



Innovation in Apprenticeships: More of the Same

By Mason M. Bishop

April 2022

Key Points

- Registered Apprenticeship Programs (RAPs) have existed in federal law since the 1930s and have been primarily used by the construction industry.
- Despite their long-term existence and recent infusion of millions of dollars in federal resources, RAPs will continually realize limited success due to the outdated program model.
- The Trump administration introduced the Industry-Recognized Apprenticeship Program (IRAP) model, which was designed to be a more flexible alternative to RAPs.
- IRAPs, or a similar model of industry-driven “work and learn,” should be given a chance to grow and mature as a legitimate upskilling option for industries such as health care, advanced manufacturing, and information technology.

When the Trump administration announced the Industry-Recognized Apprenticeship Program (IRAP) model in June 2017, it was a promising development seeking to provide a flexible alternative to the long-standing Registered Apprenticeship Program (RAP). The RAP model has remained largely unchanged since its inception in the National Apprenticeship Act of 1937, which authorizes the secretary of labor to issue regulations “necessary to safeguard the welfare of apprentices” and is primarily focused on the skilled trades with strong union support.¹ IRAP represented an attempt to reform an antiquated, little-used federal workforce development program by creating a more modern and complementary option for employers and industry partners to partner with established training providers for upskilling and supporting the upward mobility of workers.

Less than a month after Joe Biden took office, his administration announced the end of IRAP in favor of the 80-year-old RAP system. Additionally, Congress is in the process of “reforming” RAPs through the aptly named National Apprenticeship Act of 2021. Unfortunately, like other workforce development programs, these proposed revisions do not fundamentally alter the inflexible, outdated, and federalized approach to apprenticeship.

The Problem at Hand

The onslaught of technology and automation has transformed the workplace and the skills workers need. Individuals and employers alike increasingly need education and training that is more affordable, more flexible in delivery, and more relevant to the job market.

Employers of all sizes and a multitude of sectors have increasingly voiced concerns about a growing skills gap and the inability to find qualified talent.² In 2019, before the COVID-19 pandemic, the United States had record unemployment rates for nearly all demographics and record job vacancy rates in growing and in-demand fields.³ In 2021, as the United States began to emerge from the pandemic, unemployment began decreasing, and record job openings once again returned, with nearly 11 million job vacancies in July 2021,⁴ outpacing the more than eight million Americans looking for work.⁵ Clearly, the gap between vacancies and those looking for jobs speaks to the need to create a better workforce system in which individuals' interests and skills are better aligned to available jobs.

A contributing factor to the demand-supply labor misalignment is the historical policy pursuit of a four-year baccalaureate degree for all as the preferred option for career attainment. While plenty of evidence shows that a bachelor's degree, over time, provides an individual with more lifetime earnings,⁶ growing evidence indicates that the singular focus on this path is causing suboptimal career outcomes for millions of people.

Consider these facts:

- More than \$500 billion is spent on higher education funding at the federal level, compared to \$8 billion on job training,⁷ despite only 35 percent of jobs requiring a bachelor's degree.⁸
- Forty percent of students pursuing these degrees fail to graduate in six years.⁹
- Students are leaving their higher education experience with a staggering amount of student debt, with nearly 45 million Americans owing close to \$1.7 trillion.¹⁰
- The growing trend of employers relying on four-year degrees for jobs that previously did not require them is disproportionately affecting minority recruitment and hiring across the board.¹¹

The Registered Apprenticeship Program (RAP)

Given the increasing calls for alternative educational options for students and workers to gain

skills aligned to occupational demand, policymakers and others are seeking strategies that hold promise in addressing these modern workforce challenges. In recent years, "apprenticeship" has gained a larger focus and voice in public policy and workforce development circles as a solution to bridging the skills gap and growing a more diverse and inclusive workforce. This makes sense as apprenticeship is, basically, a training method that combines on-the-job experience with complementary technical training to upskill a worker for middle- and high-skill occupations. However, like many government efforts, what is a fairly straightforward concept—"work and learn"—has turned into a bureaucratic morass that keeps employers, educators, and workers from participating in apprenticeship, at least what is recognized as apprenticeship by the federal government.

