

Calendar No. 194

117TH CONGRESS }
2d Session }

SENATE

{ REPORT
117-75 }

TELECOMMUNICATIONS SKILLED
WORKFORCE ACT

R E P O R T

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND
TRANSPORTATION

ON

S. 163



FEBRUARY 15, 2022.—Ordered to be printed

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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED SEVENTEENTH CONGRESS

SECOND SESSION

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TELECOMMUNICATIONS SKILLED WORKFORCE ACT

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Ms. CANTWELL, from the Committee on Commerce, Science, and Transportation, submitted the following

R E P O R T

[To accompany S. 163]

[Including cost estimate of the Congressional Budget Office]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 163) to address the workforce needs of the telecommunications industry, having considered the same, reports favorably thereon with an amendment (in the nature of a substitute) and recommends that the bill (as amended) do pass.

PURPOSE OF THE BILL

S. 163, as reported, would direct the Federal Communications Commission (FCC) to establish an interagency working group to explore and make recommendations on various issues with respect to the workforce needs of the telecommunications industry. Additionally, the bill would direct the Department of Labor (DOL) to develop guidance to help States address telecommunications workforce issues, and it would commission a Government Accountability Office (GAO) study of the workforce needs of the telecommunications industry.

BACKGROUND AND NEEDS

In recent years, the Federal Government and the telecommunications industry have invested heavily in building out broadband infrastructure and deploying 5G networks.¹ But achieving the goals

¹Mike Saperstein, “Broadband Investment Remains High in 2019”, USTelecom, December 23, 2020 (<https://www.ustelecom.org/research/broadband-investment-remains-high-in-2019/>); “Build-

Continued

of closing the digital divide and reaping the benefits of 5G requires a workforce capable of building and maintaining this new infrastructure. One estimate suggests that the number of broadband-related technicians could increase “by 20,000 in the next ten years in order to accommodate the broadcast repack and produce the expansion of universal broadband, public safety, and 5G across North America.”²

However, despite the promise of more job openings, industry representatives say that the telecommunications sector is facing a shortage of skilled workers.³ Government, industry, and educational institutions have all taken action to develop a higher-skilled telecommunications workforce.⁴ Still, many industry stakeholders have called on the Federal Government to do more to address the shortage of skilled labor in the telecommunications industry. Several Government agencies have responded to those calls, including the FCC, which asked its Broadband Deployment Advisory Committee to examine the skilled workforce gap in the country.⁵

An important component of Federal workforce development policy includes apprenticeships and programs that train workers for a specific occupation using a structured combination of paid on-the-job training and related instruction. Indeed, witnesses at a January 2020 Senate Committee on Commerce, Science, and Transportation hearing on the telecommunications workforce highlighted the importance of these programs to filling these jobs. One such program is the Telecommunications Industry Registered Apprenticeship Program (TIRAP), a joint venture of the DOL, Government agencies, and the telecommunications industry, to develop registered apprenticeship programs for career development of the communications workforce.⁶

Although these discrete efforts have been undertaken to address telecommunications skilled workforce issues, some have noted that there seems to be no comprehensive Federal strategy to address these issues. S. 163, as reported, would establish for the first time a formal interagency working group to examine telecommunications skilled workforce issues. The bill would do three important things. First, it would direct GAO to study and estimate the skilled

ing the 5G Economy”, CTIA, January 25, 2021 (<https://www.ctia.org/news/report-building-the-5g-economy-wireless-industry-plan-to-invest-and-innovate-in-the-united-states>).

²Federal Communications Commission, Broadband Deployment Advisory Committee, *Broadband Infrastructure Deployment Job Skills and Training Opportunities Working Group Report*, October 29, 2020 (<https://www.fcc.gov/sites/default/files/bdac-job-skills-training-opportunities-approved-rec-10292020.pdf>).

³“Telecom Industry Unites Behind Call for Broadband Workforce Development to White House, Congress”, WIA, January 27, 2021 (<https://wia.org/telecom-industry-unites-behind-call-for-broadband-workforce-development-to-white-house-congress/>); letter from industry officials to President Biden, January 27, 2021 (<https://wia.org/wp-content/uploads/workforce-letter-jan-2021-biden-final.pdf>). This group of industry officials also sent letters to congressional leaders.

