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SECTOR IN-DEPTH
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Contacts

Emile El Nems +1.212.553.6849
VP-Senior Analyst
emile.elnems@moodys.com

Dean Diaz +1.212.553.4332
Associate Managing Director
dean.diaz@moodys.com

Matt Taxis +1.212.553.9485
Associate Analyst
matt.taxis@moodys.com

Julia Wilson +1.212.553.2160
Associate Analyst
julia.wilson@moodys.com

John Medina +1.212.553.3604
VP-Sr Credit Officer
john.medina@moodys.com

Michael Corelli, CFA +1.212.553.1654
Senior Vice President
michael.corelli@moodys.com

Ed Sustar +1.416.214.3628
Senior Vice President
ed.sustar@moodys.com

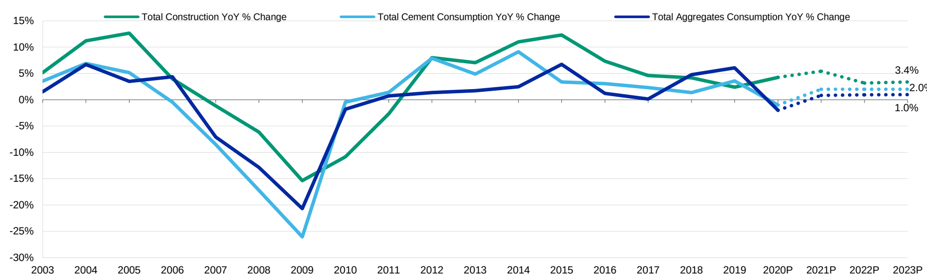
Building Materials – US

An infrastructure bill would substantially boost aggregates, cement companies

» **Trends in construction spending position building materials for years of growth.** Robust demand for single family homes, low housing inventory, steady infrastructure spending, and record low interest rates are all factors that will support strength in construction activity. For 2021 and 2022, we project US construction spending to grow at 3.2% and 3.4%, respectively, primarily driven by stable residential and public construction activity and a recovery in nonresidential spending.

Exhibit 1

Robust construction spending will drive cement and aggregates consumption higher



Source: U.S. Census Bureau, Moody's Projections

» **Passage of a multiyear federal infrastructure investment bill will have a profound effect on building materials and US construction activity.** Whether it is President Joseph Biden's "Build Back Better" plan, or another proposal, we believe a multiyear federal infrastructure investment bill will boost US construction spending growth (see Exhibit 2) by about 200 basis points 9-12 months after being passed. Assuming a bill is passed by Q3-2021, we project total US construction spending ($1.5 trillion) to grow 5.0% in 2022 and 5.5% 2023.

» **Aggregates companies would benefit substantially from passage of a multiyear federal infrastructure investment spending bill.** Half of aggregates demand is for public infrastructure, with the rest equally split between residential and nonresidential construction. Years of industry consolidation and repositioning, continued economic and construction industry strength, along with solid repair and remodeling activity, are all reasons the aggregates industry is operating at equilibrium (supply meeting demand). Under these conditions, we project price and volume to increase by 3% a year. However, if a scalable federal infrastructure investment bill passes, we see price and volume increasing an additional 2%, enhancing profitability for aggregates suppliers. These companies already benefit from no import threats and high barriers to entry, leaving them well positioned to reap the benefits from incremental demand. Since 1998, aggregates pricing have only declined twice (once in 1998 and once in 2010, each time by about 2%).

» **Cement and concrete ready-mix producers will also benefit.** Cement and concrete ready-mix producers will also do well should a multiyear federal infrastructure investment bill pass. US cement producers are operating at more than 83% capacity utilization, limiting their ability to increase supply. That offers manufacturers sustainable pricing power. In recent years, industry consolidation and environmental regulations limited expansion or new competitors, forcing reliance on imports. Imports currently account for 15% of total consumption in the US. Importing cement is not ideal, however, because transport costs can quickly outstrip profit if customers are more than 100 miles from a port.

