



# Quarterly Business Meeting

September 22, 2021

**NIAC** The President's National  
Infrastructure Advisory Council



# Opening Remarks

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# Workforce and Talent Management Study

## Study Results and Recommendations

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# Agenda

- ▶ Review NSC Guidance and Study Approach
- ▶ Present Findings
- ▶ Discuss Recommendations
  - *Near-Term*
  - *Mid-Term*
  - *Long-Term*
- ▶ Outline Alignment with Executive Branch and Congressional Actions
- ▶ Discuss Unique Opportunity and Call to Action

# Working Group Members

**Beverly Scott, Ph.D.**, CEO, Beverly Scott Associates, LLC (Co-Chair); NIAC Vice Chair

**Jan Allman**, Senior Vice President of Public Affairs and Community Relations, Fincantieri Marine Group (Co-Chair)

**William Terry Boston**, Former CEO, PJM Interconnection

**Steve Gatena**, Founder and CEO, Pray.com

**Margaret Grayson**, Consultant, E2M, LLC

**George Hawkins**, Former CEO and General Manger, District of Columbia Water and Sewer Authority

**Rhoda Mae Kerr**, Fire Chief, City of Fort Lauderdale Fire Rescue

**Carl Newman**, Airport Manager, Glendale Municipal Airport

**Keith Parker**, President and CEO, Goodwill Industries of North Georgia

# Study Group Members

**Jack Clark**, Executive Director, International Transportation Learning Center

**Turah Dorsey**, Foundation Fellow, Eastern Bank Charitable Foundation; Co-Founder, Change Agency, Ltd.

**Joseph Kane**, Senior Research Associate and Associate Fellow, Brookings Institution

**Andrew Meyer**, Head of Research and Operations, Pray.com; NIAC Point of Contact

**Nathaniel Millsap**, Director of Security and Cyber, Fincantieri Marine Group; NIAC Point of Contact

**Nitin Natarjan**, Former Director, Avantis Federal (formerly E3/Sentinel)

**Glenda Scarbrough**, Director of Human Resources, Pacific Gas & Electric

**Ty Schieber**, President and CEO, Clarity Enterprise Solutions, LLC

**Eric Seleznow**, Senior Advisor, Jobs for the Future

**Nat Smith**, Legal Advisor, Introducing Youth to American Infrastructure, Inc.; NIAC Point of Contact

**Katie Spiker**, Managing Director of Government Affairs, National Skills Coalition

**Adie Tomer**, Senior Fellow, Brookings Institution

**Andy Van Kleunen**, CEO, National Skills Coalition

**Rebecca Winkel**, Senior Economic Advisor, American Petroleum Institute

**Afia Zakiya, Ph.D.**, Former Senior Fellow for Water Infrastructure and Workforce Development, Congressional Black Caucus Foundation

# We Dedicate This Report to Peg Grayson

- ▶ Expert on finance, policy, and regulatory compliance
- ▶ Appointed to the President's NIAC in 2002
- ▶ Supported 16 NIAC studies
- ▶ Chaired 4 NIAC studies



# NSC Guidance

- ▶ The NSC issued guidance in April and December of 2020, asking the NIAC to conduct an in-depth study on the challenges facing the critical infrastructure workforce, identifying:
  - Workforce trends with the potential to impact national security;
  - Examples of effective policies and programs that could have broad application across critical infrastructure sectors; and
  - Near-term solutions to help stem the most immediate challenges.
- ▶ Focus on four “lifeline sectors”—Energy, Transportation Systems, Communications, and Water and Wastewater Systems
- ▶ Develop near-, mid-, and long-term recommendations that are applicable across all 16 sectors



# Study Approach

- ▶ The first NIAC study to examine worker readiness across all critical infrastructure sectors
  - The NIAC has made 28 previous workforce recommendations across 7 different reports
  - Most previous reports related to cyber or a single sector
- ▶ Working Group developed report by:
  - Convening a Study Group of 15 industry leaders;
  - Interviewing 59 relevant experts and industry insiders; and
  - Examining workforce trends related to COVID-19 pandemic.
- ▶ Specific areas of interest investigated include:
  - Cybersecurity education and training;
  - Funding for workforce development; and
  - The credential system for employment in critical infrastructure.

# Findings



## Worker readiness is disconnected

from the traditional education system



## Lack of coordination

between the public and private sectors and across all levels of government has created a fractured system that hampers critical infrastructure workforce development



## Lack of diversity

presents significant and persistent challenges for recruitment and talent retention

# Recommendations

## NEAR-TERM

**1**  
Track all spending on critical infrastructure, including interagency efforts, to provide greater visibility on workforce spending and inform future decision-making.

**2**  
Use executive authority to support best practices, encourage national standards, and incentivize quality training for essential jobs.

**3**  
Establish a critical infrastructure workforce coordinating council of federal executives and leadership from key stakeholders.

## MID-TERM

**4**  
Develop national standards for job quality and training.

**5**  
Launch a public awareness and image campaign to highlight the importance and opportunity of critical infrastructure careers and jobs.

**6**  
Provide increased funding and support to state and local governments to expand and improve opportunities and access to work-based learning programs.

## LONG-TERM

**7**  
Reshape cultural perceptions of technical careers by reinforcing the importance and public service benefits of critical infrastructure jobs through sustained education and awareness efforts.

**8**  
Develop a National Workforce Plan to unify and direct national policy and the necessary resources to support the training and skills needed in critical infrastructure sectors.

**9**  
Build a workforce development system that connects education to career development and provides lifelong learning opportunities to critical infrastructure workers.

