

January 31, 2008

## Long-Term Cement Consumption Outlook

### Overview

Portland cement consumption is expected to grow 43% by 2030, reaching 183 million metric tons and reflecting a 55 million metric ton increase comparable to 2005's past cyclical peak level. PCA expects the combination of sustained moderate economic and population growth will fuel this increase.

Strong growth prospects for United States cement consumption partially explains the robust \$6 billion, 25 million metric ton capacity expansion that is now underway. If PCA's long-term cement consumption projections are accurate, further large-scale investment in cement supply must materialize to feed the United States' expected future consumption – either by means of further investment in domestic plants, import terminals, or both. Such decisions are likely to be made in the context of climate change legislation, sustained high energy costs, and moderate-to-robust economic growth among the world's transitional and emerging economies, which may imply high international freight rates.

### Population Growth Outlook

#### **Point 1: U.S. population is expected to grow by nearly 63 million persons by 2030.**

Population in the United States is expected to grow by 63 million persons by 2030 compared to 2007 levels. According to the Bureau of Census (BOC) April 2005 forecast, the United States' 2007 population is estimated at almost 301 million persons and is projected to reach 363.5 million persons by 2030 – reflecting a 21% increase over 2007 levels. With the exception of the District of Columbia, West Virginia, North Dakota and Iowa, every state in the country is expected to show growth in population.

The likely increase in population is not shared equally among all areas in the United States. Nearly 81% of the population increase is expected to materialize in the southern and western regions. For example, California, Texas, and Florida account for 47% of total United States population growth through 2030.

Dynamic regional population expansions are best measured by the percent growth in population. While United States' population is expected to increase 21% by 2030, the state populations of Arizona and Nevada are expected to rise by more than 70%. Florida's population will increase by nearly 60%. Ten other states are expected to grow by more than 25% -- all located in the southern or western regions of the United States. In contrast, the populations of the northeast, Great Lakes, north central and south central regions are each expected to grow by roughly 10% or less.

## *Tables*

# Cement Consumption

- Baseline, Thousands of Metric Tons

	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030
<b>Northeast</b>											
<b>Total</b>											
Connecticut											
Delaware											
District Of Columbia											
Maine											
Maryland											
Massachusetts											
New Hampshire											
New Jersey											
New York											
Pennsylvania											
Rhode Island											
Vermont											
Virginia											
West Virginia											
<b>Southeast</b>											
<b>Total</b>											
Alabama											
Georgia											
Kentucky											
Mississippi											
North Carolina											
South Carolina											
Tennessee											
<b>Florida</b>											
<b>Florida</b>											
<b>Great Lakes</b>											
<b>Total</b>											
Illinois											
Indiana											
Michigan											
Ohio											
Wisconsin											
<b>North Central</b>											
<b>Total</b>											
Iowa											
Minnesota											
Nebraska											
North Dakota											
South Dakota											

Source: USGS (History), Portland Cement Association (Forecast)

# Cement Consumption

- Baseline, Thousands of Metric Tons

1980 1985 1990 1995 2000 2005 2010 2015 2020 2025 2030

---

## South Central

### Total

Arkansas  
Kansas  
Missouri  
Louisiana  
Oklahoma

### Texas

### Texas

## Rocky Mountain

### Total

Colorado  
New Mexico  
Utah  
Wyoming

### Arizona

### Arizona

## California-Nevada

### Total

California  
Nevada

## Northwest

### Total

Idaho  
Montana  
Oregon  
Washington

### Other

### Total

Alaska  
Hawaii

## United States

Source: USGS (History), Portland Cement Association (Forecast)

# Cement Consumption

- Baseline, Thousands of Metric Tons

	Growth 2005-2030	Growth Rate 2005-2030	Growth Share of U.S. Total
<b>Northeast</b>			
<b>Total</b>			
Connecticut			
Delaware			
District Of Columbia			
Maine			
Maryland			
Massachusetts			
New Hampshire			
New Jersey			
New York			
Pennsylvania			
Rhode Island			
Vermont			
Virginia			
West Virginia			
<b>Southeast</b>			
<b>Total</b>			
Alabama			
Georgia			
Kentucky			
Mississippi			
North Carolina			
South Carolina			
Tennessee			
<b>Florida</b>			
<b>Florida</b>			
<b>Great Lakes</b>			
<b>Total</b>			
Illinois			
Indiana			
Michigan			
Ohio			
Wisconsin			
<b>North Central</b>			
<b>Total</b>			
Iowa			
Minnesota			
Nebraska			
North Dakota			
South Dakota			

Source: USGS (History), Portland Cement Association (Forecast)

