Today’s Agenda

• Macroeconomic overview
• Residential Outlook
• Nonresidential Building Outlook
• Final thoughts

LAX Landside Access Modernization Program
Los Angeles, CA
$2.7 billion
Ground Breaking: July 2019
U.S. Macroeconomic Overview

Biggest challenges in next 12 months

Source: Dodge Data & Analytics
U.S. Macroeconomic Overview

Economic growth to slow

U.S. Gross Domestic Product
(Annualized Quarterly Percent Change)

Positives:
- Healthy job growth/spending
- Low interest rates (easing cycle)
- Two-year budget deal signed in early-August/debt ceiling lifted

Neutral:
- Trade tensions

Negatives:
- Lack of skilled/available labor
- Weaker global growth
- Worsening budget deficit
- Election/politics

Source: Bureau of Economic Analysis

<table>
<thead>
<tr>
<th></th>
<th>% Chg</th>
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<tbody>
<tr>
<td>2017</td>
<td>+2.4%</td>
</tr>
<tr>
<td>2018</td>
<td>+2.9%</td>
</tr>
<tr>
<td>2019 (F)</td>
<td>+2.3%</td>
</tr>
<tr>
<td>2020 (F)</td>
<td>+1.5%</td>
</tr>
</tbody>
</table>
U.S. Macroeconomic Overview

Business cycle indicators point to healthy economy

Chicago Fed Index
(National Activity Index - 3 mo moving avg)

Above 0.2 -> expansion
Below -0.7 -> contraction

Source: Federal Reserve Bank of Chicago
U.S. Macroeconomic Overview

Pattern of employment growth is very stable

- 2.2 million jobs created in 2017
- 2.7 million jobs added in 2018
- 1.5 million jobs added through October 2019
- Unemployment rate at 3.6%

Source: Bureau of Labor Statistics
U.S. Macroeconomic Overview

Job openings in construction near record level

Current Job Openings in Construction (Thousands)

Source: Bureau of Labor Statistics
U.S. Macroeconomic Overview

Demand for construction loans slipping

Survey of Bank Lending Officers
Construction Loans

<table>
<thead>
<tr>
<th>Year</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>17</td>
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</tr>
<tr>
<td>19</td>
<td></td>
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</tr>
</tbody>
</table>

Percent Reporting Stronger Demand for Construction Loans
Percent Reporting Tightening Standards for Construction Loans

Stronger Demand for Multifamily Loans (%)
Stronger Demand for Nonres Loans (%)

2019
Q1  -0.7 Q2  0.0
Q3  -13.9 Q4  -4.2

Tightening Standards for Multifamily Loans (%)
Tightening Standards for Nonres Loans (%)

2019
Q1  6.3 Q2  6.3
Q3  9.7 Q4  6.9

Source: U.S. Federal Reserve Board
U.S. Construction Market Indicators

Nonresidential construction market cycles

- 1975 - 1982
  - 1975 Trough - 1979 Peak: 16 Qtrs
  - 1979 Peak - 1982 Trough: 13 Qtrs
  - Total Cycle: 29 Qtrs

- 1982 - 1991
  - 1982 Trough - 1986 Peak: 16 Qtrs
  - 1986 Peak - 1991 Trough: 19 Qtrs
  - Total Cycle: 35 Qtrs

- 1991 - 2011
  - 1991 Trough - 2005 Peak: 58 Qtrs
  - 2005 Peak - 2011 Trough: 22 Qtrs
  - Total Cycle: 80 Qtrs

- 2011 - ??
  - 2011 Trough - Present: 33 Qtrs
  - 2019 Peak - ?? Trough: ??
Residential Outlook

One Chicago Square Apartment Towers
Chicago, IL
$653 million / 975 tsf / 870 units
Ground Breaking: May 2019
U.S. Single Family Housing Starts

Single family units peaked in 2018, mild declines through 2020

- Affordability improved, but supply tight
- TJIA negative in some areas
- Sales rising
- Demographics affecting starts

