



2015 U.S. Cement Industry Annual Yearbook

- Construction Facts
- Industry Trends
- Domestic & International Coverage

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U.S. CEMENT INDUSTRY ANNUAL YEARBOOK 2015

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Table 1
Construction and Economic Activity

Year	Construction (Billions 2009\$)	Real GDP (Billions 2009\$)	Ratio Construction % of GDP (Percent)	Ratio Portland Cement* to Construction (Metric Tons per \$Million)	Ratio Portland Cement* to GDP (Metric Tons per \$Million)
1994					
1995					
1996					
1997					
1998					
1999					
2000					
2001					
2002					
2003					
2004					
2005					
2006					
2007					
2008					
2009					
2010					
2011					
2012					
2013					
2014					

* Portland and Masonry

Source: U.S. Department of Commerce, Bureau of Economic Analysis, U.S. Geological Survey, PCA Market Intelligence

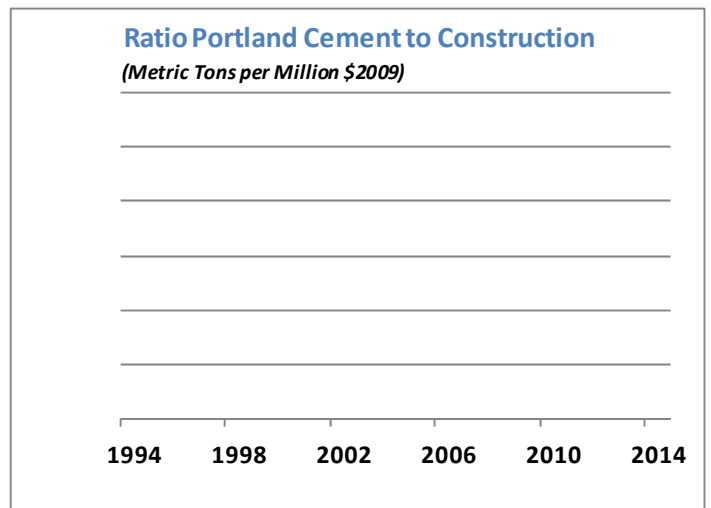
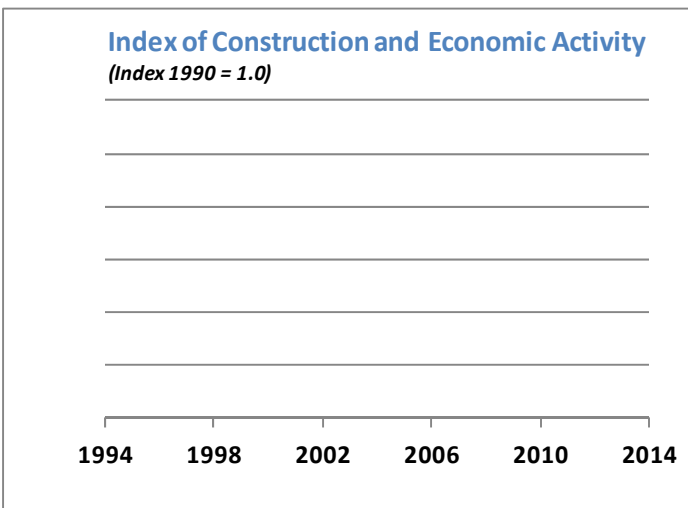




Table 2

Construction Put-in-Place

(Billions of \$2009)

Year	Total	Residential	Share of Total		Share of Total		Public	Share of Total	
			(%)	Nonresidential	(%)	(%)		Other ¹	(%)
1994									
1995									
1996									
1997									
1998									
1999									
2000									
2001									
2002									
2003									
2004									
2005									
2006									
2007									
2008									
2009									
2010									
2011									
2012									
2013									
2014									

Percent Change

2014/2013

¹Public Utility, Farm Nonresidential, Miscellaneous
 Source: U.S. Department of Commerce, U.S. Census Bureau

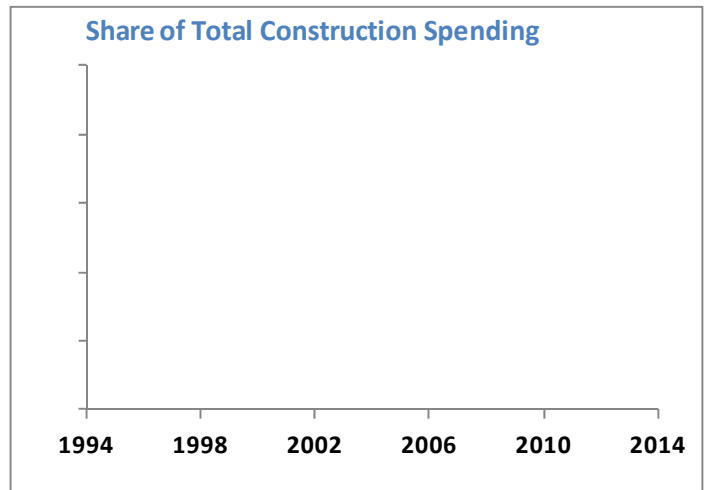
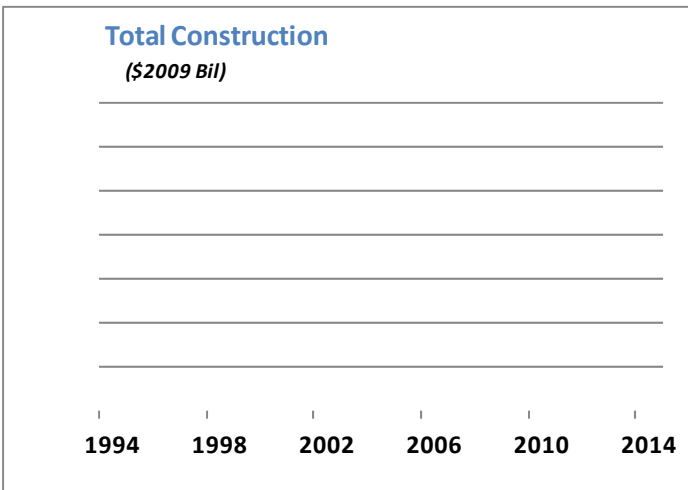




Table 3
Government Deficits

Year	Federal Debt (\$Billion)	Federal Deficit/Surplus (\$Billion)	Federal Deficit Share of GDP (%)	Federal Debt Share of GDP (%)	Long-Term Interest Rate (%)	Nominal GDP (\$Billion)
1994						
1995						
1996						
1997						
1998						
1999						
2000						
2001						
2002						
2003						
2004						
2005						
2006						
2007						
2008						
2009						
2010						
2011						
2012						
2013						
2014						

Source: United States Department of Treasury, United States Federal Reserve

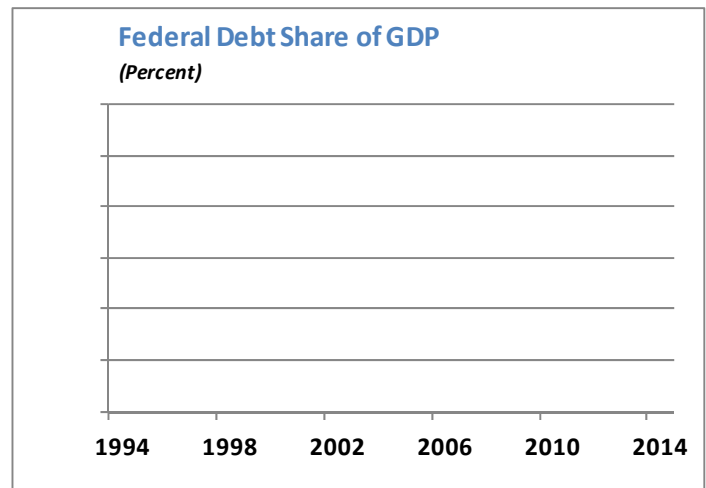
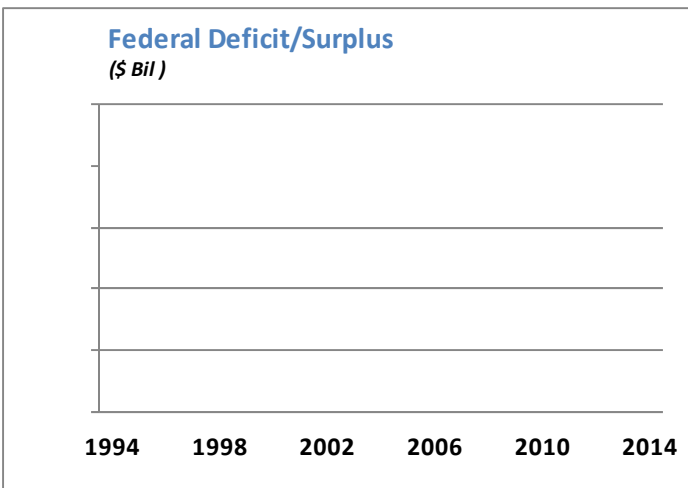




Table 4
Foreign Trade

Year	Value of Exports (\$Billion)	Value of Imports (\$Billion)	Trade Deficit (\$Billion)	Trade Deficit as a % of GDP (%)
1994				
1995				
1996				
1997				
1998				
1999				
2000				
2001				
2002				
2003				
2004				
2005				
2006				
2007				
2008				
2009				
2010				
2011				
2012				
2013				
2014				

Source: Bureau of Economic Analysis

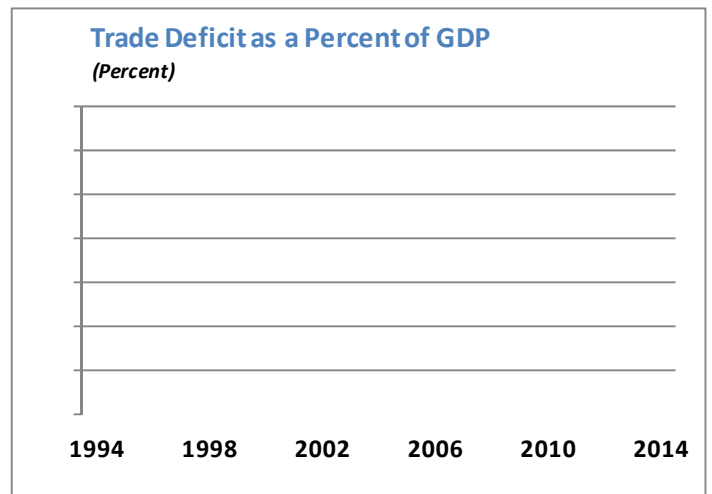
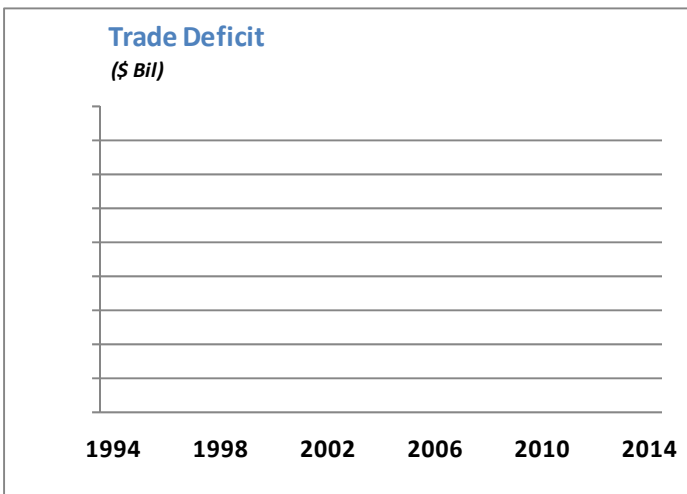




Table 5
Residential Drivers

Year	Single Family				Multifamily				Home Improvement
	Mortgage Rate (%)	Median Home Price (\$000)	Average Monthly Payment (\$)	1 st Time Home Buyers* (000)	Median Rent (\$)	Mortgage To Rent Ratio	Vacancy Rate (%)	Apartment Age Population* (000)	Housing Stock (000)
1994									
1995									
1996									
1997									
1998									
1999									
2000									
2001									
2002									
2003									
2004									
2005									
2006									
2007									
2008									
2009									
2010									
2011									
2012									
2013									
2014									

