

# ***USACE Civil Works Update***

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US Army Corps of Engineers  
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# Current Political Landscape



*The 58<sup>th</sup> Presidential Election and 45<sup>th</sup> Change in Administration Experienced by the U.S. Army Corps of Engineers In Our 241-Year History*

*How does a change in Administration influence USACE operations?*

## IMPACTS on REGIMENT / MIL-MISSIONS

- a. CHANGE is DOD GLOBAL PRESENCE
- b. FORCE STRUCTURE / MODERNIZATION
- c. POTENTIAL ENGR REGIMENT impacts
- d. MILCON / SRM / BRAC impacts
- e. SUSTAINABILITY / ENERGY impacts

## IMPACTS on CIVIL WORKS PROGRAM

- a. Potential cuts in DISCRETIONARY funding = CW
- b. Potential INFRASTRUCTURE Package
- c. Impacts on EPA / NOAA / DOI policy
- d. Pressure for REGULATORY CHANGE
- e. SIZE of GOV'T / REGULATION impacts



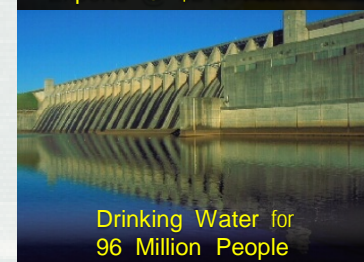
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# Securing Our Nation's Future Through Water

## Navigation - Commerce, Intn'l Markets, Trade

USACE Operates 24,000 miles of Commercial Waterways; Generates \$18 B / 500,000 Jobs Annually;  
Supports 20% of US Jobs, 1/3 of GDP;  
Transportation = Decisive US Competitive Advantage

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## Flood and Disaster Risk Reduction

USACE Prevents > \$8 in Flood Damages per \$1 Invested;  
14,700 Miles Levee → 12,700 Miles = Local O&M;  
700 USACE Dams vs 87,000 National Inventory of Dams

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## Hydropower - Inexpensive, Sustainable

USACE is the Nation's Largest Renewable Energy Producer  
25% of US Hydropower, 3% of Total US Electricity

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## Drinking Water

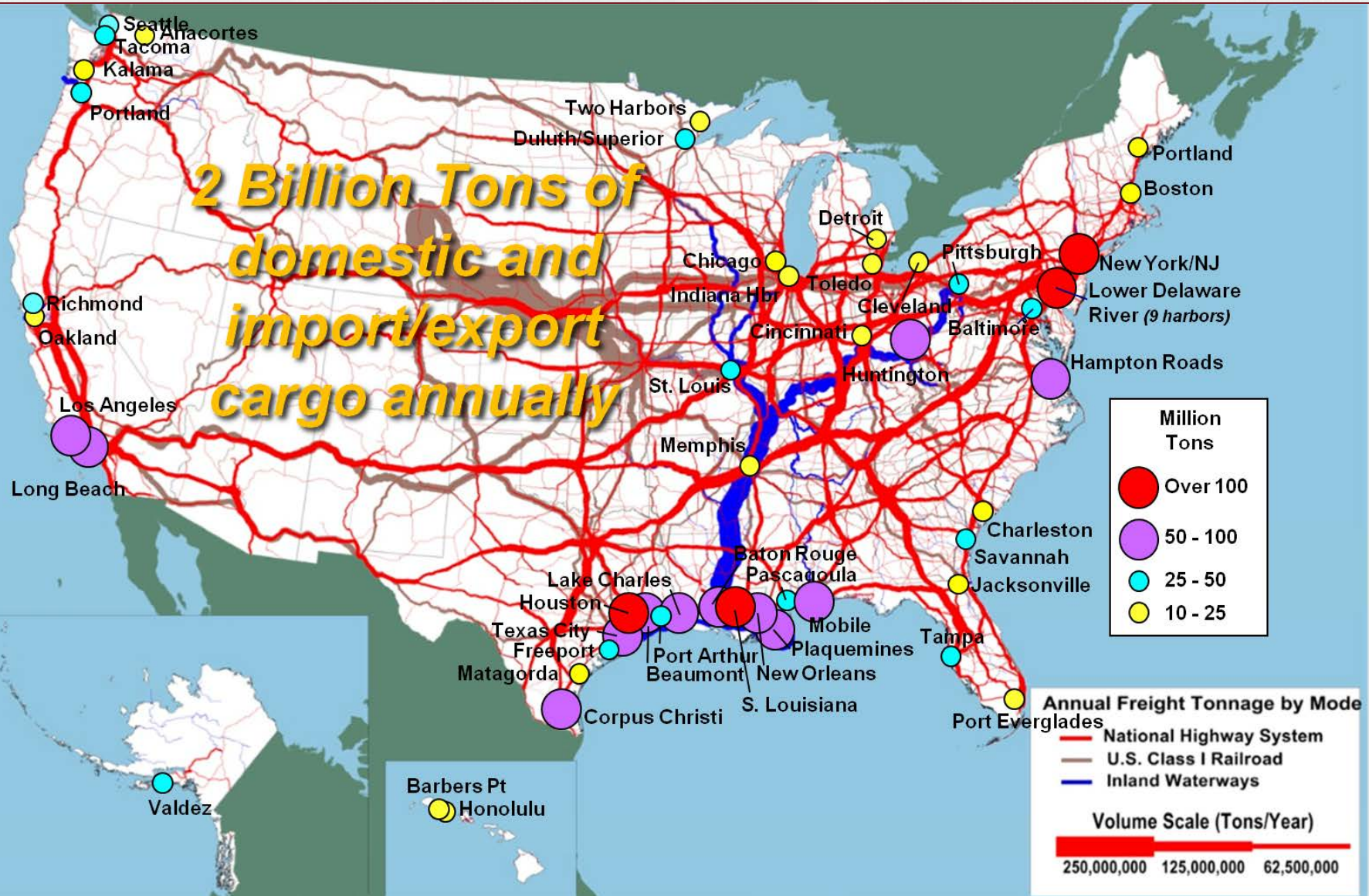
USACE Produces 6.5 Billion Gallons per Day

