Presentation Focus

1. Putting the Forecast Into Context: 2020 Performance
2. IHME Covid-19 Projections, Impacts & Risks
3. Evidence of a Strong Recovery…So Far
4. 2021-2023 Macroeconomic, Inflation & Interest Rate Scenario
5. Growth Composition In the Context of Rising Interest Rates
6. The Biden Agenda Face Value: Infrastructure “America’s Jobs Plan”
7. Political Considerations & Alternative Scenarios
8. The Weighted Average Baseline Outlook
9. Questions & Answers
Putting the Forecast Into Context

2020 Performance Data
Economic Performance

RGDP Growth
% Y-O-Y

- Largest decline in GDP Growth since 1946 when economy was transitioning from a war time economy.
- The 2nd Quarter saw Real GDP decline 31%.
- Since Q2, the economy has been mired with state shutdowns, reopenings, and shutdowns. Covid has retreated and increased.
- And…since Q3 economic growth has exceeded 5%
- 2020 GDP Growth: -3.5

Net Job Creation
Thousand Jobs

- Nearly 9.5 million jobs lost. That equates to nearly 1.0 million more jobs lost during the great recession.
- More than 20.6 million jobs were lost in one MONTH.
- Last three months average monthly job creation: 539K
Off to a Bad Start
February 2021 year-to-date

West North Central -10.4%
West South Central -12.5%
New England -13.6%
East North Central -27.7%
Middle Atlantic -21.7%
South Atlantic -2.0%
East South Central -1.7%
Pacific -10.2%
Mountain -2.6%
United States -9.9%

Despite PCA weather metric data to the contrary, cross-checks suggest declines are weather related - and not reflective of a structural decline.

Source: USGS/PCA
Covid Data & IHME Projections
Confirmed & Projected COVID-19 Deaths

U.S. Coronavirus Deaths; 7-day moving average; IHME Projections

- 3 Million Vaccinations Daily
- 18.5% Fully Vaccinated
- 40% At Least One Dose
- 25% Refuse Vaccination
- 75% Herd Immunity Reached by July 6th (PCA)

IHME Baseline Forecast

Projections July 1st
- April 6th: 818
- Base Case: 165
- Worst Case: 883
- Best Case: 78

Risks
- Some are reporting the potential of a third bump in Covid due to the spread of Variants.
- IHME Projections are Bi-Modal – they do not project a third “bump”
Vaccine Impact on the Economy

Once the Vaccine is Mass Distributed….and herd immunity levels reached…..

It will:

• Result in a dramatic surge in consumer confidence.

• Encourage a return to many, but not all, Pre-Covid activities
  • Dining, movies, shopping, face-to-face interactions.

• Business will reopen, new businesses will emerge to fill voids created by the virus.
  • Perhaps encouraged by SBA support

• Investment uncertainty will decline.

• Economy will expand rapidly.

• Jobs growth will be strong.

This is largely based on consumers returning to pre-Covid patterns.

Given the severity and duration of the disruption…full restoration of consumer patterns may occur over several quarters.

The process begins with consumers sense of safety and the achievement of herd immunity.
Evidence of a Strong Recovery
Consumer Comfort
Morning Consult, % All Adults

- Pace of Vaccinations Accelerates
- Covid-19 Daily Death Rates Drop

Activities:
- Public Socializing
- Dining Out
- Shopping
- Travel
- Sport/Concert Event
Consumer Sentiment
Composite, University of Michigan

Note:
Vaccinations & Reductions in death rates have recently resulted in the highest level of optimism since the start of the pandemic.

With continued gains in vaccinations a return to pre-Covid levels is expected during Q2 2021.
Note:
With the return in consumer optimism, LV sales has returned/exceeded pre-Covid levels.
This has been replicated across many sectors.
Economic Performance

Net Monthly Job Gains
Net Thousands

Net Job Creation
Thousand Jobs

Employment is 8.4 million jobs lower than pre-Covid levels.

Millions have left the workforce. This blurs the unemployment rate. Without the reduction in workforce, unemployment would be 9%.

Net New Jobs:
- 2021: 4.5 million
- 2022: 3.5 million

Even with continued robust job creation, Pre-Covid employment levels not reached until 2023.
Back to Normal Index
Moody’s-CNN Survey 100=March 1\textsuperscript{st} 2020

With continued progress in vaccinations, re-openings, growing consumer confidence, and sustained strength in job gains….return to pre-Covid “normal” is expected early in Q3.

