGE FROM 13300 TO 13320 FOR 20230331 - PRESENT
46703	HOST HOTELS & RESORTS INC	SHARES OUTSTANDING CHANGE FROM 711241 TO 711400 FOR 20230630 - PRESENT
49744	POTLATCHDELTIC CORP	SHARES OUTSTANDING CHANGE FROM 79916 TO 79911 FOR 20230630 - PRESENT
79782	REGENCY CENTERS CORP	SHARES OUTSTANDING CHANGE FROM 170979 TO 170556 FOR 20230630 – 20230802 AND FROM 170556 TO 171003 FOR 20230803 - PRESENT
81917	SERVICE PROPERTIES TRUST	SHARES OUTSTANDING CHANGE FROM 165446 TO 165484 FOR 20230630 – 20230803 AND FROM 165484 TO 165465 FOR 20230804 - PRESENT
83879	LAMAR ADVERTISING CO NEW	SHARES OUTSTANDING CHANGE FROM 87487 TO 87540 FOR 20230630 - PRESENT
86996	S B A COMMUNICATIONS CORP NEW	SHARES OUTSTANDING CHANGE FROM 108339 TO 108381 FOR 20230630 - PRESENT
87289	DIVERSIFIED HEALTHCARE TRUST	SHARES OUTSTANDING CHANGE FROM 239792 TO 239787 FOR 20230727 - PRESENT
89617	EQUINIX INC	SHARES OUTSTANDING CHANGE FROM 93523 TO 93565 FOR 20230630 - PRESENT
89823	GLADSTONE COMMERCIAL CORP	SHARES OUTSTANDING CHANGE FROM 39999 TO 39918 FOR 20230630 - PRESENT
90092	SABRA HEALTHCARE REIT INC	SHARES OUTSTANDING CHANGE FROM 231195 TO 231219 FOR 20230630 - PRESENT
90214	NEW YORK MORTGAGE TRUST INC	SHARES OUTSTANDING CHANGE FROM 91180 TO 91250 FOR 20230630 - PRESENT
92680	A G N C INVESTMENT CORP	SHARES OUTSTANDING CHANGE FROM 595712 TO 603300 FOR 20230630 – 20230730 AND FROM 603300 TO 606077 FOR 20230731 - PRESENT
92948	OFFICE PROPERTIES INCOME TRUST	SHARES OUTSTANDING CHANGE FROM 48588 TO 48587 FOR 20230725 - PRESENT

202307 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE	
DELISTS						
81675	LIFE STORAGE INC	LSI	53223X10	19950621	20230719	

PERMNO	COMPANY NAME	DESCRIPTION
14252	GAMING & LEISURE PROPERTIES INC	SHARES OUTSTANDING CHANGE FROM 262356 TO 262640 FOR 20230630 – PRESENT
17222	INDUSTRIAL LOGISTICS PPTYS TR	SHARES OUTSTANDING CHANGE FROM 65566 TO 65698 FOR 20230630 - PRESENT
87289	DIVERSIFIED HEALTHCARE TRUST	SHARES OUTSTANDING CHANGE FROM 239682 TO 239792 FOR 20230616 - PRESENT
92343	RETAIL OPPORTUNITY INVST CORP	SHARES OUTSTANDING CHANGE FROM 126025 TO 126004 FOR 20230630 – PRESENT
92948	OFFICE PROPERTIES INCOME TRUST	SHARES OUTSTANDING CHANGE FROM 48564 TO 48588 FOR 20230630 - PRESENT
92966	SEVEN HILLS REALTY TRUST	SHARES OUTSTANDING CHANGE FROM 14707 TO 14745 FOR 20230630 - PRESENT

202306 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE	
DELISTS						
85982	INDUS REALTY TRUST INC	INDT	45580R10	20210104	20230628	

