2019 AAPA Planning for Shifting Trade – Tampa, FL

January 30, 2019







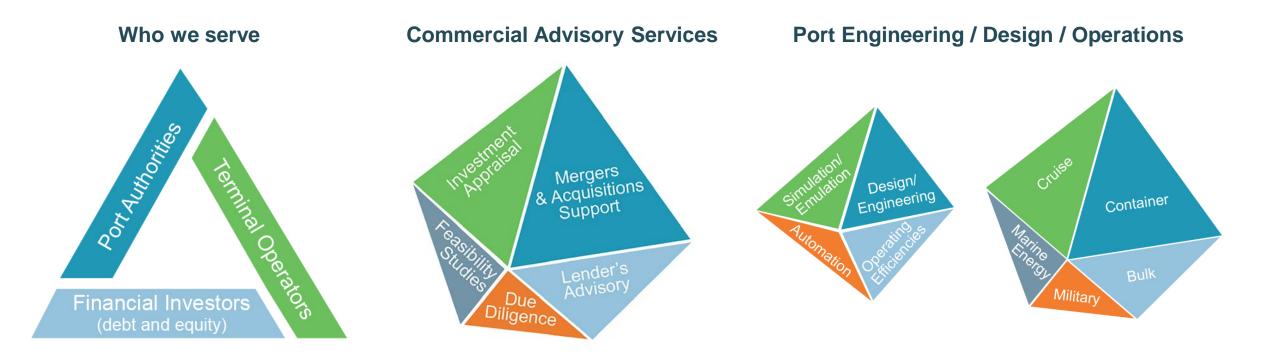
1 22.323

Joshua Hurwitz



moffatt & nichol

Moffatt & Nichol Commercial & Technical Advisory Services



Commentary and presentation materials are based on the personal views of the speaker and may not coincide with opinions held by Moffatt & Nichol or its employees

Agenda

- 1. You don't know where you're going until you know where you've been
- 2. We don't know what will happen in the future, but we know what <u>may</u> happen and therefore can plan for it
- 3. Ports are, and should be, champions of infrastructure development
- 4. Conclusion



You don't know where you're going until you know where you've been

Three broad themes discussed at the 2008 AAPA Shifting Trade Lanes conference in Tampa, FL

- 1. The weakening economic outlook
 - 60/40 chance of recession
 - Potential shock housing/sub-prime credit markets
- 2. The expected future opening of the Panama Canal
 - Favoring all-water route to US East Coast via Panama Canal
 - Increase in Caribbean transshipment
- 3. Capacity limits in Los Angeles & Long Beach lead to new gateways for U.S. cargo, especially in Mexico
 - Punta Colonet
 - Intermodal route from Lazaro Cardenas to U.S.

How well did our predictions pan out?

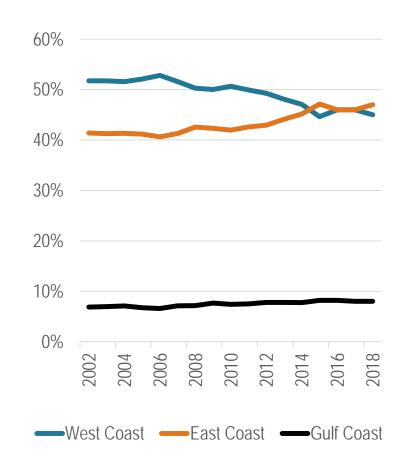
GREAT FINANCIAL CRISIS (GFC)



