



# Youth and Adult Transition Systems Collaboration

RESEARCH REPORT

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**CAPE - Youth**

CENTER FOR ADVANCING POLICY  
ON EMPLOYMENT FOR YOUTH

# About CAPE-Youth

The Center for Advancing Policy on Employment for Youth's (CAPE-Youth) mission is to advance inclusive policy-oriented research and provide state-focused technical assistance to enhance systems capacity, service delivery, and employment outcomes for youth and young adults with disabilities nationally. CAPE-Youth is a collaboration between the U.S. Department of Labor's Office of Disability Employment Policy, The Council of State Governments, the K. Lisa Yang and Hock E. Tan Institute on Employment and Disability at Cornell University, the Interwork Institute at San Diego State University, and the National Association of Workforce Development Professionals.

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# Abstract

The Workforce Innovation and Opportunity Act (WIOA) places renewed emphasis on meaningful collaboration among the partners of the workforce development system, Vocational Rehabilitation (VR), and other agencies to ensure that “a full range of services is available, regardless of disability or cultural background” (U.S. Department of Education, 2017, p. 4). Researchers commonly recommend interagency collaboration as a practice in transition to adulthood for youth and young adults with disabilities; however, further transition research is needed to develop the evidence base for specific features of successful collaborations. Researchers at The Center for Advancing Policy on Employment for Youth (CAPE-Youth) designed a study to quantify levels of collaboration among agencies, identify common collaboration practices, estimate how collaboration relates to VR agency employment outcomes, and determine the impact of COVID-19 on collaboration. During Phase 1, researchers collected data via a national online survey with 338 participants; in Phase 2 they collected data through focus group interviews across nine states. One key finding is that job role had the greatest impact on collaboration ratings by survey respondents—supervisors tended to rate their collaborations with other agencies higher than frontline practitioners. Key themes emerging from focus group discussions confirmed the Frey et al. (2006) framework including mutuality, trust, and role clarity, as well as information and resource sharing and frequent communication. Another common theme from focus group discussions was youth empowerment. Researchers found there was a lack of partner knowledge about collaboration and the impact of COVID-19 on collaboration in both study phases, helping to confirm findings. The core WIOA partners benefit from the requirements to collaborate, but weaker relationships exist with non-core partners. Lack of knowledge and staff turnover often result in fewer connections among agencies, ultimately negatively impacting youth and young adults with disabilities.

*Keywords:* disability, interagency collaboration, youth, young adults, partner knowledge, communication, transition, systems collaboration

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# Executive Summary

The Workforce Innovation and Opportunity Act (WIOA, 2014) created requirements for collaboration among core workforce partners (e.g., workforce, Vocational Rehabilitation [VR], and education), but challenges remain for effective collaboration at the state and local levels. Challenges exist not only for core WIOA partners, but also *between* workforce and other key systems such as developmental disability, mental health, social security, juvenile justice, child welfare, and postsecondary education. While interagency collaboration is a recommended practice to support transition from high school to adulthood for youth or young adults with disabilities (Y&YAD), we need to identify characteristics that underlie successful collaborations.

The research team conducted a nationwide study to identify the policies, practices, and processes that underlie strong collaborations. This study assessed the relationships of required WIOA partners and other key systems mentioned above. We asked the following research questions (RQ):

**RQ1:** What are existing levels of interagency collaboration among agencies serving transitioning youth and young adults with disabilities?

**RQ2:** What common elements are shared among states exhibiting success in coordinating services across VR, workforce, education, juvenile justice, foster care, social security, developmental disability, mental health, and other systems?

**RQ3:** What agency characteristics and practices underlie interagency collaboration in achieving transition and employment outcomes for Y&YAD?

**RQ4:** How do respondents perceive that their levels of collaboration have been affected by the ongoing COVID-19 pandemic and financial downturn?

**Methods:** The study had two phases, described in more detail in the Methodology section. In Phase 1 we developed a new survey, titled “Youth and Adult Systems Collaboration Survey” (YACS), and asked supervisory and frontline staff from all U.S. states and territories to respond. The YACS combined the “Levels of Collaboration Scale” (LCS) measure (Frey et

al., 2006) with five new subscales: (a) collaboration frequency, (b) partner knowledge, (c) collaboration quality, (d) data use and sharing, and (e) impact of the COVID-19 pandemic. After checking the quality of the responses, the team tested the relationship between survey results and state VR outcomes for employment and skill attainment. In Phase 2 of the study we selected 10 states, one per federal agency administrative region (Office of Management and Budget, 1969), with high scores on the YACS to participate in focus group interviews. The focus group interviews explored barriers to and facilitators of successful collaborations and specific practices for coordinating services across youth-serving agencies.

**Results:** Three hundred thirty-eight people from across the nation filled out the YACS. For the focus group interviews, 64 people from nine states participated. Findings from the focus group interviews confirmed many of these survey results.

**RQ1:** For RQ1, results showed an average nationwide level of collaboration score of 1.90, a score closest to “Cooperation” (2). Agencies collaborating at this level provide information to one another, have somewhat defined roles, and some formal communication, but make decisions separately. These results also showed on average across all levels of agencies that VR, Social Security Administration, and developmental disability agencies collaborated more with each other than with juvenile justice, Title II workforce, and higher education.

**RQ2:** Qualitative content analysis of focus group interviews identified four primary themes: formality, information and resource sharing, communication, and youth empowerment. Results suggested a high *interdependence* between collaboration and objectives of youth self-determination and case coordination. Some of the primary strategies outlined included the development of formal interagency agreements (e.g., Memoranda of Understanding, Data Sharing Agreements) at both state *and* local levels, cross-training opportunities, and braided positions that focus on building understanding and awareness across agencies and increasing informal points of contact, policy efforts to address service gaps in eligibility determinations, referrals, and resource sharing.



**RQ3:** Researchers ran a simple correlation analysis between the YACS and VR outcomes to explore the relationship between collaboration features and transition/employment outcomes for Y&YAD. Collaboration correlated moderately with employment but not with skill attainment.

**RQ4:** Four out of every five survey respondents indicated they collaborated differently as a result of the pandemic. In the future, agencies will continue to offer hybrid services and use more online meetings with collaborators.

**Policy recommendations:**

- Implement formal frameworks for communication with other agencies at both the state and local level.
- Expand One Stop Centers to include non-core programs to address collaboration gaps among VR, workforce, and agencies that are more peripheral to service networks (e.g., juvenile justice).
- Cross-train agencies on one another's service offerings, application processes, and desired outcomes.

# Common Terms and Acronyms Used in This Report

## **Focus Group Interviews**

Focus group interviews consist of virtual discussions facilitated by a researcher to solicit responses on key questions about the topic and to gain an understanding of the data collected in Phase 1. These are small group discussions during which participants openly and verbally respond to questions related to the topic.

## **Interagency Collaboration**

In this context, we are referring to collaboration among Vocational Rehabilitation (VR), education, workforce, and other key systems such as developmental disability, mental health, social security, juvenile justice, child welfare, and postsecondary education.

## **Vocational Rehabilitation (VR)**

VR is a federally-state funded state grant program administered by the U.S. Department of Education (USDOE, n.d.), Rehabilitation Services Administration (RSA) and authorized by the Rehabilitation Act of 1973 (Rehabilitation Act), as amended by Title IV of the Workforce Innovation and Opportunity Act (WIOA) of 2014. This program provides grants to assist States in operating statewide VR programs, each of which is an integral part of a statewide workforce development system. State VR programs provide VR services for individuals with disabilities, consistent with their strengths, resources, priorities, concerns, abilities, capabilities, interests, and informed choice, so that they may prepare for and engage in competitive integrated employment (CIE) or supported employment and achieve economic self-sufficiency.

## **Youth and Young Adults with Disabilities (Y&YAD)**

Y&YAD includes those youth between the ages of 14-24 who have a disability. The age range aligns with the age range for youth in WIOA (2014).

# Introduction

## Research Purpose

The Workforce Innovation and Opportunity Act (WIOA, 2014) places renewed emphasis on meaningful collaboration among the workforce development system, Vocational Rehabilitation (VR), and other agencies to ensure that “a full range of services is available, regardless of disability or cultural background” (U.S. Department of Education, 2017). In light of this renewed focus, states need information, resources, and technical assistance to establish career pathways and maximize financial self-sufficiency for youth and young adults with disabilities (Y&YAD). Y&YAD currently experience poor outcomes in successful transition from youth systems into adulthood, achieving lower employment, education, and community participation outcomes when compared to their peers (Mazzotti & Rowe, 2015). Despite legislative mandates, major challenges remain for effective collaboration at the state and local levels, and collaboration is difficult to measure and operationalize in furthering specific policy recommendations (Oertle et al., 2020; Fabian, 2016). Challenges exist in coordinating workforce development with VR, education, social security, juvenile justice, foster care, developmental disability agencies, mental health systems, and other community-based agencies, including faith-based organizations, school re-engagement programs, or mentoring programs likely to serve youth with one of WIOA’s defined “barriers to employment.” Youth exiting these systems are more likely to experience service gaps due to school dropout (Hook & Courtney, 2011; Kirk & Sampson, 2013), aging out of particular systems or services (Geenen & Powers, 2007), homelessness (Fowler et al., 2009), and systems avoidance.

It is important to acknowledge that although interagency collaboration in transition-to-adulthood is a commonly recommended practice, more research is needed to develop a firmer empirical basis for recommending collaboration, including whether collaboration leads to improved outcomes, and to identify the specific agency and interagency policies and practices associated with those outcomes. In the area of transition to adulthood for Y&YAD, interagency collaboration entails both formal and informal relationships between youth and adult systems in which communications, information, and resource sharing help achieve joint transition goals and service coordination (Noonan et al., 2008; Test et al., 2009). Formal

relationships include specific written policies, practices, or interagency agreements, while informal relationships include *ad hoc* or situational collaborations between agencies and individuals. Because of the challenges in effectively and validly measuring collaboration as a construct, different theoretical and operational definitions focus alternatively on synergistic elements like leadership, trust, and mutuality (Thomson et al., 2007; Weis et al., 2002;). Other definitions include more instrumental elements such as frequency of communication, resource sharing, formality, shared decision-making, and role clarity (Frey et al., 2006; Noonan et al., 2012; Povenmire-Kirk et al., 2015). The assumptions and constructs that underlie collaboration as a best practice still need refinement. For example, Fabian et al. (2016) utilized two different measures of collaboration among interagency teams, finding that instrumental or task-oriented perceptions of collaboration had a positive effect on VR outcomes, while perceptions of team “synergy” had slight, negative effects. Lack of agreement about how to define interagency collaboration is a potential weakness in a number of human services fields and raises concerns that poorly calibrated approaches to collaboration can have undesired effects, like diffusion of responsibility (Longoria, 2005). In collaboration research more broadly, a recent systematic review revealed a tendency to focus more on antecedents and outcomes of collaboration, and less on the processes exhibited in strong collaborations (Gazley & Guo, 2017). Even task-oriented measures of collaboration often lack granular detail about effective interventions in practice, such as what level of interagency communication is “frequent” or how best to structure formal collaborative agreements (such as memoranda of understanding [MOU]/agreement [MOA]) and resource sharing practices. This is a barrier to making specific, evidence-based recommendations on collaboration. Consequently, when taken as a whole, the body of research leaves room for the exploration of factors that can better define collaboration.

To explore this in more depth, we designed and carried out a mixed methods research study to identify factors and processes of strong collaborations. The study sought to assess the strength of relationships of required WIOA partners (e.g., VR, workforce, and education), as well as other essential systems like developmental disability, mental health, social security, juvenile justice, and foster care. The study consisted of two phases. Phase 1 involved a survey of youth serving professionals in all 50 U.S. states, Washington D.C., Puerto

Rico, and other territories using a pre-validated “Levels of Collaboration” (LCS) measure (Frey et al., 2006), as well as additional Likert-type questions developed by the research staff to identify states with successful collaborations. Additionally, we merged Youth and Adult Systems Collaboration Survey (YACS) data with RSA-911 data on VR outcomes. The RSA-911 consists of VR case management data submitted quarterly by each state to the Rehabilitation Services Administration (RSA). Phase 2 of the study built upon the results of the survey data from Phase 1, selecting 10 states with successful collaborations to participate in a series of focus group interviews. These focus group interviews engaged supervisors and frontline practitioners from state-level agencies in conversation to explore the practices and processes that embody successful collaborations, as well as challenges and strategies arising from the Coronavirus (COVID-19) pandemic. Phase 2 of this project explored state-level collaborations, from the perspective of supervisor-level feedback, as well as local-level collaborations with community-based organizations, and direct service providers from various agencies.

To date, there is not a state-level comparison of interagency collaboration practices and processes for serving Y&YAD in the transition to adulthood.

## Research Questions

To articulate the study’s objectives, we developed four research questions (RQ). To answer RQ1 and RQ3, we utilized the LCS and an additional new survey in Phase 1. We answered RQ2 with qualitative study results from Phase 2. RQ4 required use of results from both Phase 1 and 2 of the study. After outlining the research questions, we provide a discussion of the approaches to data collection for the collaboration survey and qualitative focus group interviews.

- **RQ1:** What are existing levels of interagency collaboration among agencies serving transitioning youth and young adults with disabilities, across U.S. states and territories?
- **RQ2:** What common elements are shared among states exhibiting success in coordinating services across VR, workforce, education, juvenile justice, foster care, social security, developmental disability, mental health, and other systems?

- **RQ3:** What agency characteristics and practices underlie interagency collaboration in achieving transition and employment outcomes for youth with disabilities?
- **RQ4:** How do respondents perceive that their levels of collaboration have been affected by the ongoing COVID-19 pandemic and financial downturn?

# Methodology

## Participants

### *Phase 1 - National online survey*

Four hundred sixty-nine people consented to participate in the online survey collection. Of the 469 people, 131 (27.93 percent) provided responses only to demographic questions. The remaining 338 individuals (72.07 percent) responded to the demographic questions and at least one collaboration question; therefore, those 338 were included in the analysis. We collected responses from people in 50 states and three territories (Washington, D.C., Puerto Rico, and Virgin Islands).

By agency type, Vocational Rehabilitation (VR) respondents comprised the largest group of participants. There were no responses from people working in adult justice systems. There were only six responses from those working for Title II workforce agencies. See Table 1 for the full list of agency types, counts, and percentages. See Appendix A Table A1 for this list disaggregated by state and territory; Table A2 contains counts for original education categories and the recoded values.

By job role, supervisors and/or program managers made up the largest group (n = 134; 39.64 percent). Eighty-two people (24.26 percent) selected “other” for job role. Other responses ranged from policy lead to consultant to advocate, none providing enough information to recategorize into one of the values listed in Table 1 or to create a new, meaningful category.

The survey asked participants to note all of the geographic settings in which their agency delivered services. Response options included urban, suburban, and rural. We fielded the survey to those working at both state agencies and non-state agencies. Nearly half (46.15 percent) of respondent agencies provided services in all settings (see Table 1). The survey did not ask if the respondent worked for a state agency. Based on these responses, most responses for services in all settings were likely individuals working for state agencies.

**Table 1****Survey Responses by Agency Type**

	<b>n</b>	<b>%</b>
<b>Total</b>	338	100
<b>Agency Type</b>		
Vocational Rehabilitation (VR)	98	28.99
Juvenile Justice (JJ)	13	3.85
Adult Justice (AJ)	0	0
Child Welfare (CW)	23	6.8
Title I Workforce (WF I)	48	14.2
Title II Workforce (WF II)	6	1.78
K-12/CTE Education (ED)	41	12.13
Social Security (SS)	10	2.96
Developmental Disabilities (DD)	32	9.47
Mental Health (MH)	14	4.14
Higher Education (H. ED)	12	3.55
Other	41	12.13
<b>Role</b>		
Supervisor	134	39.64
Frontline	69	20.41
Both	51	15.09
Other	82	24.26
No Answer	2	0.59
<b>Service Settings</b>		
Urban alone	54	15.98
Suburban alone	34	10.06
Rural alone	52	15.38



### Survey Responses by Agency Type

	n	%
Urban and suburban	18	5.33
Urban and rural	9	2.66
Suburban and rural	15	4.44
All settings	156	46.15

*Note:* Participants who only responded to the demographics questions in the survey were omitted (n = 131). Abbreviations for each agency type have been included in this table to support interpretation of tables in the Appendix. For setting, participants could select more than one; 140 served in one setting, 42 served in two settings, and 156 served in all three settings.

Participants reported a wide range of years of experience in their field and agency (see Table 2). The average number of years working in their field was 16.12 years (S.D. = 10.79). On average, they had worked 10.10 years (S.D. = 9.09) at their agency.

**Table 2**

#### Total Years of Experience (n = 338)

	M	SD	Median	Minimum	Maximum
In Field	16.12	10.79	14	0	50
In Agency	10.10	9.09	7	0	60

*Note:* Pearson's  $r = .57$  (Spearman's  $r = .56$ ).

The majority of participants identified as nondisabled (76.04 percent). Most were male (76.04 percent), White (79.88 percent), and non-Hispanic (90.53 percent). See Table 3 for counts by demographic characteristic categories.

**Table 3****Demographics for Survey Participants**

	<b>n</b>	<b>%</b>
<b>Total</b>	338	100
<b>Gender</b>		
Male	257	76.04
Female	75	22.19
Non-binary	2	0.59
Self-describe	0	0.00
Prefer not to say	4	1.18
<b>Disability status</b>		
Yes	62	18.34
No	257	76.04
Self-describe	2	0.59
Prefer not to say	17	5.03
<b>Race</b>		
African American	39	11.54
American Indian/Alaskan Native	3	0.89
Asian	6	1.78
Native Hawaiian/Pacific Islander	4	1.18
White	270	79.88
Prefer to self-describe	8	2.37
Prefer not to say	15	4.44
<b>Hispanic/Latino ethnicity</b>		
Yes	19	5.62
No	306	90.53
Self-describe	3	0.89
Prefer not to say	8	2.37

*Note:* The total percentage for race exceeds 100% because participants were asked to check all that apply for that question.

## Phase 2 - Focus group interviews

Phase 2 involved the use of virtual focus group interviews with both frontline service providers and supervisory staff in youth-serving agencies (VR, workforce, social security, education, mental health, developmental disability, juvenile justice, child welfare, etc.). The research team held 15 virtual groups during the summer and fall of 2022. Participants included agency supervisors and frontline staff ( $n = 63$ ) from nine different states. These included Arizona, Massachusetts, Michigan, Missouri, New Jersey, North Carolina, Oklahoma, Utah, and Virginia. The highest number of focus groups were held with participants from Virginia (4); two focus groups were held with participants from Missouri, North Carolina, and Oklahoma; one focus group was held for each of the remaining states. Counts by state are provided in Table 4.

