Opening Remarks
Workforce and Talent Management Study
Study Results and Recommendations

NIAC
The President's National Infrastructure Advisory Council
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 Manager, 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

**Turahn 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, Avantus 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
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 1

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
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
Workforce and Talent Management Study
Deliberation and Vote

NIAC The President's National Infrastructure Advisory Council
Closing Remarks