

# **Final Evaluation Report Transition Pathways Services**

#### Prepared for:

The Massachusetts Rehabilitation Commission

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# **Contents**

LIST	OF ABBREVIATIONS	1
EXEC	CUTIVE SUMMARY	1
	FRODUCTION	
2. OV	/ERVIEW OF THE TPS MODEL DEMONSTRATION	9
2.1	Project Partners	
2.1.1	Massachusetts Rehabilitation Commission	
2.1.2	Institute for Community Inclusion	
2.2	TPS Model Demonstration	
2.2.1	Overview of the TPS Model as Designed	10
2.2.2	Overview of Project Infrastructure, Operations, and Communication	11
2.3	Technical Assistance	13
2.4	Evaluation Overview	14
3. IM	PACT ANALYSIS OF THE TPS MODEL	15
3.1	MRC in National Context: How does MRC compare with its National Peers?	17
3.2	MRC in Local Context: How do the MRC catchment areas compare to the TPS Catchment Areas?	
3.3	TPS Youth in Context: How did the youth that were recruited and volunteered for TPS differ	
	from their peers?	25
3.4	How did TPS Youth Compare to a Matched Sample of Non-TPS Youth?	27
3.5	The TPS Service Delivery Context: What services did youth receive and how did those	
	service patterns differ between TPS and non-TPS youth?	
3.6	What were the treatment effects for TPS?	
3.7	Discussion and Conclusion	40
4. YO	OUTH AND FAMILY PERSPECTIVES	. 44
4.1	Youth Involvement in Survey Development	44
4.2	Surveys of TPS Youth	
4.2.1	Who were the youth that responded to a survey and what did they say?	47
4.3	TPS Youth and Families: In-Depth Interviews of their TPS Experience	52
4.3.1	Methods and Data Collection	52
4.3.2	Youth and Family Experiences	
4.4	The Federation for Children with Special Needs and the role of Family Support in Transition Planning	
4.5	Summary	65
5. PA	RTNER AND STAKEHOLDER PERSPECTIVES	66
5.1	Overview of Key Partner and Stakeholder Perspectives	66
5.2	Core Questions	
5.3	Interview Process	67
5.4	Data Collection	68
5.4.1	Interviews	68
5.4.2	Observations, Site Visits, and Document Review	
5.5	Findings	
5.5.1	What was the level of implementation and how did it vary by TPS site?	
5.5.2	What were the perspectives of MRC counselors, supervisors, and local leadership staff on lessons learned?	
5.5.3	What are the perspectives of key partners about lessons learned?	75

5.5.4	What do interviewees recommend MRC sustain or build to improve post high school outcomes of	
	high school students with disabilities?	
5.5.5	How did the March 2020 state and federal public health orders change TPS implementation?	81
APPE	NDIX A: DESCRIPTION OF TPS IMPLEMENTATION SITES	84
5.5.6	MRC Roxbury Area Office (MRC-R)	86
5.5.7	MRC Lawrence Area Office (MRC-L)	89
5.5.8	MRC Springfield Area Office (MRC-S)	92
APPE	NDIX B: TPS SERVICES GUIDE	95
APPE	NDIX C: FIDELITY INSTRUMENT	103

# **List of Abbreviations**

ADA	Americans with Disabilities Act
AT	Assistive Technology
BCIL	Boston Center for Independent Living
BPS	Boston Public Schools
CDT	Career Discovery Team
DESE	MA Department of Elementary and Secondary Education
DDS	Department of Developmental Services
DMH	Department of Mental Health
DOE	Department of Mental Health  Department of Education
EOHHS	Massachusetts Executive Office of Health and Human Services
EPRS	
FCSN	Employee Performance Review System
	Federation for Children with Special Needs
GPRA	Government Performance and Results Act
ICI	Institute for Community Inclusion
ID/DD	Intellectual Disability/Developmental Disability
IEP	Individual Education Plan
ILC	Independent Living Center
IRB	Institutional Review Board
JAN	Job Accommodation Network
MA DOT	Massachusetts Department of Transportation
MBTA	Massachusetts Bay Transit Authority
MRC	Massachusetts Rehabilitation Commission
MRC-L	Massachusetts Rehabilitation Commission - Lawrence
MRC-R	Massachusetts Rehabilitation Commission - Roxbury
MRC-S	Massachusetts Rehabilitation Commission - Springfield
MRCIS	MRC Information System (case management system)
MVRTA	Merrimac Valley Regional Transit Authority
NILP	Northeast Independent Living Program
PAC	Project Advisory Council
Pre-ETS	Pre-Employment Transition Services
PVTA	Pioneer Valley Transit Authority
PWD	People with Disabilities
PYD	Partners for Youth with Disabilities
RSA	Rehabilitation Services Administration
SBC	Student Benefits Counselor
SFY	State Fiscal Year
SPED	Special Education
SSDI	Social Security Disability Insurance
SSI	Supplemental Security Income
STEM	Science, Technology, Engineering, and Mathematics
STRIVE	Supported Training to Reach Independence Through Vocational Experiences
TA	Technical Assistance
TPS	Transition Pathways Services
VR	Vocational rehabilitation
WBLE	Work-based learning experience
WINTAC	Workforce Innovation Technical Assistance Center
WIOA	Workforce Innovation and Opportunity Act
YAB	Youth Advisory Board



## **Executive Summary**

#### **Transition Pathways Services Project**

The Massachusetts Rehabilitation Commission's (MRC's) Transition Pathway Services (TPS) Project was one of five model demonstrations funded by the U.S. Department of Education Rehabilitation Services Administration (RSA) to test whether high school students with disabilities who participate in at least two work-based learning experiences (WBLEs) have improved educational and employment outcomes after high school graduation. MRC implemented the Transition Pathways Services (TPS) Project as its work-based learning model demonstration in towns and cities covered by the Roxbury, Lawrence, and Springfield area offices.

Project partners include three independent living centers, Partners for Youth with Disabilities, the Federation for Children with Special Needs, multiple employment services providers, the Department of Elementary and Secondary Education, the Department of Developmental Disability Services, Work Without Limits and over 50 high schools in Massachusetts. Enrolled TPS students worked with a designated TPS Counselor to create a Career Discovery Team (CDT) that assists the youth with a menu of services including workbased learning, vocational counseling, benefits counseling, transportation coordination, self-advocacy training, family support in transition planning, career assessment, work readiness training, assistive technology, peer mentoring, and job placement services.

#### **Evaluation**

MRC contracted with the Institute for Community Inclusion (ICI) at the University of Massachusetts Boston (UMass Boston) for a formative and summative evaluation. The formative evaluation assesses the implementation process, including progress with implementing the intervention and timeliness, as well as changes and challenges, using data from stakeholder interviews, observations, site visits, document review, and analysis of student data. Student data are obtained from two sources: MRC's case management system and a database that was specifically created for use by the TPS Counselors in this project. The ICI produced an interim report in March 2020 summarizing activities through September of 2019. This report is the summative analysis assessing the impact and whether or not students achieved improved employment and/or educational outcomes in comparison to a matched group of youth receiving MRC services.

For full disclosure, the ICI at UMass Boston has multiple completed and ongoing contractual relationships with MRC, as a technical assistance provider, an employment services vendor, a rehabilitation counseling program, and a research partner. ICI is not a vendor of TPS services and is not a pre-employment transition services provider.

### **Key Findings**

#### Administrative Data Analysis

Four hundred 400 youth were enrolled into TPS. Of those 291 met criteria for inclusion in the impact analysis and 220 were matched with peers through propensity score matching. The majority of TPS and their matched peers are still receiving services as of the end of the project and many were still in high school.

- TPS Youth received a higher mean number of MRC services (8.25) versus 4.06 for non-TPS Youth.
- Seventy-seven % of TPS youth received any work-based learning service compared to 25% of non-TPS youth.
- Non-TPS youth were more frequently receiving job placement services (46%) than TPS youth (33%).
- Forty-two % of TPS youth participated in a paid work-based learning experience and 15% had a second paid work-based learning experience.
- TPS youth were more likely to have an individualized plan for employment and receive at least one MRC non-TPS service than non-TPS youth.
- A higher percentage of TPS youth were reported to have graduated from high school during their VR tenure than non-TPS youth.
- No differences in post-secondary education attendance post high school were observed.
- A small percentage of both groups were employed post IPE but before closure, possibly indicating a part-time job while in high school. TPS youth had a higher mean hourly wage (just over a dollar per hour) than non-TPS youth.
- Of those that closed out of VR, TPS youth had a VR tenure of 2.4 years versus non-TPS youth that had a tenure of 1.4 years.
- TPS youth were less likely to close before IPE than non-TPS youth.
- A large proportion of TPS youth that closed out of VR closed without an employment outcome. One TPS youth closed with an employment outcome versus 14 non-TPS youth.

#### Student and Family Surveys and Interviews

- Student and families that responded to surveys and interviews were highly motivated to participate in TPS to gain work experience and a short-term paid job.
- Interviewees made many spontaneous statements lauding the TPS counselors and peer mentors.
- A consistent theme across interviewees was a sense of confusion and uncertainty about their status as a client, whether or not they had an individualized plan for employment, what they could expect for future services, and how all of the services received were connected.
- Most of the interviewees were referred by a school representative to other systems either simultaneously or in succession including MassHire Career Centers, the Department of Developmental Disabilities, and private vendors.
- Interviewees mentioned other public state and federal systems including Department of Children and Families, the Department of Transitional Assistance, Housing and Section 8, various transportation services, Medicaid, and Social Security benefits.
- Surveys and interviews suggest that youth may be working and attending post-secondary educational setting at higher rates than what is indicated in MRC's administrative data.

#### Stakeholder Interviews

- Paid WBLEs are highly valued by TPS staff and key partners, who report in interviews that these opportunities attract youth contemplating applying for or enrolling in early career development services.
- Field staff across organizations described major adaptations and considerable resilience and creativity after the March 13, 2020, Massachusetts public health emergency shutdown. They raised many concerns about how youth fared and witnessed emotional, social, educational, and work upheavals in the lives of students. Many remained engaged; others withdrew.
- Fidelity of implementation varied across sites. Springfield used a team approach to deliver TPS services and was very different from typical services. Lawrence advanced an intensive case coordination model that varied from TPS as designed but was very different from business as usual. After 2019 when the Roxbury TPS counselor left, TPS services appeared similar to typical Pre-ETS services with an added emphasis on peer mentoring. Less than half of TPS students in the impact evaluation received a paid work-based learning experience.
- Lawrence and Springfield TPS counselors had caseload sizes above 120 which they reported limited their ability to offer career discovery team meetings and provide 8 out of 10 service components.
- Multiple stakeholders across sites lauded the work of the peer mentors based at the Independent Living Centers and nominated peer mentoring as a service MRC should sustain.

#### **Recommendations for Sustainability**

- Consider a systems approach to providing a range of youth-centered WBLEs, including paid high-intensity experiences and unpaid low-intensity experiences.
- Chart a strategic process for the flow of early career development services from age 14 through to 24 years for students and youth with disabilities to identify likely pathways, support needs, and required partnerships, and to prioritize the development of WBLEs that meet the needs of a wide range of students.
- Communicate a strong, clear, and concrete message to local offices and partners about the mission, purpose, and target population of early career development practices.
- When designing service innovations, carefully weigh the benefits and challenges of using specialist counselors versus an office-level intervention with additional capacities for critical services (such as job placement).

#### Conclusion

Impact analysis of the TPS model was inconclusive as more than two-thirds of TPS youth were either still in high school or were continuing to receive services from MRC. MRC may want to follow along outcomes and reassess once TPS progress and complete services. Fidelity of implementation varied across sites with Springfield closest to the model as designed.



#### 1. Introduction

The Massachusetts Rehabilitation Commission's TPS Project was one of five Transition Work-Based Learning Model Demonstrations funded by the Rehabilitation Services Administration through the Disability Innovation Fund. The purpose of these model demonstrations was "to identify and demonstrate practices, which are supported by evidence, in providing WBL experiences in integrated settings under the vocational rehabilitation (VR) program, in collaboration with state and local educational agencies, and other key partners within the local community, to improve post-school outcomes for students with disabilities" (Federal Register, 2016).

MRC designated three area offices (Roxbury, Springfield, and Lawrence) and their corresponding catchment areas as TPS implementation sites. Each site had a unique roster of partners including independent living centers, vendors, and area offices of other state agencies. Each TPS area office included many cities and towns and about 25 to 35 public schools in each. TPS counselors identified a few local schools to conduct intensive outreach activities. School personnel had relatively little involvement in the TPS project except as a source of referral or inviting TPS counselors into school-based meetings. The Federation for Children with Special Needs offers support to families across all sites. In each location, one MRC VR counselor was identified as the TPS specialist working with the local partners. Each TPS counselor was charged with offering a suite of work-based learning and related services using a customized, coordinated team approach. Students with disabilities who were about two years from high school graduation, met VR eligibility criteria, and had an interest in receiving work-based learning services could enroll in TPS if they lived or went to school in one of the catchment areas.

MRC contracted with the Institute for Community Inclusion (ICI) at the University of Massachusetts Boston to conduct an evaluation (formative and summative) and help guide implementation decisions that have implications for fidelity, project implementation, and training needs. ICI also provides training and technical assistance (TA) as needed. The interim report focuses on early implementation to describe start-up and progress covering the period October 2016 through September 2019. This report focuses on the impact analysis (Section 3), student and family perspectives (Section 4), and stakeholder updates on implementation (Section 5). Section 2 of this report provides an overview of the background, partners, infrastructure, local sites, and model components. More detail is available in the Interim Report.

#### 2. Overview of the TPS Model Demonstration

#### **2.1 Project Partners**

#### 2.1.1 Massachusetts Rehabilitation Commission

The Massachusetts Rehabilitation Commission (MRC) is a general VR agency that provides public employment services to individuals with disabilities, including transition-age youth, either directly, as purchased services through vendor contracts, or coordinated efforts with partners such as public schools. The agency is part of the MA Executive Office of Health and Human Services (EOHHS) along with 12 other agencies, including the MA Commission for the Blind (MCB), which serves the rehabilitation needs of individuals who are blind or meet other eligibility criteria for visual impairment. In addition to rehabilitation services, MRC is responsible for community living and disability determination for the Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI) federal benefits programs. MRC has an administrative office in Downtown Boston and 22 area offices, and 1 satellite office organized into three regions (North, South, and West) that cover all 14 counties of the Commonwealth. https://www.mass.gov/orgs/massachusettsrehabilitation-commission. In the first six months of the project, MRC launched the TPS Project in three area offices (Lawrence, Roxbury, and Springfield), hired three TPS counselors, a Transportation Instruction Coordinator, a Project Director, executed subcontracts, and assembled partners for launch meetings. MRC and its partners further refined the model to provide a coordinated services including work-based learning experiences and other employment-related skills and supports to facilitate future post-secondary enrollment and employment opportunities. By the end of the project, 400 youth were enrolled in TPS and receiving services.

#### 2.1.2 Institute for Community Inclusion

MRC contracted with the **Institute for Community Inclusion (ICI)** to provide training and technical assistance over the course of the TPS Project, and to monitor and evaluate the implementation of the TPS model across the three selected MRC area offices. The ICI is housed within UMass Boston's School for Global Inclusion and Social Development and has served as a University Center for Excellence in Developmental Disabilities Education, Research, and Service (UCEDD) since 1967. ICI also has extensive experience conducting research and evaluation within the context of VR agencies and the VR system (c.f. ExploreVR.org).

The ICI and MRC have multiple relationships. ICI's Work Experience Program has been an employment services vendor with MRC for over 35 years. This program is not a pre-ETS vendor and is not participating in the TPS Project. ICI and MRC previously partnered on a U.S. Department of Education grant called Transition Works, which was housed in the MRC area offices of Brookline, Springfield, and Worcester and featured three dedicated VR counselors assigned to specific high schools. UMass Boston's master's program in rehabilitation counseling is based within the same school as ICI. Faculty of the UMass Boston rehabilitation counseling program work closely with MRC as well as other VR agencies but have not been part of the TPS evaluation.

#### 2.2 TPS Model Demonstration

#### 2.2.1 Overview of the TPS Model as Designed

This section presents the TPS Model as initially designed. Implementation is described in subsequent sections.

**Goals:** The TPS model demonstration aimed to improve competitive integrated employment and post-secondary enrollment outcomes for students with disabilities eligible for MRC services. The TPS model included 10 service components listed in Figure 1. The TPS model as designed differed from typical VR service delivery in its coordination approach and by offering those services to a younger group of students who were at least two years away from high school completion than typically served by MRC. MRC set a target goal to provide at least 8 out of the 10 services to each TPS student with at least one of those services including two work-based learning opportunities (one paid).

**Participants:** MRC defined TPS students with disabilities as those who were a) enrolled in a high school in one of the three catchment areas, b) between the ages 16 to 22, c) two years from high school graduation, and d) would meet eligibility criteria for MRC services. Students interested in TPS but who had not been referred or applied for MRC services were asked to apply. An MRC counselor or a TPS counselor were tasked with making eligibility determinations as appropriate. Students who had already been determined eligible but not yet had an individualized plan for employment could enroll. The TPS counselor described the project to interested students and families. Students (or a guardian) who signed a TPS enrollment form were included in the project.

FIGURE 1. VISUAL REPRESENTATION OF THE TPS MODEL AND THE 10 CORE COMPONENTS



**TPS Process:** The TPS counselor was asked to develop an Individualized Plan for Employment (IPE) involving a family member, as appropriate for each student, and any other individual the student chooses to include in the plan development process. TPS services were integrated into the IPE. However, the TPS counselor was also asked to set a long-term focus on the career and post-secondary goals of the student beyond the TPS Project. Plans could include selective job placement and follow-up services as required. Some plans might include post-secondary vocational training or college training based on students' vocational goal established in the IPE.

TPS counselors were asked to use the identified vocational goal as direction for determining the two TPS WBLEs. These work experiences could occur as summer jobs or internships, after-school work, or work experience included as part of the school day program. WBLEs may be identified by TPS staff directly with an employer and/or through a number of other sources, such as the high school, American Job Center summer youth jobs program, MRC summer internship program, pre-ETS vendors, the MRC Job Placement Team, and/or an Independent Living Center. The TPS counselor was also asked to work with the student and design a career discovery team (CDT). This team would help plan and review services and identify work experiences that meet the student's individual interests, needs, and goals. In addition to the student and TPS counselor, team members could include parents/guardians, school personnel, the travel coordinator, and other community partners as needed. As designed, the team would convene a minimum of three times: first, to plan the first WBLE and review TPS services; second, to review the first experience and plan for the second one; and third, to review the second WBLE and plan for next steps toward employment and/or training, including completion of remaining TPS services. Within this framework, after the third meeting of the team, the IPE is to be amended as needed and implemented as amended.

