Subcommittee Members (by sector):

Employer	Labor	Public
Karmela Malone	Raymond W. Boyd	Donna Lenhoff
Mark Wagner (delegate)	Stephanie Harris-Kuiper	Robbie Melton
Valerie S. Richardson	Vicki L. O'Leary	Traci R. Scott

OA Subcommittee Leads: Julie Wong, Patricia Garcia, Vanietta Armstrong
ACA Subcommittee Spokespersons: Donna Lenhoff, Val Richardson
ACA Members from Other Subcommittees: N/A

1. Family Sustaining/Living Wage

During the March 30th meeting, the ACA voted to approve the following recommendation:

A registered apprenticeship must end in a family sustaining wage.

There was strong consensus among the ACA during the public vote supporting this recommendation with only one member voting no and five abstaining.

This recommendation also reflects the joint principles developed by the U.S. Department of Commerce and the U.S. Department of Labor in the "Good Jobs Initiative" to create a framework for workers, businesses, labor unions, advocates, researchers, state and local governments, and federal agencies for a shared vision of job quality. The principle defining job quality in terms of pay states: "All workers are paid a stable and predictable living wage before overtime, tips, and commissions." (see Appendix).

2. DEIA Subcommittee Statement on Family Sustaining/Living Wages

The lack of wage standardization in alignment with consumer buying power in apprenticeships has contributed to the economic disparities and instability that our country has experienced in the past. With the increasing demand for skilled labor and a shrinking workforce, it is imperative that we address this issue to avoid another economic collapse with disproportionate impact based on race, gender, ability, and residence.

Apprenticeships have long been a pathway for individuals to gain valuable skills and secure high-paying jobs, but not for everyone. For many women and African Americans, apprenticeships fail to deliver on these promises. Women account for only 14% of all registered apprentices and are concentrated in lower paying service jobs. Women earn only 2/3s of what men earn, making on average $10 less per hour. Economic outcomes of women have a direct impact upon childhood poverty rates. Sixty percent of African American households are led by

women (married or otherwise). While they represent the highest portion of homes living in poverty, their pay contrast is $15 less per hour than White men in apprenticeships. Studies show that equal pay would cut poverty in half.

But the issue we present today is not simply about pay equity. The crux is ensuring equitable access to family sustaining careers through any apprenticeship. History tells us that when pay does not keep pace with cost of living, the economy suffers. According to the National Bureau of Economic Research (NBER), a little-known contributing factor to the Great Depression was the fact that pay did not keep pace with the cost of living. In 1929, the minimum livable wage for a family was the equivalent of $9 in today's currency. Wage policy and practice missteps eventually caused more than 3-in-4 families to fall into poverty during the Depression. NBER also reveals that pay between industries, including union jobs, also played its part. Manufacturing versus Utilities labor earnings in 1932 were equivalent to $9.32 and $14.59, respectively. Racial, gender, and disabilities prejudices and deeply entrenched cultural perceptions manifested through occupational segregation, in its historical context, cannot be overlooked. Prior to 1929, immigrant and African Americans were limited to low paying jobs such as Domestic Workers (Housekeeping, Cooks, Janitors). Today, Housekeeping and Culinary apprenticeships are among the top apprenticeships for African Americans due to historical barriers. African American men make the lowest wages of any men apprentices upon completion due to a higher concentration in lower paying jobs. On completion women make even less than African American men, and African American women make the lowest wages on completion of any group. During the Covid-19 pandemic, just as during the Great Depression, Black and Hispanic unemployment were the highest of all demographics. One could look at history and see that having a job isn't a sufficient guard against poverty and economic insecurity, nor is using the federal minimum wage as a goal post.

Apprenticeship wages can lead to a family sustaining income; however, that is not a statement of guarantee. It is true that some, not all, apprenticeships lead to good paying jobs but some reach that upon entering an apprenticeship, others upon exit, others years later, and some never. Keep in mind that nearly half of all apprentices do not complete their apprenticeships, with African Americans having the lowest at 41% of any group. Simply, the American worker without financial safety nets does not have the time to wait. Wage suppression has created a dire sense of urgency to earn enough to survive. According to the National Low Income Housing Coalition, the average wage of $18.78 is not enough to afford a two-bedroom apartment in any state. Millions of families literally can no longer afford delay or inaction on the conversation of wages in apprenticeships. This is not to ignore the tremendous challenges and impacts that would be made to collective bargaining, project costs, resetting wage scaffolding, connecting wages to skills, and labor law.

3. <u>Terminology/Definition: Family Sustaining/Living Wages</u>

The DEIA subcommittee has used "family sustaining wages" and "living wages" interchangeably to indicate wages which will allow workers to earn enough income to afford adequate shelter, food, and other necessities based on local geographic area. The details need to be worked out, but the DEIA subcommittee remains steadfast in the commitment to the public vote of the ACA committee on March 30, 2023 and the principles of the "Good Jobs Initiative" jointly developed by the Departments of Commerce and Labor.

4. Interim (Stackable) Credentials, Not Stackable Apprenticeships

We are also in agreement with the approach of creating pathways through registered apprenticeship programs in the newly emerging service industries that leverage learnings from the success of the pathways currently established in the construction and building trade industries. From the March ACA meeting discussion, there appears to be an emerging consensus behind an approach that would recommend that DOL could recognize apprenticeable occupations that propose to embed interim credentials (and off-ramps) as part of the occupation that would meet the overall family sustaining or living wage criteria. The DOL has stated this would be a workable approach.

Registering one apprenticeship providing stackable credentials ending in a family sustaining or living wage would both streamline the process for employers and ensure that apprenticeships would end in providing a living wage. The DEIA subcommittee provides the following example describing details of the career path in healthcare and how this approach could work:

> High school juniors and seniors enrolled in health sciences pathways and dual enrolled in technical colleges may choose to begin their career journey as a youth apprentice. During the summer of their senior year, they complete the C.N.A. course at age 18, earn the credential and become eligible for promotion to the Patient Care Technician/PST at graduation). If they choose to continue with a technical college, they can continue to the next level of practical nurse upon completion of the diploma, pass the NCLEX exam, and become eligible for promotion to the L.P.N. If they choose, they can continue to the next level of registered nurse once they complete the associate degree of nursing, pass the NCLEX exam and gain a license as a Registered Nurse.

