

Research BRIEF

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Measure Twice, Cut Once, Part 2: Using VR Agencies' Administrative Data to Monitor Pre-Employment Transition Services

Two companion briefs offer information on (1) approaches to using the RSA-911 Case Service Report for analyses of pre-employment transition services and (2) potential performance metrics that VR agency administrators might consider reviewing on a regular basis.

<https://vrpracticesandyouth.org/vocational-rehabilitation-vr-practices/center-publications/>

This brief discusses ways to use a state vocational rehabilitation (VR) agency's administrative data to measure the provision of pre-employment transition services. These services—which are authorized under the Rehabilitation Act of 1973, as amended by Title IV of the Workforce Innovation and Opportunity Act of 2014 (WIOA)—are intended to prepare students with disabilities for life after school. But they represent a major change in how VR agencies operate. VR agencies must provide five required pre-employment transition services and, if funds are available, may provide nine other authorized services to secondary and postsecondary students (see table at the end the brief). Each agency must use at least 15 percent of its federal VR grant award on such services. Any student can receive these services if he or she is eligible or potentially eligible for VR services—meaning that students with disabilities do not have to apply to the VR program before receiving pre-employment transition services.

PRE-EMPLOYMENT TRANSITION SERVICES

Given this increased emphasis on pre-employment transition services, staff at VR agencies might be wondering how best to measure these services. Who is—and who isn't—receiving these services? Is the VR agency on track to use 15 percent of its federal funds on these services, as required? Are providers delivering the services that they are contracted to provide? Do eligible students have access to all required services, or are some students in certain schools or regions not being served? Are the services having the effects that VR agency staff want?

VR agencies already collect rich data on pre-employment transition services that staff could use to answer many of these questions. The agencies compile data on the characteristics of the people they serve, the types of services provided, and expenditures by type of service. These data enable staff to monitor the differences in pre-employment transition services by student characteristic, geography, provider, or counselor; changes in the types or number of these services over time; and spending on various types of pre-employment transition services (as well as relative to the 15 percent federal allotment requirement). VR agency staff could use these data to assess patterns in use and spending compared with their expectations for these services. In many instances, and depending on how the data are prepared, these analyses could be completed using readily accessible software.

In this brief, we identify how VR agency staff might use their administrative data to assess the provision of pre-employment transition services. We begin by describing these administrative data and their advantages and disadvantages. We then offer suggestions on how to prepare the data for analysis, followed by three examples of analyses involving pre-employment transition services that illustrate how to conduct the analysis, interpret the findings, and extend the analysis.

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WHAT ARE VR AGENCIES' ADMINISTRATIVE DATA?

VR agencies collect administrative data on pre-employment transition services through a number of sources, reflecting the variety and complexity with which these services are provided. Most VR agencies contract with providers to deliver some or all of these services, particularly for students who are not already VR clients. In many states, VR counselors also provide some services to students who are VR clients. Counselors use the VR agency's case management data system to record information on students who receive pre-employment transition services. In addition, providers of pre-employment transition services may deliver specific reports on services, submit invoices documenting services, or enter data on service provision through systems developed especially for these services. Accounting systems may track payments to providers, whereas details on VR administrators' expectations for providers might appear in the contracts or agreements that the VR agency makes with schools and providers. Each of these data sources could be used to monitor these services, either alone or in combination.

ADVANTAGES AND DISADVANTAGES OF USING VR AGENCIES' ADMINISTRATIVE DATA TO ASSESS PRE-EMPLOYMENT TRANSITION SERVICES

There are many advantages to using the vast data collected by VR agencies to measure pre-employment transition services (Figure 1). These data could be used in close to real time, as soon as they are entered or updated. Depending on whether students are VR clients or only receive pre-employment transition services, the data may contain many details about the student (such as location, school, age, race or ethnicity, and disability), the provider (such as services offered, length of involvement, and associated schools), and the services (such as timing, quantity, and costs). The data also offer a longitudinal perspective, enabling users to examine a student's or provider's entire service history.

Yet the richness of administrative data also poses an obstacle (Figure 1). The structure of the data might be complex, with various data elements and multiple observations per individual. Combining data from multiple sources within the VR agency's data system may be challenging. An analysis of pre-employment transition services using these data might therefore require staff with specialized skills to extract and manipulate the data.