**Table 4**

**Focus Group Interview Participant Counts by State**

State	Participants	Groups
Arizona	8	1
Massachusetts	4	1
Michigan	4	1
Missouri	9	2
New Jersey	5	1
North Carolina	7	2
Oklahoma	5	2
Utah	5	1
Virginia	16	4

Data from a pre-focus group interview online interest form, attendance data, and facilitator notes show that staff from VR offices were the most common participant group (41.3 percent,  $n = 26$ ), followed by child welfare and/or juvenile justice (12.7 percent,  $n = 8$ ); K-12 education and career and technical education (12.7 percent,  $n = 8$ ); workforce (7.9

percent,  $n = 5$ ); mental health (7.9 percent,  $n = 5$ ); developmental disabilities (6.3 percent,  $n = 4$ ); social security (4.8 percent,  $n = 3$ ); higher education (3.2 percent,  $n = 2$ ); and independent living (3.2 percent,  $n = 2$ ). The makeup of focus group interview participants was 60.3 percent supervisory staff ( $n = 38$ ), 31.7 percent direct service providers ( $n = 20$ ), and 7.9 percent who identified their role as “both” ( $n = 5$ ).

## Measures

### *Phase 1 - National online survey*

The national online survey, Youth and Adult Systems Collaboration Survey (YACS), combined the Levels of Collaboration Scale (LCS) (Frey et al., 2006) with six new subscales developed for this research study (see Appendix A Table A3). The six subscales asked about frequency of collaboration, partner knowledge, quality of collaboration, data use, confidence in serving different vulnerable populations, and the impact of COVID-19 on collaboration. The collaboration work by Greenbaum and Dedrick (n.d.), which focuses on instrumental elements of collaboration, influenced the development of frequency of collaboration, partner knowledge, quality of collaboration, and data use subscales. We developed a new set of questions focusing on confidence in serving 12 different youth populations to determine how confident participants were that their agency could serve those youth. For COVID-19 impact, the survey asked participants if the COVID-19 pandemic had a negative or positive impact on collaboration and provided respondents with two additional open-ended questions on which they could elaborate on the COVID-19 responses. Lastly, the survey contained one question about whether their agency had data exchange agreements in place with partner agencies. If they answered “Yes” a prompt appeared to specify which agencies.

**Levels of Collaboration.** The LCS is a one-question survey that asks repeatedly about each partner in a collaboration, but not their own agency or role in the collaboration. This item asked participants the degree to which they interact with their partners, responding on a scale ranging from zero to six with each level describing a collection of collaboration attributes as listed in Figure 1. To some extent, the LCS combines elements of frequency, partner knowledge, and quality.

**Figure 1**

**Definitions for the Level of Collaboration Scale**

<b>Value</b>	<b>Level</b>	<b>Definition</b>
0	No Interaction	No awareness or contact
1	Networking	Aware of each organization; loosely defined roles; little communication; independent decision making
2	Cooperation	Provide information to each other; roles somewhat defined; formal communication; independent decision making
3	Coordination	Shared information, resources; defined roles; frequent communication; some shared decision making
4	Coalition	Share ideas, resources; frequent, prioritized communication; all members have vote in decision making
5	Collaboration	One system; frequent, trusting communication; consensus

*Note:* From Frey et al. (2006).

**Rehabilitation Services Administration 911.** The Rehabilitation Services Administration (RSA) data set of case management records is referred to as the RSA-911. State VR agencies submit records quarterly in compliance with the relevant policy directive. Annually, the data becomes available by request for the most recent program year (PY). For this study, we used PY2020 (7/1/2020 – 6/30/2021) records to calculate employment rates and measurable skill gains by state and territory.

## Phase 2 - Focus group interviews

We developed ten questions, some with multiple parts, for the focus group interviews. During scheduling, we mixed focus groups by job roles, comprising supervisors, agency directors, and frontline staff. Because of this mix of attendees, the focus group protocol used a single set of questions that were applicable across different job roles, rather than personalized to the job role. See Figure 2 for the questions.

**Figure 2**

### Focus Group Interview Questions

Item	Question
1	Does your agency participate in interagency collaboration? What does that look like?
2	Prior to the COVID-19 pandemic, to what extent did your agency's policies and practices reflect the goals and objectives of interagency collaboration?
3	Since the start of the COVID-19 pandemic, how have your agency's policies and practices encouraged interagency coordination of youth transition services? How have your agency's policies and practices inhibited interagency coordination of youth transition services?
4	To what extent do your agency's staff training efforts include interagency coordination? Have there been updates to training efforts to help staff collaborate during the COVID-19 pandemic?
5	How has the COVID-19 pandemic affected interagency collaborations in serving transition-age youth with disabilities?
6	With regard to youth with disabilities receiving services from multiple agencies, in what ways are you able to collaborate with your colleagues at other agencies to best serve these populations?

## Focus Group Interview Questions

Item	Question
7	With regard to youth receiving services from multiple agencies, do you have formal interagency agreements in place for providing service coordination to meet the needs of these populations (e.g., memoranda of understanding, memoranda of agreement)?
8	With regard to youth and families receiving services from multiple agencies, how do you share resources and information with other agencies to support service coordination and service delivery efforts?
9	What prevents full collaboration of services across systems in your state? What are some of the barriers? What mechanisms are in place to address these barriers?
10	What, if any, successful innovations in interagency coordination have been utilized in your state? How recently were these implemented? What changes, if any, have these innovations brought about?

## Research Design

To explore this in more depth, the research team designed a mixed methods study to identify factors and processes of strong collaborations. Researchers assessed the strength of relationships of required WIOA partners (e.g., VR, workforce, and education), as well as other essential systems like developmental disability and mental health agencies, juvenile justice, and foster care. Recruitment and consent materials for both phases are in Appendix B.

### *Phase 1 - National online survey*

Phase 1 involved a survey of youth serving professionals in all 50 U.S. states, Washington D.C., Puerto Rico, American Samoa, Guam, Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands using a pre-validated LCS measure (Frey et al., 2006), as well as the new Likert-type questions (see Measures), to better understand the

instrumental elements of collaboration. We then merged survey data with state-level RSA-911 data on VR outcomes of employment and Measurable Skill Gains (MSG).

## *Phase 2 - Focus group interviews*

Focus group interviews are a widely used data collection technique across a wide range of academic and applied research areas; they provide a quick, low-cost means of obtaining rich data from selected groups in the target population for programmatic purposes (Bertrand, Brown, & Ward, 1992; Morgan, 1996). For the present purposes, focus group interviews are an ideal exploratory research approach, preferable to more proscriptive data collection methods because they allow the expression of participants' priorities while still adhering to a questioning route that maps back to research questions. Thus, the goal of the qualitative (Phase 2) study was to provide more nuanced, contextual data to supplement the findings from the quantitative (Phase 1) study.

Prior to the focus group interviews, we recruited potential participants using a short online "Interest Form," developed in Qualtrics, that described the study, asked participants for prior consent to participate, and collected demographic and agency role data to help adhere to study inclusion/exclusion criteria, as well as to provide high-level information about focus group interview participants. The ideal number of participants for groups of this type is usually between six and 10 people, and the literature recommends over-recruiting by 10-25 percent to ensure adequate sizes (Rabiee, 2004). Groups falling in this range are considered large enough to obtain a variety of perspectives but small enough to be manageable (Rabiee, 2004). Guest et al. (2017) suggest that the number of groups required to reach 90 percent saturation on themes is 4.3. However, because we were particularly interested in exploring thematic differences across diverse industries and job sectors, we aimed for a total of approximately 10 groups for the two participant groups.

## **Analysis Plan**

### *Phase 1 - National online survey*

**Preliminary Analyses.** Prior to using any of the data for analysis, we took steps to address any missing data, data preparation, and confirmatory factor analysis. We describe



these steps in the sections below followed by a description of analysis plans for RQ1, RQ3, and RQ4 (the other research questions were answered with Phase 2).

**Missing Data.** First, we examined and cleaned missing data. As noted in the participant section, 131 participants only provided demographic information and answered no collaboration questions. The percentages of respondents by demographic did not differ between the respondents and non-respondents on job role, sex, ethnicity, or disability (see Appendix A Table A4). The group did differ on identified race values. In the response group, 253 (53.94 percent) identified as White and no other race, while in the no response group only 25 (5.33 percent) identified as White. To handle missing data, the research team selected full information maximum likelihood (FIML), a method that enables all responses to be retained for analysis (Enders, 2010).

**Data Preparation.** Prior to applying any analysis methods, we prepared the data for analysis using R 4.2.1 (R Core Team, 2022). Of particular note, due to the large percentages for male (76.04 percent) and White (79.88 percent) and the small values for self-describe and similar categories on each variable, we created dummy variables, called *female/other* for gender and *people of color* for non-White and Hispanic/Latino participants.

**Confirmatory factor analysis.** After examining missing data, we examined the quality of the new survey before answering RQ1, RQ3, and RQ4. Confirmatory factor analysis (CFA) is a commonly used method to explore internal construct validity (DiStefano & Hess, 2005). We used this initial step in the analysis to validate the YACS instrument with regard to new survey items created by the research team. We examined five of the six subscales (i.e., frequency of collaboration [FREQ], partner knowledge [KNOW], quality of collaboration [QUAL], data use [DATA], and COVID-19 impact to collaboration [COVID]) using fixed factor scaling in Mplus 8.6 (Muthén & Muthén, 2022). We first analyzed each factor individually before adding to a model with all factors. We then added the LCS as a single-item factor to create a model with six factors. We excluded the questions about confidence in serving different populations from this analysis because they were not about collaboration but have added descriptive statistics from these question items to Appendix A (see Table A3). With a sample size of 338, we estimated the single factor models with robust maximum likelihood as ordered categorical

variables to examine the factor loadings. We then estimated the single factor models with maximum likelihood (ML) for FIML and bias-corrected bootstrapping with 10,000 replications to obtain empirical confidence intervals and standard errors and model fit statistics (see Appendix A Table A5). We also applied ML estimation with bootstrapping to the six-factor model. Bootstrapping was appropriate because, although we could account for state and agency type, it was unknown whether the responses within states and agency type were independent or not.

We examined both item quality and overall model fit. First, we analyzed the factor loadings for each hypothesized latent variable. Optimally, standardized factor loadings ( $\lambda$ ) should exceed 0.70 so that more than 50 percent of the variance in responses is shared with the other questions. For this study, we set the cut-off  $\lambda$  to 0.50, as many items developed for this study have not yet been tested. Second, we evaluated overall model fit using multiple measures. Root mean square error of approximation (RMSEA) should be less than 0.08 and the comparative fit index (CFI) and non-normed fit index (NNFI) should exceed 0.90 to be considered acceptable; for good fit RMSEA should be 0.05, CFI should be .95 and NNFI should be 0.95. RMSEA values for single factor models will always exceed the acceptable value of 0.08 (Kenny et al., 2015), so this fit statistic was only examined in the six-factor model. The model  $\chi^2$  should be non-significant though this value can be impacted by sample size. Standardized root mean-square residual (SRMR) should be less than 0.05, for which there is less evidence for the use of this cut-off. Lastly, once we combined the factors into a single model, we examined standardized residuals and modification indices to identify areas of strain on the item level.

**Structural equation modeling.** We converted the CFA model into a structural equation model (SEM) to obtain estimates for the model that would answer RQ1, RQ3, and RQ4. Because of constraints on the sample size and number of estimates, we did not test all covariates in the model at once. We estimated all models with Mplus 8.6 (Muthén & Muthén, 2022). We used multilevel SEMs estimates to test the VR outcomes of MSG and percentage of CIE, a required method because these outcomes were at the state level rather than individual level. We used ML estimation with 10,000 bias-corrected bootstrap replications to obtain empirical standard estimates and confidence intervals. Alpha was set to 0.05.

**Social network analysis.** For this study, the social network analysis was primarily descriptive and used the data from the LCS (Frey et al., 2006) question. We aggregated responses at the agency level to generate an adjacency matrix of collaboration ratings for the nation and each state. Using aggregate data, we created network maps from the adjacency matrices for the nation and for each state that later participated in the focus group interviews. Lastly, we created a figure to illustrate the difference in how an agency rated other types versus how they were rated.

### *Phase 2 - Focus group interviews*

The research team performed data analysis using qualitative content analysis methods within the Dedoose 4.12 qualitative coding software. A researcher first read the transcripts and session notes, applying high-level, *a priori* “rough codes” based on the questions asked and the study objectives. Next, the researcher used an inductive category application approach to identify commonalities within the texts and between focus groups. The coding process involved the researcher’s understanding of text content and the application of codes to meaning units. Coding by units of meaning refers to coding words, sentences, paragraphs, or pages that contain meaning or perspective rather than coding by a given parameter of the text (Campbell et al., 2013).

As a starting point, we developed *a priori* codes based on the constructs in Frey, et al.’s (2006) “Levels of Collaboration” scale as an initial framework for analysis. These included broadly: (a) formality of connection; (b) information and resource sharing; and (c) communication. Prior to qualitative coding, we developed additional *a priori* codes based on constructs present in the study protocol and objectives of the mixed methods study. These included: (d) youth empowerment and (e) effect of COVID-19 pandemic. During analysis, we primarily used *a priori* codes to categorize sub-themes and guide qualitative analysis. We then conducted line-by-line coding using Dedoose 4.12 qualitative coding software, identifying additional sub-themes as appropriate. We identified sub-themes through an inductive category application approach to identify commonalities within the texts and among focus group interviews (Mayring, 2004).

# Results

Prior to answering the research questions, we evaluated the survey to determine the quality of the measure. Two of the original items did not have standardized factors that exceeded 0.50:

- a. "Q12\_1. Identifying populations of youth who are not being served" ( $\lambda = 0.41$ ) in the knowledge about partners subscale, and
- b. "Q17\_3. My agency has had to develop different practices for collaborating with partner agencies during the COVID-19 pandemic" ( $\lambda = -0.06$ ) on the COVID subscale.

Q12\_1 moderately correlated with all other knowledge questions ( $r = .35 - .42$ ), and Q17\_3 was weakly correlated with the other COVID questions ( $r = -.07 - .14$ ). These correlations corresponded to weak factor loadings leaving loadings below the acceptable threshold of  $\lambda = 0.50$ . We therefore removed these items from further analyses.

After combining all 5 factors of frequency, knowledge, quality, data, and COVID plus Levels of Collaboration Scale (LCS) as a factor with 1 item into a single model, the standardized factor loadings for the 21 items exceeded 0.50, except for one item on data use: "Q16\_1. Use data to identify shared program participants for administrative purposes only" ( $\lambda = 0.46$ ). We therefore removed this item. Table 5 contains the standardized factor loadings with empirical standard errors for items used in the rest of Phase 1 analysis. We considered overall model fit good with  $\chi^2(176) = 356.98$ ,  $p < .001$ ; root mean square error of approximation (RMSEA) = 0.055, 90% confidence interval (CI) [0.047, 0.063]; comparative fit index (CFI) = .951; non-normed fit index (NNFI) = 0.941; standardized root mean square residual (SRMR) = 0.054. The SRMR exceeded the cut-off 0.05, but examination of the residuals between the observed and estimated correlations among the items ranged between the absolute values of 0.00 and 0.18, well below a problematic value of  $|\pm 2.00|$ . Inspection of modification indices identified improved model fit if Q12\_2 and Q12\_3 had correlated residuals, as well as Q12\_4 and Q12\_5. All of these items belong to the knowledge of partner subscale, new questions developed for this study. With no theoretical reason or further data with this measure, we elected not to add correlated residuals to the model at this time. Based on these results, the research team determined that the model fit well to the data, and analysis began.

**Table 5****Standardized Factor Loading Estimates, Standard Errors, Wald Statistic, and Probability**

<b>Item</b>	<b>Item Text</b>	<b><math>\lambda</math></b>	<b>S.E.</b>	<b>Wald</b>	<b><i>p</i></b>
<b>Frequency</b>					
Q11_1	Refer participants to collaborators	0.70	0.06	12.58	< .001
Q11_2	Invite collaborators to participant meetings	0.71	0.05	14.15	< .001
Q11_3	Hold regular systems of care meetings where multiple participants are discussed	0.67	0.04	16.09	< .001
Q11_4	Coordinate services between agencies	0.78	0.04	21.99	< .001
Q11_5	Seek out partners based on your participants' needs	0.72	0.05	15.37	< .001
<b>Knowledge</b>					
Q12_2	Understanding other agencies' eligibility criteria	0.89	0.02	54.03	< .001
Q12_3	Understanding other agencies' policies and procedures	0.94	0.01	74.93	< .001
Q12_4	Understanding other agencies' definitions of successful outcomes	0.92	0.01	65.44	< .001
Q12_5	Understanding shared cross-agency performance measures	0.83	0.03	29.66	< .001
<b>Quality</b>					
Q13_1	Meetings with partner agencies accomplish what is necessary for the collaboration to function well	0.62	0.05	11.42	< .001

**Standardized Factor Loading Estimates, Standard Errors, Wald Statistic, and Probability**

<b>Item</b>	<b>Item Text</b>	<b><math>\lambda</math></b>	<b>S.E.</b>	<b>Wald</b>	<b><i>p</i></b>
Q13_2	Partner agencies (including my agency) agree about the goals of the collaboration	0.74	0.04	20.65	< .001
Q13_3	My agency's tasks in the collaboration are well coordinated with those of partner agencies	0.84	0.02	37.06	< .001
Q13_4	Partner agencies (including my agency) have combined and used each other's resources so all partners benefit from collaborating	0.83	0.03	32.53	< .001
Q13_5	I feel that what my agency brings to collaborations is appreciated and respected by partner agencies	0.81	0.03	28.88	< .001
Q13_6	Partner agencies (including my agency) work through differences to arrive at win-win solutions	0.73	0.04	18.4	< .001
<b>Data Use</b>					
Q16_2	Use data to coordinate the planning and delivery of employment services (e.g., sharing aggregate student counts)	0.81	0.04	18.87	< .001
Q16_3	Using data to meet state and federal program reporting requirements (e.g., WIOA)	0.81	0.03	26.6	< .001

**Standardized Factor Loading Estimates, Standard Errors, Wald Statistic, and Probability**

Item	Item Text	$\lambda$	S.E.	Wald	<i>p</i>
<b>COVID</b>					
Q17_1	The COVID-19 pandemic has improved my agency's level of collaboration with partner agencies	0.74	0.06	12.98	< .001
Q17_2	The COVID-19 pandemic has negatively affected my agency's level of collaboration with partner agencies (reversed)	0.93	0.05	20.58	< .001
Q17_4	The COVID-19 pandemic has affected my agency's ability to collaborate with partner agencies as required by the WIOA State Plan (reversed)	0.68	0.05	13.58	< .001
<b>LCS</b>					
LCS average*	Using the scale provided, please indicate the extent to which you currently interact with each partner	1.00	0.00	--	--

*Note:* \*Because LCS is included in the CFA model as one item created by calculating an average for the respondent, there is no factor loading estimate.

One additional question, “Does your agency have data exchange agreements with partner agencies?” was not part of any subscales, nor was it related strongly enough to become part of the data use subscale. Just over half of the participants ( $n = 178$ , 52.67 percent) answered “Yes” to this question. As seen in Appendix A Table A6, the most frequently mentioned Memoranda of Understanding (MOU) agencies were education ( $n = 63$ ) followed by VR ( $n = 59$ ). Some participants ( $n = 6$ ) indicated that they had data exchange agreements with all of their Workforce Innovation and Opportunity Act (WIOA) partners. Frontline staff and those who were both supervisors and frontline staff mentioned release of information

forms about individual clients. Supervisors wrote about sharing of aggregated data, but nothing client specific. Some participants indicated they did not know ( $n = 12$ ) or there were no data sharing agreements ( $n = 8$ ). Some of the less common agency types for MOUs were the state national guard, chamber of commerce, department of motor vehicles, local housing authority, and faith groups.