* Estimated

Source: U.S. Census Bureau, Freddie Mac

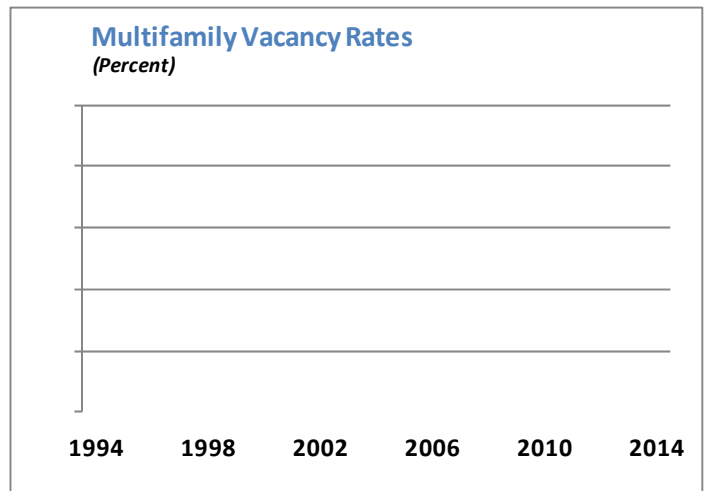
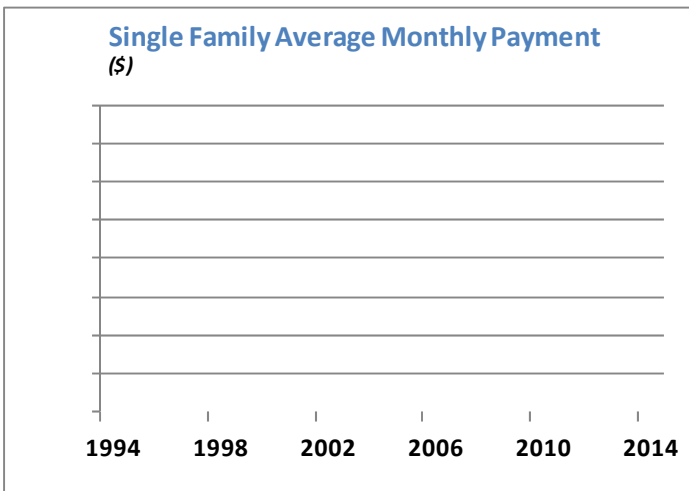




Table 6
Net Residential Balance

Year	Households (000)	Annual Change In Households (000)	Single Family Starts (000)	Multifamily Starts (000)	Manufactured Home Placements (000)	Demolition* (000)	New Net Supply (000)
1994							
1995							
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							

Source: U.S. Census Bureau

* Estimated

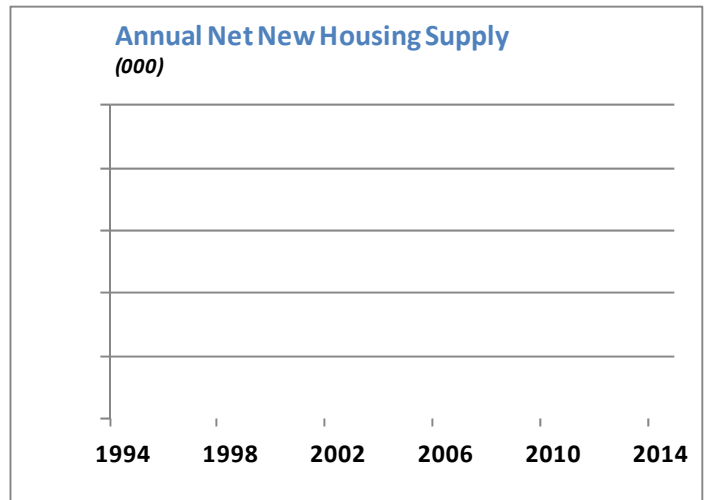
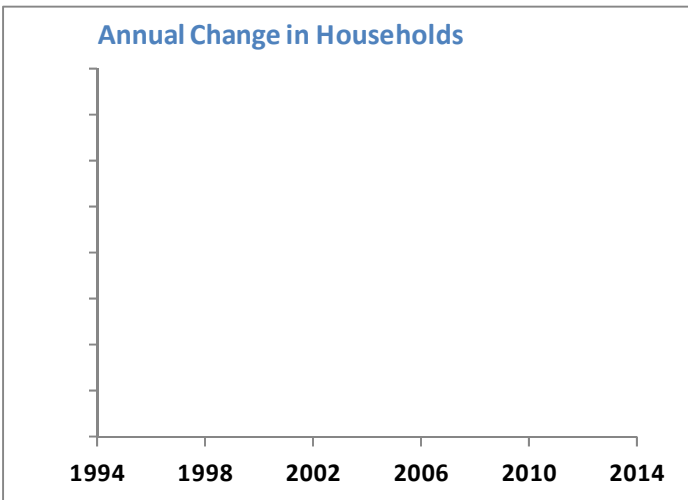




Table 7
Nonresidential Drivers

Year	Commercial				Institutional			
	Manufacturing Capacity Utilization (%)	Office Vacancy Rate (%)	Retail Sales Growth (%)	Air Travel Growth (%)	Change in Population 5 - 19 (%)	Student Teacher Ratio ¹	Healthcare Expenditure Share of GDP (%)	Pop 65+ Share of Total Pop (%)
1994								
1995								
1996								
1997								
1998								
1999								
2000								
2001								
2002								
2003								
2004								
2005								
2006								
2007								
2008								
2009								
2010								
2011								
2012								
2013								
2014								

¹ 2012-2014 are National Center for Education Statistics projections
 Sources: U.S. Census Bureau, U.S. Department of Transportation, CB Commercial, U.S. National Center for Education Statistics, U.S. Department of Health, Bureau of Economic Analysis, Centers for Medicare and Medicaid Services, Federal Reserve Board

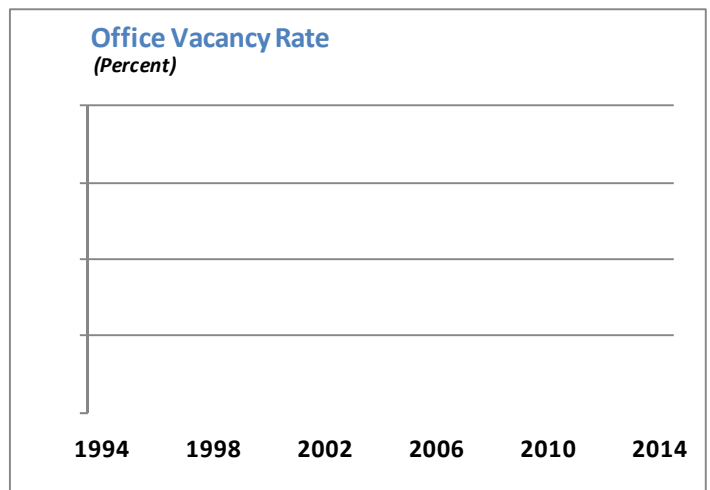
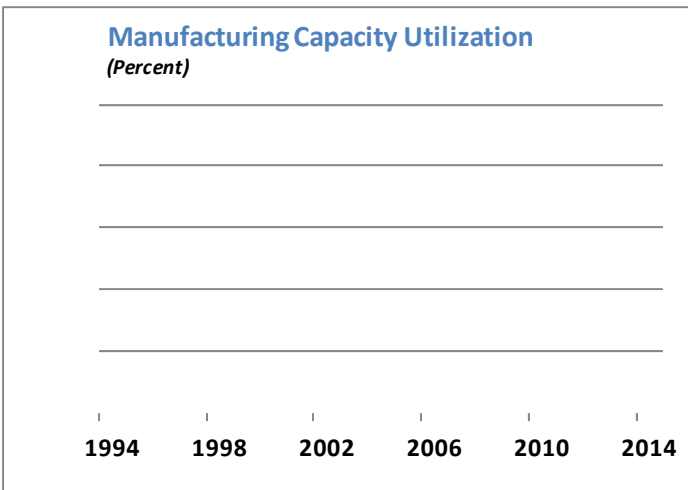




Table 8
Public Drivers

Year	State/Local Share of Total Public Construction ¹ (%)	State Government Revenues ¹ (\$ Bil)	State Revenue Per Capita ¹ (\$)	Municipal Bond Rate (%)	Real Public Construction Spending Per Capita (2009\$)
1994					
1995					
1996					
1997					
1998					
1999					
2000					
2001					
2002					
2003					
2004					
2005					
2006					
2007					
2008					
2009					
2010					
2011					
2012					
2013					
2014					

¹ Based on nominal values

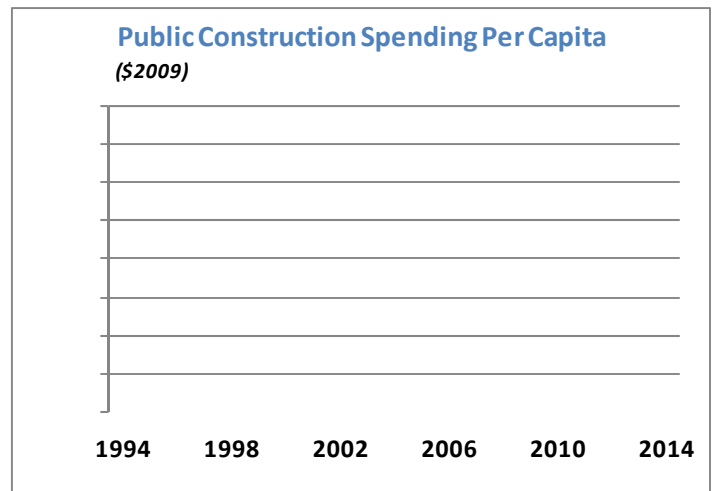
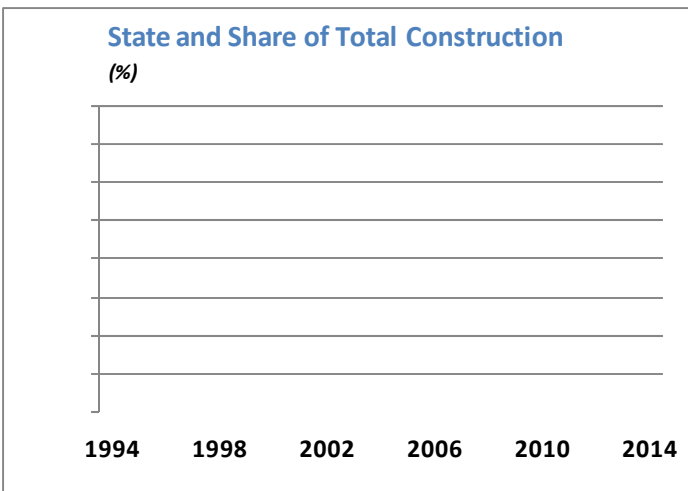




Table 9

U.S. Cement Industry Consumption - Exports - Imports - Shipments

(Thousands of Metric Tons)

Year	Consumption*			Cement Exports	Cement Imports	Change In Stocks	Total Shipments By Domestic Producers
	Portland Cement	Masonry Cement	Total				
1994							
1995							
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							

* Excludes Alaska, Foreign and Puerto Rico

** USGS Estimate

Note: Domestic shipments include cement shipments from domestic manufacturers and cement shipments ground from imported clinker, but exclude finished cement imports.

Sources: U.S. Geological Survey, Department of Commerce - Foreign Trade Division, PCA Market Intelligence

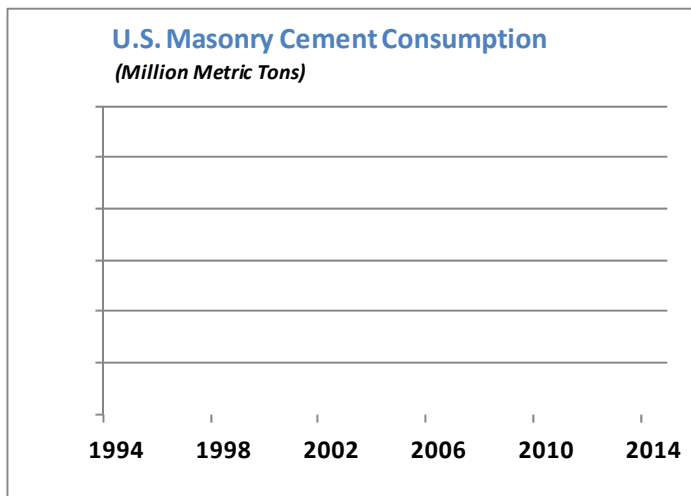
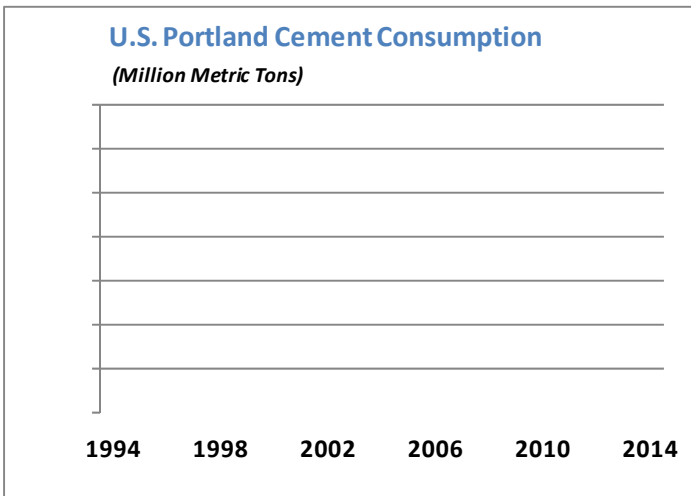




Table 10

U.S. Cement Industry Consumption - Exports - Imports - Shipments

(Year-Year % Change)