VR agencies' administrative data: advantages and disadvantages

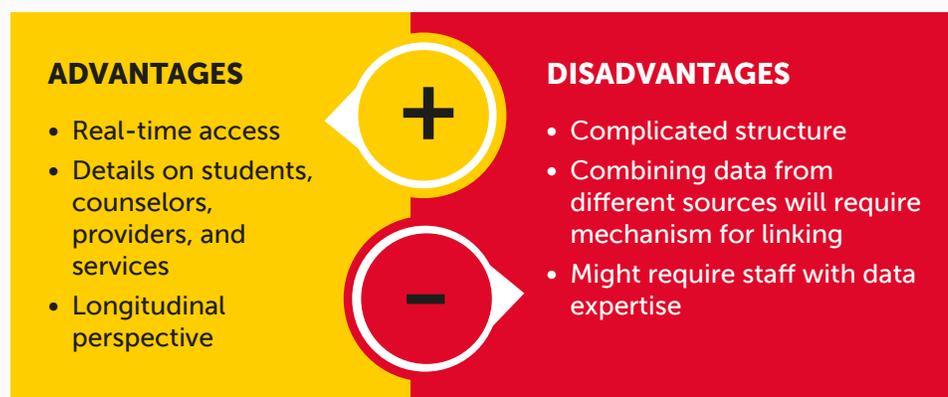


Figure 1.

PREPARING VR AGENCIES' ADMINISTRATIVE DATA FOR PRE-EMPLOYMENT TRANSITION SERVICES ANALYSES

Because each VR agency has its own approach to delivering and documenting pre-employment transition services, there is no single set of clear-cut guidelines for analyzing the relevant data. Administrators, managers, counselors, and data managers may need to work together to identify the questions they want to answer and the best data and approach for finding those answers. The analyses might involve obtaining tabulations or reports directly from the agency's management information system. Alternatively, staff might need to extract a unique data snapshot from the agency's system, which they could then investigate using programs like Microsoft Excel or Google Sheets.

Regardless, VR agency staff who wish to use their administrative data to understand pre-employment transition services might find the following guidelines helpful:

- **Define an analysis question.** A well-crafted question grounds the development of an analysis and keeps it focused. Defining the question requires careful consideration of the details of the service and its provision; its intended goal; and the target population of clients, VR staff, or providers. Crafting the question first will make the rest of the analysis much easier.
- **Identify the sample.** Being clear about which students to include in the calculations could help narrow the data request. Should the analysis include all students ages 14 to 21 (or the age range for pre-employment transition services in the state), only students receiving pre-employment transition services, or students enrolled in secondary education? This choice may have implications for the analysis and the interpretation of findings.
- **Consider the time period.** The longitudinal structure of the administrative data means that services and students could be measured for relatively long periods. But services delivered recently might be of more interest than services delivered long ago. Narrowing the time period of interest, such as a recent quarter, academic year, or calendar year, could make the analysis more manageable and the statistics more relevant to the analysis question.
- **Identify the data elements of interest.** Identifying the specific data elements needed to answer the analysis question will also narrow the data request and extraction. These data elements might include those about the pre-employment transition services itself, such as how much it cost, who provided it, who received it, and when. The data elements might also include those related to the students receiving services (such as their age, gender, and race or ethnicity), the provider, and outcomes. Some or many of the elements extracted from the administrative data might need to be rearranged, combined, or processed to make them simpler to analyze. We discuss ways to process data elements in our companion brief on using the RSA-911 Case Service Report for analyses of pre-employment transition services.

With any data analyses, including analyses of VR agencies' administrative data, it's important to follow your agency's data security guidelines to maintain the privacy of the data. These guidelines might include conducting analyses on secure computers, not emailing files with personally identifiable information (such as names and birth dates), and storing data and analysis files in specific locations.

EXAMPLES OF ANALYSES INVOLVING PRE-EMPLOYMENT TRANSITION SERVICES USING THE RSA-911 CASE SERVICE REPORT

This section presents three hypothetical examples of analyses involving pre-employment transition services using a VR agency's administrative data. The examples show the concrete steps involved in the types of analyses that might be of most interest to VR agency staff.

1. **Example 1** shows an analysis of pre-employment transition services by geographic area, which may be important for identifying geographic differences in service provision and spotting underserved areas.
 2. **Example 2** presents a way to measure spending on pre-employment transition services at the provider level. These types of statistics could help a VR agency track its progress toward the 15 percent allotment target.
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3. Example 3 shows the receipt of pre-employment transition services for individual students over time. Though a simple presentation of a VR agency’s data, it could reveal whether patterns in a student’s receipt of these services are consistent with the VR agency’s expectations.

