

# BROWNFIELDS

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## MARKET INSIGHT WEBINAR SERIES

**Trends in the COVID Era**

**October 16, 2020 1:00-2:30PM EST**

# Today's Speakers



**Aimee Storm**  
**U.S. EPA, Office of Brownfield  
and Land Revitalization**

Aimee is the Land Revitalization Coordinator for the USEPA's Office of Brownfield and Land Revitalization Program.



**Juliet Burdelski**  
**Vita Nuova, LLC**

Juliet is a former Economic Development Director with experience in site reuse analysis and brownfields redevelopment.



**Michael Taylor**  
**Vita Nuova, LLC**

Michael is the President of Vita Nuova, LLC, a national consultancy focused on redevelopment of complex sites and revitalization of distressed communities.



**Patrick Rowe**  
**Vita Nuova, LLC**

Patrick has significant experience of real estate in both the public and private sectors. He focuses on public-private partnerships for Vita Nuova.

# Agenda

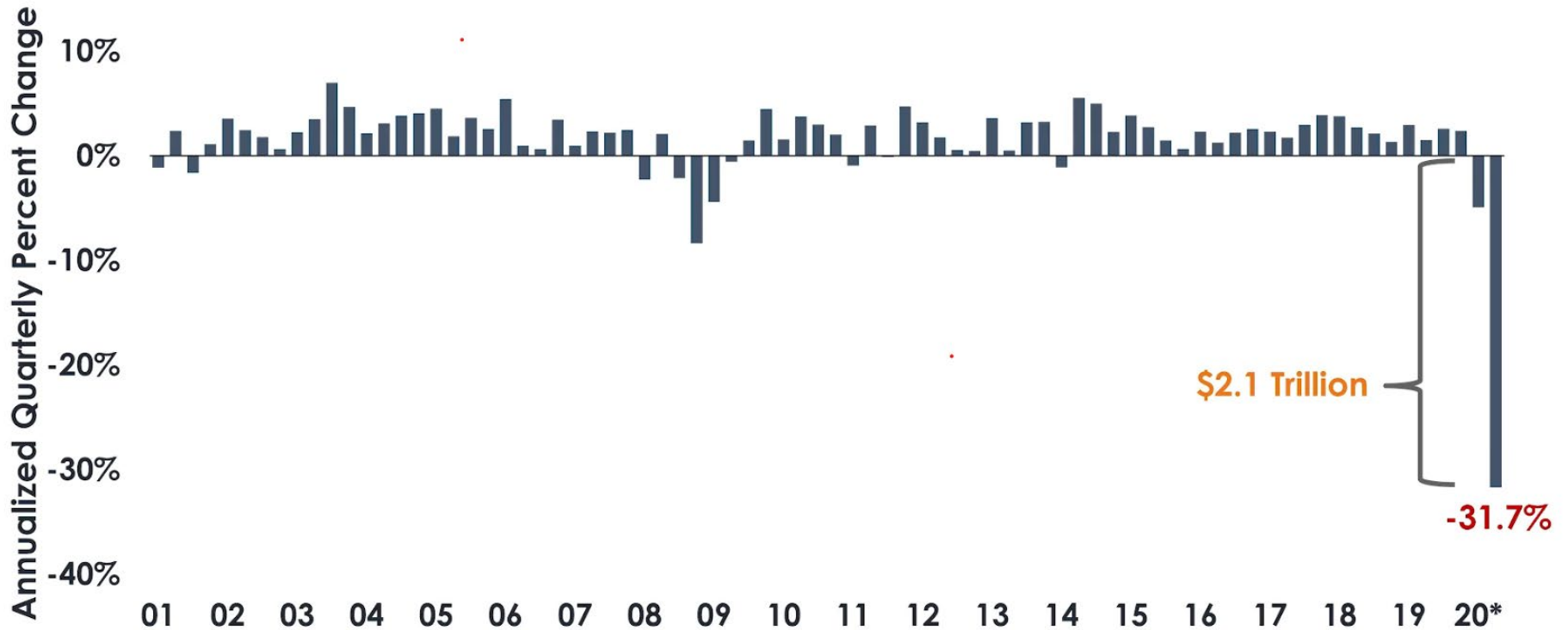
- **Introduction**
  - *Aimee Storm, US EPA*
  - *Michael Taylor, Vita Nuova, LLC*
- **Impacts of COVID on the US Real Estate Market**
  - *Patrick Rowe, Vita Nuova, LLC*
- **Brownfield Opportunities-What Communities Can Do**
  - *Juliet Burdelski, Vita Nuova, LLC*
  - *Michael Taylor, Vita Nuova, LLC*
- **Questions**

# Key Topics

- How COVID-19 has impacted the **US real estate market** (across all market sectors)
- How COVID-19 has impacted **US supply chain** resiliency, including reshoring and nearshoring
- How brownfield redevelopment can **fill the need** for strategically located real estate in the post-COVID era
- How communities can **be prepared** to eliminate encumbrances and stigma traditionally associated with brownfields and reposition these sites for redevelopment

