

# MSCI US REIT INDEX METHODOLOGY

Index Construction and Maintenance Methodology for the MSCI US  
REIT Index

**November 2015**

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## INTRODUCTION

The MSCI US REIT Index is a free float-adjusted market capitalization weighted index that is comprised of Equity REIT securities. The MSCI US REIT Index includes securities with exposure to core real estate (e.g. residential and retail properties) as well as securities with exposure to other types of real estate (e.g. casinos, theaters).

The MSCI US REIT Index is based on the MSCI USA Investable Market Index (IMI) (“the parent index”), which is comprised of all the securities included in the MSCI USA Large Cap, MSCI USA Mid Cap and MSCI USA Small Cap Indexes. The MSCI USA IMI is governed by the MSCI Global Investable Market Indexes methodology that is available on MSCI’s web site: <http://www.msci.com/products/indexes/size/methodology.html>.

At the November 2013 Semi-Annual Index Review, MSCI enhanced the MSCI US REIT Index methodology by transitioning the parent index used to derive the MSCI US REIT Index from the MSCI US Investable Market 2500 Index to the MSCI USA IMI. This change was implemented in order to align the parent index universe of the MSCI US REIT Index with the MSCI Global Investable Market Indexes.

This document contains the new enhanced guidelines used to maintain the MSCI US REIT Index. More details on the transition to the enhanced MSCI US REIT Index methodology are included in the Appendix.

## 1 DEFINING REITS AND THE MSCI US REIT INDEX ELIGIBLE REITS

A Real Estate Investment Trust, or REIT, is a company that in most cases owns and operates income producing real estate assets. Some REITs provide loans to the owners and operators of real estate. To qualify as a REIT under the Internal Revenue Code, a REIT is required to distribute at least 90% of its taxable income to shareholders annually and receive at least 75% of that income from rents, mortgages and sales of property.

MSCI classifies REIT securities into one of the nine Real Estate Investment Trust (REIT) Sub-Industries within the Global Industry Classification Standard (GICS®) structure. The REITs Sub-Industries are part of the Real Estate Industry, Real Estate Industry Group and the Financials Sector. The nine REITs Sub-Industries aim to represent REITs with distinct property type profiles.

REITs eligible for inclusion in the MSCI US REIT Index are REITs that are included in the MSCI USA IMI and that exhibit the following characteristics:

- Equity REIT structure (i.e. Mortgage REITs are not eligible)
- Real estate exposure (i.e. only selected Specialized REITs are eligible)

### REITs Sub-Industries: Eligibility for the MSCI US REIT Index

REITs Sub-Industry	Eligibility for the MSCI US REIT Index
Diversified REITs	Yes
Health Care REITs	Yes
Hotel & Resort REITs	Yes
Industrial REITs	Yes
<b>Mortgage REITs</b>	<b>No</b>
Office REITs	Yes
Residential REITs	Yes
Retail REITs	Yes
<b>Specialized REITs</b>	<b>Selected Specialized REITs only</b>

REITs classified in the Specialized REITs Sub-Industry are eligible for inclusion in the MSCI US REIT Index only if they own and/or operate the following types of properties:

- Storage and self-storage facilities
- Data centers
- Correctional facilities
- Theaters
- Casinos and gaming facilities
- Restaurants<sup>1</sup>

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<sup>1</sup> Effective starting from the February 2016 Quarterly Index Review.