Source: Dodge Data & Analytics
Home sales have moved higher as mortgage rates have fallen

Source: National Association of Realtors/U.S. Federal Reserve
U.S. Multifamily Housing Starts
Multifamily saw peak in 2018, downturn on tap

- Rental markets remain tight
- Supportive demographics

Source: Dodge Data & Analytics
U.S. Multifamily Housing Starts

Multifamily vacancy rates stable indicating tight market

Source: CB Richard Ellis Econometric Advisors

2019Q3 = 4.0%
2009 Cyclical High = 7.2%
U.S. Multifamily Housing Starts
Top year-to-date metros through Sept 2019 ranked by dollar value

Source: Dodge Data & Analytics
Commercial Outlook

Consolidated Rental Car Facility - LAX
Los Angeles, CA
$969 million / 5.8 msf
Ground Breaking: September
# U.S. Commercial Building Starts

Commercial construction sector to start cyclical decline in 2020

> **Commercial Construction Starts**
> *(Billions of Dollars)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Starts (B)</th>
<th>Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>05</td>
<td>72B</td>
<td>7%</td>
</tr>
<tr>
<td>06</td>
<td>93B</td>
<td>29%</td>
</tr>
<tr>
<td>07</td>
<td>101B</td>
<td>8%</td>
</tr>
<tr>
<td>08</td>
<td>81B</td>
<td>-19%</td>
</tr>
<tr>
<td>09</td>
<td>47B</td>
<td>-42%</td>
</tr>
<tr>
<td>10</td>
<td>42B</td>
<td>-11%</td>
</tr>
<tr>
<td>11</td>
<td>48B</td>
<td>15%</td>
</tr>
<tr>
<td>12</td>
<td>68B</td>
<td>14%</td>
</tr>
<tr>
<td>13</td>
<td>83B</td>
<td>22%</td>
</tr>
<tr>
<td>14</td>
<td>94B</td>
<td>12%</td>
</tr>
<tr>
<td>15</td>
<td>115B</td>
<td>23%</td>
</tr>
<tr>
<td>16</td>
<td>117B</td>
<td>1%</td>
</tr>
<tr>
<td>17</td>
<td>123B</td>
<td>6%</td>
</tr>
<tr>
<td>18</td>
<td>127B</td>
<td>3%</td>
</tr>
<tr>
<td>19</td>
<td>120B</td>
<td>-6%</td>
</tr>
</tbody>
</table>

Source: Dodge Data & Analytics

Includes stores, offices, warehouses, hotels, parking garages
U.S. Retail Building Starts

Store construction struggling as market shifts

Retail Construction Starts
(Billions of Dollars)

- Lower single family activity hurt big-box
- Online sales continue to gain share
- Mixed-use provided limited support
- Store renovations driving activity

Source: Dodge Data & Analytics
U.S. Warehouse Building Starts

Warehouse construction declining off record-setting levels

(Billions of Dollars)

- Vacancy rates remain low
- Regional distribution centers driving growth
- Slow global growth, trade concerns
- Improved logistic management

Source: Dodge Data & Analytics
U.S. Warehouse Building Starts

Warehouse construction evolving

Prologis Georgetown Crossroads
Seattle, WA

DR: 201500499071
Ground Breaking: Dec 2017
$70,000,000
708,000 square feet

Amazon renting 500,000 sf
Home Depot renting 100,000sf
Hotel construction starting to slip back, but levels to remain high

Hotel Construction Starts
(Billions of Dollars)

➢ Luxury and business-center properties performing well
➢ Hotel fundamentals mixed
➢ Increased competition eroding margins

Source: Dodge Data & Analytics
U.S. Hotel Building Starts

Revenue growth has slipped as occupancy remains stable

- 2019Q3 Occupancy rate = 72.2%
- 2019Q3 Revpar = -1.0% vs. year ago

Source: CB Richard Ellis Econometric Advisors
U.S. Office Building Starts
Office construction to peak in 2019