Sponsors, often employers and labor unions, of RAPs must "register" with the US Department of Labor's (DOL) Office of Apprenticeship or a DOL- and state-approved agency of apprenticeship programs. To register, sponsors must submit written descriptions to the registering agency that outline how the program will adhere to a set of federal or state standards established in federal regulations, including specifying the following:

- A minimum of 2,000 hours of supervised on-the-job training in accordance with industry standards;
- At least 144 hours annually of Related Training Instruction providing classroom and academic instruction in technical subjects related to the occupation;
- A schedule of progressively increasing wages starting with the minimum wage for entry-level apprentices;
- An outline of the time spent and the process for ensuring a supervised work experience;
- Periodic reviews of apprentices' performance on the job and in academic instruction;
- Probationary periods for apprentices, not to exceed certain time limits;
- Safety training and assurances of safe equipment and facilities; and

- Issuance of industry-recognized certificates by the registration agency.¹²

DOL also limits the types of occupations that can be taught through an apprenticeship and maintains a list of a mere 1,000 occupations that meet such stringent requirements, most in the skilled trades and construction industry.¹³ Once a program meets these sets of standards, it is granted provisional approval for one year before being granted more-permanent registration. Many of these standards have been around for decades despite the changing nature of work. And worse, many state agencies add additional rules to the federal requirements, making the process ever more cumbersome, bureaucratic, and slow to adapt.

Federal regulations also require adherence to additional employment rules including conducting workplace demographic analyses, setting utilization goals, and maintaining certain records to build diversity and inclusion in the programs. This set of standards and requirements increases paperwork and staff time for program sponsors, not to mention the redundancy of complementary federal and state employment laws that employers must adhere to, such as well-established antidiscrimination laws enforced by the Equal Employment Opportunity Commission. Yet, these additional layers of bureaucracy aligned to compliance with the RAP model have not yielded significant improvements in RAP enrollment for women and minority participants. In the federal fiscal year 2020, women made up a mere 9 percent, and African Americans were just shy of 10 percent of all active apprentices¹⁴ despite both demographic groups realizing growing participation in the overall labor force.

In addition to being overly bureaucratic and failing to recruit a more diverse workforce, the RAP system is incredibly expensive for employers to participate. According to the Center on Education and the Workforce at Georgetown University, the cost of operating a RAP can fall anywhere between \$60,000 and \$260,000 per apprentice.¹⁵ Even further, it is expensive for the taxpayer especially in light of RAP's inability to significantly address the skills gap problem.

To double and diversify the number of registered apprentices across the country, Congress and presidential administrations have increased

spending significantly on RAPs through the American Apprenticeship Initiative. However, data show that these funding increases have realized little impact on expansion of RAPs. (See Table 1.)

The Industry-Recognized Apprenticeship Program (IRAP)

Despite the unprecedented federal funding appropriated for RAP expansion and uptake in more industries, employers struggle with meaningful engagement and use of RAPs to address employee performance improvements. In fact, employers cite concerns about the “cumbersome regulatory process and the relatively low return on investment.”¹⁶

The Trump administration recognized that work-and-learn training models provide a much larger avenue for addressing skills shortages beyond just RAPs,¹⁷ and the model of government “approving” the standards for a “quality” apprenticeship actually limits the use of apprenticeship as a training modality. Thus, it sought to identify additional apprenticeship models to dramatically expand the number of apprentices in the United States. In June 2017, President Donald Trump issued an executive order titled “Expanding Apprenticeships in America.”¹⁸ He proposed creating a complement to the RAP system that would focus on expanding into new and emerging fields by putting the private sector at the helm, not DOL or state apprenticeship agencies.

The IRAP approach was modeled after higher education regional accreditation, in which institutions’ standards are recognized and valued through a system of self-assessment, peer review, strategic planning, and continuous improvement.¹⁹ While higher education accreditation has its own challenges, this system uses stakeholders and those in the profession and field to evaluate quality, rather than a federal or state bureaucratic stamp of approval with no connection to quality or outcomes.