#### 2.2.2 Overview of Project Infrastructure, Operations and Communication

TPS Leadership Team: The original TPS leadership team consisted of Principal Investigator William "Bill" Noone, Project Director Jennifer Stewart, Management Analyst Supervisor Graham Porell, Management Analyst Scott Leung, and Transportation and Community Partnership Coordinator Teri Koopman. Mr. Noone oversaw the overall project management, budget, and contracting, while Jennifer Stewart was responsible for implementation, including identification of existing agency resources, creation of new resources to support TPS, and the counselors delivering the services. Ms. Stewart facilitated internal and external communication relating to TPS via the Steering Committee and the Project Advisory Council. Jennifer Stewart relocated to another state in the Fall of 2019. Jessica Cimini added the role of TPS project director to other leadership responsibilities at MRC. Graham Porell was responsible for TPS data management and data sharing arrangement with the ICI. Scott Leung developed and maintained the TPS database and worked with ICI to analyze program data. Teri Koopman's role focused on providing transportation coordination to all three TPS sites. Over time, her responsibilities expanded into community engagement, business relations, and supporting the implementation sites on an as-needed basis. All TPS leadership team members were based at the MRC central office, while Ms. Koopman was based at the MRC Springfield area office.

**TPS Site Selection:** In fall 2016 MRC convened a meeting with the area and district office directors to determine which area offices would become implementation sites, identify a strategy for hiring TPS specialist counselors (one per site), and start the contracting process with external partners. At that time MRC had 24 offices overseen by area directors who reported to the respective district office directors. Three area offices (Roxbury, Lawrence, and Springfield) expressed an interest in participating in this model demonstration and were subsequently selected as implementation sites.

**TPS Counselor Recruitment and Engagement:** MRC's preferred strategy was to create specialist positions rather than have all counselors at a pilot site implement the model. Once the implementation sites had been identified, MRC posted three TPS counselor positions that would be based at the pilot sites, be overseen by a local supervisor, and work with the TPS Project

director based at the MRC central office. By mid-spring 2017, all three positions had been filled. The TPS counselor for Springfield left the position shortly after being hired and the position remained unfilled until February 2018. This combined with other factors resulted in a delayed startup in Springfield. It was reported that the reasons for the delay involved multiple pending policy changes, including budget decisions, relocation of offices, potential layoffs, and a possible merger of the Springfield and Holyoke offices. (The merger with the Holyoke office took effect in 2019.) In the case of Roxbury, the TPS counselor took a three-month leave of absence in the first year of the project. During that time, MRC hired a retired counselor to cover the caseload. The Lawrence office TPS counselor came on board early and remained throughout the entire demonstration. At the conclusion of the project, the Lawrence TPS counselor became a general counselor in the same office. The Roxbury TPS counselor relocated to another office in the early fall of 2019 and was not replaced. The TPS Leadership Team recruited a vendor to provide coordination services to current TPS students and to work with other partners. Some TPS youth that had completed the model or who had graduated from high school were transferred to other counselors or were determined to have completed MRC services. The Springfield TPS counselor remained engaged until the summer of 2021 and accepted a position in another state.

**TPS Implementation Team:** The TPS implementation team was made up of the Project Director the Transportation and Community Partnership Coordinator, and the three TPS counselors. In late 2019, Work Opportunities Unlimited took on the TPS counselor role as an external partner. The Project Director met at least monthly and communicating frequently with the TPS counselors to discuss progress and help problem-solve. TPS counselors (except for those working for Work Opportunities) reported to supervisors at the local office. Work Opportunities staff provided updates to the TPS Project Leadership.

Steering Committee: Established in winter 2018, the purpose of the Steering Committee was to provide guidance, advice, and strategic direction in key areas of project design, development, and implementation, support the project director and key stakeholders, and to keep MRC leadership informed about the project. That direction could be in the form of helping formulate policies or procedures, offering insight on participant outreach and recruitment, or making decisions about definitions, rules, procedures, such as the definition of WBLE, performance evaluation, business relations strategies, and contracting. The committee was comprised of 10 to 15 MRC leadership staff, including supervisors, area directors, regional directors, and central office personnel. The committee used to meet quarterly, generally in person, with the project director facilitating all meetings and interactions. Steering Committee meetings were less frequent by mid-2019. Policy and other TPS-related items may be discussed through normal leadership channels rather than through a TPS-specific leadership body. Additionally, several members of the Steering Committee changed their roles at MRC, and the MRC leadership team was focused on significant systems change issues (i.e., pilot testing an eligibility unit, changes in pre-ETS implementation, and financial concerns). MRC also launched a major initiative with the MA Department of Mental Health, which required leadership attention. By March 2020, MRC's leadership was focused on ensuring service delivery and employee safety during the global pandemic. An example of input provided by the Steering Committee was to refine the definition of WBLE and whether these experiences should include only paid experiences lasting at least multiple days. Members recommended not defining WBLE and instead providing the TPS counselors the flexibility to create opportunities that make sense for each student. This decision was disseminated to the local TPS counselors through the project director.

**Project Advisory Council (PAC):** The PAC focused on issues that arise in the course of implementing the TPS Project and that may cross over multiple service providers systems involved with this effort. A typical PAC meeting agenda includes introductions, evaluation updates, dissemination updates, an issue-specific discussion, and sharing project achievements.

Established prior to student outreach and recruitment in August 2017, the PAC was initially comprised of members representing all major service providers working with the TPS Project with the exception of the career centers. PAC members have changed considerably over time as they have taken on new roles or new jobs in the field. As of September 2019, the PAC had 16 active members including three MRC staff/TPS Project staff. The PAC generally meets at the MRC central office. Meetings are quarterly, in-person, and about two hours in length. Attendance has varied from eight to 30 people. The Project Director facilitated these meetings and communicated with PAC members in between meetings. TPS Project staff and ICI staff participated in the meetings as well. The PAC met in-person in March of 2020, but subsequent meetings were discontinued due to the pandemic.

**Service Providers and Collaborators:** While all three TPS sites provide the same (10) TPS services to eligible youth, the constellation of service providers varies across sites.

#### TPS Implementation Sites

The TPS Project was implemented in three MRC areas offices: Roxbury in MRC's South District, Lawrence in the North District, and Springfield in the West District. A detailed profile of each TPS site is provided as Appendix A.

#### 2.3 Technical Assistance

ICI provided technical assistance to the TPS Project and developed multiple tools together with local offices, the TPS Leadership Team, and counselors. See Appendix B () and Appendix C Transition Pathways Services Fidelity Instrument for detail. During the first year, TA focused primarily on assisting the Project Director Jennifer Stewart with launching the project. Drs. Foley and Fesko met with the Project Director and MRC central office staff regularly to provide advice on system issues such as forming a Steering Committee, soliciting PAC involvement, exploring options for monitoring, and evaluating progress including data collection, and staff training.

ICI met with the three implementation sites quarterly to discuss the start-up issues for the sites, talk about data collection requirements, and review their progress. Meetings were in person and held at the local office, the MRC Worcester area office that was central to all three sites, or the MRC central office. ICI responded to requests from the project director to create a video explaining the project, an infographic, and a quarterly newsletter to promote the project internally and in the community. ICI evaluation staff provided monthly data snapshots on recruitment, characteristics of TPS youth, services delivered, and any outcomes achieved.

After the first year of implementation, ICI worked directly with the TPS counselors, assisting them with identifying, strategizing, and overcoming systemic, programmatic, and case management challenges that emerged in the course of implementing the TPS model in their respective site. Throughout the second and third year of implementation, the focus of TA shifted toward referral processes and systems, the CDT process, sequence of services, and documentation. Mr. Neil McNeil, a Senior Fellow at ICI and former MRC leadership staff, provided ongoing coaching with TPS counselors. Using a problem solving and performance review approach to TA, ICI assisted TPS counselors with addressing a range of issues such as:

Determining and building the facilitation skills needed for CDTs

- Resolving issues related to agency performance appraisals that conflict with TPS
- Leveraging the MRC Placement Team resources in a more effective manner
- Using peer mentors more effectively in partnership with the IL Centers
- Making changes in the TPS reporting tools as needed and
- Navigating personnel changes on the TPS Project.

Prior to the pandemic, Mr. McNeil had monthly in-person meetings with each TPS counselor with an option for additional conference calls. Periodically, meetings included TPS counselors' supervisor and area office director, or the peer mentors assigned to work at the TPS site. Mr. McNeil met with all three TPS counselors together, although less frequently. Interactions switched to virtual zoom meetings, emails, and teleconference calls after March 2020.

Mr. McNeil connected with other MRC staff and teams as needed to identify solutions to implementation. He met with the MRC Placement Team concerning the development of unpaid WBLE opportunities for TPS students. He worked with multiple MRC personnel to identify any impact of MRC's new pre-ETS services model for potentially eligible clients on the TPS referral process/system used by schools. Throughout the TA process, an emphasis on performance has been paramount, with a particular focus on processing referrals, completing CDTs and WBLEs, and projecting and achieving outcomes. Monthly data reports provided guidance on identifying local issues, need for problem solving, and support for TPS counselors.

#### **2.4 Evaluation Overview**

The Transition Pathway Services (TPS) Model Demonstration is a pilot and feasibility test of providing a coordinated work-based learning approach for high school students eligible for vocational rehabilitation services and who are about two years from completing high school. The TPS model included 10 service components and was implemented in three catchment areas (Lawrence, Roxbury, and Springfield) that had sufficient sample sizes, greater diversity than other catchment areas, and had area directors that agreed to participate. Each catchment area designated or hired a vocational rehabilitation counselor to provide TPS services to 651 youth as defined in the proposal. MRC received permission to reduce the target number to 400. Three counselors were asked to recruit and support 400 youth creating a target caseload of about 133 youth served over the life of the model demonstration. The counselors were also asked to recruit youth from local schools, coordinate career discovery teams, partner with TPS contracted vendors in their catchment area, and provide 8 out of 10 TPS services to each youth. MRC contracted with the Institute for Community Inclusion to provide a Tier II evaluation design as defined in the RSA request for applications. The ICI analyzed administrative data, interviewed key stakeholders, surveyed youth, and interviewed youth and families. The Interim Report provides findings from the first phase of implementation.

The following sections include:

- Impact Analysis of the TPS Model
- Youth and Family Perspectives of the TPS Model
- Key Stakeholder Perspectives of the TPS Model

## 3. Impact Analysis of the TPS Model

The Impact analysis is organized by six key questions in order to provide national and local context, understand how TPS youth differed from other youth, create the best possible comparison group, and to summarize outcomes. We posed the following questions:

- 1. How does MRC compare to its peers nationally on services for youth aged 14 to 24 and did that change between a baseline year of 2015 to the latest year available 2019?
- 2. How do the TPS catchment areas compare to the other MRC catchment areas on youth characteristics and outcomes?
- 3. How did the youth who were recruited and volunteered for TPS differ from their peers in the catchment areas?
- 4. How did TPS youth characteristics and status at application differ from a matched sample of Non-TPS youth?
- 5. What services did youth receive and how did those service patterns differ between TPS and non-TPS youth?
- 6. What can be learned about early career services in comparing youth that received job placement, work-based learning, both services, or neither service during their VR tenure?

**Data Sources:** At the beginning of the TPS Project, MRC and ICI entered into a data-sharing agreement to enable sharing de-identified case data. The ICI and MRC created a master list of variables needed and determined what was available through the MRC information management system (MRCIS) and items that were either publicly available through other systems (DESE school-level data) or necessary but unavailable. The necessary but unavailable data were largely TPS services generally not available to other clients, such as peer mentoring, career discovery team meetings, and family engagement services.

MRC created a database to track TPS service delivery, but the goal was to keep these items limited for two reasons: a) to keep data entry burden and redundancy to a minimum, and b) to rely upon the MRCIS for outcome information to allow for post hoc comparison group identification and analysis. For non-TPS youth, youth could receive services similar to those in the TPS intervention. Some of those were tracked through the MRCIS (e.g., summer internship, use of benefits counseling) if provided or funded directly by MRC. For all youth (TPS or not TPS), services similar to TPS received through another system, from a vendor not supported by MRC, or during a time the youth was not a VR client were not tracked. For example, an MRC youth could receive peer mentoring and work-based learning through their high school. Thus, it was expected that all youth could have access to work experiences, benefits counseling, mentoring, family support services, and other TPS types of services through a variety of entities (such as schools, summer camps, pre-college programs, etc.). What was unlikely for non-TPS youth to receive was a coordinated team-based service delivery to services (i.e., the Career Discovery Team or CDT) and TPS specific contracted services such as peer mentoring through three independent living centers and family engagement services through the Federation for Children with Special Needs. The ICI used four data sources for the impact analysis. These included:

**The MRCIS:** MRC uses an electronic case management system for administration, quality assurance, and to report the required measures to the Rehabilitation Services Administration. Counselors and other MRC personnel enter case record data into the MRC Information System (MRCIS) on every client throughout the VR process. Key data elements include demographic, socioeconomic, disability, rehabilitation processes, case notes, services, and outcomes. MRC provided MRCIS data to ICI that included a sample of clients aged between 14-25 who had been served by MRC in FY2015-2021. The total sample size is 16,368. 14 to 25)

**The RSA 911:** The RSA aggregates case record data from all state VR agencies that includes required reporting elements. RSA releases a deidentified public data file containing data for clients closed during a federal fiscal year. While most elements remain stable from year to year, RSA has changed some measures, included others, or deleted some. Thus, researchers may not be able to report changes over time on certain variables. We used RSA 911 to provide a context and compared MRC to its peers in a baseline year 2015 and for 2019, the last year available at the time of this analysis. In some years, researchers could differentiate between blind, general, and combined agency data. For other years, data was merged at the state level. For consistency and to identify a national peer group to MRC, we subtracted records in which the person had a primary disability of blindness or visual impairment. This may be an imperfect solution. However, we confirmed this strategy in a year where the agency could be identified and found a 99.9% match. Almost no clients with a primary impairment of blindness or visual impairment are served by a general agency.

**The TPS database:** The MRC and ICI partnered to create a data portal for clients enrolled in the TPS program and collect variables not included in the MRCIS (such as TPS enrollment and model components) The data recorded detailed information for every TPS clients, including demographics, school information, socioeconomics, disability, detailed TPS services record and outcomes. The total sample size is 400.

**ICI Analysis File:** The ICI created an ICI Analysis File by combining MRCIS and TPS datasets using a common PI (Personal identifier), MRCIS client number. The purpose of constructing a combined dataset was to be able to (1) create a comparison group of TPS clients and (2) conduct comparative analyses and perform tests of statistical significance on various measures between TPS and non-TPS (matched and non-matched), such as demographics, school information, socioeconomics, disability, detailed TPS services record and outcomes. The total sample size for this combined dataset is 16,368.

# 3.1 MRC in National Context: How does MRC compare with its National Peers?

We compared MRC client characteristics to other general and combined agencies using the Rehabilitation Services Administration case record administrative data files (RSA 911) to provide context starting with a baseline year of 2015 (October 1, 2014, through September 30, 2015) and 2019 (October 1, 2018, through September 30, 2019), the latest data available at the time of this analysis. MRC closed 11,770 clients in 2015 and 10,032 in 2019. This follows a national trend in a reduction of case closures.

**Youth focus:** Youth represent a smaller percentage of the total MRC case closures in both 2015 and 2019 than other agencies with a more pronounced difference in 2019. Nationally the percentage of youth who were between 14 and 17 when they applied for VR services has grown between 2015 and 2019 and this trend is true for MRC as well. Not reported in Table 1, MRC follows a similar pattern to national numbers when comparing mean age. In 2015, adults served had a mean age of 35 to 36 and youth had a mean age of 19 to 20. By 2019, mean age of adults served dropped about two years to 33 and youth to just under 19.

**VR Tenure:** Across all age groups and for both years, MRC clients spend more time receiving VR services than clients receiving services nationally. Days spent receiving MRC services has dropped between 2015 and 2019. For MRC youth, mean days dropped by about 10 days between 2015 and 2019 for youth 14 to 24 and 391 days for youth 14 to 17.

**Early Engagement:** VR agencies and researchers are tracking the percentage of clients that are closed prior to an individual plan for employment (IPE) as a key indicator of engagement. In 2015, MRC had significantly higher engagement beyond IPE than other agencies for adults, youth aged 14 to 24, and for youth 14 to 17 in particular. By 2019, MRC improved engagement for youth but saw a decrease in engagement for adults.

**Engagement after IPE:** In general (with some exceptions), clients start to receive services after approving their IPE. Tracking who achieves a successful outcome after an IPE may be an indicator of client engagement, service delivery quality, and counselor communication. Another issue is that clients may or may not report becoming employed or enrolling into post-secondary education. MRC and its peer agencies are more successful in continued engagement with adults than with youth aged 14 to 24. MRC appears to have improved engagement of adults between 2015 and 2019 and better rates of continued engagement for youth. However, the percentage of clients aged 14 to 24 and 14 to 17 who disconnect from VR services after an IPE nears 50%.

**Closed with an Employment Outcome:** Comparing 2015 data to 2019 data, MRC had markedly improved successful employment outcome rates across age groups. This is most evident in 2019 where 40% of clients who were 14 to 24 at application have closed into competitive integrated employment compared to 25% nationally.

**Summary:** These patterns provide important context for the TPS Model Demonstration. MRC appears to be increasing the percentage of its youngest clients who are likely in high school at the time of application within its population of youth served. Youth, particularly the youngest, spend more days receiving VR services, and though engagement beyond IPE has improved, more youth exit VR without an employment outcome than achieve an employment outcome. MRC has made major gains in achieving employment outcomes for this age group. However, considering the investment in plan development and service delivery, the more frequent closure is without an employment outcome. Thus, MRC's effort to innovate and pilot test a new and intensive model focused on the youngest clients has the potential to advance outcomes.