# Economic Impact

## GDP Posts Largest Decline on Record



\* Through 2Q  
Sources: Marcus & Millichap Research Services, BEA, IMF

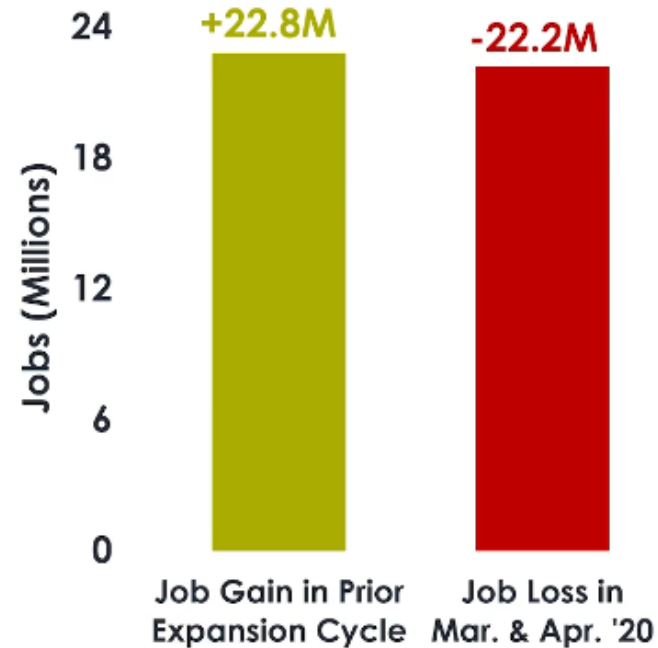
# Economic Impact

## U.S. Employment Market Sustains Severe Impact

### Total Employment



### Employment Change: Health Crisis vs. Expansion Cycle



\* Through July  
Expansion Cycle: March 2010 to March 2020  
Sources: Marcus & Millichap Research Services, BLS

# Industrial

- Strong long-term outlook

- Key Drivers:

- E-commerce growth dominates
- Increased focus on domestic manufacturing
- Larger inventories



## *Outlook – Strong*

- Smaller facilities tough to find (10K-100K / <5% vacancy rate) - Brownfield Opportunity
- Absorption +330 million SF per year by 2022
- 2 Billion additional SQFT needed by 2025

# Industrial - Manufacturing

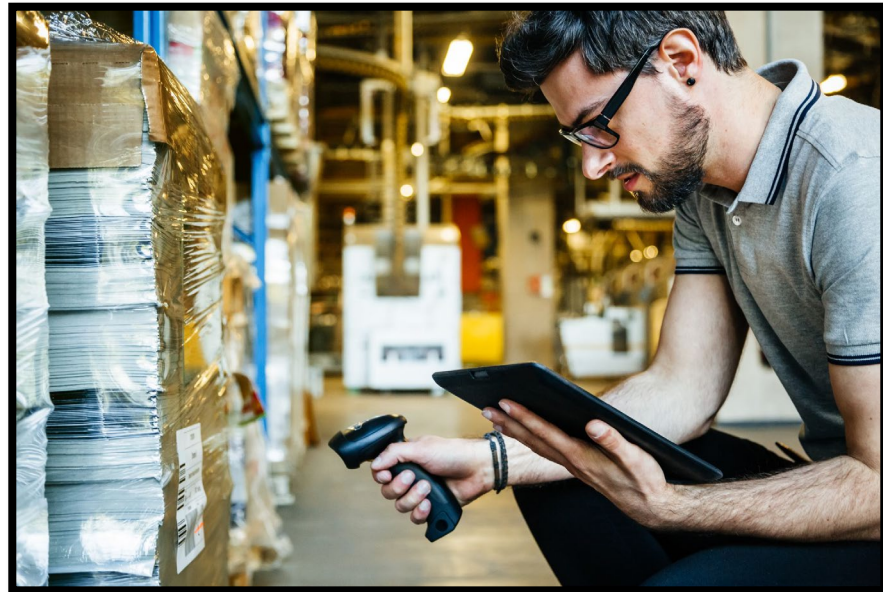


## ■ COVID Impacts

- Significant decline in April as many facilities were shutdown
- Estimated industry GDP decline of 14% (Oxford Economic Model) for 2020

## ■ Recover and Thrive Trends

- Diversify supply chains: tariff-friendly locations, resilience, and access to talent
  - Strong onshoring interest (longer fuse trend) – Brownfield opportunity.





# Hospitality

- Extraordinary impacts:
  - 70% YOY drop in April bookings
  - ADR fell by 37.4% YOY in Q2
  - RevPAR fell 75% YOY in Q2
- New starts down dramatically
- Recovery to pre-COVID levels could take until 2023 –or later

*Outlook – Weak*



# Retail – Brick and Mortar

*Outlook - Weak*

- Long-term trends continue
  - Growing e-commerce
  - Continued challenge at malls (25% of newly vacant space occurring at malls)
  - Retail industry re-sizing
- COVID Impacts
  - True impact of shutdown may not be reflected in vacancy for several quarters
  - Acceleration of long-term trends
  - Sharp decline of experience-based retail
  - Significant closures of small retailers
  - Essential and one-stop shopping retailers survive, and in some cases thrive



# Office

*Outlook - Uncertain*

## ■ Office Sector Uncertainty

- Many office workers working from home for 6+ months
- Number of tech firms deciding to allow permanent remote work option
- Companies put long-term commitments on hold (vacancy rate increases 60 points to 13.6%)

## Office Environment will change

- Hybrid office/home options
- Collaboration focus for office space
- Larger space design