CRSP DATABASE CHANGES

PERMNO	COMPANY NAME	DESCRIPTION
14252	GAMING & LEISURE PROPERTIES INC	SHARES OUTSTANDING CHANGE FROM 262657 TO 262356 FOR 20230421 – PRESENT
46703	HOST HOTELS & RESORTS INC	SHARES OUTSTANDING CHANGE FROM 711200 TO 711241 FOR 20230503 - PRESENT
86996	S B A COMMUNICATIONS CORP NEW	SHARES OUTSTANDING CHANGE FROM 108326 TO 108339 FOR 20230426 - PRESENT
89617	EQUINIX INC	SHARES OUTSTANDING CHANGE FROM 93515 TO 93523 FOR 20230504 - PRESENT

202305 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE
DELISTS	DELISTS				
19033	BROADMARK REALTY CAPITAL INC	BRMK	11135B10	20191115	20230530

PERMNO	COMPANY NAME	DESCRIPTION
13700	WHEELER REAL ESTATE INV TR INC	SHARES OUTSTANDING CHANGE FROM 9794 TO 9800 FOR 20230331 – PRESENT
14252	GAMING & LEISURE PROPERTIES INC	SHARES OUTSTANDING CHANGE FROM 262356 TO 262657 FOR 20230331 - PRESENT
15279	UNITI GROUP INC	SHARES OUTSTANDING CHANGE FROM 238585 TO 238583 FOR 20230327 - PRESENT
15912	GLOBAL SELF STORAGE INC	SHARES OUTSTANDING CHANGE FROM 11835 TO 13075 FOR 20230512 - PRESENT
22595	CHICAGO ATLANTIC REAL ES FIN INC	SHARES OUTSTANDING CHANGE FROM 18082 TO 18089 FOR 20230414 - PRESENT
46703	HOST HOTELS & RESORTS INC	SHARES OUTSTANDING CHANGE FROM 712487 TO 711200 FOR 20230331 - PRESENT
79782	REGENCY CENTERS CORP	SHARES OUTSTANDING CHANGE FROM 171308 TO 170475 FOR 20230503 - PRESENT
81917	SERVICE PROPERTIES TRUST	SHARES OUTSTANDING CHANGE FROM 165450 TO 165446 FOR 20230331 - PRESENT
83879	LAMAR ADVERTISING CO NEW	SHARES OUTSTANDING CHANGE FROM 87458 TO 87487 FOR 20230428 - PRESENT
85982	INDUS REALTY TRUST INC	SHARES OUTSTANDING CHANGE FROM 10195 TO 10198 FOR 20230501 – PRESENT
86996	S B A COMMUNICATIONS CORP NEW	SHARES OUTSTANDING CHANGE FROM 108039 TO 108326 FOR 20230331 - PRESENT
87289	DIVERSIFIED HEALTHCARE TRUST	SHARES OUTSTANDING CHANGE FROM 239685 TO 239682 FOR 20230503 - PRESENT
89617	EQUINIX INC	SHARES OUTSTANDING CHANGE FROM 92784 TO 93515 FOR 20230331 – PRESENT
89823	GLADSTONE COMMERCIAL CORP	SHARES OUTSTANDING CHANGE FROM 40390 TO 39998 FOR 20230503 - PRESENT
90092	SABRA HEALTHCARE REIT INC	SHARES OUTSTANDING CHANGE FROM 231159 TO 231195 FOR 20230427 - PRESENT
90214	NEW YORK MORTGAGE TRUST INC	SHARES OUTSTANDING CHANGE FROM 91411 TO 91180 FOR 20230428 - PRESENT
90506	SOTHERLY HOTELS INC	SHARES OUTSTANDING CHANGE FROM 18119 TO 18952 FOR 20230505 - PRESENT
92343	RETAIL OPPORTUNITY INVST CORP	SHARES OUTSTANDING CHANGE FROM 125025 TO 20230505 FOR 20230420 - PRESENT
92680	A G N C INVESTMENT CORP	SHARES OUTSTANDING CHANGE FROM 592500 TO 595712 FOR 20230428 - PRESENT