TABLE 1: DIFFERENCES IN CLIENT CHARACTERISTICS AT CLOSURE BETWEEN MRC AND OTHER AGENCIES AT BASELINE YEAR 2015 AND IN 2019, RSA 911 2015/2019 DATA, CLOSURES ONLY

	2015				2019	
	MRC only	National	P	MRC only	National	Р
Total N	11770	543317		10032	375527	
		You	th Focus			
% 14-24	31.10	34.40	*	31.00	41.3	**
% 14-17	2.90	5.30	***	9.40	14.4	*
		Mean (S	D) Days in VI	₹		
All	870.25 (887.25)	659.02 (694.61)	***	796.72 (815.16)	690.31 (704.56)	***
14 to 24	1003.83 (956.99)	809.71 (783.84)	***	993.78 (841.06)	854.26 (779.33)	***
14 to 17	1565.60 (1121)	1146.38 (880.41)	***	1174.36 (886.76)	1027.94 (806.90)	***
		% Close	d Before IPE			
All	30.40`	38.40	**	41.00	33.9	***
Youth 14 to 24	30.60	35.10	**	17.00	22.5	***
Youth 14 to 17	17.00	24.00	***	9.20	15.8	***
	% Closed Af	ter IPE with services b	ut no employ	ment outcome		
All	36.80%	31.80%	**	28.70%	33.70%	**
Youth 14 to 24	36.70%	35.70%		42.10%	46.90%	*
Youth 14 to 17	45.80%	42.10%	*	49.80%	54.6%	*
		Closed with Competiti	ve Integrate	d Employment		
All	30.70%	28.60%	*	29.40%	27.4%	*
Youth 14 to 24	32.40%	29.00%	*	40.10%	25.80%	***
Youth 14 to 17	36.90%	33.50%	**	40.00%	26.90%	***

<sup>\*</sup> P<0.05; \*\* p<0.01; \*\*\*p<0.001

# **3.2 MRC in Local Context: How do the MRC catchment areas compare to the TPS Catchment Areas?**

At the start of the model demonstration, MRC had 22 local offices as an organizational unit offering services throughout the Commonwealth. Each local office served a number of surrounding towns as a catchment area. For the purposes of this analysis, we use the term "catchment area" rather than local office. MRC identified Lawrence, Roxbury, and Springfield as the three TPS catchment areas largely due to ability and willingness of the site to implement the model, likely sample sizes, and greater levels of racial and ethnic diversity than other catchment areas. We compare each TPS catchment area to a neighboring catchment area and to all others. The researchers' rationale for this was to determine if the neighboring areas, who frequently share local economic conditions, employers, vendors, and local offices of partnering agencies could be potential sources for a matched sample. It would also provide more information about how the 3 identified TPS catchment areas differ from their neighbors and the other catchment areas in the Commonwealth. Springfield is matched with Holyoke, Lawrence with Lowell, and Roxbury with Downtown Boston. Table 2 compares the catchment areas for youth aged 14 to 24 who applied for MRC services between 2015 through 2017.

**Age and Gender:** Youth differed by mean age across the catchment areas with youth in Roxbury, Downtown Boston, and Lawrence slightly less than a year older than youth in Springfield, Holyoke, and Lowell. Across all catchment areas, the majority of youth are male. Springfield and Holyoke appear to have a greater representation of female applicants.

Racial and Ethnic Diversity: MRC collects racial and ethnic characteristics of applicants who may select one or more identities. Springfield, Holyoke, Lawrence, Roxbury, and Downtown Boston have much greater representation of Latinx youth applicants than Lowell and all other agencies. The majority of youth applicants in Roxbury are Black or multi-racial including Black. Forty percent of youth applying in the Downtown Boston catchment area are Black or multi-racial including Black. Springfield, Holyoke, Lawrence, Lowell, and the other catchment areas have a majority white or multi-racial including white population. Lowell and Downtown Boston include more youth applicants who are Asian or multi-racial including Asian.

**Primary Disability:** We grouped primary impairment variables into seven distinct disability categories. While a youth applicant may have multiple disabilities, we compared the catchment areas by primary disability. For the majority of catchment areas, specific learning disability is the most frequent primary disability. Holyoke has a much different representation with a high percentage of youth with cognitive impairments (45%). Lowell applicants were more frequently reporting autism as a primary disability. Springfield appears to have a much more dispersed representation by primary disability. These numbers are hard to interpret or explain. It is unclear if the difference in applicant primary disability is related to counselor decisions, available documentation, community level prevalence, referral patterns, or partnership behavior.

Characteristics at Application: Very few youths were working at application though this was different across catchment areas. The percentage of youth that did not have a high school diploma at application varied across catchment areas. Roxbury and Holyoke had the lowest number of applicants without a high school diploma but still the majority of applicants. The percent of youth receiving Medicaid varied. Roxbury, Holyoke, Lawrence, and Downtown Boston had the highest percentages, while Lowell and Springfield had the lowest. As the percentage of youth receiving Medicaid was much higher than the percentage of youth receiving SSI, youth and families may be receiving Medicaid for reasons related to poverty rather than disability. The percent of youth applicants receiving SSI varied ranging from 15% in Lowell to about 28% in Springfield.

Youth Engagement and VR Status Variables: For youth who applied between 2015 and 2017, approximately 72% to 79% had completed MRC services by January 2021. This varied by catchment area but perhaps not meaningfully so. However, two engagement indicators have relevance for the TPS project. Namely the percent of youth that close prior to an IPE and the percent of youth that close unsuccessfully after an IPE is signed. Closure prior to IPE varied significantly across the catchment areas with a low of 7.8% in Lowell to a high of 28.60% in Roxbury. For closed unsuccessfully post IPE, this varied greatly from a low of 33.20% in Roxbury to 51.80% in Springfield. Roxbury and Holyoke appear to lose youth earlier in the VR process than other catchment areas. Yet the difference may have more to do with the pace of completing an IPE than a difference in engagement. Catchment areas also vary by successful closure into employment ranging from 25.2% in Downtown Boston to 40.80% in Lowell.

**Summary:** MRC identified three catchment areas that were more diverse in racial and ethnic representation, may have higher rates of poverty, and had very different disability patterns among youth than most other catchment areas. Engagement and baseline employment outcome achievement varies by catchment area. Differences suggest that matched samples should be drawn within a catchment area.

TABLE 2: COMPARISON OF CATCHMENT AREAS TO NEAREST NEIGHBOR AND ALL OTHER CATCHMENT AREAS FOR YOUTH AGED 14 TO 24 WHO APPLIED FOR SERVICES IN 2015, DATA SOURCE: MRCIS (2015 TO 2021).

	Neighl	ooring	Neighboring		Neighboring		All Other	
Characteristic	Springfield	Holyoke	Lawrence	Lowell	Roxbury	Downtown Boston		P
N	533	522	470	550	264	507	6008	
Mean Age	18.91	18.81	19.34	18.99	19.48	19.27	19.1	***
% Male	58.20	58.00	61.79	69.10	61.40	60.40	61.40	***
	Pe	rcent Youth by	Race and Ethni	city: Not Mutua	lly Exclusive			
White	78.00	88.90	88.50	83.60	36.70	55.80	84.50	***
Black	21.00	10.00	12.30	8.40	60.60	39.10	13.70	***
Native	1.30	0.80	0.60	0.50	1.10	0.80	1.40	NS
Asian	1.10	3.30	2.10	8.70	3.00	4.30	2.70	***
Hawaiian	0.60	0.00%	0.20	0.20	0.00	1.00	0.40	N.S.
Ethnicity: Hispanic	31.70	29.90	36.80	15.80	32.60	31.40	12.40	***
		Disabil	ity Variables: M	utually Exclusi	ve			
Audio Visual	3.80	4.80	3.00	0.90	1.10	0.40	2.50	
Specific Learning Disorder	28.50	12.50	61.10	33.80	54.20	52.70	33.50	
ADHD	15.00	6.10	5.50	12.50	7.60	6.50	11.40	
Autism	12.00	6.10	8.50	21.10	9.10	10.10	15.40	***
Cognitive Impairment	16.70	45.00	5.10	6.50	6.80	8.30	8.90	
Mental Health	12.40	6.30	11.90	20.00	16.70	17.60	22.50	
Physical	11.60	19.20	4.90	5.10	4.50	4.50	5.90	
		Ch	aracteristics at	Application				
% receiving SSI	27.80	26.20	26.00	15.10	16.70	18.90	17.70	**
% receiving Medicaid	50.50	60.00	65.50	37.50	69.30	62.10	51.40	***
% without high school diploma at application	66.20	57.90	68.70	61.30	58.70	60.70	63.80	***
% working at application	2.10	3.40	3.20	4.90	4.50	4.70	5.10	*
			VR Status Va	ariables				
Closed N	423	411	351	395	199	401	4375	
% Closed	79.36	78.74	74.68	71.82	75.38	79.09	72.82	***
% Closed prior to IPE	13.50	24.80	9.70	7.80	28.60	19.50	14.70	***
% Successful Employment Outcome	33.30	28.70	38.20	40.80	30.20	25.20	34.40	***
% Unsuccessful Employment Outcome	51.80	46.00	47.90	49.40	33.20	50.90	47.30	***
Mean Days in VR	740.46	749.61	814.62	786.52	698.16	755.94	776.44	***

<sup>\*</sup> P<0.05; \*\* p<0.01; \*\*\*p<0.001

# 3.3 TPS Youth in Context: How did the youth that were recruited and volunteered for TPS differ from their peers?

Three TPS counselors enrolled 400 youth between December 2017 and June 2021. As of receipt of the data on July 19th, 2021, approximately two thirds of the TPS youth have open cases. Therefore, we compare demographic, disability, and status at application here rather than closure data for the total number of TPS enrollees versus all other youth in the catchment areas.

**Age and Gender:** TPS youth are one to two years younger than non-TPS youth across all catchment areas. TPS youth in Roxbury are more likely to be male than other youth in Roxbury.

Racial and Ethnic Diversity: Racial and ethnic diversity is different between TPS and non TPS youth and across the three catchment areas. In Lawrence, more TPS youth identify as Black or multi-racial including Black. In Roxbury, more TPS youth identify as Asian than non-TPS youth. Springfield has a lower percentage of youth that identify as White or multi-racial including white, and a higher percentage that identify as Black or multi-racial including Black. Fewer TPS youth identified as Latinx than non-TPS youth in Roxbury. While in Springfield, almost half of the TPS youth identified as Latinx compared to one third of non-TPS youth

**Primary Disability:** Each catchment area had notable differences in disability patterns between TPS and non-TPS youth. In Lawrence, youth with cognitive impairment (32.70%) and youth with autism (30.90%) represented more than half of the TPS youth enrolled. Of non-TPS youth in Lawrence, the majority were youth with specific learning disorder (57.20%). In Roxbury, youth with autism were nearly one third of the enrollees, though the highest percentage of youth were youth with specific learning disorder (37%). Springfield had a very different pattern of disability among TPS participants with autism (25%), specific learning disorder (24%), mental health impairment (19%), and ADHD (16%) nearly equally represented.

**SSI and Medicaid Status at application:** Across the catchment areas, the percentage of youth who received SSI at application was similar with an exception in Lawrence where a higher percentage of TPS youth received SSI. Across all catchment areas and across TPS and non-TPS youth, the majority received Medicaid. Roxbury TPS youth were less frequently receiving Medicaid than non-TPS youth and Springfield TPS youth were more likely to receive Medicaid (73% versus 61%, respectively).

**Education and employment at application:** The majority of youth in all catchment areas did not have a high school diploma at application. TPS youth were more likely to not have a high school diploma, particularly in Roxbury and Springfield. About 18% of TPS youth in Lawrence had a high school diploma at application. This is an expected difference between TPS and non-TPS as a TPS inclusion criterion was that youth be about two years from graduating high school. Very few were working at application, and this did not vary by subgroup.

**Summary:** TPS youth were younger than their peers and more frequently male in Roxbury. For each catchment area, racial and ethnic diversity of TPS participants varied from their peers and trended toward increased racial diversity. TPS youth in Lawrence and in Springfield were more likely to be Black. More Asian youth participated in TPS in Roxbury. Fewer Latinx youth participated in TPS in Roxbury though more participated in Springfield. Key informant interviewees reported that the Springfield TPS team included bilingual staff and that the Roxbury office included counselors who were bilingual in Spanish but were not part of TPS. This suggests that referral to TPS may have been based upon a number of factors and capacities beyond TPS inclusion criteria. TPS youth had very different primary disabilities than non-TPS youth in their catchment area. This may also imply that referral to TPS may have been influenced by individual counselor decisions, eligibility determination, partnership arrangements, referral sources, or other local strategies. This is discussed further in the analysis of key informant interviews (See Section 4).

TABLE 3: DEMOGRAPHIC, DISABILITY, STATUS AT APPLICATION VARIABLES COMPARISON BETWEEN TPS AND NON-TPS WITHIN THE THREE CATCHMENT AREAS FOR THE PROJECT PERIOD 2016 THROUGH 2021. (DATA SOURCE: MRCIS, JULY 2021).

Characteristic	Characteristic Lawrence			Roxbury		Springfield			
	TPS	Non-TPS	Р	TPS	Non-TPS	Р	TPS	Non-TPS	Р
Total N	162	869		86	417		152	931	
Mean Age	18.12	19.30	***	18.06	19.81	***	17.63	19.21	***
% Male	68.50%	61.30%		74.40%	62.10%	*	62.50%	58.30%	
				Race					
White	82.10%	86.90%		26.70%	33.30%		69.10%	76.90%	*
Black	32.70%	12.70%	***	59.30%	64.30%		29.60%	21.70%	*
Native	0.60%	0.50%		1.20%	1.40%		0.70%	2.00%	
Asian	3.70%	1.60%		10.50%	2.90%	**	1.30%	1.60%	
Hawaiian	0.60%	0.20%		0.00%	0.00%		0.00%	0.60%	
				Ethnicity					
Ethnicity: Hispanic	38.90%	38.10%		14.00%	30.70%	**	46.10%	34.20%	**
		Туре	of Disabi	lity (Primary	/ Impairment)				
Audio/Visual	0.00%	2.50%		2.30%	1.00%		0.00%	3.80%	
Specific Learning Disorder	18.50%	57.20%		37.20%	48.90%		23.70%	25.10%	
ADHD	5.60%	6.70%		2.30%	7.20%		16.40%	14.60%	
Autism	30.90%	8.90%	***	31.40%	9.80%	***	25.00%	12.50%	***
Cognitive Impairment	32.70%	3.20%		10.50%	8.60%		9.90%	15.50%	
Mental Health	8.60%	16.80%		11.60%	19.90%		19.10%	16.00%	
Physical	3.70%	4.70%		4.70%	4.60%		5.90%	12.60%	
			Stati	us at Applica	ition				
% receiving SSI	25.90%	19.00%	*	14.00%	20.40%		28.30%	28.90%	
% receiving Medicaid	67.30%	67.00%		60.50%	72.70%	*	73.70%	56.60%	***
% without high school diploma at application	82.10%	65.40%	***	94.20%	51.10%	***	98.70%	60.80%	***
% working at application	4.90%	4.50%		1.20%	4.10%		3.90%	3.00%	

<sup>\*</sup> P<0.05.; \*\* p<0.01; \*\*\* p<0.001

## 3.4 How did TPS Youth Compare to a Matched Sample of Non-TPS Youth?

Our goal was to create as rigorous a comparison group as possible given the design, the sample size, and the available variables in order to detect differences in key outcomes.

**Strategy for Creating a Comparison Group:** Given the above analyses, the ICI ruled out the possibility of including youth from other catchment areas in the sample. There were too many intangible differences in referral, eligibility, service delivery, engagement, and context at the local level. This limited the available sample for a comparison group to youth served during the model demonstration implementation period within Roxbury, Lawrence, and Springfield and increased the risk that not all TPS youth would have an identified match.

ICI requested MRCIS and TPS data for the impact analysis period (January 1st, 2017, through December 31st, 2020) for youth in the three catchment areas who met eligibility criteria. In December 2020, MRC initiated a new wave of recruitment, but it was decided that the impact analysis would be limited to those youth that had at least one full semester of TPS services.

Three TPS counselors recruited 400 hundred youth into the model demonstration between January 2017 and July 2021. Inclusion criteria for TPS participation were

- Currently in high school in one of the three catchment areas.
- Estimated to be about 2 years from high school graduation.
- Applied for and met eligibility criteria for MRC services.
- Was at least 14 but not older than 22 at application.
- Volunteered to participate in TPS versus receiving business as usual services.

Inclusion criteria for the impact analysis included

- Eligibility date prior to January 1st, 2021
- Eligibility date after December 31st, 2017
- Did not have a high school diploma at application
- Was at least 14 and not older than 22
- Received services in one of the three catchment areas

Table 4 provides detail on inclusion and exclusion criteria for the impact analysis. Of the 400 TPS youth recruited, 291 met inclusion criteria for the impact analysis. A cluster of youth had a high school diploma at application. Another 62 had been enrolled into TPS after January 1st, 2021.

For the matched sample, more than half of the non-TPS youth were excluded from the pool for comparison. Of the 2217 non-TPS youth identified in the MRCIS, 870 had graduated from high school prior to application and 404 had enrolled prior to December 31st, 2017.

TABLE 4: REASONS FOR EXCLUSION PRIOR TO MATCHING TPS TO NON-TPS YOUTH BY CATCHMENT AREA

		TP	S		Non-TPS			
	Springfield	Roxbury	Lawrence	Total	Springfield	Roxbury	Lawrence	Total Non-TPS
Total N	162	86	152	400	869	417	931	2217
Eligibility before 1/1/2017	1	0	1	2	122	77	205	404
Eligibility after 12/31/2020	44	2	16	62	0	0	0	0
Not between age 14 and 22 at application	0	0	0	0	6	8	11	25
Had a high school diploma or greater at application	15	11	10	36	301	204	365	870
Not Eligible (closed as Applicants)	6	2	1	9	2	3	3	8
Final Impact Analysis Sample	102	73	125	291	440	128	350	910

Matching Process: We chose to use propensity score matching (PSM). We note the limitations in this approach. Two key issues are that the TPS intervention was delivered by three TPS counselors who may be very different from their peers in a wide range of factors such as local support and supervision, experience, skill, provider relationships, and professional development. We could not factor into the equation counselor level differences. We were also limited in the types of variables we could match. Factors such as job-related skills, prior work history, interest in post-secondary education, and receipt of services from other entities were not available in administrative data. While these factors may be less variable for youth than for adults, we could not match for a range of potentially important differences. Local key informants, particularly counselors, described purposefully identifying youth that had more need or were more marginalized. This was defined very differently by each counselor and included such circumstances as housing insecurity, risk of leaving high school early, parents with limited work and college experience, speaking languages other than English at home, food insecurity, and severity of disability. We attempted to capture some of these factors with the best variable available, such as receipt of Medicaid for poverty status, but those are incomplete measures of counselors' descriptions.

**Analysis:** We estimated the propensity score for enrollment into TPS for each individual served within the three catchment area offices during the impact analysis period. We ran logistic regression models to estimate the propensity score for each client i(i =1,....N) as the conditional probability of enrollment into the TPS program.

# (TPS i = 1) versus non-TPS program (PE i = 0) given a series of observed covariates with xi: e(xi)=pr (TPS i = 1|X i = x i).