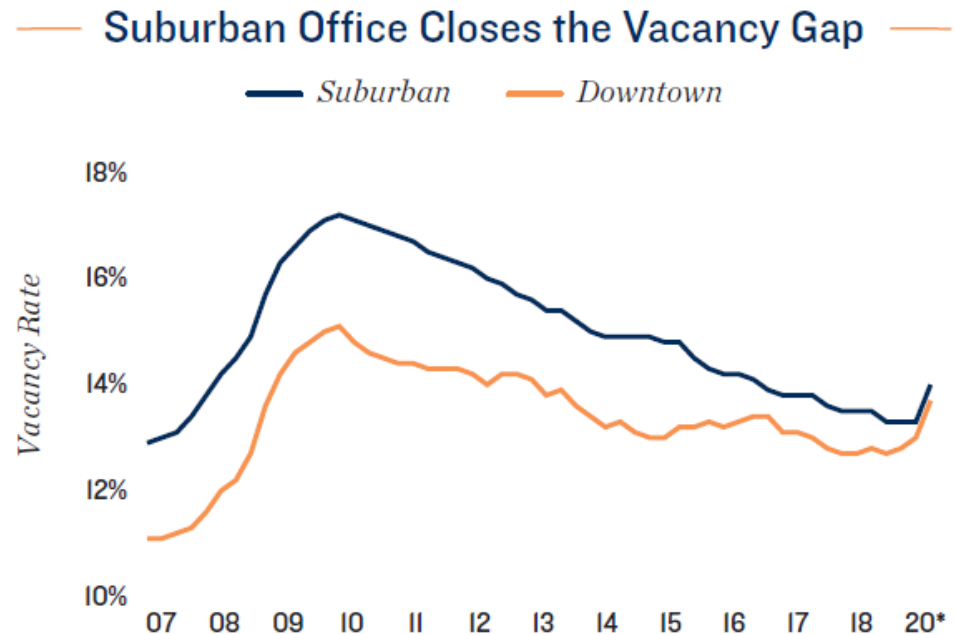


# Office

Outlook - Uncertain

## ■ Trends

- Office space to remain essential for most
- Increasing demand for suburban space
- Space needs are reconsidered
  - Discounted sublease space anticipated
- Rent collections remain strong, for now



Source: Marcus & Millichap Research Services

# Multifamily

*Outlook - Strong*

- Government stimulus supports in short-term
  - Vacancy +30 basis points (4.7%, Q2)
  - Average rent fell .9% (Q1)
- Class A segment faces greatest challenges
  - New supply
  - Slow wage growth
  - Aging millennials
- Suburban apartments outperforming
- Long-term – multifamily sector remains undersupplied; developers remain confident in sector



# Data Centers



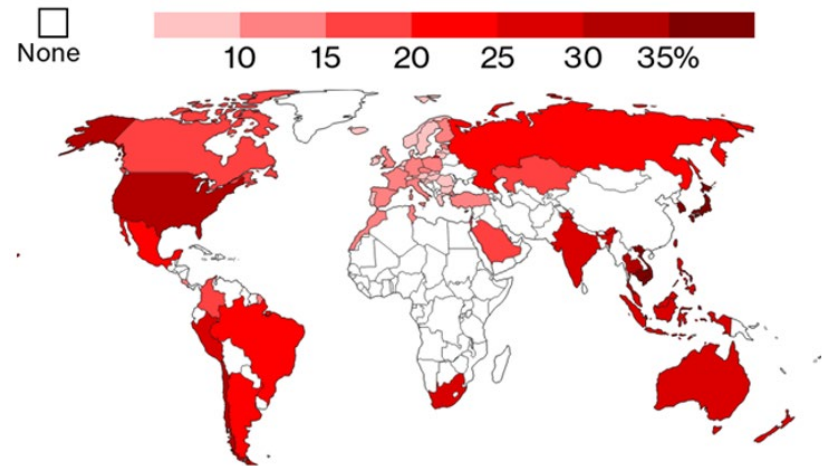
## *Outlook - Strong*

- One of least affected market sectors by COVID and recession
- Drivers:
  - Growth of all things digital (“hyperscalers”)
  - 5G – build it and we’ll use it
  - Remote work reinforces importance and reliability of data centers and networks that use them
- Secondary markets saw significant YOY increase in inventory
  - Denver, Minneapolis, Boston, South Florida, Las Vegas, Charlotte, Kansas City, Houston, Philadelphia, Nashville
- Key location characteristics include
  - Energy cost/reliability
  - Fiber density
  - Proximity to users (where speed matters)
  - Co-location w/ partners

# Supply Chain

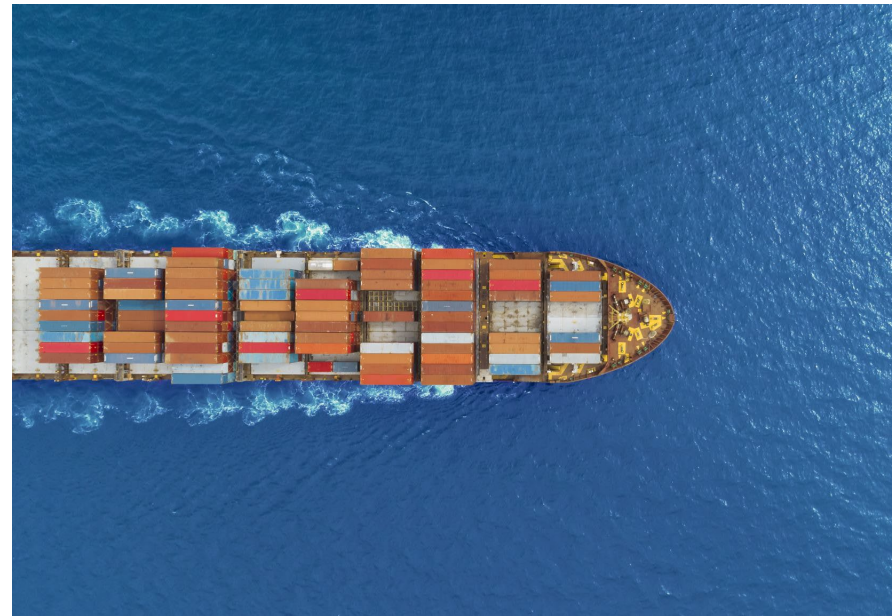
- COVID-19 latest challenge to supply chain and diversification shift away from China
  - China-Plus-One
  - Nearshoring
  - Onshoring
- Supply Chain – Key Factors
  - Political stability
  - Resiliency
  - Lead time
  - National security
  - Cost

