Market Outlook Construction Forum

FRMEULENS

Summary

as of July 10, 2020

Presenters

o Richard Vermeulen, Lead Economist, Vermeulens

Construction Market Data to End of June

- Bids tracking at March 2020 rates with some instances of price declines
- Monetary stimulus continuing to underpin capital and employment markets
- Bounce back economy wide and in construction employment numbers

Covid Timelines and Re Opening

- Comparison of flattening the curve mitigation measures versus containment measures
- Effect of re-opening in contained and/or mitigated countries and states

Intro to Integrated Design for a Covid Ready World

- Low cost/high efficiency cost models for transportation, green infrastructure, home, work, and institutional uses
- Integrated design processes as they iterate for a variety of different scenarios

Look Ahead to Office, Work, and Social

- Taking the long view on our built environment
- Gathering and measuring data for home, work, and social scenarios

Future Agenda

- July 24, 2020
 - Lord Aeck Sargent: Work from Home: How will this reshape the world we live/work in along with Survey Results August 7, 2020
 - o Stantec: Getting Back to Social





Service Beyond Estimation

Design & Construction Market Outlook

Richard Vermeulen – Co-CEO Blair Tennant – Associate Principal

North America's Construction Economist vermeulens.com

Boston New York Toronto San Antonio Denver Los Angeles

- Please mute mics except for those speaking
- Please keep camera function off
- Interim questions and comments via chat
- Bi-Weekly: "Situation Report", slide deck, reminder, sign up
- Webcast audio available with reminder link
- Bi-Weekly July 24th next session

- Construction Market Data to End of June
- Covid Timelines and Re Opening
- Intro to Integrated Design for a Covid Ready World
- Look Ahead to Office Work and Social

Macro to Micro - Index



Macro to Micro – Fed Watch



Macro to Micro - US Unemployment



Macro to Micro – Construction Labor





- Reconciled escalation <u>rates maintained</u> at or past the Design Development stage
- **3%-4%** escalation below the line for **projects** with long time horizons
- Line item unit rates will be held at March 2020 values until bid data is substantial
- No reliable data or history on how long or deep this downturn will be
- Potential <u>offsetting cost increase</u> for COVID measures and construction efficiency
- Vermeulens **<u>bid data</u>** show rates stable or declining depending on project size
- Consider <u>design add alternates</u> in the 10% of cost range

Macro to Micro – Great Recession



Macro to Micro – Macro Flattening?



Macro to Micro – Herd Immunity?



antibodies were only found in 6.1 per cent of the samples collected nationwide in the week ending May 24

social distancing requirements in Sweden are now stricter than in many other countries because places like Denmark and Norway have rolled back the severe lockdowns they imposed early on





Total

Macro to Micro – Containment Sawtooth?







Cases over time



Cases over time



Macro to Micro – Macro Flattening vs Micro Containment

United States						
Confirmed	Recovered 621,646			Deaths		
2,064,092			115,487			
Updated less than 1 hour age	→ Source: <u>Wikipedia</u>					
Cases						
Location	Confirmed ψ	Cases per 1 million people	Recovered	Deaths	New cases (last 60 days)	
Worldwide	7,273,958	935	H	413,372		
United States	2,064,092	6,263	621,646	115,487		
New York	380,892	19,531	68.211	24,442	~	
New Jersey	165,816	18,798	28,376	12,443	~	
California	133,489	3,542	-	4,697	-	
Illinois	130,603	10,148	117,536	6,185	~	
Massachusetts	104,156	15,811	78,108	7,454	~~~	
Texas	81,583	2,946	52,449	1,920	~	
Pennsylvania	77,313	6,067	55,665	6.113		
Michigan	64,998	6.581	42.041	5,943	5	

United States		
Confirmed	Recovered	Deaths
3,048,072	918,298	133,322
Updated less than 1 hour ago + 5	Source: <u>Wikipedia</u>	

Cases						
Location	Confirmed ψ	New cases (last 60 days)	Cases per 1 million people	Recovered	Deaths	1
Worldwide	11,797,213	_	1,517	6,415,379	543,595	
United States	3,048,072	_	9,249	918,298	133,322	
New York	402,928	5	20,661	71,040	31,934	
California	287,766	-	7,636	No data	6,563	
Texas	219,164	1	7,913	108,485	2,816	
Florida	213,786	~	11,218	No data	3,840	
New Jersey	175,734	~	19,922	30,729	15,281	
Illinois	150,110	m	11,664	93,157	7,281	
Massachusetts	110,338	m.	16,750	93,157	8,213	
Arizona	105,159	1	16,222	12,260	1,933	

Macro to Micro – Ecology Wellness Economy in a Covid Ready World





Macro to Micro – Covid Ready Transportation



Macro to Micro – Covid Ready Green Infrastructure



Macro to Micro – Green Infrastructure Access and Mobility





Macro to Micro – Planning Framework Walkability



Macro to Micro – Planning Framework Adaptability



_	New York City	
	26,000 people / square r	nile
	Apartment	
	Apartment	28%
	Townhouse	28%
	Townhouse	0.616
		24%
	Townhouse Residence, Detached	24% 3%
	Townhouse Residence, Detached Commercial	24% 3% 16%
	Townhouse Residence, Detached Commercial Institutional	24% 3% 16% 16%
	Townhouse Residence, Detached Commercial Institutional Park	24% 3% 16% 16% 13%

Macro to Micro – Live Work Private Yard



Macro to Micro – Live Work Multi Family



Macro to Micro - Live Work Mixed Use



Macro to Micro – Social and Educational



Macro to Micro – Cost Models and Integrated Design



Macro to Micro – Think Big with Lord Aeck Sargent



STONE

CLASSICAL ANTIQUITY AGES & RENAISSANCE MACHINE & INDUSTRIAL AGE

INFORMATION AGE DIGITAL AGE Macro to Micro – Covid Ready Design

Google	office design after coronavirus	
	All B News Trages Images Shopping Videos More	
	Abou 5,450,000,000 results (0.5) seconds)	
Google	post covid university design	HOME OFFICE
	© JOHN SCHNEIDER 2020 Q All Contrages の Shopping の PP PBR 伊子 PR BUT MON	
	Abour 1,390,000,000 results (0.66 seconds)	OTHER
Google	multi-family after coronavirus	
	🔍 All 🗏 News 😩 Images 🧷 Shopping 🕑 Videos 🗄 More	
	Abour 2,560,000,000 results (0.56 seconds)	
5/25/20		

Macro to Micro – Emissions Redux



Source: New York Times / Nature Climate Change and Global Carbon Project

Macro to Micro – Covid Ready Social with Stantec



Future Agenda

July 24th

• Lord Aeck Sargent: Work From Home: How will this reshape the world we live/work in along with Survey Results

August 7th

• Stantec: Getting Back to Social