## 2 MAINTENANCE OF THE MSCI US REIT INDEX

The maintenance of the MSCI US REIT Index includes:

- Semi-Annual Index Reviews (SAIRs) in May and November,
- Quarterly Index Reviews (QIRs) in February and August, and
- Ongoing event-related changes which are generally implemented in the indexes as they occur

### 2.1 SEMI-ANNUAL INDEX REVIEWS AND QUARTERLY INDEX REVIEWS

During Semi-Annual Index Reviews and Quarterly Index Reviews, the parent index is reviewed under the guidelines of the MSCI Global Investable Market Indexes methodology. Changes in the parent index during Index Reviews may impact the MSCI US REIT Index as follows:

- Existing constituents of the MSCI US REIT Index that are deleted from the parent index are deleted from the MSCI US REIT Index
- Eligible equity REIT securities not currently constituents of the MSCI US REIT Index that are added to the parent index are added to the MSCI US REIT Index
- Changes in the Foreign Inclusion Factors (FIF) and Number of Shares (NOS) for securities of the parent index are also applied to the securities included in the MSCI US REIT Index
- When a change in Global Industry Classification Standard (GICS®) for an existing constituent of the parent index to one of the eligible REIT Sub-Industries defined in Section 1 is announced, then provided that the date of such announcement is before the implementation date of the next Index Review, such constituent may be considered for inclusion in the MSCI US REIT Index at such Index Review

In addition, the list of eligible property types for REITs classified in the Specialized REITs Sub-Industry is reviewed during each Semi-Annual Index Review and Quarterly Index Review. Changes to the list are communicated as part of the Index Review announcements and become effective at the subsequent Index Review.

For more information on Index Reviews for the MSCI Global Investable Market Indexes, please refer to Sections 3.1 and 3.2 of the MSCI Global Investable Market Indexes methodology book.

## 2.2 ONGOING EVENT-RELATED CHANGES

The parent index is updated to reflect ongoing event-related changes in accordance with the MSCI Global Investable Market Indexes methodology. Ongoing event-related changes in the parent index are reflected in the MSCI US REIT Index at the time of the implementation of the event in the parent index:

- Existing constituents of the MSCI US REIT Index that are deleted from the parent index due to corporate events are deleted from the MSCI US REIT Index
- Eligible equity REIT securities not currently constituents of the MSCI US REIT Index that are added to the parent index due to corporate events are added to the MSCI US REIT Index
- Changes in the Foreign Inclusion Factors (FIF) and Number of Shares (NOS) for securities of the parent index due to corporate events are also applied to the securities included in the MSCI US REIT Index

For more information on the implementation of corporate events in the MSCI Global Investable Market Indexes, please refer to Section 3.3 of the MSCI Global Investable Market Indexes methodology book.

## 2.3 ANNOUNCEMENT POLICY

In line with the MSCI Global Investable Market Indexes methodology, the changes to the MSCI US REIT Index are typically announced at least ten business days prior to these changes becoming effective in the indexes as “expected” announcements, or as “undetermined” announcements, when the effective dates are not known yet or when aspects of the event are uncertain. MSCI sends “confirmed” announcements at least two business days prior to events becoming effective in the indexes provided that all necessary public information concerning the event is available. In case a “confirmed” announcement needs to be amended, MSCI sends a “correction” announcement with a descriptive text announcement to provide details about the changes made.

If warranted, MSCI may make descriptive text announcements for events that are complex in nature and for which additional clarification could be beneficial for any Standard, Small Cap and Micro Cap Indexes.

For more information on the announcement policy for the MSCI Global Investable Market Indexes, please refer to Section 3.4 of the MSCI Global Investable Market Indexes methodology book.

## APPENDIX I: PAST METHODOLOGY CHANGES FOR THE MSCI US REIT INDEX

### CHANGES APPLIED AT THE NOVEMBER 2013 SEMI-ANNUAL INDEX REVIEW

Effective at the time of the November 2013 Semi-Annual Index Review, MSCI enhanced the MSCI US REIT Index methodology by transitioning the parent index used to derive the MSCI US REIT Index from the MSCI US Investable Market 2500 Index to the MSCI USA IMI. This change was implemented in order to align the parent index universe of the MSCI US REIT Index with the MSCI Global Equity Indexes.

To reduce index turnover following the transition to the enhanced MSCI US REIT Index methodology, current constituents of the MSCI US REIT Index will remain eligible for inclusion in the MSCI US REIT Index as long as they remain in the MSCI USA Micro Cap Index.