Each example shows how to use the data to answer a particular analysis question. We pose the analysis question, identify the needed data elements, describe the analysis process, present a graph or table with hypothetical data, offer questions to interpret the findings, and suggest ways to extend the analysis further. The companion brief on the RSA-911 Case Service Report contains a different set of examples that may also be relevant for analyses using VR agencies’ administrative data.

How does the provision of pre-employment transition services differ by geographic area?

Percentage of students receiving pre-employment transition services in academic year 2017–2018, by county

County	Number of students	Job exploration counseling	Work-based learning experiences	Counseling on post-secondary education	Workplace readiness training	Instruction in self-advocacy
County 1	115	67%	33%	21%	55%	11%
County 2	252	53%	35%	23%	62%	16%
County 3	18	68%	63%	33%	100%	17%
County 4	25	100%	100%	31%	73%	12%
Total	410	60%	40%	23%	62%	14%

Conduct the analysis

Create binary indicators of individual pre-employment transition services for each student.

Create counts of total students and the number who are receiving each pre-employment transition service by county for the target period.

Calculate the percentage of students in each county who are receiving each pre-employment transition service.

Interpret the results

Are the differences by county as expected?

Can any differences by county be accounted for by provider capacity, service rollout, or school relationships?

Extend the analysis

Would a graphic (such as a bar chart) be easier to read than a table?

Is it worthwhile to examine the percentages by quarter or month?

If multiple time periods are analyzed, is change happening in the expected direction over time?

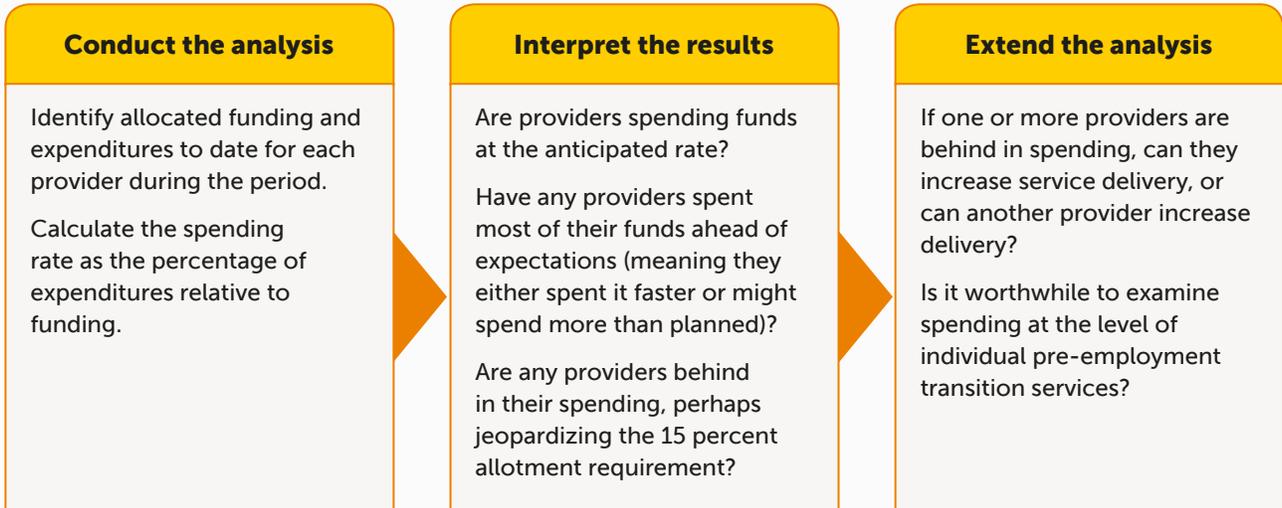
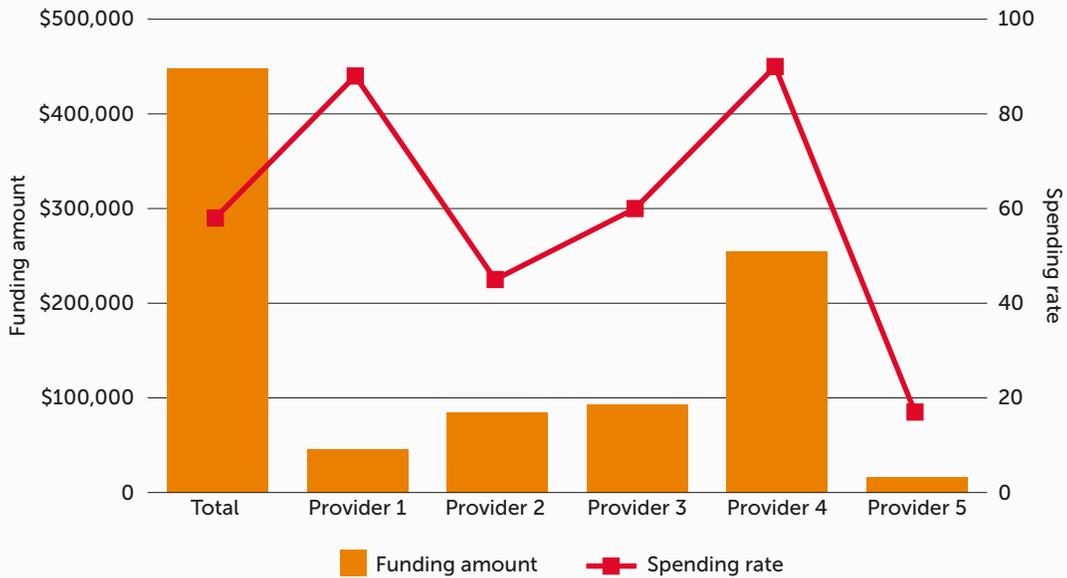
Should the analysis cover youth who are receiving only pre-employment transition services as well as those receiving both pre-employment transition services and VR services?

