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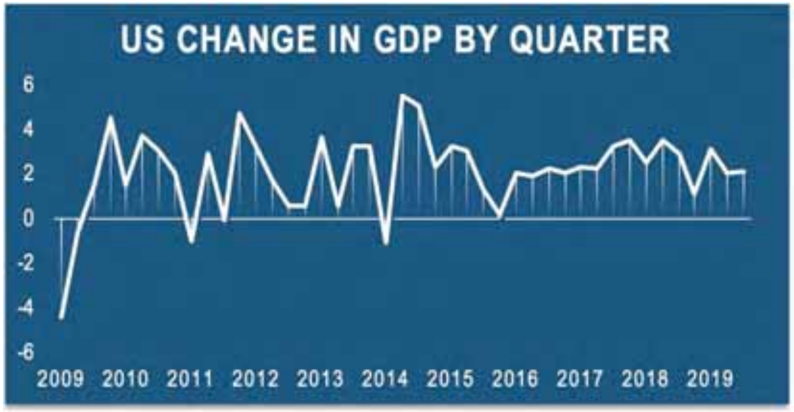
# CONTINUUM ADVISORY GROUP

## CONSTRUCTION ECONOMIC OUTLOOK

# TRANSFORMING THE WORLDWIDE BUILDING AND CONSTRUCTION INDUSTRY
# THROUGH REVOLUTIONARY INNOVATION

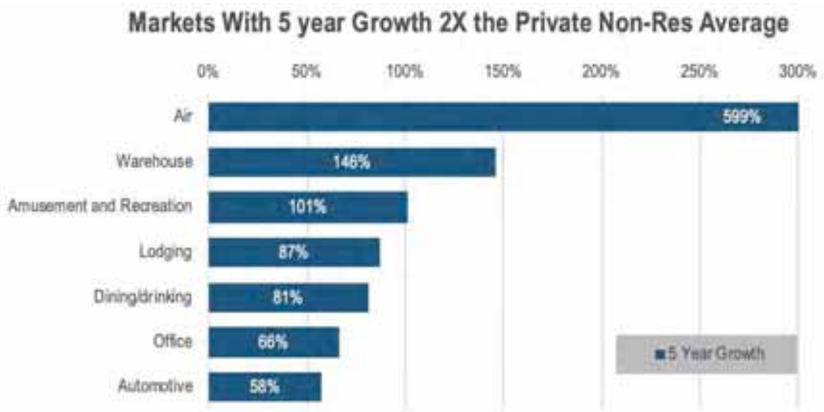
# WHERE WE HAVE BEEN – LET THE GOOD TIMES ROLL

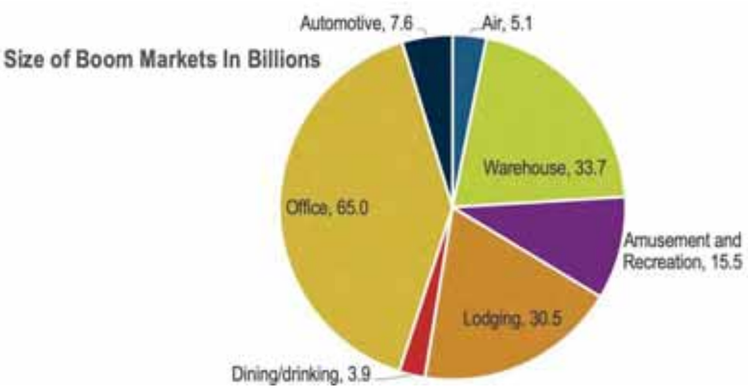




- The US Economy is in the midst of its longest expansion in history (127 months). The previous longest expansion was 120 months in the 1990s.
- Unemployment peaked in 2009 at 10%, fell below 5% in 2016, and is currently at a cycle low of 3.5%.
- Nonresidential construction has grown every year since 2011. The bottom in 2011 was 25% below the 2007 peak. Since then it has grown by 46% to be 10% above its previous peak in 2007. Through November 2019 non-res was up 3% on the year.
- Residential has grown since 2010 where it bottomed down 60% from peak. Since then it has increased by 116% though it is still 13% below its 2005 peak.