> This is their "on ramp" to living wages and family sustaining income. For working adults in nursing entry level roles (i.e., C.N.A, PCT/PST, etc.), the apprenticeship model may provide the best option to assist team members to increase income and career mobility. While working adults are employed in an entry level role, participants are not likely to have extra income to use traditional tuition reimbursement models which requires them to pay upfront and wait until the end of the semester to be reimbursed, make installments payments as you go or go into further debt via student loans.

> Using the Apprenticeship model, employers can assist working adults to utilize a combination of grant funds, supportive services, and a create a compensation plan that allows participants to "earn and learn" while ascending to a higher degree as well as maintain a quality of life while on their educational journey. Again, the apprenticeship model is their "on ramp" to living wages and family sustaining income.

We believe that the pathways to family sustaining or living wages need to be clearly outlined from the beginning and communicated to the apprentice as a prerequisite for an apprenticeship to be registered and that the employer must agree to support and mentor apprentices who wish to complete the entire pathway. Care should be taken to track progress and provide support for apprentices moving along the pathway to ensure that apprentices, and especially apprentices

from underserved communities who have experienced systemic discrimination, are not "stuck" on the bottom rungs of the career pathway.

5. Year 2 DEIA Issue Statement Topic:

Define leading indicators to flag critical emerging issues and opportunities in the Registered Apprenticeship and Pre-Apprenticeship ecosystems so that they can be addressed in a systematic and proactive way to promote diversity, equity, inclusion, and accessibility (DEIA) in order to meet industry demand for skilled workers by:
1) Tapping into the strengths and talents of the United States' increasingly diverse communities
2) Providing "Good Jobs" according to the principles of the U.S. Department of Labor and U.S. Department of Commerce (see Appendix)

6. Issue and Background

The RA ecosystem is currently focused mostly on reacting to lagging indicators evaluated on a program-by-program basis. Registration agencies (OA and the SAAs) routinely review RAPs to see how they performed on DEIA (and other) metrics *in the past*; they can step in to address reports of violations that occurred *in the past*; and apprentices may file complaints of discrimination that they have suffered *in the past* (although, due to fears of retaliation and futility, they rarely do so).

Moreover, the RA ecosystem gets the majority of its information only from the employer/RAP side, and by definition that information is only about individuals already in the system–meaning that we have no way of capturing data about the needs of and barriers facing individuals who are considering apprenticeship or those who considered but elected not to pursue an apprenticeship. It is critical that we capture valuable data from both sources.

Responding to what has happened in the past is important and necessary, but it is a limited tool for predicting trends, preventing recurring discrimination, or incentivizing deep culture change.

Registered Apprenticeship and Pre-Apprenticeships are powerful levers for ensuring equitable jobs. Indeed, existing regulations (29 CFR part 30) specifically prohibit discrimination by gender, race, ethnicity, and disability status (among others), and regulations should be enforced as inclusively as possible.

7. Strategic Importance of the Priority Issue

The U.S. economy currently sits at almost $23 trillion, but if the United States eliminated racial disparities in health, education, incarceration, and employment, the U.S. economy could be $8 trillion larger by 2050.[1] Over the past 30 years, if economic opportunities had been equitably distributed by gender, race, and ethnicity, the U.S. economy would be double its current size.[2]

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[1] Commerce Deputy Secretary Don Graves, The Kellogg Foundation, "The Business Case for Racial Equity: A Strategy for Growth."
[2] The Brookings Institute, "The Economic Gains From Equity".

Economic inequality is a serious and chronic problem in the United States. According to the US Census, in 2021 income inequality increased, driven by real declines in incomes at the bottom.[3] Households headed by African Americans have the lowest, and households headed by Hispanics have the second-lowest median incomes—$48,297 and $57,981 respectively—compared with $77,999 for households headed by whites. The median income for all female-headed households with no spouse present is only $51,168.[4] While the average income of households headed by Asian Americans, Native Hawaiians, and Pacific Islanders (AA & NHPI) in the aggregate is comparable to the income of households headed by whites, AA & NHPI communities have the broadest range of incomes of any racial or ethnic group masking inequities. For example, when disaggregated, the AA & NHPI communities include groups such as Burmese Americans with average incomes of only $44,000.[5]

Apprenticeship has a strategic role to play in addressing economic inequality, because it has long been an effective way to raise one's income. But despite improvements, RA continues to reflect the inequalities, occupational segregation, and discrimination of the larger economy. As the ACA reported in May, women currently represent only 14-18% of apprentices and most women apprentices are in the health, hospitality, education, and care economy sectors, which have lower hourly wages on completion; African American apprentices have the lowest completion rate and the lowest hourly wage at completion of any race or ethnicity; and while Hispanic apprentices make a strong showing in the high-paying construction sector, they are underrepresented in the science, technology, engineering, and mathematics (STEM) fields. AA & NHPI apprentices are the most underrepresented group of any race or ethnicity. The percentage of Native American apprentices appears to be drifting down. It is difficult to assess apprentices with disabilities as little data is available. Moreover, egregious incidents like nooses (as happened at the Obama Presidential Center site in Chicago as recently as November 2022)[6] or and even fatal assaults (such as when black female apprentice carpenter Outi Hicks was bludgeoned to death in a racist assault at her worksite in Fresno, CA,[7] a few years ago) continue to occur at sites where apprentices work.

These are not isolated incidents, but rather the tip of the iceberg. The majority of Registered Apprenticeship positions are available in the construction industry. A recent study commissioned by the National Institute of Building Sciences (NIBS) found that 72% of Black respondents and 66% of women respondents stated they have experienced discrimination or prejudice while at work. Other non-white racial groups also reported discrimination at levels ranging from 35% to 48%. Many of the respondents reporting discrimination said they had to work harder than others to be valued in their roles in the construction industry. The Joint Center for Political and Economic Studies[8] highlighted concerns about ongoing racial exclusion and harassment on construction sites stating, "Black men report that they do not receive the informal mentoring on the job site that white men receive and are more likely to be blamed when mistakes are made."[9]

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[3] https://www.census.gov/library/stories/2022/09/income-inequality-increased.html
[4] https://www.census.gov/data/tables/time-series/demo/income-poverty/cps-hinc/hinc-04.html#par_list_13.
[5] https://www.pewresearch.org/fact-tank/2021/04/29/key-facts-about-asian-americans/.
[6] https://www.cnn.com/2022/11/10/us/noose-obama-presidential-center-reaj/index.html.
[7] https://www.enr.com/articles/48733-jobsite-killer-of-woman-carpenter-apprentice-gets-15-years-to-life-sentence.
[8] Camardelle, A, Joint Center for Political and Economic Studies. Five Charts To Understand Black Registered Apprentices in the United States (2023) https://jointcenter.org/wp-content/uploads/2023/03/Five-Charts-To-Understand-Black-Registered-Apprentices-in-the-United-States.pdf
[9] Paap, Kris. "How Good Men of the Union Justify Inequality." *Labor Studies Journal* 33, no. 4 (2008): 371–92.