In the second step, we created a new sample of matched cases that share approximately similar likelihoods of being assigned to the treatment condition. We used the "Nearest neighbor with caliper" (caliper size=1/4 of a standard deviation) to perform a one-to-one match for the total sample (TPS=229, non-TPS=229). Table 5 provides detail on selected characteristics between TPS and non-TPS post-match and indicates that we achieved comparable groups regarding propensity to treatment (TPS) enrollment. As we created the comparison group by matching on a several characteristics. the number of clients in the non-TPS needs to be relatively large to ensure a high-percentage one-to-one match based on the propensity score. The ratio of TPS to non-TPS students for Springfield and Lawrence is approximately 1 to 3 while that for Roxbury is only about 1 to 2. Therefore, we cannot perform matching separately for each office. We were unable to find a match for 71 TPS youth. We found no significant difference between the TPS and the matched TPS youth on characteristics in Table 5 confirming the groups are similar on those measures. However, the 71 TPS youth that were not matched were more likely to be male (78.9% p<.05), less likely to be Latinx (21.10%, p<.05), were more likely to be youth with autism (59.20%) or cognitive impairment (22.5%) and less likely to be youth with a learning disability (5.6%) (p<.001). They were more frequently receiving SSI at application (38.2%; p<.05).

TABLE 5: CHARACTERISTICS OF MATCHED TPS AND NON-TPS STUDENTS

Characteristics	TPS	Non TPS	P Level					
Total N	220	220						
Age and Gender								
Mean Age	17.87	17.87	NS					
% Male	66.40	63.60	NS					
	į.	Race						
White	69.10	62.30	NS					
Black	35.50	36.40	NS					
Native	0.50	0.00	NS					
Asian	4.10	3.20	NS					
Ethnicity								
Hispanic	39.50	37.70	NS					
	Primar	y Disability						
Audio/Visual	0.90	0.50	NS					
Specific Learning Disorder	33.60	30.50						
ADHD	10.90	10.50						
Autism	20.90	25.00						
Cognitive Impairment	16.40	17.30						
Mental Health	12.30	12.30						
Physical	5.00	4.10						
	Status at	Application						
% receiving SSI	21.80	22.60	NS					
% receiving Medicaid	70.50	68.20	NS					
% working at application	3.60	2.70	NS					
	Year of Eligibility							
2017	5.90	6.40	NS					
2018	35.00	32.70						
2019	43.20	45.50						
2020	15.90	15.90						

<sup>\*</sup> P<0.05; \*\* p<0.01; \*\*\*p<0.001

Notably, the majority of non-matched TPS youth were from the Lawrence office. The Lawrence TPS counselor was the first onboarded counselor who started recruiting earlier than the other two counselors. During the early implementation phases, multiple MRC personnel prioritized youth aged 18 to 22 years old receiving special education services. The TPS counselor in Lawrence formed an early working partnership with a Department of Developmental Disabilities (DDS) counselor who was co-located in the office. This relationship was not echoed in other locations and provides further suggestion that implementation sites made different decisions about partnerships, referrals, and target population. The Roxbury office had fewer TPS cases as the TPS counselor left in September 2019 and there was minimal recruitment of new TPS youth after that point in time. A near majority (47.7%) of TPS youth in the impact analysis are from the Springfield catchment area.

TABLE 6: MATCHING STATUS BY CATCHMENT AREA (N = 220 MATCHED PAIRS)

	Mat	ched	Not Matched	
Characteristics	TPS	Non TPS	TPS	P level
Total N	220	220	71	
	By Area	Office		
Springfield	105 (47.7%)	96 (43.6%)	12 (16.9%)	***
Lawrence	58 (26.4%)	96 (43.6%)	41 (57.7%)	
Roxbury	57 (25.9%)	28 (12.7%)	18 (25.4%)	

# 3.5 The TPS Service Delivery Context: What services did youth receive and how did those service patterns differ between TPS and non-TPS youth?

The TPS model included components as described earlier and listed in Table 7. Of those components, six were available through business-as-usual services to non-TPS youth including work-based learning. WBL services for non-TPS youth were generally those offered through MRC's pre-employment training services (Pre-ETS) which may or may not include paid WBLs. Many TPS youth were also referred to Pre-ETS services, particularly in early phases of implementation to get the same WBLs that any youth could receive. TPS counselors tracked paid WBLs, unpaid WBLs and total number of WBLs. Other MRC counselors tracked whether or not a youth received any WBL. During later phases, non-TPS youth were included in group WBL created by the TPS teams.

Services Differences Between Matched TPS and Non-TPS Youth: TPS counselors and MRC counselors tracked WBLs differently. TPS counselors tracked the number of WBLs, paid versus unpaid WBLs, and type of WBL. Both TPS and MRC counselors entered whether or not a client received any WBL into the MRCIS but did not include number of or whether it was paid or unpaid into that database as numerical data. To compare, we looked at MRCIS data for "any WBL" and then for TPS youth only, we examined number and type of WBL. TPS youth were more frequently receiving benefits counseling, work readiness training and assistive technology.

Table 7 shows that TPS counselors documented an average of 8.25 services versus MRC counselors documenting 4.05 for a matched sample of 220 non-TPS youth. This follows the expected pattern that TPS students who completed the model would receive 8 out of 10 services. TPS youth received a broader array of types of services (7) than non-TPS youth (3.5). For nearly all services available to both youth groups, a higher percentage of TPS youth were documented as having received the service, with one exception. Non-TPS youth more frequently were documented as having received job placement services. Of the TPS only services, a majority of TPS youth received peer mentoring, a career discovery team, and transportation coordination, and family support transition planning. About 77% of TPS youth and 25% of non-TPS youth were documented as having received any WBL. Less than the majority of TPS youth received a paid work-based learning service (about 42%) with 15% receiving a second paid WBL. Across all youth, the most common service was vocational counseling, although with greater frequency among TPS youth.

**Service Delivery Patterns for TPS youth that were matched versus TPS Youth that were not matched:** Of the 400 youth that were enrolled into TPS, 291 met criteria for the impact analysis. Seventy-one youth were not included in the matched sample. Service delivery differences were minimal between the two groups. Unmatched TPS youth were less likely to receive any WBL, but the difference is minimal (77.27% versus 74.80%) and were less likely to receive peer mentoring or family support for transition planning. See Table 8.

Service Delivery Patterns between Youth who did not receive TPS by whether or not they were matched: Non-TPS youth who matched (220) tended to receive more services and a wider array

of services than those who were not included in the impact analysis. They were also more likely to receive any WBL, vocational counseling, and job placement services. See Table 9.

**Summary:** Service delivery patterns differed between matched TPS and non-TPS youth in the direction expected. Most TPS youth received more services across typical MRC services and also received TPS only services. TPS youth that were not matched received a similar pattern of services. Youth who did not receive TPS but were matched with a TPS youth, tended to receive more services than their peers, particularly vocational counseling, WBLs, and job placement. Of the TPS youth, fewer than expected received a paid WBL which suggests that the model was not fully implemented. It is unclear if these service patterns are true measures of what services youth received. Some youth may be receiving any number of early career development services from schools, other systems, and providers. TPS counselors were monitored for data entry on services that may be offered to any youth, but other counselors may not have entered service provision into the MRCIS. An example is benefits counseling. The TPS counselors were encouraged to document it in the TPS database if they referred a student to the MRC Student Benefits Counselor (SBC). It is not clear if general MRC counselors would document the service utilization as diligently for an internal service. Vocational counseling is listed as one of the 10 TPS components and was more frequently recorded as received by TPS youth. However, it is likely that any youth that received a service or an IPE also received vocational counseling. It is probable that the service delivery patterns for non-TPS youth may be undercounts. Nonetheless, less than the majority of TPS youth received a paid work-based learning service through MRC. A lack of difference in outcome between matched TPS and non-TPS youth may have more to do with limited implementation than with the whether or not paid work-based learning advances employment outcomes of youth.

TABLE 7: SERVICE DELIVERY PATTERNS BETWEEN MATCHED TPS AND NON-TPS YOUTH.

Item	Matched TPS (220)	Matched Non TPS (220)	P value					
Mean Number of Services Received	8.25 (5.53)	4.05 (4.03)	***					
Mean Number of Type of Services Received	7.23 (4.56)	3.46 (3.34)	***					
TPS Service Components also available to non TPS Youth								
Any WBL	77.27%	24.55%	***					
Vocational Counseling	91.82%	57.27%	***					
Benefits Counseling	63.64%	5.00%	***					
Assistive Technology	45.91%	0.00%	***					
Work Readiness Training	70.91%	4.55%	***					
Job Placement	32.73%	45.91%	**					
TPS Se	rvice Components only availabl	e to TPS Youth						
Career Discovery Team	88.64%	NA	NA					
Peer Mentoring	83.64%	NA	NA					
Transportation Coordination	76.36%	NA	NA					
Career Assessment	15.00%	NA	NA					
Family Support Transition Planning	65.91%	NA	NA					
Additional WBL Measures tracked for TPS but not for non-TPS Youth								
Paid WBL	41.82%	NA	NA					
Second Paid WBL	15.45%	NA	NA					

<sup>\*</sup>P<0.05; \*\*p<0.01; \*\*\*p<0.00

TABLE 8: SERVICE DELIVERY PATTERNS BY MATCHED TPS AND UNMATCHED TPS YOUTH.

Item	Matched TPS (220)	Unmatched TPS (71)	P value				
Mean Number of Services Received	8.25(5.53)	7.85 (5.21)	NS				
Mean Number of Types of Services	7.23 (4.56)	6.31 (4.34)	NS				
TPS Service Components Received also available to non TPS Youth							
Any WBL.	77.27%	74.80%	*				
Vocational Counseling	91.82%	87.30%	NS				
Benefits Counseling	63.64%	63.40%	NS				
Assistive Technology	45.91%	44.40%	NS				
Work Readiness Training	70.91%	68.20%	NS				
Job Placement	32.73%	28.20%	NS				
TPS Service	e Components only available to TP	S Youth					
Career Discovery Team	88.64%	90.10%	NS				
Peer Mentoring	83.64%	71.80%	*				
Transportation Coordination	76.36%	80.30%	NS				
Career Assessment	15.00%	9.20%	NS				
Family Support Transition Planning	65.91%	50.00%	**				
Additional WBL Measures tracked for TPS but not for non-TPS Youth							
Paid WBL	41.82%	35.10%	NS				
Second Paid WBL	15.45%	12.70%	NS				

<sup>\*</sup>P<0.05; \*\*p<0.01; \*\*\*p<0.00

TABLE 9: SERVICE DELIVERY PATTERNS MATCHED AND NOT MATCHED YOUTH THAT DID NOT RECEIVE TPS.

Item	Unmatched Non-TPS (690)	Matched Non TPS (220)	P value			
Mean Number of Services Received	3.13 (4.52)	4.05 (4.03)	*			
Mean Number of Types of Services	2.55 (3.54)	3.46 (3.34)	*			
TPS	Service Components also availab	le to non TPS Youth				
Any WBL.	16.70%	24.55%	ste ste			
Vocational Counseling	39.80%	57.27%	专业会			
Benefits Counseling	4.20%	5.00%	N.S.			
Assistive Technology	0.10%	0.00%	N.S.			
Work Readiness Training	5.40%	4.55%	N.S.			
Job Placement	33.10%	45.91%	安安安			
Т	PS Service Components only avail	able to TPS Youth				
Career Discovery Team	NA	NA	N.A.			
Peer Mentoring	NA	NA	N.A.			
Transportation Coordination	NA	NA	N.A.			
Career Assessment	NA	NA	N.A.			
Family Support Transition Planning	NA	NA	N.A.			
Additional WBL Measures tracked for TPS but not for non-TPS Youth						
Paid WBL	NA	NA	N.A.			
Second Paid WBL	NA	NA	N.A.			

<sup>\*</sup>P<0.05; \*\*p<0.01; \*\*\*p<0.00

#### 3.6 What were the treatment effects for TPS?

The final step was to compare outcomes between the matched pairs of youth determine the treatment effects for the TPS group. For the impact analysis, we looked at eight outcomes in four major areas:

#### Engagement and Retention

- a. IPE established
- b. Received at least one service after IPE
- c. Remained an open case

#### Achieved a Skills Gain

- a. Graduated from high school with diploma
- b. Attending any post-secondary educational setting

#### **Employment**

- a. Employed post IPE
- b. Hourly wages
- c. Weekly hours worked

#### VR Closure Status

- a. Total closed
- b. Closed before IPE
- c. Closed after IPE but without employment
- d. Closed after IPE with employment
- e. Days involved with VR (application to closure)

Table 10 provides the details on the differences. For the first three outcome categories, TPS students are faring better than non-TPS students. However, the key takeaway is that the majority of youth enrolled during the impact period were still receiving services at the end of the project impact period. Of youth that completed MRC services (i.e., were recorded as a closed case), the majority of youth left MRC services without an employment outcome known to MRC or TPS counselors. We make this caveat as a small sample of TPS youth reported working or attending college at a much higher rate than was documented in the MRCIS or TPS data (See Youth and Family Perspectives Section).

**Engagement and Retention:** TPS youth were more likely to have an IPE established, receive at least one MRC non-TPS service and have an open case with VR.

**Achieved a Skills Gain:** A higher percentage of TPS youth were reported to have graduated from high school during their VR tenure (after application) by TPS counselors than by MRC counselors. However, there was no difference in post-secondary education attendance between the two groups.

**Employment Status at any time:** A small percentage of both groups were employed post IPE but before closure. This employment measure does not include paid WBL but appears to be an indicator of a part-time job at approximately 26 hours per week. TPS youth had higher mean hourly wages with the actual difference just over a dollar per hour. TPS youth earned approximately \$365 per week versus \$320 per week for non-TPS youth.

**VR Closure Status:** Most youth are still receiving services from MRC with non-TPS youth having a higher percentage of case closure. Of the 82 TPS youth that closed, their VR tenure was about 2.4 years versus non-TPS youth that had a tenure of 1.4 years. Non-TPS youth were more likely to

close before IPE than TPS youth. But a large proportion of TPS youth that closed out of VR closed without an employment outcome. Only 1 TPS youth closed with an employment outcome versus 14 non-TPS youth.

**Summary:** The majority of TPS and non-TPS youth are still receiving services through MRC. Given the low numbers of closures, the results indicate that the true impact of TPS might not be known until a higher percentage of youth complete services. Differences in skills gain may be more a result of how counselors documented high school graduation. TPS counselors may have had more frequent contact with TPS youth than MRC counselors did with their youth clients. Thus, the differences in some outcomes such as high school graduation may be more a reflection of expectations for data entry. TPS counselors carried very high caseloads by the last year of the project. It is unclear whether TPS counselors were aware of whether or not a youth was working or attending a post-secondary education.

TABLE 10: OUTCOME DIFFERENCES BETWEEN MATCHED TPS/NON-TPS SAMPLE

Outcomes	TPS (N=220)	Non-TPS (N=220)	Р
Engagement and Retention with VR			
IPE established	208 (94.50%)	184 (83.60%)	***
Received at least one service	191 (86.82%)	133 (60.45%)	***
Remain open	147 (66.8%)	136 (61.81%)	*
Achieved a Skills Gain			
Graduated from high school with diploma	125 (56.8%)	51 (23.20%)	***
Attending any post-secondary education	8 (3.6%)	9 (4.1%)	NS
	Employment post PE		
Employed post IPE	25 (11.4%)	17 (7.7%)	NS
Mean hourly wages	13.93 (1.39)	12.73 (1.12)	**
Hours worked	26.20 (8.38)	25.12 (8.10)	NS
Closure Outcomes			
Closed from MRC Services	73 (33.18%)	84 (38.18%)	*
Mean (SD) Days Application to Closure	867.57 (323.43)	547.67 (364.76)	安安安
Closed Before IPE	12 (16.4%)	32 (38.1%)	物物物
Closed after IPE but without employment	60 (82.2%)	38 (45.2%)	物物物
Closed after IPE with employment	1 (1.4%)	14 (16.72%)	ste ste ste

<sup>\*</sup> P<0.05.; \*\* p<0.01; \*\*\*p<0.00

#### 3.7 Discussion and Conclusion

Accuracy of administrative data: A key dilemma in providing vocational rehabilitation services is that the breadth and depth of knowledge and activities of a VR counselor is expanding. So is data collection and data entry. To what extent any counselor is keeping up with client life changes such as high school graduation, working part-time, attending a college class, relocating after high school, or receiving services from another system is hard to say. One potential explanation for the high rate of closures without an employment outcome is that youth are working or attending college and have not relayed that information to a VR counselor. Another explanation is that youth are receiving services from a different system and have lost contact with MRC counselors. Yet, the most troubling potential explanation is that systems have lost track of youth who may not be working or advancing in their life goals. We suspect all three situations are happening which is supported by statements made by youth and families surveyed and interviewed. No system has a full picture of services offered to or received by high school students with disabilities who are departing secondary education. No system has a means for fully recording the current employment and educational status of youth with disabilities that recently left high school. This is a significant obstacle in determining what package of services advances economic and educational opportunities for youth with disabilities.

**Emphasis on WBL or on job placement during early career:** Non-TPS youth had higher rates of receiving job placement while TPS youth received a menu of services with an emphasis on work-based learning. Is offering early job placement services better than offering paid WBL? The majority of youth in the impact analysis had not yet completed their VR tenure which limited a comparison of post-high school employment outcomes. TPS youth had slightly higher hourly earnings than non-TPS youth when they were documented as working after IPE but before closure.

**Fidelity of implementation:** Our assessment is that the fidelity of implementation across all three sites was limited, with the Springfield office having the highest level of fidelity. TPS counselors provided about 8 out of 10 TPS services to approximately 300 students served in the impact analysis time frame. They recruited an additional 100 students many of whom enrolled after January 1, 2021. Fewer than 50% of the students received a paid WBL though it was a required component of the model demonstration.

Most TPS students had at least one WBL experience, however, slightly less than half of TPS youth received a paid WBL. Certainly, the pandemic played a role in access to paid WBL, but prior to the pandemic, the majority of enrolled TPS youth had not received a paid WBL. (See interim report). This may have been due to a number of factors including delayed enrollment of 400 youth, a limited number of TPS counselors, inconsistent support from job placement personnel, changes in the Pre-ETS model, and limited infrastructure to identify and provide paid WBLs. Another factor may have been site level differences in partnerships, vendor capacity, and decisions about recruitment and enrollment.

We noted differences in implementation across the three sites as reported in Project Partners Perspectives section and summarized here. Lawrence and Springfield provided services that were notably different than business as usual services. The Roxbury TPS model was modified after the TPS counselor left in September of 2019. It was unclear from the data and interviews whether TPS services in Roxbury differed significantly from business-as-usual services past that point.

**Lawrence:** The Lawrence site had a long-standing TPS counselor who seemed to function independently without a job placement specialist or a transportation coordinator. The TPS counselor reported that she frequently took on mentor and job coaching roles for TPS youth because the peer mentor vendor had limited capacity (i.e., no female mentors) and that the TPS youth enrolled in Lawrence required 1:1 job coaching during work-based learning experiences. The

Lawrence site enrolled a significant cohort (about 25) of youth who were about 18 to 22 years old and receiving special education services. The TPS counselor reported that the families expressed interest in receiving community-based day services through the Department of Developmental Disabilities and did not want to seek employment or post-secondary education post high school. The TPS counselor saw this group of youth as the most in need of WBL services as an alternative and possible assessment of whether a community day program was a long-term goal. Family members interviewed indicated that they enrolled in TPS as it seemed a better option than being in a school setting but that their goal was not to seek employment or post-secondary education.