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## Quality of Life – Local Economic Engines

USACE is the No. 1 Federal Provider of Outdoor Recreation, Contributing > \$16 B to Local Economies

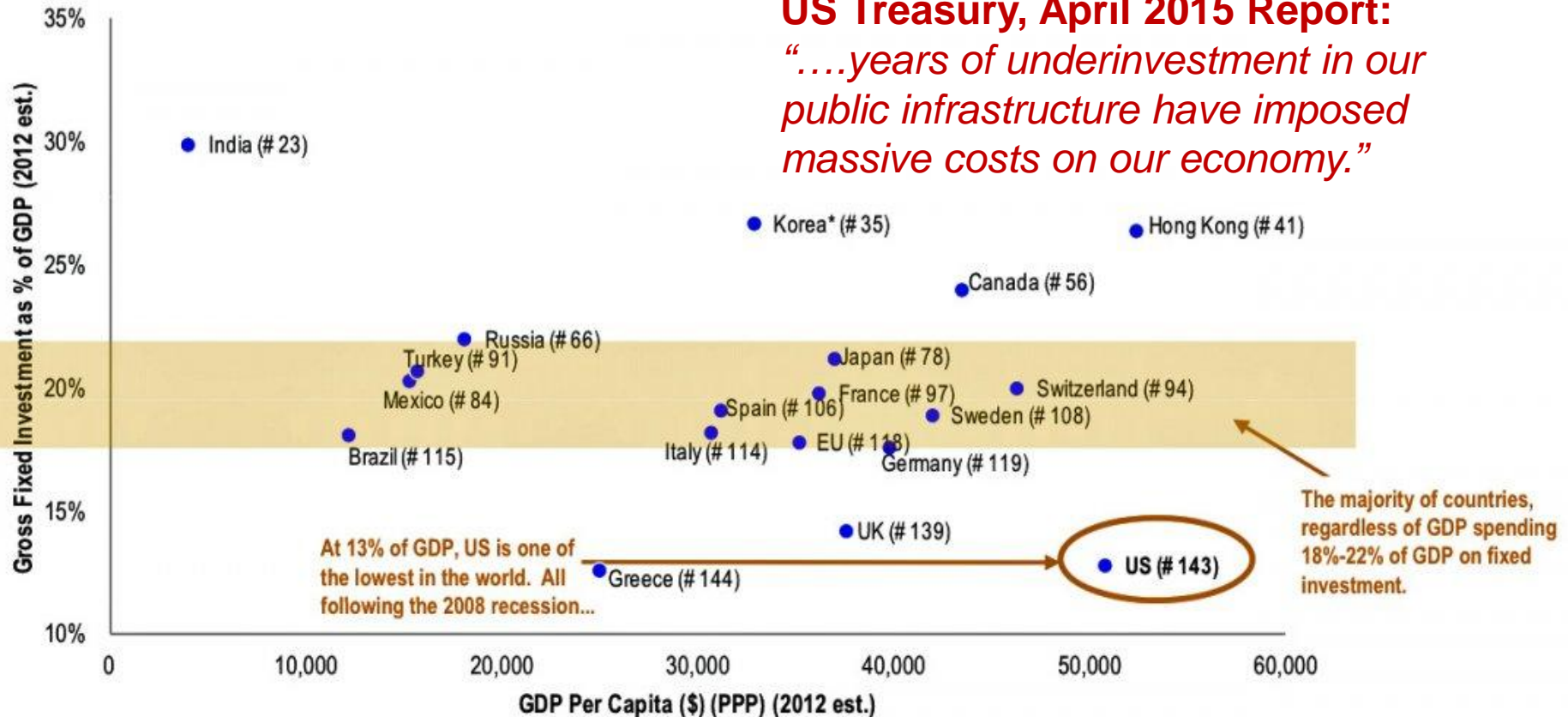
# ***U.S. Ports and Inland Waterways: Vital to our National Economy***