Real GDP
2021: 6.2%
2022: 4.5%

Unemployment Rate
2021: 5.2%
2022: 4.8%

Note: Unemployment rate estimates include a significant expansion of the labor force – muting the decline in unemployment rates.
2021-2023
Inflation & Interest Rates
### Growing Inflation Concerns

<table>
<thead>
<tr>
<th>Year</th>
<th>Events</th>
</tr>
</thead>
</table>
| **2020** | Global Pandemic Unfolds  
Oil Prices Drop  
Massive Unemployment Materializes  
Consumer Demand Contracts  
Capacity Utilization Eases  
Inflationary Expectations are Reduced  
Federal Reserve Accommodative.  
US Covid-19 Vulnerability Prompts Weakening of Dollar  
Inflation Declines an Estimated 50 Basis Points  
Inflation Rate: 1.3% |
Consumer Demand Increase  
Capacity Utilization Rises But Slack Remains.  
High Inventories, Increased Iran Supply, Potential OPEC Production Significantly Neutralize Demand Pull on Oil Prices  
Unemployment Reduced to 6% by Year End – Still High and Holds In-Check Wage Increases  
Minimum Wage Slowly Phased In.  
Inflationary Expectations Rise Modestly.  
Federal Reserve Remains Accommodative.  
Inflation Increases an Estimated 80 to 90 Basis Points – From Low Level.  
Inflation Rate: 2.0% |
| **2022-23** | Much of Pandemic Has Passed.  
Pent-Up Demand Is Released.  
Unemployment Declines Below 5%.  
Phase in of Minimum Wage Limits Impact on Inflation.  
Capacity Slack is Reduced.  
Inflationary Expectations Rise More Aggressively.  
Federal Reserve Becomes Mildly Restrictive.  
US Dollar Strengthens.  
Inflation Increases an Estimated 50 to 70 Basis Points  
Inflation Rate: Above Fed Target Rate |
Inflation Rate Scenario, %

Stage I
- Covid supply disruptions, increased demand create product specific shortages.
- Transitory not Structural

Stage II
- Covid supply disruptions fade.
- Slackness that characterizes productive side of economy slowly recedes.
- Inflation eases.

Stage III
- Economy regains footing. Slackness disappears. Unemployment drifts below 5%.
- Inflation increases beyond Fed target Rate.

Stage IV
- Fed Target Rate achieved 2024 & beyond.
Stage I
- Covid supply disruptions, increased demand create product specific shortages.
- Transitory not Structural

Stage II
- Covid supply disruptions fade.
- Slackness that characterizes productive side of economy slowly recedes.
- Inflation eases.

Stage III
- Economy regains footing. Slackness disappears. Unemployment drifts below 5%.
- Inflation increases beyond Fed target Rate.

Stage IV
- Fed Target Rate achieved 2024 & beyond.
Growth Composition In the Context of Rising Interest Rates
Residential Projection
Residential Cement Consumption

Mortgage Interest Rates
Conventional, 30 Year, %

Monthly Payment Average Annual Increases %

- 2005-2019: 1.9%
- 2020-2022 Q2: 2.3%
- 2022 Q3-2024: 11.6%
Ending Foreclosure & Eviction Moratoriums:

PCA’s analysis suggests due to tight housing supplies, little adverse impact will be suffered by either single and multifamily construction.
Nonresidential Projection
Nonresidential Recovery Process

Working Capital Factor:
The longer below “normal” economic conditions persist – the more pressure occurs on working capital and ability to stay open.

Structural Factors Contribute to Vacancy Rates:
- Work-At-Home
- E-Retail
- Virtual Meeting
- E-Learning
- Urban Trend Slows

Nonresidential Construction
Real PIP, Y-O-Y Change

-30%
-25%
-20%
-15%
-10%
-5%
0%
-5%
-10%
-15%
-20%
-25%
-30%

January
February
March
April
May
June
July
August
September
October
November
December

Nonresidential is not expected to contribute to growth until 2023
Public Projection
Percent Declines in General Fund Tax Revenues from Pre-COVID Levels

On a state weighted basis, 2021 general fund revenues are expected to decline 12.3% as reported by state agencies.

States with high exposure to oil & tourism revenues are at most risk.