The Joint Center continues finding that "employers continue to leave Black journeymen in lower-wage jobs in the (construction) industry, while white workers are the most likely to be hired in higher-wage jobs, such as construction managers and supervisors." Citing U.S. Bureau of Labor statistics, the Joint Center concludes, "Just five percent of construction supervisors are Black, while 90% are white."[10,11]

The Joint Center also notes, "These issues are pronounced for Black women who sit at the intersection of racist and sexist harassment in the construction trades."[12] In the Institute for Women's Policy Research's (IWPR) survey of tradeswomen, 55.7 percent of all women respondents report at some point notifying a supervisor or other company official, their business agent (senior union official) or staff overseeing their apprenticeship program of harassment or other form of discrimination. The US Equal Employment Opportunity Commission Harassment Study summarizing representative surveys of sex-related harassment concluded that 40% of women had "experienced sexually-based behaviors, such as unwanted sexual attention or sexual coercion;" 60% of women had experienced "gender harassment," defined as "sexist or crude/offensive behavior [or] hostile behaviors that are devoid of sexual interest;" and 35% of lesbian-, gay-, or bisexual-identified respondents "who reported being 'open' at work" had experienced workplace harassment. In the Federal Motor Carrier Safety Administration (FMCSA) Crime Prevention for Truckers survey[13] in 2022, one third of surveyed women truckers reported that in the previous two years, they had experienced inappropriate touching (pp. 49-50) -- though some women truckers criticize this is as "a significant undercount…" The *Bloomberg Law Daily Labor Report* found that 38% of women truckers state that they were threatened verbally with physical harm; and 15% that they were hit, pushed, or physically hurt. Women were twice to four times more likely than non-minority men to be touched without permission and **minority women were up to 9 times more likely be physically harmed.[14]** Additional data provided in the Appendix.

A recent study by the North American Builder's Trade Unions and the University of Oregon Labor Education and Research Center found that registered apprenticeships and unions have the potential to support greater equity and inclusion in the construction industry showing that "union apprenticeship programs provide significantly better outcomes overall for women and BIPOC compared to non-union programs."[15]

10.1177/0160449x08322773. "Although the construction industry does offer many well-paying, desirable occupations, it is not an industry seen as being accessible to all. On the contrary, this industry is generally regarded as hostile to women and has often created union and industry rules to exclude women, people of color, and immigrants."

[10] U.S. Bureau of Labor Statistics. "Employed persons by detailed occupation, sex, race, and Hispanic or Latino ethnicity"

[11] https://www.bdcnetwork.com/study-finds-racism-discrimination-common-construction-industry.

[12] Hunte, Roberta. "Black women and race and gender tensions in the trades." *Peace Review* 28, no. 4 (2016): 436-443; Bridges, Donna, Elizabeth Wulff, Larissa Bamberry, Branka Krivokapic-Skoko, and Stacey Jenkins. "Negotiating gender in the male-dominated skilled trades: A systematic literature review." *Construction Management and Economics* 38, no. 10 (2020): 894-916.

[13] https://www.fmcsa.dot.gov/research-and-analysis/crime-prevention-truckers-study.

[14] Institute for Women's Policy Research's (IWPR) survey of tradeswomen, A Future Worth Building: What Tradeswomen Say about the Change they Need in the Construction Industry (2021); US Equal Employment Opportunity Commission, Select Task Force on the Study of Harassment in the Workplace (2016) (EEOC Harassment Study); Federal Motor Carrier Safety Administration (FMCSA) Crime Prevention for Truckers Survey (2022) (pp. 49-50) though some women truckers criticize this is as "a significant undercount,"; *Bloomberg Law Daily Labor Report* (December 12, 2022); 38% that they were threatened verbally with physical harm; and 15% that they were hit, pushed, or physically hurt. Women were twice to four times more likely than non-minority men to be touched without permission; minority women were up to 9 times more likely be physically harmed.

[15] https://cpb-us-e1.wpmucdn.com/blogs.uoregon.edu/dist/a/13513/files/2021/11/Constructing_A_Diverse_Workforce.pdf

This is why one of the overarching recommendations in the ACA's May 2022 Interim Report was that *DEIA should be intentionally embedded throughout the RA ecosystem.* As mechanisms for doing that, the Report recommended thoroughly implementing existing DEIA requirements (29 CFR part 30); creating RAP cultures of inclusion and removing other barriers preventing individuals from underserved communities from enrolling and succeeding in RAPs; and removing barriers that industry faces in identifying and retaining apprentices from underrepresented populations and other underserved communities.

While implementing those recommendations from the May Interim Report remains crucial, by focusing on leading indicators and proactively using those indicators to anticipate, prevent, and incentivize, our recommendations for the next phase of ACA work goes a step further.

8. Recommendations and/or Best Practices

Our goal is to leverage leading indicators to amplify the potential of Registered Apprenticeship to create a positive, healthy culture of inclusion and equitable development to benefit all apprentices and the economy as a whole.

The new things we need to focus on are systemic changes to:

- Use Leading Indicators to Proactively Support a Healthy Culture of Inclusion
    - Addressing concerns and removing barriers for potential, current, and alumni apprentices to connect with jobs that provide a family-sustaining or living wage

- Initiate Systematic Assessments Focused on People, As Well As Programs
    - Create survey focused on apprentice experience to fill gaps in current data Leverage Apprentice Survey, existing internal and external data to construct leading indicators that measure progress towards DEIA goals and remaining challenges, in particular using equity indices to compare access to opportunities by region, industries/occupations, education/skill levels, wages/hours/promotions before, during, and after the apprentice lifecycle.