### **RQ1: What are existing levels of interagency collaboration among agencies serving transitioning youth and young adults with disabilities, across U.S. states and territories, and how do VR characteristics relate to collaboration?**

With RQ1, the collected data helped answer how “levels of collaboration” differed by agency and by state, as well as how collaboration levels and practices differ among state VR systems. As seen in Table 6, latent variable means for each collaboration subscale exceeded the middle value on each subscale, except for the LCS, meaning that, as a group, the participants provided positive ratings about collaboration when it came to frequency, knowledge, quality, and data. The LCS, with an average score of 1.90 and a median of 1.82 that is interpreted to mean cooperation (2) on the scale from networking (1) to collaboration (5), means that on average actual collaboration was not as high in the context of thinking about actual partners. The subscales were moderately to strongly correlated with the strongest correlation between quality and data ( $r = .60$ ). The weakest correlation was between the LCS and COVID ( $r = .20$ ). The moderate correlations indicated that the subscales appeared to be measuring distinct constructs.

**Table 6**

**Latent Means, Standard Deviations, and Correlations for Collaboration Subscales**

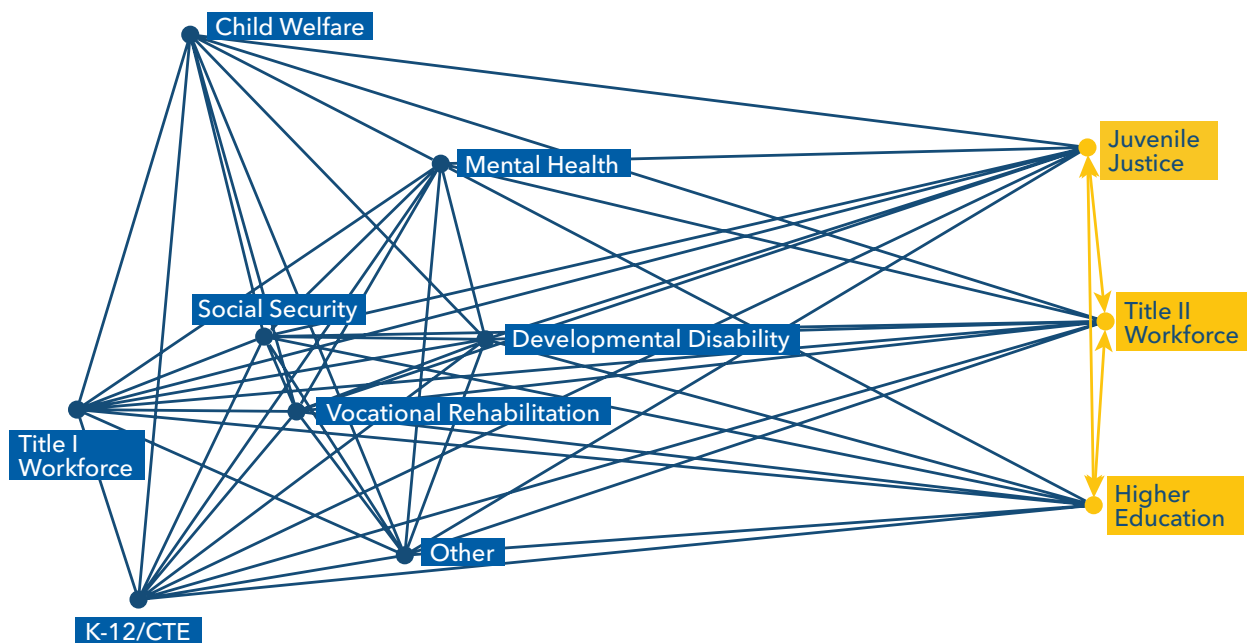
	Range	M	SD	LCS	FREQ	KNOW	QUAL	DATA	COVID
1. LCS	0-5	1.91	0.97	–					
2. FREQ	1-6	4.88	0.74	.56	–				
3. KNOW	1-10	6.58	1.98	.37	.36	–			
4. QUAL	1-5	4.09	0.49	.42	.45	.39	–		
5. DATA	1-5	3.70	0.80	.28	.30	.31	.60	–	
6. COVID	1-5	3.01	0.78	.20	.21	.22	.29	.30	–

*Note:* All correlations were statistically significant at  $p < .05$ .



We then aggregated the LCS responses to the national level and for each state selected for focus group interviews (see Appendix A Table A7). Figure 3 is a national network map indicating how close or far the collaborative relationship is among agencies. We found VR, social security, and developmental disability agencies were at the center, indicating the central role they play and how closely they collaborate. Juvenile justice, workforce Title II, and higher education were separate from the other agencies for lower collaboration, but with higher levels with one another.

**Figure 3**



*Note:* Agencies highlighted in yellow represent the agencies with the lowest levels of collaboration with other groups in the network map.

We then conducted one additional set of analyses to test the effects of respondent characteristics on collaboration ratings, both job characteristics (e.g., role, experience, agency) and personal characteristics/demographics (e.g., race, disability, and gender). Because of sample size constraints, we tested these variables in three separate models. Agency type had effects primarily on collaboration levels (see Appendix A Table A8). Because the largest group of participants was from VR agencies, we compared VR responses to all other agency types.

Participants from K-12 and Career and Technical Education (CTE) ( $\beta = -1.00$ , S.E. = 0.16,  $p < .001$ ), developmental disabilities agencies ( $\beta = 0.53$ , S.E. = 0.23,  $p = .023$ ), and other agencies ( $\beta = 0.44$ , S.E. = 0.13,  $p = .023$ ) all rated levels lower than VR agency participants. The only other differences were from other agency participants on frequency ( $\beta = -0.34$ , S.E. = 0.17,  $p = .048$ ) and COVID-19 impact ( $\beta = 0.35$ , S.E. = 0.17,  $p = .040$ ).

For job role, we observed differences when supervisors were compared to frontline staff and to participants who were both frontline staff and supervisors (see Table 7). Frontline staff rated partner knowledge, COVID-19 impacts, and collaboration levels lower than supervisors. Those who are both frontline and supervisors rated partner knowledge, quality, and data use higher than those who identified only as supervisors. Lastly, participants in other roles rated COVID-19 impact higher than supervisors.

**Table 7**

<b>Effects of Job Role on Collaboration Ratings</b>				
	$\beta$	SE	Wald	p
<b>Frequency</b>				
Frontline	-0.20	0.12	-1.60	.109
Frontline and Supervisor	0.01	0.11	0.10	.924
Other Role	-0.01	0.12	-0.05	.962
<b>Knowledge</b>				
Frontline	-0.97**	0.30	-3.24	.001
Frontline and Supervisor	0.82*	0.34	2.45	.014
Other Role	0.11	0.28	0.40	.686
<b>Quality</b>				
Frontline	-0.01	0.08	-0.13	.897
Frontline and Supervisor	0.18*	0.09	2.05	.040
Other Role	0.12	0.08	1.55	.122

### Effects of Job Role on Collaboration Ratings

	$\beta$	SE	Wald	p
<b>Data</b>				
Frontline	0.07	0.15	0.47	.639
Frontline and Supervisor	0.49**	0.15	3.27	.001
Other Role	0.18	0.15	1.20	.228
<b>COVID</b>				
Frontline	-0.38**	0.13	-3.00	.003
Frontline and Supervisor	0.01	0.13	0.09	.929
Other Role	0.27*	0.14	1.98	.048
<b>Levels</b>				
Frontline	-0.33*	0.13	-2.52	.012
Frontline and Supervisor	0.03	0.17	0.18	.861
Other Role	0.17	0.15	1.10	.273

Note: \*p < .05; and \*\*p < .01

People of color status and gender had little impact, and disability status had no impact on collaboration. Those who identified as female or other responded lower than males on data use ( $\beta = -0.30$ , S.E. = 0.13,  $p = .021$ ). Those who identified as a person of color rated collaboration levels higher ( $\beta = 0.31$ , S.E. = 0.13,  $p = .021$ ) than their peers who identified as non-Hispanic White. See Appendix A Table A9 for full results.

**RQ2: What common elements are shared among states exhibiting success in coordinating services across VR, workforce, education, juvenile justice, foster care, social security, developmental disability, mental health, and other systems?**

Table 8 summarizes and describes themes and sub-themes identified in focus group interview transcripts. See Appendix A Tables A10-A14 for additional quotes for each theme.

**Table 8**

**Descriptions of Themes and Sub-Themes**

Theme and Sub-Themes	Description
<b>1. Formality</b>	Extent that formal processes guide collaboration.
<b>a.</b> Written interagency agreements	Use of interagency agreements (e.g., MOU, MOA).
<b>b.</b> Interagency collaboratives	Existence and function of interagency working groups.
<b>c.</b> Agency bridges/liaisons	Agencies facilitating new connections.
<b>d.</b> Policy and practice disconnect	Effect of high-level interagency policy and practice on service delivery.
<b>2. Information &amp; Resource Sharing</b>	Extent of information/resource sharing across agencies.
<b>a.</b> Data sharing and referrals	Barriers and facilitators to sharing data across agencies.
<b>b.</b> Cross-training opportunities	Role of training in information and resource sharing.
<b>c.</b> Legal and process barriers	Practical barriers to agencies sharing information.
<b>d.</b> Familiarity and trust	Familiarity/trust with other agency's services and function.
<b>3. Communication</b>	Levels of communication between agencies.
<b>a.</b> Barriers/facilitators to communication	Barriers and facilitators to effective communication.

## Descriptions of Themes and Sub-Themes

Theme and Sub-Themes	Description
<b>b.</b> Role clarity & mutual decision making	Existence of clear roles and mutual decision making.
<b>c.</b> Staffing, capacity and resource issues	Impact of capacity and resources on communications.
<b>4. Youth Empowerment</b>	Situating youth at the center of collaborative processes.
<b>a.</b> Client self-determination	Supporting youth self-determined decision making.
<b>b.</b> Communicating complex systems	Describing complex systems/services to youth/families.
<b>c.</b> Preventing service gaps	Preventing gaps as youth move between systems.
<b>5. Effect of COVID-19 Pandemic</b>	Changes to collaborative practices during pandemic.
<b>a.</b> Service disruptions	Service disruptions during the pandemic.
<b>b.</b> Technological and geographic barriers	Technology/geographic barriers during the pandemic.
<b>c.</b> Remote work effect on collaborations	Effect of remote work on interagency collaboration.

### 1. Formality

Focus group interview questions asked participants to describe the extent that their partnerships with other agencies are guided by formal processes and policies. In other words, the extent to which their agency *requires*, or provides a specific written policy or framework for, working with staff in other agencies. In general, participants described their work collaborating with other agencies as consisting of a combination of formal frameworks

and informal or *ad hoc* relationships. Participants who worked in supervisory roles tended to describe more formalized policies and processes for collaborating with other agencies, as compared to participants who worked in frontline service provider roles. Participants frequently mentioned the different levels of formal collaboration experienced by supervisory and frontline agency staff, making it a salient sub-theme identified in every focus group interview that was held. The most common formal frameworks discussed by participants included *written interagency agreements* (e.g., MOU, MOA, Data Sharing Agreements) and *interagency collaboratives* (e.g., steering committees, task forces, working groups and communities of practice).

**a. Written interagency agreements.** The most mentioned formal framework for collaboration was interagency contracts and agreements (e.g., MOU and MOA). Participants in all states and across agency types described having high-level written agreements with key partner agencies to carry out services. Some of the agreements described were tailored to particular short-term objectives (such as carrying out a pilot program), while others specified interagency responsibilities related to, for instance, data sharing, cross-design on services and offerings, staff training, coordinating services and filling service gaps, and more. Despite many participants, across different agency types, indicating at least some written agreements with other agencies, a common theme was that often these agreements were limited to legislatively required interagency partnerships (e.g., VR and workforce systems) or most frequent partnerships (e.g., VR and K-12 education or CTE).

Participants across agency types indicated they would benefit from more formal partnerships with other agencies in their state. Most notably, some participants indicated a desire for stronger, more formal partnerships with child welfare and juvenile justice agencies. In some states, participants indicated the need for more formal relationships between, for instance, VR and mental health, or VR and developmental disabilities agencies. Other states, however, indicated very strong, formal partnerships already existed between these agencies.

A growing trend participants described across the different state contexts was the need for more concerted efforts to formalize frameworks for working with youth who are

being served by multiple agencies. For instance, a participant in a supervisory role at a Missouri VR agency noted:

“We do not have MOUs specifically targeting youth receiving services from multiple agencies.”

Many participants, particularly those who identified their roles as direct service or frontline, also indicated that informal partnerships are both extremely common and, potentially, extremely important. In some instances, there was a sense that informal partnerships supplemented formal frameworks for getting things done, and in others there was a sense that the work simply cannot get done at more local levels without building relationships in an *ad hoc* way. For example, one participant in a direct service role at a Missouri juvenile justice office described that working with youth on a daily basis requires the flexibility that comes with informal partnerships:

“Sometimes the way that actually looks is when an opportunity presents itself, that is when those partnerships happen. So, if there is an employer that needs a specific thing done or if there is one group of youth in a certain part of this state, that is kind of how it happens. A lot of times it is *ad hoc*.”

On the topic of interagency agreements, a related sub-theme pertained to the perceived disconnect between higher-level agreements and actual practice on the ground. For further discussion on this, see Sub-Theme 1.d. “Policy and Practice Disconnect.”

**b. Interagency collaboratives.** In addition to written agreements, another common form of interagency collaboration across states involved the development of interagency collaboratives at higher levels of agency administration. Participants from every state described examples of high-level interagency committees, working groups, and other partnerships specifically tailored to increasing service continuity among different youth systems, or between youth and adult systems. In particular, the focus on these collaboratives often centered on serving youth who are involved in multiple service systems, youth who are most in need of strong collaboration. Some interagency collaboratives are more formal than others around the country. For instance, describing their state transition council, a participant from Oklahoma explained:

“It’s really pretty informal. But then we also have key agencies [developmental disability, VR,

education]... It's probably one of the biggest, I guess I would say, interagency collaborations that we have in our state that's informal."

One important objective in some states was making sure that higher-level policy initiatives had appropriate dissemination to direct service providers.

Other participants noted the significant role of contractors and vendors, and the importance of ensuring that they are both aware of statewide efforts of this nature. Participants indicated that ensuring that local-level agencies (contractors and vendors) have a presence in policy discussions is an important component in improving systems collaboration and coordination because of the central role of such agencies in carrying out the work. For instance,

"I know we value collaboration ... especially working with so many local agencies and making sure that they are aware of what services that we are offering, and encourage and collaborate with the community organizations, make sure the youth services are individualized and age appropriate. That makes a big difference."

A participant in a direct service provision role in a Massachusetts VR office similarly noted the importance of ensuring continuity of messaging and expectations as services transition from referral to vendor, noting that this mostly needs to be ensured through informal practices and relationship building. At more local levels, direct service staff noted formal collaboratives often happen on a more case-by-case basis, such as in the context of school-based Individualized Education Program (IEP) meetings, child and family teams, juvenile-justice related mental health interventions, etc. Similarly, frontline staff in some states indicated that there were more local, region-specific trainings meant to facilitate interagency training and information sharing. For instance, a participant in a policy/supervisory role at a Michigan VR agency noted:

"They may have, like a local training series for a series for their staff or the constituents of their partner organizations ... so we've had to work together to figure out how to best deliver that information and get it out to those who need it."

While participants indicated that such instances present important opportunities to involve staff from diverse agencies, there is also a need to broaden such opportunities for interagency collaboration and coordination so that they happen more frequently and



more proactively. See sub-theme 3.b., “Role Clarity and Mutual Decision Making” for further discussion.

**c. Agency Bridges/Liaisons.** Within the broader discussion about formal and informal interagency partnerships, one consistent theme across focus groups and in different states was the integral role that VR counselors (VRC) can and do play as interagency bridges and liaisons, both between state agencies and vendors and between agencies such as education, developmental disability, mental health, and others. For instance, one participant from Arizona described:

“Something that I like is how [VRCs] are very good with contacting ... other agencies ... to collaborate with planning or when we are going to close [a] case. Either to [developmental disability] or [mental health]. It’s very good that the work they do contacting other agencies and planning [so] we don’t have [service] duplication or gaps.”

Similarly, another participant highlighted the importance of involving VRCs in IEP meetings as early as possible to support the transition to adulthood.

Across state contexts, this perspective was frequently accompanied by a concern that certain contexts were more accessible for VRCs than others. For instance, involvement of VRCs at local levels in juvenile justice, child welfare, and other settings was viewed as limited, stemming from a number of factors related to capacity, systems disconnect/silos, data and information sharing limitations, and lack of awareness. These topics will be revisited in later discussions. In general, the sentiment among direct service participants was that the goal of collaboration, whether formal or informal, is to expand the resources and services available to youth participants to ensure holistic services. A participant from a VR office in North Carolina explained that without these liaisons, and front-end planning coordinated among agencies, youth may not receive the “shoulder-to-shoulder” support they need to build career pathways:

“It is sometimes the hardest for ... more significantly disabled students ... that the all-encompassing community-based [VR] services are so backlogged, sometimes that is hard to be able to, because we don’t do long term follow-up to the degree that they may need ... yet we want to bring them on and provide services to them and help them with all the skills they need to be successful on a job, but [to do this] they need that shoulder-to-shoulder support after our services cease ... sometimes we are setting them up for failure if we don’t have that shoulder-to-shoulder support after VR backs out. That is a conversation we have to have on

the front end because it's hard to place them if they are not going to have that support and then we are burning bridges with employers.”

**d. Policy and Practice Disconnect.** One interesting sub-theme that emerged across states and focus group interviews was the perception—conveyed by both supervisory and frontline participants—that a disconnect exists between state-level collaborations at higher levels of policy and actual practice. Multiple participants from different states described this as an issue of high-level policies and practices within their states failing to “trickle down.” In some instances, this referred to information dissemination - getting the new policies and action items to the groups that implement them. In other instances, this referred to a more fundamental disconnect between what is perceived as collaboration at the state level, as opposed to at the local levels. For instance:

“The collaboration on the frontline is completely different ... let's face it. You talk to my boss and the information is one thing ... by the time it trickles down, if it does, the message is completely different.”

This concern also pertained to the development of MOU and benchmarks, and ways that these sometimes do not connect well with practice on the ground.

In a related sense, agencies that are not as specifically connected to the workforce development side of things (e.g., child welfare in the example below) conveyed misunderstanding of key terms and outcomes, and connected this to the lack of awareness among systems and differences in key benchmarks and agency-level goals:

“We [Department of Child Safety] have our own transition language and world. When ... they [VR and other systems] were talking transition, I'm like, what transition are you speaking of? We have transition. So, I think it has been kind of challenging I'd say from the child welfare side to kind of try to enter a group that is so used to what they mean by their transition and the disability and vocational rehabilitation and services world. And then how that kind of relates to the foster care world, I would say.”