Year	Consumption			Cement & Clinker Exports	Cement Imports	Total Shipments By Domestic Producers
	Portland Cement	Masonry Cement	Total			
1994						
1995						
1996						
1997						
1998						
1999						
2000						
2001						
2002						
2003						
2004						
2005						
2006						
2007						
2008						
2009						
2010						
2011						
2012						
2013						
2014						

Source: Calculated from Table 9

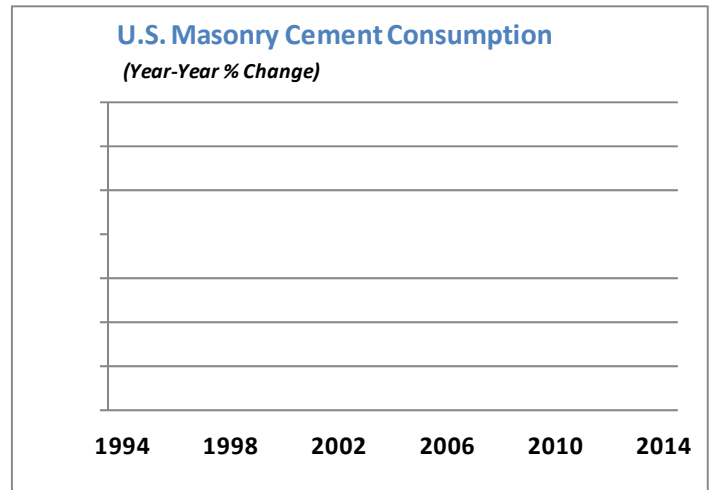
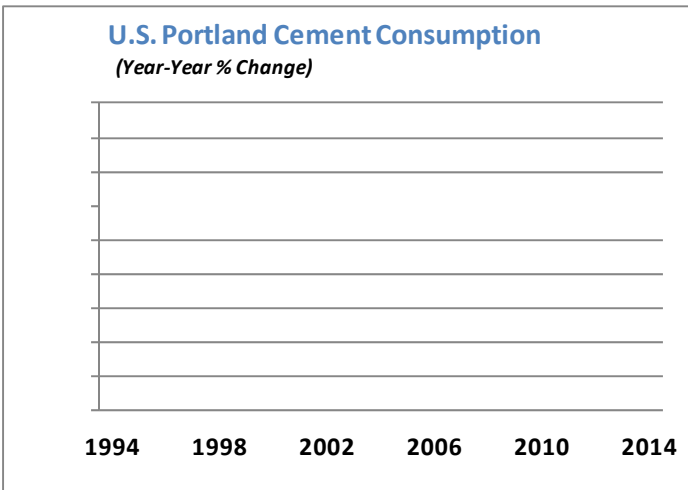




Table 11
Apparent Use of Portland Cement by Market

(Thousands of Metric Tons)

Market	2010	2011	2012	2013	2014*	5 Year Average	5 Year Average Share (%)
Total							
Residential Buildings							
New Housing							
Single Family							
Multi Family							
Improvements							
Nonresidential Buildings							
Manufacturing							
Office							
Lodging							
Health Care							
Religious							
Educational							
Commercial							
Public Utility & Other							
Farm Nonresidential							
Oil & Gas Wells							
Miscellaneous							
Public Construction							
Buildings							
Highways & Streets							
Public Safety							
Conservation							
Sewage & Waste Disposal							
Water Supply Systems							

Source: PCA Market Intelligence: Apparent Use of Portland Cement by State and Market

* Preliminary Estimates

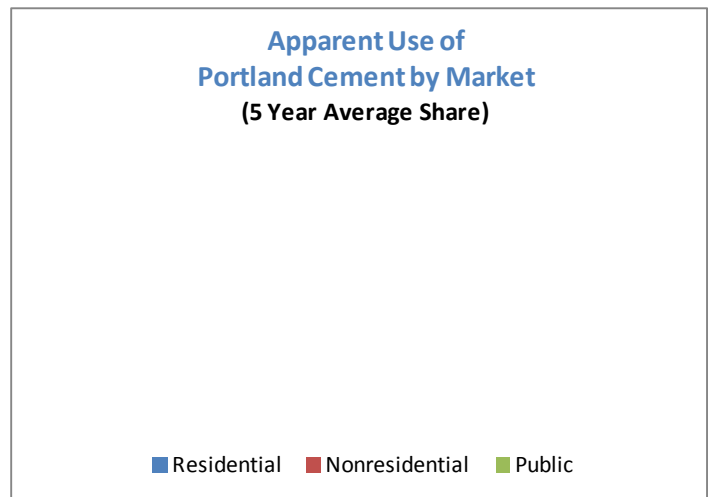
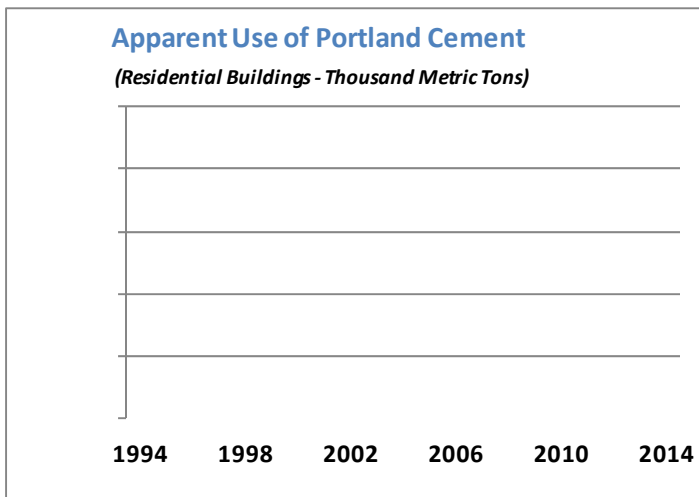




Table 12
Alternative Measures of Cement Usage Intensity

Year	Real Construction \$ per Capita (000, \$2009)	Portland Cement Consumption per Capita (Metric Tons)	Portland Cement Consumption per Million Construction \$ (Metric Tons)	Portland Cement Consumption per Construction Worker (Metric Tons)
1994				
1995				
1996				
1997				
1998				
1999				
2000				
2001				
2002				
2003				
2004				
2005				
2006				
2007				
2008				
2009				
2010				
2011				
2012				
2013				
2014				

20 Year Average
10 Year Average
5 Year Average

Sources: U.S. Dept. of Labor, U.S. Dept. of Commerce, PCA

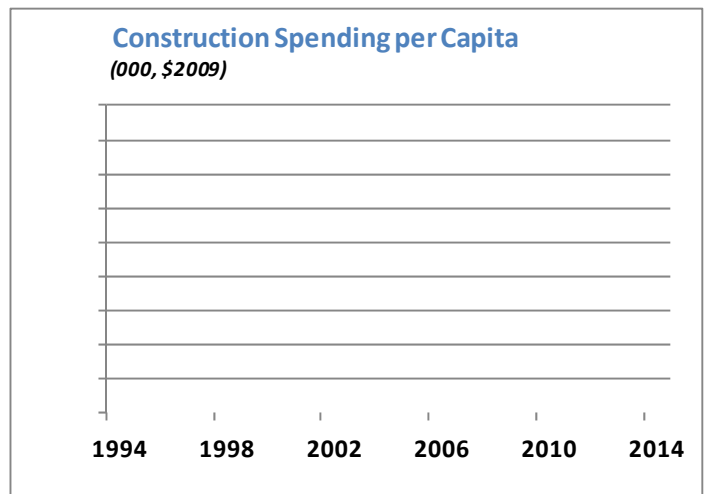
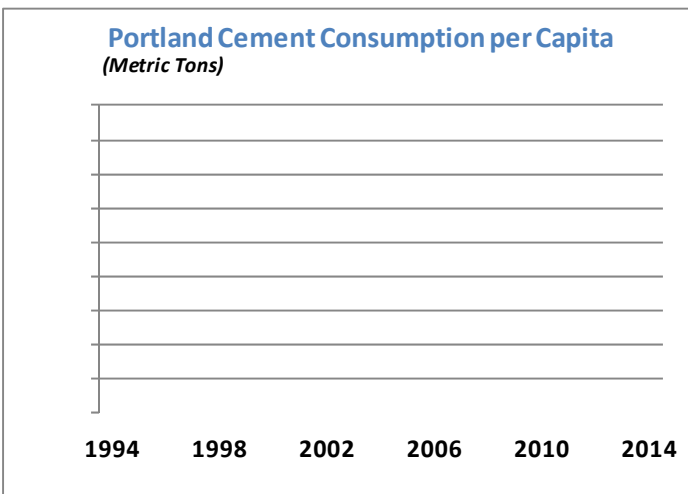




Table 13
Single Family Construction

Year	Single Family Starts (000)	Mortgage Rate (%)	Affordability Index (% Change)	1st Time Home Buyers ¹ (000)	Home Ownership Rate (%)	Single Family Cement (000 MT)	Cement Tons per SF Start (Metric Tons)
1994							
1995							
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							

¹ Ages 30-39
* Preliminary Estimate

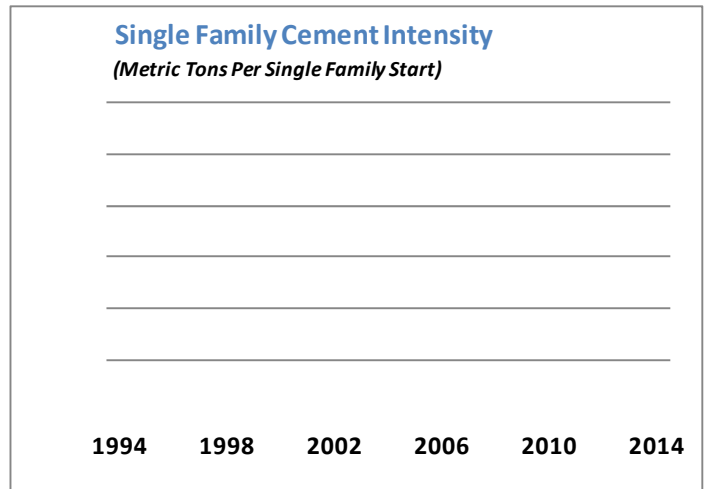
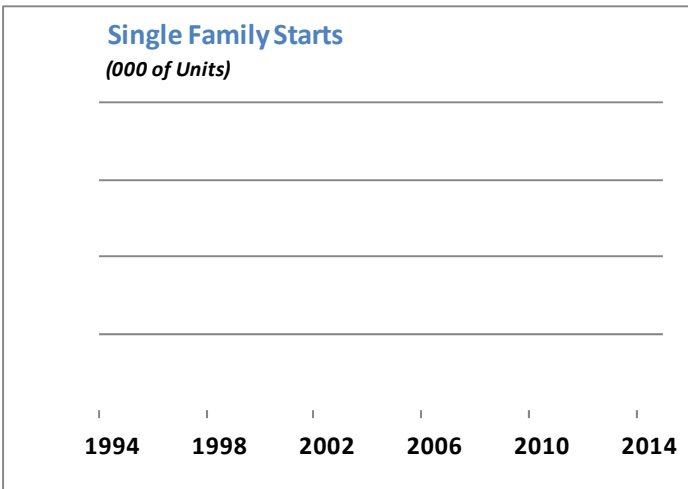




Table 14
Multifamily Construction

Year	Multifamily Starts (000)	Vacancy Rate (%)	Mortgage To Rent Ratio (%)	Apartment Age Population ¹ (000)	Retirement Age Population ² (000)	Multifamily Cement (000 MT)	Cement Tons per MF Start (Metric Tons)
1995							
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							

¹ Ages 20-29

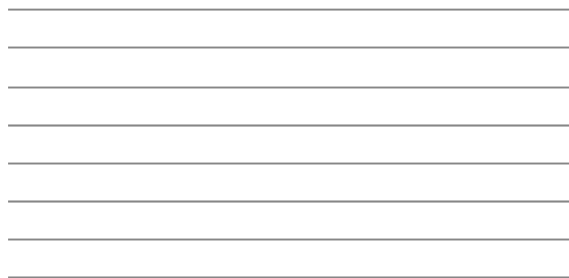
² Ages 65 and older

* Preliminary Estimate

Sources: PCA Market Intelligence, U.S. Geological Survey, U.S. Census Bureau

Multifamily Starts

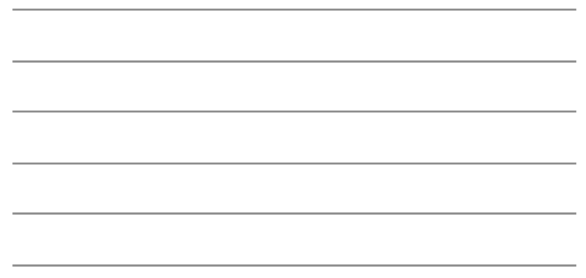
(000 of Units)



1995 1998 2001 2004 2007 2010 2013

Multifamily Cement Intensity

(Metric Tons per Multifamily Start)