⁴For examples of telecommunications workforce development initiatives, see the FCC’s Broadband Deployment Advisory Committee’s *Broadband Infrastructure Deployment Job Skills and Training Opportunities Working Group Report*, October 29, 2020 (<https://www.fcc.gov/sites/default/files/bdac-job-skills-training-opportunities-approved-rec-10292020.pdf>).

⁵Justin Faulb, et al., *Broadband Deployment Advisory Committee Overview* at 15–16, June 13, 2019, Federal Communications Commission (<https://www.fcc.gov/sites/default/files/bdac-overview-06132019.pdf>).

⁶An apprenticeship that is registered is one that is certified by DOL (or by a DOL-recognized State agency) as being in compliance with applicable standards for such programs, and consists of a documented plan designed to move an apprentice from a low or no skill entry-level position to full occupational proficiency (<https://www.tirap.org/tirap-press-release-telecommunications-consortium-teaming-dol-fcc-public-private-workforce-training-initiative/>); see also (<https://www.tirap.org/>) and *Fact Sheet: Telecommunications Industry Registered Apprenticeship Program (TIRAP)*, Department of Labor (<https://www.doleta.gov/oa/pdf/TIRAP.pdf>).

workforce needs of the telecommunications industry. Second, it would direct the FCC to establish a formal working group made up of members named by various Federal agencies to make recommendations on how to meet the workforce and safety needs of the telecommunications industry. Finally, it would direct DOL to issue guidance to States on how they can help address telecommunications skilled workforce and safety needs in their State.

LEGISLATIVE HISTORY

S. 163 was introduced on February 2, 2021, by Senator Thune (for himself and Senators Tester, Peters, Wicker, and Moran), and was referred to the Committee on Commerce, Science, and Transportation of the Senate. On April 28, 2021, the Committee met in open Executive Session and, by voice vote, ordered S. 163 reported favorably with an amendment (in the nature of a substitute). Senator Warnock became an additional cosponsor on July 20, 2021.

S. 163 is substantially similar to H.R. 1032, which was introduced in the House of Representatives on February 11, 2021, by Representative Tim Walberg (for himself and Representatives Yvette Clark and Greg Pence). H.R. 1032 was referred to the Committee on Energy and Commerce of the House of Representatives.

S. 163 also is substantially similar to S. 3355 from the 116th Congress. S. 3355 was introduced on February 27, 2020, by Senator Thune (for himself and Senators Tester, Moran, Peters, and Wicker) and was referred to the Committee on Health, Education, Labor, and Pensions of the Senate. Unlike S. 163, S. 3355 directed the Secretary of Labor to create the working group on the workforce needs of the telecommunications industry required by the legislation.

Hearing

On January 22, 2020, the Committee on Commerce, Science, and Transportation held a hearing on telecommunications workforce issues, among other obstacles to broadband deployment.

ESTIMATED COSTS

In accordance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, May 20, 2021.

Hon. MARIA CANTWELL,
Chairwoman, Committee on Commerce, Science, and Transportation, U.S. Senate, Washington, DC.

DEAR MADAM CHAIRWOMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 163, the Telecommunications Skilled Workforce Act.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is David Hughes.

Sincerely,

PHILLIP L. SWAGEL,
Director.

Enclosure.

S. 163, Telecommunications Skilled Workforce Act			
As ordered reported by the Senate Committee on Commerce, Science, and Transportation on April 28, 2021			
By Fiscal Year, Millions of Dollars	2021	2021-2026	2021-2031
Direct Spending (Outlays)	0	0	0
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	0	0	0
Spending Subject to Appropriation (Outlays)	*	*	not estimated
Statutory pay-as-you-go procedures apply?	No	Mandate Effects	
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2032?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	Yes, Under Threshold
* = between zero and \$500,000.			

S. 163 would require the Federal Communications Commission (FCC) to establish an interagency working group to develop recommendations that address the workforce needs of the telecommunications industry and report its findings to the Congress. The bill also would direct the Department of Labor (DOL) to issue guidance on how state workforce development boards can support the telecommunications industry. Finally, the Government Accountability Office (GAO) would be required to report to the Congress on the number of telecommunications workers needed to build and maintain broadband infrastructure in rural areas.

In total, CBO estimates that implementing S. 163 would cost less than \$500,000 over the 2021–2026 period; any spending would be subject to the availability of appropriated funds.