Office Construction Starts
(Billions of Dollars)

- Data centers/HQs driving growth
- Speculative development muted despite low vacancy rates

Source: Dodge Data & Analytics
U.S. Office Building Starts
Data centers becoming a larger share of office construction

Data Center Starts
(Billions of Dollars)

Source: Dodge Data & Analytics
U.S. Office Building Starts

Office vacancy rate continues to fall despite added supply

Source: CB Richard Ellis Econometric Advisors
U.S. Manufacturing Outlook

Toyota/Mazda Manufacturing Plant
Huntsville, AL
$1.6 billion / 6 msf
Ground Breaking: March 2019
U.S. Manufacturing Building Starts

High value projects driving trend

- Some petro plants moving forward as global prices stabilize and demand increases
- High-end manufacturing moving forward

Source: Dodge Data & Analytics
U.S. Manufacturing Building Starts

Manufacturing output has eased back in 2019

U.S. Industrial Production vs. Exchange Rate

2019 YTD Manufacturing
Production: +0.2%
Employment: +0.9%
Capacity Utilization: 75%

Source: U.S. Federal Reserve Board
Institutional Outlook

O’Hare Terminal 5 Expansion
Chicago, IL
$1.1 billion / 350 tsf
Ground Breaking: June 2019
U.S. Institutional Building Starts

Institutional building starts to rise 2% in 2019, flat-ish in 2020

Stirrings of improved public finances are enhancing outlook

Source: Dodge Data & Analytics
U.S. Education Building Starts

Education building starts responding to stronger demographics

Education Construction Starts

(Billions of Dollars)

➢ Recent large bond measures
➢ K-12 construction driving the market

Source: Dodge Data & Analytics
U.S. Education Building Starts

K-12 starts larger, but more volatile than college/university starts

Educational Buildings - Segments

(Millions of Square Feet - 12 month rolling total)

- In 2018, sq ft. for K-12 was nearly 4 times the size of the post-secondary market
- Back in 2000, it was more than 7 times the size of college starts

Source: Dodge Data & Analytics
U.S. Education Building Starts

Enrollment growth ultimately drives activity for many segments

Public K-12 Enrollments
(History Through 2017, Millions)

- K-12 enrollments growing steadily

College Enrollment
(History through 2017, Millions)

- College enrollments inching higher

Source: National Center for Education Statistics
Public school enrollment growth is strongest in South and West

Source: National Center for Education Statistics
# U.S. Education Building Starts

Largest year-to-date education projects – through Sept 2019

<table>
<thead>
<tr>
<th>Title</th>
<th>City/State</th>
<th>Start Month</th>
<th>Millions</th>
<th>Area (Thou. SF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belmont High School (Renovation/Addition)</td>
<td>Belmont, Massachusetts</td>
<td>2019:08</td>
<td>$247</td>
<td>451</td>
</tr>
<tr>
<td>Translational Precision Medicine Complex</td>
<td>Columbia, Missouri</td>
<td>2019:09</td>
<td>$220</td>
<td>275</td>
</tr>
<tr>
<td>B.M.C. Durfee High School</td>
<td>Fall River, Massachusetts</td>
<td>2019:04</td>
<td>$215</td>
<td>501</td>
</tr>
<tr>
<td>Attleboro High School</td>
<td>Attleboro, Massachusetts</td>
<td>2019:09</td>
<td>$203</td>
<td>473</td>
</tr>
<tr>
<td>UPMC Immune Transplant and Therapy Ctr</td>
<td>Pittsburgh, Pennsylvania</td>
<td>2019:02</td>
<td>$200</td>
<td>0</td>
</tr>
<tr>
<td>Agnews K-12 Campus</td>
<td>San Jose, California</td>
<td>2019:08</td>
<td>$195</td>
<td>353</td>
</tr>
<tr>
<td>East Providence High School</td>
<td>East Providence, Rhode Island</td>
<td>2019:07</td>
<td>$190</td>
<td>334</td>
</tr>
<tr>
<td>Worcester South High Community School</td>
<td>Worcester, Massachusetts</td>
<td>2019:03</td>
<td>$173</td>
<td>359</td>
</tr>
<tr>
<td>Plant Sciences Building/ Greenhouse</td>
<td>Raleigh, North Carolina</td>
<td>2019:07</td>
<td>$160</td>
<td>185</td>
</tr>
<tr>
<td>Wellesley College Science Center</td>
<td>Wellesley, Massachusetts</td>
<td>2019:05</td>
<td>$159</td>
<td>99</td>
</tr>
</tbody>
</table>