## APPENDIX II: GLOBAL INDUSTRY CLASSIFICATION STANDARD (GICS)

### INTRODUCTION

The Global Industry Classification Standard (GICS) was developed by MSCI in collaboration with S&P Dow Jones Indices to provide an efficient, detailed and flexible tool for use in the investment process. It is designed to respond to the global financial community's need for a global, accurate, complete and widely accepted approach to defining industries and classifying securities by industry. Its universal approach to industry classification aims to improve transparency and efficiency in the investment process.

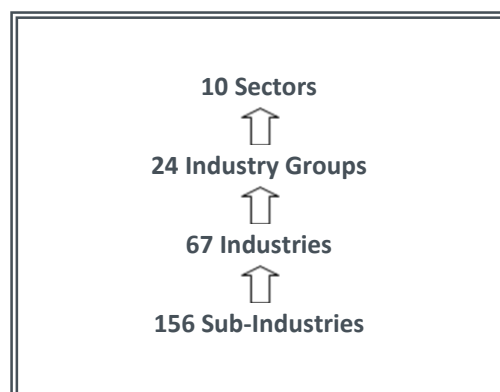
### KEY FEATURES OF THE GICS

The key features of the GICS are that it is:

- Universal: the classification applies to companies globally.
- Accurate: the structure precisely reflects the state of industries in the equity investment universe.
- Flexible: the classification consists of four levels of analysis, ranging from the most general to the most specialized sub-industry.
- Evolutionary: annual reviews are conducted to ensure that the classification remains fully representative of the universe.

To provide the level of precision critical in the investment process, the GICS is designed with four levels of classifications:

### The Global Industry Classification Standard (GICS)



The GICS has 10 sector classifications:

- Energy
- Materials
- Industrials
- Consumer Discretionary
- Consumer Staples
- Health Care
- Financials
- Information Technology
- Telecommunication Services
- Utilities.

#### **PHILOSOPHY AND OBJECTIVES OF THE GICS**

The way in which securities are classified into asset classes forms the basis of many important investment decisions. The relative merits of each security are judged primarily within these asset classes, and investment decisions are taken within this framework.

#### **APPROACHES TO INDUSTRY CLASSIFICATION SCHEMES**

While grouping securities by country and regions is relatively straightforward, classifications by industries are more difficult. There are many approaches to developing industry classification schemes, some of which are discussed below.

At one extreme is the purely statistical approach, which is solely financial market-based and backward looking, using past returns. Aggregations are formed around correlation, often yielding non-intuitive groupings that are dissimilar across countries and regions. Another approach attempts to define a priori financial market-oriented groups or themes, such as cyclical, interest rate sensitive, etc. The difficulty, however, lies in finding widely accepted and relatively stable definitions for these themes.

Two other approaches begin with an economic perspective on companies. The first focuses on a production orientation while the other adopts a market or demand orientation in company analysis. The production-oriented approach was effective in the past in its analysis of the microstructure of industries from the producers' standpoint. For instance, it segregated goods and services on the premise that it was a different set of companies that provided each to consumers. As the structure of the global economy evolved, limitations of

this approach became increasingly obvious. The ever-increasing share of discretionary income brought about by economic development, emergence of the service era, and the availability and accessibility of information with the advent of new communication technology has moved the emphasis from producers to consumers.