Using information from the FCC, CBO expects that one employee would be needed for one year, at a cost of about \$200,000, to support the working group. However, because the FCC is authorized to collect fees each year sufficient to offset the costs of its regulatory activities, CBO estimates that the net cost to the FCC would be negligible, assuming appropriation actions consistent with that authority.

Based on information provided by the agencies for similar proposals, CBO estimates the costs for DOL to issue the required guidance and for GAO to complete the required report would be insignificant.

If the FCC increases annual fee collections to offset the costs of implementing provisions in the bill, S. 163 would increase the cost of an existing private-sector mandate on entities required to pay those fees. CBO estimates that the incremental cost of the mandate would be small and would fall well below the annual threshold es-

established in the Unfunded Mandates Reform Act for private-sector mandates (\$170 million in 2021, adjusted annually for inflation).

The bill contains no intergovernmental mandates.

The CBO staff contacts for this estimate are David Hughes (for the FCC), Meredith Decker (for DOL), and Rachel Austin (for mandates). The estimate was reviewed by H. Samuel Papenfuss, Deputy Director of Budget Analysis.

REGULATORY IMPACT STATEMENT

Because S. 163 does not create any new programs, the legislation will have no additional regulatory impact, and will result in no additional reporting requirements. The legislation will have no further effect on the number or types of individuals and businesses regulated, the economic impact of such regulation, the personal privacy of affected individuals, or the paperwork required from such individuals and businesses.

S. 163 would create a new working group to consider skilled workforce issues in the telecommunications industry, and impose on that working group certain reporting requirements. It also directs GAO to prepare a report on the workforce needs of the telecommunications industry.

CONGRESSIONALLY DIRECTED SPENDING

In compliance with paragraph 4(b) of rule XLIV of the Standing Rules of the Senate, the Committee provides that no provisions contained in the bill, as reported, meet the definition of congressionally directed spending items under the rule.

SECTION-BY-SECTION ANALYSIS

Section 1. Short title.

This section would provide that the Act may be cited as the “Telecommunications Skilled Workforce Act”.

Section 2. Telecommunications interagency working group.

Subsection (a) of section 2 would add a new section 344 to the Communications Act of 1934⁷ establishing an interagency working group to develop recommendations on telecommunications skilled workforce issues, including worker safety.

Subsection (a) of the new section 344 would define the term “telecommunications interagency working group” for purposes of the section as the working group established under subsection (b) of section 344.

Subsection (b) of the new section 344 would direct the FCC, in consultation with DOL, to establish the interagency working group within 60 days of enactment. The subsection further provides that the working group shall be considered established on the date on which a majority of its members have been appointed consistent with section 344.

Subsection (c) of the new section 344 would set forth the duties of the telecommunications interagency working group. Specifically, in developing recommendations related to telecommunications skilled workforce issues, the working group must do the following:

⁷ 47 U.S.C. 151 et seq.

- Determine whether, and how, Federal laws, regulations, guidance, policies, practices or budgetary constraints inhibit institutions of higher education or for-profit businesses from establishing, adopting, or expanding programs to address telecommunications industry workforce needs, including those related to 5G infrastructure;
- Identify potential policies and programs to encourage and improve Federal agency, Federal/State, and inter-State coordination on telecommunications industry workforce needs;
- Examine how Federal programs, including those related to employment of veterans and transitioning military personnel, could be used to address telecommunications industry workforce needs;
- Identify ways to encourage individuals and businesses to participate in qualified industry-led workforce development programs;
- Identify ways to improve recruitment in qualified industry-led workforce development programs;
- Identify Federal incentives that could be provided to institutions of higher education, for-profit businesses, State workforce development boards, or other stakeholders to establish new, or adopt existing, programs to address telecommunications industry workforce needs, including such needs in rural areas; and
- Identify ways to improve the safety of telecommunications workers, including tower climbers.

Subsection (d) of new section 344 sets forth in detail the members of the telecommunications interagency working group, including identifying what Federal official will be responsible for naming each member. Members of the working group would include representatives from the Department of Education, the National Telecommunications and Information Administration, the FCC, a telecommunications industry association, an Indian Tribe or Tribal organization, a rural telecommunications carrier, a telecommunications contractor firm, a minority institution, a public interest advocate for tower climber safety, the Directorate of Construction of the Occupational Safety and Health Administration, and a labor organization representing the telecommunications industry.

Subsection (e) of new section 344 provides that the members of the telecommunications interagency working group shall serve without compensation.