PANAMA CANAL EXPANDS

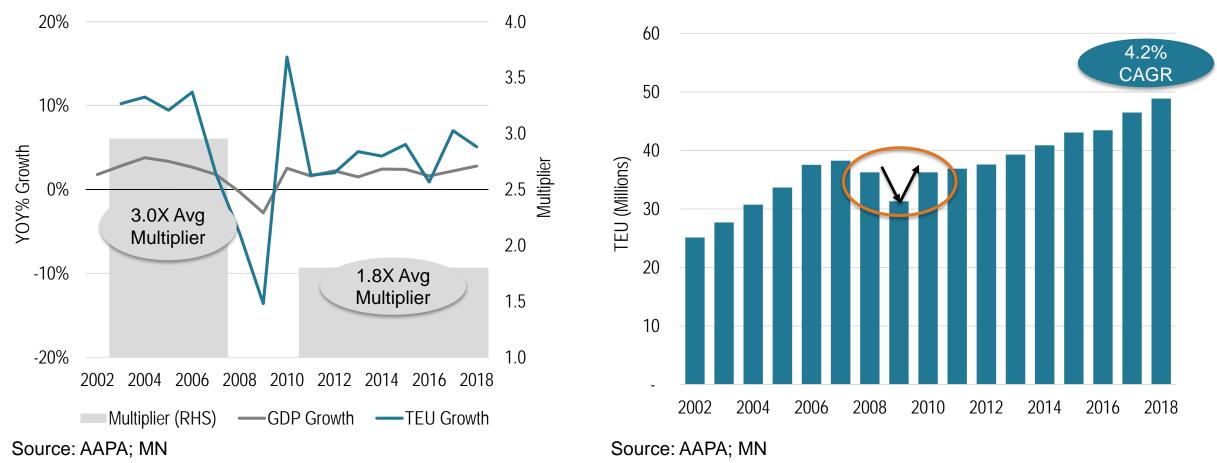


U.S. EAST COAST GAINS SHARE



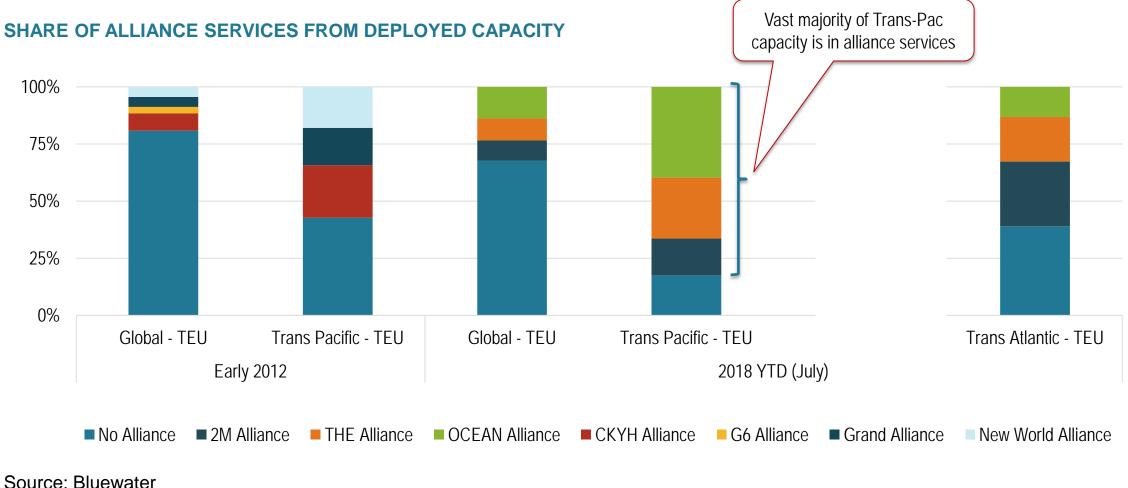
U.S. CONTAINER TRADE GROWTH & GDP

US container trade growth continues to outpace overall economic growth at roughly 1.8X GDP