- Establish Data-Driven Feedback Loop to Measure Progress & Implement Changes
    - Collect data to measure progress towards DEIA goals and remaining challenges
    - Identify leading indicators flagging barriers to and opportunities for advancing equity to get ahead of discriminatory practices before they become grievances
    - Develop whole-of-RA-ecosystem strategies reviewing data quarterly and taking action on key findings from the data on an annual basis to close the feedback loop

- Make Sure to Connect All Apprentices with "Good Jobs"
    - Design or promote career paths from lower-paying to higher-paying jobs to combat occupational segregation, especially in the service industry
    - Increase representation of underrepresented groups and other underserved communities in new emerging sectors such as finance and technology

   o Increase diversity in higher-paying jobs in sectors traditionally relying on apprenticeships such as construction

Develop Systematic Assessment Focused on People, As Well As Programs

As an initial matter, we see a huge gap–a "missing piece"–in the data that the RA system currently has available to it from which to craft leading indicators: while RAPIDS and the other information systems that the Registration Agencies use provide information on RAPs and on apprentices' demographic characteristics, there is no systematic way of assessing registered apprenticeship *as it is experienced by the apprentices themselves*. To address this gap, we recommend that, as soon as feasible, OA establish a *new data source*: *a regular, anonymous survey of apprentices' and recent apprentice exiters' experiences–on which to base leading* indicators. Conducted by OA on a nationwide basis, this survey will provide feedback that is "people-focused," not "program-focused." It should also track apprentices from outreach through program participation and as they become established in their careers and leadership positions.

The idea is not unprecedented: the ACA recommended apprentice surveys in our May 2022 Interim Report and the Rhode Island SAA already conducts annual surveys of apprentices.[16]

Apprentice Survey cadence. Frequency of survey administration should depend on the length of the apprenticeship and extend throughout and beyond the apprenticeship term. The survey should be administered during onboarding, annually and/or at the midpoint of the apprenticeship, when exiting or completing the program, six months after completion, and once a year for five years after completion.

Apprentice Survey characteristics. To preserve reliability, the surveys must be anonymous, and to maintain anonymity, they must be administered by Registration Agencies, independent of RAPs and employers. Sampling should be sufficient to produce representative data by underrepresented population, major occupation group, and state.

The Apprentice Survey can include questions about problems (e.g., harassment, nooses, pornographic graffiti) but should also assess apprenticeship quality overall (for example, asking apprentices to rate if they are getting enough work assignments and if they are getting training in all the work processes that they need, on a scale of 1-5). Questions should remain essentially the same from year to year to permit comparisons over time.

Subcommittee members suggested a number of questions for the survey that would inform leading indicators. Questions were suggested to assess the health and inclusiveness of RAP cultures; other questions were suggested to help assess what is arguably the flip side of healthy, inclusive cultures–the prevalence of bullying, harassment, intimidation, and retaliation–by asking apprentices and apprentice exiters about their experiences with the most prevalent forms of harassment on the job, *quid pro quo* and hostile-work-environment harassment. These questions are provided in the Appendix to this Issue Paper.

Constructing Leading Indicators by Leveraging Existing Data and Combining It with Findings from New Apprentice Survey

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[16] In England, the INSTITUTE FOR APPRENTICESHIPS AND TECHNICAL EDUCATION (IFATE) conducted a survey of apprentices in 2022 and one in 2020 and apparently intends to conduct one annually.

In this issue paper, we cannot definitively identify the leading indicators that the RA ecosystem should use; that is a task for the ACA in the future. But we do recommend that the leading indicators be chosen specifically so that RA can address, for each underrepresented group, at minimum the following issues:

[Indicators of apprenticeship conditions]
- Prevalence of discriminatory entry barriers to particular occupations, especially those that pay a family-sustaining wage
- Use of career ladders leading to occupations that pay a family-sustaining wage
- Barriers to apprentices advancing through, sticking with, and completing their programs
- Prevalence of healthy, inclusive workplace cultures
- Prevalence of bullying, harassment, intimidation, and retaliation
- Equity in work-hour assignments

[Indicators of effectiveness of RA ecosystem efforts]
- Effectiveness of marketing and recruitment efforts including wrap-around services
- Impact of Technical Assistance to RAPs on Diversity, Equity, Inclusion, and Accessibility
- Impact of OA's Grant-Making on Diversity, Equity, Inclusion, and Accessibility

The data that the leading indicators will be based on will vary according to subject-matter. Some leading indicators will be based on data gathered in the Apprentice Surveys. The leading indicators will also leverage existing data in particular equity indices which compare what the probability that any given outcome will be experienced in general vs. the likelihood of that outcome occurring equitably within a specific group. Some will be based on internal data that is already or can be available to OA; these internal data include RAPIDS data and data from the Apprenticeship Program Reviews (APRs) and Extended Apprenticeship Program Reviews (EAPRs) that OA conducts.

Some leading indicators will be based on external economic data or published studies. Recognizing the vast availability of third party data, recommend that additional data sources be explored that may be used to augment the survey and/or inform new leading indicators. Some meaningful leading indicators may not be achieved through survey or readily known. But by fully leveraging data mining capabilities and predictive analytics, relevant and actionable insights can be gleaned that may inform emerging leading indicators. Most leading indicators will be constructed of data from a combination of these data-sources. Moreover, there is some overlap: some data-sources will be relevant to more than one leading indicator.

None of these data sources alone is perfect. Because apprentices' memories and perceptions are not 100% accurate, it is useful to supplement data from Apprentice Surveys with information from programs. While RAPIDS data on apprentices' demographic identification is self-reported, it is reported to the RAP/employer (not anonymously) and is not always provided, suggesting that it is useful to supplement it with data from Apprentice Survey. Data from APRs and EAPRs conducted in any given year represent only a small portion of all RAPs; moreover, these data are not yet retrievable in any automated fashion. Data from external studies or workforce-wide sources may not be specific enough to apprenticeship. For these reasons, the leading indicators should be constructed by combining as many of these data-sources as are available.

The following table shows one example of leading indicators and the sources of data from which indicators could be constructed. See Appendix for full table.

Leading Indicator	Apprentice Survey	Internal Data	External Data
All data to be analyzed by sex, race, ethnicity, disability status, occupation, and location.			