» **Lumber will be affected least, steel and copper will fare slightly better.** Passage of a federal infrastructure investment bill will have little effect on lumber pricing in our view. Lumber's largest demand driver is residential construction, along with repair and remodeling activity, which would not be affected by such a bill. We expect steel and copper to fare better than lumber, because the Biden Administration's plan includes green initiatives that are highly reliant on the metals. The new administration's "Made In All of America" initiative commits to procuring steel (as well as cement, concrete, and other building products) from within the US. Furthermore, Biden's initiatives call for new electric vehicle charging stations and zero emission school buses, which would require about 200,000 tons of copper (Reuters).

Infrastructure investment plan would build on already strong industry fundamentals

A multiyear federal infrastructure investment bill would boost construction spending growth as much as 2% and drive prices and volumes materially higher for cement and aggregates.

Exhibit 2

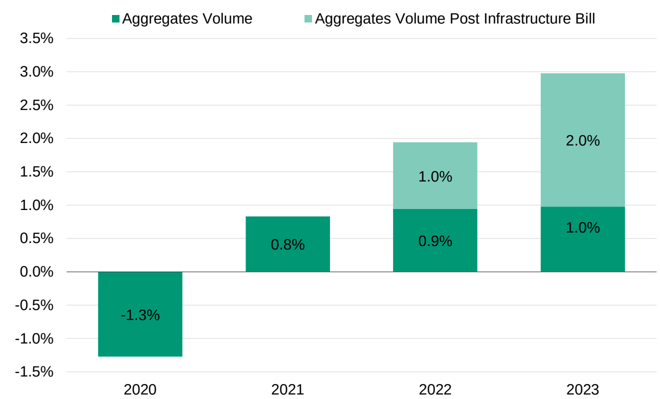
Impact of potential multiyear federal Infrastructure investment bill on US construction spending

	Construction spending at 11/30/20 in $mm	Segment Breakdown	2019 YoY % change	Jan. to Nov. 2020	2020P YoY % change	2021P YoY % change	2022P YoY % change w/o Bill	2023P YoY % change w/o Bill	2022P YoY % change w/ Bill	2023P YoY % change w/ Bill
Total Construction Spending	$1,459,440	100.0%	2.3%	4.3%	4.3%	5.4%	3.2%	3.4%	5.0%	5.5%
Total Residential	$666,990	45.7%	-2.5%	10.0%	10.6%	9.2%	3.0%	3.0%	3.8%	3.0%
Total Non Residential	$792,450	54.3%	5.8%	0.4%	0.0%	2.6%	3.3%	3.7%	4.8%	6.9%
Total Public Spending	$347,600	23.8%	8.0%	5.1%	4.9%	2.8%	2.9%	3.5%	7.6%	8.1%
Public Residential	$8,904	0.6%	2.1%	31.7%	31.0%	20.0%	5.0%	3.0%	10.0%	8.0%
Public Non Residential	$338,697	23.2%	8.1%	4.5%	4.4%	2.4%	2.9%	3.6%	7.5%	8.1%
Office	$10,788	0.7%	10.9%	3.1%	2.4%	2.4%	-1.0%	-3.0%	1.0%	1.0%
Commercial	$3,644	0.2%	11.8%	-3.0%	-2.3%	1.0%	1.0%	1.0%	2.0%	2.0%
Healthcare	$9,808	0.7%	0.0%	0.0%	1.3%	2.5%	3.0%	5.0%	4.8%	9.0%
Education	$86,733	5.9%	0.0%	0.0%	2.8%	3.5%	3.5%	3.5%	4.3%	10.0%
Public Safety	$15,318	1.0%	12.0%	46.2%	44.7%	50.0%	0.0%	-5.0%	0.0%	3.0%
Amusement & Recreation	$13,942	1.0%	10.7%	5.6%	4.9%	-1.0%	-1.0%	-1.0%	3.0%	3.0%
Transportation	$41,798	2.9%	13.4%	4.0%	3.7%	5.0%	1.5%	5.0%	6.0%	9.0%
Power	$6,745	0.5%	29.3%	4.1%	2.5%	2.5%	2.5%	2.5%	5.0%	7.0%
Highway & Street	$97,545	6.7%	7.2%	2.1%	2.6%	2.6%	3.5%	5.0%	5.5%	8.5%
Sewage & Waste Disposal	$25,795	1.8%	7.1%	3.2%	3.0%	3.0%	3.5%	3.5%	5.0%	6.0%
Water Supply	$17,468	1.2%	2.3%	16.7%	15.2%	15.2%	7.5%	10.0%	9.0%	15.0%
Conservation & Development	$7,649	0.5%	10.6%	-6.9%	-7.4%	1.0%	2.0%	3.0%	3.0%	3.0%