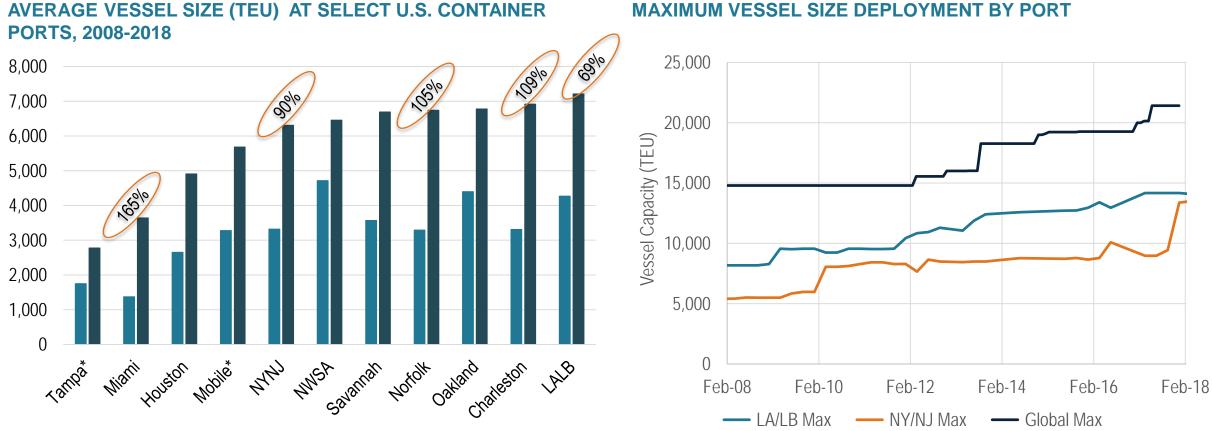


U.S. TOTAL CONTAINER TRADE (2002 – 2018)