The creation of the IRAP model did not threaten or discourage the use of RAPs if RAPs meet employer and worker training needs. However, in the spirit of innovation and modernization, IRAPs represented a new work-and-learn approach focused on validating the skills needed in occupations, addressing how workers gain those skills through competency-based training (unlike most time-based RAPs),

Table 1. Federal Spending on Apprenticeship per Apprentice, Fiscal Years 2010–20

Fiscal Year	Apprenticeship Funding	New Registered Apprentices	RAP Completions per Fiscal Year	Spending per New Apprentice
2010	\$27,784,000	109,989	51,212	\$252.61
2011	\$27,728,000	130,391	55,178	\$212.65
2012	\$27,676,000	147,487	59,783	\$187.65
2013	\$26,228,000	164,746	52,542	\$159.20
2014	\$30,000,000	170,544	44,417	\$175.91
2015	\$31,117,000	197,535	52,717	\$157.53
2016	\$90,000,000	206,020	49,354	\$436.85
2017	\$95,000,000	191,563	64,021	\$495.92
2018	\$145,000,000	238,549	71,789	\$607.84
2019	\$160,000,000	252,271	81,552	\$634.24
2020	\$175,000,000	222,243	82,379	\$787.43

Source: US Department of Labor, Employment and Training Administration, "Data and Statistics," <https://www.dol.gov/agencies/eta/apprenticeship/about/statistics/2020>; and Benjamin Collins, *Registered Apprenticeship: Federal Role and Recent Federal Efforts*, Congressional Research Service, <https://crsreports.congress.gov/product/pdf/R/R45171>.

reducing bureaucracy and unnecessary government oversight, and lowering the costs to help grow apprenticeships in industries that had little to no experience in establishing apprenticeship programs. (See Figure 1.)

Upon issuance of the executive order, the secretary of labor convened a task force focused on apprenticeship expansion that laid out a series of strategies to promote apprenticeships across a wide array of occupations. The task force delivered a set of recommendations around increasing education and credentialing; attracting business to apprenticeship; expanding access, equity, and career awareness; and using administrative and regulatory strategies to expand apprenticeship programs.

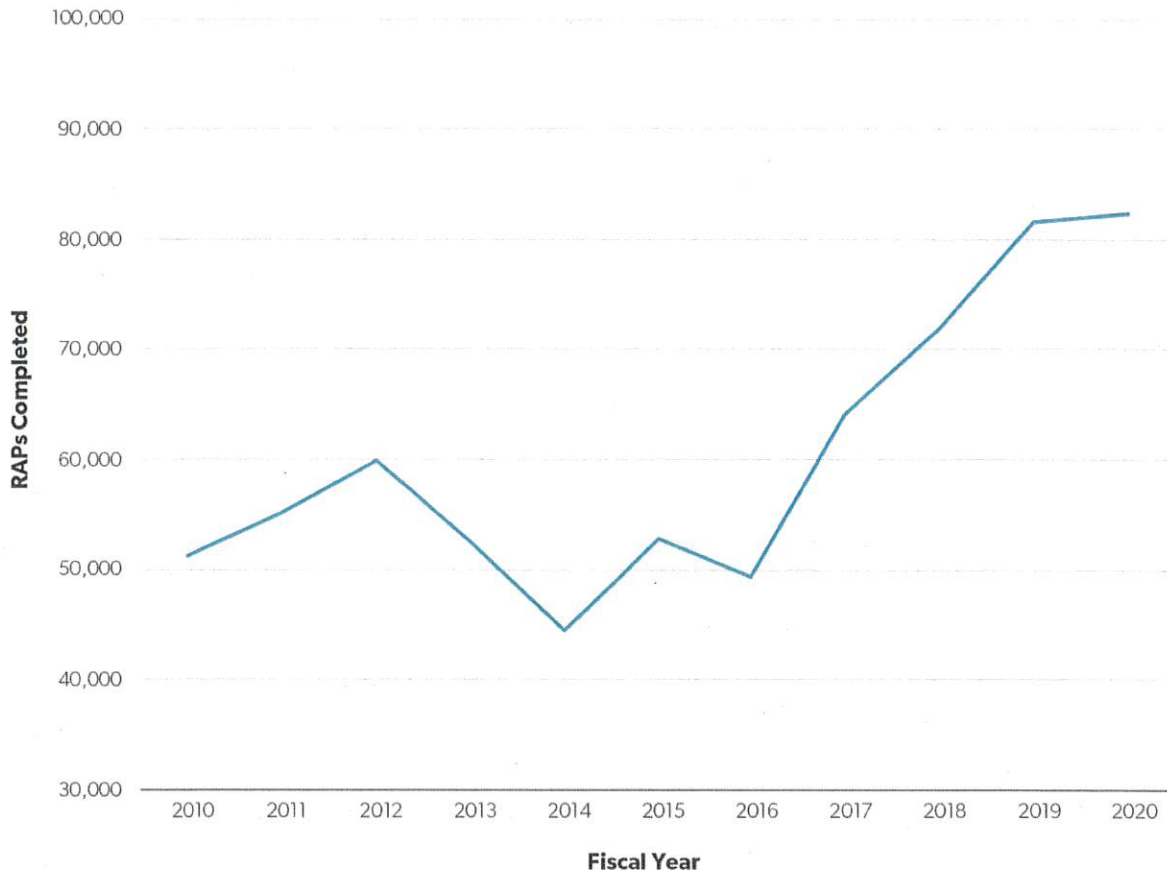
Upon completion of the task force's work, DOL began a rulemaking process to outline and codify IRAPs, with the final rule issued in 2020.²⁰

