

# CRSP/ZIMAN REAL ESTATE DATA SERIES RELEASE NOTES

DECEMBER 2010 ANNUAL UPDATE

## FILE VERSION SPECIFICS

- The CRSP/Ziman Real Estate Data Series contains data through December 2010.
- The data series contains 527 securities of which 163 are currently trading.
- There is one DVD included with this release that may be installed on three platforms: Windows, Linux and Sun. ASCII and SAS versions of the data series are available for all three platforms, and in addition, a Microsoft Access database is available for Windows.
- Installation is done with InstallAnywhere®. Because files are compressed, in order to access them, they must first be installed on your computer.

## 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.

## **201012 REIT INDEXES SUMMARY**

### **CRSP DATABASE CHANGES**

PERMNO 85472 (INVESTORS REAL ESTATE TRUST) had a shares outstanding change from 78158 to 78552 for 20100903-20101028 and from 78158 to 79093 for 20101029-20101130

PERMNO 90092 (SABRA HEALTHCARE REIT INC) had a shares outstanding change from 8319 to 24932 for 20101116-20101130

PERMNO 92620 (HATTERAS FINANCIAL CORP) had a price change from 30.80 to 30.81 on 20101126

PERMNO 92111 (CARE INVESTMENT TRUST INC) added a delisting price of \$7.00 on 20100827

### **INDEXES DIFFS:**

(any change over 5% for 1000800 and 1000850, except new adds and drops, or any suspicious change in returns, usdval or usdcnt for any indno)

### **Daily:**

INDNOs 1000803 & 1000853 had an absolute value change of 42.15% for usdvals on 20100827 due to a next price added to PERMNO 92111 (CARE INVESTMENT TRUST INC)'s delisting array on 20100827

INDNOs 1000803 & 1000853 had an absolute value change of 20.00% for usdcnts on 20100827 due to a next price added to PERMNO 92111 (CARE INVESTMENT TRUST INC)'s delisting array on 20100827

INDNOs 1000806 & 1000856 had an absolute value change of 8.33% for usdcnts on 20100827 due to a next price added to PERMNO 92111 (CARE INVESTMENT TRUST INC)'s delisting array on 20100827

**Monthly:**

INDNOs 1000803 & 1000853 had an absolute value change of 51.65% for usdvals on 20100831 due to a next price added to PERMNO 92111 (CARE INVESTMENT TRUST INC)'s delisting array on 20100827

INDNOs 1000803 & 1000853 had an absolute value change of 20.00% for usdcnts on 20100831 due to a next price added to PERMNO 92111 (CARE INVESTMENT TRUST INC)'s delisting array on 20100827

INDNOs 1000806 & 1000856 had an absolute value change of 8.33% for usdcnts on 20100831 due to a next price added to PERMNO 92111 (CARE INVESTMENT TRUST INC)'s delisting array on 20100827

INDNOs 1000803 & 1000853 had an absolute value change of 6.69% & 6.95%, respectively, for treturns on 20100831 due to a next price added to PERMNO 92111 (CARE INVESTMENT TRUST INC)'s delisting array on 20100827

**201011 REIT INDEXES SUMMARY****CRSP ADDS, DELISTS AND CHANGES**

PERMNO 90092 (SABRA HEALTHCARE REIT INC) added on 20101116

**CRSP DATABASE CHANGES**

PERMNO 52214 (MISSION WEST PPTYS INC MD) had a shares outstanding change from 21959 to 22013 for the period 20100930-20101108

PERMNO 81087 (SUPERTEL HOSPITALITY INC) had a shares outstanding change from 22869 to 22918 for the period 20100930 - 20101130

PERMNO 89823 (GLADSTONE COMMERCIAL CORP) had a shares outstanding change from 8545 to 8605 for the period 20100930 - 20101130

PERMNO 90214 (NEW YORK MORTGAGE TRUST INC) had a shares outstanding change from 9419 to 9425 for the period 20100930 - 20101130

PERMNO 91285 (VESTIN REALTY MORTGAGE II INC) had a shares outstanding change from 13513 to 13322 for the period 20100930 - 20101130

PERMNO 91373 (VESTIN REALTY MORTGAGE I INC) had a shares outstanding change from 6489 to 6444 for the period 20100930 - 20101130

**201010 REIT INDEXES SUMMARY****CRSP ADDS, DELISTS AND CHANGES**

PERMNO 12323 (CAMPUS CREST COMMUNITIES INC) added on 20101014

**CRSP DATABASE CHANGES**

PERMNO 92680 (AMERICAN CAPITAL AGENCY CORP) had a shares outstanding change from 36459 to 38967 for the period 20100915-20100930.