# United States Relative to Other Nations

Figure: GDP Per Capita versus Gross Fixed Investment as a % of GDP: Underinvestment in the US

Estimates for 2012 The rank of Gross fixed investment as % of GDP is in the parenthesis.



## Low Investment in Infrastructure



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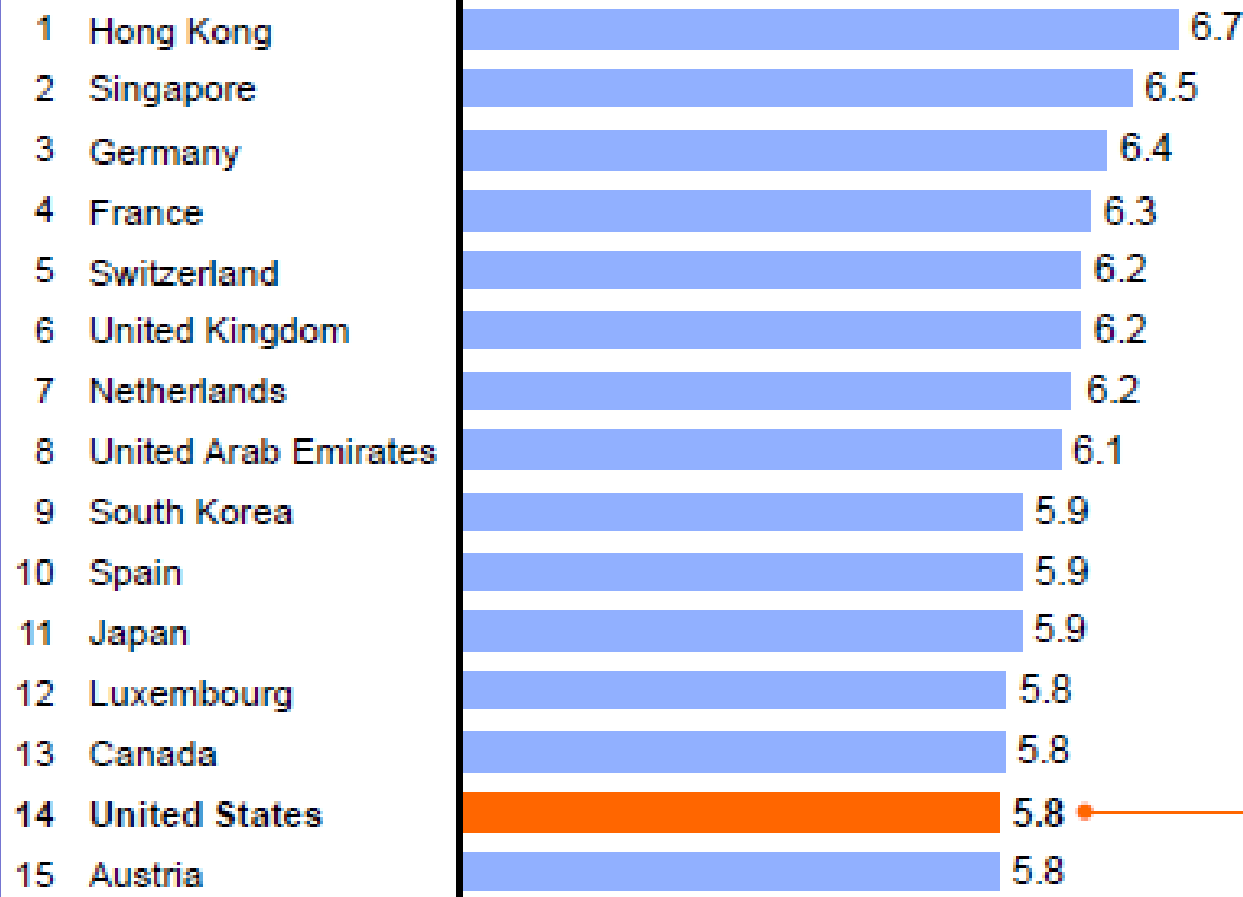
# Relative Quality of US Infrastructure