Source: U.S. Census Bureau, Moody's Projections

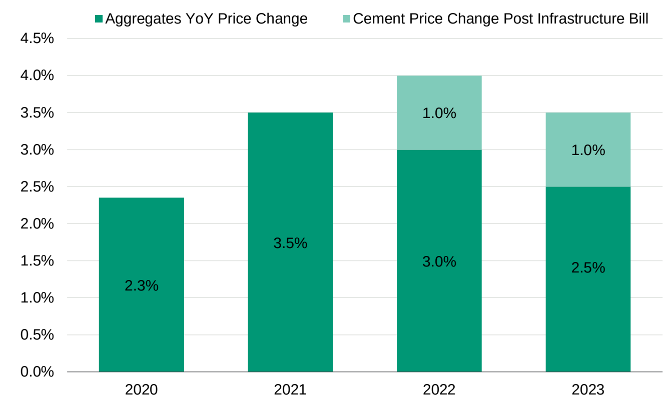
We believe additional demand stemming from US public infrastructure projects (roads, transit, transportation, healthcare and educational facilities, power, electrification, etc.) will materially impact supply and demand (see Exhibits 3 - 6) providing support for further price increases and higher volumes. Since the great recession many of the larger suppliers of aggregates have consolidated their operations and rationalized their footprint to enhance their scale and limit the risk of irrational pricing behaviour.

Exhibit 3
Aggregates volume demand would grow only modestly without an infrastructure bill



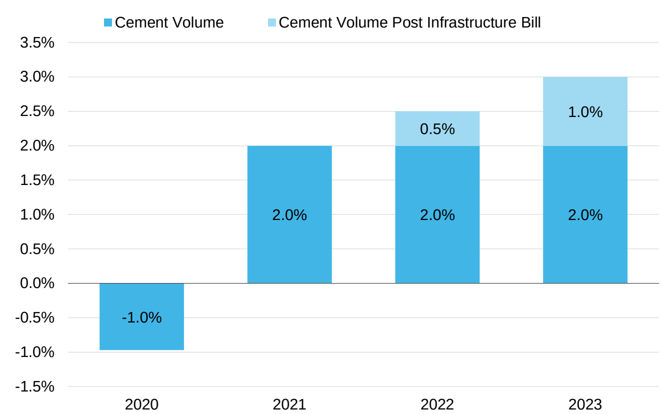
Source: Moody's Projections

Exhibit 4
Aggregates prices would climb much faster with an infrastructure plan



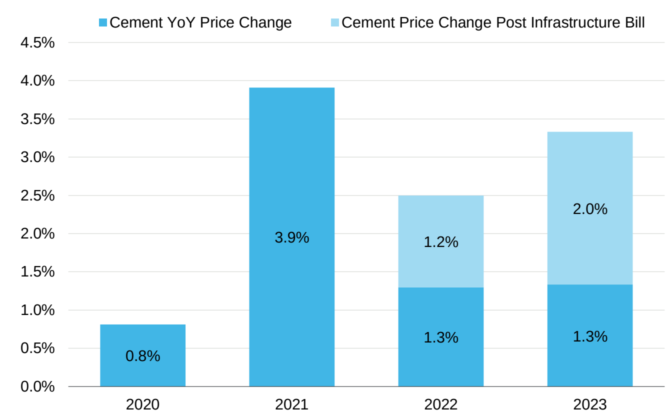
Source: Moody's Projections

Exhibit 5
Cement volumes would jump with an infrastructure bill



Source: Moody's Projections

Exhibit 6
Cement prices, already on the rise, would also benefit with supply constrained



Source: Moody's Projections

The two largest suppliers of aggregates in the nation are Martin Marietta Materials, Inc. (Baa2 Stable) and Vulcan Materials Company (Baa2 Stable). Martin Marietta has a presence in 27 states while Vulcan Materials has a presence in 20 states. Additionally, they each serve clients at over 300 locations. Due to transportation costs, the aggregates industry is primarily a local business. Given the issuers' extensive networks of quarries, scale, and limited competition, if a multiyear infrastructure bill is passed by Congress and signed by President Biden, these companies will be well positioned to reap the benefits of higher sales, larger profits and could reduce leverage at a faster pace than otherwise expected (see Exhibits 7 & 8) if debt levels remain static (assuming no material share repurchases or dividend distribution, acquisitions or any other strategic transactions).