**201009 REIT INDEXES SUMMARY****CRSP ADDS, DELISTS AND CHANGES**

PERMNO 12093 (CORESITE REALTY CORP) added on 20100923.

**CRSP DATABASE CHANGES**

PERMNO 85472 (INVESTORS REAL ESTATE TRUST) had a shares outstanding change from 77672 to 78158 for the period 20100730-20100831.

PERMNO 92680 (AMERICAN CAPITAL AGENCY CORP) had a shares outstanding change from 33660 to 36459 for the period 20100831.

**201008 REIT INDEXES SUMMARY****CRSP ADDS, DELISTS AND CHANGES**

PERMNO 12070 (WHITESTONE REIT) added on 20100826.

PERMNO 92111 (CARE INVESTMENT TRUST INC) delisted on 20100826.

## HISTORICAL CHANGES

PERMNO 85653 (ARLINGTON ASSET INVESTMENT CORP) stopped trading as a REIT on 20090101.

PERMNO 89805 (CAPITALSOURCE INC) stopped trading as a REIT on 20090101.

## CRSP DATABASE CHANGES

PERMNO 81087 (SUPERTEL HOSPITALITY INC) had a shares outstanding change from 22002 to 22869 for the period 20100630-20100730.

PERMNO 85472 (INVESTORS REAL ESTATE TRUST) had a shares outstanding change from 76251 to 77672 for the period 20100723-20100730.

PERMNO 86367 (EASTERN LIGHT CAPITAL INC) had a shares outstanding change from 500 to 353 for the period 20100528-20100730.

PERMNO 90506 (M H I HOSPITALITY CORP) had a shares outstanding change from 9520 to 9541 for the period 20100630-20100730.

PERMNO 91285 (VESTIN REALTY MORTGAGE II INC) had a shares outstanding change from 13616 to 13513 for the period 20100630-20100730.

PERMNO 91373 (VESTIN REALTY MORTGAGE I INC) had a shares outstanding change from 6499 to 6489 for the period 20100630-20100730.

PERMNO 92343 (RETAIL OPPORTUNITY INVST COR ) had a shares outstanding change from 41805 to 45170 for the period 20100630-20100730.

PERMNO 92680 (AMERICAN CAPITAL AGENCY CORP) had a shares outstanding change from 32760 to 33660 for the period 20100630-20100730.

## INDEX DIFFS

The following differences listed below include:

- With the exception of added or dropped securities, any change over 5% for INDNOs

1000800 and 1000850

- Any suspicious change in returns, usdval, or usdnt for any INDNO.

### Daily

INDNO 1000802 & 1000852 had an absolute value change ranging from 5.08%-1000% for dropvals and obsvals for the period 200900105-20100618 due to PERMNOS 85653 and 89805 loss of REIT status on 20090102.

INDNO 1000850 & 1000800 had an absolute value change of 200% for dropcnts on 20090227 due to PERMNOS 85653 and 89805 loss of REIT status on 20090102.

INDNO 1000805 & 1000855 had absolute value changes ranging from 7.69%-1000% for dropcnts, begcnts, and obscnts for the period 20090105-20100730 due to PERMNOS 85653 and 89805 loss of REIT status on 20090102.

INDNO 1000802 & 1000852 had absolute value changes ranging from 5.09%-13.95% for hhis for the period 20090313 -20100719 due to PERMNOS 85653 and 89805 loss of REIT status on 20090102.

INDNO 1000802 & 1000852 had absolute value changes ranging from 5.00%-7.00% for conratio for the period 20090507-20091005 due to PERMNOS 85653 and 89805 loss of REIT status on 20090102.

INDNO 1000805 & 1000855 had absolute value changes ranging from 7.69%-8.22% for usdnt & totcnts for the period 20090115-20100730 due to PERMNOS 85653 and 89805 loss of REIT status on 20090102.

INDNO 1000855 had absolute values ranging from 5.04%-15.58% for alevels & tlevels for the period 20090319-20100730 due to PERMNOS 85653 and 89805 loss of REIT status on 20090102.

INDNO 1000802 & 1000852 had absolute value changes ranging from 5.00%-804% for totals and usdvals for the period 20090210-20100730 due to PERMNOS 85653 and 89805 loss of REIT status on 20090102.

**Monthly**

INDNO 1000805 & 1000855 had absolute value changes ranging from 7.69%-1000% for dropcnts, begcnts, and obscnts for the period 20090227-20100730 due to PERMNOS 85653 and 89805 loss of REIT status on 20090102.