1995 1998 2001 2004 2007 2010 2013



Table 15
Manufacturing Construction

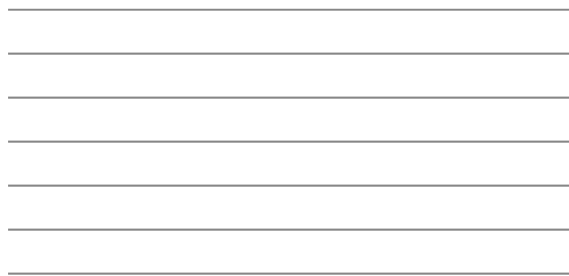
Year	Manufacturing Construction (\$2009 Bil)	Industrial Production Index (2007=100)	Manufacturing Capacity Utilization (%)	Change in Manufacturing Employment (000)	Industrial Vacancy Rate (%)	Manufacturing Cement (000 MT)	Cement Tons Per Million \$ (Metric Tons)
1995							
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							

* Preliminary Estimate

Sources: PCA Market Intelligence, U.S. Geological Survey, U.S. Census Bureau, CB Commercial and Bureau of Labor Statistics

Manufacturing Construction Spending

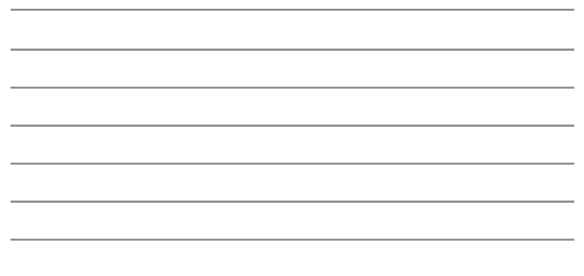
(\$2009 Bil)



1995 1998 2001 2004 2007 2010 2013

Cement Intensity In Manufacturing

(Metric Tons per Million \$2009)



1995 1998 2001 2004 2007 2010 2013



Table 16
Office Construction

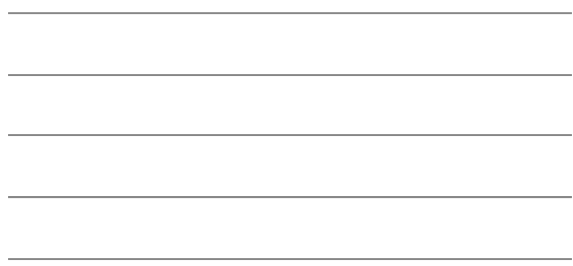
Year	Office Construction (\$2009 Bil)	Office Employment (000)	Change in Office Employment (000)	Estimated Office Capacity ¹ (000 Employees)	Office Vacancy Rate (%)	Office Cement (000 MT)	Cement Tons Per Million \$ (Metric Tons)
1995							
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							

* Preliminary Estimate

¹ Employment Based

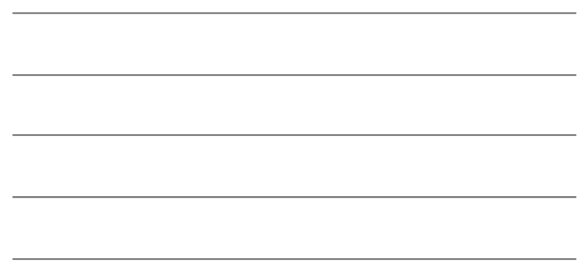
Sources: PCA Market Intelligence, U.S. Geological Survey, U.S. Census Bureau, CB Commercial and Bureau of Labor Statistics

Office Construction Spending
(\$2009 Bil)



1995 1998 2001 2004 2007 2010 2013

Cement Intensity in Office Construction
(Metric Tons per Million \$2009)



1995 1998 2001 2004 2007 2010 2013



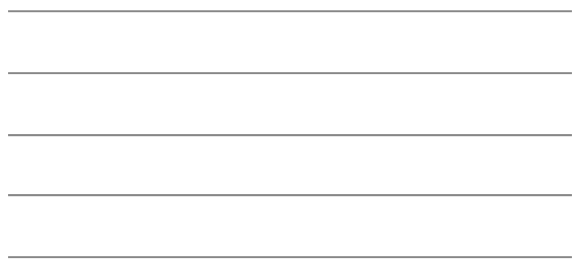
Table 17
Retail Construction

Year	Retail Construction (\$2009 Bil)	Real Consumer Spending Growth (%)	Change in Retail Employment (000)	Consumer Sentiment Index (1985=100)	Retail Cement (000 MT)	Cement Tons Per Million \$ (Metric Tons)
1995						
1996						
1997						
1998						
1999						
2000						
2001						
2002						
2003						
2004						
2005						
2006						
2007						
2008						
2009						
2010						
2011						
2012						
2013						
2014						

* Preliminary Estimate

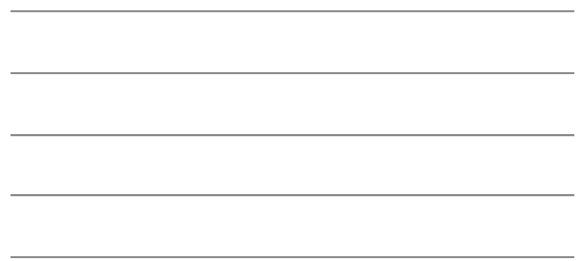
Sources: PCA Market Intelligence, U.S. Geological Survey, U.S. Census Bureau, CB Commercial and Bureau of Labor Statistics

Retail Construction Spending
(\$2009 Bil)



1995 1998 2001 2004 2007 2010 2013

Cement Intensity Retail Construction
(Metric Tons per Million \$2009)



1995 1998 2001 2004 2007 2010 2013



Table 18
Total Public Construction

Year	Public Construction (\$2009 Bil)	State/Local Share of Total Public ¹ (%)	Change In Government Employment (000)	Public Cement (000 MT)	Cement Tons Per Million \$ (Metric Tons)
1995					
1996					
1997					
1998					
1999					
2000					
2001					
2002					
2003					
2004					
2005					
2006					
2007					
2008					
2009					
2010					
2011					
2012					
2013					
2014					

* Preliminary Estimate

¹ Based on nominal value

Sources: PCA Market Intelligence, U.S. Geological Survey, U.S. Census Bureau, CB Commercial, Bureau of Labor Statistics, Federal Highway Administration, Bureau of Economic Analysis

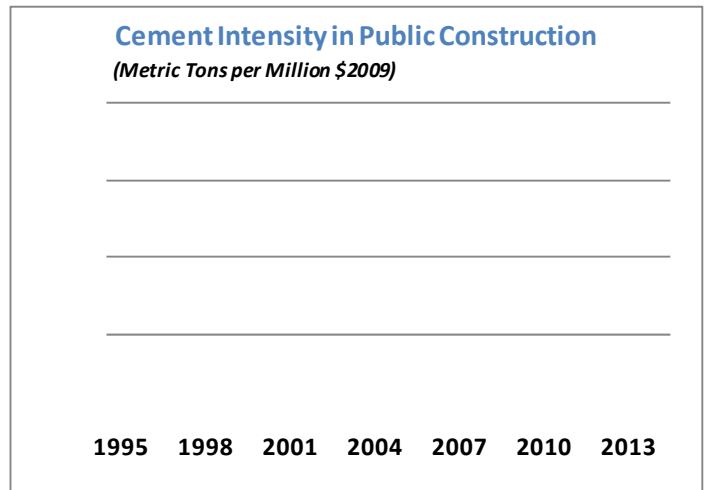
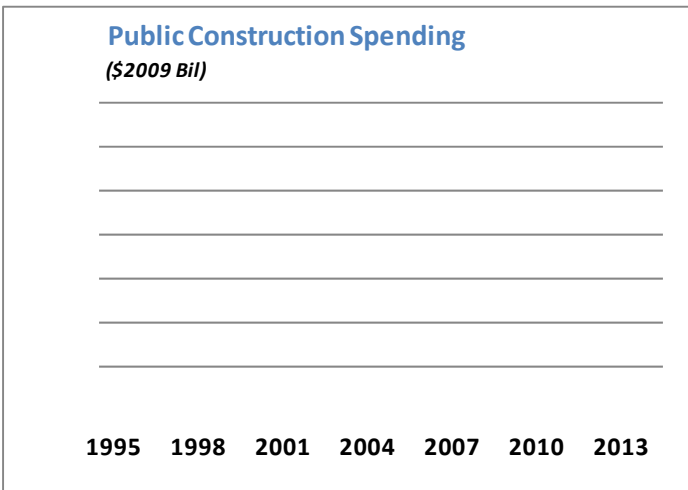




Table 19
Highway Construction

Year	Highway Construction (\$2009 Bil)	Highway Trust Fund Authorizations ^{1,2} (\$2009 Bil)	Estimated Discretionary Highway Spending ³ (\$ Bil)	Highway, Roadway, and Bridge Cement (000 MT)	Cement Tons Per Million \$ (Metric Tons)
1995					
1996					
1997					
1998					
1999					
2000					
2001					
2002					
2003					
2004					
2005					
2006					
2007					
2008					
2009					
2010					
2011					
2012					
2013					
2014					

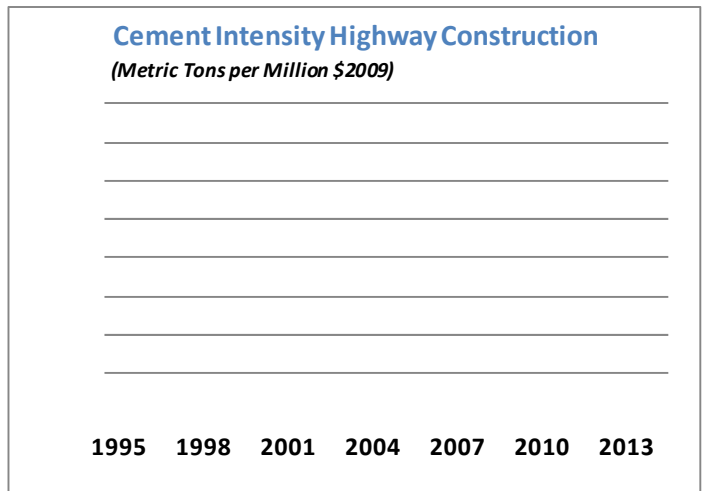
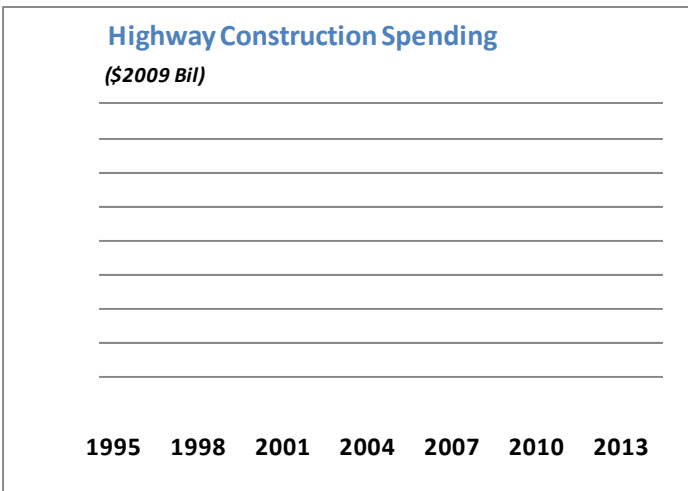
¹ Highway Trust Fund encompasses ISTEA/TEA/SAFETEA-LU/MAP-21 and subsequent extensions following 2009 expiration

² Data based on planned allocations, not actual funding

³ Includes ARRA Spending

* Preliminary Estimate

Sources: PCA Market Intelligence, U.S. Geological Survey, U.S. Census Bureau, U.S. Department of Transportation



**Table 20****Portland Cement Consumption Growth by State***(Compound Annual Growth Rate)*

1985 - 1994

1995 - 2004

2005 - 2014

1985 - 2014

Total U.S.**Total U.S.****Total U.S.****Total U.S.***Source: U.S. Geological Survey*



Table 21
Top 20 States in Portland Cement Consumption¹
(Thousands of Metric Tons)

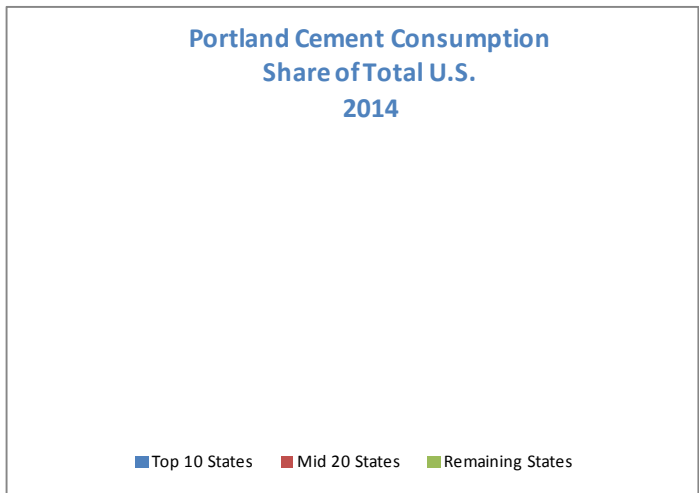
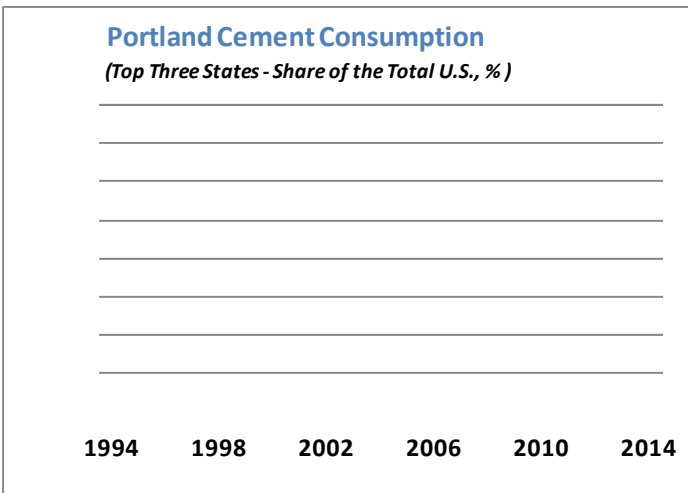
State	1994	State	2004	State	2014
-------	------	-------	------	-------	------

Total U.S.