Source: Center on Budget and Policy Priorities: Data compiled from various state agencies as of November 6, 2020
State & Local Allocation Scheme

$Billions

Total State & Local Government Aid: $350

State Governments & DC: $195.3
- Divided equally: $25.5
- Divided based on states' share of total unemployed Americans: $169.8

Counties & Cities: $130.2
- Counties: $65.1
- Cities: $65.1
- Divided based on population:
  - >50,000: $45.6
  - <50,000: $19.5

Territories & Tribes: $24.5
- Tribes: $20
- Territories: $4.5
Estimated Aid Sent to States

<table>
<thead>
<tr>
<th>State</th>
<th>$Billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>$ 0.89</td>
</tr>
<tr>
<td>Kentucky</td>
<td>$ 2.26</td>
</tr>
<tr>
<td>New York</td>
<td>$ 14.02</td>
</tr>
<tr>
<td>Alabama</td>
<td>$ 2.12</td>
</tr>
<tr>
<td>Louisiana</td>
<td>$ 3.12</td>
</tr>
<tr>
<td>Ohio</td>
<td>$ 5.58</td>
</tr>
<tr>
<td>Arkansas</td>
<td>$ 1.55</td>
</tr>
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<td>Massachusetts</td>
<td>$ 5.38</td>
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<tr>
<td>Oklahoma</td>
<td>$ 1.84</td>
</tr>
<tr>
<td>Arizona</td>
<td>$ 4.46</td>
</tr>
<tr>
<td>Maryland</td>
<td>$ 3.77</td>
</tr>
<tr>
<td>Oregon</td>
<td>$ 2.69</td>
</tr>
<tr>
<td>California</td>
<td>$ 28.31</td>
</tr>
<tr>
<td>Maine</td>
<td>$ 1.08</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>$ 8.08</td>
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<tr>
<td>Colorado</td>
<td>$ 3.99</td>
</tr>
<tr>
<td>Michigan</td>
<td>$ 4.98</td>
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<tr>
<td>Rhode Island</td>
<td>$ 1.15</td>
</tr>
<tr>
<td>Connecticut</td>
<td>$ 2.97</td>
</tr>
<tr>
<td>Minnesota</td>
<td>$ 2.76</td>
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<tr>
<td>South Carolina</td>
<td>$ 2.58</td>
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<tr>
<td>District Of Columbia</td>
<td>$ 1.07</td>
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<tr>
<td>Missouri</td>
<td>$ 2.67</td>
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<tr>
<td>South Dakota</td>
<td>$ 0.74</td>
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<tr>
<td>Delaware</td>
<td>$ 0.99</td>
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<tr>
<td>Mississippi</td>
<td>$ 1.86</td>
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<td>Tennessee</td>
<td>$ 3.32</td>
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<td>Florida</td>
<td>$ 8.47</td>
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<td>Montana</td>
<td>$ 0.85</td>
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<td>Texas</td>
<td>$ 16.37</td>
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<td>Georgia</td>
<td>$ 4.78</td>
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<td>North Carolina</td>
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<td>Utah</td>
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<td>Hawaii</td>
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<td>Virginia</td>
<td>$ 4.26</td>
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<tr>
<td>Iowa</td>
<td>$ 1.45</td>
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<td>Nebraska</td>
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<td>Vermont</td>
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<tr>
<td>Idaho</td>
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<tr>
<td>New Hampshire</td>
<td>$ 0.95</td>
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<tr>
<td>Washington</td>
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<td>Illinois</td>
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<td>New Jersey</td>
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<td>Wisconsin</td>
<td>$ 2.44</td>
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<td>Indiana</td>
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<td>New Mexico</td>
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<td>West Virginia</td>
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<tr>
<td>Kansas</td>
<td>$ 1.36</td>
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<tr>
<td>Nevada</td>
<td>$ 2.56</td>
</tr>
<tr>
<td>Wyoming</td>
<td>$ 0.75</td>
</tr>
</tbody>
</table>

Source: BLS, PCA

The legislation says the funds are to be distributed based on each states’ share of total unemployed Americans. So I used BLS unemployment numbers to figure out the share. Each state and DC also starts out with $500 million.
Cement Consumption Outlook
No Infrastructure
Cement Consumption Outlook: No Added Infrastructure

Y-O-Y %

Late Years of Horizon

- Covid-19 accelerates structural trends that were in-place.
- Fossil fuel prices remain constrained.
- Interest rates increase.
- Private sector slows.
- Public sector growth largely a state phenomenon and supported by moderately growing economic conditions.