As noted above, participants in certain states noted that eligibility criteria, service alignment and coordination, and other objectives can be frustrating, even among disability systems (these topics will be returned to later). One final thing to note in this section is that some participants, particularly frontline providers, did not see this policy/practice disconnect as solely the responsibility of agency leads, but indicative of a more systemic problem related

to the creation of policies and legislation at the state and federal levels.

## 2. Information and Resource Sharing

Participants were asked to describe the processes through which they share information and resources with other agencies. There was a sense across many of the focus groups, although not universally in all states, that disability-focused systems (e.g., VR, developmental disability, mental health, and social security) tend to share information and resources among themselves more effectively and willingly than they do with non-disability focused agencies. In some instances, even participants from workforce agencies felt that they experienced difficulties working with disability-focused agencies around their state. For instance, a supervisor from the Oklahoma VR agency explained:

“[VR] was always supposed to [serve youth with significant disabilities] but they didn’t... They expected ... that DDS would serve them. And when WIOA came along, I mean, it was specific on it said you will serve them.... But there was still people around ... that thought the old way. And I mean, now ... a change is coming. And they are really realizing it. So, I think a barrier of attitudes ... that ‘we don’t serve the ones with more significant disabilities’... Now they are seeing that they do serve them, and that we need to work together.”

In part, participants described this as an issue related to service eligibility and the tendency for silos to develop where information and resources are contingent on a disability determination.

Multiple participants expressed that resource and information sharing can go a long way in addressing capacity issues, (see sub-theme 4.c. “Staffing, Capacity and Resource Issues”). The general objective of information and resource sharing was to work towards the goal of providing wraparound services for youth (and families) that addressed their disability, but also provided needed services related to transportation, housing, benefits advisement, family support, and more. Participants from different agencies around the country routinely reiterated this goal of resource and information sharing. One common discussion under this topic was that resource and information sharing are interrelated; in other words, part of resource sharing is building awareness across agencies about the *availability* of coordinated services. For instance, a participant in a supervisory role at a Virginia VR agency described the importance of staying aware of the full array of services that a youth might be eligible

for, both under the roof of VR but also in other agencies, and conveying that information to frontline staff.

**a. Data Sharing and Referrals.** Within discussions about information and resource sharing, one of the more complex topics pertained to data sharing and agreements. Many participants indicated that data sharing agreements are common, but only in very targeted collaborations, such as direct referral systems (which were only present in a couple states). Missouri was one state where VR indicated efforts to develop data sharing agreements centered on effective interagency referrals.

“The committee under the state plan committee specifically developed a plan for statewide referrals. That was an interagency collaboration...but it filtered down to the field to ensure all our field staff working with citizens directly would know how to refer those citizens onto other statewide agencies for services or benefits and things of that nature.”

However, another participant from Missouri noted:

“We always talk about one referral system for all agencies, but...in reality data is shared so rarely, and everybody has their own data legacy system.”

Participants in some states indicated that they were not aware of any case management data sharing systems or agreements. One challenge of not having data sharing agreements was that it added to clients’ burden to respond to similar questions/ fields multiple times. Many participants mentioned this in multiple state contexts. In some circumstances, data sharing is impractical or unfeasible because of legal or process barriers, particularly where vulnerable populations are concerned (see section 2.c., below). Similarly, participants consistently referenced the extent that different agencies and systems have different benchmarks, outcomes, and goals connected to those data points. This, in turn, can create difficulties interpreting and sharing data across agencies — a barrier to data and information sharing even in cases where agreements exist.

Another state wherein VR indicated data sharing across agencies was Arizona. However, participants described challenges related to the policy-practice disconnect, highlighting the fact that even comprehensive data sharing MOU need to exist across localities in order to be effective. For instance, a participant in a supervisory role in an Arizona VR agency described:

“We [VR] ... have a data sharing agreement with [education] so that we can compare ... ABE [adult basic education] postsecondary outcomes... Compare that to ... students ... we’ve served ... [in] transition from school-to-work program with their school district ... we only have 32 agreements ... [out of] well over 200 districts ... 32 is a drop in the bucket.”

Leading into our next discussion, some participants noted that data sharing agreements must be supplemented by cross-training and information sharing opportunities to increase understanding of different systems’ data collection and outcome measures, so that the available data are interpretable and useful.

**b. Cross-Training Opportunities.** Building on the data sharing and referral issues, participants frequently mentioned interagency cross-training and resource information sharing opportunities as important practices. As a participant from Massachusetts noted:

“Every Fiscal Year we have interagency coordination trainings. All the different vendors, One-Stop staff, [and] core partners ... if it’s a youth training, we do [it] ... if it’s WIOA Title I [training] ... that includes [VR].”

A major emphasis of cross-training efforts emphasized understanding agency offerings and referral processes to overcome service gaps for youth. Other states did not have training that specifically focused on interagency collaborations.

Participants also mentioned connecting systems-level collaboration outcomes to progress measures or professional development frameworks. A participant from Missouri noted:

“In [our state] we have a professional development role where our staff are required to undergo so many hours’ worth of professional development. Part of that can be learning about some of the other programs that are happening across the state. Learning how other agencies work and so on.”

**c. Legal and Process Barriers.** A related sub-theme in the area of information and resource sharing involved more practical barriers to sharing information (and by extension, resources), stemming from legal or other processual reasons that agencies must guard their data systems carefully. Sometimes, these barriers stem from the client-side or agency-side and involve the need for getting timely release of information (ROI) forms and processes for obtaining releases. As a participant from Massachusetts put it:

“That is ... a huge barrier within the state, the ROIs. Everyone having a different one. It is overwhelming. You enroll somebody, and you have all this paperwork you review with them ... then they sign all this information, and ... find out that it is no good to this agency or that agency. It’s frustrating.”

Beyond just receiving timely release forms, current and accurate data, and having agreements in place, another challenge related to legal issues around agency compliance and concerns is sharing even basic client information. For instance, a participant from a Utah VR agency explained:

“There are a lot of barriers as far as consent to share progress reports or to know from the agency them self they are receiving services because family reporting sometimes is tricky as well...we have a lot of barriers [to sharing data]...We work around them because we are really good professionals...the focus of [a new statewide interagency] collaborative is working on interagency agreement [templates] and a common referral process so we can share information across services without the family’s having to be the gate keeper to all of that information.”

**d. Familiarity and Trust.** A final theme related to resource and information sharing involved whether agency staff felt they were able to familiarize themselves with other agencies’ processes, information, resources and whether confidence and trust existed about making referrals to outside agencies. Many participants indicated that, in their day-to-day work, it was sometimes difficult to know exactly which agencies to involve at which junctures in a client’s transition process. For example, a participant from a youth-serving agency in Arizona noted:

“It can be really challenging to know what ... other partners are supposed to be doing or how they can help...”

Within this sub-theme, there was a connected notion that, even where it exists on a basic level, *familiarity* might not always translate to trust and/or confidence that youth will receive services they need from outside agencies. This can result from information gaps, communication gaps, policy-related shortcomings, or lack of strong collaborations among agencies. We discuss barriers to communication further in the next section, while we discuss issues related to service gaps and duplication/lack of coordination for youth in detail under sub-theme 4.c. (“Preventing Service Gaps”).

One participant's comment exemplified some of the concerns with referring youth and families to outside services without feeling fully confident that the services will occur in a timely manner (or at all):

"Like, we have all these great, you know, services and everything. Then when push comes to shove, the providers are like, oh, that one has a wait list ... when you're serving youth, you just really want to have really tangible understanding of, like, if I recommend this to you, it's going to be great. Right? ... I think that's where we have a disconnect still."

Similarly, other participants described some challenges related to schools and local education agencies (LEA) trusting outside agencies, despite the significance of schools as touchpoints for other agencies to access transition youth.

### *3. Communication*

Among the themes that emerged from the focus groups, one of the most mentioned topics involved the importance of structuring frequent communications so that interagency collaborations flow from a mutual place of understanding and clear, well-defined roles when serving youth.

**a. Barriers to and Facilitators of Open Communication.** One of the most mentioned facilitators to effective interagency communications involved structuring opportunities for communication so they occur at regular intervals. A participant from Massachusetts noted that sometimes it is as simple as inviting extended partners, rather than just focusing on core partners, to meetings that are already scheduled.

Multiple participants felt that such invitations, in the aggregate, can help build the familiarity and trust that underlies coordinated service delivery. On the other hand, some interviewed expressed that agency-level silos and reliance on "business as usual" can be a barrier to implementing more frequent, structured communications. A participant from Arizona stated:

"When we are trying to collaborate with...youth who need ... additional or supplemental services, they become, well, 'you do this, we'll do that.' And it makes it much harder to try to coordinate those services especially when there's not a lot of communication happening."

Many of these discussions had additional themes; most notably, challenges related to communication. While participants frequently noted that, in an informal sense, certain staff members (e.g., VRCs) can serve as valuable *bridges* or links between agencies, participants also described instances where a pivotal staff member, absent formal frameworks for doing so, does not actively engage in the coordination of services across agencies despite having a role that clearly situates them to do so within a youth's transition to adulthood.

Finally, a number of direct service provider staff, across multiple states, described the challenges that stem from simply not knowing who to get in touch with, or not having a point of contact within a partner agency. According to some participants, these problems often intersect with agency capacity and turnover issues (see Sub-Theme 3.c. "Staffing, Capacity, and Resource Issues").

**b. Role Clarity and Mutual Decision-Making.** One strategy participants noted for overcoming communication challenges was to focus on clearly identifying a core individual within an agency to carry out interagency tasks and taking steps to ensure different roles across agencies are well defined, providing clear frameworks for shared decision-making. For example, a participant from Massachusetts noted successes when situating a clear point of contact for outside agencies to approach when needed. Going back to opportunities to leverage existing teams and meetings to strengthen interagency communications and partnerships, a participant from Arizona highlighted the Child Family Team processes, which provides a systematic framework. Similarly, participants again mentioned IEP teams as a unique opportunity to introduce more role clarity, although only in cases where a youth currently has an IEP.

"A lot of times youth with disabilities have individualized education plans. They have a team that meets on a regular basis to talk about updating that plan and including new services.... That is a good focal point for the multiple agencies that might be serving that youth to meet together and collaborate."

Participants from Massachusetts described pilot efforts that take a similar approach, but with youth who are no longer affiliated with a LEA or who do not have an IEP centered on similar notions of clarity in assigning agency-level roles and responsibilities. Participants



frequently asserted that this lack of role clarity and familiarity with outside organizations is related to the creation of service gaps and duplication of services for youth involved in multiple services (something we will revisit later). For example:

“Because a lot of [service] gaps end up aligning or overlapping with each other [across different agency offerings], we still have significant gaps in the service of what we’re allowed to do and those gaps are large enough that we can’t really address the core of what it is that we need to be doing for transitioning youth to employment. Especially for those with disabilities.”

**c. Staffing, Capacity, and Resource Issues.** A final dimension of the discussion of interagency communications pertained to agency staffing and resource issues, turnover, and other capacity-related issues that make it difficult to maintain strong communications across systems, particularly in the absence of formal frameworks for doing so. A participant in a supervisory role in Massachusetts expressed some of the practical or budgetary limitations that make it difficult to have points of contact that are widely integrated with other systems.

“I don’t know if it is something preventing full collaboration, but money is the bottom line.... It would be great if we had a career center staff person at every single school, all day long, but logistically impossible ... I think a lot of it, on a behind the scenes level, when you are not frontline, is just the money piece of it.”

Participants described staff turnover as a significant dimension of this problem. Multiple participants noted that turnover in VR systems and other agencies results in staff losing a valuable point of contact and needing to start from scratch with their interagency outreach. Again, participants saw these challenges as directly contributing to service gaps for youth, something that we will discuss in more depth in the next section.

A common theme across states, related to service capacity issues, focused specifically on youth in rural areas who might not have the same access to services and learning opportunities because of transportation, technology, or other barriers. As these participants in different states explained:

“We also have a number of areas that are more rural ... [so] they may not have the services we need in order to actually serve those youth. Especially, like, on reservations and so forth. But not just there.”

## 4. Youth Empowerment

Participants in every state expressed the general sentiment that, when thinking about interagency collaborations, it is important to situate the youth service recipient within those collaborations—ensuring that the goal of collaboration is to empower the youth in their transition to adulthood, among systems and out of systems. One participant highlighted the need for “youth voice” in service delivery and described a strategy (hiring more credible messengers with lived experience) to increase youth empowerment, engagement, and voice.

“I think I’d like to see more youth voice being used in ... service delivery ... we’ve really tried to increase our hiring of young people with lived experience in our system. You know, give satisfaction surveys and being part of program development. And I think it really helps make sure that your service delivery is improving in a way that meets your clients’ needs.”

One participant who works for a VR agency in Utah described his own child’s experience accessing VR services and some of the challenges they experienced to self-determination and youth/family empowerment.

“As far as barriers, I can speak from a personal perspective. My son qualified for vocational rehabilitation services, and we are going through the application and gathering the information. Even a well-adjusted individual as my son, he began to struggle with the process. There are some things going through the process of that can become frustrating and the information gathering...we lose a lot of families because of this if we don’t provide them with appropriate coordinators and family engagement.”

**a. Client Self-Determination.** Participants noted that the complexity of the systems, and the potential difficulties navigating them, make it even more important that youth and their families feel informed and competent in understanding the choices presented to them. As one participant from Arizona noted, youth presented with multiple adult professionals and an array of services and systems can struggle comprehending all the information.

“And we need that client [to be] involved in these processes, oftentimes these processes are very, very complex. And there’s a lot of professionals involved... And these youth don’t know what’s happening ... when we talk about empowerment, we talk about informed choice, or giving them the opportunity to make these decisions, when they don’t know what’s going on, they can’t make those decisions. They can’t be informed. They can’t become empowered.”

In another example described by a VR supervisor from Michigan, youth served as ambassadors in the development of an interagency collaboration training.

Beyond efforts like this, however, participants highlighted the need for self-determination for individual youth navigating the system. As discussed above, participants conveyed a consistent sentiment throughout the focus group interviews that youth self-determination and interagency collaboration and coordination are fundamentally intertwined because of the frequent need for wraparound services and coordination for youth who are involved in multiple systems—so one cannot fully exist without the other.

**b. Communicating Complex Systems.** Within the larger theme of empowering youth, a common sub-theme involved the challenges and need for communicating complex service systems to youth, in the effort to prepare them for informed and self-determined decision-making. Participants described the need for these efforts from the perspectives of both youth and families. As one participant put it:

“For me it is also about including the families in these conversations. Getting them to a level of understanding of why I want to work with [this agency or that agency], because it is this is all overwhelming to families. We talk in acronyms all the time.”

Some participants noted additional challenges in conveying to youth exactly why they should want to access these services and cultural competency needs around connecting services across systems to youth interests and goals.

Some straightforward strategies described by participants in some states included things like creating centralized locations—often online—where youth and families can access services that exist across different systems in plain language. For example, in Missouri:

“The State Steering Committee, which includes all agencies ... created a website that is specifically for the [state] workforce system. It lists for citizens all of our agency services based on what they are looking for. It’s not a way to record referrals, but it did get all the services in one centralized location.”

Participants frequently mentioned benefits counseling as integral to empowering youth and communicating the importance of career preparation while also alleviating fears among families about losing benefits.

**c. Preventing Service Gaps.** A primary sub-theme within the discussions about empowering youth involved the primary objective of helping youth and families understand where service gaps might occur and preparing them to navigate or prevent those gaps from

happening. One of the most cited practices involved working across agencies to ensure that youth are engaged as early as possible, particularly in the transition to adulthood context. As discussed in other contexts earlier, many participants noted that issues with youth empowerment, communicating complex services, and avoiding service gaps can become even more urgent and complicated where youth have multiple disabilities.

“If [a youth has] [one] disability ... gaps are manageable. But if you have multiple disabilities, that gap becomes almost like a chasm, if you will. It becomes so wide that either agency is very limited or very unwilling to move forward in a way that requires them or allows them to try and fill those gaps. Either because in their mind, it does not justify the number of people that they are serving, we should be serving. Or because it would cause too much of a financial hardship on their budget if they’d try to take on that additional area of services that needs to be provided.”

## *5. Effect of COVID-19 Pandemic*

A separate set of questions during the focus group interview asked participants to describe the effects of the COVID-19 pandemic on their collaborations with other agencies. Of note was the fact that participants described both significant barriers stemming from the pandemic, but also some unexpected innovations and benefits related to collaborating across agencies to serve youth. We discuss some of the barriers below in the sub-themes, but it is important to note that across states and groups, one salient theme involved the fact that the quick move to remote work, meetings, and services introduced a degree of flexibility to collaborations and services that did not exist prior to the pandemic. For example, a participant described this phenomenon in the following way:

“Talking specifically about interagency coordination, the flexibility that COVID sort of entered in all of our agencies, at least our[s], it wasn’t there before, allowed for a better use of time when going in between agencies.”

Participants expressed this sentiment in almost every state context: there were both pros and cons when making the rapid move to remote work during the early months of the pandemic.

**a. Service Disruptions.** The most pressing challenge described across participant groups during the pandemic related to significant employment and other service disruptions, and the effect this had on relationships with clients and families, career pathway

development, access to essential care services, and more. Multiple participants suggested there were substantial issues with keeping youth engaged virtually, with one participant saying:

“So, and I think that goes the same with our VR services that are virtual. How are we supposed to really engage with the young adults and see them in their workspace or walk through that process with them?”

In particular, VR staff noted that the loss of in-person school settings caused significant problems in the form of losing access points for engaging transitioning youth. As one participant from a VR agency in Massachusetts put it:

“Well, with the youth group, a lot of the services were occurring in the schools, right, the in-school youth, so, they had actual time where they were pulled together as a group to give specific services and provide certain skill sets. Then, once they were work from home, a lot of them didn’t have the technology. A lot of them did not use the technology.”

As described in more detail below, participants often noted that the most significant problems came in the form of technological and/or transportation barriers.

**b. Technological and Geographic Barriers.** Participants relayed mixed sentiments on the pros and cons of virtual service delivery during the early months of the pandemic. Many participants noted there were upsides to having more flexibility in scheduling with youth and families, and that virtual options created new opportunities for overcoming transportation barriers, which were identified as a major problem prior to the pandemic, especially for youth in rural areas. As one participant put it:

“We [VR] went completely virtual.... What’s unique about the situation is our agency saw a lot of benefits to being virtual.... It’s not great for everybody being virtual, especially places that have difficulty with Wi-Fi and such like on the reservations, it’s a big challenge. But ... it does [help] address the transportation barrier that a lot of people have.”

Access barriers stemming from a lack of access to technology was a common concern related to the pandemic, across states. In particular, low-income youth and youth in rural areas faced particular digital divides. However, several participants were quick to acknowledge that these barriers, in many cases, predated the pandemic.

“On the other side, we have also have benefits when it’s coming to virtual.... Even before the pandemic, we had to provide a lot of transportation to parents and things like that. And

just always trying to find ways to deal ... transportation ... is huge for some families and get connected with a VR counselor.”

Similarly, when initiating and sustaining collaborations, participants also showed mixed feelings about the extent to which the rapid shift to remote work and services affected them. Interestingly, participants described geographic barriers—especially for rural and tribal populations—as challenges in nearly every state that took part in the focus group interviews. Participants also described a heavy intersection between geographic and technological barriers, stemming from a combination of physical barriers (e.g., distance from training centers and state agency offices) and digital divides from comparatively lower access to internet or technology in rural areas. Participants across diverse state and agency contexts described the pandemic as exacerbating certain inequalities related to geographic and technological accessibility for rural and tribal populations.