202304 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE
ADDS					
23829	PEAKSTONE REALTY TRUST	PKST	39818P79	20230413	20230428

CRSP DATABASE CHANGES

PERMNO	COMPANY NAME	DESCRIPTION
14252	GAMING & LEISURE PROPERTIES INC	SHARES OUTSTANDING CHANGE FROM 262356 TO 262354 FOR 20230331 – PRESENT
15279	UNITI GROUP INC	SHARES OUTSTANDING CHANGE FROM 238585 TO 237253 FOR 20230331 - PRESENT
15912	GLOBAL SELF STORAGE INC	SHARES OUTSTANDING CHANGE FROM 11105 TO 11109 FOR 20230331 - PRESENT
19858	PRESIDIO PROPERTY TRUST INC	SHARES OUTSTANDING CHANGE FROM 13075 TO 11656 FOR 20230331 - PRESENT
22207	GENERATION INCOME PROPERTIES INC	SHARES OUTSTANDING CHANGE FROM 2611 TO 2508 FOR 20230331 - PRESENT
49744	POTLATCHDELTIC CORP	SHARES OUTSTANDING CHANGE FROM 79916 TO 79683 FOR 20230331 - PRESENT
75846	SAFEHOLD INC NEW	SHARES OUTSTANDING CHANGE FROM 13894 TO 13894 FOR 20230331 - PRESENT
81917	SERVICE PROPERTIES TRUST	SHARES OUTSTANDING CHANGE FROM 165450 TO 165500 FOR 20230331 - PRESENT
83879	LAMAR ADVERTISING CO NEW	SHARES OUTSTANDING CHANGE FROM 87458 TO 87328 FOR 20230331 - PRESENT
85982	INDUS REALTY TRUST INC	SHARES OUTSTANDING CHANGE FROM 10194 TO 10192 FOR 20221230 – PRESENT
86996	S B A COMMUNICATIONS CORP NEW	SHARES OUTSTANDING CHANGE FROM 108039 TO 107997 FOR 20230228 - PRESENT
90506	SOTHERLY HOTELS INC	SHARES OUTSTANDING CHANGE FROM 19236 TO 18119 FOR 20230331 - PRESENT
92343	RETAIL OPPORTUNITY INVST CORP	SHARES OUTSTANDING CHANGE FROM 125025 TO 124610 FOR 20230331 - PRESENT

202303 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE
ADDS					
23742	STAR HOLDINGS	STH0	85512G10	20230331	20230331
DELISTS					
16770	SAFEHOLD INC	SAFE	78645L10	20170622	20230330

PERMNO	COMPANY NAME	DESCRIPTION
13700	WHEELER REAL ESTATE INV TR INC	SHARES OUTSTANDING CHANGE FROM 3379 TO 9794 FOR 20230131 – PRESENT
13756	GLADSTONE LAND CORP	SHARES OUTSTANDING CHANGE FROM 35050 TO 35714 FOR 20230217 - PRESENT
14252	GAMING & LEISURE PROPERTIES INC	SHARES OUTSTANDING CHANGE FROM 260727 TO 262354 FOR 20230214 - PRESENT
15279	UNITI GROUP INC	SHARES OUTSTANDING CHANGE FROM 235829 TO 237253 FOR 20230217 - PRESENT
15912	GLOBAL SELF STORAGE INC	SHARES OUTSTANDING CHANGE FROM 11106 TO 11109 FOR 20221230 - PRESENT
17222	INDUSTRIAL LOGISTICS PPTYS TR	SHARES OUTSTANDING CHANGE FROM 65568 TO 65566 FOR 20230209 - PRESENT
18259	MEDALIST DIVERSIFIED REIT INC	SHARES OUTSTANDING CHANGE FROM 17440 TO 17758 FOR 20221230 - PRESENT
19858	PRESIDIO PROPERTY TRUST INC	SHARES OUTSTANDING CHANGE FROM 12233 TO 11656 FOR 20221230 - PRESENT
22207	GENERATION INCOME PROPERTIES INC	SHARES OUTSTANDING CHANGE FROM 2496 TO 2502 FOR 20221230 - 20230103
22595	CHICAGO ATLANTIC REAL ES FIN INC	SHARES OUTSTANDING CHANGE FROM 17658 TO 17767 FOR 20221230 – 20230307