Alliances dominate the Transpacific trade lane, less so on Transatlantic



Average vessel sizes have increased on the order of 50-100% over the past decade



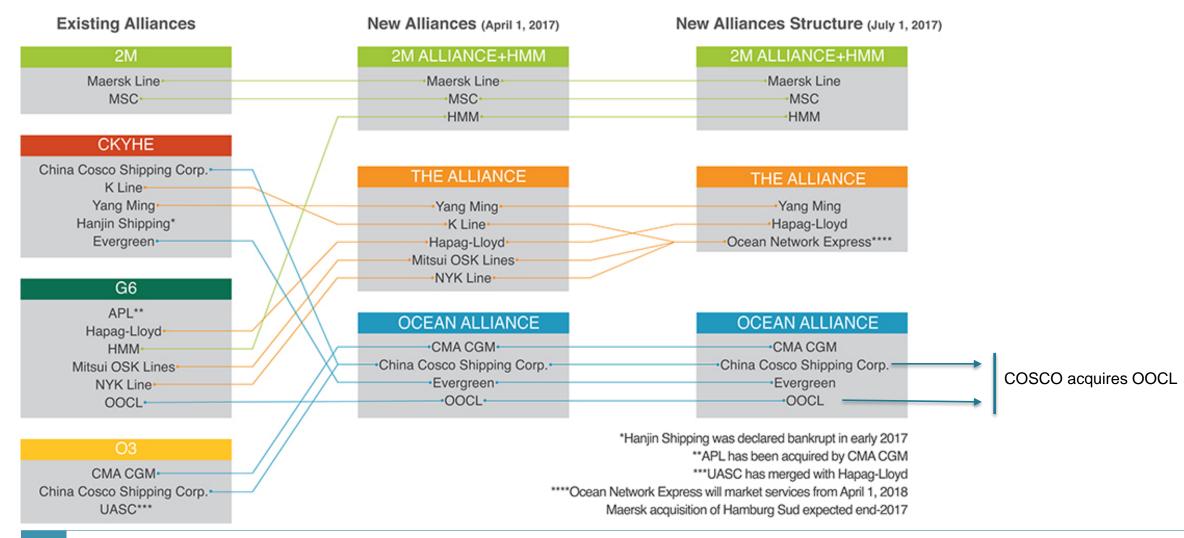
MAXIMUM VESSEL SIZE DEPLOYMENT BY PORT

*Mobile 2012-2018

*Tampa 2012-expected average following COSCO service deployment

Source: COMPAIR

Liner Consolidation and Alliances



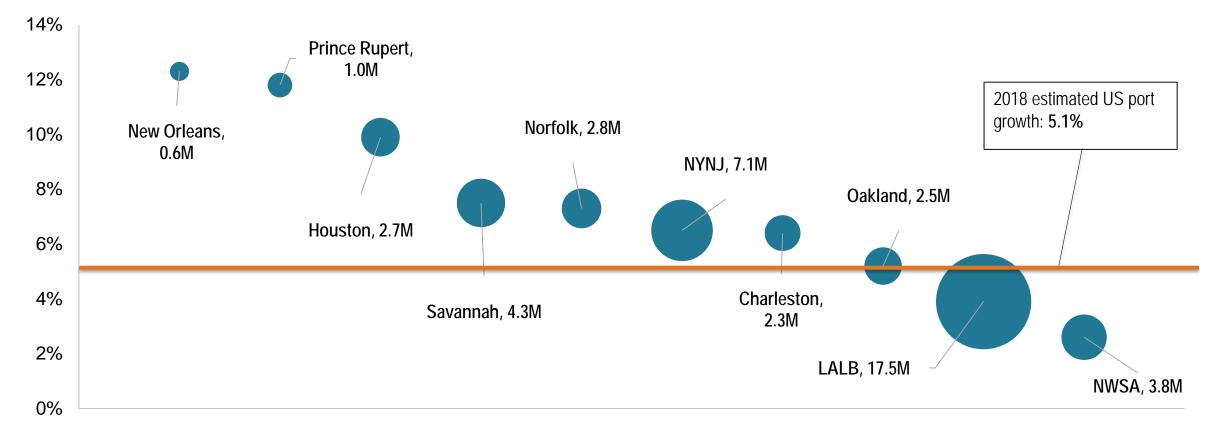
Consolidation trickling down to terminals and port authorities



TraPac MOL / Brookfi

Ben E. Nutle

Strong container growth at many North American ports



2018 TEU volume (in millions) and year-on-year growth rate for selected ports

Source: MN estimates, port authority websites



We don't know what will happen in the future, but we know what *may* happen and therefore can plan for it

In the U.S., economic fundamentals look ok for now, but headwinds exist and policy uncertainty looms over the near term