**c. Remote Work Effect on Collaborations.** Many participants described “Zoom fatigue” and issues related to coworker and cross-agency accountability from the movement to remote work and meetings. As one participant put it:

“In the meetings, they continued, and people schedules were put online. It was all accountability. So, I felt like as a team we worked completely well together. Then it got old and I am really sick of it now, but, yeah, that sort of stuff stuck with me.”

However, others described some welcome changes as remote work transitioned back to hybrid and in-person options. For example:

“We realized we can do business and provide services [in] different ways with our participants, which includes youth. So, we have allowed for different types of service deliverables that maybe we didn’t do before. So, is for example, remote support for our participants, and remote supports for employers, not necessarily having to be in person.”

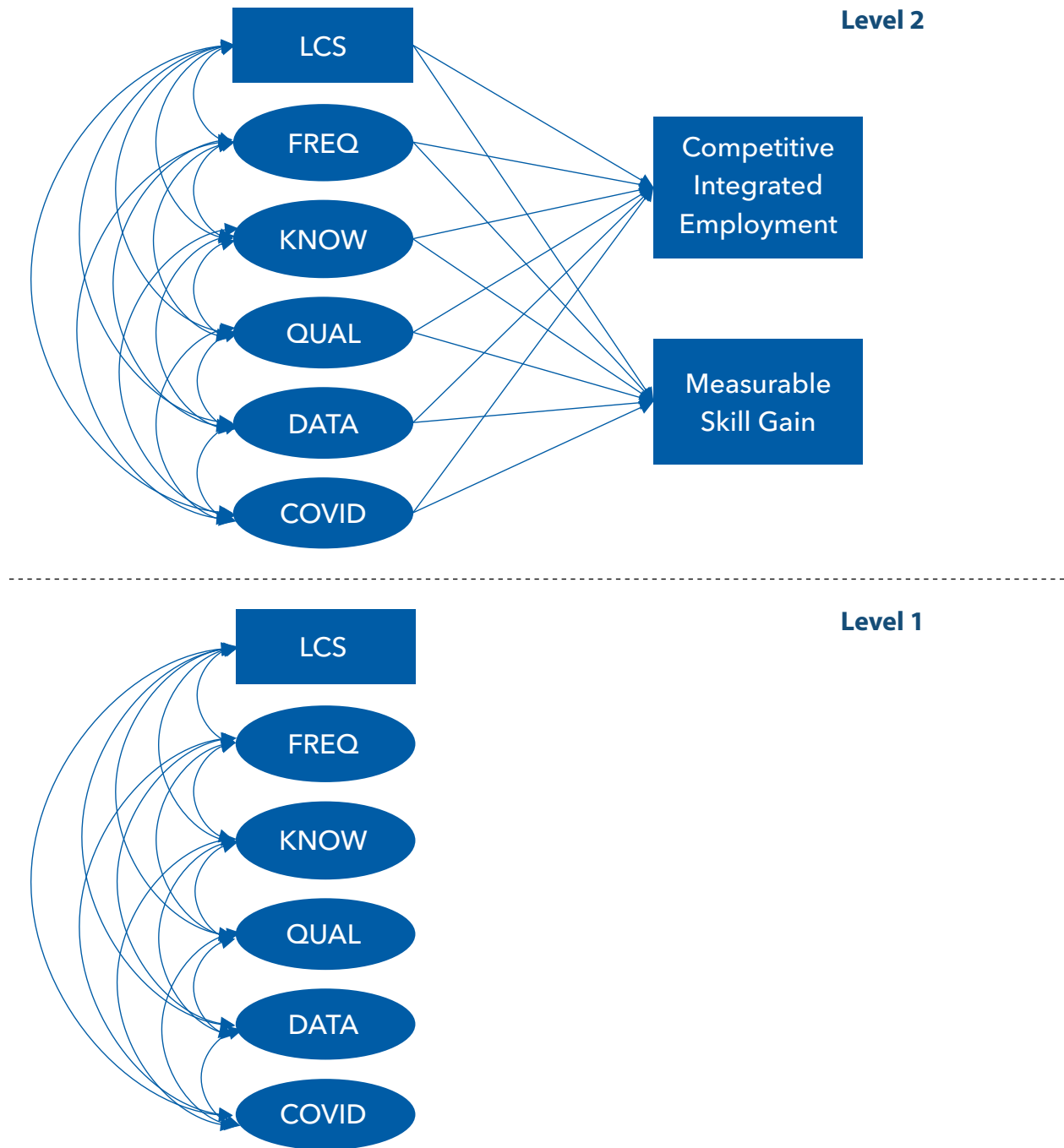
### **RQ3: What agency characteristics and practices underlie interagency collaboration in achieving transition and employment outcomes for youth with disabilities?**

We list collaboration totals, aggregated by state, in Appendix A Table A15 with VR Measurable Skill Gains (MSG) and percent Competitive Integrated Employment (CIE) for Project Year (PY) 2020. A simple correlation between the collaboration total and CIE returned

a moderate value ( $r = 0.26$ ), while the correlation between MSGs and the collaboration total was very small ( $r = -0.06$ ), with neither value statistically significant ( $p > .05$ ). Practices in this context refer to the subscales of levels of collaboration, frequency of collaboration, knowledge about partners, quality of collaboration, data use, and impact of COVID-19. Within the context of a multilevel structural equation model in Figure 3, none of the collaboration practice subscales was a significant predictor of CIE or MSG. As noted above, the collaboration practice subscales combined different agency-level practices described by survey respondents, such as frequency of communication, data and information sharing, and formal interagency agreements. With lack of significance for the VR outcomes, we simplified the model to a single-level model with the collaboration practice subscales as the outcomes. Due to sample size constraints, use of a single level model enabled testing of agency predictors on all collaboration factors at once. We estimated the single level model with VR agency predictors of order of selection status, separate or combined agency, percent of youth served, percent of other referrals (not self or education), and percent receiving services from other WIOA programs. The only significant predictors were percent of youth served ( $\beta = -3.35$ , S.E. = 1.58,  $p = .033$ ) and percent of other referrals ( $\beta = -4.08$ , S.E. = 1.87,  $p = .029$ ) on knowledge about partners. See Appendix A Table A16 for full results.

**Figure 4**

**Multilevel Model to Predict Collaboration and Vocational Rehabilitation Outcomes**



*Note:* The single model with covariates is the lower half of the diagram marked Level 1 with covariates as predictors for all 6 factors. The meaning of LCS, FREQ, KNOW, QUAL, DATA, and COVID are described in the Methodology Analysis Plan section.



## **RQ4: How do respondents perceive that their levels of collaboration have been affected by the ongoing COVID-19 pandemic and financial downturn?**

Both the online survey and the focus group interviews collected data relevant to this research question. As shown in Table 8, survey responses were neutral ( $M = 3.01$ ,  $SD = 0.78$ ) about whether COVID-19 had a negative or positive impact on collaboration. But 240 of the 288 (83.33 percent) who answered “My agency has had to develop different practices for collaborating with partner agencies during the COVID-19 pandemic” agreed or strongly agreed with this statement. In a follow-up question, participants provided information about activities, benefits, and achievements. For collaboration activities, they described shared information and documents, problem solving, and interpersonal support. The benefits were: saved time due to shorter meetings and no required travel, improved meeting attendance, more frequent contact with service providers, increased communication between urban and rural agencies, greater transparency among collaborators, and a greater reliance on the group. For achievements, participants highlighted new collaborations with vendors that support virtual learning and job shadowing, statewide development of transition resources, and finalization of service sequencing for one state.

COVID-19 did introduce or highlight some challenges; specifically, lack of technology access for both staff and clients, inability to assess progress of youth in the workplace, burdensome frequency of meetings, online burnout, and more training with less placement. To address technology issues, participants described applying for grants to pay for Chromebooks for youth and partnering with a community location like the public library to provide a Wi-Fi hotspot. To best meet client needs in the future, some will adopt a hybrid approach to client meetings and refocus on best practice models for placement of clients in jobs.

Findings from the focus group interviews confirmed many of these survey results. We describe these results in more detail at the end of the section for RQ2, but summarize here for completeness. Participants described both benefits and barriers. Most importantly, they thought remote work allowed greater flexibility in both service delivery and collaboration

that had not been experienced before the pandemic. While staff experienced “Zoom fatigue” they also experienced greater cross-agency accountability with the accountability piece continuing even today. Participants described hybrid services as a benefit both in work among agencies and for clients.

# Discussion

## Phase 1 – National online survey

With the use of a newly developed online survey, the research team assessed the levels of interagency collaboration, frequency of those practices, knowledge about partners, quality of collaboration, data use, and COVID-19 impact on collaboration and how these factors are related to Vocational Rehabilitation (VR) outcomes in each state. For the most part, we found that the ratings for collaboration were above the mid-point for the subscales, with the exception of Levels of Collaboration Scale (LCS), which was below the mid-point. Levels of collaboration asks the participants to think about specific partners, while the other subscales ask more generally about collaboration. This difference in focus may account for the difference in ratings. Because the levels of collaboration ask about a combination of ideas related to frequency, knowledge, and quality, it was anticipated that this subscale would have strong correlations with the other subscales, but this was only true for frequency. In general, for the correlations with the other subscales, the COVID-19 subscale was the weakest overall. Asking about collaboration in the context of an event that spanned multiple years may account for why this subscale was not strongly related.

Levels of collaboration, as illustrated by the network map (see Figure 3 on page 41), highlighted the centrality of VR to other agencies serving youth and young adults with disabilities (Y&YAD). The map also highlighted the distance between the main cluster of agencies and child welfare, as well as the distance between the main cluster and juvenile justice. Collaborating effectively with child welfare and juvenile justice may be challenging due to confidentiality issues and for juvenile justice physical constraints, such as limited opportunities to exit the facilities to participate in work-based learning experiences.

There was no significant relationship between collaboration and the VR outcomes of Measurable Skill Gains (MSG) and Competitive Integrated Employment (CIE). There were some differences by agency type on levels of collaboration but not on the other subscales of collaboration. Responses differed little due to personal characteristics of person of color, gender, and disability status. Most notable were the rating differences for job roles. In general,

supervisors rated collaboration higher than frontline staff. Some differences may be expected due to job-specific responsibilities and perspective but we anticipated little to no difference in partner knowledge. Frontline staff rated themselves almost a full point lower than supervisors, yet they are the ones making referrals for their clients. Supervisors that also provide frontline services rated collaboration higher than supervisors, with the largest difference in partner knowledge. Based on this finding, one area of practice recommendation could involve efforts to increase the ongoing “blending” of supervisory and frontline experience so that agency staff can gain ongoing understandings of both experiences. For example, it might be beneficial for agencies to increase opportunities for supervisors to work directly with clients, even if their caseload is minimal. On the other hand, involving frontline staff in higher-level discussions about collaboration might increase the applicability of collaborative policies to direct service provision. However, more research is needed to develop specific interventions that address the findings related to collaboration experiences of supervisory versus frontline staff.

The open-ended responses about how the COVID-19 pandemic impacted collaboration provided insight on activities agencies implemented during the shutdown and will continue to practice. Virtual meetings became commonplace, along with document sharing. Participants experienced the benefit of saved time, freeing them to move quickly to the next meeting or task. They also experienced greater connections between urban and rural settings. Additionally, they used many of the same virtual practices with their clients and envisioned providing services in a hybrid manner of short check-in meetings with longer face-to-face sessions.

## **Phase 2 – Focus group interviews**

Results from the initial, exploratory qualitative analysis support some transferable takeaways that can guide policy and future research. At a high-level, the qualitative findings seem to support Frey et al.'s (2006) framework for assessing interagency collaboration in the context of youth services. Topics such as formal interagency frameworks, information and resource sharing, frequent communication, mutuality and trust, role clarity, and other constructs present in Frey's framework (which was also used in the Phase 1 survey for this

project) were also highly present within text units during the focus group interviews across all nine states. The results also suggest a high *interdependence* between these aspects of collaboration and the objective of youth empowerment and self-determination. One salient topic across all groups involved the idea that breakdowns in communication can, for example, lead to issues with information and resource sharing. Similarly, informal frameworks for getting in touch with colleagues in other agencies was a nuanced consideration. On the one hand, participants described overreliance on informal connections with other agencies as potentially leading to issues with communication, especially where staff turnover, unmanageable caseloads, and other capacity issues cause challenges in maintaining consistent points of contact. On the other hand, however, participants routinely outlined the *importance* of informal networks and relationship building, suggesting that formal collaboration policy cannot necessarily replace informal networking, but rather should support and enhance such efforts. A theme that cut across other topics was the idea of collaboration supporting youth empowerment. By “cutting across” we mean that the topic of youth empowerment was relevant to a number of other themes observed, such as Information and Resource Sharing and Interagency Communication. In other words, participants described issues related to information sharing and interagency communication as *directly affecting* issues related to youth empowerment. With the range of complicated services and systems that a young person is likely to experience, youth empowerment, especially for youth involved in multiple systems or those transitioning between systems, cannot be facilitated without clear frameworks for communicating across agencies—at both the state and local level.

One particularly interesting finding involved the extent to which direct service provider or frontline staff differed in their experiences with formal interagency agreements. Participants across all states conveyed a strong sense that formal Memoranda of Understanding (MOU), Memoranda of Agreement (MOA), and other written agreements exist at high levels of policy, but do not always “trickle down” into practice at the front lines. Participants also conveyed a general impression that frontline practitioners did, in fact, want more clearly defined channels for reaching out to agency partners, especially in instances where they are unable to successfully build relationships in more informal ways. A takeaway

here was that direct service providers highly value informal relationships built over time with colleagues in other agencies and believe these informal collaborations are fundamental to their work. That said, there also appeared to be instances where the framework for *building* those relationships is lacking, as it can be unclear who to contact at an agency, and, in some cases, can even be difficult to know exactly what another agency offers in terms of services, or how to handle communication breakdowns stemming from issues with capacity, trust, or policy.

To that end, our analysis suggested that communication issues between individuals and agencies were not the only barrier to successful coordination across agencies to serve youth. On some levels, participants viewed the barriers as policy-level disconnects with practice. The extent to which different policy requirements and eligibility criteria in, for instance, mental health, developmental disability, social security, VR, and workforce systems can lead to systemic silos and expectations that certain agencies—even within the disability-serving space—only work with certain types of youth and families. Some participants noted that this feels antithetical to the spirit of the Workforce Innovation and Opportunity Act (WIOA) and stems from the accumulation of state-level policies and practices that, over time, suggested a certain division of labor that may no longer be appropriate when serving multiple-system involved youth, or youth transitioning between systems. Participants described some of these misaligned policies, objectives, and outcome orientations as even more extreme between disability serving and non-disability serving agencies. Among participants, there was a common assertion that working across, for instance, VR or developmental disability and child welfare or juvenile justice agencies was particularly challenging, because these types of agencies have significantly different terminologies, outcomes orientations, streams of funding, and so on. A simple example of this, shared by a participant, was that even the word “transition” means something much different in the child welfare/juvenile justice context than it does in the workforce context.

Language was frequently mentioned as a barrier to serving youth and young adults with disabilities (Y&YAD) who have WIOA identified “barriers to employment” such as involvement in the foster care and/or child welfare system. In discussions of information and resource sharing, differing definitions, and a lack of understanding of service offerings

across agencies similarly contribute to a sort of stasis, whereby youth-serving agencies do not reach out to one another simply because they do not even know what services another agency offers. This was part of a broader theme that formal collaborations tend to be stronger with “required” or core partners under some legislative frameworks (e.g., VR and workforce, education and VR) and that collaborations tend to, across states, be stronger between those agencies than with agencies where there is no specific legislative mandate requiring substantive collaboration. This was even true at local levels, where participants described opportunities like Individualized Education Program (IEP) meetings offering significant opportunities to get multiple agencies *at the same table* (e.g., introducing youth to a VR counselor within the context of an IEP team meeting).

Some participants in different states described efforts to engage non-core partners into collaboratives, task forces, steering committees, and communities of practice. Participants conveyed a general impression that these relationships are at an early stage with high-level efforts focused on ensuring agencies work together more comprehensively at the state level with minimal effect on local delivery of services. In terms of non-core partner agencies working together more frequently, direct service staff mentioned that there are other practical barriers to working across significantly different youth-serving systems (e.g., VR and juvenile justice). Most notably, they consistently referenced the legal barriers to information and data sharing, because systemic data around client characteristics, services, and outcomes are sensitive across these systems. One important step towards improving information sharing involved cross-trainings that helped staff across agencies at least *understand* what the outcome measures of another agency were and how they were collected, even if actual cross-referrals or centralized data sharing were not yet practical under existing regulatory conditions. Participants explained that certain types of data sharing among core partners were further along, and more achievable. Yet, even in states with shared referral systems among disability serving agencies, there persists a consistent sense that legacy systems within agencies are difficult to understand and a barrier to sharing information. Duplicative data collection remains a problem for staff and for families, and data sharing agreements can have limited effectiveness if they do not permeate at local levels. Two straightforward examples of this provided by participants included data sharing or other formal agreements

that do not permeate LEAs, or that do not permeate juvenile detention settings—both of which can be highly idiosyncratic in their data systems and referral processes, rendering “high level” interagency agreements less effective. Additionally, it was noted that getting families to sign release forms can be time-consuming and difficult, which further adds to the legal delays in sharing data and information that might be necessary for transition planning.

On the topic of training connected to discussions around the effect of the pandemic on interagency collaborations, many participants indicated that, while the COVID-19 pandemic created many challenges around service disruptions and lack of interpersonal “face-to-face” connections, there were also some unexpected benefits around collaborating with colleagues and attending trainings. In particular, frontline staff indicated that previously trainings or interagency meetings might take a whole day or require significant travel. During the pandemic, there were some innovations in this space, whereby new partnerships and training opportunities were developed in hybrid formats creating greater opportunities for relationship building. Still, many participants indicated that “Zoom fatigue” and lack of interpersonal interactions were a major challenge for them in the early months of the pandemic.

Similarly, service disruptions for youth, especially during the early months of the pandemic, were problematic. This was particularly true for youth in rural areas or who lacked technological access, and the disruption in experiential learning and training opportunities was seen as a major problem. Similarly, while some noted increased opportunities to collaborate, others noted that the loss of physical environments for youth outreach (e.g., schools) had serious implications. Again, others indicated some unexpected innovations during the pandemic around flexible scheduling and delivery options in youth services that they hope to carry forward into the future.

On the topic of empowering youth and families, participants conveyed a significant sense that the complexity of different systems can be highly disempowering. As a result, frontline staff jobs may become predominantly focused on simply communicating what service offerings exist—either with the objective of increasing wraparound services or preventing service gaps (or sometimes service duplication) from occurring. Innovative



strategies for communicating these complex services and systems were viewed as highly important, but there was a consistent reference to potential frustration where these things were not successfully communicated. Issues arose in reaching out to a partner agency, making a referral, or experiencing waitlists or other issues at the point of referral. These issues affected trust in the agencies, and, ultimately, could also affect youth and family trust of various systems, which was seen as a significant problem. The two strategies for incorporating more *youth voice* into the service delivery process included:

- (a) hiring more people with lived experience and credible messengers who can reach out to youth in their communities, and
- (b) involving youth and parent ambassadors across different policy domains, including having them participate in trainings, policy development discussions, toolkit development, etc.