# BOOM SEGMENTS

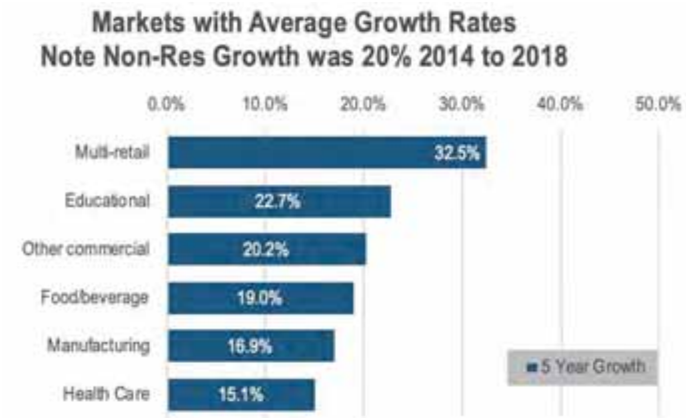


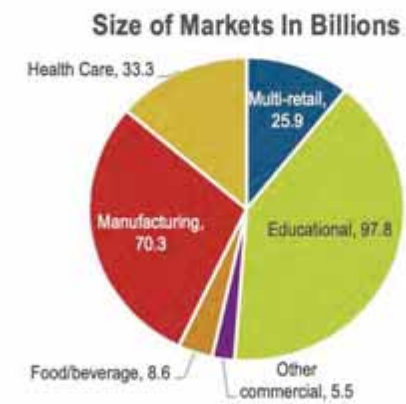




- The $31 billion private lodging market is up 87% since 2014. It is still14% below its previous peak in 2008. Recent growth has slowed up only 0.7% annually though November 2019.
- Airport spending, particularly on terminal projects, is in the midst of a historic boom up 599% since 2014. This $5.1 billion annual market is now well above any historic spending levels with a previous peak of $1.9 billion in noted in 2001. Spending appears to be slowing with November 2019 numbers down 25% on an annual basis.
- The $65 billion private office market is up 66% since 2014. It is 16% above its previous peak in 2008, up 172% from its 2011 low point. Warning signs have not yet appeared for the market. The US office vacancy rate is at its lowest level in 18 years. Latest November 2019 numbers showed strong annual growth of 6.5%. Note there is another $10 billion in public office construction that is up 28% since 2014.
- The $34 billion warehouse market is up 146% since 2014. E-commerce has reshaped this market, as it is more than 2 times its size during its previous peak in 2008. Latest November 2019 numbers showed still strong annual growth of 4.2%.

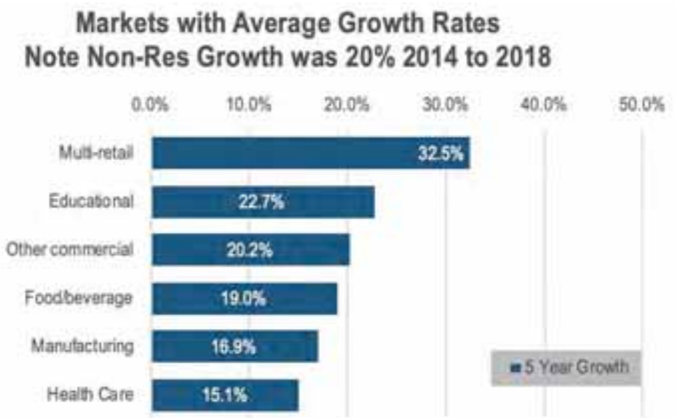
# OTHER LARGE GROWING SEGMENTS

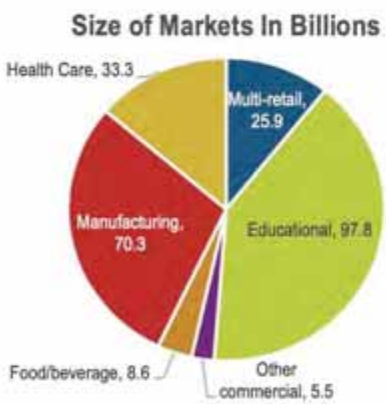
- Education market is still 7% below its 2008 peak. Growth in total spending was strong in 2019, up 7.2% annually through November 2019. Primary secondary education looks very strong in 2019, up 13.6% through November 2019. Higher Education is weaker showing a 2019 decline of 2.2%. Long-term trends for higher education are not positive while secondary should remain strong.
- Manufacturing has generally seen modest growth over the last five years, up 17% vs. an overall market that was 20%. 2019 though November indicated modest growth of 2.1%. Sub-segments doing well over the last five years including Wood, Paper, Plastics, fabricated metal. Subsegments that have struggled include Textile, Petroleum/coal, Nonmetallic mineral, Primary metal, Transportation equipment.