PERMNO	COMPANY NAME	DESCRIPTION
46703	HOST HOTELS & RESORTS INC	SHARES OUTSTANDING CHANGE FROM 713400 TO 713479 FOR 20230217 - PRESENT
79782	REGENCY CENTERS CORP	SHARES OUTSTANDING CHANGE FROM 170659 TO 171308 FOR 20230216 - PRESENT
81917	SERVICE PROPERTIES TRUST	SHARES OUTSTANDING CHANGE FROM 165453 TO 165500 FOR 20230224 - PRESENT
83879	LAMAR ADVERTISING CO NEW	SHARES OUTSTANDING CHANGE FROM 87327 TO 87328 FOR 20230201 - PRESENT
85982	INDUS REALTY TRUST INC	SHARES OUTSTANDING CHANGE FROM 10192 TO 10194 FOR 20230224 - PRESENT
87289	DIVERSIFIED HEALTHCARE TRUST	SHARES OUTSTANDING CHANGE FROM 239704 TO 239695 FOR 20221230 – 20230223
89617	EQUINIX INC	SHARES OUTSTANDING CHANGE FROM 92745 TO 92784 FOR 20230224 - PRESENT
89823	GLADSTONE COMMERCIAL CORP	SHARES OUTSTANDING CHANGE FROM 39744 TO 39987 FOR 20230222 - 20230228
90092	SABRA HEALTHCARE REIT INC	SHARES OUTSTANDING CHANGE FROM 231009 TO 231159 FOR 20230214 - PRESENT
90214	NEW YORK MORTGAGE TRUST INC	SHARES OUTSTANDING CHANGE FROM 364775 TO 365642 FOR 20230215 - 20230308
92343	RETAIL OPPORTUNITY INVST CORP	SHARES OUTSTANDING CHANGE FROM 124539 TO 124610 FOR 20230209 - PRESENT
92680	A G N C INVESTMENT CORP	SHARES OUTSTANDING CHANGE FROM 574600 TO 575078 FOR 20230224 - PRESENT
92948	OFFICE PROPERTIES INCOME TRUST	SHARES OUTSTANDING CHANGE FROM 48566 TO 48564 FOR 20230214 - PRESENT

202302 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE
ADDS					
23711	STRAWBERRY FIELDS REIT INC	STRW	86318210	20230222	20230228
DELISTS					
15052	STORE CAPITAL CORP	STOR	86212110	20141118	20230202