Subsection (f) of new section 344 addresses several other issues related to the operation of the telecommunications interagency working group. First, it provides that the working group shall name a chair and vice chair, who will be responsible for organizing the business of the working group. Second, it provides that the chair and vice chair, in consultation with the other members of the working group, may establish subgroups to help conduct the work of the working group. Finally, it states that the FCC and DOL may detail employees of those agencies to assist and support the work of the working group.

Subsection (g) of new section 344 directs the telecommunications interagency working group to submit a report to Congress containing its recommendations within 1 year of its establishment. The subsection includes a list of the congressional committees that should receive a copy of the working group's report, along with the

FCC and DOL. Subsection (g) further states that the report should be posted on the websites of both the FCC and DOL. Additionally, the subsection provides that the report required by the subsection may not be submitted unless it has the support of the majority of the members of the working group, and the report should include any concurring or dissenting views offered by a member of the working group, which must include identification of the member who submitted such views. The subsection would also require the FCC and DOL to make a copy of the report publicly available on their websites.

Subsection (h) of new section 344 provides that the telecommunications interagency working group shall not be subject to the Federal Advisory Committee Act.⁸

Subsection (b) of section 2 would provide that new section 344 of the Communications Act of 1934,⁹ as added by subsection (a) of section 2, shall be repealed on the day after the date on which the telecommunications interagency working group submits its report consistent with subsection (g) of such new section 344.

Section 3. Telecommunications workforce guidance.

This section would direct the Secretary of Labor, in consultation with the chairperson of the FCC, to develop guidance for States on how they can address the workforce and safety needs of the telecommunications industry. The guidance would include information on how a State workforce development board established under section 101 of the Workforce Innovation and Opportunity Act¹⁰ can (1) utilize Federal resources to meet telecommunications workforce needs; (2) promote and improve recruitment in qualified industry-led workforce development programs; and (3) ensure the safety of telecommunications workers.

Section 4. GAO assessment of workforce needs of the telecommunications industry.

This section would direct GAO to prepare a report estimating the number of skilled telecommunications workers needed to build and maintain (1) broadband infrastructure in rural areas based on both current need and if Congress passes legislation that accelerates broadband infrastructure construction in the Nation; and (2) the wireless infrastructure needed to support 5G wireless technology. The report must be submitted to the appropriate congressional committees (as that term is defined in the section) within 180 days of enactment. The Committee encourages GAO to seek input from a wide variety of stakeholders regarding the report required by this section.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new material is printed in italic, existing law in which no change is proposed is shown in roman):

⁸ 5 U.S.C. App.

⁹ 47 U.S.C. 151 et seq.

¹⁰ 29 U.S.C. 3111.

COMMUNICATIONS ACT OF 1934

* * * * *

TITLE III—SPECIAL PROVISIONS RELATING TO RADIO

PART I—GENERAL PROVISIONS

* * * * *

[47 U.S.C. 301 et seq.]

SEC. 344. TELECOMMUNICATIONS INTERAGENCY WORKING GROUP.

(a) *DEFINITION.*—In this section, the term “telecommunications interagency working group” means the interagency working group established under subsection (b)(1).

(b) *ESTABLISHMENT.*—

(1) *IN GENERAL.*—Not later than 60 days after the date of enactment of this section, the Chairman of the Commission, in consultation with the Secretary of Labor, shall establish within the Commission an interagency working group to develop recommendations to address the workforce needs of the telecommunications industry, including the safety of that workforce.

(2) *DATE OF ESTABLISHMENT.*—The telecommunications interagency working group shall be considered established on the date on which a majority of the members of the telecommunications interagency working group have been appointed, consistent with subsection (d).

(c) *DUTIES.*—In developing recommendations under subsection (b), the telecommunications interagency working group shall—

(1) determine whether, and if so how, any Federal laws, regulations, guidance, policies, or practices, or any budgetary constraints, inhibit institutions of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)) or for-profit businesses from establishing, adopting, or expanding programs intended to address the workforce needs of the telecommunications industry, including the workforce needed to build and maintain the 5G wireless infrastructure necessary to support 5G wireless technology;

(2) identify potential policies and programs that could encourage and improve coordination among Federal agencies, between Federal agencies and States, and among States, on telecommunications workforce needs;