# OTHER LARGE GROWING SEGMENTS (CONT'D)

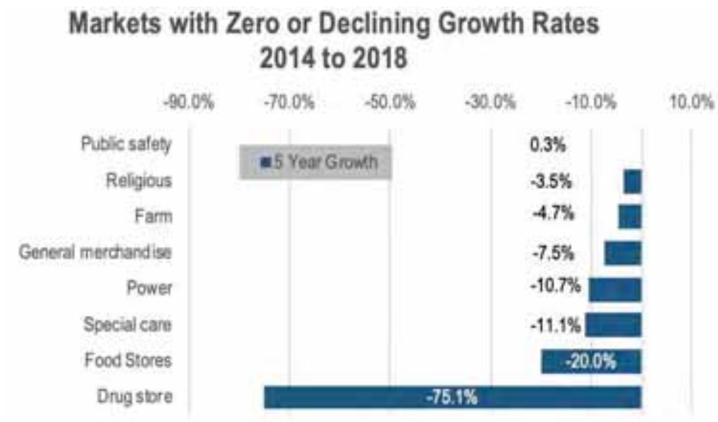


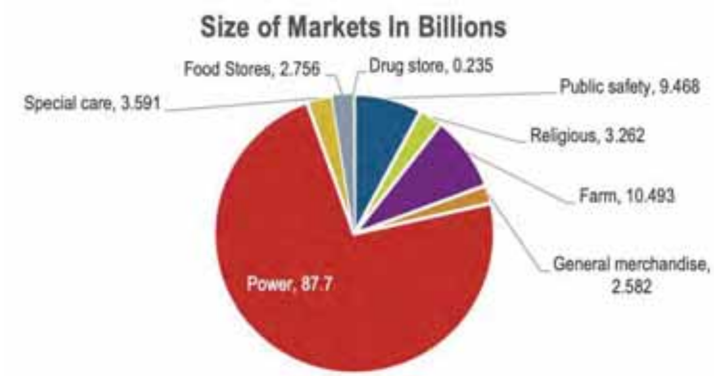




- Healthcare growth has been modest over the last five years, up 15.1%. 2019 has seen good growth, up 5.1% though November. Medical office building has seen the strongest growth, up 27.8% over the last five years. Hospital construction has seen more modest growth, up 16% over the last five years but still 20% below it value in 2008. Note Hospital put in place spending is still 2X MOB spending. Special care, which includes nursing homes is down 11% over the last five years.
- Multi-Retail is up 26% over the last five years but is still 19% below its previous peak. General merchandise stores (big box) has done particularly poorly, down 7.5% over the last five years and 41% below its previous peak in 2008. Shopping centers and malls have seen some growth but are still more than 25% below their spending level in the mid-2000s. 2019 has not been a good year for Multi-retail with 2019 spending down 27.5% though November 2019.

# DECLINING SEGMENTS

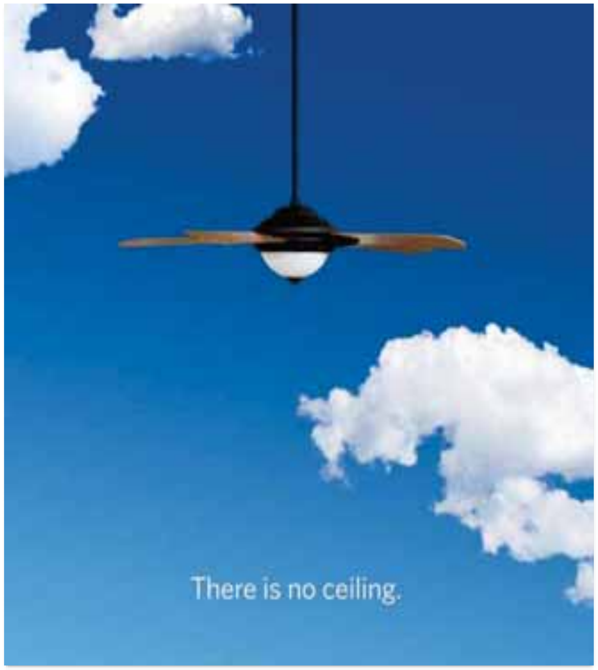
- The power market is down 11% over the last five years. Most of this is due to a 68% decline in oil related spending. Electric spending is also down slightly 2.6% over the last five years. Overall, Electric represents 75% of the spending in power and is at or above average levels for the industry.
- General merchandize is down 7.5% over the last five years. In 2019 it is up slightly, 2.1%. Construction spending on general merchandize stores peaked in 2007 at $7.5 billion. Today the market is $2.5 billion annually with a generally negative outlook.
- Religious spending is down 3.5% since 2014. Through November 2019 the market is down another 8.5%. In 2003 this market was $8.5 billion annually. 2019 spending is projected at only $2.8 billion.