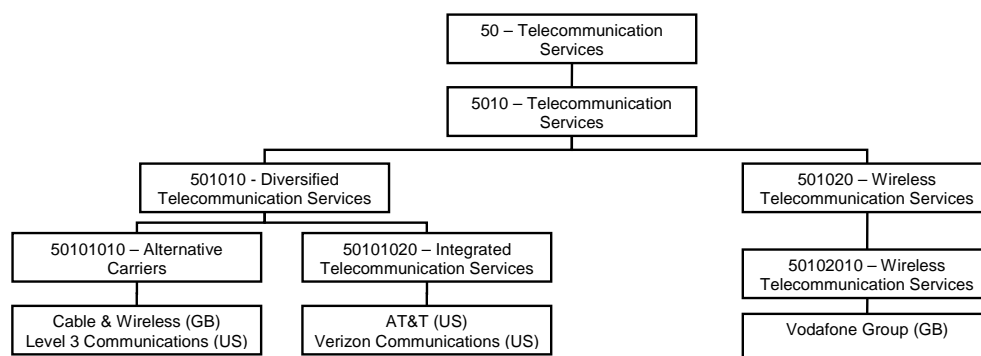
### THE GICS: MARKET DEMAND-ORIENTED

The Global Industry Classification Standard is designed to be market demand-oriented in its analysis and classification of companies. For example, drawing the line between goods and services is becoming increasingly arbitrary as they are now commonly sold together. This distinction between goods and services is replaced by adopting the more market-oriented sectors of “Consumer Discretionary” and “Consumer Staples”, which group goods and services sub-industries. In addition, the creation of large stand-alone sectors such as Health Care, Information Technology and Telecommunication Services accurately represents industries that provide significant value to the consumer in today’s global and integrated economy. This further contributes to a more uniform distribution of weights among the 10 sectors.

### GICS COMPANY CLASSIFICATION

The GICS is used to assign each company to a sub-industry according to its principal business activity. Since the GICS is strictly hierarchical, a company can only belong to one grouping at each of the four levels.

#### An Illustration of the GICS – Telecommunication Services Sector:



## CLASSIFICATION BY REVENUE

In order to provide an accurate, complete and long-term view of the global investment universe, a company's revenues often provide a more stable and precise reflection of its activities than earnings. Furthermore, industrial and geographical breakdowns of revenues are more commonly available than earnings broken down the same way for most companies. Nevertheless, company valuations are more closely related to earnings than revenues. Therefore, earnings remain an important secondary consideration in a company's industry classification.

## GENERAL GUIDELINES FOR CLASSIFICATION

The primary source of information used to classify securities is a company's annual reports and accounts. Other sources include brokers' reports and other published research literature. As a general rule, a company is classified in the sub-industry whose definition most closely describes the business activities that generate at least 60% of the company's revenues.

### Example: Nokia (FI)

2013 Results	Nokia Networks	Nokia Technologies	HERE
Revenues	89%	4%	7%
Earnings	88%	24%	-12%

Classified as:

GICS Level	GICS Code	Code Description
Sector	45	Information Technology
Industry Group	4520	Technology Hardware & Equipment
Industry	452010	Communications Equipment
Sub-Industry	45201020	Communications Equipment

However, a company engaged in two or more substantially different business activities, none of which contribute 60% or more of revenues, is classified in the sub-industry that provides the majority of both the company's revenues and earnings. When no sub-industry provides the majority of both the company's revenues and earnings, the classification will be determined based on further research and analysis. In addition, a company significantly diversified across three or more sectors, none of which contributes the majority of revenues

or earnings, is classified either in the Industrial Conglomerates sub-industry (Industrial Sector) or in the Multi-Sector Holdings sub-industry (Financials Sector).

#### Example: General Electric (US)

2006 Results	Infrastructure	Industrial	Healthcare	NBC Universal	Comercial Finance	Consumer Finance
Revenues	30%	21%	10%	10%	15%	14%
Earnings	34%	10%	12%	11%	19%	13%

Classified as:

GICS Level	GICS Code	Code Description
Sector	20	Industrials
Industry Group	2010	Capital Goods
Industry	201050	Industrial Conglomerates
Sub-Industry	20105010	Industrial Conglomerates

In the case of a new issue, the classification will be determined based primarily on the description of the company's activities and pro forma results as given in the prospectus.