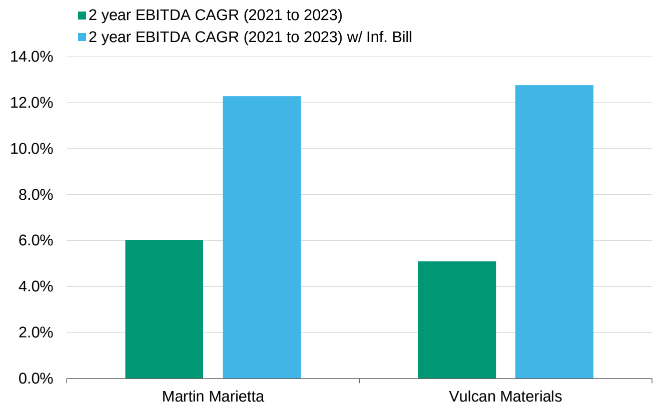
These companies benefit from:

» The cost-to-weight ratio creates local markets which prevents additional competitors

» Difficult permitting processes and environmental regulations limit new entrants

Exhibit 7

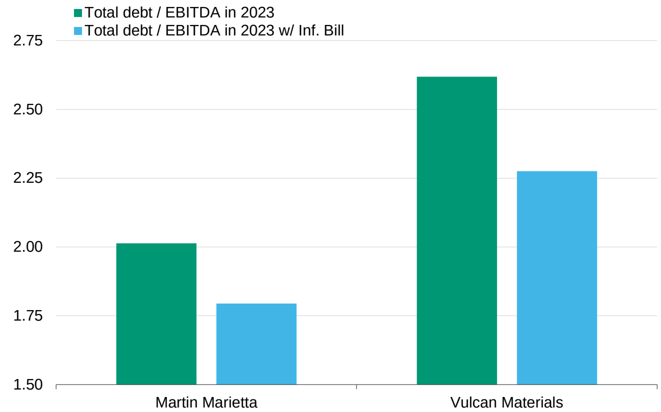
A multiyear infrastructure bill will result in material growth for aggregates suppliers



Note: Projections are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Total debt is based on calculated total debt as of last reported financial statements
Source: Moody's Projections

Exhibit 8

A multiyear infrastructure bill is credit positive



Note: Projections are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Total debt is based on calculated total debt as of last reported financial statements
Source: Moody's Projections

Cement producers also went through a wave of consolidation in recent years. The top five cement manufacturers (in terms of revenue) account for over 75% of total domestic production. The top eight manufacture over 90% of domestically produced cement. We project cement and ready-mix concrete players to benefit the most among building materials issuers through long-term sustainable pricing power (see Exhibits 9 & 10).

These companies benefit from:

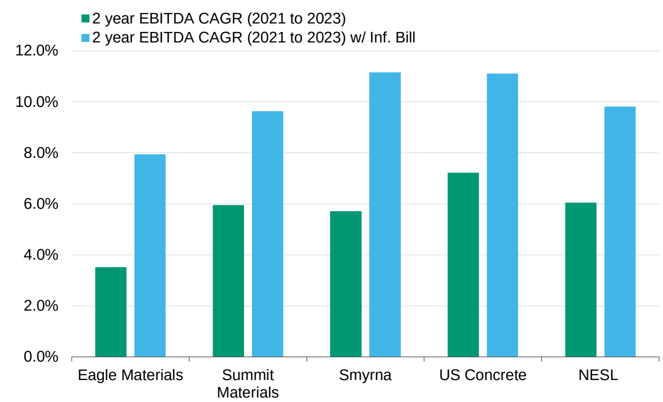
» No product substitution,

» Limited ability to expand production facilities as a result of very restrictive environmental and zoning laws,