RSA's stated goals of improving employment and post-secondary educational outcomes for high school students with disabilities assumed that students with disabilities and their families would also identify these post high school career goals. The Lawrence site was passionately advocating to include youth with the most significant disabilities even if those youth may not be likely to engage in paid work. Work-based learning models for youth with the most significant disabilities may need to identify other components necessary to achieve better lives post high school including job coaching services, customized employment, ongoing family support, paratransit options, residential placement, intensive local multi-system team approaches that are inclusive of Developmental Disabilities Services systems. MRC is embarking on such a model through its new model demonstration. The Lawrence TPS site may provide lessons learned on how to better involve families in early career development services and actively coordinate with local DD case managers and other critical systems.

**Springfield:** The Springfield site got a late start as the first TPS counselor left the position shortly after being hired. Another TPS counselor was hired about a year after and remained with the project until the summer of 2021. Though TPS enrollment was delayed, the Springfield TPS counselor did a remarkable job of catching up and met enrollment goals very quickly. Springfield had an active two-person team and divided up tasks such as coordinating services and actively seeking work-based learning opportunities. Springfield appears to have targeted a very different group of youth than Lawrence. Interviewees indicated that they sought out youth that were likely to "fall through the cracks" because of a wide variety of economic and household situations including homelessness, foster system involvement, and families of recent immigrants. Springfield also had significant capacity to provide services in English and Spanish in comparison to the other sites, though they also indicated that the demand was higher than their capacity. The Springfield site enrolled students from more than 17 high schools but identified a key high school that provided a substantial cohort. The high school was a public high school with specialty in science, math, and technology education. The Springfield site had more job placement services capacity than the other two sites and had informal internal arrangements and active vendors.

**Roxbury:** The Roxbury catchment area did not have an MRC based TPS counselor after 2019. A local vendor identified a key person to take on the role and MRC created a work around for that vendor to provide TPS data to a central office person to enter into MRCIS. From interviews, it was not clear if TPS youth that were supported by the vendor had an identified MRC counselor. The vendor appeared to have coordinated across several organizations. Roxbury supervisory and leadership staff appeared to have limited involvement with implementation after 2019 and described it as a vendor contract overseen by the TPS leadership staff. To what extent Roxbury services were different than business as usual services is unclear. Multiple local interviewees described it as similar to pre-ETS services with options for peer mentoring.

The sample sizes were too small to conduct an impact analysis by location. The Springfield site contributed more TPS cases in the matched sample yet the number of youths that completed services was too small to generate conclusions by site.

Caseload size and continued engagement: Three TPS counselors recruited and supported 400 TPS youth. The Lawrence TPS counselor was active through all years of the model demonstration and had a caseload size of over 135. The Roxbury counselor left in September 2019 and was not replaced by another VR counselor. The 90 Roxbury TPS cases were dispersed depending upon whether they completed the TPS intervention, had just enrolled, or were mid-way through. We had difficulty identifying which students remained in TPS and which students had been transferred, how and to whom. Interviewees differed in their descriptions of the process. The Springfield TPS counselor had a caseload size of about 135. Whether the model was implemented well or not, the ability of TPS counselors to remain activity engaged with all TPS youth may have been limited due to bandwidth. All three TPS counselors stated that they had very heavy caseloads. However, multiple supervisory and leadership staff described TPS counselors as having a light caseload around 30 to 50 persons. One factor may have been that leadership staff understood that once a student graduated from high school or completed TPS services they would be transferred to an adult service. This was the stated plan in the early phase of implementation. However, TPS counselors reported that this was not an option and that there was no system in place to transfer to a general caseload.

**Target Population:** There seemed to be significant differences among the TPS implementation sites in identifying a target population. How need and priority is defined varied greatly by catchment area and by individual counselors. Local relationships, vendors, and capacities may have influenced decisions. Other factors such as counselor perceptions of "falling through the cracks" may not have clear measures. TPS personnel universally stated that TPS was for youth that may need extra support. But the definition of "need" and "extra" was context, counselor, and site dependent. We are limited to administrative data. However, we highly respect the decisions by TPS counselors to seek out youth that were marginalized, underserved, or in challenging situations. TPS youth were more likely to be in poverty as defined by receipt of Medicaid without SSI and were younger than the MRC typical population. They were also more likely to be Black, Hispanic, and Asian than the typical MRC youth population. TPS counselors identified an underserved population and attempted a highly complex model with a large caseload. They also improved the likelihood that a youth would get through the IPE process and receive an MRC service. TPS youth received many services that may have long-term benefits not measured in the model demonstration (i.e., mentoring, transportation instruction, direct interactions with employers, vocational counseling). Whether or not outcomes can be counted at the time of the evaluation should not lessen the critical importance of the effort and the moral imperative to support youth who are "falling through the cracks" of highly fragmented systems that are not tracking long-term economic and educational outcomes.

## 4. Youth and Family Perspectives

Youth and family perspectives provided another vantage point from which to assess the TPS Project. The ICI interviewed TPS youth who volunteered to be interviewed, conducted two waves of surveys, and interviewed personnel from the Federation for Children with Special Needs. The Federation for Children with Special Needs was a TPS partner contracted to provide family support for youth participants.

- Youth and families had interest in participating in paid work experiences. Those who participated in paid work experiences found those experiences positive.
- Youth and families who agreed to participate in interviews expressed confusion about TPS, the
  roles of partners, and whether or not they had active cases with MRC or were "finished" with
  MRC. Many of the youth and families were involved with multiple systems that may or may not
  have been communicating with each other.
- Youth and family interviewees described obtaining part-time paid employment and attending or pursuing post-secondary education on their own or through other systems.
- Of the small number of youth and family members who responded to surveys, most were aware of MRC, but the majority did not know whether they received TPS services or not.
- Youth and family respondents reported higher rates of high school graduation, post-secondary education attendance, and working for pay than was estimated from MRC case management data.
- Youth ranked "talking to a counselor" and "getting a paid job" highest among a list of early career development services.
- Youth indicated that their main sources of support for early career decisions were people at their high school and their family members.
- The Federation for Children with Special Needs (hereafter referred to as the Federation),
  a parent information provider, lauded MRC for extending work-based learning experiences
  to high school students and engaging in a flexible and adaptable model. Some factors
  that hindered implementation included counselor turnover, large caseload sizes, and an
  intervention model that had too many components.

This section of the report provides more detail on the following evaluation activities and findings:

- Youth Involvement in Survey Development
- Surveys of TPS Youth
- Interviews of TPS Youth and Families
- Interviews with the Federation for Children with Special Needs

### **4.1 Youth Involvement in Survey Development**

The TPS Project Director created a Project Advisory Council (PAC) that met quarterly for the first two years and then twice a year until March 2020. The PAC included a youth representative, partnering agencies, representatives from the state department of education and the state developmental disabilities agency, the ICI evaluation and technical assistance members, and MRC personnel. TPS counselors were invited guests and speakers. The ICI recruited a 3-member Youth Advisory Board (YAB) in spring and summer of 2019 to provide input into the development of a youth survey and provide guidance on interpreting results. The ICI recruited one youth from each TPS catchment area. The plan was to host in-person quarterly meetings. Logistics became a challenge for in-person meetings which delayed an October 2019 meeting. By the late winter of 2020, hosting an in-person YAB meeting became untenable due to the COVID-19 pandemic. YAB members declined offers to meet virtually - understandably so as schools moved to online classrooms. ICI attempted to recruit TPS youth who could join virtually but was not successful.

The ICI disbanded the YAB Instead, ICI proposed to design the survey and then conduct an interviewing process with 8 to 10 youth receiving TPS services. The Institutional Review Board (IRB( approved the change.

ICI research staff worked with the TPS counselors to identify at least one TPS youth still in high school and at least one youth who had graduated. TPS counselors provided contact information for 13 potential survey pilot participants. Research staff contacted youth by email and invited them to participate in a 1-hour, individual Zoom call to review the prospective survey questions and provide feedback. The email also included project information and an informed consent form. Researchers then followed up with a telephone call to the youth (and their parents and guardians, if appropriate) during which they explained the survey pilot and procedures and answered any questions that the youth (and their parent or guardian) may have had before seeking their verbal consent to participate in this pilot study. Six youth (two youth per TPS implementation site, including two high school youth and four recent high school graduates) agreed to participate. All youth were at least 18 years old. We reimbursed all six youth for their time and contribution with a one-time stipend in the amount of \$100 per youth.

The six TPS youth participated in an individual Zoom call with two research staff in December 2020. The calls followed the UMass Boston IT Department's guidelines for secure Zoom meetings. Research staff used the survey instrument as the interview protocol and made notations about clarity, use of terminology, length, response, and which questions were difficult to answer. One research staff read each question-and-answer option to the youth and another research staff entered the youth's answers directly into the online survey form. Research staff then revised the survey tool based on the pilot results. Revisions included eliminating some questions, creating improved skip patterns, and clarifying terminology. Two youth participated in testing the online survey for ease of use and accessibility. ICI then prepared the survey link for email distribution.

## **4.2 Surveys of TPS Youth**

**Overview:** The ICI and MRC agreed that personally identifiable information should not be shared beyond MRC. We devised data collection strategies in which MRC retained contact information and ICI created an online portal to host the survey. Respondents who clicked on a link were directed to a Qualtrics survey and could anonymously and confidentially answer questions. ICI would not know the names or identities of youth and MRC would not know who or how youth responded. For the first effort, MRC sent the Qualtrics link to all TPS youth enrolled at the time (n = 335) through an email (MRC routinely collects email contact information). MRC sent the email two additional times. ICI and MRC considered that a survey through text message might have a better response rate than through email. The ICI worked with MRC, the IRB, and Qualtrics to ensure that the survey could be sent through text message, youth could opt out of future messages, and that ICI would not know the names and contact information of the sample members. ICI sent the text message with the URL for the Qualtrics survey with two additional rounds of follow-up.

**Survey Tool Development and IRB Approval:** We developed a survey draft and requested feedback on the draft survey from the ICI technical assistance (TA) staff, the MRC TPS Partnership Coordinator, and MRC TPS leadership staff. The survey included a list of TPS services and asked respondents to select the TPS services they had received. The survey instructed respondents to rate their satisfaction with the respective service and their TPS experience overall. We also included a limited number of open-ended questions. Some questions were tailored to in-high-school-youth versus out-of-high-school-youth. We included a set of demographic questions and questions about whether the youth was currently working and/or attending postsecondary education. Six TPS youth piloted the survey and discussed how to improve it. ICI revised the survey based on their suggestions.

ICI used Qualtrics, an online accessible survey platform, to build and administer the survey. The survey was a short 24-question survey with skip patterns depending upon whether the student was still in high school or had left high school. After poor response to the initial email distribution and one follow-up, ICI and MRC shortened the survey to about 10 questions, depending upon how youth answered and skip patterns. The shortened survey was translated into four languages (Spanish, Portuguese, Arabic, and Haitian-Creole). We eliminated questions about specific services (such as the career discovery team) and focused on work-based learning, work status, and academic status.

**Email Distribution:** MRC disseminated the survey link via email to TPS youth who had previously provided an email address to MRC. Nearly all TPS youth had provided an email address (n = 335). MRC sent the 24-question survey in two waves and the shortened survey in a third wave. The message also included an option to take the survey via telephone. MRC followed up with a reminder after one week. Even with this reminder message, the response rate remained very low.

**Text Message Distribution:** The ICI evaluation team and MRC project staff had been meeting throughout the implementation process to discuss the survey response and devise alternative ways to reach and engage youth in this survey effort. This prompted the team to seek IRB approval to disseminate the link to TPS youth via text messaging. There were two supporting reasons for using this mode for disseminating the survey: (1) MRC counselors typically use text messaging (rather than email) to communicate with TPS youth. TPS youth had already agreed to receive messages from MRC via text. (2) MRC had up-to-date telephone numbers for a majority of TPS youth. After IRB approval, MRC provided ICI with the telephone numbers excluding any personally identifying information. ICI worked with Qualtrics and the IRB to create a text message that would ensure privacy, provide a clear opt-out option, reduce the likelihood of any fees or charges to the respondent, and provide ICI staff contact information so youth could reach ICI staff directly.

ICI research staff disseminated the survey via text message to TPS youth, who previously provided MRC with a telephone number (n = 238: 96 from Lawrence, 61 from Roxbury, and 81 from Springfield). It is likely that youth received the survey link up to six times over a 7-month period. Given the very low response rates, we were less concerned with duplication. The message also included an option to take the survey via telephone as well as an option for youth to opt out altogether. Research staff followed up with two reminder text messages and then ended the survey follow-up. Of the 238 youth that received a text message, 24 clicked on the link, 22 answered at least one question, and a total of 18 completed the survey. Two youth who received a text version of the survey requested an alternative format. ICI evaluation staff contacted both youth who requested an alternative format, but neither of the youth responded. One youth who received the link started the survey in Spanish but did not complete it.

TABLE 11. RESPONSE BY MODE AND SURVEY TYPE

	Total opened	Answered at least one question	Completed the survey	Did not complete
Email Long	19	14	7	7
Email Short	9	8	5	3
Text Short	24	22	18	4
Total	52	44	30	14
Cognitive Testing Interviews	6	6	6	0
Total	58	50	36	14

ICI research staff downloaded the survey data from Qualtrics. We combined responses obtained through email and responses obtained through text message into one electronic data file. (Note that there were no requests from respondents to complete the survey via telephone or in another accessible format.) Due to the very low response rate, we provide descriptive information only. We also added in data from the six youth who completed the survey as an interview for a total of 36 completed surveys. We had 36 completed surveys and 14 incomplete surveys for a total of 49 surveys. We included responses from the incomplete surveys where possible. Of those youth who did not complete the full survey, most completed at least 30% of the survey. All respondents had an option to skip any question for any reason. Twenty-three youth completed the short survey and 13 completed the long survey. For the following tables, we indicate which survey version and how many respondents answered a specific question.

## 4.2.1 Who were the youth that responded to a survey and what did they say?

We provide an overall description of the youth respondents. Because the numbers are small, we do not report specific characteristics (like language spoken at home, type of disability, or gender identity) that could inadvertently disclose the identity of a respondent.

**Demographics:** In general, the demographics of the survey respondents are very similar to the TPS sample. They are mostly male, diverse in racial and ethnic identity, and range in age from 17 to 23 with more than half being less than 20 years old. About 18 respondents stated that they were the parent or guardian responding on behalf of the youth receiving the survey.

**Disability:** Of the 36 respondents who answered the question, 24 agreed that they identified as a person with a disability. Seven responded that they did not have a disability, four declined to answer, and one youth did not know.

**High School Graduation:** Forty respondents had reported that they had graduated or left high school at the time of the survey with most receiving a high school diploma or equivalent. Ten reported that they will be attending high school in the Fall 2021 semester. The survey asked this question, along with employment and postsecondary education status, in the first set of questions. Thus, the number of respondents is higher than those that completed the survey.

**Current Employment Status:** Out of 39 participants who responded to the current employment status question, 14 stated that they were currently working for pay with 11 of those indicating that they would be working for pay in September 2021. Nine youth that responded to the question indicated that they had worked for pay in high school.

**Current Postsecondary Education Status:** Five out of the 27 that answered a question about current education plans indicated that they were attending college, university, or technical school. A total of 10 reported planning to attend college, university, or technical school in September 2021.

**Knowledge of MRC and TPS:** For the long version of the survey, we asked respondents about their familiarity with MRC, the TPS project, and if they received services from either. Of the 17 youth who responded to the question, all reported knowing about MRC and 13 stated they had received MRC services. A smaller portion had heard of the TPS Project, but most were not certain they had received TPS services.

Activities to Prepare for Life After High School: We asked youth what prepared them for life after high school. Youth could check as many as applied. Twenty-four youth answered what activities they pursued during high school and twenty of those respondents rated which ones were most helpful. The answers youth most frequently identified included talking to a counselor, learning about money and benefits, and learning how to drive or take public transportation. Six youth selected "got a paid job" and four selected "got a short-term work experience." Youth also rated what was most helpful. Table 12 is sorted by which activities youth rated as most helpful to prepare

for life after school. The two highest responses were "talking to a counselor" and "getting a paid job." Short-term work experiences were less highly rated. Ten youth stated that they learned about money and benefits, but only three of those youth selected it as most helpful.

TABLE 12. ACTIVITIES TPS YOUTH PERCEIVED AS MOST HELPFUL: SHORT SURVEY

	Selected as Most Helpful N = 20	Total Number Selected N = 24
Talked to a counselor	8	10
Got a paid job	6	6
Talked to a peer mentor or someone with a disability	4	6
Learned about different types of schools and/or went on a tour of the school	4	5
Learned about different careers or job tour	3	5
Did practice interviews with employers	3	6
Did a short-term work experience for pay	3	4
Applied for a job	3	5
Learned about money and benefits	3	10
Other activities (specific training program)	3	4
Applied to a college, university, or other type of school	2	5
Went to a job or career fair	2	6
Learned how to drive or use public transportation	1	8

We asked the question a little differently in the longer version of the survey. The respondents included the six youth in the pilot test and the 13 youth in the email version. Out of 19 possible respondents, 11 indicated that they took a job to prepare for life after high school. Other activities appear to be a range of early career development activities, college preparation, and transportation options.

TABLE 13: ACTIVITIES TO PREPARE FOR LIFE AFTER HIGH SCHOOL: LONGER SURVEY

	Number
Took a job	11
Had an informational meeting	9
Toured a business or workplace	9
Received help with resume	8
Other activities*	8
Received help with applications to higher education	7
Interviewed with an employer	7
Learned to use public transportation	7
Toured a college campus	6
Received help with job applications	6
Obtained a driver's permit or license	3

<sup>\*</sup>Other activities included music and art programs, cooking, media production activities, sports, learning about different job skills, and college fairs

When asked about who their support team was across different categories (e.g., applying for jobs, applying for college, writing a resume, getting a paid job), almost all youth mentioned someone at their high school or someone in their family as their main source of support. Later, when asked about the efficacy of the support they received at the high school, 70% of respondents reported that the support was sufficient. About 30% reported that their high school did not provide clear plans or enough resources to prepare them for life after high school. One respondent reported that in lieu of support at their high school, a parent had to reach out to a public agency to request services and support. Another participant reported COVID-19 as a reason for their high school's poor quality of transition services.

When asked about the advice they would give to other youth preparing for life after high school, the participants mentioned the importance of persistence, not giving up, seeking assistance, and making use of available resources such as informational sessions with employers as their main advice.