#### REVIEW OF SUB-INDUSTRY CLASSIFICATION

A company's sub-industry classification will be reviewed either when a significant corporate restructuring occurs or when a new annual report is available. In order to provide a stable sub-industry classification, when reviewing a company's classification, changes will be minimized in the sub-industry classification to the extent possible by disregarding temporary fluctuations in the results of a company's different activities.

In the event that the above guidelines should not appropriately capture a particular company's business activity, its classification will be determined based on more extensive analysis.

GICS (Global Industry Classification Standard) Effective after close of business (US, EST) Friday February 28, 2014			
Sector	Industry Group	Industry	Sub-Industry
10 Energy	1010 Energy	101010 Energy Equipment & Services	10101010 Oil & Gas Drilling
			10101020 Oil & Gas Equipment & Services
		101020 Oil, Gas & Consumable Fuels	10102010 Integrated Oil & Gas
			10102020 Oil & Gas Exploration & Production
			10102030 Oil & Gas Refining & Marketing
			10102040 Oil & Gas Storage & Transportation
			10102050 Coal & Consumable Fuels
15 Materials	1510 Materials	151010 Chemicals	15101010 Commodity Chemicals
			15101020 Diversified Chemicals
			15101030 Fertilizers & Agricultural Chemicals
			15101040 Industrial Gases
			15101050 Specialty Chemicals
			15102010 Construction Materials
			15103010 Metal & Glass Containers
			15103020 Paper Packaging
			15104010 Aluminum
			15104020 Diversified Metals & Mining
		151020 Construction Materials	15104030 Gold
			15104040 Precious Metals & Minerals
			15104045 Silver
			15104050 Steel
			15105010 Forest Products
		151030 Containers & Packaging	15105020 Paper Products
		151040 Metals & Mining	
		151050 Paper & Forest Products	
20 Industrials	2010 Capital Goods	201010 Aerospace & Defense	20101010 Aerospace & Defense
			20102010 Building Products
		201020 Building Products	20103010 Construction & Engineering
			20104010 Electrical Components & Equipment
		201030 Construction & Engineering	20104020 Heavy Electrical Equipment
			20105010 Industrial Conglomerates
		201040 Electrical Equipment	20106010 Construction Machinery & Heavy Trucks
			20106015 Agricultural & Farm Machinery
		201050 Industrial Conglomerates	20106020 Industrial Machinery
			20107010 Trading Companies & Distributors
	2020 Commercial & Professional Services	201060 Machinery	20201010 Commercial Printing
			20201050 Environmental & Facilities Services
		201070 Trading Companies & Distributors	20201060 Office Services & Supplies
			20201070 Diversified Support Services
		202010 Commercial Services & Supplies	20201080 Security & Alarm Services
			20202010 Human Resource & Employment Services
		202020 Professional Services	20202020 Research & Consulting Services
			20301010 Air Freight & Logistics
		203010 Air Freight & Logistics	20302010 Airlines
			20303010 Marine
	2030 Transportation	203020 Airlines	20304010 Railroads
		203030 Marine	20304020 Trucking
		203040 Road & Rail	20305010 Airport Services
		203050 Transportation Infrastructure	20305020 Highways & Railroads
			20305030 Marine Ports & Services
		203050 Transportation Infrastructure	25101010 Auto Parts & Equipment
			25101020 Tires & Rubber
		251010 Automobiles	25102010 Automobile Manufacturers
			25102020 Motorcycle Manufacturers
	2520 Consumer Durables & Apparel	252010 Household Durables	25201010 Consumer Electronics
			25201020 Home Furnishings
		252020 Leisure Products	25201030 Homebuilding
			25201040 Household Appliances
		252030 Textiles, Apparel & Luxury Goods	25201050 Housewares & Specialties
			25202010 Leisure Products
		252030 Textiles, Apparel & Luxury Goods	25203010 Apparel, Accessories & Luxury Goods
			25203020 Footwear
		253010 Hotels, Restaurants & Leisure	25203030 Textiles
			25301010 Casinos & Gaming
25 Consumer Discretionary	2530 Consumer Services	253010 Hotels, Restaurants & Leisure	25301020 Hotels, Resorts & Cruise Lines
			25301030 Leisure Facilities
		253020 Diversified Consumer Services	25301040 Restaurants
			25302010 Education Services
		254010 Media	25302020 Specialized Consumer Services
			25401010 Advertising
		255010 Distributors	25401020 Broadcasting
			25401025 Cable & Satellite
		255020 Internet & Catalog Retail	25401030 Movies & Entertainment
			25401040 Publishing
	2550 Retailing	255010 Distributors	25501010 Distributors
			25502010 Catalog Retail
		255020 Internet & Catalog Retail	25502020 Internet Retail
			25503010 Department Stores
		255030 Multiline Retail	25503020 General Merchandise Stores
			25504010 Apparel Retail
		255040 Specialty Retail	25504020 Computer & Electronics Retail
			25504030 Home Improvement Retail
		255040 Specialty Retail	25504040 Specialty Stores
			25504050 Automotive Retail
		255040 Specialty Retail	25504060 Homefurnishing Retail