» Current production operating at near full capacity utilization (>82%) and,

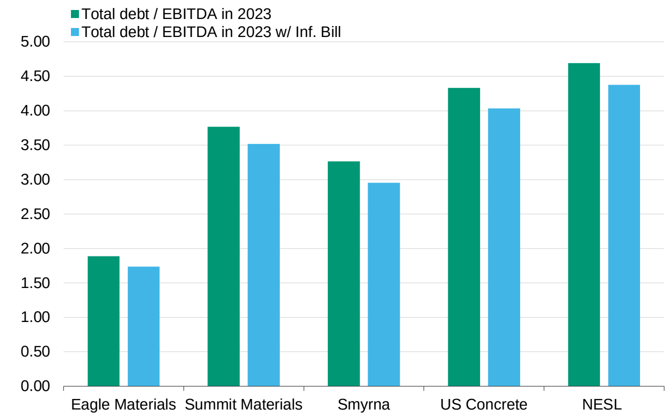
» Transport costs generally make imported cement prohibitively expensive outside a 100 mile radius from a port

Exhibit 9
A multiyear infrastructure bill will add 300+ bps to revenue growth for domestic cement producers



Note: Projections are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Total debt is based on calculated total debt as of last reported financial statements
Source: Moody's Financial Metrics™, Moody's Projections

Exhibit 10
A multiyear infrastructure bill is credit positive to cement issuers

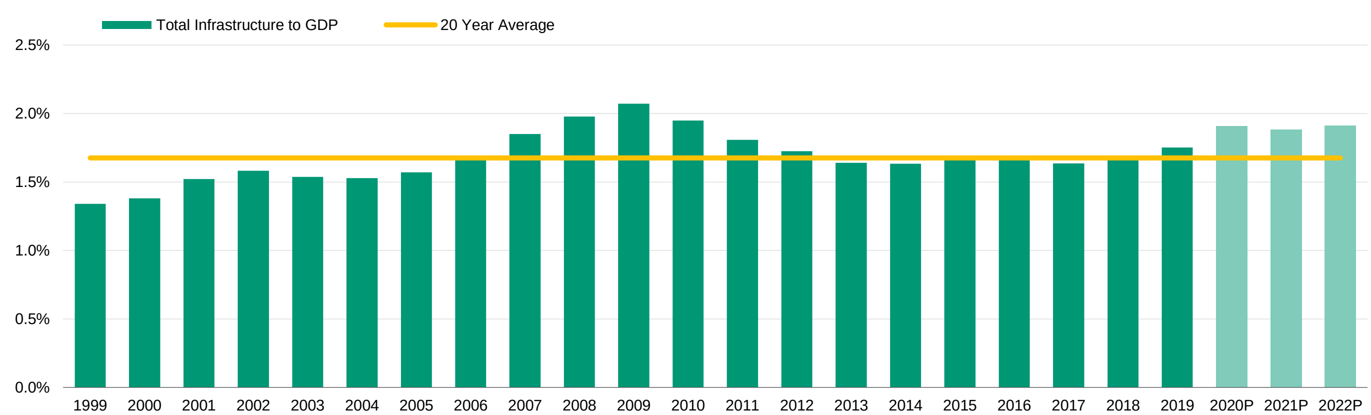


Note: Projections are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Total debt is based on calculated total debt as of last reported financial statements
Source: Moody's Financial Metrics™, Moody's Projections

Steady spending on public infrastructure

Annual US public infrastructure spending, per the census bureau, has remained steady for many years (see Exhibit 11). A multiyear infrastructure investment bill that is additive to this total spending would inject material growth into already growing construction activity. Due to the fact that two-thirds of infrastructure spending is funded by state and local governments that are facing deficit pressures, any increased federal investment in infrastructure would need to be additive or there is the risk that the increased funding could just replace normal construction activity. The need to increase infrastructure investment in the US is widely acknowledged as the American Society of Civil Engineers' Infrastructure Report Card continues to grade US infrastructure at a "D+", confirming the need for significant new infrastructure investment from all levels of government for several years.