Some participants indicated that, at a more fundamental level, service offerings do not always take youth perspectives into account and, therefore, fail to consider how youth (generally and individually) “think about work” or fail to connect services to young people’s actual goals and hobbies. Again, this was an area where participants indicated that the approach from different youth-serving agencies cannot be piecemeal: holistic service delivery requires coordination among agencies that provide different services, tailoring to match youth goals, and communication with youth and their families in ways that allow for informed decision making.

## Implications from integrated results

There are multiple points where findings from the online survey and focus group interviews aligned. First were the terms in which participants think about collaboration. Themes arose in the focus group interviews that aligned with the Frey et al. (2006) framework of *formal interagency frameworks, information and resource sharing, frequent communication, mutuality and trust, and role clarity*. We administered the online survey more than six months before the first focus group interview, so it is doubtful that participants who engaged in both parts of the study had a strong memory of the language used in the survey. This overlap in

language means the Frey et al. (2006) framework is useful to continue developing. A second overlap was *lack of knowledge about partners*. In the online survey, there were differences by job role on *partner knowledge* with frontline staff reporting less knowledge than supervisors. Details emerged in the focus group interviews about this problem along with some solutions like cross-training events to increase understanding of desired outcomes by other agencies. The third area of findings aligned around the COVID-19 pandemic. Both groups of participants described saving time with virtual meetings, greater participation by partners and increased flexibility in means of service delivery. However, there were also barriers around access to technology and burnout from technology.

## Limitations of research

### *Phase 1 - National online survey*

The online survey, piloted for this study, was limited in a few ways that were primarily related to sample size. Not all variables could be tested in a single model but, instead, had to be tested in separate models, limiting information about how these variables were related to one another in the context of collaboration. Sample size also limited testing of measurement invariance by job role, person of color status, disability status, and gender so the degree to which each group responded to the measure in the same way is unknown. It is also unknown if the composition of the sample, that was mostly white and male, is representative of the population. Lastly, it is unclear how collaboration across a whole system is related to VR outcomes; whether that was due to sample size or is too removed from VR outcomes could not be answered with this study.

### *Phase 2 - Focus group interviews*

Similar to the online survey, findings were limited by focus group interview participation. Efforts were made to recruit participants in all 10 federal regions but only nine regions participated; region 10 is not represented in these findings, though we do not anticipate that our analysis was significantly impacted by this omission. Recruiting was also challenging; the original goal was to conduct separate focus group interviews for supervisors and frontline staff, but in a number of states it was challenging to schedule just one group,

much less two or more. This meant in some interviews both supervisors and frontline staff were in the same session, potentially impacting how frontline staff responded to the questions. As a result, we might not have captured the full perspective of frontline staff.

## Opportunities for future research

### *Phase 1 - National online survey*

Based on the findings from this study, there are opportunities to conduct further research on the implementation of the online survey. For the subscales, it should be determined if a single set of response choices could be used by all questions. Partner knowledge items were correlated in addition to the relationship with the construct of partner knowledge, but this correlation may be due to the items being asked in a group rather than scattered within a larger measurement. Mixing the order of all items would help determine if the items were related because of the order presented or whether they would still be related if answered in a random order. The weakest items should also be evaluated to determine if they could be omitted from the measure or reworded to better represent the factor. Because of the Frey et al. (2006) themes that emerged in the coding of the focus group interview recordings, it may be useful to primarily retain questions that specifically align with the Frey et al. framework. Aside from the survey, it would also be useful to identify other sources of outcome data that could be used to measure the impact of interagency collaboration on Y&YAD.

### *Phase 2 - Focus group interviews*

The focus group interview findings generated more questions about collaboration. In the area of *communication*, we can explore how to make higher-level agency collaborations and agreements have more direct impact on frontline services and day-to-day practice. Would having staff dedicated to collaboration result in increased coordination? Lastly, while the WIOA partners reported stronger collaborations, collaborations with non-required WIOA partners are more challenging. Identifying some states that have been able to create strong collaborations among non-required partners and describing the conditions that have enabled this to occur, is an area of future research.

# Policy and Practice Implications

At the core of collaboration is the goal of empowering youth and young adults with disabilities (Y&YAD), situating them at the center of collaborative processes. However, challenges exist that make collaboration to support Y&YAD difficult. Communication challenges impact resource and information sharing, ultimately impacting the Y&YAD these agencies work to effectively serve. Agencies need more formal frameworks for communication with other agencies, so staff turnover does not create additional barriers. This formal communication can be in addition to Memoranda of Understanding (MOU) and Memoranda of Agreement (MOA), of which frontline staff are often not aware and, as written, do not necessarily provide sufficient information to effectively coordinate services. In addition, this formal communication needs to occur at the state and local levels.

Data agreements at the state agency level are disconnected from the work of frontline staff serving Y&YAD. Privacy regulations around data sharing for child welfare and juvenile justice present additional barriers, and many legacy data systems are challenging to maintain, much less update to better support collaboration. Because data are rarely shared, Y&YAD typically need to go through intake multiple times if they need services from the core WIOA programs and non-core programs. Expanding One Stop Centers to include non-core programs would potentially streamline coordination for frontline staff, as would requiring more formal collaborative structures at the local level to support frontline direct service provision among youth-serving agencies that are not core partners. These formal structures should benefit all staff and the Y&YAD served.

Cross-training was a significant facilitator of both information and resource sharing and communication. In part, this was because there is a genuine need for staff and supervisors to truly understand other agencies' service offerings, their processes for offering those services, potential for service gaps, waitlists, and other challenges, as well as ways of getting in touch with those agencies to build trust. Training opportunities offer ways to disseminate information and ways to build familiarity among staff where such familiarity does not already exist. As discussed above, many frontline staff indicated they feel quite skilled at building relationships informally, but simply lack the pathways to do so with certain agencies.

Only a couple states had training opportunities that were specifically focused on interagency collaboration, so this is a potential immediate recommendation for state policymakers. Cross-training can also address challenges of differing terminology, addressing a barrier to effective communication.

# Conclusion

This research study gained insight into the benefits of and challenges to interagency collaboration. The core Workforce Innovation and Opportunity Act (WIOA) partners benefit from requirements to collaborate, but weaker relationships exist with non-core partners. For all types of partners, one area of weakness is lack of knowledge about partner goals, eligibility criteria, and processes. This lack of knowledge, along with staff turnover, often result in fewer connections among agencies, ultimately negatively impacting youth and young adults with disabilities (Y&YAD). There are challenges to sustaining collaboration practices due to lack of formal communication structures among agencies, even if those structures are present at the highest level. With the transition to virtual meetings due to the COVID-19 pandemic, teams did experience some improvement in collaboration due to the ability to be present virtually for more meetings and connect across urban and rural divides. If communication structures and data sharing can improve while staff apply a hybrid approach to their work, both agencies and Y&YAD can benefit.

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**Table A1****Collaboration Question Responses Received for State and Territories by Agency Types**

	VR	JJ	CW	WFI	WF II	ED	SS	DD	MH	H. ED	Other	Total
State Totals	98	13	23	48	6	41	10	32	14	12	41	338
AK	1	0	0	0	0	0	0	0	0	0	2	3
AL	2	0	0	0	0	0	1	0	2	0	0	5
AR	1	0	0	0	0	1	0	1	1	0	0	4
AS	0	0	0	0	0	0	0	0	0	0	0	0
AZ	3	0	0	5	0	9	0	0	0	0	0	17
CA	0	0	0	2	1	1	1	0	0	0	1	6
CO	1	1	1	0	1	0	0	0	0	0	2	6
CT	0	0	0	1	1	0	0	3	0	0	1	6
DC	1	0	1	0	0	0	0	0	0	0	0	2
DE	1	0	0	0	0	1	0	0	0	0	0	2
FL	0	0	0	0	0	1	1	0	0	0	0	2
GA	1	0	0	2	0	0	0	0	0	0	0	3
GU	0	0	0	0	0	0	0	0	0	0	0	0
HI	0	0	0	1	0	0	0	0	0	0	1	2
IA	10	0	0	1	0	0	0	0	0	0	1	12
ID	3	0	0	0	0	3	0	0	0	1	0	7
IL	0	0	0	4	1	0	1	1	0	0	1	8
IN	7	0	0	0	0	1	0	3	1	2	1	15
KS	2	0	0	0	0	3	0	0	0	0	0	5

### Collaboration Question Responses Received for State and Territories by Agency Types

	VR	JJ	CW	WFI	WF II	ED	SS	DD	MH	H.ED	Other	Total
KY	2	0	0	0	0	2	1	0	0	0	0	5
LA	1	0	1	0	0	1	0	0	0	1	0	4
MA	2	0	0	1	0	2	0	0	0	0	1	6
MD	2	1	0	1	0	1	0	1	0	0	2	8
ME	1	0	0	0	0	0	0	0	0	0	0	1
MI	7	0	1	3	0	0	0	3	7	0	0	21
MN	1	0	0	1	0	1	0	0	0	0	1	4
MO	1	1	0	2	0	0	1	0	0	0	1	6
MP	0	0	0	0	0	0	0	0	0	0	0	0
MS	0	0	0	0	0	0	0	0	0	0	1	1
MT	1	0	0	0	0	0	0	0	0	0	0	1
NC	1	0	0	1	0	1	0	0	0	1	0	4
ND	1	0	0	0	0	0	0	0	0	0	0	1
NE	1	2	1	0	0	0	1	1	0	0	0	6
NH	0	2	1	0	0	0	0	0	0	1	1	5
NJ	2	0	1	2	0	0	0	1	0	0	1	7
NM	1	0	0	1	0	0	0	1	0	0	1	4
NV	0	0	6	0	0	0	0	0	0	0	0	6
NY	4	2	1	2	0	2	1	4	0	0	0	16
OH	1	0	1	2	0	0	0	1	0	0	0	5
OK	1	1	0	1	1	1	0	0	0	2	1	8

**Collaboration Question Responses Received for State and Territories by Agency Types**

	VR	JJ	CW	WFI	WF II	ED	SS	DD	MH	H. ED	Other	Total
OR	3	1	1	1	0	0	0	0	0	0	0	6
PA	0	1	0	2	0	0	0	0	1	0	0	4
PR	0	0	0	0	1	0	0	0	0	0	0	1
RI	1	0	4	1	0	2	0	0	0	0	2	10
SC	2	0	0	0	0	1	0	0	0	1	2	6
SD	1	0	0	1	0	1	1	1	0	0	3	8
TN	1	0	0	1	0	0	0	0	1	0	3	6
TX	3	0	0	1	0	1	1	0	0	1	4	11
UT	1	1	1	2	0	2	0	0	0	0	0	7
VA	16	0	0	3	0	2	0	3	0	0	4	28
VI	0	0	0	0	0	0	0	0	0	1	0	1
VT	3	0	1	0	0	0	0	0	0	0	1	5
WA	1	0	0	1	0	0	0	6	1	1	1	11
WI	1	0	1	1	0	0	0	1	0	0	0	4
WV	1	0	0	0	0	1	0	1	0	0	1	4
WY	1	0	0	1	0	0	0	0	0	0	0	2

*Note:* Participants were asked to rate Adult Justice/Department of Corrections but no individuals working for those agencies participated in the survey.



**Table A2****Education Agency Type Counts**

Types	Original		Recoded		Types
	n	%	n	%	
Total	50	100	51	100	Total
K-12	31	56.36	41	80.39	K-12/CTE
Higher Education	8	14.55	8	15.69	Higher Education
Career Technical Education (CTE)	2	3.64			
Other	7	12.73	2	3.92	Other

**Table A3****National Survey Questions with Descriptive Statistics for Each Subscale (n = 338)**

Items	Item Text	n	Rate	M	SD	Median	Range
<b>Frequency of Collaboration Practices – Never (1) to Very Frequently (6)</b>							
Q11_1	Refer participants to collaborators	330	0.98	4.88	1.06	5	5
Q11_2	Invite collaborators to participant meetings	330	0.98	4.58	1.30	5	5
Q11_3	Hold regular systems of care meetings where multiple participants are discussed	329	0.97	3.89	1.53	4	5

### National Survey Questions with Descriptive Statistics for Each Subscale (n = 338)

Items	Item Text	n	Rate	M	SD	Median	Range
Q11_4	Coordinate services between agencies	329	0.97	4.70	1.18	5	5
Q11_5	Seek out partners based on your participants' needs	330	0.98	5.02	1.01	5	5
<b>Partner Knowledge – 1 to 10</b>							
Q12_1	Identifying populations of youth who are not being served	322	0.95	7.02	2.14	7	9
Q12_2	Understanding other agencies' eligibility criteria	323	0.96	6.59	2.22	7	9
Q12_3	Understanding other agencies' policies and procedures	323	0.96	5.99	2.30	6	9
Q12_4	Understanding other agencies' definitions of successful outcomes	322	0.95	6.07	2.39	6	9
Q12_5	Understanding shared cross-agency performance measures	321	0.95	5.79	2.49	6	9

### National Survey Questions with Descriptive Statistics for Each Subscale (n = 338)

Items	Item Text	n	Rate	M	SD	Median	Range
<b>Quality of Collaboration – Strongly disagree (1) to Strongly agree (5)</b>							
Q13_1R	Meetings with partner agencies accomplish what is necessary for the collaboration to function well	317	0.94	4.10	0.79	4	4
Q13_2R	Partner agencies (including my agency) agree about the goals of the collaboration	317	0.94	3.97	0.84	4	4
Q13_3R	My agency's tasks in the collaboration are well coordinated with those of partner agencies	317	0.94	3.80	0.94	4	4
Q13_4R	Partner agencies (including my agency) have combined and used each other's resources so all partners benefit from collaborating	315	0.93	3.83	0.93	4	4
Q13_5R	I feel that what my agency brings to collaborations is appreciated and respected by partner agencies	315	0.93	3.83	0.89	4	4

### National Survey Questions with Descriptive Statistics for Each Subscale (n = 338)

Items	Item Text	n	Rate	M	SD	Median	Range
Q13_6R	Partner agencies (including my agency) work through differences to arrive at win-win solutions	317	0.94	4.04	0.84	4	4
<b>Confidence in Serving Population – 1 to 10</b>							
Q14_1	In-school	303	0.9	7.89	2.30	8	9
Q14_2	Out-of-school (ages 16-24 and high school dropouts)	308	0.91	7.62	2.28	8	9
Q14_3	Pregnant and parenting youth	308	0.91	6.30	2.67	6.5	9
Q14_4	Receiving SSI/SSDI and/or other public assistance	310	0.92	7.78	2.21	8	9
Q14_5	Minorities (racially and ethnically diverse)	309	0.91	7.93	2.03	8	9
Q14_6	Foreign language speakers	308	0.91	5.69	2.63	6	9
Q14_7	Immigrants, migrants, and/or refugees	309	0.91	5.71	2.64	6	9
Q14_8	LGBTQ+	308	0.91	7.37	2.42	8	9
Q14_9	Homeless	309	0.91	6.82	2.53	7	9
Q14_10	Justice-system involved	308	0.91	6.81	2.62	7	9

### National Survey Questions with Descriptive Statistics for Each Subscale (n = 338)

Items	Item Text	n	Rate	M	SD	Median	Range
Q14_11	In foster care	308	0.91	7.08	2.58	8	9
Q14_12	Rural residents	309	0.91	7.61	2.30	8	9
<b>Data Use – Strongly disagree (1) to Strongly agree (5) and Don’t know (0)</b>							
Q16_1	Use data for administrative purposes	234	0.69	3.45	1.05	4	4
Q16_2	Use data to coordinate and plan	240	0.71	3.5	1.05	4	4
Q16_3	Use data to meet WIOA reporting requirements	247	0.73	3.96	0.96	4	4
<b>COVID Impact – Strongly disagree (1) to Strongly agree (5) and Don’t know (0)</b>							
Q17_1	Pandemic has improved collaboration	285	0.84	3.01	1.05	3	4
Q17_2*	Pandemic has negatively affected collaboration	287	0.85	3.18	1.14	3	4
Q17_3	Agency had to develop different practices for collaboration	288	0.85	4.09	0.83	4	4
Q17_4*	Pandemic has impacted WIOA-related collaboration activities	257	0.76	3.02	1.12	3	4

\*These items were reverse coded so that a positive increase would mean that the effect was positive.

**Table A4****Chi-square Test of Sample to Excluded Responses**

	$\chi^2$	df	p
Job role	0.21	3	.977
Sex	0.27	1	.604
Ethnicity	1.06	1	.304
White	133.74	1	< .001
Disability	0.73	1	.390

**Table A5****Fit Statistics for Single Factor Models**

	Categorical Estimates			Continuous Estimates					
	$\chi^2$	df	p	$\chi^2$	df	p	CFI	NNFI	SRMR
Frequency	723.05	7728	1.000	29.84	5	< .001	0.958	0.917	0.032
Knowledge	928.57	9942	1.000	31.5	2	< .001	0.976	0.929	0.018
Quality	622.67	15575	1.000	25.32	9	.003	0.972	0.954	0.031
Data Use*	231.65	109	< .001	0	0	< .001	1.000	1.000	0.000
Covid Impact*	132.57	107	.047	0	0	< .001	1.000	1.000	0.000

Note: The  $\chi^2$  statistic for the categorical estimates is the Likelihood Ratio  $\chi^2$ .

\*The model fit statistics for the continuous estimates of Data Use and Covid Impact are perfect because there were no extra model degrees of freedom from which to calculate those fit statistics.

**Table A6****Existence of Data Agreement by Agency Type**

<b>Agency Type</b>	<b>n</b>	<b>%</b>
Vocational Rehabilitation	59	33.15
Juvenile Justice	10	5.62
Corrections	18	10.11
Child Welfare/Social Services	35	19.66
Workforce Title I	19	10.67
Workforce Title II	11	6.18
Education	63	35.39
Social Security	24	13.48
Developmental Disabilities	18	10.11
Mental Health	14	7.87
Higher Education	11	6.18
Department Labor	21	11.80
Department of Health	20	11.24
Other	30	16.85
Don't know	12	6.74
None	8	4.49

*Note:* The field was text so participants could list multiple agencies.