Use of career ladders leading to occupations that pay a family-sustaining wage	Questions about *opportunities* to pursue higher-level training (e.g., diploma or associate degree, etc.) including the marketing, promotion and awareness of higher-level opportunities
	
	Questions about *barriers* preventing pursuit of a higher level of training (e.g., cost of tuition, books, supplies, transportation, childcare; wage or benefit loss while in class)
	Questions that identify effective strategies that increased the likelihood apprentices leveraged career ladders to pursued training for higher wage occupations.
	
	Questions about apprentices' reasons for not pursuing training for higher-wage occupations
		Comparative US DOL RAPIDS analyses of active and completed apprentices in occupations that do pay a family-sustaining wage vs. those that do not
		
		Analysis of RAPIDS data on frequency of individuals completing successive apprenticeships in a career ladder (i.e., completers of one RAP who transition to higher level/longer RAPs)
			Specific analyses for specific occupations where there is a range of training required and wages paid.
			   E.g., in health care: Census Bureau data on % of LPNs or RNs from different demographic groups over time
			
			Other published relevant research.
			   E.g., in health care, there is published research on rate of C.N.A./Home Health Aides who progress up the career ladder to LPN or RN positions by race (Sick and Loprest, *Employment and Earnings Outcomes by Length and Occupation of Healthcare Training* (2021)).
			
			Public data on amounts of Apprenticeship, WIOA, or sector-specific grant funds (such as Health Profession Opportunity Grants) available to assist apprentices to overcome financial barriers and progress up the career ladder

Establish Data-Driven Feedback Loop to Measure Progress and Implement Change
Of course, it is not enough just to establish leading indicators. Their purpose is to drive root-cause problem-solving. Thus, the RA ecosystem–OA, the SAAs, and the other RA–must use leading indicators to guide proactive, systematic monitoring and create an actionable feedback loop. It should develop targets for changes to leading indicators year-over-year. For example, if the leading indicator on Healthy Inclusive Cultures shows that only 40% of apprentices in manufacturing apprentices are experiencing healthy cultures, OA could set a goal of increasing that number by 5% each year for 5 years, and then measure the change each year.

To affect the leading indicators, the RA ecosystem has a number of tools at its disposal:

- OA and the SAAs can target which programs, or types of programs, will be subject to APRs and EAPRs.
- OA and the SAAs can allocate TA resources to programs, industries, or regions that need it the most. This includes the TA that OA and the SAAs deliver directly as well as the TA delivered by OA's s Registered Apprenticeship Technical Assistance Centers and by other intermediaries.

- OA and the SAAs can award grants to promote effective DEIA practices or develop partnerships that will be necessary to anticipate trends revealed by the leading indicators.

Finally, OA should take leadership in establishing regular mechanisms to ensure implementation of changes resulting from the leading-indicator analysis. Ideally, these mechanisms should be institutionalized in OA's Annual Operating Plan and in OA staff's individual Annual Performance Plans.

9. Regulatory Changes Needed

Deployment of the Apprentice Survey would not require any changes to CFR title 29, but it would require development of a survey instrument and its approval by OMB (through filing of an Information Collection Request under the Paperwork Reduction Act).

In addition, the DEIA Subcommittee made a number of recommendations in the May Interim Report that would require regulatory changes, and we incorporate those here. These recommendations address: frequency of program reviews (p. II-9 of the Interim Report); stronger DEIA training (p. II-9); the definition of "apprenticeable occupation" (pp. II-9 – II-10); establishment of apprentice utilization goals for federal construction sponsors (p. II-11); working with OSHA, establishment of standards for PPE that fits; clean, sex-separate or single-user bathrooms; and workplace violence (p. II-14).

APPENDIX: Suggested Leading Indicators and Sources of Data for Each

Leading Indicator	Apprentice Survey	Internal Data	External Data
All data to be analyzed by sex, race, ethnicity, disability status, occupation, and location.			
Prevalence of discriminatory entry barriers to particular occupations, especially those that pay a family-sustaining wage	Questions addressing tracking; recruitment, application and selection procedures; on-boarding experiences Questions about apprentices' reasons for not pursuing training for higher-wage occupations	Equity Indices (calculated from RAPIDS data on active and completed apprentices in occupations that do pay a family-sustaining wage vs. those that do not)	Comparisons to industry norms (e.g., Census Bureau data on % of workers from different demographic groups in apprenticeable occupations, showing changes over time) EEOC data on charges filed of hiring discrimination in comparable occupations

Use of career ladders leading to occupations that pay a family-sustaining wage	Questions about *opportunities* to pursue higher-level training (e.g., diploma or associate degree, etc.) including the marketing, promotion and awareness of higher-level opportunities
	
	Questions about *barriers* preventing pursuit of a higher level of training (e.g., cost of tuition, books, supplies, transportation, childcare; wage or benefit loss while in class)
	Questions that identify effective strategies that increased the likelihood apprentices leveraged career ladders to pursued training for higher wage occupations.
	
	Questions about apprentices' reasons for not pursuing training for higher-wage occupations
		Comparative US DOL RAPIDS analyses of active and completed apprentices in occupations that do pay a family-sustaining wage vs. those that do not
		
		Analysis of RAPIDS data on frequency of individuals completing successive apprenticeships in a career ladder (i.e., completers of one RAP who transition to higher level/longer RAPs)
			Specific analyses for specific occupations where there is a range of training required and wages paid.
			    E.g., in health care: Census Bureau data on % of LPNs or RNs from different demographic groups over time
			
			Other published relevant research.
			    E.g., in health care, there is published research on rate of C.N.A./Home Health Aides who progress up the career ladder to LPN or RN positions by race (Sick and Loprest, *Employment and Earnings Outcomes by Length and Occupation of Healthcare Training* (2021)).
			