Total U.S.

Total U.S.

¹ U.S. Total excludes AK, Foreign, and Puerto Rico
 Source: U.S. Geological Survey



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Table 22
Highway Infrastructure Funding

Year	Gas Tax <i>(cents per gallon)</i>	Deflated Gas Tax (1993\$) <i>(cents per gallon)</i>	Gas Tax Highway Allocation <i>(cents per gallon)</i>	Gas Tax Public Transit Allocation <i>(cents per gallon)</i>	Vehicle Miles Traveled <i>(Bill Miles)</i>	Fuel Economy <i>(average MPG)</i>	Highway Construction Cost Index <i>(2009=100)</i>
1994							
1995							
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							

Source: PCA Market Intelligence, U.S. Geological Survey, U.S. Census Bureau, U.S. Department of Transportation, Federal Highway Administration, U.S. Bureau of Economic Analysis (BEA)

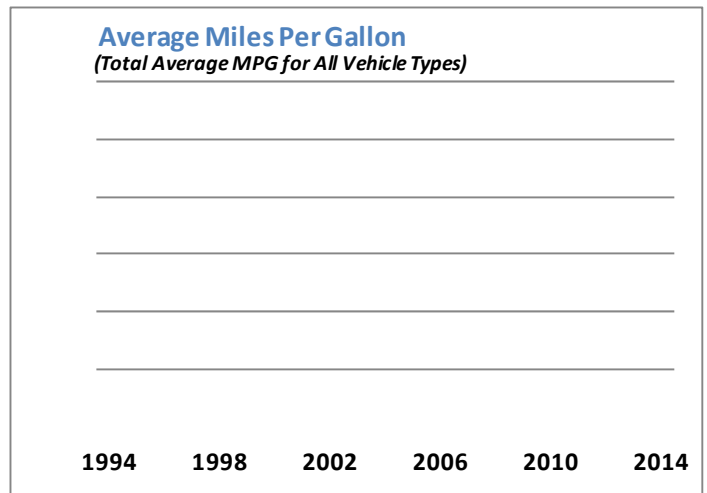
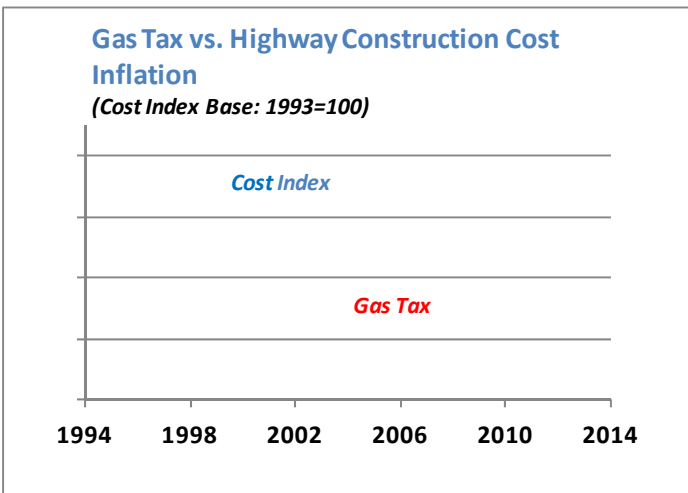




Table 23
Highway Congestion

Year	Roadway Lane Miles	Total Licensed Drivers (000)	Total Vehicles On Road (000)	Lane Miles Per Thousand Licensed Drivers	Lane Miles Per Thousand Vehicles	Fatalities (per million drivers)
1994						
1995						
1996						
1997						
1998						
1999						
2000						
2001						
2002						
2003						
2004						
2005						
2006						
2007						
2008						
2009						
2010						
2011						
2012						
2013						
2014						

* Estimated
Source: Federal Highway Administration, National Highway Traffic Safety Administration

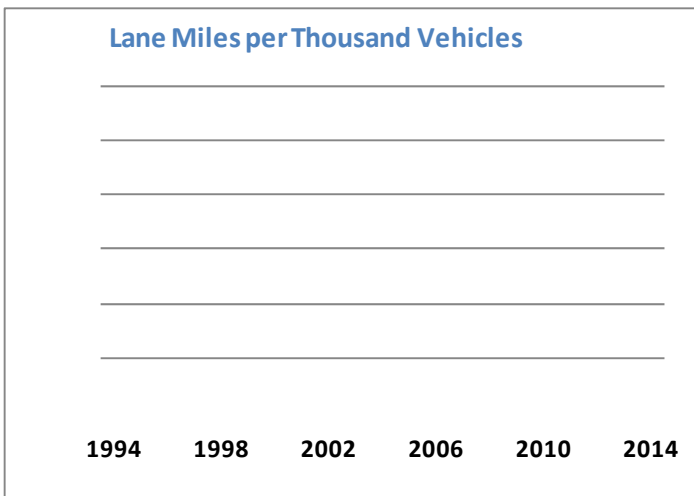
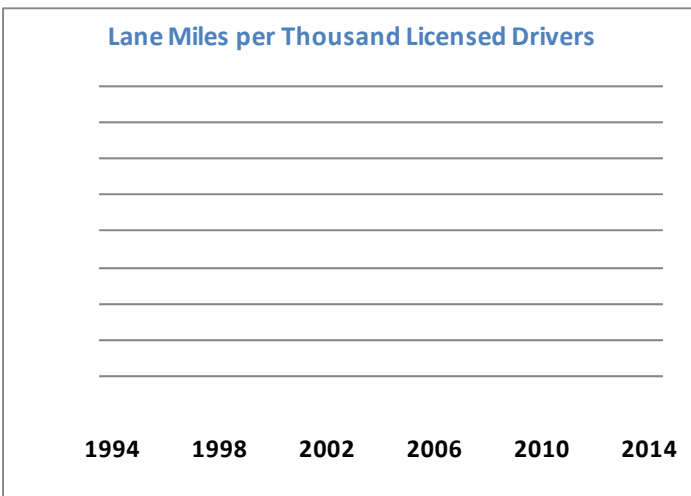




Table 24
Airport Infrastructure Funding

Year	Airport and Airway Trust Fund Tax Receipts <i>(Mil \$)</i>	Airport and Airway Trust Fund Balance <i>(Year End)</i>	Airport Construction Spending <i>(Nominal Mil \$)</i>	Cargo Tax <i>(%)</i>	Domestic Passenger Tax <i>(%)</i>	International Departure Ticket Tax <i>(\$ per passenger)</i>
1994						
1995						
1996						
1997						
1998						
1999						
2000						
2001						
2002						
2003						
2004						
2005						
2006						
2007						
2008						
2009						
2010						
2011						
2012						
2013						
2014						

Sources: Federal Aviation Administration, U.S. Census Bureau, Internal Revenue Service

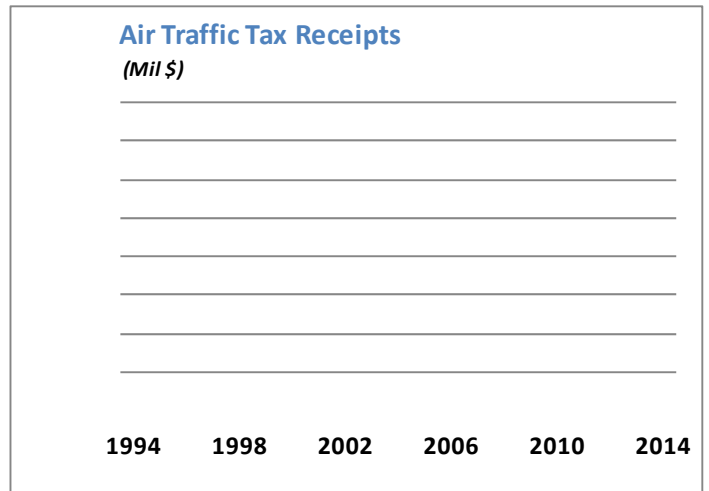




Table 25
Airport Congestion Measures

Year	Air Travelers (000)	Air Travelers (% Change)	Total Landed Cargo (000 tons)	Active Aircraft (000)	Hours Flown Per Aircraft	Travelers Per Aircraft	Aviation Incidents
1994							
1995							
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							

* Estimated
 Note: 2013 Air Travelers and Total Landed Cargo are Preliminary Estimates
 Source: Federal Aviation Administration, National Transportation Safety Board

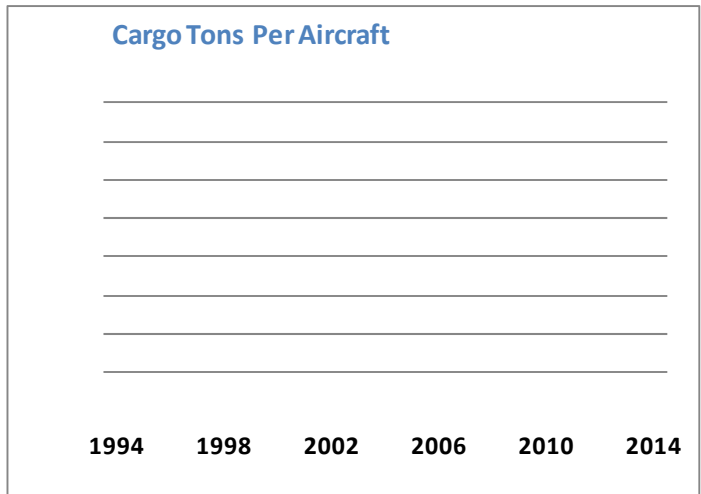
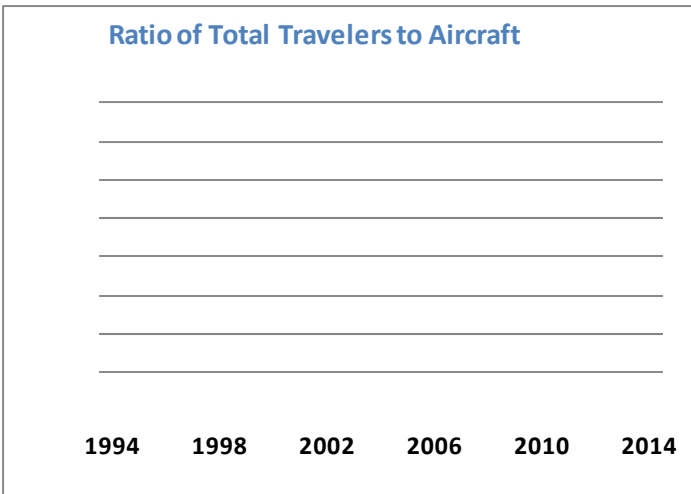




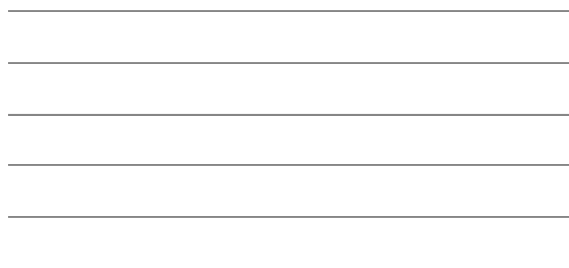
Table 26
Seaport Congestion Measures

Year	U.S. Waterborne Commerce <i>(Million Short Tons)</i>	U.S. Waterborne Commerce <i>(% Change)</i>	Water Transportation Gross Output <i>(Mil \$)</i>	Water Transportation Gross Output <i>(% Change)</i>	Ratio Water Transportation to GDP <i>(%)</i>
1994					
1995					
1996					
1997					
1998					
1999					
2000					
2001					
2002					
2003					
2004					
2005					
2006					
2007					
2008					
2009					
2010					
2011					
2012					
2013					

Sources: U.S. Army Corps of Engineers, Maritime Administration, Bureau of Economic Analysis

Waterborne Commerce - Domestic

(Million Short Tons)



1994 1998 2002 2006 2010

Waterborne Commerce - Foreign

(Million Short Tons)



1994 1997 2000 2003 2006 2009 2012

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Table 27
Clinker Capacity*

(Thousands of Metric Tons)

Year	Number of Plants ¹	Number of Kilns	Average Kiln Capacity	Average Daily Clinker Capacity	Annual Clinker Capacity
1994					
1995					
1996					
1997					
1998					
1999					
2000					
2001					
2002					
2003					
2004					
2005					
2006					
2007					
2008					
2009					
2010					
2011					
2012					
2013					
2014**					

* Years 2011-2012 are estimates calculated from the 2010 base, adding expansions and subtracting only announced permanent closures.