Similar to a higher education regional accreditation process, the rule outlined how DOL would approve third-party providers to serve as

the accreditors for apprenticeship programs. Known as Standards Recognition Entities (SREs), these organizations were then responsible for recognizing and overseeing IRAPs, allowing SREs to set the standards for a quality apprenticeship experience based on industry standards, work experiences, competency requirements for workers, and career pathways. IRAPs, like RAPs, still required evidence-based training methods, including paid on-the-job training, progression of knowledge and skills attainment, and industry-recognized credentials issuance. But unlike RAPs, IRAPs allowed far more flexibility from the mandated RAP time requirements for classroom instruction and training and more flexibility in the ratio of journeymen to apprentices, allowing more people to enroll. They also sped up the approval process overall for recognition.

During the development of the new IRAP initiative, criticisms tended to fall along political lines.²¹ While most critics dwelled on concerns about "quality," they primarily focused on the federal role

Figure 1. RAP Completions per Fiscal Year, 2010–20



Source: US Department of Labor, Employment and Training Administration, "Data and Statistics," <https://www.dol.gov/agencies/eta/apprenticeship/about/statistics/2020>; and Benjamin Collins, *Registered Apprenticeship: Federal Role and Recent Federal Efforts*, Congressional Research Service, <https://crsreports.congress.gov/product/pdf/R/R45171>.

overall. Senate Democrats slammed the administration for

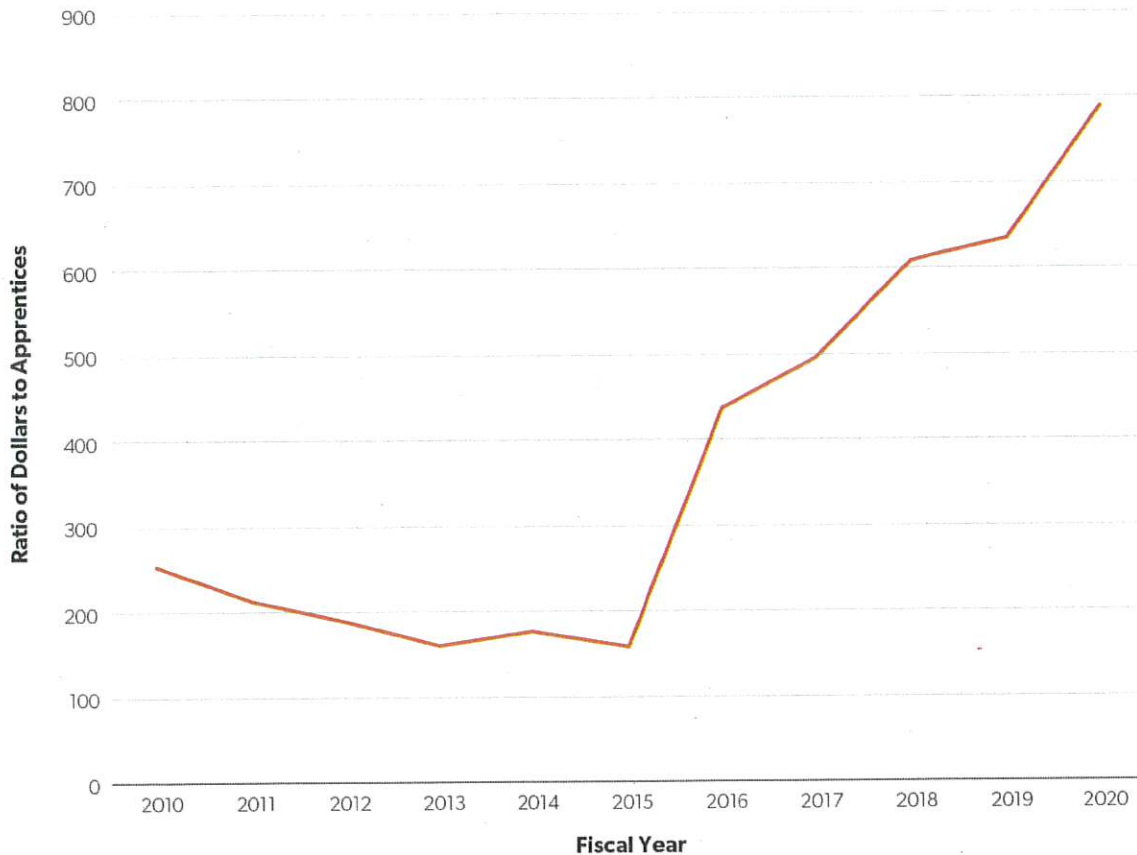
attempt[ing] to undermine the Nation's registered apprenticeship system . . . by allowing IRAPs to bypass the Department's longstanding approval and quality assurance process, removing the crucial role of state governments in maintaining the integrity of programs operating within their states, substantially weakening protections and guarantees for workers, and causing confusion for businesses and industries.²²