# FORECAST: WE WILL SLOW DOWN – WHEN?

- We are currently in the longest economic expansion in US History. 127 months with average growth of 2.3% and employment growth of 1.1%. 2019 saw GDP growth of 2.3% below 2018's 2.9%.
- The fed forecast growth at 2.0% in 2020, 1.9% in 2021 and 1.8% in 2022.
- Economic forecasters feel the risk of a national economic recession have diminished.
- Positives for the economy include:
  - Favorable interest rates with low inflation
  - Strengthening housing market
  - Strong job creation late in the business cycle
  - Trade Agreements with Mexico-Canada and China
- Risk to the economy include:
  - Weakening manufacturing
  - Declining business investment levels
  - International tensions
  - Election year




Cover of the annual report of a publicly traded home builder prior to the great recession – fact check, there was a ceiling.

# AIA CONSENSUS FORECAST:
## CAUTIOUS BUT OPTIMISTIC – DEEP DOWNTURN NOT EXPECTED

| | 2020 | 2021 |
|---|---|---|
| Nonresidential Total | 1.5 | 0.9 |
| Commercial Total | 0.6 | -0.2 |
| Office | 3.0 | 0.5 |
| Retail and Other Commercial | -1.3 | -0.9 |
| Hotel | -0.7 | -1.0 |
| Industrial Total | 0.3 | 0.5 |
| Institutional Total | 2.9 | 2.0 |
| Health | 3.4 | 3.5 |
| Education | 3.9 | 3.3 |
| Religious | -1.9 | -1.9 |
| Public Safety | 7.2 | 2.6 |
| Amusement and Recreation | -1.8 | -1.6 |

- Overall forecasters believe the growth of nonresidential construction will slow in 2020 and further slow in 2021. For reference, nonresidential construction grew 3.7% in 2018 and should grow around 2.5% in 2019.
- From a segment perspective, poorly performing segments such as retail and religious will continue to underperform.
- Hotel and Amusement/Recreation have performed well over the last five years but have slowed in 2019. These segments are forecast to slow further over the next two years.

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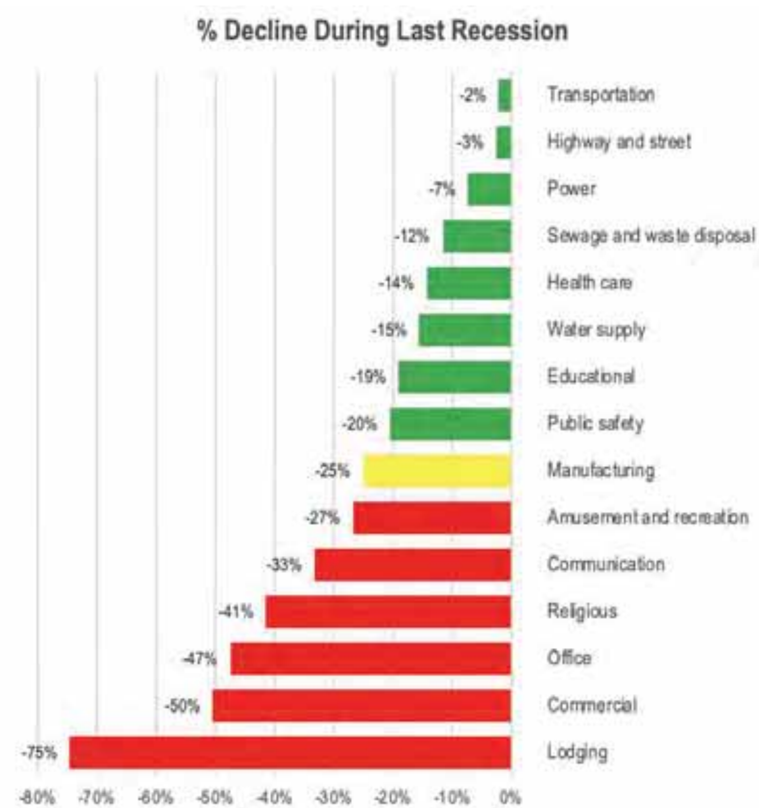
- Of the eight contributors to the consensus forecast, six are relatively consistent with the consensus forecast. Differences include:
  - Moody's is significantly more optimistic calling for 3.4% growth in 2020 and 5.4% growth in 2021 with all sectors growing in 2021. Note that Well Fargo is also bullish calling for 2.8% growth in 2020 and 3.6% growth in 2021.
  - Dodge is more pessimistic calling for 1.1% growth in 2020 with a decline of 5.9% in 2021 and all sectors declining in 2021.
  - Three of the eight forecasters are forecasting a drop in nonresidential construction in 2021 – Dodge -5.9%, FMI -0.2% and ABC -0.9%.
- The AIA billings and design contract index flipped between positive and negative for the first 3 quarters of 2019 indicating potential for a slowing market. The last quarter of 2019 saw both billings and design contracts turn consistently positive for October, November and December. This indicates risk of a broad downturn in 2020 is significantly reduced.