Source: Dodge Data & Analytics
U.S. Healthcare Building Starts

Healthcare starts to rise in 2020

- Pent-up demand a positive influence
- Support from demographics & new tech
- Mergers accelerating

Healthcare Construction Starts (Billions of Dollars)

Source: Dodge Data & Analytics
U.S. Recreation Building Starts

Recreation starts to fall 8% in 2020

Recreation Construction Starts
(Billions of Dollars)

➢ Includes casinos, convention centers, sports arenas (with roofs), student centers

➢ Large projects has dominated construction activity

Source: Dodge Data & Analytics
# U.S. Recreation Building Starts

Recreation starts by segment – through December 2018

Amusement Construction Starts (Billions of Dollars)

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Misc. Recreation (inc. casinos)</td>
<td>5.9</td>
<td>5.3</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>43%</td>
<td>-9%</td>
<td>-6%</td>
</tr>
<tr>
<td>Gyms/Field Houses</td>
<td>3.9</td>
<td>4.2</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>33%</td>
<td>8%</td>
<td>-8%</td>
</tr>
<tr>
<td>Arenas/Coliseums</td>
<td>4.3</td>
<td>3.3</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>214%</td>
<td>-25%</td>
<td>-15%</td>
</tr>
<tr>
<td>Exhibit Halls/Convention Centers</td>
<td>1.3</td>
<td>1.9</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>-38%</td>
<td>50%</td>
<td>96%</td>
</tr>
<tr>
<td>Theaters</td>
<td>1.5</td>
<td>2.0</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>-26%</td>
<td>33%</td>
<td>32%</td>
</tr>
<tr>
<td>Clubs and Lodges</td>
<td>0.9</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>20%</td>
<td>-35%</td>
<td>54%</td>
</tr>
<tr>
<td>Communications Bldgs</td>
<td>0.6</td>
<td>0.4</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>-9%</td>
<td>-38%</td>
<td>165%</td>
</tr>
<tr>
<td>Auditoriums</td>
<td>0.2</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>-38%</td>
<td>45%</td>
<td>-21%</td>
</tr>
<tr>
<td>Bowling Alleys</td>
<td>0.0</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>-11%</td>
<td>55%</td>
<td>29%</td>
</tr>
<tr>
<td>Total Recreation</td>
<td>18.6</td>
<td>18.0</td>
<td>20.2</td>
</tr>
<tr>
<td></td>
<td>31%</td>
<td>-3%</td>
<td>12%</td>
</tr>
</tbody>
</table>

## Notable Projects 2015-2018

- **City of Champions Stadium (2016)** – 3 million sf
- **Las Vegas Raiders Arena (2018)** – 1.0 million sf
- **Texas Rangers Ballpark (2017)** – 1.7 million sf
- **Las Vegas Convention Center (2018)** – 1.4 million sf
- **Jacob Javits Convention Ctr (2017)** – 1.3 million sf
- **Wynn Casino (2016)** – 983,000 sf

Source: Dodge Data & Analytics
U.S. Transportation Building Starts

Large airport terminals to push starts 4% higher in 2019

Transportation Construction Starts
(Billions of Dollars)

- Stabilization in federal policy aiding starts
- Rising air traffic and revenues spurs airport rehabs

