



Quarterly Business Meeting

September 22, 2021

NIAC The President's National
Infrastructure Advisory Council



Opening Remarks

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Infrastructure Advisory Council



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

Turahh 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.

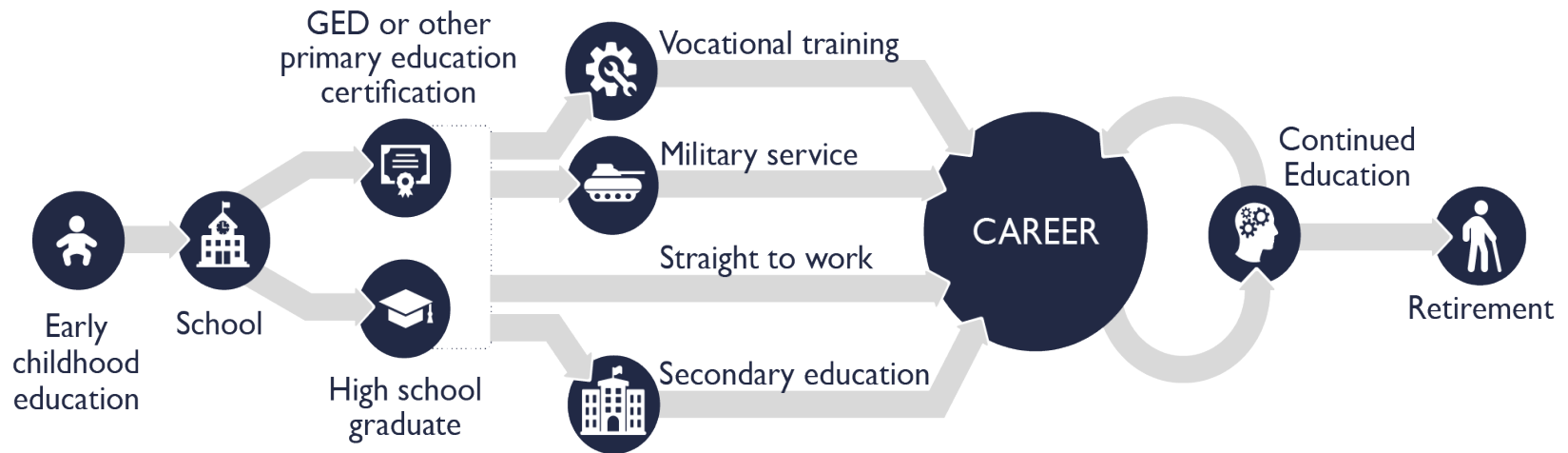
- ▶ To be led by coordinating council
- ▶ Develop a shared national vision and direction
- ▶ Continually assess worker readiness and develop meaningful metrics
- ▶ Draw inspiration from military force readiness practices

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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Workforce and Talent Management Study

Deliberation and Vote

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Closing Remarks

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