The World Economic Forum ranks US infrastructure behind that of most other comparable advanced nations

Overall infrastructure quality index, 2012–13

Top 15 of 144 countries

Scale: 1 = Extremely underdeveloped; 7 = Extensive and efficient by international standards



Sector-specific indexes, 2012–13

Out of all 144 countries

Ports  
United States  
**#19**

Roads  
United States  
**#20**

Power and telephony  
United States  
**#21**

## Inland Waterways

2013  
GRADE D<sup>+</sup>

Our nation's inland waterways and rivers are the hidden backbone of our freight network – they carry the equivalent of about 51 million truck trips each year. In many cases, the inland waterways system has not been updated since the 1950s, and more than half of the locks are over 50 years old. Barges are stopped for hours each day with unscheduled delays, preventing goods from getting to market and driving up costs. There is an average of 52 service interruptions a day throughout the system. Projects to repair and replace aging locks and dredge channels take decades to approve and complete, exacerbating the problem further.

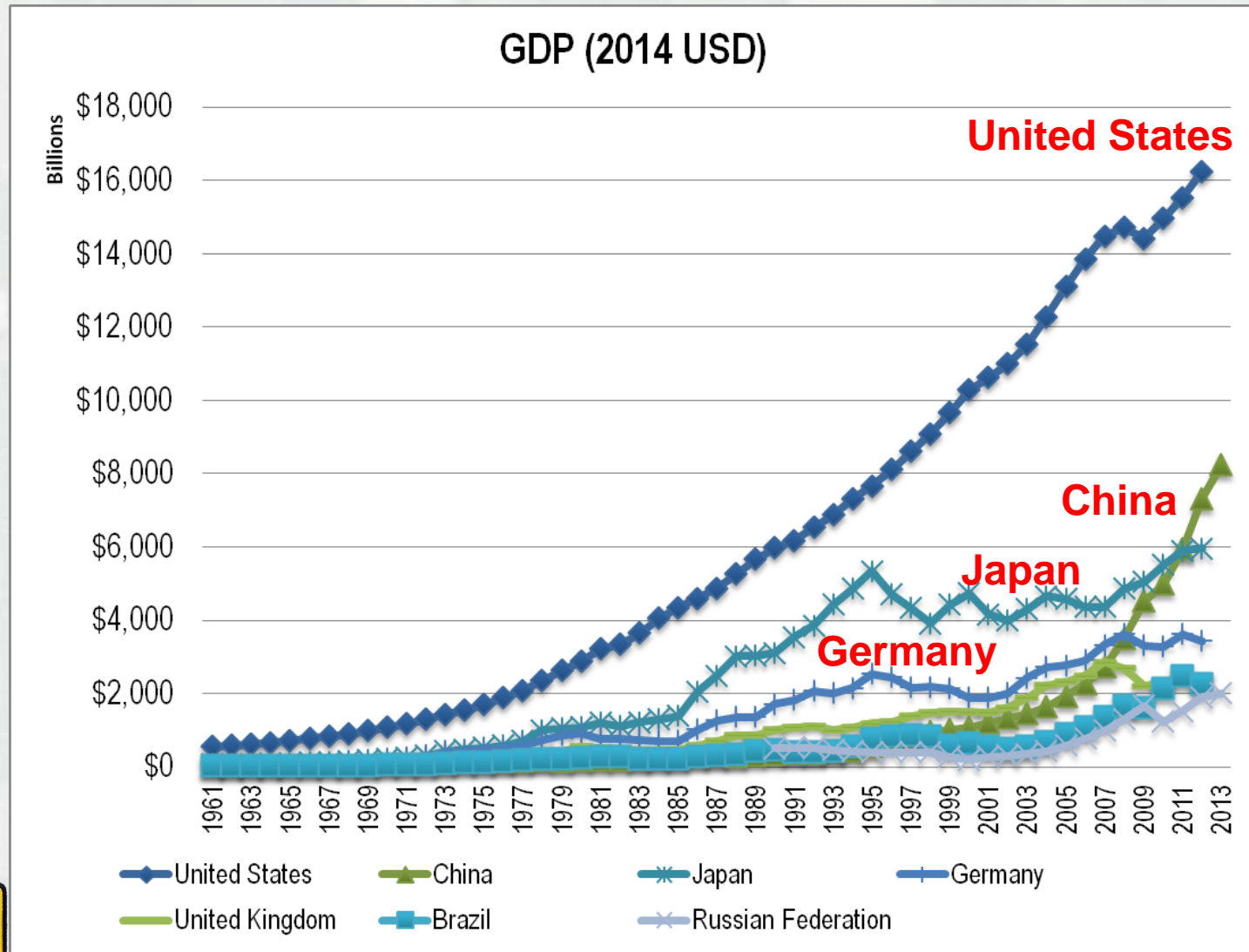
A = Exceptional  
B = Good  
C = Mediocre  
D = Poor  
F = Failing