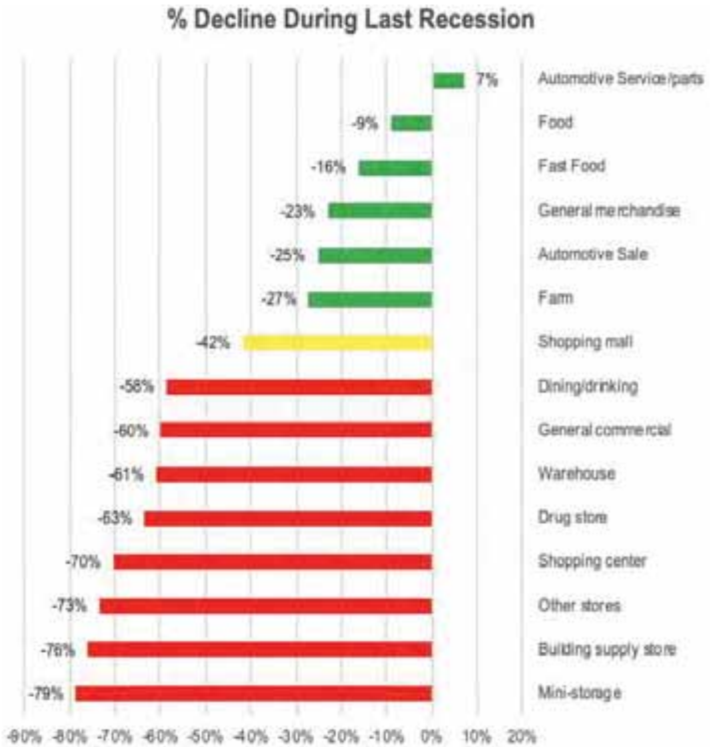
# LESSONS FROM THE LAST DOWNTURN



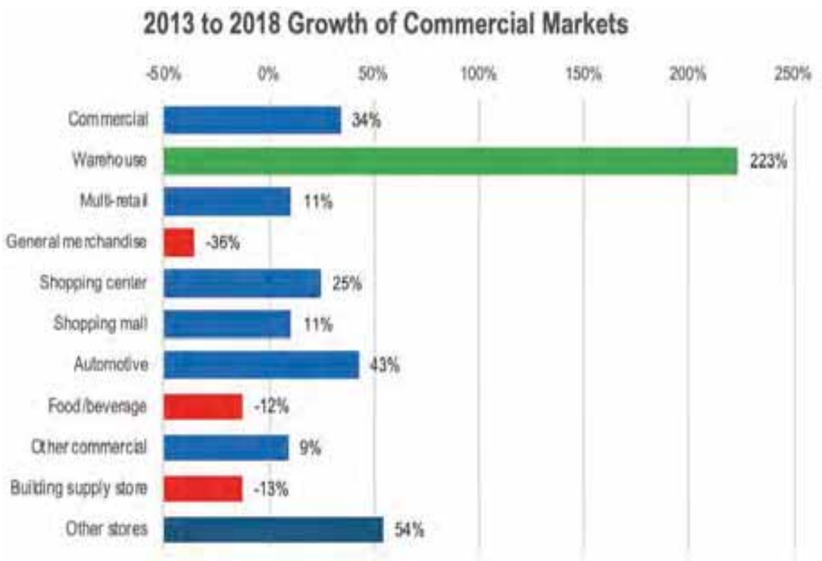

- Many of today's high performing segments (Lodging, Office, Amusement and Rec) perform very poorly during recessions.
- Segments with slower growth during the current economic cycle have tended to hold up better during recessions – specifically healthcare, education and to some extent manufacturing. Segments driven by government spending, such as transportation, water/wastewater and public safety also do better in recessions.

# THE FUTURE OF COMMERCIAL IS MORE COMPLEX AND NOT JUST ABOUT ECONOMIC CYCLES

- More resilient segments, including general merchandise (big box) and food (grocery), have spending below 2011 levels and appear unlikely to recover due to e-commerce. Drug store and building supply store are also below 2011 levels.
- Despite overall dietary trends against it, fast food is likely to remain a safe harbor in the commercial segment during a recession. Automotive is less certain due to larger technological trends though the high percentage of leased cars may help support the segment.