			Public data on amounts of Apprenticeship, WIOA, or sector-specific grant funds (such as Health Profession Opportunity Grants) available to assist apprentices to overcome financial barriers and progress up the career ladder

Barriers to apprentices advancing through, sticking with, and completing their programs*	Questions about experiences with assessments for progression to the next levels of the RAP Questions about availability and use of wraparound supports Questions about other barriers preventing completion of programs	RAPIDS data on time to completion; retention rates	EEOC data on charges filed of promotion discrimination in comparable occupations
Note: the leading indicators on the prevalence of healthy, inclusive workplace cultures and of bullying, harassment, intimidation, and retaliation are also relevant to this leading indicator.			
Prevalence of healthy, inclusive workplace cultures	Questions about inclusiveness/ exclusiveness of culture. **SEE EXAMPLES IN APPENDIX**	[not applicable]	[not applicable]
Prevalence of Bullying, Harassment, Intimidation, and Retaliation	Questions addressing personal experiences and experiences witnessed. **SEE EXAMPLES IN APPENDIX**	Program review results: incidence of anti-harassment training	Published research on experiences of apprentices and/or of workers in various occupations (e.g., Institute for Women's Policy Research 2021 survey of tradeswomen, A Future Worth Building: What Tradeswomen Say about the Change they Need in the Construction Industry; Federal Motor Carrier Safety Administration Crime Prevention for Truckers Study (November 1, 2022)) EEOC data on charges of harassment and retaliation in comparable industries filed
Equity in number of work hours assigned	Questions about apprentices' experiences and assignments	Program review results: disparate assignments	Comparison of actual wages earned as reported to Wage & Hour (for Davis-Bacon-covered contractors) or other sources with RAPIDS data on race/sex/ethnicity/disability status

			EEOC data on charges filed of discrimination in work-hours assigned in comparable industries
Effectiveness of marketing and recruitment efforts	Questions about extent and sources of apprentices' information about apprenticeship – e.g., how did they find out about it and where did they get the information? Were current apprentices and journeyworkers included in the recruitment process to discuss their experiences? Did they reflect the demographics of the population being recruited?	Data on applicant flow gathered from program reviews (where available)	[not applicable]
DEIA Impact of Technical Assistance to RAPs	[not applicable]	Program review results: % of programs reviewed that – • provided the required anti-harassment training • notified all recruitment sources of all openings in their programs • prepared written Affirmative Action Plans (AAPS) (if required) • invited applicants and apprentices to voluntarily identify as a person with a disability (if required) • conducted targeted outreach and recruitment (if required) • conducted annual self-assessments of their personnel practices (if required)	[not applicable]
DEIA Impact of OA's Grant-Making	[not applicable]	Equity Indices for apprentices in grant-funded programs compared with non-granted funded programs	[not applicable]

APPENDIX: Sample Questions

The following questions were suggested to assess the health and inclusiveness of RAP cultures:

- Do you feel like the registered apprenticeship program supports your ability to succeed and thrive?
- Do you feel safe and respected on the job site?
- If an issue arose on the job, would you feel comfortable raising it with your supervisor or other program representative?
- Does your program provide wrap-around services such as childcare and transportation?
- Does your program include training on anti-harassment and anti-discrimination?
- How often are you in touch with mentors?
- Do you have opportunities to engage in peer group discussions?
- Do you have opportunities to engage in discussions with senior leadership and union representatives?
- Is there an alumni program available to you once you complete the apprenticeship program?
- Are you aware of other apprenticeship opportunities to continue building your skills after you complete this program?
- How satisfied were you with your apprenticeship training program?

The following questions were suggested to help assess the prevalence of hostile-work-environment harassment:

- Unsolicited or unwelcome physical contact;
- Rude lewd or offensive jokes;
- Anything involving the "big five;"
    - Jokes about sexual orientation, gender, religion, age, or ethnicity;
- Negative or aggressive behavior towards a specific person or group;
- Belittling or threatening behavior;
- Witnessing behavior that makes you feel uncomfortable (if you feel uncomfortable, the targeted individual most likely does too);
- Micro-aggressions—more than just insults, these are insensitive comments or generalized jerky behavior, leaving their targets feeling uncomfortable or insulted;
- Outward manifestations of unconscious or implicit bias (a learned assumption or belief or attitude that exists in the subconscious);
- Witnessing quiet fear (quiet fear when someone looks like they are terrified, or is looking down or looking around for help), as opposed to quiet strength (which is when someone looks straight back at the perpetrator and handles the situation).

APPENDIX: The Good Jobs Initiative

Department of Commerce and Department of Labor Good Jobs Principles
[Download the Good Jobs Principles Fact Sheet](#) (PDF)

Good jobs are the foundation of an equitable economy that lifts up workers and families and makes businesses more competitive globally. They allow everyone to share in prosperity and support local communities and the entire U.S. economy. Workers know the value of a good job that provides stability and security for them and their families. All work is important and deserving of dignity. Many companies recognize that providing good quality jobs – that make them an employer of choice – creates a clear competitive advantage when it comes to recruitment, retention, and execution of a company's mission.
The Departments of Commerce and Labor have partnered to identify what comprises a good job. These eight principles create a framework for workers, businesses, labor unions, advocates, researchers, state and local governments, and federal agencies for a shared vision of job quality.

Recruitment and Hiring: Qualified applicants are actively recruited – especially those from underserved communities. Applicants are free from discrimination, including unequal treatment or application of selection criteria that are unrelated to job performance. Applicants are evaluated with relevant skills-based requirements. Unnecessary educational, credentials and experience requirements are minimized.

Benefits: Full-time and part-time workers are provided family-sustaining benefits that promote economic security and mobility. These include health insurance, a retirement plan, workers' compensation benefits, work-family benefits such as paid leave and caregiving supports, and others that may arise from engagement with workers. Workers are empowered and encouraged to use these benefits.

Diversity, Equity, Inclusion, and Accessibility (DEIA): All workers have equal opportunity. Workers are respected, empowered, and treated fairly. DEIA is a core value and practiced norm in the workplace. Individuals from underserved communities do not face systemic barriers in the workplace. Underserved communities are persons adversely affected by persistent poverty, discrimination, or inequality, including Black, Indigenous, people of color; LGBTQ+ individuals; women; immigrants; veterans; individuals with disabilities; individuals in rural communities; individuals without a college degree; individuals with or recovering from substance use disorder; and justice-involved individuals.

Empowerment and Representation: Workers can form and join unions. Workers can engage in protected, concerted activity without fear of retaliation. Workers contribute to decisions about their work, how it is performed, and organizational direction.

Job Security and Working Conditions: Workers have a safe, healthy, and accessible workplace, built on input from workers and their representatives. Workers have job security without arbitrary or discriminatory discipline or dismissal. They have adequate hours and predictable schedules. The use of electronic monitoring, data, and algorithms is transparent, equitable, and carefully deployed with input from workers. Workers are free from harassment, discrimination, and retaliation at work. Workers are properly classified under applicable laws. Temporary or contractor labor solutions are minimized.