Source: Dodge Data & Analytics
Total Construction Outlook

Foxconn LCD Fabrication Facility
Mount Pleasant, WI
$1.0 billion / 1 msf
Ground Breaking: July 2019
Total U.S. Construction Starts

Total construction to fall 1% in 2019 and 4% in 2020

Source: Dodge Data & Analytics
## U.S. Total Construction Starts

Total construction to fall 1% in 2019 and 4% in 2020

### U.S. Construction Starts

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Residential</td>
<td>$167</td>
<td>$211</td>
<td>$234</td>
<td>$274</td>
<td>$298</td>
<td>$307</td>
<td>$330</td>
<td>$314</td>
<td>$295</td>
</tr>
<tr>
<td></td>
<td>31%</td>
<td>27%</td>
<td>11%</td>
<td>17%</td>
<td>9%</td>
<td>3%</td>
<td>7%</td>
<td>-5%</td>
<td>-6%</td>
</tr>
<tr>
<td>Commercial</td>
<td>$55</td>
<td>$68</td>
<td>$83</td>
<td>$94</td>
<td>$115</td>
<td>$117</td>
<td>$123</td>
<td>$127</td>
<td>$120</td>
</tr>
<tr>
<td></td>
<td>14%</td>
<td>22%</td>
<td>24%</td>
<td>12%</td>
<td>23%</td>
<td>1%</td>
<td>6%</td>
<td>3%</td>
<td>-6%</td>
</tr>
<tr>
<td>Industrial</td>
<td>$13</td>
<td>$19</td>
<td>$36</td>
<td>$25</td>
<td>$20</td>
<td>$26</td>
<td>$33</td>
<td>$23</td>
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<tr>
<td></td>
<td>-25%</td>
<td>48%</td>
<td>85%</td>
<td>-29%</td>
<td>-19%</td>
<td>29%</td>
<td>25%</td>
<td>-29%</td>
<td>-2%</td>
</tr>
<tr>
<td>Institutional</td>
<td>$92</td>
<td>$92</td>
<td>$105</td>
<td>$110</td>
<td>$123</td>
<td>$145</td>
<td>$141</td>
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<td></td>
<td>-8%</td>
<td>0%</td>
<td>14%</td>
<td>5%</td>
<td>11%</td>
<td>18%</td>
<td>-3%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Nonbuilding</td>
<td>$166</td>
<td>$157</td>
<td>$147</td>
<td>$187</td>
<td>$183</td>
<td>$193</td>
<td>$189</td>
<td>$202</td>
<td>$196</td>
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<tr>
<td></td>
<td>12%</td>
<td>-5%</td>
<td>-6%</td>
<td>27%</td>
<td>-2%</td>
<td>6%</td>
<td>-2%</td>
<td>7%</td>
<td>-3%</td>
</tr>
<tr>
<td>Total Construction</td>
<td>$493</td>
<td>$547</td>
<td>$606</td>
<td>$690</td>
<td>$739</td>
<td>$788</td>
<td>$815</td>
<td>$809</td>
<td>$776</td>
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<tr>
<td></td>
<td>12%</td>
<td>11%</td>
<td>11%</td>
<td>14%</td>
<td>1%</td>
<td>1%</td>
<td>3%</td>
<td>-1%</td>
<td>-4%</td>
</tr>
</tbody>
</table>

Source: Dodge Data & Analytics
U.S. Total Construction Starts

Current cycle near peak, mild decline on tap

1975 - 1982
1975 Trough - 1979 Peak: 16 Qtrs
1979 Peak - 1982 Trough: 13 Qtrs
Total Cycle: 29 Qtrs

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Total Cycle: 35 Qtrs

1991 - 2011
1991 Trough - 2005 Peak: 58 Qtrs
2005 Peak - 2011 Trough: 22 Qtrs
Total Cycle: 80 Qtrs

2011 - ??
2011 Trough - 2019 Peak: 34 Qtrs
2019 Peak - ?? Trough: ??

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Thank You!

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