Growth slows to 1% or Less
Biden’s American Jobs Plan
Face Value
After Congressional Passage: There Will Be a Wait for Pouring to Begin

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
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<tbody>
<tr>
<td>House &amp; Senate Passage</td>
<td>4-9 Months</td>
</tr>
<tr>
<td>Federal &amp; State Paperwork</td>
<td>4-12 Months</td>
</tr>
<tr>
<td>Bid Letting &amp; Review</td>
<td>6-15 Months</td>
</tr>
<tr>
<td>Contract Award to Construction</td>
<td>6-21 Months</td>
</tr>
</tbody>
</table>

Average Construction Start: Early 2023
Non-Traditional Infrastructure Investments
Spending Segmented by Cement Intensities

- **Low Cement Intensities**
  - $669.0

- **High Cement Intensities**
  - $894.0

- **Zero or Undetermined Cement**
  - $610.0

Biden “Face Value” Infrastructure Scenario: $2.2 Trillion

- 28% of spending has no impact on cement consumption.
- 59% of spending has little or no impact on cement consumption.
Cement Consumption Estimates

Biden “Face Value” Infrastructure Scenario:
Cement Consumption

Programs Totaling 82 MMT
Infrastructure Timing Distribution
Highway & Bridges

Process repeated across all 14 construction segments that are impacted by the Infrastructure Program

<table>
<thead>
<tr>
<th>Billion</th>
<th>ROAD &amp; BRIDGES</th>
<th>ROAD SAFETY</th>
<th>COMMUNITY</th>
<th>TOTAL</th>
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<td>$115</td>
<td></td>
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<td>$139</td>
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<td>$20</td>
<td></td>
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</tr>
<tr>
<td>$4</td>
<td></td>
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</table>

**Fiscal Year Spending**

<table>
<thead>
<tr>
<th>Spending Allocation Billion $</th>
<th>Fiscal Year Spending</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>Total Spent</th>
<th>Total Spent</th>
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<tbody>
<tr>
<td>2023</td>
<td>$14</td>
<td>$3</td>
<td>$6</td>
<td>$3</td>
<td>$2</td>
<td>$14</td>
<td>100%</td>
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<tr>
<td>2024</td>
<td>$14</td>
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<td>$3</td>
<td>$6</td>
<td>$3</td>
<td>$12</td>
<td>86%</td>
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<td>2025</td>
<td>$14</td>
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<td></td>
<td>$3</td>
<td>$6</td>
<td>$9</td>
<td>64%</td>
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<td>2026</td>
<td>$14</td>
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<td>$3</td>
<td>$3</td>
<td>21%</td>
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<tr>
<td>Total Spending</td>
<td>$70</td>
<td>$3</td>
<td>$9</td>
<td>$12</td>
<td>$14</td>
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</table>
S&L Sterilization
Percentage Foregone

TEA/SAFETY-LU: 31%
ARRA: 81%

0% 10% 15% 20% 33%

VA Buildings Manufacturing Utilities
Education Residential Renovations Public Misc.
Conservation Public Buildings
Highway Bridges Water
Shovel Ready

S&L Sterilization
Biden Housing Initiative
# Biden’s Housing Impact
**Over Full Horizon**

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
<th>Details</th>
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<tbody>
<tr>
<td></td>
<td>$213 Billion</td>
<td>500,000 Units</td>
</tr>
<tr>
<td>New SF</td>
<td>$7 Billion</td>
<td>30,000 Units</td>
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<tr>
<td>New MF</td>
<td>$55 Billion</td>
<td>470,000 Units</td>
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<tr>
<td>Rehabilitations</td>
<td>$106 Billion</td>
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<tr>
<td>Clean Energy &amp; Insulation</td>
<td>$45 Billion</td>
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Tax Impact
## Biden Tax Impacts

GDP Impacts Reflect Consensus of:

- Tax Foundation, American Enterprise Institute, Wharton

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th></th>
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<th>Tax Scenario</th>
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<th>Net Impact</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>2015</td>
<td></td>
<td>2.9%</td>
<td>143,093</td>
<td>979</td>
<td>89,835</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.9%</td>
<td>143,093</td>
<td>979</td>
<td>89,835</td>
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<tr>
<td>2016</td>
<td></td>
<td>4.1%</td>
<td>147,625</td>
<td>1,050</td>
<td>94,184</td>
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<td></td>
<td>4.1%</td>
<td>147,625</td>
<td>1,050</td>
<td>94,184</td>
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<tr>
<td>2017</td>
<td></td>
<td>2.9%</td>
<td>150,275</td>
<td>1,061</td>
<td>96,295</td>
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<td></td>
<td></td>
<td></td>
<td>2.9%</td>
<td>150,275</td>
<td>1,061</td>
<td>96,295</td>
<td>0</td>
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<tr>
<td>2018</td>
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<td>2.2%</td>
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<td>1,046</td>
<td>99,762</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.2%</td>
<td>152,513</td>
<td>1,046</td>
<td>99,762</td>
<td>0</td>
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<tr>
<td>2019</td>
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<td>-4.4%</td>
<td>143,055</td>
<td>1,064</td>
<td>101,724</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-4.4%</td>
<td>143,055</td>
<td>1,064</td>
<td>101,724</td>
<td>0</td>
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<tr>
<td>2020</td>
<td></td>
<td>6.2%</td>
<td>147,432</td>
<td>1,079</td>
<td>104,273</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.2%</td>
<td>147,432</td>
<td>1,079</td>
<td>104,273</td>
<td>0</td>
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<tr>
<td>2021</td>
<td></td>
<td>5.3%</td>
<td>150,712</td>
<td>1,119</td>
<td>108,073</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.3%</td>
<td>150,712</td>
<td>1,119</td>
<td>108,073</td>
<td>-75</td>
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<tr>
<td>2022</td>
<td></td>
<td>2.4%</td>
<td>153,462</td>
<td>1,140</td>
<td>109,492</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.4%</td>
<td>153,462</td>
<td>1,140</td>
<td>109,492</td>
<td>-125</td>
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<tr>
<td>2023</td>
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<td>2.4%</td>
<td>155,737</td>
<td>1,150</td>
<td>110,316</td>
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<td></td>
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<td></td>
<td>2.4%</td>
<td>155,737</td>
<td>1,150</td>
<td>110,316</td>
<td>-175</td>
</tr>
</tbody>
</table>
Biden Face Value Impact Summary
Cement Consumption Outlook: Infrastructure Face Value

Y-O-Y %

Late Years of Horizon

• Private sector growth decays in the context of rising interest rates

• Public sector supports stronger growth rates during back end of the forecast.

• More than $860 billion in the Biden Infrastructure plan contributes little or nothing to cement consumption.

• Adds 7 MMT to consumption by end of forecast horizon.

Growth increases to 3% annually.
The Political Assumptions
It took from George Washington to Ronald Reagan – more than 200 years – to amass $1 Trillion in Debt.

During 2020-2021 – two years - the US will amass $7.2 Trillion in Debt.

ANY Infrastructure proposal must pay for itself.

That means taxes.

Some in Congress have concern about the deficit & rigid stands against new taxes.

This forms the basis of opposition to the Biden proposal.

Note: Passed through reconciliation with no Republican support; signed into law on March 11.
Compromise Scenario

• Ditch the contentious Biden tax increases.

• Scrap the expanded definition of “Infrastructure”.

• Focus on expanding commitment to traditional infrastructure programs already in place:
  • Fast Act
  • WRDA
  • Army Corps Projects
  • FAA Reauthorization

• Assume a 25% expansion in each program.

• Net Impact: + 4.6 MMT annually, 4.1 MMT after sterilization assessments.

Cement Consumption Growth

| Annual, % | 2020: 2.0% | 2021: 2.2% | 2022: 1.9% | 2023: 2.1% | 2024: 2.7% | 2025: 1.3% |
Adjusting for Political Risks

Potential Outcomes Considered

- Biden Face Value: 60%
- Compromise: 5%
- No Plan is Passed: 35%

**Base Case**

Weighted Average of the Three Scenarios

**NOTE:**
Regardless of which political outcome materializes, it will not have any substantive impact on cement consumption until 2023.

That implies that this source of risk to the forecast is not present during 2021-2022 time period.

**Note:** The $1.9 Trillion “America Rescue Plan passed through reconciliation with no Republican support; signed into law. Reconciliation will be in force for the Infrastructure bill.
Summary
The Political Scenarios: Summary

**Total Cement Consumption**
Metric Tons

**Cement Consumption Growth**
Y-O-Y % Change

- **Biden Face Value**
- **Compromise**
- **No Infrastructure**
Weighted Average Baseline: Summary

<table>
<thead>
<tr>
<th>Year</th>
<th>Cement Consumption Growth, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>2.0%</td>
</tr>
<tr>
<td>2021</td>
<td>2.2%</td>
</tr>
<tr>
<td>2022</td>
<td>1.9%</td>
</tr>
<tr>
<td>2023</td>
<td>2.4%</td>
</tr>
<tr>
<td>2024</td>
<td>2.8%</td>
</tr>
<tr>
<td>2025</td>
<td>1.8%</td>
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