Change in Plans Due to the COVID-19 Pandemic: We asked about any change in plans due to COVID-19 in two different ways. On the short version of the survey, we provided a "check all that apply" with a write-in option. In the early version of the survey, we had an open-ended question. Twenty-two youth responded to the short version survey. While six indicated that they had no change in plans caused by the pandemic, others indicated the pandemic affected their options for a paid job, help in planning for life after high school, applying for or attending postsecondary education, or finishing high school on time. Write-in responses included not receiving a driver's license, not being able to attend classes in-person, and not being able to do an on-site internship.

TABLE 14. CHANGE IN PLANS DUE TO COVID PANDEMIC

	Number
Did not obtain a paid job	6
Did not receive help with planning for life after high school	6
Other change (write in responses)	6
No change in plans due to COVID-19	6
Did not apply to or attend college, trade school, or other school	4
Did not finish high school on time	2

Write-in responses on the longer survey echoed these findings. Many of the participants also reported that the pandemic had affected their ability to socialize and interact with people. Several reported that the pandemic had affected their moods: They wrote that they were sad and often had lost motivation. Some had more difficulty accessing services because of the pandemic. We elected not to share direct quotes due to the small sample size and the potential for disclosure. Responses suggest that the pandemic not only decreased access, but that youth may have felt discouraged, unmotivated, and isolated.

**Summary:** Multiple waves of survey administration, modifications to the survey instrument, and an effort to pilot the survey through intensive interviewing did not lead to a reasonable response rate. However, there are several findings that further support the likelihood that administrative case record data may be underreporting current work status, enrollment in postsecondary educational settings, and high school graduation. Forty (80%) of the youth that responded to any of the surveys indicated that they had graduated from high school. However, in the TPS administrative data, 125 (57%) out of 220 indicated that they had graduated from high school. Five (28%) out of 27 survey respondents reported attending a postsecondary educational setting and 10 (37%) planned to be in a postsecondary educational setting in September 2021. In comparison, eight

(3.6%) out of 220 were reported to be in a postsecondary educational setting in the TPS/MRCIS data. About half of the survey respondents (14 out of 27) answering a question about current employment status indicated that they were currently working for pay. Only 11% (25 out of 220) were identified as currently working in the TPS data.

This discrepancy is also likely or even more likely for the non-TPS youth. TPS counselors were asked to capture high school graduation and may have done so more routinely than general MRC counselors. Improving data collection and accuracy in identifying high school graduation, work status, and postsecondary educational status may indicate that MRC is contributing to measurable skills gains and possibly employment outcomes. However, it remains inconclusive about whether TPS or business as usual services are more effective. Survey response rates were low, and percentages may shift markedly. However, the raw numbers indicate that youth may be more active in work and educational settings than understood from one system's administrative data.

We also note that youth seemed to value talking to a counselor and having a paid job. They rated having a paid job higher than a short-term paid work experience. Youth who responded to the question about what is the most helpful frequently indicated talking to a counselor as the most helpful. Interviews at the local level support this finding. TPS counselors, student benefits counselors, peer mentors, and vendors also reported that many youth had very limited understanding of their post high school options. Several interviewees indicated that informational interviews with employers, such as a fire station chief in the Springfield area, were profound experiences for youth. Youth seem to appreciate contact with supportive adults.

Another notable issue is that many respondents indicated familiarity with MRC, but most were not aware of TPS. Youth received a survey requesting their perspective on TPS and may not have recognized it. Surveys using text messaging as the delivery mechanism seem to have slightly higher response rates than email surveys. However, this methodology has serious shortcomings in collecting youth perspectives. To further understand youth and family perspectives, we conducted qualitative interviews described in the following section. We suggest that future efforts should prioritize qualitative follow-along interviews over survey administration for youth participating in interventions. Relying on administrative data has significant benefits, including reducing costs, reducing burden, and protecting personally identifiable information. However, administrative data is not collected for research purposes and is only one system's point of view on a very complex time in the lives of youth with disabilities. Survey responses indicate that MRCIS and TPS data may be undercounting youth academic and employment status.

We also call attention to written comments by youth. Some youth wrote on a digital survey that they were sad, socially isolated, and lacked motivation, and that this had an impact on their work and education. While public systems push forward to improve early career development services and offer career readiness, work-based learning, and college preparation options, finding ways to create community, well-being, self-care, and a sense of self-worth may be equally important. Participation is not just about doing; it is about enjoying.

## 4.3 TPS Youth and Families: In-Depth Interviews of their TPS Experience

## 4.3.1 Methods and Data Collection

The interview sample comprised 11 youth who had received TPS services from MRC. We recruited potential participants through two sources: a) the TPS counselors and b) the TPS Youth Survey. Similar to the survey pilot, we approached the three TPS counselors with a request to identify and recruit TPS youth who would be interested and willing to participate in a 1-hour, in-depth qualitative interview about their TPS experiences. TPS counselors identified a total of 18 TPS youth (six in Lawrence, six in Roxbury, and six in Springfield) and provided their names and contact

information (telephone numbers and email addresses). Additionally, the TPS Youth Survey included a question at the end asking respondents about their interest and availability for a qualitative interview. A total of 11 youth responded positively to this question.

ICI research staff contacted all 29 interested youth identified with the assistance of TPS counselors or through the TPS Youth Survey. The youth received an email with an interview invitation and a combined project information and informed consent form. Research staff followed up with the youth (and their parents or legal guardians, if applicable) with a telephone call. During the call, research staff explained the interview and procedures and answered any questions that the youth (and their parents or legal guardians) had before seeking their verbal consent to (the youth) participating in an interview. If the youth was under 18, research staff also obtained consent from their parents or legal guardians. A total of 11 TPS youth agreed to participate in interviews. All of them were 18 years or older. Five of the 11 TPS youth were interviewed without a parent or guardian present; the interviews with the remaining six TPS youth included one or both parents. Table 5 details youths' characteristics. The outreach and recruitment process for this qualitative study emphasized representation of a wide range of TPS youth in terms of demographics and backgrounds. We reimbursed all youth for participating in an interview with a one-time stipend in the amount of \$100 (per youth).

TABLE 15. YOUTH INTERVIEWS BY TPS CATCHMENT AREA

	Lawrence	Roxbury	Springfield	Total
Youth present during interview	5	4	2	11
Parent present during interview	5	0	2	7
Identified as male	3	1	1	5
Working for pay at time of interview	3	1	0	4
In a postsecondary education setting	2	3	2	7
Had high school work-based learning experience	3	1	2	6

Interview Protocol and IRB Approval: ICI evaluation staff developed a semi-structured interview protocol to gather the experiences and perspectives of TPS youth. The protocol comprised three sets of questions. The first set of questions addressed youth's engagement with TPS, asking how and when the youth first learned about the TPS Project; what specific aspects of the project they were most interested in; and what the process of receiving services was like. This section also included questions about the Career Discovery Team (CDT). The second set of interview questions asked youth to describe in more detail the types of services that they received and from whom (provider), and to what extent they were satisfied with the supports received. The third set of questions probed youth regarding the impact that TPS may have had (or not) on them. Specifically, youth were asked about the ways in which the TPS Project had helped them with choosing a career, making post high school plans, peer support, and more. The last question in the protocol asked youth to describe any future plans. Research staff requested feedback on the draft protocol from the MRC TPS Partnership Coordinator. The final protocol and consent form (see Appendix X) were submitted to the UMass Boston IRB for review and approval as exempt research.

**Interviews:** We held interviews with the 11 TPS youth between July and September 2021. ICI TA staff conducted all interviews via Zoom and followed the UMass Boston IT Department's guidelines for secure Zoom meetings. Research staff used the semi-structured interview protocol to guide the interviews, encouraging a free-flowing conversation with the youth. None of the youth requested disability-related accommodations or language interpretation. Interviews lasted on average 30 minutes ranging from 20 to 55 minutes. We audio recorded 45 interviews with each youth's

permission (and their parents' or legal guardians' permission, if appropriate). Three research staff listened to the interviews, created summary memos, and identified themes. The lead interviewer wrote up a summary of each interview. Transcripts were auto generated through Zoom. A research staff member reviewed the transcripts for accuracy by listening to the recordings and following along the transcript, correcting as necessary and documenting the changes.

**Participants:** All 11 TPS youth interviewed received special education services and four of the youth indicated that they were also involved with the Massachusetts Department of Developmental Services (DDS). All TPS youth except one had completed high school. Five youth were enrolled in a community college (one had graduated) and two youth were planning to attend a skills training program (non-college). Three TPS youth were working or about to begin an identified job soon. One youth had no specific plans.

## 4.3.2 Youth and Family Experiences

Note: We lightly edited quotes so that the names of counselors, youth, parents, mentors, employers, and other individuals were disguised. We included references to public agencies or non-profit organizations with TPS model demonstration subcontracts. During interviews of youth with a parent present, one of the parties often signified agreement or encouraged the other speaker (such as by saying "uh huh", "yes"). We included statements signified as "Parent continued" or "Youth continued" rather than the encouragements. For three interviews, the youth left the Zoom screen but was present in the same room. For two interviews, the parent and youth were in different rooms in their house but on the same Zoom meeting.

## How did youth and families find out about TPS?

Most youth were referred to MRC through their high school, such as by a special education teacher or director, transition specialist, or other school personnel. Four interviewees described how special education personnel referred them to multiple public systems and that those systems referred them to local vendors depending upon service needs. Several were referred either through other public systems or through a family member.

Youth: My DCF (Department of Children and Families) worker is helping me with it and Mass Rehab is too.

Youth: My aunt. I'm assuming she got the program from somewhere and she put me in. And I think it was around my senior year, like new year and this year. It was... around March (2021).

TPS counselors reported that youth who were referred to MRC in the catchment areas were often triaged to them if they met the criteria for TPS. Youth and parents expressed some confusion about whether they received TPS, MRC services, or just had a really involved MRC counselor. The majority of youth and family interviewees were involved with counselors, coordinators, and case managers from multiple systems and did not always know why they were being referred for different services. One youth described it as having many people "from the government" calling him, but he was not sure who they were or why they were calling. He was clear that he wanted a job and could name what job he wanted but stated that, to date, no one had gotten him a job yet. In one TPS catchment area, the TPS counselor worked with a parent who was also an administrator of a private, non-profit school for students aged 12 to 22 with complex learning, language, and social skills:

Parent: I asked (TPS counselor) if she would be the coordinator for all my students at (name of) Academy. All of them come from different offices so that becomes challenging for me as an administrator to deal with the (name of office) and the (name

of office) and all of them, so they agreed and so then (TPS counselor) was then the counselor for all my students. All 14 were part of the TPS program through (name of) Academy, even though they were from different area offices so that's how (my daughter) got involved in the legit way and my other students got involved because we adopted them under the (TPS catchment) office.

Another parent stated that she had expected her daughter to be referred for adult services either to the Department of Developmental Disabilities or the Department of Mental Health but was referred to MRC.

Parent: There was a lot of confusion around post-graduation services. Being a parent of a child, the first time coming through the education system that has different needs, you don't really know what you're doing, you're just trying to do the best job that you can. You just take the information that you have. You know your child and then there's the information that you're getting from the staff that works with her and you will do your own research. It's a very confusing maze of information and that hasn't changed. I have a feeling that it will be like that forever, but we have been very fortunate to have a lot of people who have been very helpful and (TPS counselor) was one of them. She was awesome. So, there was a lot of confusion around where that 688 referral, what direction that would point us in. I initially thought that it would be either in DDS or DMH because she also has some mental health diagnosis but based on her needs, I thought it would be DDS but then it turned out it was MRC.

## What did they receive from TPS and what value did they place upon those services?

Interviewees varied greatly in describing the services received. Interviewees from the Roxbury area were uncertain about whether they were receiving MRC services or independent living services and often named a counselor who was not affiliated with MRC as their MRC counselor. They expressed some degree of confusion about what would happen after the project ended. During interviews, multiple youth mentioned that the Roxbury area peer mentor working with the independent living center was very involved and was helping them with a wide range of challenges, including time management, understanding services, saving money, and figuring out what to do next. The dialogue between one Roxbury area youth and the interviewer seemed to convey uncertainty.

Youth: I've worked with a lot of counselors, and I do not know which one you are talking about. It may be from school or other governments, or other people have talked to my mom and talked to me.

The interviewer gave a list of names and the youth remembered and then responded to a question about what the relationship was like for them.

Youth: I think it was (Name of Person). It was (Name of Person). Because I am 18 now, I. like, talked about, like, jobs I want to do. When I mean jobs, like, not like long term but short term. My hobbies, things I like to do when I am not in school. And all of those things. I cannot remember off the top of my head right now. ... Like I said, like, get a job, like how to go to the job.

When asked if the youth had gotten a job through the TPS project, the youth replied:

Youth: No. I do want to get a job now. I want to work in, if it does matter, I don't think it does. I want to work in a movie theater for now.

Interviewer: When you worked with (name of counselor) did she set up any visits to any companies or jobs?

Youth: I don't think she is the one that did it for me. Um, she had done some, she had done some companies that would help me. Like, I don't know if you know those drivers that drive people with disabilities. That go to jobs. I don't know what it is called off the top of my head. She, like, helped me learn that.

Interviewer: Did you go to a job and work for a little while for a few weeks?

Youth: No. I didn't. I'm actually interested to do that. Thank you for saying that. I'm actually interested to do that.

The interviewer asks a few questions about peer mentoring and other activities and then asks if the youth has had contact with anyone recently.

Interviewer: Is someone working with you now?

Youth: I don't know who is working with me now. I have people that have called me. I don't know if they are the one that you are talking to me. Maybe I do not remember it.

Later, they asked if they could "give you some feedback" about how to help other high school students with disabilities.

Youth: When I leave my high school, I need a driver. You guys should really think how you guys help us with that. I don't know if I'm making sense, but we need all of that. Like a 1 to 1 presentation. Not like oh, you know. I know it is only for Boston Public Schools, but we need that. We need transportation. I do not know if you know what I mean.

For instance, for me, I am interested in getting a job. When I do get a job, not like an uber. I'm going to say an uber, I am sorry. I need an uber to get to work and get me home. I do not want my family to drop me every single day. I want to be independent. That is the feedback that I wanted to give you.

Interviewees across sites referred to transportation challenges. The three sites differ in public transportation capacity, but interviewees across all three sites were very concerned about how they would get around. Parents talked about how they could help their family member with transportation, but it was not a long-term solution. Housing came up as another missing piece. One youth was hoping to get support from MRC to find an apartment, a parent requested help from the TPS counselor to find an independent housing option, and another parent described talking to the TPS counselor about how to get on the list for public housing.

#### **Peer mentoring**

Nearly all interviewees mentioned connecting with a peer mentor. The TPS Project peer mentors were affiliated with one of three Independent Living Centers (ILCs) in the state of Massachusetts including the Boston Center for Independent Living (Roxbury), Stavros (Springfield), and the Northeast Independent Living Program (Lawrence). Some had extensive contact, and some had introductory conversations.

Youth (Roxbury): Okay peer mentoring was like, he could help he could help me with, like, a bunch of stuff and one of the main things was like, controlling with my money, like helping us, like, save money and how to use it well.

Interviewer: Did that happen?

Youth: No, I didn't, sadly, but I did, like we've, he reached out to me, and I was busy like with school, getting a job and stuff like that, so I couldn't really.

Interactions with peer mentors appeared flexible, tailored to the interests of the youth participants, and varied greatly across sites.

Youth (Roxbury): My peer mentor taught me about self-care and being more confident in myself. Our services [TPS program] ended but we're trying to, but the services shouldn't end, which is what my peer mentor said.

Youth (Roxbury): They provided me two workers, one was (Name) and the other was (Name). They worked at ILC. We each met twice a week, different topics to learn about life, they were like what do you want? They would ask me what topic do you want to talk about next time and I would say finance and we would talk about that for a few weeks and they would teach me the basics of finance and how to save money.

Youth and Parent (Springfield): At first, we would have these small get-togethers and discuss different places and how we could travel, how the travel system works. I joined a company with (mentor), and we would go to local places (Mall, Community College). Parent: He (the mentor) was just trying to introduce you to the bus. Youth: I got my PDTA card.

Youth (Lawrence): He helped with what I wanted to do and my emotions. I was going through rough times, and I didn't know what to do, I was just, like, I was home not doing anything.

One issue raised by a parent was that all the mentors identified as men with disabilities.

Parent (Lawrence): Some of the other students that I had involved did have peer mentors but not (my daughter), and part of it was there were no women. (The TPS Counselor) was the only one and she came every so often, but they could not find a woman mentor. So, the boys had a mentor.

# Finding and participating in Work-Based Learning

One TPS youth talked about their post high school work and college participation with the interviewer. We highlight this conversation as an example that youth and families may have gotten their own jobs and enrolled in college but may or may not have shared that with a counselor. The youth interviewed was working and attending college but had not interacted with a TPS counselor for a few months. The youth found involvement with the TPS Project helpful to them, but it was not clear whether they received any of the TPS components other than peer mentoring as they discussed earlier in the conversation. They also reported not having had contact with anyone for a few months.

Interviewer: You mentioned the paid internships. Now, did you get a paid internship?

Youth: No, I went to go work. I've got my own job.

Interviewer: Okay, well, what kind of a job is that?

Youth: At (Name of) hospital.

Interviewer: Okay, and what are you doing there.

Youth: Helping around cleaning just, just the normal like a janitor.

Interviewer: Okay, how did you get that job.

Youth: From my aunt and uncle. ... My uncle works at (Hospital). My aunt works at (Other Hospital).

Interviewer: Okay that's good. Is it full-time or part-time?

Youth: Part-time since I'm going to college...

Interviewer: Did any of the services you got from Mass Rehab, do you think they helped you figure out a career direction?

Youth: Oh yes, of course, they like, well, mostly me, I just needed help with scheduling stuff and how to manage, like, my time. So, they really helped me a lot with that.

Other interviewees, often together with a parent, talked at length about a wide array of services they received by a number of organizations and vendors. A dialogue between the interviewer, a TPS youth, and the TPS youth's mother who participated through the Springfield area describes a team approach between the TPS counselor, peer mentor, and vendors. It also points to how youth and families are reaching out or referred to multiple systems simultaneously.

Youth: One of the first things she was discussing about was finding work for me, sort of.

Parent continues: Right, she was doing. She actually introduced (my son) to Viability, where he took a.. it was like a work ready program.

Youth: They set me up for an internship at a place called (name of store in a local mall).

Parent continues: (TPS counselor) was also the key person that introduced (my son) to Stavros where (he) met his mentor. She was a key person in getting that relationship together.

Youth clarified: to get me familiar with bus travel.

The youth participant described the tasks at his internship and what he learned on the job. After the internship ended, he continued to volunteer until he started college in the fall.