Share of all imports of intermediate products coming from China



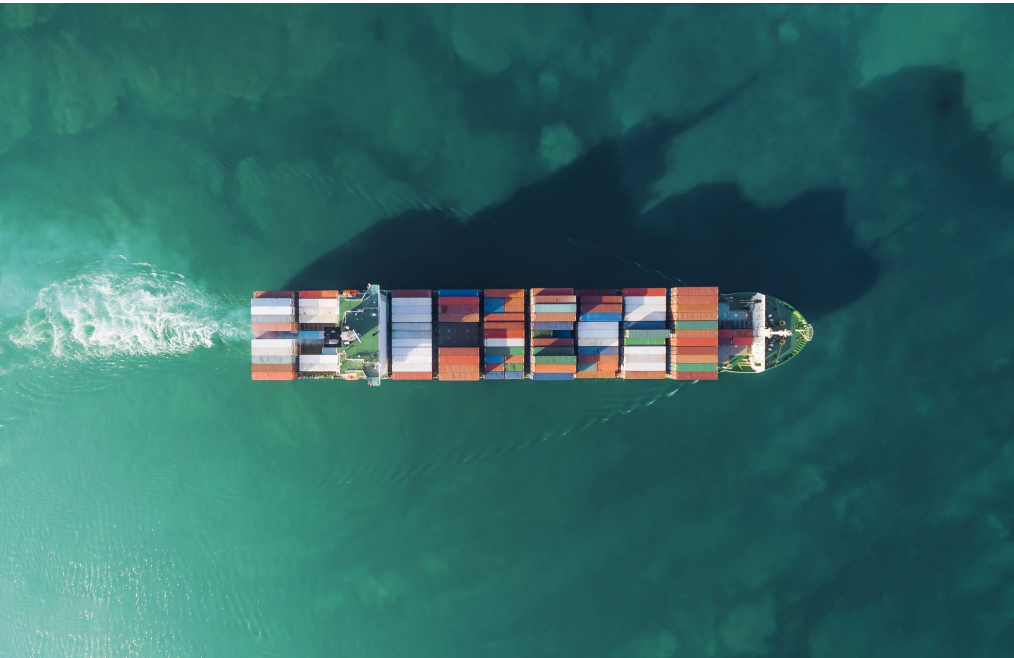
Source: OECD TiVA, Bloomberg Economics

**Bloomberg**



# Supply Chain – China+1

- China Plus 1
  - Vietnam as a No. 1 choice
  - Largest year-over-year trade growth with the U.S. in 2019
  - Cost competitive - \$3/hour compared to China (\$6.50/hour)
  - Similar transportation routes
  - Indonesia, Malaysia, India in play

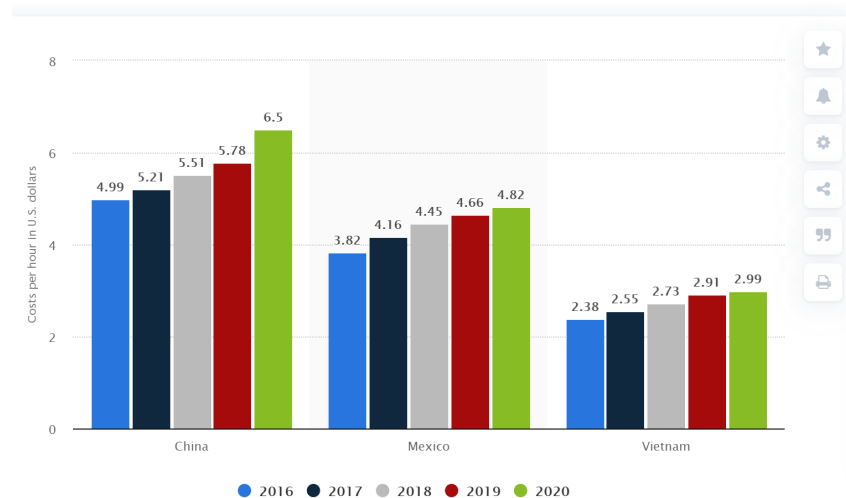




# Supply Chain - Nearshoring

- Nearshoring
  - Mexico
  - Brazil/South America
  - Mexico and South America low labor rates (\$4-\$5/hour less than China)
  - Exports primarily to eastern seaboard ports (Houston, Miami, Savannah, Richmond, NJ/NY)
  - Net positive for industrial real estate accelerating supply source diversification away from West Coast requiring more distribution centers

Manufacturing labor costs per hour for China, Vietnam, Mexico from 2016 to 2020  
(in U.S. dollars)