# Cement Consumption

- Baseline, Thousands of Metric Tons

	Growth 2005-2030	Growth Rate 2005-2030	Growth Share of U.S. Total
<b>South Central</b>			
<b>Total</b>			
Arkansas			
Kansas			
Missouri			
Louisiana			
Oklahoma			
<b>Texas</b>			
<b>Texas</b>			
<b>Rocky Mountain</b>			
<b>Total</b>			
Colorado			
New Mexico			
Utah			
Arizona			
<b>Arizona</b>			
<b>Arizona</b>			
<b>California-Nevada</b>			
<b>Total</b>			
California			
Nevada			
<b>Northwest</b>			
<b>Total</b>			
Idaho			
Montana			
Oregon			
Washington			
<b>Other</b>			
<b>Total</b>			
Alaska			
Hawaii			
<b>United States</b>			

Source: USGS (History), Portland Cement Association (Forecast)

# Per Capita Cement Consumption

- Baseline, Metric Tons Consumed Per Thousand People

1980 1985 1990 1995 2000 2005 2010 2015 2020 2025 2030

---

## Northeast

### Total

Connecticut  
Delaware  
District Of Columbia  
Maine  
Maryland  
Massachusetts  
New Hampshire  
New Jersey  
New York  
Pennsylvania  
Rhode Island  
Vermont  
Virginia  
West Virginia

## Southeast

### Total

Alabama  
Georgia  
Kentucky  
Mississippi  
North Carolina  
South Carolina  
Tennessee

## Florida

### Florida

## Great Lakes

### Total

Illinois  
Indiana  
Michigan  
Ohio  
Wisconsin

## North Central

### Total

Iowa  
Minnesota  
Nebraska  
North Dakota  
South Dakota

Source: USGS (History), Portland Cement Association (Forecast)

# Per Capita Cement Consumption

- Baseline, Metric Tons Consumed Per Thousand People

1980 1985 1990 1995 2000 2005 2010 2015 2020 2025 2030

---

## South Central

### Total

Arkansas  
Kansas  
Missouri  
Louisiana  
Oklahoma

### Texas

### Texas

## Rocky Mountain

### Total

Colorado  
New Mexico  
Utah  
Wyoming

### Arizona

### Arizona

## California-Nevada

### Total

California  
Nevada

## Northwest

### Total

Idaho  
Montana  
Oregon  
Washington

### Other

### Total

Hawaii

## United States

Source: USGS (History), Portland Cement Association (Forecast)

# Population

- Baseline, Thousands of Persons

1980 1985 1990 1995 2000 2005 2010 2015 2020 2025 2030

---

## Northeast

### Total

Connecticut  
Delaware  
District Of Columbia  
Maine  
Maryland  
Massachusetts  
New Hampshire  
New Jersey  
New York  
Pennsylvania  
Rhode Island  
Vermont  
Virginia  
West Virginia

## Southeast

### Total

Alabama  
Georgia  
Kentucky  
Mississippi  
North Carolina  
South Carolina  
Tennessee

## Florida

### Florida

## Great Lakes

### Total

Illinois  
Indiana  
Michigan  
Ohio  
Wisconsin

## North Central

### Total

Iowa  
Minnesota  
Nebraska  
North Dakota  
South Dakota

Source: United States Bureau of Census

# Population

- Baseline, Thousands of Persons

1980 1985 1990 1995 2000 2005 2010 2015 2020 2025 2030

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## South Central

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Louisiana  
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New Mexico  
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### Arizona

### Arizona

## California-Nevada

### California-Nevada

California  
Nevada

## Northwest

### Total

Idaho  
Montana  
Oregon  
Washington

### Other

### Total

Alaska  
Hawaii

## United States

Source: United States Bureau of Census

# Population

- Baseline, Thousands of Persons

Growth  
2005-2030

Growth Rate  
2005-2030

Growth Share  
of U.S. Total

---

## Northeast

### Total

Connecticut  
Delaware  
District Of Columbia  
Maine  
Maryland  
Massachusetts  
New Hampshire  
New Jersey  
New York  
Pennsylvania  
Rhode Island  
Vermont  
Virginia  
West Virginia

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Kentucky  
Mississippi  
North Carolina  
South Carolina  
Tennessee

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### Florida

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Indiana  
Michigan  
Ohio  
Wisconsin

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Source: United States Bureau of Census

# Population

- Baseline, Thousands of Persons


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<b>Texas</b>			
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<b>Rocky Mountain</b>			
<b>Total</b>			
Colorado			
New Mexico			
Utah			
Wyoming			
<b>Arizona</b>			
<b>Arizona</b>			
<b>California-Nevada</b>			
<b>California-Nevada</b>			
California			
Nevada			
<b>Northwest</b>			
<b>Total</b>			
Idaho			
Montana			
Oregon			
Washington			
<b>Other</b>			
<b>Total</b>			
Alaska			
Hawaii			
<b>United States</b>			


Source: United States Bureau of Census

**2008 Order Form**  
Economic Research Department

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Portland Cement Association Attn: Economic Research Dept. 5420 Old Orchard Rd. Skokie, IL 60077-1083	

	By Fax:
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	By Phone:
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| <input type="checkbox"/> East North Central | <input type="checkbox"/> South Atlantic     | <input type="checkbox"/> Mountain           |
| <input type="checkbox"/> East South Central | <input type="checkbox"/> West North Central | <input type="checkbox"/> Pacific            |

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