Later in the interview, the youth and their mother discussed working with the Department of Developmental Disabilities Services (DDS) as another avenue her son pursued to find work. In comparing a work-based learning experience to a job search:

Youth: It did set me up for possibly finding work, but I would not actually find work until I met up with Work Opportunities. (Asking parent): Did (TPS counselor) introduce us to that?

Parent continued: No. That was an introduction through (special education teacher) who applied for assistance through DDS. And he's been approved for benefits in 2019 and they referred him to Work Opportunities Unlimited and they have been trying for two years to get him a job. Two years this month. And just recently in the last two weeks he found a part-time job.

Youth continued: It took a long time to find a job that was suitable for me.

The youth described the part-time position and found it to be "a good fit for me." The youth and parent reported that they had been assigned a new MRC counselor but have not met yet and are not sure what they would receive from MRC going forward. They would like to continue to work with MRC.

The parent talked about another vendor that DDS referred her son to so that he could connect with other youth.

Parent: The other company that DDS referred (name of son) to is called Multicultural Services. They are here in Springfield. They have opportunities for (name of son) to meet up with other individuals, autistic, and I know that there are some other disabled individuals there. With the pandemic, they had the opportunity just to get together and watch a movie, play bingo, and just to have an interaction with people. They are also putting him on a list to get an apartment, but it is a long list that might take 10 years. They also helped him apply for food stamps.

The youth described another service that they found together:

Youth: Not that long ago, we were doing this thing for this program called Leadership and Success. We were working on these things called SNTs, which is short for Success Networking Team. What we basically do is we talk about, we discuss about our main goals and we elaborate a plan on how we are going to get them done. And we come up with action steps... Each meeting we came up with how we would slowly, but shortly achieve our goals.

The parent provided additional information about the program and that her son was offered it because he was on the honor roll at the high school.

The discussion was echoed by other interviewees in Springfield and Lawrence. Youth participants in Springfield and Lawrence described referrals to MRC, DDS, DMH, ILCs, housing vendors, and transportation companies. They were working with multiple vendors, sometimes simultaneously and sometimes in succession. Highly-informed parents described multiple case managers and coordinated teams. If a needed service was not offered through one, the youth and parents sought them out from another source. High school personnel referred youth to multiple service systems, and those systems may not be aware of the multiple referrals. As the youth and family members described what they had received, the interviewer had a hard time discerning what had originated from the TPS counselor either as a service or referral or what was from the school or another adult service system.

## On the value of paid work-based learning

One consistent theme across all interviews was that youth were very interested in getting a paid job whether it was short-term or long-term. Youth seemed to understand paid work-based learning as a short-term paid job. A youth who completed a 3-month internship at a local shop arranged by his TPS counselor described his work-based experience as follows:

Youth: I had a limited time over there, for once a week, [but] it allowed me to create a bunch of art, and that was the first one I did. It allowed me to get skilled in terms of using paint, I continued to volunteer over there when I started college. This [the internship] was my first time working at a job. It was a small job, for a limited time, but it was still a job, nonetheless. It was my first time.

The mother of a TPS students who completed a paid internship at a coffee shop reflected on how TPS had changed her perspective on her daughter working:

Parent: My take on that internship was: All the interest inventories we had done were working with the elderly, kids, and animals, so when they found the coffee shop as an internship for her, I was a little wary of that saying that's not her interest, plus I know her skillset. But then I thought, let me back off and let her try it. It's 10 weeks, if she doesn't like it, she doesn't like it. And that taught me a lesson. She loved that job. Just because they don't put on paper as their interest, they don't know."

Her daughter commented:

Youth: I'm not good at the money part [referring to the paid internship] [...] unlike most young people, money is not a big motivator for me. It's more the social aspect.

Yet another TPS student talked about an experience of completing a virtual internship that was an effort to provide work-based learning during the pandemic.

Youth: It [the internship] was all on Zoom. I got to meet other interns my age and we would go to workshops and listen to other speakers who worked at [internship site] and do projects. One of the projects was about health-related [issues], we drew a diagram on a piece of paper and labelled the different parts of the human body and how they functioned and presented to whoever was teaching us.

Another parent stated that the paid work-based learning experiences were well-intended but there may be a need to consider whether employers and those supervising youth have enough support:

Parent: I loved the idea of the program because I felt it was a very hands-on learning experience and I thought she would benefit from and do best with it. There was

someone there to direct you. But at the time she did that program or had that job training or job experience, the owner of the place was not around at the time and one of the employees was in charge and the person in charge was young and was definitely capable of running the business. But in terms of facilitating somebody in her situation trying to guide them to get the most out of that experience and I don't know she came from that learning a whole lot.

While there was consensus among all interviewees that work-based learning is of high interest, helpful, and positive, the concept of a Career Discovery Team (CDT) seemed not to mean anything to the youth and parents interviewed. None used the term in the interviews, although several noted that they had participated in some meetings early in the TPS process. These meetings involved high school staff and the MRC/TPS counselor and were part of the referral and intake process. For many, it may have been understood as an individual education plan (IEP) meeting in which they learned about the TPS Project or MRC services. As one parent stated:

Parent: We have so many meetings. It's like, I don't remember how many. But we have several. At the beginning this is the thing. If I told you exactly how many and how many were with (TPS counselor), I would be lying. Why? Because we have so many things going on with (my son) that I have multiple people, meeting them in the high school Every time we had a meeting (TPS counselor) was there. I cannot tell you specifically. So many.

### Summary: Several key themes emerged.

Youth and families place a high value on talking to someone who knows the system, getting a paid job, and finding practical solutions for transportation. Specific TPS services that youth highlighted in the interviews were peer mentoring and help with transportation (e.g., using public transportation, driver's license preparation). Youth interviewees were very clear about wanting a paid job even if it was a short-term job. Most were either working, attending college, or had immediate plans to attend college. They have an interest in continuing contact with MRC and found the experience beneficial, reporting improved time management, life skills, travel skills, and having experience in a workplace.

Most youth and parents found services confusing and were uncertain about what to expect next: All TPS youth and parents who participated in an interview were not able to distinguish TPS from MRC as a service model. The interviewer had a similar experience trying to keep track of what services were provided by which organization and whether it was through MRC, the schools, another public system, or private options. A consistent theme was the significant level of confusion, uncertainty, and general lack of understanding regarding the services and case management processes of MRC. Youth and parents seemed not to know whether they were eligible for certain services, precisely what those services were, and the processes by which these services would be delivered. Several parents participating in the interviews were highly informed and active advocates for their young adult family member and reported involvement in various advocacy groups or occupations (such as a director of an alternative school). Yet they expressed a great deal of uncertainty about whether they had an individual plan for employment (IPE), what they could expect from MRC, if their young adult was still considered a client, and whether they would receive any services in the future. Several parents indicated that their young adult had been identified as a Chapter 688 youth but were uncertain about why they were receiving services from MRC when they were hopeful to become eligible for either DMH or DDS. While TPS required a coordinated team approach, from the youth and family point of view, there were many people "from the government" contacting them who were seemingly unaware of each other.

# 4.4 The Federation for Children with Special Needs and the role of Family Support in Transition Planning

About two-thirds of the TPS participants received family support in transition planning. In general, MRC does not typically provide or refer for family support. During the model demonstration, MRC lowered its early age for eligibility from 16 to 14. In the coming years, there will likely be increasing need to engage with parents and guardians, refer to family support services, or integrate family support into the menu of MRC options. The TPS Project included a contract with the Federation for Children with Special Needs. The Federation is a non-profit organization dedicated to providing "information, support, and assistance to parents of children with disabilities, their professional partners, and their communities" (see FCSN.org). The Federation operates multiple federal, state, foundation, and private-sector-funded programs, including a Special Education Parent Center, Family Support Center, Health Advocacy Center, Family and Community Engagement Center, and Parent-Professional Leadership Center.

MRC contracted with the Federation to provide family engagement and support services in partnership with the TPS counselors across all three sites. Federation staff who were interviewed overall had a positive experience with TPS, both as an implementation partner and as a member of the Project Advisory Council (PAC). Similarly, TPS counselors and other MRC personnel praised Federation staff for being responsive and easy to work with, and for providing high quality services to youth and their families. Federation staff who were interviewed for this evaluation highlighted the important role that they have played informing and educating youth and families about the opportunities and supports available through TPS.

I think a lot of what we ended up doing was talking to them about receiving services through Mass Rehab and understanding the benefits that could come out of it [...] reassuring families that they were doing the right thing by having their students involved in this project [...] just encouraging the concept of work was a big shift for a lot of families. (Federation interviewee, summer 2021).

The Federation interviewees defined TPS as a wraparound approach that provided families access to additional services across many organizations. They stated that reassurance was critical so that families would remain engaged and get services. Federation staff also worked with TPS youth to explore recreational opportunities, "something that is consistent while all of this other change is happening." MRC and ICI did not track access to recreational opportunities as it was not included in the TPS model. It is unclear how many TPS youth accessed this option and whether that was universal across the three catchment areas. Several staff working at the Federation are themselves parents of children or youth with disabilities, have lived experience, and understand TPS families and what they are going through. The Federation interviewees reported that this helped them connect and engage with youth and families in an authentic way or at a deeper level.

This aspect became important during the COVID-19 pandemic, when Federation staff were no longer able to meet with youth and families in person and instead had to shift all engagement and support over the telephone and/or online. What also played a role in effectively connecting TPS youth and families with the Federation was the direct referral and introduction via email by the TPS counselors. Most of the family engagement was parent and not student driven and that seemed to be quite common in Federation staff's experience of working with transition youth and their families. According to TPS data, approximately two-thirds of TPS youth and families received family support for transition planning.

Another way families were engaged in the TPS Project was through workshops and other group activities planned in partnership with the Federation and sometimes held in conjunction with other events, such as an open house at the Roxbury MRC office. The Federation used group training in part to serve a larger number of TPS youth and their parents, thereby helping TPS counselors

manage increasing caseloads. These events also provided an opportunity for parents and youth to interact with other families. Parents of TPS youth were also eligible for scholarships provided by the Federation to attend the "Planning a Life: One-Day Intensive Conference," an event that they hold several times a year across Massachusetts, and that offers free training to parents and family members of children and youth with disabilities.

Federation staff reflected on some of the challenges that the TPS Project had faced, how these challenges had been addressed, and how this had impacted their ability to serve and support TPS families. The Federation interviewees mentioned high turnover among TPS counselors as a major challenge to building and sustaining working relationships. Some counselors were better than others at preparing their successors and project partners for their departure and transition of roles and responsibilities to new TPS staff. Turnover was high in the Roxbury office but was not in the Lawrence and Springfield offices. The Federation, based in Boston, may have had more interaction with the Roxbury counselors than with the Lawrence and Springfield areas.

Another major challenge concerned the expected number of youth participants to be recruited and served through TPS, with the primary point of contact being the TPS counselors.

I think this project was a lot. I think that they [MRC] threw everything into it. Assuming that people could do this much work over three years and recruit that many students was shocking. (Federation interviewee, Summer 2021).

What made it all work in the end, according to Federation staff, was a high level of flexibility and adaptability on the part of MRC TPS staff and project partners and a shared belief in the goals of the TPS project.

Everyone worked really well together. I think that everyone understood the goal was to help students get vocational, work-based experiences [...] teaching them soft skills and engaging them in some kind of paid employment. You know, I think everybody was on the same team and working towards the same goals.

Overall, Federation staff interviewed thought that the TPS Project has benefited all involved:

I think students and families who really understood what was happening and why and who saw [the benefit of participating in TPS]. Some kids, who never even thought work was a possibility for them, had opportunities. Engaging their interest and I think that really hits home. And I think employers benefited because they were like, 'Wow, this is a really great employee, who I love being with and I see the benefits of them being here.' And this is life changing for them the same way it is for the students, and I also think that's where we have learned a lot in that people don't just need one service at a time; they need all of this stuff to go to work. It takes a village to get someone to work, it really does.

Using a wraparound approach to serving TPS youth involved partnering with multiple organizations, both state-funded and community, which according to Federation staff helped MRC "build a bigger community to support work [for transition youth]." The Federation benefited in that they were able to build relationships that they never had before with the three MRC offices that served as TPS sites. Furthermore, the TPS Project served youth with more significant support needs, who may not have been ready for jobs. Interviewees thought that this helped MRC look at youth and youth service provision a little differently.

I think MRC realized the benefit of early work experience for better futures because, ultimately, these young people may come back as clients to MRC, but they will have better foundational experiences [because of TPS].

Federation staff highlighted the benefits of wraparound services for youth while in high school and were hoping that this could be sustained after the project ends.

You should look at the students as a whole and surround them with everything that's going to help them to get them somewhere instead of providing the least number of services and that you know that's all about funding, but rehab is the least amount of services to get someone a job.

**Summary:** The Federation staff supported many TPS students and families. They highly valued the team approach and MRC's effort to create wrap-around services attending to the full needs of students transitioning from high school to adult life. They suggested that MRC re-evaluate caseload sizes and improve counselor retention.

## 4.5 Summary

The TPS Project set out to provide a comprehensive set of early career development services that included a menu of options, some available to all youth and some specific to youth receiving TPS. It required a complex web of organizations, professionals, and systems that changed focus, delivery strategies, and practices over the five years of the model demonstration. What may have transpired is that youth and families may not have understood all the interconnections, the acronyms, what status they were in, and whether there was an overall plan. Youth and families were referred to MRC and then to a TPS counselor who referred them to other organizations. They could recall names of contact people or counselors but there was turnover in many of the organizations. Youth seemed consistent in their goals. They wanted a paid job and transportation including learning how to drive. They found talking to a supportive adult helpful, whether it was a TPS counselor, student benefits counselor, a peer mentor at an ILC, an employment specialist working for a vendor organization, or a member of the Federation. But they could not always recall what organization they were from.

Team approaches and coordinated services maybe useful internally, but they may be organized in ways that provide more clarity to the professionals than to the youth and families involved. Youth and family interviewees were not clear on whether they had an IPE, whether they would continue to receive services, and whether the person that they received a work experience from was part of MRC or another organization. The TPS Project relied heavily on referrals both within MRC (TPS counselors to student benefits counselors) or to other organizations, such as organizations for peer mentors and work experience options. For youth and families who responded to surveys and requests for interviews, they were not sure if they were receiving TPS services or whether all the services they were receiving were part of TPS or a different organization.

Youth and families were clear about an interest in getting a paid job. Only half of the TPS youth got a paid work experience while three-quarters of TPS youth participated in other types of work experiences. TPS counselors and other key informants stated that the infrastructure to identify paid work experiences was limited, often dependent upon vendor contracts, and disrupted by changes to pre-employment transition services and the COVID-19 pandemic. Youth interviewees reported working but it was not always clear if those opportunities originated from the TPS project, schools, another system, or from youth and family efforts to find a paid job. Building more infrastructure to meet the short-term and long-term paid job interests of high school students may or may not increase engagement with MRC if the youth and family members are not clear on who connected them with a job. Short-term paid work is a clear interest of youth with disabilities who are still in high school. Team approaches, such as the career discovery team, may appear more coordinated to people working within the system. From a youth and family point of view, they may be part of multiple coordinated teams that are not talking to each other and unaware of the full scope of services that youth and families are seeking, missing, or receiving.

## 5. Partner and Stakeholder Perspectives

## **5.1 Overview of Key Partner and Stakeholder Perspectives**

The ICI conducted three waves of interviews of key partners and stakeholders during the project period. Wave 1 and 2 are summarized in the interim report as part of the process evaluation.

- Wave 1 (October through December 2017): Out of 80 identified TPS stakeholders, twenty-two
  agreed to interviews. Interviewees included personnel representing TPS Project Management,
  TPS counselors and supervisors, Pre-ETS vendors, independent living centers, the Project
  Advisory Council, and schools.
- Wave 2 (March and May 2019): Out of 104 identified TPS stakeholders, twenty-eight agreed to interviews. Eleven interviewees had participated in the Wave 1 interviews.
- Wave 3 (May through September 2021): By the summer of 2021, many of the identified key informants in Wave 1 and 2 had changed jobs. Several interviewees were new to the project. Consistent with prior waves, one person from a public high school agreed to an interview. Of the 57 key stakeholders listed, 31 participated in interviews.

### **5.2 Core Questions**

The ICI created a basic interview protocol and customized questions based upon role, TPS catchment area, and the length of time the interviewee had participated in the TPS project. The ICI sought to answer four core questions:

- What was the level of implementation and how did it vary by TPS site?
- What were the perspectives of MRC counselors, supervisors, and local leadership staff on implementation, value and lessons learned?
- What were the perspectives of key partners on implementation, value and lessons learned?
- What do interviewees recommend MRC sustain or build to improve post high school outcomes of high school students with disabilities?
- How did the March 2020 state and federal public health orders change TPS implementation?

#### **5.3 Interview Process**

Wave 3 interviews were conducted with 31 TPS staff and partners or collaborating entities. Project leadership and TPS counselors reviewed the list of contacts and provided updates. Guided by these recommendations, researchers selected individuals from MRC and collaborating organizations for interviews, including MRC area offices (counselors, unit supervisors, area directors, and benefits counselors), Independent Living Centers (peer mentors), pre-ETS vendors, schools, the Federation for Children with Special Needs, MRC SBC, Partners for Youth with Disabilities, and personnel from the area regional transit authority. Additionally, researchers identified three staff from the MRC administrative office directly involved in the TPS Project and the Transportation and Community Partnerships Coordinator. Finally, we interviewed the technical assistance provider from the ICI.

The ICI evaluation team created a one-page study fact sheet and sent that along with an interview invitation to the identified individuals. Upon response, researchers scheduled a videoconference interview and sent interview questions. Nearly all who were contacted agreed to participate. In a few instances where individuals did not to respond to the interview invitation and researchers' follow-up efforts, researchers identified an alternative with the help of the respective TPS counselor.

Table 16 shows the total number of individuals listed in the TPS contacts provided by MRC, the number contacted by the evaluation team, and the number interviewed. Researchers interviewed a total of 31 individuals.

**TABLE 16. WAVE 3 INTERVIEWS** 

	Total Contacts Provided Interviewe		TPS Site			
			L	R	S	С
TPS Counselors	2	2	1		1	
ILC Staff (3 Peer Mentors)	7	5	2	1	2	
MRC Unit Supervisors	3	3	1	1	1	
MRC Area Directors	2	2		1	1	
MRC Administrative offices	4	4				4
MRC TPS Transportation and Community Partnerships Coordinator	1	1			1	*
School Personnel	1	1			1	
Pre-ETS Vendors	17	6	3	1	2	
Federation for Children with Special Needs	2	2	*	2		
Regional Transit Authorities	2	2				2
MRC Benefits Counselor	3	2	1		1	
Other State Agencies	12	0	1	1		
ICI TA Provider	1	1				1
Total	57	31				

TPS Site Key: L=Lawrence, R=Roxbury, S=Springfield, C=Cross-site

#### 5.4 Data Collection

#### 5.4.1 Interviews

Research staff conducted interviews using an online conferencing platform. Interviews lasted on average 60 minutes and were audio-recorded with the permission of the interviewee. Recordings were automatically transcribed by the videoconferencing service and reviewed and corrected for accuracy by a research staff member and a graduate student. Interview protocols were developed by ICI evaluation staff to gather the perspectives of key stakeholders. Finalized protocols and consent procedures were submitted to the UMass Boston Institutional Review Board (IRB) for review and approval as exempt research.