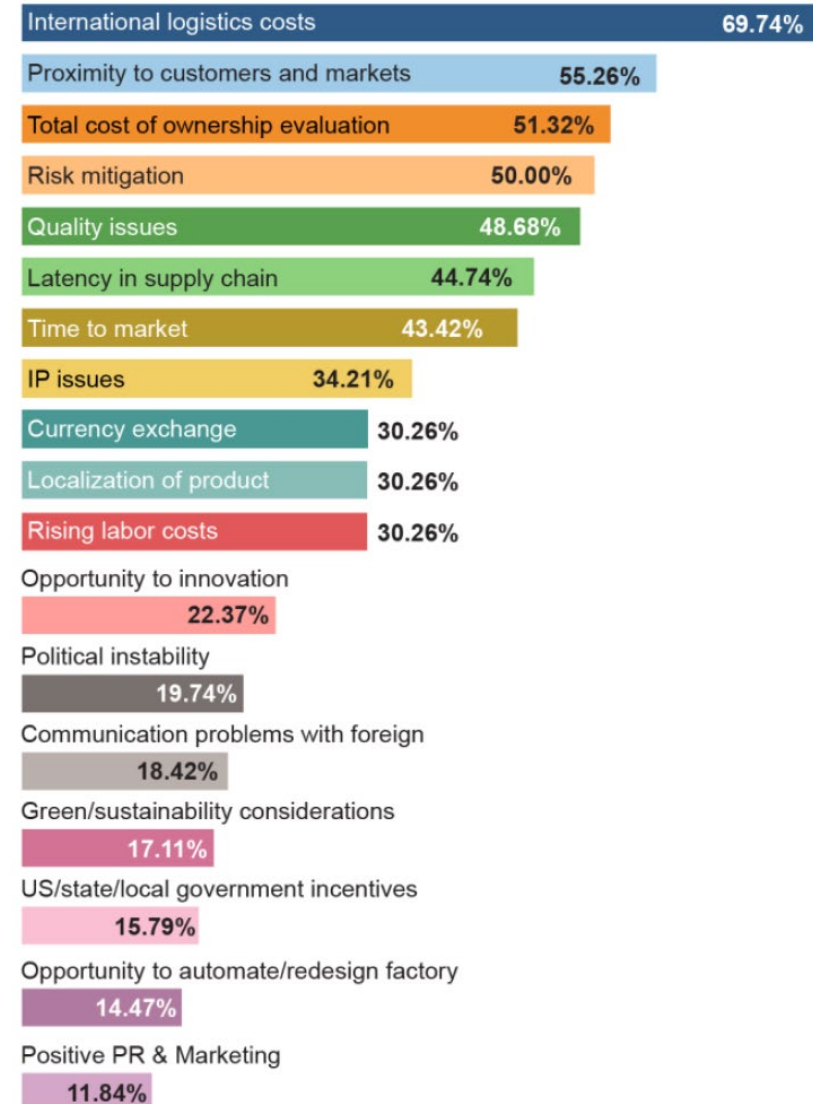
Source: [www.statista.com](http://www.statista.com)

© Statista 2020

# Reshoring

- Strong Interest - Two in three US manufacturers (69%) indicate they are “likely” to “extremely likely” to reshore
- Most likely candidates:
  - Higher margin / higher value products
  - Industry that requires highly skilled workforce
  - Manufacturing that lends itself to automation
  - Essential / critical to national interests
- Examples
  - Communications infrastructure
  - Packaged food production
  - Defense-contract applications
  - Pharmaceuticals / medical
- Longer term trend – watch in the years to come

## Reasons for US Companies to Reshore, 2017-2018



# Market Update - Summary

- Key Trends – Opportunities
  - E-Commerce Growth
  - Data Centers – growth of digital environment
  - Preference for less density
  - Manufacturing – Onshoring/nearshoring of key industries (longer-developing trend)

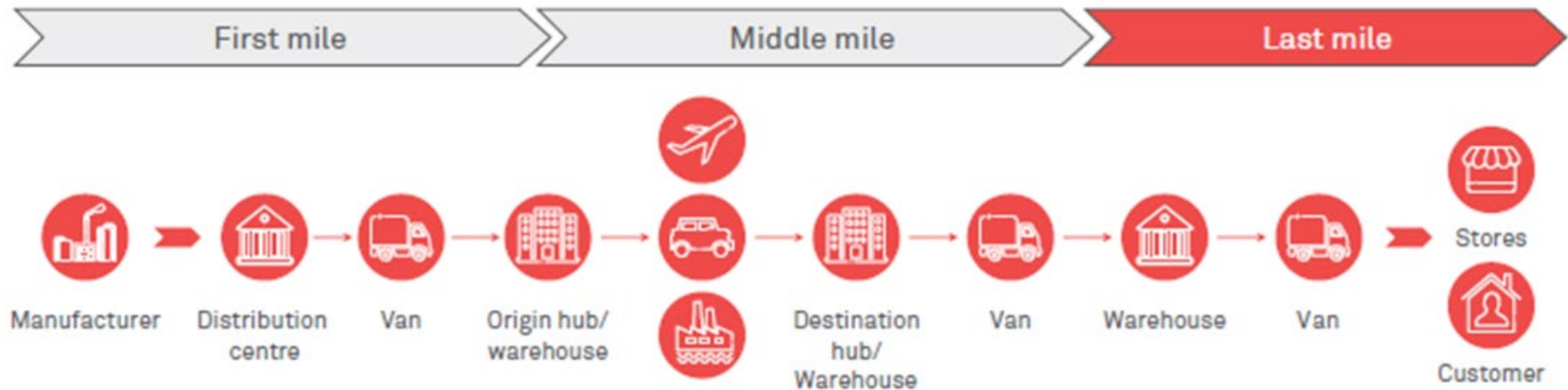
# Brownfield Opportunities

- Brownfields have an opportunity to meet real estate demand in the Covid era
- Benefits of brownfields vs. traditional or greenfield sites
  - Contributes to redevelopment of blighted/underutilized areas
  - Existing, usable infrastructure may already be in place
  - Grants and other economic incentives can help pay for clean-up and improvements
  - Consistent with smart growth and sustainable development goals
  - Located in high population areas, highest and best use is possible with site reuse
- Pressure to grow distribution and manufacturing supply chain networks beyond the top distribution hubs to secondary and tertiary hubs