INDNO 1000802 & 1000852 had an absolute value change ranging from 5.08%-1000% for dropvals and obsvals for the period 20090227-20100528 due to PERMNOS 85653 and 89805 loss of REIT status on 20090102.

INDNO 1000802 & 1000852 had absolute value changes ranging from 5.30%-6.78% for conratio for the period 20090529-20090731 due to PERMNOS 85653 and 89805 loss of REIT status on 20090102.

INDNO 1000802 & 1000852 had absolute value changes ranging from 5.17%-13.95% for lhis for the period 20090331-20100730 due to PERMNOS 85653 and 89805 loss of REIT status on 20090102.

INDNO 1000855 had absolute values ranging from 6.04%-11.49% for alevels & tlevels from 20090529-20100730 due to PERMNOS 85653 and 89805 loss of REIT status on 20090102.

INDNO 1000802 & 1000852 had absolute value changes ranging from 5.08%-7.58% for totcnts and usdvals for the period 20090227-20100730 due to PERMNOS 85653 and 89805 loss of REIT status on 20090102.

INDNO 1000850 & 1000800 had an absolute value change of 55475% for dropvals on 20090227 due to PERMNOS 85653 and 89805 loss of REIT status on 20090102.

INDNO 1000805 & 1000855 had absolute value changes ranging from 7.69%-8.33% for usdcnts & totcnts for the period the period 20090227-20100730 due to PERMNOS 85653 and 89805 loss of REIT status on 20090102.

**201007 REIT INDEXES SUMMARY****CRSP DATABASE CHANGES**

PERMNO 85472 (INVESTORS REAL ESTATE TRUST) had a shares outstanding change from 74200 to 75805 for the period 20100430-20100629.

PERMNO 85472 (INVESTORS REAL ESTATE TRUST) had a shares outstanding change from 74200 to 76251 for date 20100630.

**201006 REIT INDEXES SUMMARY****CRSP ADDS, DELISTS AND CHANGES**

PERMNO 92477 (ARMOUR RESIDENTIAL REIT INC) added on 20100616.

PERMNO 93419 (HUDSON PACIFIC PROPERTIES INC) added on 20100624.

PERMNO 92343 (RETAIL OPPORTUNITY INVST CORP) is a historical change and began trading as a REIT on 20091022.

**CRSP DATABASE CHANGES**

PERMNO 92477 (ARMOUR RESIDENTIAL REIT INC) had a Price and PTYPE change on 20100201. Price went from 7.00 to 6.530 and PType from 10 to 7.

PERMNO 92477 (ARMOUR RESIDENTIAL REIT INC) had a Price and PTYPE change on 20100226. Price went from 7.00 to 0.00 and PType from 10 to 13.

PERMNO 92680 (AMERICAN CAPITAL AGENCY CORP) had a shares outstanding change from 26760 to 32760 for the period 20100525-20100528.

PERMNO 92945 (CYPRESS SHARPRIDGE INVTS INC) had a shares outstanding change from 18761 to 18768 on 20100528.

**INDEXES DIFFS**

(any change over 5% for 1000800 and 1000850, except new adds and drops, or any suspicious change in returns, usdval or usdcnt for any indno)

Indno 1000862 had an absolute value change of 1000 % for addcnts on 20091130 due to PERMNO 92343. RETAIL OPPORTUNITY INVST CORP had actually started trading as a REIT on 20091022.

Indno 1000800 had an absolute value change of 1000 % for addcnts on 20091023 due to PERMNO 92343. RETAIL OPPORTUNITY INVST CORP had actually started trading as a REIT on 20091022.

Indno 1000812 had an absolute value change of 1000 % for addcnts on 20091023 due to PERMNO 92343. RETAIL OPPORTUNITY INVST CORP had actually started trading as a REIT on 20091022.

Indno 1000851 had an absolute value change of 1000 % for addcnts on 20091023 due to PERMNO 92343. RETAIL OPPORTUNITY INVST CORP had actually started trading as a REIT on 20091022.

Indno 1000852 had an absolute value change of 1000 % for dropcnts on 20100226 due to PERMNO 92477. ARMOUR RESIDENTIAL REIT INC had a zero name line added for the period 20100201-20100615.

## 201012 REIT INDEXES SUMMARY

### CRSP DATABASE CHANGES:

PERMNO 89823 (GLADSTONE COMMERCIAL CORP) had a shares outstanding change from 8563 to 8545 for the period 20100331-20100430.

PERMNO 90506 (M H I HOSPITALITY CORP) had a shares outstanding change from 9152 to 9520 for the period 20100331-20100430.