Yet, the RAP system, in the 80 years it has existed and the more than half-billion dollars in recent appropriations, had yet to take DOL-approved apprenticeships to scale. Further, the definition of quality

in RAP programs is ambiguous, and little evidence exists as to the quality of RAPs, especially in light of the costs per number of apprentices completing such programs. (See Figure 2.)

Despite political opposition and little to no federal funding, organizations still applied to be SREs, demonstrating an appetite to try something new. By the end of 2020, a little more than six months into the program, DOL had approved 27 organizations to operate as SREs in 20 separate industries, creating more than 130 IRAPs.²³ SREs included state apprenticeship offices, the National Urban League, the Colorado Community College System, and the National Institute for Metalworking Skills, a well-established and longtime leader in certifying skills training in manufacturing.²⁴ The diversity in the types of organizations designated as SREs held

Figure 2. Spending per New Apprentice, Fiscal Years 2010–20



Source: US Department of Labor, Employment and Training Administration, “Data and Statistics,” <https://www.dol.gov/agencies/eta/apprenticeship/about/statistics/2020>; and Benjamin Collins, *Registered Apprenticeship: Federal Role and Recent Federal Efforts*, Congressional Research Service, <https://crsreports.congress.gov/product/pdf/R/R45171>.

promise for rapid scaling and new approaches to apprenticeship and work-based learning.

Yet, there was, and remains, a pervasive theory among IRAP opponents that the government provides more accountability and quality assurance than does any other entity, despite a history of lackluster performance. Thus, IRAPs succumbed to an abrupt ending once President Biden took office, instructing the DOL to “reverse these programs and to immediately slow support for industry recognized apprenticeship programs by pausing approval of new Standards Recognition Entities.”²⁵

Congressional Action on Apprenticeships

While Congress has held ongoing bipartisan discussions in recent years to expand traditional RAPs and provide funding for new and emerging work-

based learning models, the only real legislation that has moved in recent years has been to abbreviate the approval process for RAPs using GI Bill and Workforce Innovation and Opportunity Act funds.²⁶ And worse, Congress has recently prohibited funding for any type of apprenticeships other than RAPs in its recent annual appropriations bills, ensuring that any apprenticeship expansion is relegated mainly to the building and trades unions.