PERMNO	COMPANY NAME	DESCRIPTION
13700	WHEELER REAL ESTATE INV TR INC	SHARES OUTSTANDING CHANGE FROM 9793 TO 3379 FOR 20230131 – PRESENT
13756	GLADSTONE LAND CORP	SHARES OUTSTANDING CHANGE FROM 34704 TO 35050 FOR 20221230 - PRESENT
14252	GAMING & LEISURE PROPERTIES INC	SHARES OUTSTANDING CHANGE FROM 257517 TO 260727 FOR 20221230 - PRESENT
15279	UNITI GROUP INC	SHARES OUTSTANDING CHANGE FROM 237200 TO 235829 FOR 20221230 - PRESENT
17222	INDUSTRIAL LOGISTICS PPTYS TR	SHARES OUTSTANDING CHANGE FROM 65569 TO 65568 FOR 20221230 - PRESENT
46703	HOST HOTELS & RESORTS INC	SHARES OUTSTANDING CHANGE FROM 715028 TO 713400 FOR 20221230 - PRESENT
49744	POTLATCHDELTIC CORP	SHARES OUTSTANDING CHANGE FROM 80777 TO 79683 FOR 20221230 - PRESENT
79782	REGENCY CENTERS CORP	SHARES OUTSTANDING CHANGE FROM 171123 TO 170659 FOR 20221230 - PRESENT
83879	LAMAR ADVERTISING CO NEW	SHARES OUTSTANDING CHANGE FROM 87263 TO 87327 FOR 20221230 - PRESENT
86996	S B A COMMUNICATIONS CORP NEW	SHARES OUTSTANDING CHANGE FROM 107966 TO 107997 FOR 20221230 – PRESENT
89617	EQUINIX INC	SHARES OUTSTANDING CHANGE FROM 92621 TO 92745 FOR 20230216 - PRESENT
89823	GLADSTONE COMMERCIAL CORP	SHARES OUTSTANDING CHANGE FROM 39607 TO 39744 FOR 20221230 - PRESENT
90092	SABRA HEALTHCARE REIT INC	SHARES OUTSTANDING CHANGE FROM 230977 TO 231009 FOR 20221230 - PRESENT
90214	NEW YORK MORTGAGE TRUST INC	SHARES OUTSTANDING CHANGE FROM 371063 TO 364775 FOR 20221230 - PRESENT
92343	RETAIL OPPORTUNITY INVST CORP	SHARES OUTSTANDING CHANGE FROM 124542 TO 124539 FOR 20221230 - PRESENT
92680	A G N C INVESTMENT CORP	SHARES OUTSTANDING CHANGE FROM 571622 TO 574600 FOR 20221230 - PRESENT

DELIVERY METHOD, INSTALLS, AND DATA FORMATS

DELIVERY

CRSP data delivery for all products is available through the "Cloud." By utilizing IPSwitch's MOVEit Cloud product (https://crsp.moveitcloud.com, you can download data products either on demand, or with scheduled processes.

ZIP INSTALLS

CRSP uses a zip process for data installation. ZIP utilities that are standard on all platforms should work to unzip the databases. On Windows computers, CRSP recommends using 7-ZIP, which can be downloaded from this site: https://www.7-zip.org/

Several important items to note:

- All directories are extracted to lower case letters. For example: C:\crspdata\raz201308
- All Windows Users: Extracting a zipped file does not create an installed program in Windows. It will not show in the Windows Control Panel. When uninstalling the data, just delete the directories that contain the detailed files

Red Hat Linux Users: If your version of Red Hat is earlier than 6.0, you will need to install an updated version of the "File Roller" program in order to install the data.

ZIP FILE STRUCTURE AND PROCESS:

Four individual zip files need to be unzipped separately. Unzip the files into the root or home or your target directory. For example, c:\ in Windows; /home for Linux. The unzip process will created the \crspdata subdirectory.

Note that the destination directories have also changed as part of this process:

ZIP FILE ON DISK	DESCRIPTION	INSTALL PATH
RAZYYYYMM_ASCII	ASCII FILES	\CRSPDATA\RAZYYYYMM_ASCII
RAZYYYYMM_SAS	SAS FILES	\CRSPDATA\RAZYYYYMM_SAS
RAZYYYYMM_R	R FILES	\CRSPDATA\RAZYYYYMM_R

Contact CRSP Client Services for assistance at support@crsp.org or call 312-263-6400, Option 2.

SYSTEM REQUIREMENTS

- SAS, ASCII, R, or an analytical tool of your choice
- Sufficient disk space to load and manipulate the data series.*

DATA SERIES FORMAT	MONTHLY DATA SERIES	DAILY/MONTHLY DATA SERIES
ASCII	11.9 MB	255 MB
SAS	13.4 MB	275 MB
R FILES	N/A	37 MB

^{*}Additional disk space will be needed for data manipulation.

File name specifications and installation information can now be found in the CRSP/Ziman Real Estate Data Series Guide.