PERMNO 91373 (VESTIN REALTY MORTGAGE I INC) had a shares outstanding change from 6499 to 6875 for the period 20100331-20100415.

PERMNO 92680 (AMERICAN CAPITAL AGENCY CORP) had a shares outstanding change from 26756 to 26760 for the period 20100331-20100430.

## 201004 REIT INDEXES SUMMARY

### CRSP ADDS, DELISTS AND CHANGES

PERMNO 93314 CHATHAM LODGING TRUST added on 20100416

PERMNO 93315 EXCEL TRUST INC added on 20100423

### CRSP DATABASE CHANGES:

PERMNO 52214 MISSION WEST PPTYS INC MD had a shares outstanding change from 21877 to 21912 for 20100331

PERMNO 55029 MONMOUTH REAL ESTATE INVT CORP had a shares outstanding change from 28290 to 28464 shares for the period 20100309-20100331

PERMNO 81087 SUPERTEL HOSPITALITY INC had a shares outstanding change from 21880 to 22002 shares for the period 20091231-20100331

PERMNO 90214 NEW YORK MORTGAGE TRUST INC had a shares outstanding change from 9415 to 9419 shares for the period 20100316-20100331

PERMNO 92680 AMERICAN CAPITAL AGENCY CORP had a shares outstanding change from 24322 to 26756 shares for the period 20100324-20100331

PERMNO 84581 PERMNO 84581 PERNIX THERAPEUTICS HLDGS INC had a share code change from 18 to 11 for 200020102-20100309.

## 201003 REIT INDEXES SUMMARY

### CRSP ADDS, DELISTS AND CHANGES

PERMNO 79129 (GENERAL GROWTH PROPERTIES INC) added on 20100305. A zero name line was added for the period 20090416-20100304 to reflect off exchange trading.

PERMNO 84581 (PERNIX THERAPEUTICS HLDGS INC) changed from REIT status to common stock on 20100310



**CRSP DATABASE CHANGES:**

PERMNO 52214 (MISSION WEST PPTYS INC MD) had a shares outstanding change from 21770 to 21870 for the period 20091231-20100226

PERMNO 85472 (INVESTORS REAL ESTATE TRUST) had a shares outstanding change from 73536 to 73966 shares for the period 20100129-20100226.

PERMNO 90214 (NEW YORK MORTGAGE TRUST INC) had a shares outstanding change from 9419 to 9415 shares for the period 20091231-210100226

PERMNO 90506 (M H I HOSPITALITY CORP) had a shares outstanding change from 6964 to 9097 shares for the period 20091231-20100226

PERMNO 91285 (VESTIN REALTY MORTGAGE II INC) had a shares outstanding change from 13741 to 13616 shares for the period 20091231-20100226

PERMNO 91373 (VESTIN REALTY MORTGAGE I INC) had a shares outstanding change from 6500 to 6499 shares for the period 20091231-20100226

PERMNO 79129 (GENERAL GROWTH PROPERTIES INC) had a price change from .600 to 14.010 on 20090416. Daily index used the price of 14.01 due to the zero nameline.

PERMNO 79129 (GENERAL GROWTH PROPERTIES INC) had a price change from .6 to 1.050 on 20090430. Monthly index used 1.050 due to the zero nameline.

**INDEXES DIFFS:**

(any change over 5% for 1000800 and 1000850, except new adds and drops, or any suspicious change in returns, usdval or usdnt for any indno)

**Daily:**

INDNO 1000800 had an absolute value change of 1000 % for dropcnts on 20090430 due to PERMNO 79129. GENERAL GROWTH PROPERTIES INC had a zero name line added for the period 20090416-20100304.

**201002 REIT INDICES SUMMARY****CRSP ADDS, DELISTS AND CHANGES**

PERMNO 93251 (PIEDMONT OFFICE REALTY TRUST INC) added on 20100210

PERMNO 93261 (TERRENO REALTY CORP) added on 20100210

PERMNO 92477 (ARMOUR RESIDENTIAL REIT INC) delisted on 20100129

**CRSP DATABASE CHANGES:**

PERMNO 55029 (MONMOUTH REAL ESTATE INVT CORP) had a shares outstanding change from 27845 to 28151 for the period 20091231-20100129

PERMNO 64653 (PUBLIC STORAGE) had a shares outstanding change from 168344 to 169490 for the period 20090630-20090828.