**Reflects Capacity Adjustments through 12/31/2013

Source: PCA U.S. Portland Cement Industry: Plant Information Summary

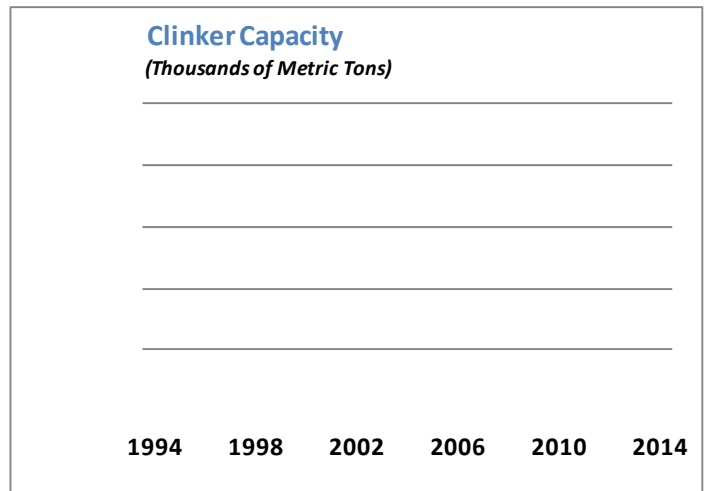
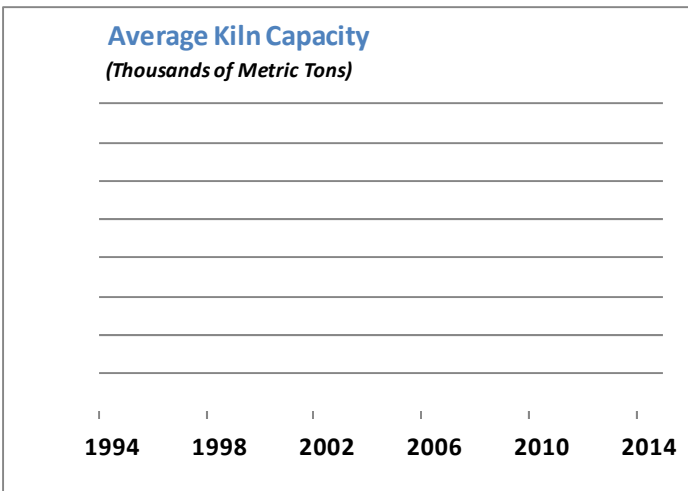




Table 28
Clinker Production,
Capacity and Capacity Utilization

Year	Clinker Production (MMT)	Clinker Capacity* (MMT)	Utilization Rate (%)
1994			
1995			
1996			
1997			
1998			
1999			
2000			
2001			
2002			
2003			
2004			
2005			
2006			
2007			
2008			
2009			
2010			
2011			
2012			
2013			
2014			

*Years 2011-2012 are estimates calculated from the 2010 base, adding expansions and subtracting only announced permanent closures.

**Reflects Capacity Adjustments through 12/31/2013

Clinker is the primary intermediate product of cement making. Kilns produce clinker which is finely ground to make finished cement. Clinker comprises approximately 92% of cement's final weight.

Source: U.S. Geological Survey, PCA U.S. Portland Cement Industry: Plant Information Summary

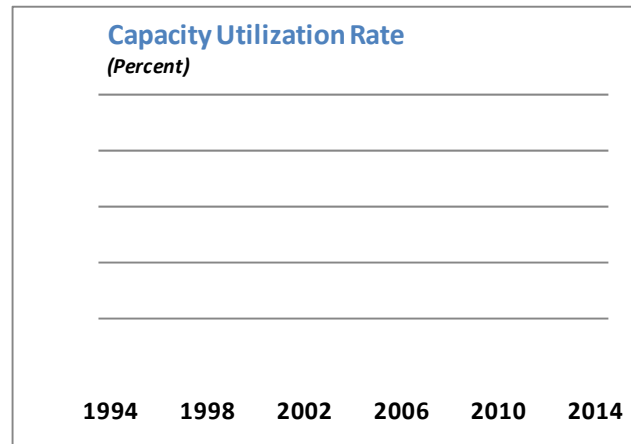
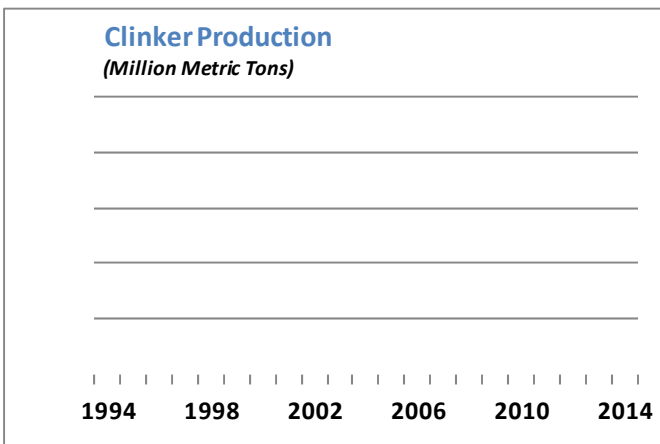




Table 29

Age Distribution of U.S. Clinker Capacity by Process, 2013*

(Percent)

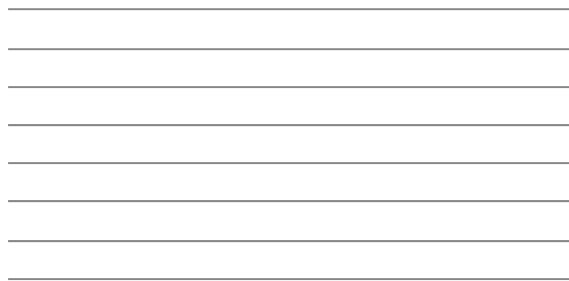
Age of Kilns	Wet Process	Dry Process	Total
Before 1931			
1931-1935			
1936-1940			
1941-1945			
1946-1950			
1951-1955			
1956-1960			
1961-1965			
1966-1970			
1971-1975			
1976-1980			
After 1980			
Total Clinker			

*Reflects Capacity Adjustments through 12/31/2013

Source: PCA U.S. Portland Cement Industry: Plant Information Summary

Age Distribution of U.S. Kilns - 2013

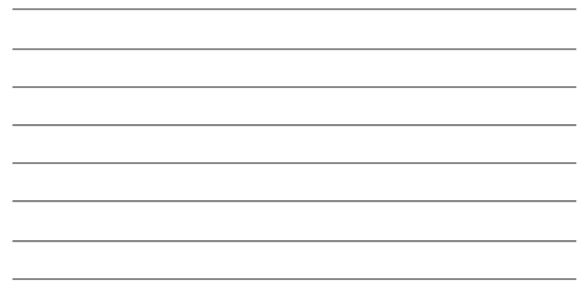
(Percent)



< 1950 50's 60's 70's 1980 >

Dry Process Kilns

(Percent of Total)



1993 1997 2001 2005 2009 2013



Table 30
Clinker Capacity By Census District*

(Thousands of Metric Tons)

Year	New England	Mid Atlantic	South Atlantic	East North Central	East South Central	West North Central	West South Central	Mountain	Pacific	Total
1994										
1995										
1996										
1997										
1998										
1999										
2000										
2001										
2002										
2003										
2004										
2005										
2006										
2007										
2008										
2009										
2010										
2011										
2012										
2013										
2014**										

* Years 2011-2012 are estimates calculated from the 2010 base, adding expansions and subtracting only announced permanent closures.

**Reflects Capacity Adjustments through 12/31/2013

Source: PCA U.S. Portland Cement Industry: Plant Information Summary

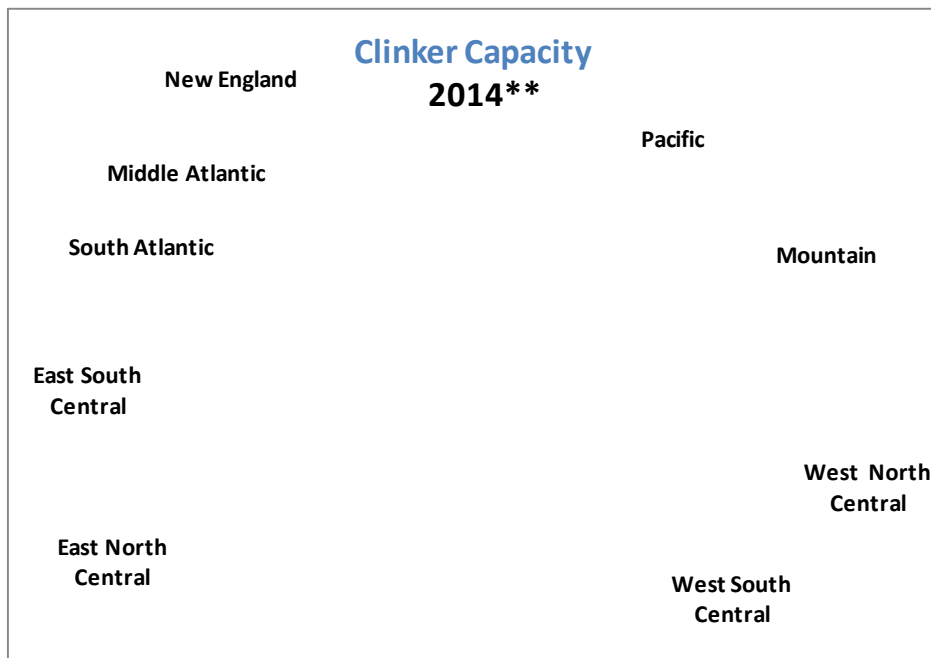




Table 31

U.S. Cement Company Clinker Capacity

(Gray and White Plants) (Thousands of Metric Tons - Estimated as of 12/31/2013)

Rank	Company	Clinker Capacity*	Percent of Industry
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
Total Capacity			

*Reflects Capacity Adjustments through 12/31/2013

**4 Source: PCA U.S. Portland Cement Industry: Plant Information Summary

**Table 32****Foreign Affiliated U.S. Clinker Capacity***(Gray and White Plants)*

Company	Affiliation as of December, 31, 2013	Country	Clinker Capacity (000 Metric Tons) 12/31/2013**
---------	--------------------------------------	---------	---

Total Foreign Owned Capacity:

Total U.S. Capacity:

Percent of U.S. Foreign Owned Clinker Capacity :

Domestic Affiliated U.S. Clinker Capacity

Company

Total Domestic Owned Capacity:

Total U.S. Capacity:

Percent of U.S. Domestically Owned Clinker Capacity :

**Reflects Capacity Adjustments through 12/31/2013; includes temporarily furloughed plants



Table 33
Capacity Expansion Estimates

(Clinker, Thousands of Metric Tons)

Company	Location	Year On Stream	Net Expansion								
			2008	2009	2010	2011	2012	2013	2014	Total	
2008											
2009											
2010											
2012											

Net U.S. Capacity Changes

(G) Designates a greenfield plant. All other listings reflect expansions



Table 34

15 Largest States Ranked by Cement Grinding Capacity

(Thousands of Metric Tons - as of 12/31/13)

State	1994			2004			2014		
	Rank	Cement Grinding Capacity	Percent of U.S. Total	Rank	Cement Grinding Capacity	Percent of U.S. Total	Rank	Cement Grinding Capacity	Percent of U.S. Total

Total U.S.

Source: PCA U.S. Portland Cement Industry: Plant Information Summary



Table 35
Cement Imports

(Thousands of Metric Tons)

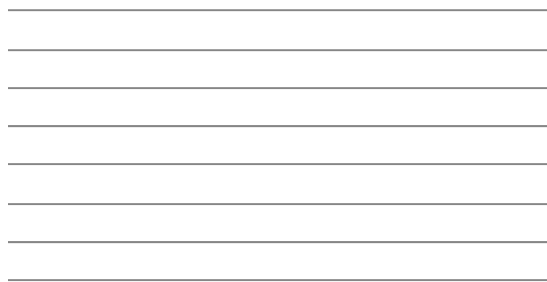
Year	Clinker	Finished Cement	Total	U.S. Cement Consumption ¹	Percent Share of Consumption		
					Clinker	Finished Cement	Total
1994							
1995							
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							

¹ Portland and Masonry. Excludes AK, Foreign and Puerto Rico

Source: U.S. Department of Commerce - Foreign Trade Division, U.S. Geological Survey

Total Imports

(Thousands of Metric Tons)



1994 1998 2002 2006 2010 2014

U.S. Import Share of Consumption

(Percent)



1994 1998 2002 2006 2010 2014



Table 36

U.S. Cement and Clinker Imports By Port - Top Customs Districts

(Thousands of Metric Tons)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Houston/Galveston											
Seattle											
Detroit											
Buffalo											
Miami											
Philadelphia											
New York City											
Cleveland											
Columbia-Snake											
Honolulu											
Pembina											
Ogdensburg											
All Others											
Total U.S.											