The House Education and Labor Committee, chaired by Rep. Bobby Scott (D-VA), introduced a reauthorization of the National Apprenticeship Act of 2021²⁷ that simply codifies many of the RAP regulations, authorizes grant programs made to RAPs under prior presidential administrations, and ensures IRAPs, or any alternative apprenticeship program, would be prohibited. Recent congressional attempts to “reform” apprenticeships are nothing more than a doubling down on a system that

Table 2. Comparison of RAPs and IRAPs

Program Component	RAPs	IRAPs
Paid Work	<ul style="list-style-type: none"> • Paid wages consistent with displayed and acquired skills • Progressive wage increases • Determined by program sponsor 	<ul style="list-style-type: none"> • Paid apprentices • Upfront decision on wages and circumstances under which they increase • Not available in the construction sector
Hands-On Learning	<ul style="list-style-type: none"> • Approximately 2,000 hours (one year) of on-the-job learning 	<ul style="list-style-type: none"> • No time requirement • Competency-based work experience
Classroom Education	<ul style="list-style-type: none"> • At least 144 hours of related training instruction 	<ul style="list-style-type: none"> • Related instruction set by the industry
Mentorship	<ul style="list-style-type: none"> • Typically, an equal number of professionals to apprentices • Ratio varies slightly by occupational needs 	<ul style="list-style-type: none"> • No set mentor ratio • Structured mentorship and supervision throughout the program's duration • required for apprentices
Oversight	<ul style="list-style-type: none"> • Supervised by DOL apprenticeship office • Strict standards 	<ul style="list-style-type: none"> • Supervised by SREs
Credentials	<ul style="list-style-type: none"> • Paid wages consistent with displayed and acquired skills • Progressive wage increases • Determined by program sponsor 	<ul style="list-style-type: none"> • At least one industry-recognized credential • Counts toward the Workforce Innovation and Opportunity Act credential attainment rate
Benefits	<ul style="list-style-type: none"> • Approximately 2,000 hours (one year) of on-the-job learning 	<ul style="list-style-type: none"> • More flexible program • Accessible by more of the workforce • Tailors to industry needs
Concerns	<ul style="list-style-type: none"> • At least 144 hours of related training instruction 	<ul style="list-style-type: none"> • Untested model • Potential for relaxed standards • Uncertain funding

Source: Isabel Soto and Isabella Hindley, "Industry-Recognized Apprenticeship Programs vs Registered Apprenticeship Programs," American Action Forum, November 10, 2020, <https://www.americanactionforum.org/insight/industry-recognized-apprenticeship-programs-vs-registered-apprenticeship-programs/>.

has failed to make substantial inroads into enhancing worker skills in the 21st-century economy.

Policy Implications

RAP proponents tout the "quality" of the programs, thus assuming the need for a federal oversight role in ensuring apprenticeship design and implementation. Yet, what is truly the policy justification for needing government approval to "recognize" an apprenticeship? Does RAP recognition actually ensure quality?

In today's economy, it is difficult to justify a government "stamp of approval" on a RAP. One such justification may include the use of federal funds to subsidize an apprentice's training costs, in which case the government arguably has an oversight role. However, other federal education and training funds for students, such as Pell Grants, are

premised on allowing subsidies for universities and colleges that are regionally accredited—the same premise on which IRAPs were built.²⁸

One of the largest criticisms of unregistered programs is that they are a "wild west of programs of highly variable quality,"²⁹ but half of all apprenticeships in the United States are unregistered.³⁰ IRAPs provided significantly more oversight to this cadre of employer-led work-based learning programs, creating a set of standards and a pathway to recognition—including a pathway to the traditional registered apprenticeship system—that had never existed. (See Table 2.)

While the Biden administration's abrupt end to IRAPs did stall the ability of third-party providers to approve new and emerging apprenticeship programs, it did not quell the desire for an alternative to the RAP system. Work-and-learn programs are

expanding across the country, and as college enrollments continue to decline,³¹ more job seekers and employers are looking for alternative pathways to upskilling.

There is a growing commitment from the private sector to embrace more competency- and skills-based hiring and training with the end goal of accessing and promoting a more talented and diverse workforce.³² Companies are embracing new models that incorporate more on-the-job training and personalized coaching, all without federal government involvement. Validating these models and taking these practices to scale across small and midsize businesses, where the majority of job

growth persists, is how to ensure all individuals can move up the economic ladder.

IRAPs demonstrated the growing interest in allowing industry associations, education providers, and community organizations to develop quality apprenticeship frameworks that could be used and validated throughout different sectors. The next generation of apprenticeships should learn a key lesson from this experience and expand beyond the New Deal-like design of RAPs and their overreliance on federal government “recognition,” instilling instead a “modern economy” design in which private, public, and community partners lead together to foster worker skills acquisition and improved employment outcomes.

About the Author

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