- Dining/drinking and shopping centers have seen strong growth over the last five years but are likely still heavily exposed to economic downturns.



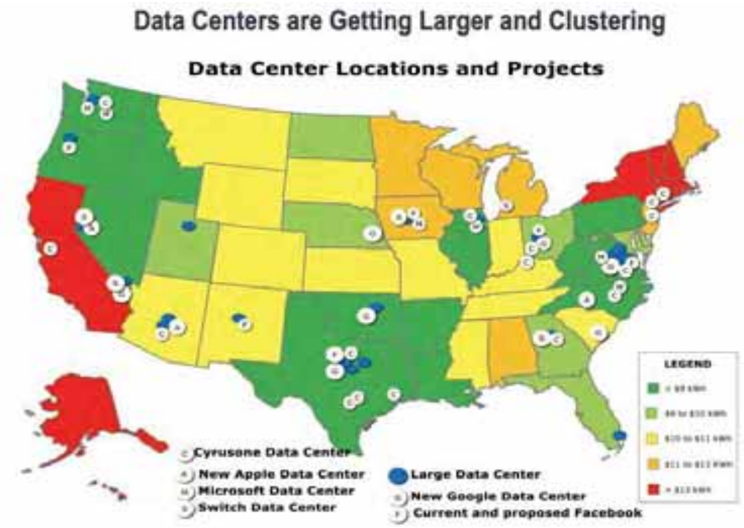
# IS WAREHOUSE THE NEW RESILIENT COMMERCIAL SEGMENT?

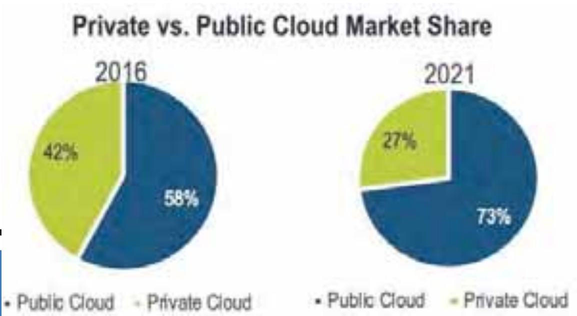



- In 2008, warehouse was a $16.7 billion market which represented 20% of total commercial spending.
- In 2018, warehouse was a $33.6 billion market which represented 37% of total commercial spending.
- 255 million sq. feet of warehouse is under construction as of June 2019.
- Despite the rapid pace of building, available space has averaged 170 million sq. feet less then demand since 2015 according to CBRE.
- **Same day delivery will account for 25% of the delivery market by 2025 driving a broad-based warehouse market including a growing trend of smaller urban warehouses.**
- All trends are positive for the sector, with the ongoing shift to e-commerce fueling spending. Job loss associated with declining retail is also motivating state and local governments to offer incentives to draw new warehouse projects.