Exhibit 11
Infrastructure spending to GDP has remained stagnant over a 20 year period

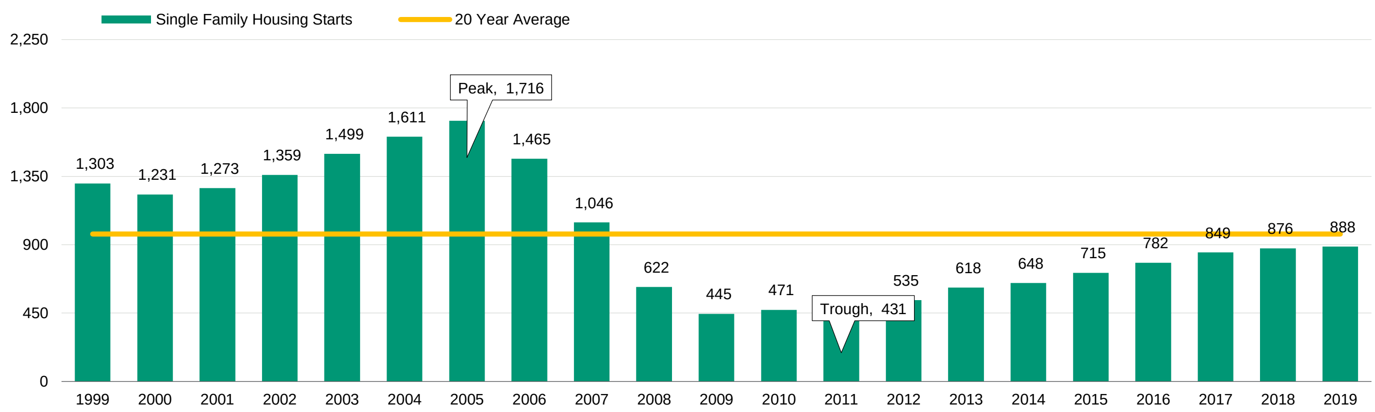


Source: U.S. Census Bureau, Moody's Projections

Lack of housing supply as housing starts remain below the 20 year average

For 2021, we expect the demand for residential construction to remain solid. Since the 2008-2009 recession, annual housing starts for single family homes have remained below the 20-year average (see Exhibit 12), creating an environment of little supply to meet the recent surge in demand. The pandemic, stay-at-home orders, and remote work prompted families and young adults to leave urban centers in search of single-family homes. This phenomenon created an imbalance between home supply and demand for housing, which we believe will offset a softer economy and higher unemployment levels.

Exhibit 12
Below average single-family housing starts has restricted supply of homes for sale



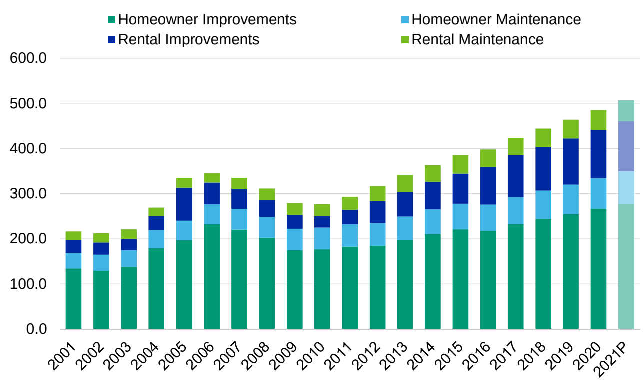
Source: U.S. Census Bureau

Solid momentum for repair and remodel activity

For 2021, we expect repair and remodeling activity to grow another 5%, supported by consumers shifting spending from transportation to housing, and the rest from projects related to updating aging housing stock (80% of homes in the US were built before 2000), and an aging-in-place population.

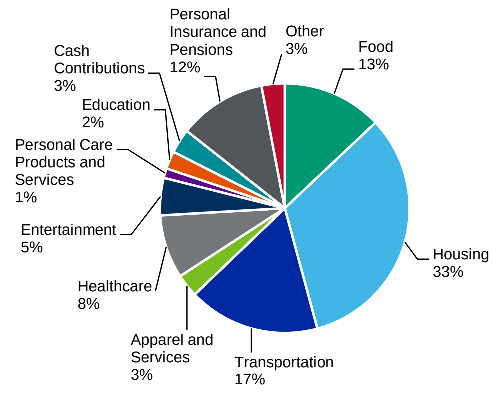
In the US, transportation costs (including commuting), amount to 17% of household budgets, while housing is 33%. With so many employees continuing to work remotely, we assume money saved on commuting during 2021 will be spent on repair and remodeling projects to enhance the homes where people are spending so much time (see Exhibits 13 & 14).