Source: U.S. Department of Commerce - Foreign Trade Division

Table 37

U.S. Cement and Clinker Imports - Country of Origin

(Thousands of Metric Tons)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Greece											
Sweden											
France											
Denmark											
Columbia											
Other											
Total U.S.											

Source: U.S. Department of Commerce - Foreign Trade Division



Table 38
Cement & Clinker Imports By Census District

(Thousands of Metric Tons)

Year	New England	Mid Atlantic	South Atlantic ¹	East North Central	East South Central	West North Central	West South Central	Mountain	Pacific	Total
1994										
1995										
1996										
1997										
1998										
1999										
2000										
2001										
2002										
2003										
2004										
2005										
2006										
2007										
2008										
2009										
2010										
2011										
2012										
2013										
2014										

¹ Includes Puerto Rico and U.S. Virgin Islands

Source: U.S. Department of Commerce - Foreign Trade Division

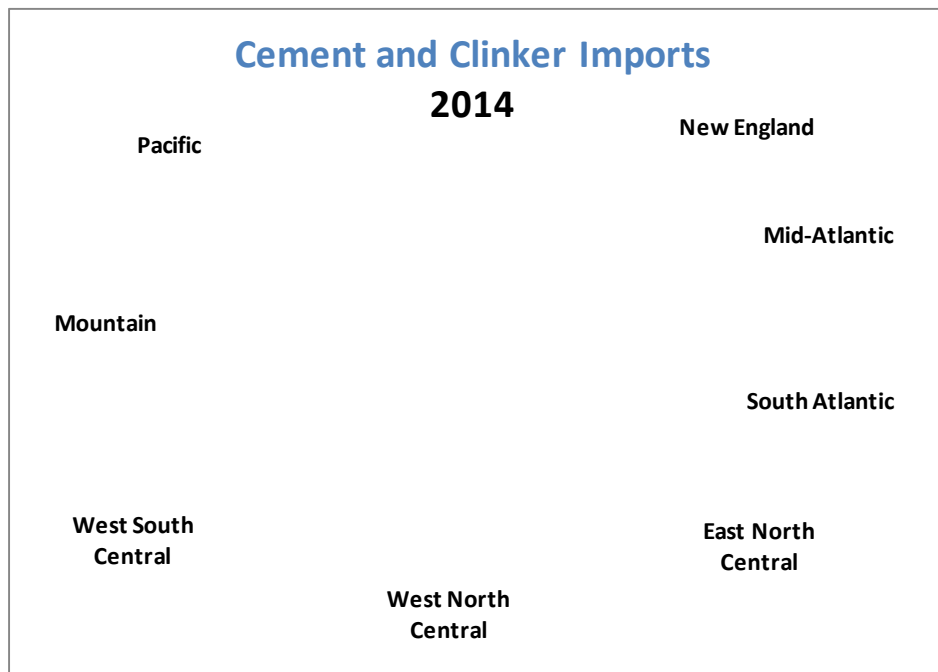




Table 39
Cement* Inventories at Year-end

(Thousands of Metric Tons)

Year	Stocks at Mills & Terminals	Year-Year % Change	U.S. Consumption	Year-Year % Change	Days Supply
1994					
1995					
1996					
1997					
1998					
1999					
2000					
2001					
2002					
2003					
2004					
2005					
2006					
2007					
2008					
2009					
2010					
2011					
2012					
2013					
2014					

* Portland & Masonry (excludes Puerto Rico)
Source: U.S. Geological Survey

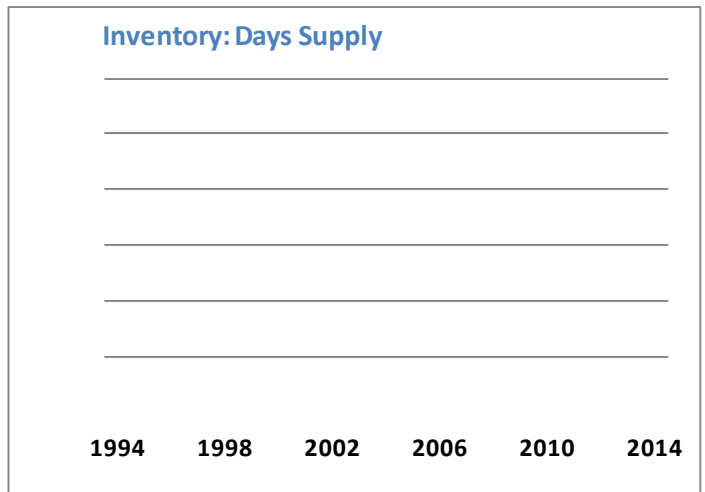
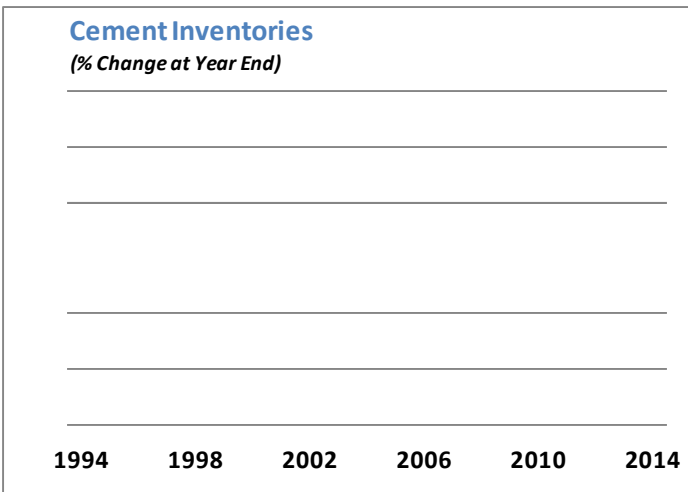




Table 40

Portland Cement Shipments by Type of Customer*

(Thousands of Metric Tons)

	2011		2012		2013	
	Quantity	% of Total	Quantity	% of Total	Quantity	% of Total
Ready-Mix Concrete						
Concrete Product Manufacturers						
Contractors						
Building Material Dealers						
Oil Well, Mining, and Waste						
Government & Misc.						
Total Shipments						

*Includes imported cement and cement made from imported clinker. Excludes Puerto Rico, data may not add to totals due to rounding

Note: 2013 Preliminary

Source: U.S. Geological Survey

Table 41

Portland Cement Shipped from U.S. Plants by Type of Product*

(Thousands of Metric Tons)

	2011		2012		2013	
	Quantity	% of Total	Quantity	% of Total	Quantity	% of Total
General Use and Moderate Heat (Types I and II)						
High-Early Strength (Type III)						
Sulfate-Resisting (Type V)						
Block						
Oil Well						
White						
Blended						
Portland Slag and Pozzolan						
Portland Fly Ash and Other						
Miscellaneous						
Total Shipments						

*Includes sales of imported cement. Excludes Puerto Rico, data may not add to totals due to rounding

Note: 2013 Preliminary

Source: U.S. Geological Survey



Table 42

Shipments of Portland Cement from Mills by Type of Carrier

(Percent Distribution)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Shipments to Ultimate Customer											
Rail											
Truck											
Barge & Boat											
Unspecified											
Shipments from Plant to Terminal <i>(Bulk only)</i>											
Rail											
Truck											
Barge & Boat											
Unspecified											
Percent of Total Shipments											
Terminal to customer											
Plant to customer											

Note: 2013 Preliminary

Source: U.S. Geological Survey

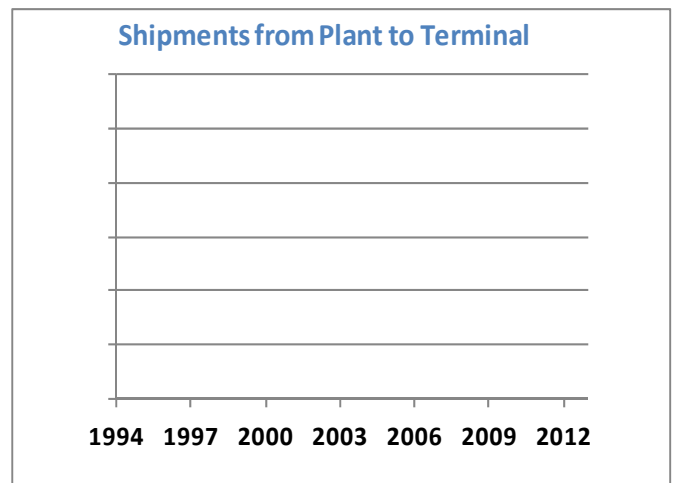
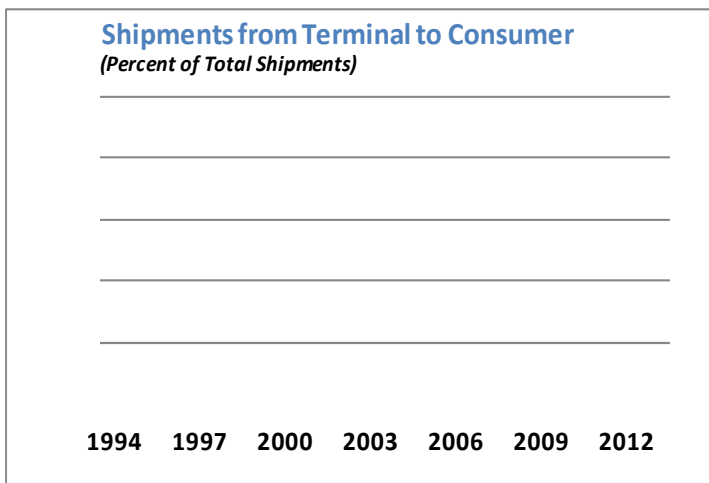




Table 43
Summary of Energy Consumption

(Thousands of BTUs per Equivalent Metric Ton*)

	1972	2008	2009	2010	2011	2012	2013	%Change	
								13/72	13/12
Gasoline									
Middle Distillates**									
Diesel									
Fuel Oil									
Residual oil									
LPG									
Total Petroleum Products									
Natural gas									
Coal									
Petroleum Coke									
Total Coal and Coke									
Alternative Fuel									
Total Fuel									
Electricity									
Total Fuel and Power									

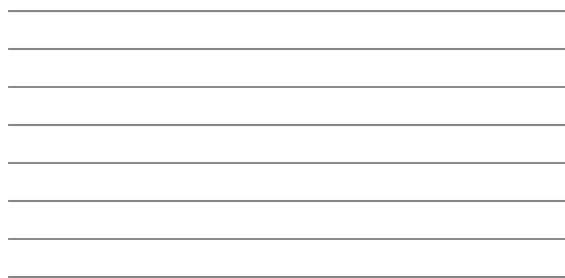
* Equivalent Metric Ton = weighted average of 92% clinker production plus 8% finished cement production

** Collection of Diesel and Fuel Oil individually commenced in 2011

Source: PCA U.S. Labor-Energy Input Survey

Energy Resources

(Million BTU per 000 Tons Produced)



1994 1997 2000 2003 2006 2009 2012

U.S. Plants - Energy Consumption

(Coal and Coke)



1994 1997 2000 2003 2006 2009 2012



Table 44

Alternative Fuels Utilized

	United States										
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total Reporting Plants											
Plants using Alternative Fuel											
Percent											
Types of Alternative Fuels Used*											
Tire Derived Fuel											
Waste Oil											
Solvents											
Other											