Organizational Culture: All workers belong, are valued, contribute meaningfully to the organization, and are engaged and respected especially by leadership.

Pay: All workers are paid a stable and predictable living wage before overtime, tips, and commissions. Workers' pay is fair, transparent, and equitable. Workers' wages increase with increased skills and experience.

Skills and Career Advancement: Workers have equitable opportunities and tools to progress to future good jobs within their organizations or outside them. Workers have transparent promotion or advancement opportunities. Workers have access to quality employer- or labor-management-provided training and education.

Appendix: DEIA Subcommittee Responses to Other Subcommittee Feedback on DEIA Issue Paper

1. *Family-sustaining wages. The DEIA Subcommittee's responses to the Pathways and IENES members' feedbacks on family-sustaining wages are provided separately.*

2. *Business case for DEIA. Following is the Pathways member(s)' feedback on adding information about the business case for DEIA and the DEIA Subcommittee's response to this feedback:*

Feedback: I would include existing research on the businesses that have deployed quality DEIA practices and the positive impact it has had on their bottom line. Having a diverse workforce IS good business – in connection with the section "Issue and Background" on pp. 1-2 of the Issue Paper.

DEIA response: Agreed.

3. *Data supporting prevalence of harassment and discrimination. Following is the Pathways member(s)' feedback on data supporting prevalence of harassment and discrimination and the DEIA Subcommittee's response to this feedback:*

Feedback: While emotive the references to specific instance of harassment in Fresno and Chicago do not show the trend towards a lack of inclusivity and harassment. The data to prove this trend is likely available and should be used as well to prevent these statements from being dismissed as one-off or anecdotes.

DEIA response:
You are right, there is extensive survey data supporting the prevalence of sex harassment and discrimination, especially in male-dominated workplaces. We have added additional data to the DEIA Issue Paper and also here. *See, e.g.:*

- Institute for Women's Policy Research's (IWPR) survey of women in manufacturing jobs, Advancing Women in Manufacturing: Perspectives from Women on the Shop Floor (2023) (IWPR Women in Manufacturing Study) (detailing that 17% of women surveyed reported "sexual harassment occurring frequently or always;" 18% of women of color surveyed reported "that racial harassment and discrimination occur frequently or always; [a]bout one in ten report frequently or always being exposed to hostile and disparaging graffiti, including anti-Semitic or Islamophobic symbols" (p. 26)); (finding that harassment and disrespect were the most common reasons for women wanting to leave their manufacturing jobs (p. 32)).

- Institute for Women's Policy Research's (IWPR) survey of tradeswomen, A Future Worth Building: What Tradeswomen Say about the Change they Need in the Construction Industry (2021) (IWPR Tradeswomen Survey), (55.7 percent of respondents report at some point notifying a supervisor or foreman, human resource manager or other company official, their business agent (senior union official) or staff overseeing their apprenticeship program [of harassment or other form of discrimination).

- US Equal Employment Opportunity Commission, SELECT TASK FORCE ON THE STUDY OF HARASSMENT IN THE WORKPLACE: REPORT OF CO-CHAIRS CHAI R. FELDBLUM & VICTORIA A. LIPNIC (2016) (EEOC Harassment Study) (summarizing representative surveys of sex-related harassment and concluding that 40% of women had "experienced sexually-based behaviors, such as unwanted sexual attention or sexual coercion;" 60% of women had experienced "gender harassment," defined as "sexist or crude/offensive behavior [or] hostile behaviors that are devoid of sexual interest;" and 35% of lesbian-, gay-, or bisexual-identified respondents "who reported being 'open' at work" had experienced workplace harassment (pp. 8-10)) (citations omitted).

- Federal Motor Carrier Safety Administration (FMCSA) Crime Prevention for Truckers survey in 2022 (FMCSA Study) (detailing that a third of surveyed women truckers reported that in the previous two years, they had experienced inappropriate touching (pp. 49-50) (though some women truckers criticize this is as "a significant undercount," Harassment of Women Truckers Spurs Drivers, Agency to Seek Fixes," *Bloomberg Law Daily Labor Report* (December 12, 2022)); 38% that they were threatened verbally with physical harm; and 15% that they were hit, pushed, or physically hurt. Women were twice to four times more likely than non-minority men to be touched without permission; minority women were up to 9 times more likely be physically harmed.

- Riddle, Kimberly Marie, "RISK FACTORS FOR WORKPLACE SEXUAL HARASSMENT IN FEMALE TRUCK DRIVERS" (2021) (Riddle study), Theses and Dissertations--Nursing. 58. https://uknowledge.uky.edu/nursing_etds/58, at p. 157 (citations omitted) (estimating that 60% of women have been sexually harassed).

Surveys also show that harassment and discrimination are substantially underreported:

- IWPR Tradeswomen Survey, p. 18 (finding that in the construction trades, only between 6 and 13 percent of harassment incidents are formally reported) (citation omitted).

- EEOC Harassment Study (finding that "90% of individuals who say they have experienced harassment never take formal action against the harassment") (p. 8).

- FMCSA Study at p. 50 (finding that respondents who had experienced harassment did not report it about half the time -- specifically., 42 percent of women, 57 percent of minority males, and 51 percent of non-minority males did not report).

The IWPR Women in Manufacturing Study also described its survey respondents' experience with discrimination or unequal treatment in general, and reports that a substantial minority of them (between 30 and 41%) say that they are never or only sometimes treated equally with regard to safety, pay, access to overtime and good shifts, use of tools, lay-offs and on-the-job training, and that a majority (between 51% and 56%) say they are never or only sometimes treated equally with regard to work assignments, respect, promotion opportunities, and leadership development (p. 22, Figure 4).

Although there are fewer studies on the prevalence of harassment and discrimination based on characteristics other than sex (and none using a representative sample), 70% of the respondents to the most recent study of racial and ethnic harassment "reported experiencing some form of

verbal harassment; … 45% reported experiencing exclusionary behaviors; [and] 69% …reported *witnessing* at least one ethnically-harassing behavior in the last two years." EEOC Harassment Study, p. 12 (emphasis in original).

Two of these studies shed some light on women's experiences in apprenticeships or other training programs in particular:

- The FMCSA Study found that "[h]arassment for women truckers often begins in driver training or in the motor carrier school they attend. Driver training is a vulnerable setting for women truckers as the majority of trainers are men, which presents the opportunity for the trainer to leverage his power or authority." *Id.,* at p. 8 (citation omitted).