# Brownfield Opportunities: E-Commerce/Logistics

- E-commerce/distribution driving demand for land
- 330 million SF of annual net absorption
- 2 billion SF total net absorption by 2025 (**150,000 acres at 30% FAR**)
- Amazon, Walmart, and other E-Commerce giants are pushing out build to suit RFPs in advance of their 2021 and 2022 needs
- Land for first mile, middle mile and last mile facilities needed



Source: [Wipro Consulting \(www.wipro.com\)](http://www.wipro.com) - [Delivering-on-the-last-mile-A-shift-from-the-traditional-supply-chain](#)

# Brownfield Opportunities: E-Commerce/Logistics

- Strategic infill sites are increasingly brownfields
  - “First Mile” facilities (large distribution/warehouses >300,000 sf)
  - “Middle Mile” and “Last Mile” facilities located in secondary and tertiary locations also serve an important need
- Important to have land available and “shovel ready” for all steps in supply chain

## Last-mile distance for top 15 US cities (in miles)



# Brownfield Opportunities: E-Commerce/Logistics

## Key Siting Criteria

- Located in (or, in proximity to) MSAs with > than 1,000,000
- Minimum 20-25 acres; > 25 acres preferred
  - One property dimension not less than 900 feet
  - Regular shape preferred
- Able to achieve >30% building coverage ratio (FAR)
- Proximity to major freeways/interstates, ideally intersection of two
- Ingress/Egress - 2 locations to enter/exit site (preferred)
- Strong, local labor pool (pick and pack workers)



## Deal Killers

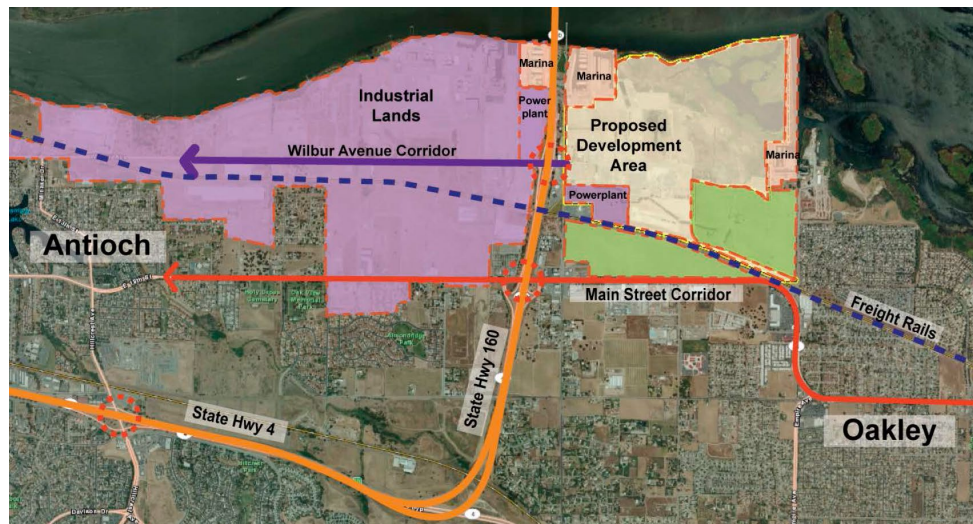
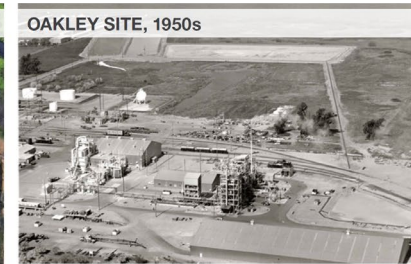
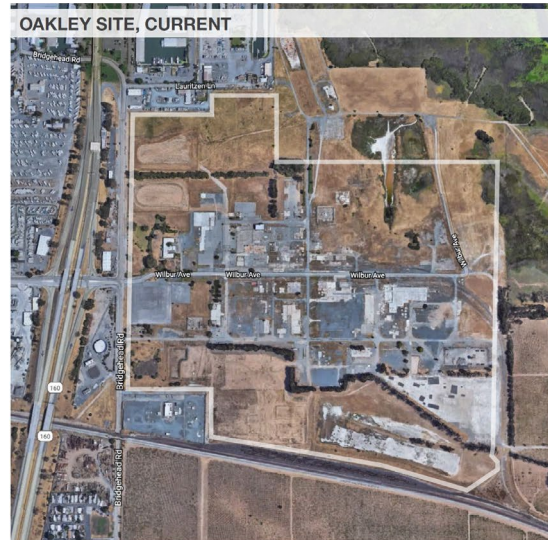
- Poor access/long distance to freeways/interstates
- Access through residential areas
- Rail crossings
- Surface water, wetlands, floodplain
- Utility easements or encumbrances (product pipelines, transmission lines)