**Table A7****Aggregated Collaboration Ratings by Nation and Focus Group Interview States**

	<b>VR</b>	<b>JJ</b>	<b>CW</b>	<b>WFI</b>	<b>WFII</b>	<b>ED</b>	<b>SS</b>	<b>DD</b>	<b>MH</b>	<b>HEd</b>	<b>OTH</b>
<b>Nation</b>											
Vocational Rehabilitation (VR)	–	2.71	1.6	3.49	2.57	1.47	1.13	2.95	2.76	1.32	1.46
Juvenile Justice (JJ)	1.31	–	1.23	3.33	2.23	3.8	3.08	2.42	3.46	2.33	1.65
Child Welfare (CW)	1.04	1.65	–	2.5	2.3	3.3	4.33	2.61	3.04	1.5	3.09
Workforce Title I (WFI)	0.65	4.6	2.43	–	2.64	2.06	1.13	1.34	1.53	1.64	1.91
Workforce Title II (WFII)	1.17	3.5	2.58	2.33	–	1.5	1	1.5	1.5	3	1.17
K-12, Career and Technical Education (ED)	0.68	1.02	0.6	3.52	1.8	–	0.71	2.1	1.2	0.49	0.83
Social Security (SS)	3.9	1.44	1.61	1.78	1.56	1.22	–	2.6	2.38	1.33	1.89
Developmental Disabilities (DD)	1.26	1.29	0.95	3.06	1.39	0.72	1	–	2.39	0.88	1.36
Mental Health (MH)	1.14	0.71	0.89	2.64	1.57	1.5	2	3	–	2	1.89
Higher Education (HEd)	1.5	1.5	1	2.83	3.4	0.42	0.75	2.83	2.58	–	1.29
Other Agencies (OTH)	1.49	1.86	1.27	2.46	1.77	1.16	1.05	2.54	2.23	1.41	–
<b>Arizona</b>											
Vocational Rehabilitation (VR)	–	2.33	1.33	5	3	0.67	0.67	2.67	2.33	0.67	0.33
Workforce Title I (WFI)	0.4	4	2.3	–	3.4	1.2	1.8	0.4	1.8	1.6	3.1



## Aggregated Collaboration Ratings by Nation and Focus Group Interview States

	VR	JJ	CW	WFI	WFII	ED	SS	DD	MH	HEd	OTH
K-12, Career and Technical Education (ED)	0.89	0.78	0.56	4.71	2.11	–	0.78	2.89	1.44	0.44	0.78
<b>Massachusetts</b>											
Vocational Rehabilitation (VR)	–	3	0.75	2.5	1.5	1	1.5	4	4	0	0.5
Workforce Title I (WFI)	1	5	4	–	5	2	2	2	2	2	2.5
K-12, Career and Technical Education (ED)	1	1.5	0.5	1.5	0.5	–	1	3	0.5	0	1.5
Other Agencies (OTH)	0	0	0	4	2	5	4	4	4	3	–
<b>Michigan</b>											
Vocational Rehabilitation (VR)	–	3.43	1.93	3.86	2.43	1.86	1.57	3.5	3.86	2.29	1.57
Child Welfare (CW)	2	2	–	2	2	2	2	2	2		2
Workforce Title I (WFI)	0	4.67	3.33	–	2.67	1.67	1.67	2	2	2	1.67
Developmental Disabilities (DD)	0.67	0	0.67	2.67	0.33	0.33	1	–	2.33	0	0.5
MH	1	0.14	0.5	2.57	0.86	1.29	1.71	2.17	–	1.57	0.86
<b>Missouri</b>											
Vocational Rehabilitation (VR)	–	3	4.5	5	5	5	5	5	5	5	4
Juvenile Justice (JJ)	0	–	0	5	3		5	1	5	0	0
Workforce Title I (WFI)	1.5	5	4	–	3	3	0	3	2.5	0	2
Social Security (SS)	2	2	2	2	2	2	–	2	2	2	2

## Aggregated Collaboration Ratings by Nation and Focus Group Interview States

	VR	JJ	CW	WFI	WFII	ED	SS	DD	MH	HEd	OTH
Other Agencies (OTH)	5	1	0	2	2	0	0	2	2	2	–
<b>North Carolina</b>											
Vocational Rehabilitation (VR)	–	5	3.5	3	4	2	2	4	4	2	3
Workforce Title I (WFI)	3	5	3.5	–	2	2	2	2	2	2	3.5
K-12, Career and Technical Education (ED)	0	1	0	5	1	–	0	1	1	0	0
Higher Education (HEd)	0	0	0	2	4	0	0	0	0	–	0
<b>New Jersey</b>											
Vocational Rehabilitation (VR)	–	3	2	3	2.5	3	1	2.5	2	2.5	2.25
Child Welfare (CW)	1	1	–	3	2	3		3	1	1	3.5
Workforce Title I (WFI)	2.5	3	1.5	–	3.5	3	2	3.5	2.5	1.5	3
Developmental Disabilities (DD)	5		1.5	1	4	4	2	–	2	4	3
Other Agencies (OTH)	1	3	2	3	3	3	0	3	3	0	–
<b>Oklahoma</b>											
Vocational Rehabilitation (VR)	–	5	3.5	5	5	5	3	5	5	3	4
Juvenile Justice (JJ)	2	–	2	3	2		3	3	3	2	2
Workforce Title I (WFI)	0	5	3	–	5	5	0	1	1	0	3
Workforce Title II (WFII)	2	2	2.5	2	–	0	1	2	2	3	1

## Aggregated Collaboration Ratings by Nation and Focus Group Interview States

	VR	JJ	CW	WFI	WFII	ED	SS	DD	MH	HEd	OTH
K-12, Career and Technical Education (ED)	1	0	0	5	1	–	0	1	0	0	0
Higher Education (HEd)	2.5	1.5	0.75	3.5	4.5	0	0.5	3.5	1.5	–	0.25
Other Agencies (OTH)	0			2				1			–
<b>Virginia</b>											
Vocational Rehabilitation (VR)	–	3.13	1.75	3.13	2.13	1.5	1	3.06	3.5	1.69	1.47
Workforce Title I (WFI)	1.67	4.5	3	–	3.67	2.67	0.67	2.33	2.33	3.33	2
K-12, Career and Technical Education (ED)	0	1.5	0	3	1	–	0.5	0.5	0.5	0	0.25
Developmental Disabilities (DD)	1	0	0	0.67	0.33	0	0	–	0.5	0	0.33
Other Agencies (OTH)	1.25	1.75	1.13	2	0.25	0	1.5	2.25	1.75	1.5	–
<b>Utah</b>											
Vocational Rehabilitation (VR)	–	5	4.5	5	4	4	4	5	5	4	3.5
Juvenile Justice (JJ)	3	–	3	5	5	5	4	4	4	4	2
Child Welfare (CW)	2	5	–	3	2	4	5	4	4	2	3
Workforce Title I (WFI)	0	5	2.75	–	2.5	2.5	0.5	0.5	0.5	1	0.25
K-12, Career and Technical Education (ED)	0	1.5	1	4.5	1.5	–	1.5	4	2.5	0	0.5

Note: Missing agency rows for the state indicate there were no survey responses by any state agency personnel. The entries with ‘–’ are intentional as agencies were asked to not rate their own agency type. Empty cells indicate no response from an individual from that agency.

**Table A8****Effects of Agency Type on Collaboration Ratings**

	$\beta$	S.E.	Wald	p
<b>Frequency</b>				
Juvenile Justice	0.28	0.15	1.85	.065
Child Welfare	0.11	0.13	0.83	.406
Workforce Title I	-0.16	0.13	-1.21	.226
Workforce Title II	0.37	0.22	1.68	.094
K-12/CTE	-0.27	0.19	-1.45	.147
Social Security	-0.28	0.17	-1.70	.089
Developmental Disability	0.02	0.15	0.14	.891
Mental Health	0.02	0.22	0.08	.939
Higher Education	-0.05	0.35	-0.13	.896
Other Agencies	-0.34*	0.17	-1.98	.048
<b>Knowledge</b>				
Juvenile Justice	0.28	0.48	0.58	.563
Child Welfare	-0.46	0.43	-1.07	.284
Workforce Title I	0.14	0.39	0.37	.713
Workforce Title II	1.15	0.88	1.32	.188
K-12/CTE	-0.03	0.37	-0.09	.926
Social Security	0.59	0.88	0.67	.503
Developmental Disability	-0.16	0.42	-0.38	.708

### Effects of Agency Type on Collaboration Ratings

	$\beta$	S.E.	Wald	p
Mental Health	0.33	0.59	0.57	.570
Higher Education	0.18	0.62	0.29	.771
Other Agencies	-0.01	0.42	-0.03	.980
<b>Quality</b>				
Juvenile Justice	0.01	0.12	0.04	.968
Child Welfare	0.01	0.10	0.07	.942
Workforce Title I	-0.04	0.09	-0.41	.686
Workforce Title II	0.20	0.18	1.11	.265
K-12/CTE	-0.13	0.12	-1.03	.301
Social Security	0.13	0.17	0.75	.454
Developmental Disability	0.08	0.10	0.88	.380
Mental Health	0.22	0.15	1.49	.135
Higher Education	0.09	0.17	0.53	.598
Other Agencies	0.02	0.11	0.14	.887
<b>Data</b>				
Juvenile Justice	-0.49	0.27	-1.80	.071
Child Welfare	-0.14	0.23	-0.61	.543
Workforce Title I	0.08	0.18	0.45	.656
Workforce Title II	0.60	0.40	1.49	.136
K-12/CTE	-0.30	0.22	-1.34	.181

### Effects of Agency Type on Collaboration Ratings

	$\beta$	S.E.	Wald	p
Social Security	0.23	0.36	0.65	.518
Developmental Disability	0.12	0.19	0.61	.539
Mental Health	-0.28	0.27	-1.01	.311
Higher Education	-0.06	0.28	-0.22	.830
Other Agencies	-0.17	0.22	-0.76	.450
<b>COVID</b>				
Juvenile Justice	0.42	0.25	1.68	.094
Child Welfare	0.28	0.21	1.36	.173
Workforce Title I	-0.13	0.16	-0.85	.397
Workforce Title II	0.23	0.33	0.70	.484
K-12/CTE	0.08	0.17	0.47	.642
Social Security	-0.34	0.32	-1.07	.285
Developmental Disability	0.11	0.17	0.64	.524
Mental Health	0.03	0.27	0.11	.909
Higher Education	-0.17	0.27	-0.64	.524
Other Agencies	0.35*	0.17	2.05	.040
<b>Levels</b>				
Juvenile Justice	0.13	0.25	0.50	.618
Child Welfare	0.24	0.21	1.11	.267
Workforce Title I	-0.10	0.19	-0.55	.584

### Effects of Agency Type on Collaboration Ratings

	$\beta$	S.E.	Wald	p
Workforce Title II	-0.16	0.52	-0.31	.756
K-12/CTE	-1.00***	0.16	-6.12	< .001
Social Security	0.11	0.50	0.22	.826
Developmental Disability	-0.53	0.23	-2.27	.023
Mental Health	-0.32*	0.33	-0.98	.325
Higher Education	-0.40	0.28	-1.45	.148
Other Agencies	-0.44*	0.19	-2.28	.023

Note: \* p < .05; \*\* p < .01; and \*\*\* p < .001

**Table A9**

### Effects of Personal Characteristics on Collaboration Ratings

	$\beta$	S.E.	Wald	p
<b>Frequency</b>				
Person of Color	0.02	0.10	0.20	.842
Disability	0.04	0.13	0.30	.762
Female/Other	-0.05	0.11	-0.45	.650
<b>Knowledge</b>				
Person of Color	0.48	0.27	1.77	.078
Disability	0.41	0.31	1.33	.184
Female/Other	-0.15	0.27	-0.56	.576

### Effects of Personal Characteristics on Collaboration Ratings

	$\beta$	S.E.	Wald	p
<b>Quality</b>				
Person of Color	0.13	0.07	1.84	.065
Disability	0.02	0.08	0.27	.790
Female/Other	-0.04	0.07	-0.60	.547
<b>Data</b>				
Person of Color	0.18	0.13	1.32	.188
Disability	0.22	0.14	1.53	.126
Female/Other	-0.30*	0.13	-2.32	.021
<b>COVID</b>				
Person of Color	0.07	0.12	0.56	.573
Disability	-0.19	0.13	-1.49	.136
Female/Other	-0.06	0.12	-0.48	.631
<b>Levels</b>				
Person of Color	0.31*	0.13	2.31	.021
Disability	0.06	0.14	0.46	.648
Female/Other	-0.08	0.13	-0.59	.557

*Note:* Person of color refers to all non-White and non-Hispanic/Latino responses. Female/Other refers to all responses for female, non-binary, self-describe, and prefer not to say.  
\* p < .05



**Table A10**

**Formality Quotes**

<b>Written Interagency Agreements Sub-theme</b>
We ... have a lot of different interagency agreement[s] ... the goal is to try and fill each other's gaps based on the services we can provide that another agency can't ... and vice versa.
We ... worked with workforce development, education, higher education, vocational rehab[ilitation] and division of developmental disabilities and [mental health] ... to do an MOU [with] a lot of cross design and embedded best practices.
Our school program is partnered with the Department of Rehabilitation Services. Our Best Step Camp is memorandum of agreement between [Oklahoma University], Pre-ETS, and Oklahoma Department of Rehabilitation Services.
For me, it is very informal...there were monthly meetings... occurring with all the facets kind of under one roof [VR, child welfare, developmental disability agencies] ... but for 20 years prior ... I had built up relationships. There is no shared agreement, and they got me together with the right person... I would walk into a One-Stop [Center] and ask ... what can you do for my youth, what is the story?
<b>Interagency Collaboratives Sub-theme</b>
We ... have a community of practice on transition ... since 2004 ... that is an instrument through which we work on that collaboration and bring awareness to...different stakeholders ... initially ... it was [VR, developmental disability and education].... But we ... branched out in ... the last five years to including a lot more state agencies and organizations ... we should be working with.
We are on a couple of different committees with statewide agencies, so everyone shares what they have going on. We just push out to staff that there is training opportunities or information sessions about agencies
The private CRPs are a really important part of the puzzle.
We have over 1,000 contractors around the state.... It's one thing at the state level, and state agency level we have historically done a lot of broad process and collaboration... It's the 1,000 community-based organizations that support services to youth with disabilities.
With the vendors ... I try to tag along to meetings with my kiddos so everywhere is saying the same language, you know? That the message is still the same.

## Formality Quotes

<b>Agency Bridges/Liaisons Sub-theme</b>
Before the age of maturity ... [at] one of their last IEP meetings ... you talk about life after post-graduation, what does that look like? What services will you need? [and] introducing [a VRC] at the table.
When we get the youth centered, the whole goal is to bring people informal and formal supports around this youth basically wrap the youth around in service.
<b>Policy and Practice Disconnect Sub-theme</b>
We [VR] have collaborative protocols ... with [developmental disabilities] and [social security] ... the central office people deal with that sort of thing. Then it probably doesn't have great trickle down to ... the people that ... need to know.
Just because [the Transition] Council says 'yes, we are going to partner,' doesn't mean it trickles down. There is a lot of time where it is really difficult to get even middle-aged dogs to learn new tricks.
So, the MOUs need to be developed, but we get these benchmarks, this is what you are looking to do, the scope of work and everything else, but what is reality? I think some MOUs are missing the reality piece of it.
In the ... literature around disabilities and mental illness .... we should be able to serve those [things] together. Really what I see ... [is that] we don't serve [these things together]—the branches fight of is this a disability issue or behavioral health trauma issue? And they're not communicating effectively. So, we see that young people, especially in foster care, often have both of those pieces together. So that was a lot. But that was just my thoughts about it.
One of my big frustrations with this whole thing is that if you think about how policy is written and developed, who is writing those policies? Who's responsible for rolling out those policies? ... And so what ends up happening is when you have policies ... distributed out to a field that deals with ... youth with disabilities, and that we try to provide feedback back to the policy writers, they're not able to understand or bridge the gap between what's happening out in the field and the barriers and the challenges that we face as well as the feedback loop that's not happening as it should be happening ... a lot of the policies don't address the disabilities, it makes it even harder to address the disabilities as a whole.... And so that creates those additional barriers for us and the field staff who are trying to provide these services or coordinate these services.

**Table A11**

**Information & Resource Sharing Quotes**

<b>Information &amp; Resource Sharing Theme</b>
<p>The reality is [that] ... the groups representing individuals with disabilities have better communication ... what do we do about that? And how do we get those programs all working together with, perhaps, the workforce development group because they may be able to craft something together with the resources of all the groups that gives you let's say wages, supports, transportation and care which any one of them alone may not be able to put all that together. But collectively, you may be able to have a full-fledged program.</p>
<p>You all have limited resources, and you have a handful of people involved in job development or placement, you can extend your reach if you were working collectively that way. As opposed to having separate efforts from each of you.</p>
<p>Sometimes our workers have so much on their plates, so I feel like my role is making sure they are aware of what services are out there [for] our young people now ... they can get Medicaid up to age 26, we offer education and training voucher program ... [and then] the Chaffee funds [if the youth was involved in child welfare]. We really depend on that inter agency collaboration and coordination. I might be the one doing that though. (chuckles).</p>
<b>Data Sharing and Referrals Sub-theme</b>
<p>In my day-to-day work, I cannot speak to any data sharing that comes from our cyber system which is managed by [VR] ... our data drives a lot of what we do, but there isn't, that I know of, data sharing with outside entities. And access to our cyber system is extremely restricted. Even for the folks that use it, there are different levels of clearance. So, I'm not familiar with us opening that data up to outside entities.</p>
<p>Is just the referral ... one agency has their database, and you do your database, but a lot of it is duplicate data entry.... We are asking the customer to give us the same information multiple times.</p>
<p>I want to bring...to light the technology differences within prisons because there is a lot of restrictions ... [in our] state ... every prison pretty much has their own...different learning management systems. So, we are trying to coordinate efforts to really understand which institutions are working with facilities to ... work within those networks of technology barriers to education.</p>

## Information & Resource Sharing Quotes

To me, the other big area is the backside outcome output. Many of our systems have a variety of performance measurements and statewide indicators we have to achieve when individuals benefit from the connection and go to work. The other large piece of data that would be great to exchange is if the person is employed, what their earnings are. Some of us have a similar system requirement.... Obviously, when you don't have that exchange of data interoperability, if one is a little bit disconnected, they are not for sure what the progress or output or outcome because of their effort.

Other [agency] staff ... want to know the One Stop Center system and try to learn our database. We try to learn their database too ... can send a referral process ... and how they are tracking the information.

### Cross-training Opportunities Sub-theme

DSS, department of the higher education, workforce development and the WIOA youth subcommittee have done training series ... focused on what other agencies offer and they push it out wide to all of employees statewide and others.

I just finished...collaborating with our [developmental disability] employment team partners to do collaborative presentations to each of the local areas between [VR] and [developmental disability] staff across the entire state. So, we went to each of the local areas and...had collaborative meetings where we talked about how do our agencies collaborate ... how to do a referral, when to do a referral and so they knew about each other's agencies.

I am not aware of any training, per se, directly looking at interagency coordination. However, we have to do an annual progress report each year, and one of the things we have to speak to are who we are collaborating with, with agencies. There may be some interagency training going on, but I'm just not aware of it, unless we do it ourselves.

### Legal and Process Barriers Sub-theme

Continuing to always figure out how to reach out to different agencies ... can be ... a challenge ... we have a lot of difficulty getting folks to complete releases between our agencies so we can have that communication ... with ... agencies that have mutual clients.

## Information & Resource Sharing Quotes

Release of information is our starting point. And a verbal email, or in-person, that is pretty much the channels that we have utilized to share information with agencies we are collaborating with to provide services in Case Management.... Sometimes not having updated information, in all honesty—a prime example would be, sometimes the youth Medicaid information is not up-to-date, and sometimes the locality may not even know where to access that information, in all sincerity.