Would it be useful to show statistics for VR regions, offices, supervisors, counselors, and schools?

Example 1.

At what rate are providers spending their allocation for pre-employment transition services?

Funding amounts and spending rates of pre-employment transition services by provider, academic year 2017-2018

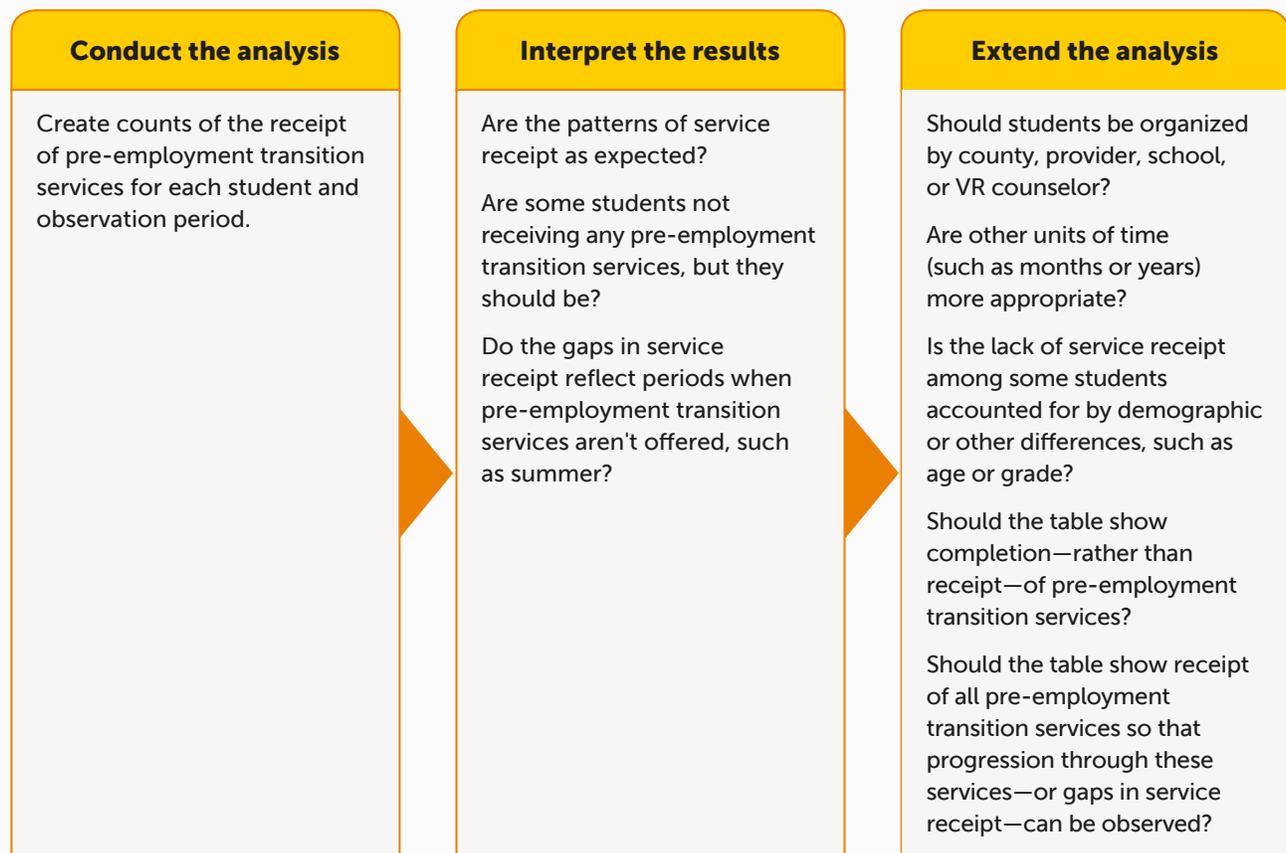


Example 2.

How does the provision of pre-employment transition services differ by geographic area?

Receipt of job exploration services by quarter in academic year 2017–2018, by student

Student ID	Q1	Q2	Q3	Q4	Number of quarters, 2017–2018
Student 1	1	0	1	1	3
Student 2	1	0	1	1	3
Student 3	1	0	0	1	2
Student 4	0	0	0	0	0
Student 5	1	0	0	0	1
Total	4	0	2	3	9



Example 3.

CONCLUSION

Tracking pre-employment transition services across students, counselors, providers, geographic areas, and time could be useful for understanding whether a VR agency's service provision is effective and how these services could be improved. This brief, along with the other two briefs in this series, is intended to provide VR agency staff with ideas for measuring pre-employment transition services, but the examples are just a starting point. An agency could conduct a wide array of analyses to understand these services, limited only by the data elements that it collects. Staff can use the resources on the next page to extend their analyses.

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- The VR Program Evaluation Coach, an online tool to help VR agencies assess their programs: <https://vrealcoach.com/>
- An issue brief on performance management issues for VR agencies: <https://www.mathematica-mpr.com/our-publications-and-findings/publications/performance-management-for-state-vocational-rehabilitation-agencies-serving-transition-aged-youth>
- An issue brief on VR agencies' early implementation of pre-employment transition services: <https://www.mathematica-mpr.com/our-publications-and-findings/publications/state-vocational-rehabilitation-agencies-early-implementation-experiences-with-pre-employment>
- The Workforce Innovation Technical Assistance Center, which provides resources related to pre-employment transition services: <http://www.wintac.org/>
- The Program Evaluation and Quality Assurance Technical Assistance Center, which provides training, technical assistance, and resources for data analysis and evaluation: <https://peqatac.org/>

Definitions of required and authorized pre-employment transition services