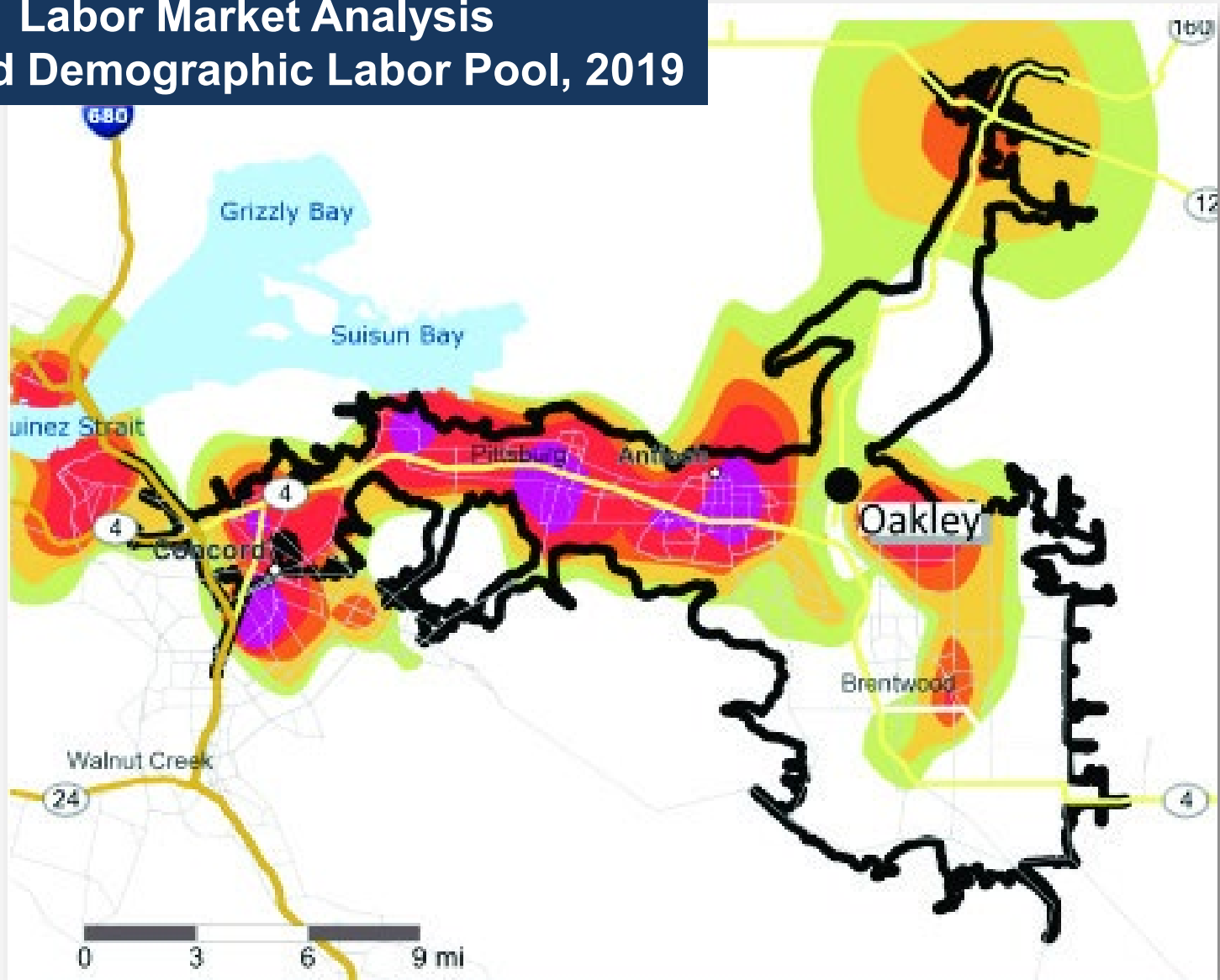
# Oakley, CA Case Study

- Former DuPont (now Chemours) Chemical Production Plant, closed 1998
- 150 acres developable (total 348 acres)
- Industrial zoning
- Excellent frontage and highway access
- BNSF rail line
- Deep water access
- Significant utilities
- Environmental/Regulatory
- RCRA Corrective Action under DTSC jurisdiction
- Extensive cleanup nearly complete
- Integration of redevelopment with remaining cleanup obligations
- Fully supportive, business friendly city enabled project development and speed to market



# Oakley, CA Case Study

## Labor Market Analysis Targeted Demographic Labor Pool, 2019



# Oakley, CA Case Study

**± 2M SF**

TOTAL BUILDING AREA

**± \$185M**

CAPITAL INVESTMENT

**\$350,000+**

ANNUAL EXCESS FUNDING  
TO OAKLEY GENERAL FUND

**\$400,000+**

ANNUAL FUNDING  
TO FIRE DEPARTMENT

**\$475,000,000**

ECONOMIC ACTIVITY  
TO THE COUNTY

**725**

CONSTRUCTION  
JOBS

**1,890**

DIRECT  
JOBS (onsite)