AMERICA'S GPA:  
**D<sup>+</sup>**  
GRADING METHODOLOGY



	Add'l Total Investment by 2020	Protects \$B in Exports	Protects \$B in GDP	Protects Jobs	Protects Personal Income
<b>Waterways</b>	<b>\$16B</b>	<b>\$270B</b>	<b>\$697B</b>	<b>738,000</b>	<b>\$872B</b>
Airports	\$39B	\$54B	\$313B	350,000	\$361B
Electricity	\$107B	\$51B	\$496B	529,000	\$656B
Water/Wastewater	\$84B	\$20B	\$416B	669,000	\$541B
Roads	\$846B	\$114B	\$897B	877,000	\$930B

# Comparison of Gross Domestic Product



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# Challenges and Opportunities

- **Infrastructure Investment = Global Challenge**
- **Corps Civil Works Portfolio: 3,000+ Operational Projects, with Replacement Value of Approx **\$268B****
- **Corps Civil Works Asset Classes are Diverse**
  - Flood & Coastal Storm Damage
  - Coastal and Inland Harbors
  - Inland Waterways
  - Hydropower
  - Dam & Levee Safety Programs
  - Water Storage
  - Aquatic Ecosystems
  - Water-Based Recreation
- **Demands for CW Infrastructure Maintenance, Operations, and Capital Investment are Expanding**
  - Civil Works New Construction Backlog → \$ 60B
  - ASCE: Dams, Levees, IWW's = "D" → \$140B
- **CW Infrastructure Systems Aging, Experiencing Negative Performance Trends Across Portfolio (Serviced by ~\$4.6B Annual Budget Nationally....)**



# ***Federal P3/P4 Challenges***

- **Payment Mechanisms, Availability Payments**
  - ▶ Inability to Make Commitments on Future Appropriations
- **Budget Scoring**
  - ▶ Scores Full Federal Project Cost Up Front in First Year
- **Revenue Generation and Ring-Fencing**
  - ▶ Ability to Collect, Retain and Reinvest Fees/Charges
- **Budgetability**
  - ▶ Prioritization of Projects Within Current Budget Policy (Benefit-Cost Ratio)



# ***Future Opportunities & Demands***

- U.S. Population Projected to **Increase** by 110M in 30 Years
- Over **50%** of US Population Located within **50 Miles** of Coastline...Plus “Center Coast”...Flood Risk Management Implications
- U.S. Imports and Exports Projected to **Increase** Significantly
- Panama Canal New Locks Now Opening - Worldwide Fleet of **Post-Panamax** Vessels to Increase
- Opportunities for Economically Justified **Port Expansions**
- Improving Grain Yield Trends and Improved Panama Canal Efficiencies → **Increased Grain Exports**
- Environmental **Mitigation** Activities Likely Significant
- Future Alternative Financing Opportunities,  
Where They **Make Sense**



# ***Closing Thoughts***

- Addressing the Nation's Infrastructure Investment Gap is a Shared Federal, State and Local Responsibility
- The Corps Doesn't Deliver Anything by Itself... Critical that We Not Lose Focus on Our Partners and Our Commitments
- Navigation Investment is Essential for the Nation's Global Trade and International Competitiveness
- Economically Justified FRM Investment Reduces Risk to Economic Activity, Lives, Livelihoods and Quality of Life
- Infrast Investment: Financial (and Generational...) Challenge
- Elevated Priority Afforded to Infrastructure Investment?

What are YOUR ideas?



# ***Thank You!***



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As of: <date>  
POC: <name>