600

400

200

0

2004

2006

2008

2010

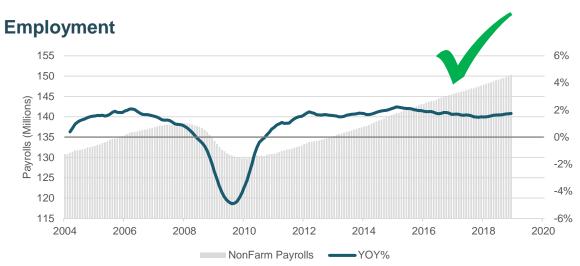
New Home Sales

2012

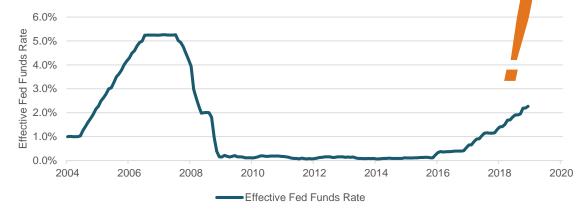
2014

—YOY%

2016









-10%

-20%

-30%

-40%

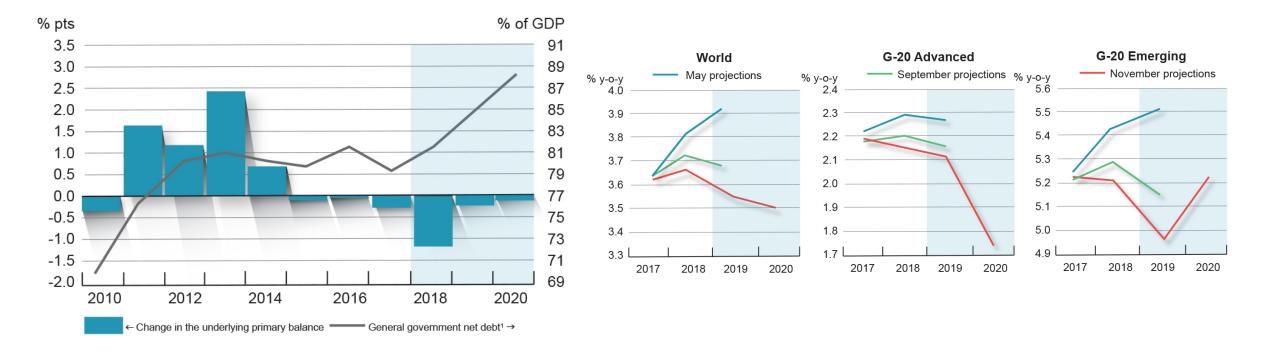
-50%

2018

Fewer levers left to manage the next recession; global growth slowing

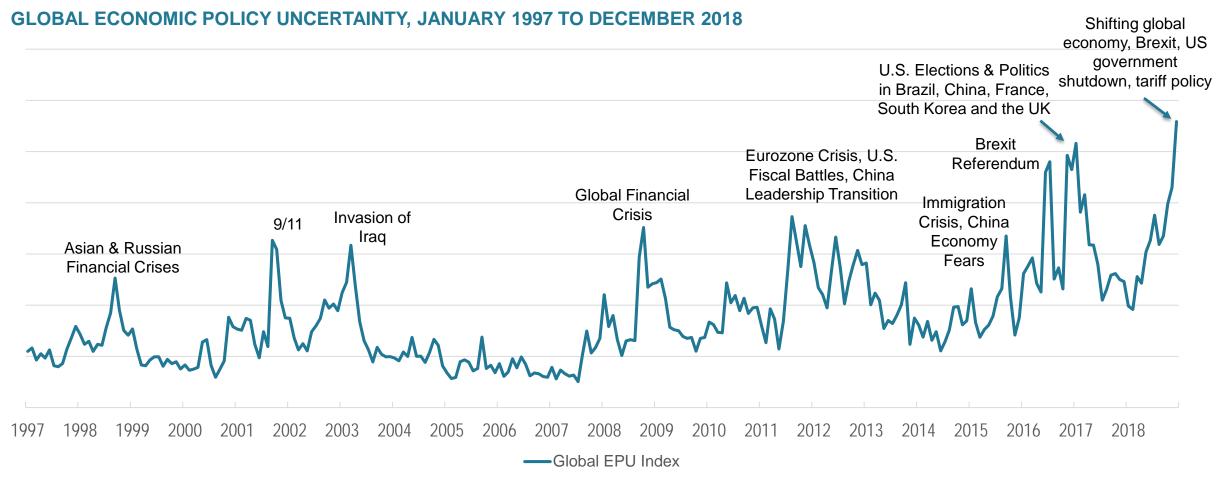
THE US BUDGET DEFICIT IS INCREASING

OECD: GLOBAL GDP GROWTH IS LOSING MOMENTUM



OECD Economic Outlook, 21 November 2018

There is a lot of near-term uncertainty, but infrastructure is long-term



Source: PolicyUncertainty.com; Baker, Bloom and Davis

US CONTAINER GROWTH PROJECTIONS

US Containerized Volume Growth Projections

100 60% 2018-2030 2040 CAGR: CAGR: 50% 80 2.9% 2.7% CAGR 40% Share of US TEU (million) 60 1.9% 30% CAGR 40 20% 3.0% 20 CAGR 10% 0% 2005 2010 2015 2020 2025 2030 2035 2040 2010 2015 2020 2025 2030 2035 2040 -West East -Gulf Import Export Empty