## RECOMMENDATION I

**Track all spending on critical infrastructure, including interagency efforts, to provide greater visibility on workforce spending and inform future decision-making.**

- ▶ Achieve greater clarity on spending
- ▶ To be led by Office of Management and Budget (OMB)
- ▶ Provide necessary data to center people in future critical infrastructure planning initiatives
- ▶ Identify funding gaps and opportunities for better alignment with workforce goals

## RECOMMENDATION 2

**Use executive authority to support best practices, encourage national standards, and incentivize quality training for essential jobs.**

- ▶ To be led by the White House
- ▶ Add *workers* to the statutory definition of critical infrastructure
- ▶ Elevate human capital risk management practices
- ▶ Use federal procurement and grant requirements to encourage best practices

## RECOMMENDATION 3

**Establish a critical infrastructure workforce coordinating council of federal executives and leadership from key stakeholders.**

- ▶ To be led by an individual from the Executive Office of the White House
- ▶ Membership must comprise leaders from relevant federal agencies and critical infrastructure owners and operators, as well as other pertinent stakeholders, such as labor unions, youth leadership, and community organizations
- ▶ Stand up within 90 days
  - Issue first report within 6 months
  - Issue subsequent progress reports on a quarterly schedule

## RECOMMENDATION 4

### **Develop national standards for job quality and training.**

- ▶ To be led by the White House and coordinating council
- ▶ Develop national training and job quality standards
  - Engage key federal agencies, owners and operators, and leaders from key constituencies
  - Tap relevant advisory and oversight groups to provide a cross-sectoral look at proposed standards
- ▶ Improve consistency and portability of credentials
- ▶ Improve worker mobility and readiness

## RECOMMENDATION 5

**Launch a national public awareness and image campaign to highlight the importance and opportunity of critical infrastructure careers and jobs.**

- ▶ To be led by the White House and coordinating council
- ▶ Improve understanding of opportunities available in critical infrastructure segments and value of critical infrastructure work
- ▶ Enhance optics of critical infrastructure professions to attract new workers, such as diverse youth and skilled workers from declining industries
- ▶ Highlight public service benefits of critical infrastructure careers to appeal to veterans and other constituencies looking for good jobs doing good work



## RECOMMENDATION 6

**Provide increased funding and support to state and local governments to expand and improve opportunities and access to work-based learning programs.**

- ▶ To be led by U.S. Depts. of Education and Labor
- ▶ Create opportunities for hands-on, experiential learning during all phases of traditional education
- ▶ Make work-based learning programs accessible and affordable to lower barriers to entry
- ▶ Provide the wraparound services workers need to engage in the workforce and training

## RECOMMENDATION 7

**Reshape cultural perceptions of technical careers by reinforcing the importance and public service benefits of critical infrastructure jobs through sustained education and awareness efforts.**

- ▶ To be led by coordinating council
- ▶ Emphasize that critical infrastructure workers “make normal happen”
- ▶ Highlight benefits of critical infrastructure work
  - Well-paid
  - Meaningful
  - Cutting-edge
- ▶ Provide deliberate and sustained outreach to improve public perception of critical infrastructure

## RECOMMENDATION 8

**Develop a National Workforce Plan to unify and direct national policy and the necessary resources to support the training and skills needed in critical infrastructure sectors.**

- ▶ To be led by coordinating council
- ▶ Develop a shared national vision and direction
- ▶ Continually assess worker readiness and develop meaningful metrics
- ▶ Draw inspiration from military force readiness practices

## RECOMMENDATION 9

**Build a workforce development system that connects education to career development and provides lifelong learning opportunities to critical infrastructure workers.**

- ▶ To be led by coordinating council
- ▶ Shift focus from K-12 education system to “K to Gray” education/career-readiness continuum
- ▶ Prioritize workers of all backgrounds and on all pathways, including adult learners
- ▶ Emphasize lifelong learning needed for all workers in critical infrastructure

# “K to Gray” Education/Career-Readiness Continuum



THE EDUCATION/CAREER-READINESS CONTINUUM

# Unique Opportunity

- ▶ The pandemic has exacerbated the challenges facing the Nation's workforce, particularly in critical infrastructure.
- ▶ The drastic changes brought on by COVID-19 present an opportunity to rethink how we approach workforce development.
- ▶ Congress and the White House have already taken significant steps toward building up the Nation's workforce development system that align with the NIAC's recommendations and offer a framework on which to build further.
  - American Rescue Plan, signed into law in March 2021, expands Registered Apprenticeship Program and provides funding to rebuild Nation's infrastructure
  - American Jobs Plan, before Congress, requests funding for Dislocated Workers Program to provide training and support services for a "just transition"
  - American Families Plan, before Congress, asks for funding for wraparound services that benefit workers, including education grants, healthcare, and childcare
  - Executive Orders require strengthened efforts to improve diversity, equity, and inclusion in the federal workforce and expand Registered Apprenticeship Programs

# Call to Action

- ▶ Now is our chance to change the way people think and talk about critical infrastructure jobs.
- ▶ As the Nation works to “Build Back Better,” we have a once-in-a-lifetime opportunity to overhaul our education and workforce development systems.
- ▶ We must appeal to a more diverse pool of potential workers to ensure a nimble and ready workforce for generations to come.
- ▶ New infrastructure investments create the opportunity to provide good jobs and address persistent diversity and equity challenges.
- ▶ These investments will appeal to new workforce entrants as well as those leaving declining industries who deserve a “just transition.”

# Any Questions?





# Public Comment

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## Deliberation and Vote

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# Closing Remarks

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