**490**

INDIRECT  
JOBS

**470**

INDUCED  
JOBS

**\$190,000,000+**

ANNUAL COMPENSATION  
GENERATED FROM JOBS

# What Can Communities Do Now? Site Inventory

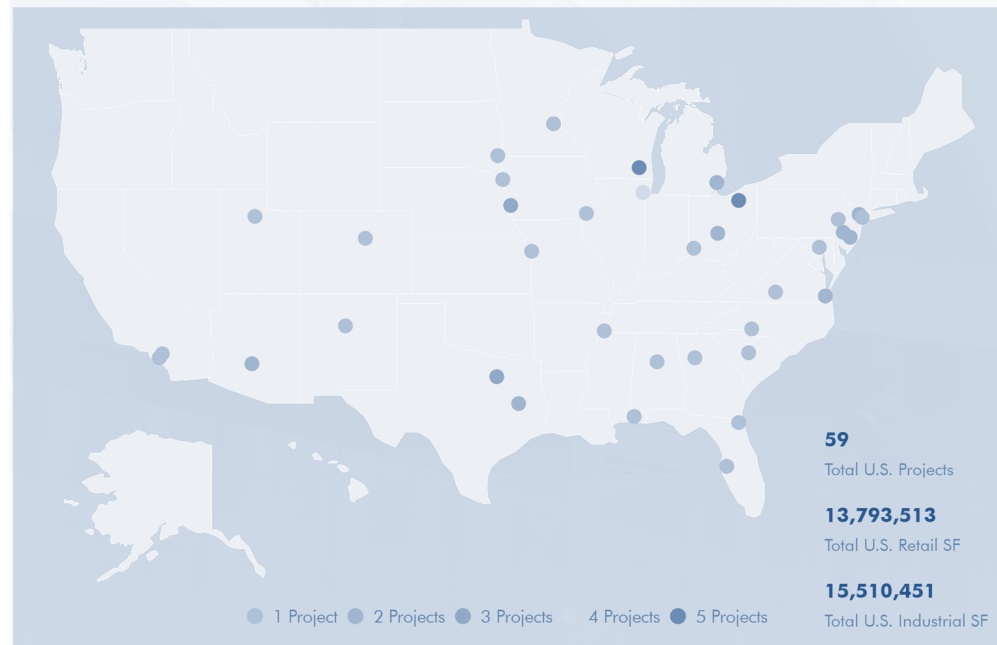
- Compile inventory of vacant or underutilized sites
- Identify sites with:
  - Transportation access to interstates
  - Utilities in place
  - Large tract of land
  - Access to population centers and labor markets
- Reuse opportunities are not just for properties with known contamination. Evaluate status of retail malls, office parks, other obsolete large structures
  - Approximately 1,400 malls in US; 25% closing every 5 years; By 2030, less than half expected to remain
- Fill in data gaps when possible
  - Complete environmental site assessments and hazardous building materials/structural investigations to determine site conditions



# What Can Communities Do Now? Site Inventory

- Sites with Existing Structures: Conversion vs. Demo
  - Decrease in real estate proforma may impact assessments and future tax payments
  - Demo may lead to higher values in the future
- Challenges to Consider
  - Economic: re-tenanting demand as retail; higher and better uses may include apartments, hotels
  - Political: Restrictive zoning and entitlements; perceived loss of sales tax revenue
  - Physical: poor reconfigurability of existing structures; inefficient site layouts/geometry; sites too small for logistics uses
  - Aesthetics: perception as trucking hub
  - Environmental: Unknown sites may need to be assessed and initial cleanup actions may need to be conducted
  - Energy use: Older buildings may be inefficient, demo and rebuild may be cost effective in terms of future energy use

Figure 1: Markets with Retail-to-Industrial Projects Since 2017



Source: [U.S. Market Flash – Retail to Industrial Property Conversion Accelerates](#), CBRE Research, Q2 2020.

# What Can Communities Do? Prioritization

## Prioritize sites with the greatest potential for reuse:

- Tracts of Land > 20 acres located in large MSA. Suitable for:
  - “First Mile” or “Middle Mile” E-commerce (business to business transport)
  - Warehouse and Distribution Facilities >300,000 sf
  - Manufacturing and Reshoring
- Tracts of Land <20 acres in proximity to large population centers. Suitable for:
  - “Middle Mile” or “Last Mile” Facilities (business to consumer transport)
- Reuse/Demo/Selective Demo Sites
  - Multi-family housing
  - Hotel/Hospitality
  - Data Centers

## Maintain relevant information on each site in a public database:

- Proximity of highways, rail, major utilities (water/sewer, gas, electricity, fiberoptic)
- Zoning, surrounding land uses
- Potential site hazards: waterbodies, wetlands, flooding
- Environmental assessments/status of environmental conditions
- Market Data (Labor force, employment, education)



# What Can Communities Do Now? Create Framework for Investment

- Community Planning/Community Engagement
- Strategic/Long Range Planning, Rezoning
- Incentives to attract e-commerce/logistics, manufacturing and reshoring opportunities into their communities
  - Property tax abatements
  - Economic development incentives to offset costs of moving, real estate investment, construction, equipment purchase, energy upgrades, env. assessments
- Promote labor force, workforce development programs
- Upgrade transportation and utility and data infrastructure



# What Can Communities Do Now? Create Site Prospectus



- Create a document to be used to advertise a property
- Describes site opportunities and constraints
- Drive interest in the property by highlighting:
  - Economic incentives/tax breaks
  - Employers
  - Education and workforce
  - Infrastructure (utilities, broadband, rail, roads, intermodal, airports)
  - Climate/geography
  - Strategic investment opportunities/properties



# What Can Communities Do Now? Opportunity Zones

- Properties located in an Opportunity Zone may also be able to offer additional incentives for site development
- Over 216 QOZ Funds and \$47 billion of total anticipated investment (Source: National Coalition of State Housing Agencies, August 2020)
- What Can Cities Do Now:
  - Understand the mechanics, the math, and the potential of the program
  - Identify locations of designated OZs
  - Identify suitable projects and potential investors
  - Consider Opportunity Zone Prospectus



Questions?

See you for the next Webinar in  
Spring 2021.

**BROWNFIELDS**  

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