MARKET SHARE PROJECTIONS BY COAST

Several factors have the potential to alter our planning for trade lane growth

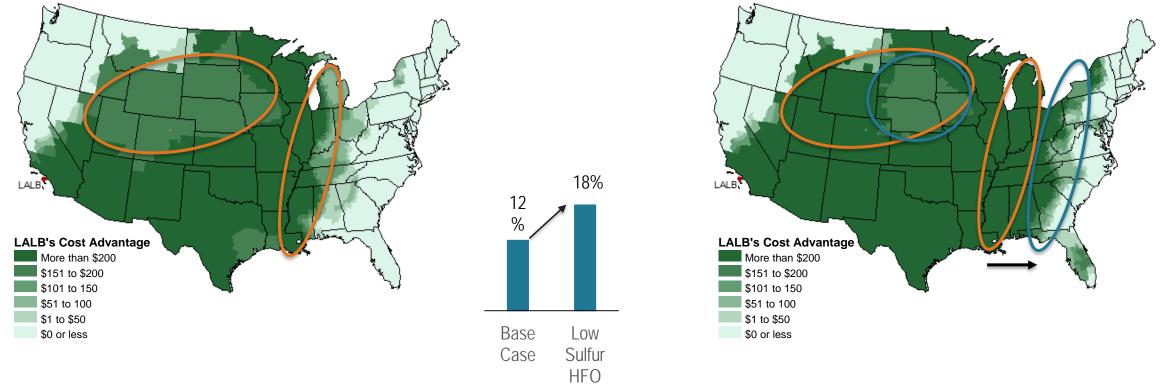
China's effort to reduce waste imports is shifting US waste paper export trading partners

140,000 120,000 100,000 80,000 TEU 60,000 40,000 20,000 Jan-14 Jul-14 Jan-15 Jul-15 Jan-16 Jul-16 Jan-17 China India Taiwan Other ■ Korea, South Indonesia Vietnam Thailand NonContainerized Equivalent Source: US Trade Online

EXPORTS OF US WASTE PAPER (6-MONTH MOVING AVERAGE)

IMO 2020 could (temporarily?) shift up to 1.2 million TEU of discretionary cargo to the West Coast

LALB – NORTH ASIAN IMPORTS – BASE CASE



Source: MN

Cost Advantage of LALB over NYNJ for North Asian Import destined for Chicago

LALB – NORTH ASIAN IMPORTS – LOW SULFUR HFO

AAPA 2019 Planning for Shifting Trade

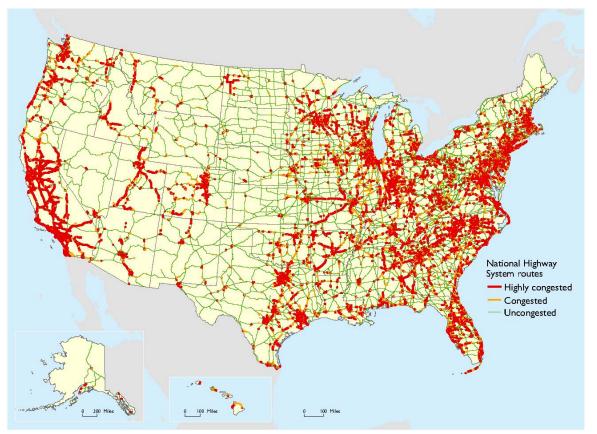
US – China tariff hikes would slow GDP growth

% 0.0 Total tariffs plus higher uncertainty -0.4 Tariffs on rest of US-China -0.8 trade in 2019 -1.2 ■ Current tariffs rise to 25% (The Jan increase -1.6 postponed 90 days) Current US-China tariffs -2.0 China GDP USA GDP World GDP World Trade Trade excl. USA & China