Exhibit 13
During 2021, consumer budgets are projected to shift from transportation toward housing



Source: Bureau of Labor Statistics, Moody's Projections, Harvard Joint Center for Housing Studies

Exhibit 14
Transportation and housing represented the two largest parts of US consumers' 2019 budgets



Source: Bureau of Labor Statistics

Appendix

Exhibit 15
Aggregates are well positioned for long term growth and for credit improvements

Summary	Credit Rating	Outlook	Overall Strength	Scale Based on Revenue	Growth	EBITDA Margins	Resilient Revenue(s)	Competitive Strength	Attractive Footprint	Debt Leverage
Eagle Materials, Inc.	Baa2	Stable	◑	◑	◕	●	◑	◑	◕	●
Martin Marietta Materials, Inc.	Baa2	Stable	◕	●	◑	●	●	●	●	●
Vulcan Materials Company	Baa2	Stable	◕	●	◑	●	●	●	●	●
Smyrna Ready Mix, LLC	B1	Stable	◑	◑	◑	◕	◑	◑	◑	◕
Summit Materials, LLC	B1	Stable	◑	◑	◕	◕	◑	◕	◕	◑
New Enterprise Stone & Lime Co., Inc.	B2	Stable	◔	◔	◑	◑	◑	◕	◔	◔
US Concrete, Inc.	B2	Stable	◑	◑	◕	◑	◑	◑	◑	◔

Credit positive relative to peer group ●
Credit negative relative to peer group ○

Note: Overall Strength is based on the summation of all metrics shown in the table above, Growth is based on revenue and ebitda growth, Resilient Revenue(s) takes into consideration price and demand volatility during economic downturns, and Debt Leverage is based on total adjusted debt-to-ebitda based on most recent financial statements (inclusive of Moody's adjustments).
Source: Moody's Projections, Company Filings

Exhibit 16
Revenue Exposure

Revenue Exposure	Credit Rating	Aggregates	Cement	Ready Mix	Other
Eagle Materials, Inc.	Baa2	12%	43%	-	45%
Martin Marietta Materials, Inc.	Baa2	64%	10%	20%	6%
Vulcan Materials Company	Baa2	76%	-	-	24%
Smyrna Ready Mix, LLC	B1	3%	-	97%	-
Summit Materials, LLC	B1	27%	12%	27%	34%
New Enterprise Stone & Lime Co., Inc.	B2	29%	-	10%	61%
US Concrete, Inc.	B2	14%	-	85%	1%

Source: Company Filings, Company Presentations

Exhibit 17
End Markets

End Markets	Credit Rating	Residential	Non-Residential	Public
Eagle Materials, Inc.	Baa2	25%	25%	50%
Martin Marietta Materials, LLC [1]	Baa2	22%	36%	35%
Vulcan Materials Company	Baa2	56%		44%
Smyrna Ready Mix, LLC	B1	57%	39%	4%
Summit Materials, LLC	B1	31%	31%	38%
New Enterprise Stone & Lime Co., Inc.	B2	4%-5%	26%-35%	60%-70%
US Concrete, Inc.	B2	25%	57%	18%

[1] Martin Marietta Materials, Inc.'s end markets consists of Residential: 22%, Non-residential 36%, Infrastructure: 35%, and Chem Rock/Rail: 7%
Source: Company Filings, Company Presentations

Exhibit 18
Geographic Concentration

Company	Credit Rating	Top Revenue Exposure by Geography			
Eagle Materials, Inc.	Baa2	Texas	Colorado	Illinois	Ohio
Martin Marietta Materials, Inc.	Baa2	Texas	Colorado	North Carolina	Iowa
Vulcan Materials Company	Baa2	California	Texas	Virginia	Tennessee
Smyrna Ready Mix, LLC	B1	Tennessee	Georgia	Florida	Michigan
Summit Materials, LLC	B1	Texas	Kansas	Utah	Missouri
New Enterprise Stone & Lime Co., Inc.	B2	Pennsylvania	Western New York	-	-
US Concrete, Inc.	B2	Texas	California	New York	New Jersey

Source: Company Filings, Company Presentations

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Contacts

Emile El Nems +1.212.553.6849
VP-Senior Analyst
emile.elnems@moodys.com

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

MOODY'S INVESTORS SERVICE