- The IWPR Women in Manufacturing Study oversampled women workers who have either completed or are pursuing apprenticeships (p. 55). It did not report any difference in the prevalence or kinds of harassment and discrimination experienced by women in apprenticeship programs.

From these, it is fair to conclude that the general findings of experienced by female apprentices experience the same (if not worse) frequency and kinds of harassment and discrimination that are generally true of women in similar workplaces.

We alluded to some of the above studies in the Appendix titled "Suggested Leading Indicators and Sources of Data for Each" to our Subcommittee's Issue Paper (p. 9). But we agree that the incidents in Fresno and Chicago referred to in the main body of our Issue Paper (pp. 3-4) do not alone "show the trend towards a lack of inclusivity and harassment." To prevent these incidents "from being dismissed as one-off or anecdotes," we will edit the paragraph beginning with "Apprenticeship has a strategic role to play in addressing economic inequality" on p. 3 to refer to the body of evidence establishing the prevalence and seriousness of harassment and discrimination in many apprenticeship settings.

4. *The way leading indicators will be used.* *Following is the Pathways member(s)' feedback on the use of leading indicators (2 comments) and the DEIA Subcommittee's response to this feedback:*

Feedback:
- The leading indicator survey could make employers nervous about retaliatory comments being used against them when they fire an apprentice with cause. It is important to clarify how these reports will be handled by the DOL and at what point an investigation might be triggered. Provide the assurance that an investigation will only begin if a trend is spotted and not from 1 report.
- Provide a review process allowing for the employer to clarify their actions that have been called into question. We want to assure employer the DOL wants them to be better and is willing to help them become better when they are failing.

DEIA response:
While we understand that there may be apprehension about deployment of a new information tool like the survey we propose, we are confident that there is no reason for such apprehension.

First of all, not all apprentices and apprenticeship exiters will be surveyed – given the number of apprentices that would be impossible. Instead, as is done in virtually all professional surveys, a representative sample of apprentices and exiters will be surveyed. (We alluded to this on p. 4 of the Issue Paper, in our statement that "Sampling should be sufficient to produce representative data by underrepresented population, major occupation group, and state.) So the likelihood that any particular fired apprentice would be surveyed would be rather small.

Moreover, as we emphasized in the Issue Paper, the survey would be anonymous, so even if an apprentice who was fired were to be surveyed, their identity would not be revealed to OA.

Furthermore, we assumed that the bulk of the survey would be questions the answers to which can be easily quantified (e.g., ratings on a 1-5 scale), so that answers are comparable and can be tabulated to identify trends. Again, this is the standard for professional surveys. There may be an opportunity at the end of the survey for the survey-taker to offer a comment, but such comments would not identify the employer or RAP sponsor in public reporting.

Most important, the survey is not intended to be used to identify specific employers or RAP sponsors that are not complying with the regulations. To the contrary, the purpose is to allow "the RA ecosystem—OA, the SAAs, and the other RA—[to] use leading indicators to guide proactive, systematic monitoring and create an actionable feedback loop" (p. 6 of the Issue Paper). In other words, aggregate survey data will be used to point to leading indicators. Nor will survey results be the sole measure of the indicators; the survey data will be considered along with internal data sources (including RAPIDS data) and external data sources to assess the indicators.

When leading indicators point to potential problem areas, OA and the SAAs can target their resources – the reviews they conduct, the technical assistance they (and intermediaries) provide, and the investments (grants) they make – to address the issue before it becomes a problem. The example given on p. 6 of the Issue Paper is illustrative. Should the leading indicator on Healthy Inclusive Cultures show that only 40% of apprentices in manufacturing are experiencing healthy cultures, OA could respond by targeting more resources to technical assistance to manufacturing RAPs.

Finally, whenever OA does program reviews, the process always includes numerous opportunities for the employer or RAP sponsor to clarify their actions. That starts with the very first component of a review, the desk review, during which the sponsor may provide additional information and documentation. During the second component, the in-person review, "the registration agency staff member will [m]eet with the sponsor's designated representative to verify, clarify, and fill in any gaps in the information gathered during the desk review." The in-depth review also "provides an opportunity for sponsors to ask questions and for the registration agency staff to provide technical assistance to help the sponsor comply" with the applicable requirements. Apprenticeship Program Reviews Quick Reference Guide (APR QRG), pp. 4-5. These and other steps in the review process where there is an opportunity for input and technical assistance are laid out in materials on OA's website, including the aforementioned APR QRG, the Apprenticeship Program Reviews Quick Reference Guide, and related webinar and PowerPoint presentations.

5. *Leading Indicator for effectiveness of marketing and recruitment efforts. Following is the Pathways member(s)' feedback on the leading indicator for the effectiveness of marketing and recruitment efforts (Issue Paper p. 5) and the DEIA Subcommittee's response to this feedback:*

Feedback: Split off "Effectiveness of marketing and recruitment efforts as calculated by historically untapped populations engaging in RA" and separate into a new bullet "Not only the allowability of wrap-around supports and services but the calculation of usage for each services carving out general workforce supports separate and apart from occupation-specific supports (e.g. communication skill building, daycare, OSHA certification)"

DEIA response:
We don't understand what the Pathways member means and would appreciate clarification.

6. *Definition of "underserved communities" in the APPENDIX: The Good Jobs Initiative. Following is the Pathways member(s)' feedback on the definition of "underserved communities" in the APPENDIX: The Good Jobs Initiative and the DEIA Subcommittee's response to this feedback:*

Feedback: Add in please "mature adults who are recareering" as ageism and older workers are also part of this category -- in connection with the following definition of "underserved communities" in the Good Jobs Initiative paragraph on DEIA:

Underserved communities are persons adversely affected by persistent poverty, discrimination, or inequality, including Black, Indigenous, people of color; LGBTQ+ individuals; women; immigrants; veterans; individuals with disabilities; individuals in rural communities; individuals without a college degree; individuals with or recovering from substance use disorder; and justice-involved individuals.

DEIA Response:
While we may agree with the commenter that older workers should be included in the definition of "underserved communities," this entire Appendix is *verbatim* from the Department of Commerce and Department of Labor Good Jobs Principles Fact Sheet and so cannot be changed.