(3) identify ways in which existing Federal programs, including programs that help facilitate the employment of veterans and military personnel transitioning into civilian life, could be leveraged to help address the workforce needs of the telecommunications industry;

(4) identify ways to encourage individuals and for-profit businesses to participate in qualified industry-led workforce development programs, including the Telecommunications Industry Registered Apprenticeship Program;

(5) identify ways to improve recruitment in qualified industry-led workforce development programs, including the Telecommunications Industry Registered Apprenticeship Program and other industry-recognized apprenticeship programs;

(6) identify Federal incentives that could be provided to institutions of higher education, for-profit businesses, State workforce development boards established under section 101 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3111), or other relevant stakeholders to establish or adopt new programs, or expand current programs, to address the workforce needs of the telecommunications industry, including such needs in rural areas; and

(7) identify ways to improve the safety of telecommunications workers, including tower climbers.

(d) MEMBERS.—The telecommunications interagency working group shall be composed of the following representatives of Federal agencies and relevant non-Federal industry stakeholder organizations:

(1) A representative of the Department of Education, appointed by the Secretary of Education.

(2) A representative of the National Telecommunications and Information Administration, appointed by the Assistant Secretary of Commerce for Communications and Information.

(3) A representative of the Commission, appointed by the Chairman of the Commission.

(4) A representative of the Telecommunications Industry Registered Apprenticeship Program, appointed by the Secretary of Labor.

(5) A representative of a telecommunications industry association, appointed by the Chairman of the Commission.

(6) A representative of an Indian Tribe or Tribal organization, appointed by the Chairman of the Commission.

(7) A representative of a rural telecommunications carrier, appointed by the Chairman of the Commission.

(8) A representative of a telecommunications contractor firm, appointed by the Chairman of the Commission.

(9) A representative of a minority institution (as defined in section 365 of the Higher Education Act of 1965 (20 U.S.C. 1067k)), appointed by the Secretary of Education.

(10) A public interest advocate for tower climber safety, appointed by the Chairman of the Commission.

(11) A representative of the Directorate of Construction of the Occupational Safety and Health Administration, appointed by the Secretary of Labor.

(12) A representative of a labor organization representing the telecommunications workforce, appointed by the Chairman of the Commission.

(e) NO COMPENSATION.—A member of the telecommunications interagency working group shall serve without compensation.

(f) OTHER MATTERS.—

(1) CHAIR AND VICE CHAIR.—The telecommunications interagency working group shall name a chair and a vice chair, who shall be responsible for organizing the business of the telecommunications interagency working group.

(2) *SUBGROUPS.*—*The chair and vice chair of the telecommunications interagency working group, in consultation with the other members of the telecommunications interagency working group, may establish such subgroups as necessary to help conduct the work of the telecommunications interagency working group.*

(3) *SUPPORT.*—*The Commission or the Secretary of Labor may detail an employee of the Commission or the Department of Labor, respectively, to assist and support the work of the telecommunications interagency working group, though such a detailee shall not be considered to be a member of the telecommunications interagency working group.*

(g) *REPORT.*—

(1) *IN GENERAL.*—*Not later than 1 year after the date on which the telecommunications interagency working group is established, the telecommunications interagency working group shall submit a report containing its recommendations to address the workforce needs of the telecommunications industry to—*

(A) *the Committee on Commerce, Science, and Transportation of the Senate;*

(B) *the Committee on Health, Education, Labor, and Pensions of the Senate;*

(C) *the Committee on Energy and Commerce of the House of Representatives;*

(D) *the Committee on Education and Labor of the House of Representatives;*

(E) *the Secretary of Labor; and*

(F) *the Commission.*

(2) *MAJORITY SUPPORT.*—*The telecommunications interagency working group may not submit the report under paragraph (1) unless the report has the support of not less than the majority of the members of the telecommunications interagency working group.*

(3) *VIEWS.*—*The telecommunications interagency working group shall—*

(A) *include with the report submitted under paragraph (1) any concurring or dissenting view offered by a member of the telecommunications interagency working group; and*

(B) *identify each member to whom each concurring or dissenting view described in subparagraph (A) should be attributed.*

(4) *PUBLIC POSTING.*—*The Commission and the Secretary of Labor shall make a copy of the report submitted under paragraph (1) available to the public on the websites of the Commission and the Department of Labor, respectively.*

(h) *NONAPPLICABILITY OF FACa.*—*The Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the telecommunications interagency working group.*

* * * * *