IMPACT ON GDP AND TRADE BY 2021, PERCENT DIFFERENCE FROM BASELINE

Source: OECD

Conflicting trends and a diversity of business strategies for serving inland markets

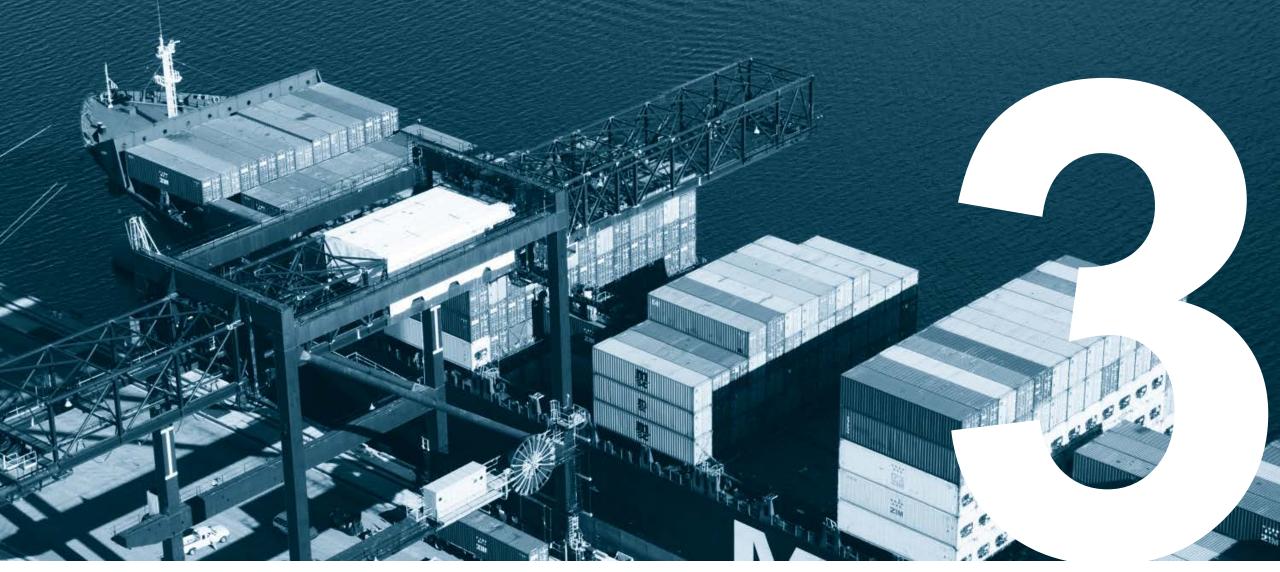


HIGHLY CONGESTED HIGHWAYS, 2045

PRECISION RAILROADING



Source: USDOT, Bureau of Transportation Statistics, 2017



Ports are, and should be, champions of infrastructure development

Smart infrastructure investment precedes, follows and facilitates trade growth

SAVANNAH, GA: MASON MEGA RAIL 2020



Source: GPA / Stephen A. Morton

Smart infrastructure investment precedes, follows and facilitates trade growth

TAMPA, FL: MASTER PLAN: VISION 2030



Source: Port Tampa Bay



Conclusion

Major Themes

- 1. US economy strong but showing signs of weakness; Global growth slowing
- 2. Near-term uncertainty over major economic policies, including trade policy
- IMO 2020 has potential to cause short-term congestion challenges in West Coast
- 4. Longer-term macro fundamentals favor continuation of slow shift to East and Gulf Coasts, provided proper planning
- 5. Landside connectivity is an evolving challenge
- 6. Efficient freight networks require multiple entities working together
- 7. Infrastructure needs a champion: port authorities are that champion

THANK YOU

Joshua Hurwitz Moffatt & Nichol jhurwitz@moffattnichol.com 510-788-8963



moffattnichol.com