# DATA CENTER IS ANOTHER STRONG MARKET WHICH WILL BE RESILIENT DURING A DOWNTURN

- The worldwide data center market is forecast to continue rapid growth going from $18.5B in 2018 to $30B by 2024.
- Data center traffic is forecast to grow 25% annually through 2021. IoT and big data will continue to be major drivers of demand.
- State and local municipalities are competing for centers in their markets with tax incentives. Dallas has been aggressive in this area, while Columbus has also offered strong incentives.
- Hyperscale data centers are capturing an increasing share of the market (hyperscale is >5,000 servers and 10,000 sq. feet – most have over 100,000 servers). In 2016 there were 338 of these facilities representing 27% of installed servers. By 2021 there will be 628 representing 53% of installed servers.
  - REITs have become major players in the market accounting for 35% of global market share.



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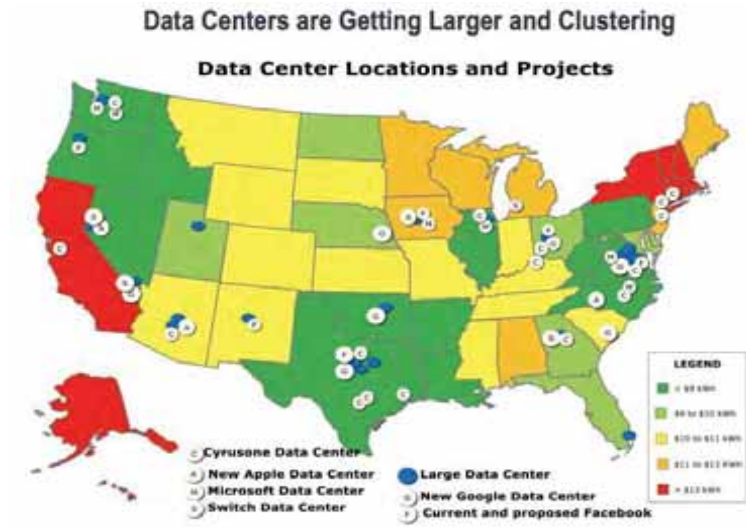
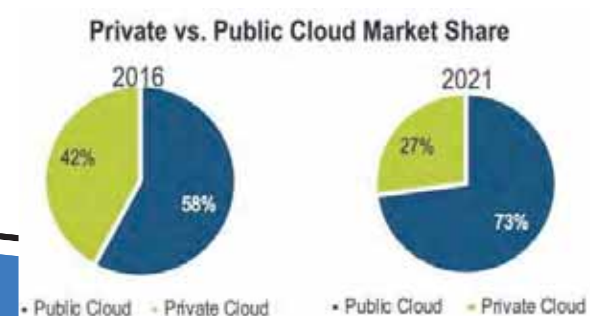
- Data centers have become exponentially more complex in recent years, which include facilities, user requirements and solutions. A jump in the need for remote monitoring, cloud-based management and customized deliverables is expected.
- Legacy data centers employ obsolete environmental control equipment that drive high operational cost. State of the art systems are required (particularly for hyperscale facilities) to be competitive.
- As the market shifts towards public cloud as opposed to private enterprise data centers the opportunity will continue to consolidate around a few large developers/operators.



# PROFIT AND PLAN

| Profit | Plan |
|---|---|
| A significant market downturn does not appear imminent. | We are near the end of the business cycle – the market will not grow forever and a downturn within the next 3 to 5 years is highly likely. |
| A focus on quality projects with desirable owners (which is more possible due to the limited amount of construction services supply in the market) will yield benefits for both labor and management. | Traditionally resilient markets including healthcare, education (particularly secondary), and those driven by government spending will remain resilient during the next downturn. Maintaining and/or growing work in these segments will increase the resilience of individual contractors and the union. |
| Strong markets should continue to include: Office, Air Transportation, Data Center and Warehouse. Dining/Drinking and some other forms of mixed-use retail (not big box or grocery) also look strong. | Retail, particularly large retail, has continued to shrink despite general construction industry expansion. These markets are likely to decline further during a recession. |
| Previously strong markets including Amusement/Recreation and lodging may be past peak. | The flip side of the decline of retail is the rapid growth of warehouse and data centers. These markets may offer an opportunity to grow in both strong and weak economic conditions. |
| Chasing work in soft or declining markets (particularly those that perform poorly in downturns) should not be necessary in 2021. | |

# Q&A

# THANK YOU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