**201001 REIT INDICES SUMMARY****CRSP ADDS, DELISTS AND CHANGES**

PERMNO 93200 (CHESAPEAKE LODGING TRUST) added on 20100122

**SYSTEM REQUIREMENTS**

- SAS version 8 or higher, Microsoft Access, or an analytical tool of your choice
- A CD-ROM drive
- Sufficient disk space to load and manipulate the data series.\*

DATA SERIES FORMAT	MONTHLY DATA SERIES	DAILY/MONTHLY DATA SERIES
ASCII	9.68 MB	205 MB
Microsoft Access	9.41 MB	175 MB
SAS V 9.1	11.1 MB	217 MB

\*Additional disk space will be needed for data manipulation.

## ASCII

All files contain variable-width records, ending with line-feeds, with pipe-delimited “|” fields. There are no header records. See Table Definitions in Chapter 3 for field order in each file.

FILE NAME	DESCRIPTION
crsp_daily_data.txt*	daily REIT security data
crsp_header.txt	security REIT header data
crsp_monthly_data.txt	monthly REIT security data
crsp_names.txt	security name history of REITS
crsp_ziman_daily_index.txt*	daily index results
crsp_ziman_monthly_index.txt	monthly index results
index_type_map.txt	definitions of REIT indexes and characteristics
price_type.txt	definitions of available price types
Property_type.txt	definitions of available REIT property types
reit_type.txt	definitions of available REIT categories
sub_property_type.txt	definitions of available REIT property subtypes
ziman_reit_info.txt	REIT information

\* present in daily/monthly product only

## SAS

Column names and labels are embedded in the data sets. The full descriptions for fields can be found in the table definitions section of Chapter 3.

FILE NAME	DESCRIPTION
crsp_daily_data.sas7bdat*	daily REIT security data and index
crsp_daily_data.sas7bndx*	
crsp_header.sas7bdat	security REIT header data and index
crsp_header.sas7bndx	
crsp_monthly_data.sas7bdat	monthly REIT security data and index
crsp_monthly_data.sas7bndx	
crsp_names.sas7bdat	security name history of REITS and index
crsp_names.sas7bndx	
crsp_ziman_daily_index.sas7bdat*	daily index results and index
crsp_ziman_daily_index.sas7bndx*	
crsp_ziman_monthly_index.sas7bdat	monthly index results and index
crsp_ziman_monthly_index.sas7bndx	
index_type_map.sas7bdat	definitions of REIT indexes and characteristics
price_type.sas7bdat	definitions of available price types
Property_type.sas7bdat	definitions of available REIT property types
reit_type.sas7bdat	definitions of available REIT categories
sub_property_type.sas7bdat	definitions of available REIT property subtypes
ziman_reit_info.sas7bdat	REIT information and index
ziman_reit_info.sas7bndx	

\* present in Daily/Monthly product only

## MSACCESS

A Microsoft Access database is provided named `reit_db.mdb` containing all data tables. The database is in Access 2000 file format. The design view menu within Access can be used to view available fields, data types, and descriptions.

## DATA INSTALLATION

1. Instructions and screen shots for installation are written for Windows. Differences related to Linux and Sun are noted where applicable.

### WINDOWS:

To install data, insert your CD into the drive and from the Start Menu, select Run `d:\setupwin32.exe`. Click **OK** to proceed.

### LINUX:

Upon insertion of the CD, a file manager will open with the file, `SETUPLINUX.BIN`. Double click on this setup file and run in a terminal to begin the installation process.

### SUN:

Upon insertion of the CD, a file manager will open with the file, `SETUPSOLARIS.BIN`. Double click on this file to begin the installation process.

2. After clicking on **Next** on the Welcome screen, scroll through and read the CRSP Data and Utilities Agreement. Click to accept the terms and select **Next**.

### 3. WINDOWS:

The default directory for the data installation is `c:\crspdata\RAZyyyymm` for daily/monthly and `c:\crspdata\RMZyyyymm` for monthly only. You may accept or modify the location. Click **Next**.

### LINUX AND SUN:

The default directory for the data installation is `/crspdata/RA(or M)Zyyyymm`. You must create a root directory, for example,

`/home/username/crspdata/RA(or M)Zyyyymm`.

### 4. WINDOWS:

You have the choice of either a typical or custom installation. The typical installation will install *all* data formats (ASCII, Microsoft Access, and SAS).

### LINUX AND SUN:

ASCII and SAS data files are available for installation on Linux and Sun.

5. Selecting the Custom option will allow you to pick and choose the file types that you wish to install to your computer. Once you have checked the files you wish to install, click **Next**.
6. Once files are selected for installation, a confirmation screen with summary information is displayed, including location, data components and the amount of space that is required for the data. You may select the **Back** button if changes are needed, or **Install** to proceed.
7. A message indicating the success of the installation appears when the process is complete. Click **Finish**.