Sector	Industry Group	Industry	Sub-Industry		
30 Consumer Staples	3010 Food & Staples Retailing	301010 Food & Staples Retailing	30101010 Drug Retail		
			30101020 Food Distributors		
			30101030 Food Retail		
	3020 Food, Beverage & Tobacco	302010 Beverages	30101040 Hypermarkets & Super Centers		
			30201010 Brewers		
			30201020 Distillers & Vintners		
		302020 Food Products	30201030 Soft Drinks		
			30202010 Agricultural Products		
			30202030 Packaged Foods & Meats		
	3030 Household & Personal Products	302030 Tobacco	30203010 Tobacco		
		303010 Household Products	30301010 Household Products		
		303020 Personal Products	30302010 Personal Products		
35 Health Care	3510 Health Care Equipment & Services	351010 Health Care Equipment & Supplies	35101010 Health Care Equipment		
			35101020 Health Care Supplies		
			35102010 Health Care Distributors		
	3520 Pharmaceuticals, Biotechnology & Life Science	351020 Health Care Providers & Services	35102015 Health Care Services		
			35102020 Health Care Facilities		
			35102030 Managed Health Care		
		351030 Health Care Technology	35103010 Health Care Technology		
			352010 Biotechnology	35201010 Biotechnology	
			352020 Pharmaceuticals	35202010 Pharmaceuticals	
		352030 Life Sciences Tools & Services	35203010 Life Sciences Tools & Services		
		40 Financials	4010 Banks	401010 Banks	40101010 Diversified Banks
					40101015 Regional Banks
401020 Thrifts & Mortgage Finance	40102010 Thrifts & Mortgage Finance				
4020 Diversified Financials	402010 Diversified Financial Services		40201020 Other Diversified Financial Services		
			40201030 Multi-Sector Holdings		
			40201040 Specialized Finance		
	402020 Consumer Finance		40202010 Consumer Finance		
			402030 Capital Markets	40203010 Asset Management & Custody Banks	
				40203020 Investment Banking & Brokerage	
	40203030 Diversified Capital Markets			40203010 Insurance Brokers	
			4030 Insurance	403010 Insurance	40301020 Life & Health Insurance
					40301030 Multi-line Insurance
40301040 Property & Casualty Insurance					
4040 Real Estate	404020 Real Estate Investment Trusts (REITs)		40301050 Reinsurance		
			40402010 Diversified REIT's		
			40402020 Industrial REIT's		
			40402030 Mortgage REIT's		
			40402035 Hotel & Resort REIT's		
			40402040 Office REIT's		
			40402045 Health Care REIT's		
			40402050 Residential REIT's		
			40402060 Retail REIT's		
			40402070 Specialized REIT's		
			404030 Real Estate Management & Development	40403010 Diversified Real Estate Activities	
				40403020 Real Estate Operating Companies	
				40403030 Real Estate Development	
40403040 Real Estate Services					
45 Information Technology	4510 Software & Services		451010 Internet Software & Services	45101010 Internet Software & Services	
				451020 IT Services	45102010 IT Consulting & Other Services
		45102020 Data Processing & Outsourced Services			
	4520 Technology Hardware & Equipment	451030 Software	45103010 Application Software		
			45103020 Systems Software		
			45103030 Home Entertainment Software		
		452010 Communications Equipment	45201020 Communications Equipment		
			452020 Technology Hardware, Storage & Peripherals	45202030 Technology Hardware, Storage & Peripherals	
				452030 Electronic Equipment, Instruments & Components	45203010 Electronic Equipment & Instruments
		45203015 Electronic Components			45203020 Electronic Manufacturing Services
			45203030 Technology Distributors		45203010 Semiconductor Equipment
				4530 Semiconductors & Semiconductor Equipment	45301010 Semiconductor Equipment
	50 Telecommunication Service	5010 Telecommunication Services			45301020 Semiconductors
			50101010 Alternative Carriers		
			50101020 Integrated Telecommunication Services		
501020 Wireless Telecommunication Services	50102010 Wireless Telecommunication Services				
	55 Utilities	5510 Utilities	55101010 Electric Utilities		
			55102010 Gas Utilities		
55103010 Multi-Utilities					
55104010 Water Utilities					
551050 Independent Power and Renewable Electricity Producers			55105010 Independent Power Producers & Energy Traders		
			55105020 Renewable Electricity		