Source: PCA U.S. Labor-Energy Input Survey

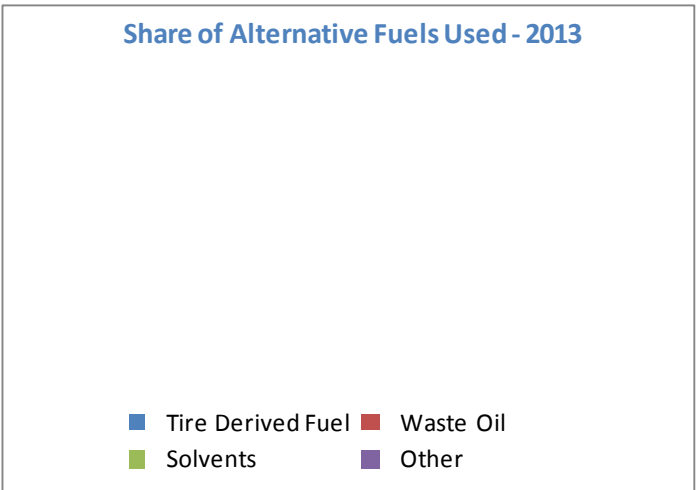
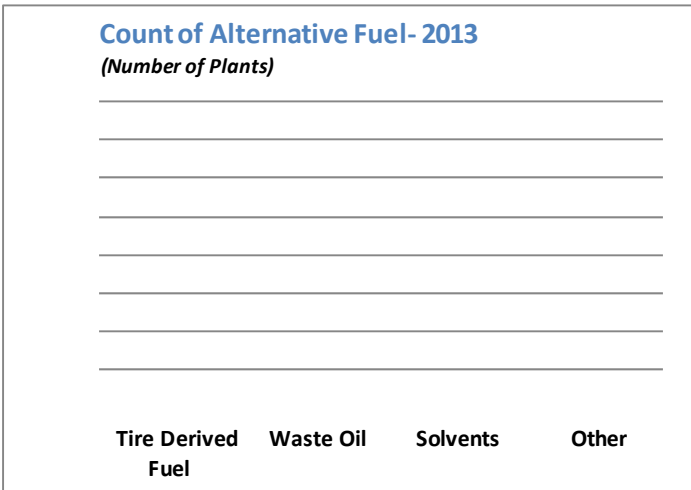




Table 45
Fossil Fuel Mix

(% Distribution of BTUs Consumed)

	1972	2005	2006	2007	2008	2009	2010	2011	2012	2013
Coal and Coke										
Natural Gas										
Petroleum Products										
Electricity										
Alternative Fuels										
Total Fuel										

Source: PCA U.S. Labor-Energy Input Survey

Table 46
Energy Consumption by Process

(Thousands of BTUs per Equivalent Metric Ton*)

	1972	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% Change		
												13/72	13/12	
Fuel and Electricity														
All Plants														
Wet-Process Plants														
Dry-Process Plants														
Fuel														
All Plants														
Wet-Process Plants														
Dry-Process Plants														
Electricity (kWh per Equivalent Metric Ton)														
All Plants														
Wet-Process Plants														
Dry-Process Plants														

*Equivalent Metric Ton = weighted average of 92% clinker production plus 8% finished cement production

Source: PCA U.S. Labor-Energy Input Survey



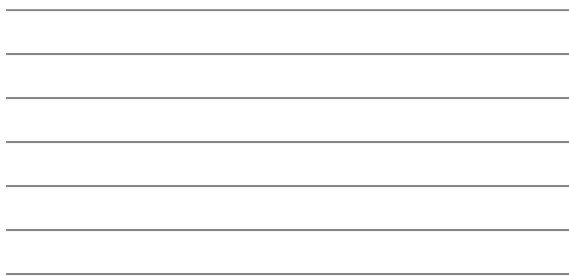
Table 47
Resources Used in Producing Cement¹
(Per Thousand Metric Tons of Cement Production)

Year	Material <i>(metric tons)</i>	Energy* <i>(million BTUs per ton)</i>	Labor** <i>(Tons per Hour)</i>
1990			
1991			
1992			
1993			
1994			
1995			
1996			
1997			
1998			
1999			
2000			
2001			
2002			
2003			
2004			
2005			
2006			
2007			
2008			
2009			
2010			
2011			
2012			
2013			

Percent Change (13/12)

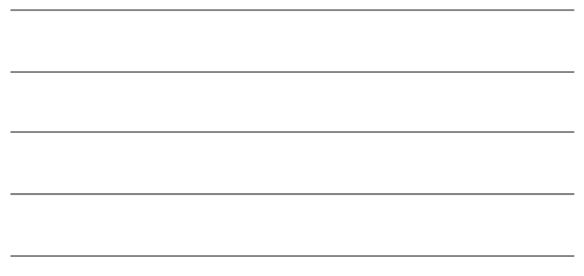
¹ Portland and Masonry
 * Equivalent Energy Ton = weighted average of 92% clinker production plus 8% finished cement production
 **Equivalent Labor Ton = weighted average of 85% clinker production plus 15% finished cement production
 Source: PCA U.S. Labor-Energy Input Survey, U.S. Geological Survey

Labor Resources
(Tons Per Hour)



1994 1997 2000 2003 2006 2009 2012

Labor Resources
(Employee - Hours per 000 Tons Produced (US & Canada))



1994 1997 2000 2003 2006 2009 2012



Table 48

U.S. Cement Industry Employment

Year	All Employees (Thousands)	Production Workers (Thousands)	Cement* Tons per Employee (Thousands)	Cement* Tons per Production Worker (Thousands)
1970				
1975				
1980				
1985				
1990				
1991				
1992				
1993				
1994				
1995				
1996				
1997				
1998				
1999				
2000				
2001				
2002				
2003				
2004				
2005				
2006				
2007				
2008				
2009				
2010				
2011				
2012				
2013				

* Portland + Masonry

Source: Annual Survey of Manufacturers, U.S. Census (NAICS 327310)

Table 49

U.S. Cement Industry Financial Statistics

(Median Results Cement Operations)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	Industry Total 2014
Gross Margin (%)										
Operating Profit (%)										
Operating Profit (\$/ton)										
Annual Capital Expenditures (% of sales)										

Source: PCA Financial Benchmarking Survey



Table 50

Cement Industry Operating Statistics

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Value of Shipments (\$ Billion)												
Labor												
Employment (000)												
Payroll (\$ Million)												
Energy (\$ Million)												
Purchased Fuel & Power												
Fuel												
Power												
NonEnergy Material												
Investment (\$ Million)												
New Capital Expenditures												
Buildings												
Equipment												
Key Ratios - Percent of Shipments (%)												
Payroll												
Purchased Fuel and Power												
NonEnergy Materials												

Source: Annual Survey of Manufacturers, U.S. Census (NAICS 327310)

U.S. Cement Industry - Capital Expenditures

(Billion \$)

1998 2000 2002 2004 2006 2008 2010 2012

Value of Industry Shipments

(Billion \$)

1998 2000 2002 2004 2006 2008 2010 2012



Table 51
Top World Producers of Hydraulic Cement

(Thousand of Metric Tons)

2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Total World

Source: U.S. Census Bureau, International Cement Review, PCA

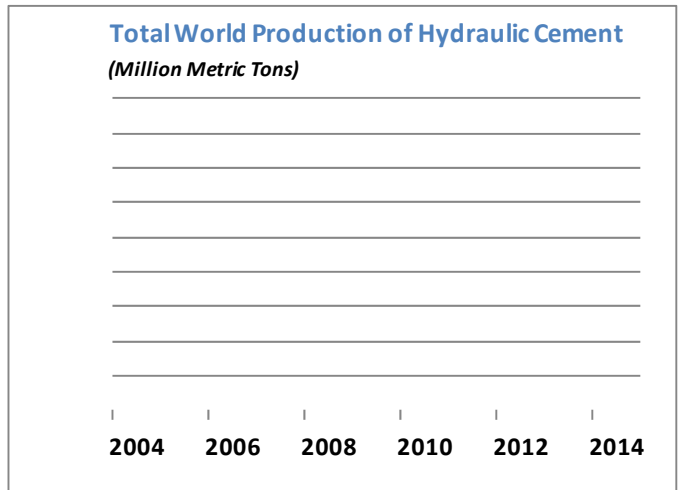
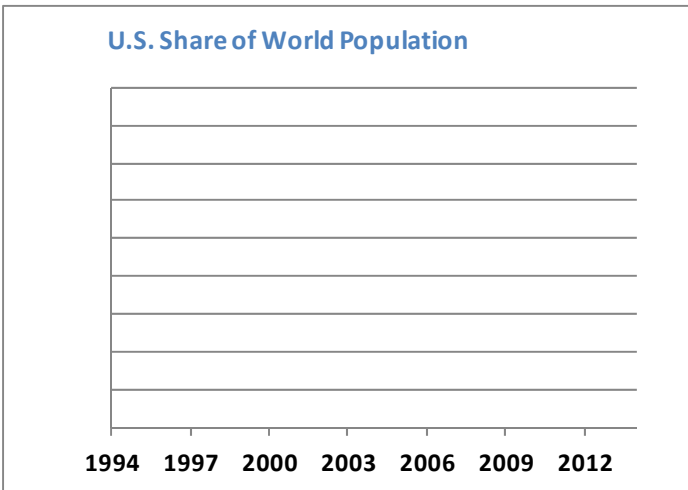




Table 52

Population Growth Rates for Top World Producers of Hydraulic Cement

(Year-Year % Change)

2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Total World

**Includes Puerto Rico.*

Source: U.S. Census Bureau: International Data Base

Share of G8 Countries to Total World Cement Consumption - 2014

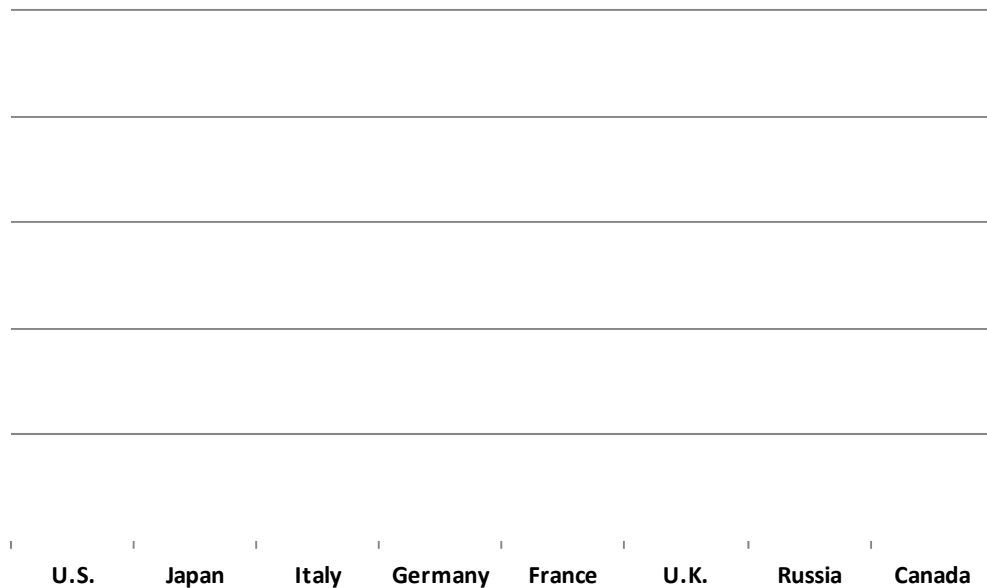




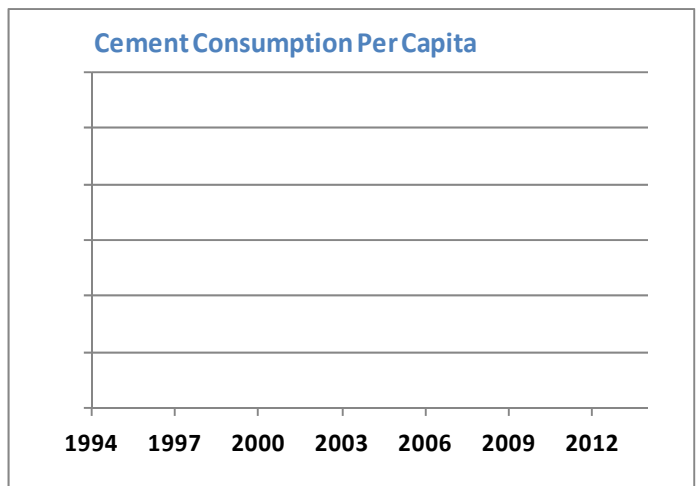
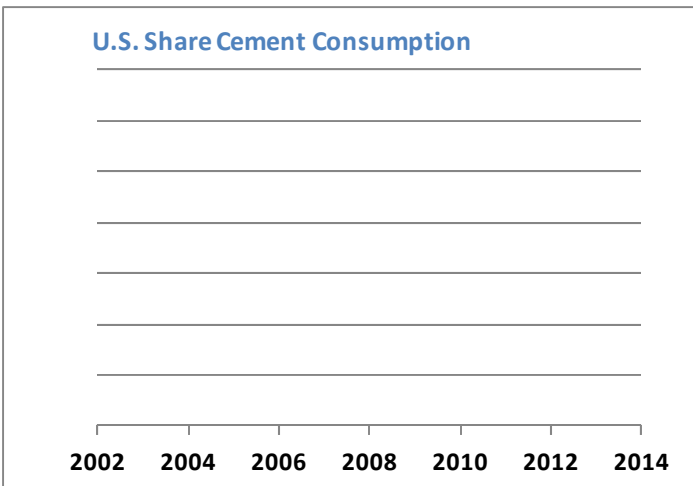
Table 53

Cement Consumption

(Million Metric Tons)

Year	G8 Countries		
	Total G8 Consumption	World Consumption	G8 Share of World Consumption (%)
1995			
1996			
1997			
1998			
1999			
2000			
2001			
2002			
2003			
2004			
2005			
2006			
2007			
2008			
2009			
2010			
2011			
2012			
2013			
2014			

*Estimated





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