When we have conversations about a referral system ... the issue is getting all of our legal departments to agree even on being able to share someone's name and their barriers. So, if ... I send someone to a job center, they know they are learning English or just even the most basic. To be able to do a hand off and track it and track what happens to that person when we do that referral.

### Familiarity and Trust Sub-theme

There's so many agencies and there are so many services that can serve all of our mutual clients. How do we get that information out to everybody involved?

I think the biggest barrier is awareness of all the services and programs out there, and how to connect to them, in addition to doing your own job duties, and doing the very things that you have to do to meet your obligations with your job, because I think that can be challenging to try to do your job, and, for like our counselors, for example, to connect with others. There are so many partners out there, and to know what the right partner is and the right resource, just to be aware.

When we're serving youth, I don't refer ... a service, a support, unless I know it's going to meet that young person's needs. So, I know that that was really a challenge was to really trust these other entities.

Yes, we work together, but [sometimes when I] set an appointment...the Case Managers are chasing the tail.

We have tools...that can be initiated on either side whether it be a participating agency that is part of the IEP team or school initiates that to share that information and resources. Then, also the part of the transition plan in the IEP that actually addresses that interagency collaboration piece. But, does it get done is kind of the question? I think some educators are reluctant to invite outside agencies because they think they are then putting their LEA kind of at risk if the agency doesn't follow through. So, there is reluctance.... Or they don't understand what that agency can bring to the table. So, the invite doesn't happen.

**Table A12**

**Communication Quotes**

<b>Barriers/Facilitators to Communication Sub-theme</b>
[For] young adults with disabilities, 90-day reviews [with developmental disability] are amazing to get everybody on the same page ... [and] clarify what each person is doing for the young adult.
We do ... monthly core partner meetings .... not just the WIOA partners but extended partners are invited and participate in the monthly meeting.
Everybody is kind of used to doing business as usual. Foster care is such a specific community that offers so many additional challenges.
On paper we have MOUs [VR, education and developmental disability] ...but it is very siloed.
The challenge ... becomes, you know, unless you know a [specific person] to call and say, 'hey, we need this service' or, hey, 'we're hitting a roadblock.
Communication going down to the lower end to the people that are actually in the field and knowing some of these things. Sometimes if you don't know somebody who knows somebody, they may not know that resource even exists.
There is a whole pie there. If I only know [one agency], and I only know [one person], I will pick up the phone and see what [that person] is offering ... [but] I know very few counselors on the ground.
<b>Role Clarity &amp; Mutual Decision-Making Sub-theme</b>
Each One Stop Center has a specific person. If anybody is from [VR, blind agencies, education, developmental disability] comes by they go to that one specific person .... with the referral form or whatever ... is able to triage that customer into all the different services.
Help with trying to keep everybody on track and kind of pinpoint who's in charge of what.

## Communication Quotes

We have a new initiative called 'Next Generation' ... for 18 to 26 or ... 30-year-olds separated from LEAs, whether it is ... dropouts, [or those who] successfully completed [school] but haven't done training ... or were involved with [child welfare or juvenile justice]. Two agencies [VR and mental health] work ... together to provide best practices for students who...tend to fall through the cracks ... there is one dedicated staff person for the two agencies.... So, this is, like, earth shattering ... [but] it is only in certain areas of the state right now.

### Staffing, Capacity and Resource Issues Sub-theme

So, you know, the policymakers don't get that. I am seeing a hundred customers to get ten people. Outreach, I am reaching out to 300, 400 customers. If I am lucky, 5 respond, okay?

We [VR] have a lot of turnover. What our staff do, you know, they all have a lot on their plates. So, we're always trying to figure out...How do we reach out to staff and not just put more on their plates?

I also think that turnover all around, from various agencies, ours included, makes that challenging, because people leave, you may have had this really great relationship, and then somebody moves on, and you don't have that. So, making that connection just makes it for sure more challenging, and more time consuming to get there.

A major problem is the lack of personnel and people waiting, wait times and things like that. So not having the amount of personnel needed for some of these different programs also is a barrier.

We have two major urban areas and a whole lot of rural areas. So, what I think is missing and maybe what the biggest barrier is statewide is consistency. We don't want to tell them how to do everything because what worked for one part of the state doesn't work for the other.

**Table A13**

**Youth Empowerment Quotes**

<b>Client Self-Determination Sub-theme</b>
We developed a model of multiple agency collaboration around a youth starting from a very early age, as young as 14, to make sure that they got the work experiences etc., prior to leaving the educational system... We developed [video] a curriculum...where [youth] ambassador hosts are creating a third in that series, geared specifically 'by us for us'.
<b>Communicating Complex Systems Sub-theme</b>
The transition is scary. It is scary for parents, it is scary for kids. And when working with counselors, there is [often] no relationship built with the counselors and families
More than half the time, the parent doesn't even know what's going on. They're bouncing from one person to the next person to the next person. Trying to understand what happened and then trying to be able to educate their child about what's happening.
I think the younger generation of workers have a different mentality ... across the board there is a lack of communication and the meaning of work is completely different.
It is hard, you have to pay \$1,500 for an apartment for rent for a family of one or two. If I did a part-time job or that money will affect my housing, my food stamps. It is getting harder and harder.... Everything is so expensive. Educating the family of how the youth get involved in the work environment, how could it benefit them and how could they prevent falling into that pitfall of losing everything.... The sharing of information, how to break that down and make it digestible.
One of the other things we have done ... [in our state] is developing a tiered approach to benefits education. We talk about disability the number one obstacle is how will it impact the public benefits?
<b>Preventing Service Gaps Sub-theme</b>
The other thing that we found, that's really important, is to try to connect with the students as early as possible. Because by the time they hit that transition age ... they're not necessarily even looking. They're already entrenched in those systems. So, the earlier we can make that connection, we can make those—help them make those referrals into the VR system. We do that a lot with our littler guys to get them into the system to start the transition services to connect things together.



**Table A14****Effect of COVID-19 Pandemic Quotes**

<b>Effect of COVID-19 Pandemic Theme</b>
I will just jump on and say I feel like there is more training available because there is so much more available virtually, and that it is easier to have staff, frontline staff, especially, attend trainings, because it is not taking a full day away from them anymore.... And I feel the addition of virtual training, obviously since COVID, an update and made it more accessible to send more staff to different training opportunities.
<b>Service Disruptions Sub-theme</b>
Youth just didn't respond well to virtual service delivery.
We ... do hands-on activities, things with the students. Trainings, activities, different things.... So we're hands-on learning, it was interrupted. We were able to do additional virtual ... [but] it only worked a little bit.
<b>Technological and Geographic Barriers Sub-theme</b>
One of the issues I can see sometimes when vocational rehabilitation counselors need to meet with them in some of these low-income families don't have Internet at home. Or don't have a computer.
<b>Remote Work Effect on Collaborations Sub-theme</b>
There were advantages of being online for teachers, counselors and students. Just connect and go to any meeting or go to any training that you need to the students need to know. These are some of the advantages.

**Table A15****Collaboration Ratings and Vocational Rehabilitation Outcomes (PY 2020) by State**

<b>State Name</b>	<b>Number of Collaboration Survey Responses</b>	<b>Collaboration Total</b>	<b>Measurable Skill Gain</b>	<b>Competitive Integrated Employment %</b>
Alabama	5	33.87	0.42	0.44
Alaska	3	27.91	0.61	0.32

## Collaboration Ratings and Vocational Rehabilitation Outcomes (PY 2020) by State

State Name	Number of Collaboration Survey Responses	Collaboration Total	Measurable Skill Gain	Competitive Integrated Employment %
American Samoa	0	0.00	–	–
Arizona	17	32.15	0.49	0.29
Arkansas	4	27.81	0.55	0.36
California	6	30.54	0.40	0.29
Colorado	6	29.16	0.32	0.30
Connecticut	6	34.44	0.52	0.40
Delaware	2	32.1	0.44	0.42
Florida	2	35.81	0.28	0.31
Georgia	3	32.07	0.30	0.18
Guam	0	0.00	–	0.15
Hawaii	2	33.91	0.30	0.12
Idaho	7	27.35	0.53	0.23
Illinois	8	28.21	0.60	0.41
Indiana	15	29.5	0.64	0.23
Iowa	12	31.71	0.39	0.43
Kansas	5	21.22	0.10	0.27
Kentucky	5	28.34	0.36	0.39
Louisiana	4	32.45	0.42	0.33
Maine	1	1.92	0.48	0.20

## Collaboration Ratings and Vocational Rehabilitation Outcomes (PY 2020) by State

State Name	Number of Collaboration Survey Responses	Collaboration Total	Measurable Skill Gain	Competitive Integrated Employment %
Maryland	8	28.87	0.31	0.18
Massachusetts	6	31.55	0.21	0.34
Michigan	21	30.41	0.49	0.38
Minnesota	4	26.85	0.49	0.30
Mississippi	1	38.89	0.70	0.45
Missouri	6	35.31	0.78	0.38
Montana	1	22.13	0.36	0.11
Nebraska	6	27.77	0.61	0.22
Nevada	6	29.73	0.17	0.20
New Hampshire	5	32.54	0.61	0.22
New Jersey	7	31.68	0.27	0.24
New Mexico	4	34.13	0.14	0.15
New York	16	29.69	0.44	0.18
North Carolina	4	34.20	0.30	0.24
North Dakota	1	17.16	0.68	0.35
Northern Marianas	0	0.00	–	0.32
Ohio	5	29.30	0.58	0.32
Oklahoma	8	32.59	0.71	0.24
Oregon	6	29.87	0.25	0.35

### Collaboration Ratings and Vocational Rehabilitation Outcomes (PY 2020) by State

State Name	Number of Collaboration Survey Responses	Collaboration Total	Measurable Skill Gain	Competitive Integrated Employment %
Pennsylvania	4	32.63	0.38	0.34
Puerto Rico	1	38.16	0.34	0.39
Rhode Island	10	33.45	0.26	0.22
South Carolina	6	32.61	0.45	0.35
South Dakota	8	30.09	0.22	0.32
Tennessee	6	31.29	0.53	0.30
Texas	11	33.76	0.42	0.38
Utah	7	32.12	0.52	0.30
Vermont	5	35.29	0.49	0.27
Virgin Islands	1	34.50	–	0.44
Virginia	28	29.89	0.89	0.28
Washington	11	33.1	0.46	0.18
Washington, D.C.	2	38.8	0.36	0.30
West Virginia	4	31.24	0.55	0.36
Wisconsin	4	28.93	0.47	0.32
Wyoming	2	24.51	0.56	0.36

*Note:* Measurable Skill Gains are not available for all of the territories.

**Table A16****Effects of VR Agency Characteristics on Collaboration Ratings**

	$\beta$	S.E.	Wald	p
<b>Frequency</b>				
Order of Selection Agency	0.17	0.11	1.58	.114
Separate Agency	0.02	0.09	0.25	.802
Youth Percent	-0.76	0.66	-1.14	.254
Other Referrals Percent	-0.58	0.73	-0.79	.427
Receiving Other Services Percent	0.46	0.89	0.52	.603
<b>Knowledge</b>				
Order of Selection Agency	-0.08	0.25	-0.32	.752
Separate Agency	-0.22	0.23	-0.94	.347
Youth Percent	-3.35*	1.58	-2.13	.033
Other Referrals Percent	-4.08*	1.87	-2.19	.029
Receiving Other Services Percent	-1.10	2.38	-0.46	.645
<b>Quality</b>				
Order of Selection Agency	-0.04	0.06	-0.55	.581
Separate Agency	-0.03	0.06	-0.41	.684
Youth Percent	-0.43	0.43	-1.00	.317
Other Referrals Percent	-0.74	0.53	-1.41	.160
Receiving Other Services Percent	0.67	0.59	1.14	.254
<b>Data</b>				
Order of Selection Agency	-0.15	0.14	-1.10	.272

### Effects of VR Agency Characteristics on Collaboration Ratings

	$\beta$	S.E.	Wald	p
Separate Agency	-0.13	0.12	-1.12	.264
Youth Percent	-0.44	0.85	-0.52	.605
Other Referrals Percent	-0.84	0.91	-0.92	.356
Receiving Other Services Percent	0.64	1.01	0.64	.525
<b>COVID</b>				
Order of Selection Agency	-0.03	0.12	-0.24	.810
Separate Agency	0.06	0.11	0.57	.569
Youth Percent	-0.94	0.87	-1.08	.278
Other Referrals Percent	-0.44	1.05	-0.42	.672
Receiving Other Services Percent	-0.55	1.20	-0.45	.650
<b>Levels</b>				
Order of Selection Agency	0.06	0.12	0.47	.637
Separate Agency	-0.03	0.12	-0.22	.826
Youth Percent	-0.64	0.82	-0.79	.432
Other Referrals Percent	0.05	1.05	0.05	.963
Receiving Other Services Percent	0.29	1.29	0.22	.823

Note: \*  $p < .05$

# Appendix B

## Study Recruitment and Consent Materials

### *Recruitment Letter for Phase 1 - National Online Survey*

September 20, 2021

Dear Colleague:

[The Center for Advancing Policy on Employment for Youth \(CAPE-Youth\)](#) seeks your input on best practices to improve transition outcomes for youth and young adults with disabilities. Funded by the U.S. Department of Labor Office of Disability Employment Policy's (ODEP), CAPE-Youth is launching a national research study on **“Youth and Adult Systems Collaboration.”** This study will explore best practices, challenges and strategies for improving interagency collaboration and service coordination that can improve transition outcomes for youth and young adults with disabilities. The study seeks responses from *supervisors and direct service providers* working for state and local level governmental agencies and service providers.

CAPE-Youth will use lessons learned from the study to develop technical assistance and professional development tools and resources that support state and local level interagency collaboration and service coordination best practices. Participation in the research study is voluntary, but broad engagement in this research by informed stakeholders is essential to ensuring that the study develops robust insights to guide the efforts of state and local policymakers.

I am requesting your support in this endeavor to understand the interagency collaboration needs of practitioners who seek to change the lives of youth and young adults with disabilities every day. Please use <https://capeyouth.org/participate-in-our-research/> to visit the site and click on the link for your state to participate in our study. In addition, we ask that you distribute this request to other professionals in your agency and in partner agencies with knowledge of interagency collaboration efforts, both at the state and local levels and where direct services are provided. For more information on the project, please contact the CAPE-Youth team at [info@capeyouth.org](mailto:info@capeyouth.org) or Matthew Saleh at [mcs378@cornell.edu](mailto:mcs378@cornell.edu).

Sincerely,  
Jennifer Sheehy  
Deputy Assistant Secretary  
Office of Disability Employment Policy (ODEP), U.S. Department of Labor

OMB Control No: 1230-0015  
Expiration Date: 07/31/2024

## *Consent Text for Phase 1 - National Online Survey*

The Center for Advancing Policy on Employment for Youth (CAPE-Youth) is performing a research study of best practices in interagency collaboration among state agencies serving transition-age youth and young adults with disabilities (i.e., vocational rehabilitation, social security, workforce development, education, juvenile justice, child welfare, developmental disabilities agencies, mental health agencies, and other agencies likely to serve youth with one of WIOA's defined "barriers to employment").

As part of this research, you are being asked to participate in the following online "Youth and Adult Systems Collaboration Questionnaire." The questionnaire is for administrators, supervisors, and direct service providers working for state-level government agencies providing services to transition-age youth and young adults with disabilities. In responding to the questions, please focus on your agency's collaborative work specifically related to serving youth and young adults with disabilities. The questionnaire will take about 25-30 minutes to complete.

## *Recruitment Letter for Phase 2 - Focus Group Interviews*

Dear Colleague,

The Center for Advancing Policy on Employment for Youth (CAPE-Youth) is a U.S. Department of Labor, Office of Disability Employment Policy-funded policy development and technical assistance center supporting the development, implementation and integration of evidence-based effective practices and policies for improving transition outcomes for youth and young adults with disabilities. This year, as part of the ongoing effort to ascertain the best practices in interagency collaboration among state agencies and organizations serving transitioning youth and young adults with disabilities, we are inviting you to voluntarily participate in our **Youth and Adult Systems Collaboration Study**, a research initiative of CAPE-Youth. The research project is conducting focus groups from July 12, 2022-December 30, 2022.

If you choose to be a part of this study, you will be asked to participate in focus group interviews. The focus group interview questions will assess: (a) transition coordination practices between systems; (b) methods for facilitating external partnerships; (c) understanding of other agencies' policies, procedures, and eligibility criteria; (d) existing organizational attitudes and experiences; and (e) the frequency and success in serving diverse populations of youth and young adults with disabilities. The interviews will take approximately 1.5 hours to complete. Additionally, one-on-one phone or virtual interviews will be offered in some cases to accommodate participants who cannot make the scheduled sessions. The discussions will be audio recorded and transcribed, but transcription records will be anonymized. Reporting efforts will take steps to ensure that participants are not identifiable during reporting of qualitative findings.

As we extend this invitation, please keep in mind: (a) you are under no obligation to participate; (b) transcriptions and audio recordings will remain private, except for aggregate reporting efforts by the research team; and (c) responses will be used only for the necessary



information to include in the Center's research, technical assistance and professional development efforts. If you are interested in learning more about CAPE-Youth and Cornell University's research initiatives to support transitioning youth with disabilities, please contact: Matthew Saleh ([mcs378@cornell.edu](mailto:mcs378@cornell.edu)) or Leslie Shaw ([leslie.shaw@cornell.edu](mailto:leslie.shaw@cornell.edu)). If you are interested in learning more about Cornell's Yang-Tan Institute on Employment and Disability and the overall efforts of CAPE-Youth, please contact Kimberly Osmani ([ko259@cornell.edu](mailto:ko259@cornell.edu)).

OMB Control No: 1230-0015

Expiration Date: 07/31/2024

### *Consent Text for Phase 2 - Focus Group Interviews*

The Center for Advancing Policy on Employment for Youth (CAPE-Youth) is performing a research study of best practices in interagency collaboration among state agencies serving transition-age youth and young adults with disabilities (i.e., vocational rehabilitation, social security, workforce development, education, juvenile justice, child welfare, developmental disabilities agencies, mental health agencies, and other agencies likely to serve youth with one of WIOA's defined "barriers to employment").

As part of this research, you are being asked to participate in a virtual focus group interview. We are seeking input from administrators, supervisors, and direct service providers working for state-level government agencies providing services to transition-age youth and young adults with disabilities. The questions below are asked only to support scheduling activities. Once you fill out this interest form, one of the study staff will be in touch to schedule you for a focus group interview session.

We are conducting focus groups in the following states. What state do you work in?

**Answer Choices:** Arizona, Massachusetts, Michigan, Missouri, New Jersey, North Carolina, Oklahoma, Utah, Virginia

If you (a) represent any of the targeted agencies and positions in one of the states listed in question 1 and (b) are interested in participating, you are eligible to participate in our focus group interviews. Do you want to participate?

- **Yes** (If you answer yes, we will be in touch soon about dates and times. Please move on to the next item to complete the contact information to be included in further steps of the process.)
- **No**
- **Maybe** I would like more information about the focus group interviews and/or want to ensure I fit in the target categories. (If you select maybe, please complete the rest of the items, and we will contact you to provide more information and answer any questions.)

# CAPE - Youth

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CENTER FOR ADVANCING POLICY  
ON EMPLOYMENT FOR YOUTH