#### **GICS STRUCTURE REVIEW FREQUENCY**

MSCI and S&P Dow Jones Indices are committed to ensuring that the GICS structure remains relevant and up-to-date. This is accomplished through an annual review of the structure. This review includes a detailed internal analysis to develop a proposal for potential structural changes and public request for comments and in-depth client consultations with various market participants as a means of obtaining feedback on proposed structural changes.



## METHODOLOGY BOOK TRACKED CHANGES

### The following sections have been modified since February 2014:

Section 1: Defining REITs and the MSCI US REIT Index Eligible REITs

- Updates in this section

### The following sections have been modified since June 2015:

Section 1: Defining REITs and the MSCI US REIT Index Eligible REITs

- Update to the list of eligible property types

### The following sections have been modified since November 2015:

Section 1: Defining REITs and the MSCI US REIT Index Eligible REITs

- Added “Restaurants” to the list of eligible property types

Section 2.1: Semi-Annual Index Reviews and Quarterly Index Reviews

- Added a paragraph on the review process for the list of eligible property types

## CONTACT US

clientservice@msci.com

### AMERICAS

Americas	1 888 588 4567 *
Atlanta	+ 1 404 551 3212
Boston	+ 1 617 532 0920
Chicago	+ 1 312 675 0545
Monterrey	+ 52 81 1253 4020
New York	+ 1 212 804 3901
San Francisco	+ 1 415 836 8800
Sao Paulo	+ 55 11 3706 1360
Toronto	+ 1 416 628 1007

### EUROPE, MIDDLE EAST & AFRICA

Cape Town	+ 27 21 673 0100
Frankfurt	+ 49 69 133 859 00
Geneva	+ 41 22 817 9777
London	+ 44 20 7618 2222
Milan	+ 39 02 5849 0415
Paris	0800 91 59 17 *

### ASIA PACIFIC

China North	10800 852 1032 *
China South	10800 152 1032 *
Hong Kong	+ 852 2844 9333
Mumbai	+ 91 22 6784 9160
Seoul	00798 8521 3392 *
Singapore	800 852 3749 *
Sydney	+ 61 2 9033 9333
Taipei	008 0112 7513 *
Tokyo	+ 81 3 5290 1555

\* = toll free

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