<p>The five required pre-employment transition services</p>	<ol style="list-style-type: none"> 1. Job exploration counseling 2. Work-based learning experiences, which may include in-school or after-school opportunities, or experiences outside the traditional school setting (including internships), provided in an integrated environment to the maximum extent possible 3. Counseling on opportunities for enrollment in comprehensive transition or postsecondary educational programs at institutions of higher education 4. Workplace readiness training to develop social skills and independent living 5. Instruction in self-advocacy, which may include peer mentoring
<p>The other nine authorized pre-employment transition services</p>	<ol style="list-style-type: none"> 1. Implementing effective strategies to increase the likelihood of independent living and inclusion in communities and competitive, integrated workplaces 2. Developing and improving strategies for individuals with intellectual disabilities and individuals with significant disabilities to live independently; participate in postsecondary education experiences; and obtain and retain competitive, integrated employment 3. Providing instruction to VR counselors, school transition personnel, and other persons supporting students with disabilities 4. Disseminating information about innovative, effective, and efficient approaches to achieving the goals of WIOA 5. Coordinating activities with transition services provided by local educational agencies under the Individuals with Disabilities Education Act (20 U.S.C. 1400 et seq.) 6. Applying evidence-based findings to improve policy, procedure, practice, and the preparation of personnel in order to better achieve the goals of WIOA 7. Developing model transition demonstration projects 8. Establishing or supporting multistate or regional partnerships involving states, local educational agencies, designated state units, developmental disability agencies, private businesses, or other participants to achieve the goals of WIOA 9. Disseminating information and strategies to improve the transition to postsecondary activities for members of traditionally unserved populations

Source: Rehabilitation Services Administration. "Pre-Employment Transition Services." RSA-VR-1. 2016. Available at <https://www2.ed.gov/policy/speced/guid/rsa/supporting/rsa-vr-1-pre-employment-transition-services.pdf>. Accessed January 8, 2019.

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