## 5.4.2 Observations, Site Visits, and Document Review

Across the life of the project, the ICI reviewed documents, observed meetings, and visited each of the three area offices. The intent was to conduct additional site visits in the spring and summer of 2020. This was not possible due to the pandemic and public health restrictions. MRC and ICI met monthly providing updates. The ICI TA staff member met frequently with each TPS counselor to assist counselors, supervisors, and others and problem solve to move TPS activities into a virtual strategy. The ICI in partnership with MRC created a fidelity instrument (see Appendix C) that looked at overall implementation across sites rather than whether or not a specific student got a full dose of the TPS model.

<sup>\*</sup>Individual also works in this area

## **5.5 Findings**

## 5.5.1 What was the level of implementation and how did it vary by TPS site?

The TPS model components are described in Appendix C and in Section 2. TPS counselors offered 10 TPS services with a target of 8 out of 10 per student including 2 WBL with one paid. TPS counselors provided about 8 out of 10 TPS services to approximately 300 students served that were included in the impact analysis time frame. MRC recruited an additional 100 students after January 1, 2021. Most TPS students in the impact analysis received a mean of 8.25 TPS services. About 41% received a paid WBL though 78% received any type o WBL. Interviewees reported that, the pandemic played a role in access to paid WBL. Other factors include delayed enrollment of 400 youth, TPS counselor turnover, inconsistent support from job placement personnel, changes in the Pre-ETS model, and limited infrastructure to identify and provide paid WBLs. Another factor may have been site level differences in partnerships, vendor capacity, and decisions about recruitment and enrollment. Lawrence and Springfield provided services that were notably different than business as usual services. The Roxbury TPS model was modified after the TPS counselor left in September of 2019. It was unclear from the data and interviews whether TPS services in Roxbury differed significantly from business-as-usual services.

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### Lawrence

The Lawrence site had a long-standing TPS counselor who seemed to function independently without a job placement specialist or a transportation coordinator, attended IEP and 504 meetings in schools prior to the pandemic, and created a referral process to the TPS partners. By late 2019, early 2020, she reported a caseload size of 126 students, far more than she had expected when she took the job. Her caseload size was similar to a regular counselor, and she felt it reduced her opportunity to provide the range of comprehensive services and use the Career Discovery Team process. She frequently took on mentor and job coaching roles because the peer mentor vendor had limited capacity (i.e., no female mentors) and that the TPS youth required 1:1 job coaching during work-based learning experiences. One of the peer mentors also provided job coaching during paid internships. The Lawrence site enrolled a significant cohort (about 25) of youth who were about 18 to 22 years old and receiving special education services. The TPS counselor reported that the families expressed interest in receiving community-based day services through the Department of Developmental Disabilities and did not want to seek employment or postsecondary education post high school. The TPS counselor saw this group of youth as the most in need of WBL services as an alternative and possible assessment of whether a community day program was a long-term goal. Family members interviewed indicated that they enrolled in TPS as it seemed a better option than being in a school setting but that their goal was not to seek employment or post-secondary education.

The Lawrence site passionately advocated inclusion of youth with the most significant disabilities even if those youth and their families stated an interest in non-work settings after high school. Early referrals and transfers between the MRC counselors and the TPS counselor focused youth that were seeking DDS services or were identified as Chapter 688. Yet, the TPS counselor expressed doubt about whether or not students with a Chapter 688 referral should have been included in TPS.

Because I was heavily DDS and I feel like the outcomes, it was never clear. Is it a high school graduation, the outcome, which is high school - or employment? Had I personally, the Lawrence site, known that, that was it, the enrollments would never have included people who are going to go to DDS straight.

TPS implementation in Lawrence was different than MRC business as usual in that the TPS counselor provided intensive case management, provided job coaching and peer mentoring directly to youth, referred students and families to services not available to other MRC youth clients, and worked with students several years before high school completion. Yet, the TPS counselor felt that there was a lack of support and unclear goals.

...because we had going on an extended time without having like somebody who is able to like organize us on....I appreciate (MRC staff) she came in, she did what Neil did for us then. She came in. We are struggling with referrals. um we meet every week. she's able to like - we have our own supervisor for TPS, something that we never had....I wish again we had somebody like (MRC staff) from the initial stages of the grant who would have been able to be organized, have a uniform message, be able to have targeted goals.

And I found out that I was very flexible because every time...and look, like we would be on one track and then we'll meet. And I felt like we're supposed to do "a" and they're no no you're supposed to do "b.".

Interviewees described confusion about whether or not attendance at a yearly IEP or 504 meeting was the same thing as a career discovery team meeting.

I would say the initial meetings definitely were helpful, but unfortunately after those initial meetings with students, the intakes and stuff we really didn't get a chance to join any more meetings regarding the student unless they had an upcoming IEP and if we weren't invited to that IEP then we were just kind of getting secondhand information from either the parent or the school sometimes and sometimes no information unfortunately. But we did attend any meeting we were invited to. We were happy to attend.

Peer mentors from the independent living center worked together with students and families fairly independently after the referral from MRC. They also took on the role of identifying work experience and internship opportunities.

When the students did have that goal of like having an internship or a job, I believe that we would, yeah, I would just help them kind of like work on like the skills training in that area. Like maybe. like work on looking online for job listings. You know filling out job applications online. You know, especially since the pandemic took place. There are a couple times, where I would meet the student at a restaurant they wanted to work at or another location like Market Basket, for example. Kind of like guide them and encourage them into asking for a job application themselves. (...) Like that kind of like intensive relationship that I developed with the student as a peer mentor allowed me to kind of work towards a larger goal than a temporary internship.

TPS partners other than the peer mentor stated that they received very few if any referrals from TPS after late 2019. The TPS counselor made some referrals to the Federation and families found the services very helpful but that it was not a frequent connection. The SBC reported working intensively with students and families up until late 2019 and then referrals dropped off. The TPS counselor reported that during 2020, she was directed to recruit more TPS youth and was working on enrollments and IPEs during the Spring of 2020. The timing of the intensive recruitment effort meant that she needed to focus on onboarding rather than service provision and that may have reduced focus on identifying paid internships.

**Summary:** The Lawrence site had limited fidelity to the TPS model but was very different from business-as-usual services.

## **Springfield**

The Springfield site got a late start as the first TPS counselor left the position shortly after being hired. Another TPS counselor was hired about a year after and remained with the project until the summer of 2021. Though TPS enrollment was delayed, the Springfield TPS counselor did a remarkable job of catching up and met enrollment goals very quickly. Springfield had an active two-person team and divided up tasks such as coordinating services and actively seeking workbased learning opportunities. The SBC was co-located and often participated in Career Discovery Team meetings. The TPS counselor reflected on the team approach which seemed to echo the opinion of other Springfield partners:

I love the team approach with what we've had here...It's great to bounce ideas off folks – and what do you think of this.

It took some time for Springfield to work through the team approach. At first, the TPS counselor and the Transportation Coordinated tried to make the CDT meetings very formal. The meetings included the counselor, the student, the peer mentor, the Transportation Coordinator, and others as relevant to the student. They completed an intake process and discussed WBLs, student interests, and other services. Scheduling was frequently a challenge and they switched to a "laid-back, low-pressure atmosphere" to build rapport. If employment services vendors attended, the meetings became more formal. The TPS counselor reported working with several different types of schools, but her relationship with each school varied. Some schools were very involved and sent a number of referrals while others sent very few. She felt it was critically important to develop relationships with school personnel. Some MRC counselors and school personnel were very invested in the program, highly responsive and would invite her to attend IEP meetings. However, CDT meetings were often held in the evenings convenient for youth and families but made it more difficult for the school personnel to attend.

Springfield appears to have targeted a very different group of youth than Lawrence. Interviewees indicated that they sought out youth that were likely to "fall through the cracks" because of a wide variety of economic and household situations. Springfield TPS students were diverse in type of disability and expressed interest in working after high school, attending post-secondary education, or both. Springfield also had significant capacity to provide services in English and Spanish in comparison to the other sites, though they also indicated that the demand was higher than their capacity. The supervisor and the SBC were bilingual. The Springfield site enrolled students from more than 17 high schools but identified a key high school that provided a substantial cohort. The high school was a public high school with specialty in science, math, and technology education. Similar to Lawrence, the TPS counselor stated that the caseload size was too high and that she had a higher number of clients on her caseload than a general MRC counselor. She also stated that the timing of a new recruitment initiative meant that she was not able to concentrate on WBLs.

The Springfield site had more job placement services capacity than the other two sites and had informal internal arrangements and active vendors. Multiple employment services vendors assisted in identifying paid internships, however, this changed after MRC redesigned its Pre-ETS efforts. The TPS counselor felt it would have been ideal to have someone at MRC dedicated to working with employers and finding internship opportunities to attend CDT meetings and interact with the student and the teams. Originally, an MRC job placement staff member was involved but she had her own caseload and could not take on the task.

**Summary:** The Springfield site implemented the TPS model, and it was very different than business as usual. Of the three sites, Springfield was closest to the model as designed. However, as with the other sites, about half of the participants completed a paid WBL.

## Roxbury

The Roxbury catchment area did not have an MRC based TPS counselor after 2019. A local vendor identified a key person to take on the role and MRC created a work around for that vendor to provide TPS data to a central office person to enter into MRCIS. From interviews, it was not clear if TPS youth that were supported by the vendor had an identified MRC counselor. The vendor appeared to have coordinated across several organizations, particularly with the peer mentor. Roxbury supervisory and leadership staff appeared to have limited involvement with implementation after 2019 and described it as a vendor contract overseen by the TPS leadership staff. To what extent Roxbury services were different than business as usual services is unclear. Multiple local interviewees described it as similar to pre-ETS services with options for peer mentoring. Several vendor staff and peer mentors left their positions during the interim and described minimal contact with the Roxbury office.

**Summary:** The Roxbury site implemented the TPS model up until the Fall of 2019. Once the TPS counselor relocated, it is unclear if services were markedly different from business-as-usual services.

# 5.5.2 What were the perspectives of MRC counselors, supervisors, and local leadership staff on lessons learned?

Use of Specialist Model: MRC hired three TPS counselors to carry specialty caseloads and implement the TPS model in their area office. In the case of TPS, this approach had distinct advantages as reported by the TPS leadership team. It did not require changing job descriptions that are defined in partnership with the union, and it helped fast-track implementation because only three staff needed to be trained and supported. The approach came with some risk as it limited bandwidth to reach out to the high schools in the TPS catchment area, created gaps if a TPS counselor left or had a significant absence, and limited the ability to increase sample sizes beyond three TPS counselor caseloads. The TPS counselors reflected on this model. One TPS counselor stated that 3 TPS counselors were not enough for a target goal of 400 youth and that it would have been better to have a caseload size of about 50 to 55 students. This would have allowed more opportunity to focus on coordination across a large number of organizations, more frequent communication with youth, and more opportunity to identify paid internships. The same counselor also suggested that having at least one MRC job placement specialist who focused exclusively on paid WBLs for high school students would have made a significant different. Another counselor suggested that all counselors in an area office should implement the TPS model for any high school student. Instead of hiring a TPS counselor, MRC could hire a WBL specialist. They also agreed with the other counselor that caseload sizes for model demonstrations should be low (about half of a regular caseload) to allow time for the additional work of coordination, family support, and partnerships with a large number of high schools.

**Intensity of TPS Services:** Nearly all interviewees described the TPS model as too complex with too many components. Some interviewees in the Lawrence site felt that key services were missing including transportation, job coaching, customized employment options, and housing referrals, particularly for students with Chapter 688 referrals. Others felt that a clear focus on work-based learning paired with vocational counseling and peer mentorship may have been more feasible and more effective.

**Pre-ETS, Paid Work Based Learning and Job Placement Services:** One student interviewee remarked that a lot of people from the government were trying to help them get a paid job, sometimes short-term and sometimes long-term. Across MRC interviewees, there was a difference in opinion about how to deploy Pre-ETS services, paid WBLs, and job placement services for

students who are several years away from high school completion. MRC Roxbury personnel suggested that Pre-ETS was a solution and that all eligible and potentially eligible high school students should be served by Pre-ETS vendors. Then, when old enough and closer to high school graduation, they should be referred to an MRC adult services counselor who refers them for job placement services. Interviewees in Springfield observed that student and families in their area were very interested in paid part-time jobs and were less interested in participating in training. They perceived students in households with economic pressures would seek paid part-time work and might disengage from MRC if that was not an option. Lawrence personnel suggested that students with severe disabilities who had unclear post high school goals would benefit significantly from trying low risk WBLs to test out work options. Senior MRC personnel were assessing ways to follow Pre-ETS rules, extend group and low-dose WBLs to a larger number of students with disabilities, and to increase engagement with MRC services.

Project Management and Infrastructure: In the early years of the model demonstration, the MRC TPS Project Director created a Steering Committee, a Project Advisory Council, yearly All Partners conferences, held monthly site meetings and frequently communicated with the TPS counselors. She represented the project to MRC Leadership. Her role was broadened, and she became the Transition Coordinator overseeing Pre-ETS implementation and other activities. After her departure, TPS project management activities were dispersed across MRC personnel who had many other obligations. The Roxbury TPS counselor relocated to another area office and was not replaced. TPS Leadership subcontracted with a vendor to support some of the participating students. The vendor is also a Pre-ETS vendor who described referring TPS students to the Pre-ETS services and coordinating with the Boston Center for Independent Living. Upon reflection, MRC TPS leadership staff suggested having a Project Director and Deputy Director for every model demonstration. Another issue was that TPS counselors were supervised by the local area office supervisor who may or may not have the latest information about implementation. Three MRC central office staff suggested that a different model of supervision, performance management, and clear lines of authority would improve communication and clarity. The TPS Project Director had a firm commitment to local flexibility and buy-in. Interviewees reported that they appreciated the flexibility, but it left a lot open to interpretation with many unanswered questions such as what constituted an unpaid WBL, what was a CDT, and who should they recruit. The TPS Project Director was committed to ensuring equal access to students with Chapter 688 referrals. Lawrence, an early implementer, actively recruited accordingly. However, this may have limited the ability of the TPS project to demonstrate employment and post-secondary educational attainment post high school. Many youths who had recently completed a Chapter 688 referral remained in high school. One eligibility requirement is that they are not able to work more than 20 hours per week. An MRC central office staff member responsible for examining outcomes spoke out how we may not know the value of TPS for a while.

When we look at the composition of these students, I think some of them, if they hadn't been involved in this program, may have not had the access to some of these resources so I think that just by participating... I hope there's a way we can track these people in the long term because I'm hoping that this experience will benefit these students in the long run. I think they're a more diverse group than the overall state population for these types of students. I also think that they had access and benefited from, when you look at the internship data, we moved away from paid internships in the Pre-ETS model, so these students were benefiting from something that not everyone was getting.

The Important Role of MRC Student Benefits Counselors (SBCs): MRC employs about 13 benefits counselors with three designated as SBCs. Each TPS site worked with an affiliated SBC. Students who were not involved in TPS has access to the same services. SBCs remarked that they were more connected to the TPS counselors.

The good thing is that VR counselors know that I'm here for them and they know the basic information of the services that I provide. So that's a good thing, because, you know, sometimes the parents – I know the parents and, 'Oh, what's going to happen?' But the VR counselor may answer, 'Well, you're not going to lose [your benefits]. You're still a student. You're in school.' But like, deeper, I can answer those questions. So, I'm there for them and they contact me, and we have a better communication with [the VR counselors] after I talked to them. Every time that I contact my consumers, I send an e-mail or report to the VR counselor I did with every detail and that's how we are all of us on the same page.

The Springfield SBC felt the close connection with the TPS counselor made an important difference,

"it was very helpful having TPS. A lot of consumers don't know the services TPS provided for them. It was teaching kids how to take a bus, how to communicate, how to have their pass. That kind of stuff, and I think it is really helpful."

The Lawrence SBC commented that the coordination was critical:

It's very important [that the benefits counseling be integrated with the work experiences and internship]. People often minimize – I think – the need for benefits counseling. I think everybody should have it because sometimes they won't share that concern. Or they may not be aware that that will play in because they haven't worked yet.

She also felt that the most important component of the TPS project was that it served people who would normally not be served:

I think the most important thing for me is that you addressed the neediest areas – that urban areas – and you targeted students in those underserved areas and gave them opportunities they may not have had and kept data on them. I am really curious to see what you find out.

The benefits counselors reported very strong teamwork and collaboration with each other and with the TPS counselors. The Springfield SBC shared a cubicle with the other members of the TPS team and had a very strong relationship with them. She noted that TPS counselors seem to have a better connection with their clients and are more able to support and motivate them. She emphasized that the teamwork between the TPS counselors was the hallmark of success with the TPS program:

They were a great team. They were working together all the time. And I think it was successful -they were always out...They were looking for all the needs of the consumer they were attending

She reported that TPS counselors had a better understanding of the services provided by benefits counseling than many other VR counselors: This understanding meant they were better able to provide services to their clients. She felt that particularly in the western part of the state people often do not understand what services are available to them. She sends and e-mail to the VR counselors every 3-4 months to remind them of the services she can provide.

The Lawrence SBC reported she initially had some misunderstandings while working with the TPS counselor who would refer every student to her. She felt she only needed to see the students who were interested in working. She mentioned that was very common when starting a grant – often people were not certain who to refer, when to refer, etc. She believed the counselor was overwhelmed with the project expectations and that the process could have been better organized. Eventually they formed a very strong relationship.

The Lawrence SBC also thought the PAC meetings were very important:

I thought the PAC was essential - having us being in the same room...We talked about increasing outreach to families."

The three benefits counselors have a database and communicate regularly - they call and text and discuss problems they are having and asked and answered questions during staff meetings. They do not have a way of tracking outcomes, which they would like to do.

Both SBCs felt that some of the communication with other agencies particularly independent living centers could be improved. They both mentioned the critical role that mentors played on the project. One SBC requested that MRC keep better data on how the work is impacting students and families. One SBC reported that she had a great relationship with the Federation, as a transition consultant, and the Link Center, which she said served a critical purpose educating families about transition issues.

## 5.5.3 What are the perspectives of key partners about lessons learned?

Multiple partners were involved in TPS implementation. Section 3 speaks to the role and perspective of the Federation for Children with Special Needs. For the impact report, we focused on the role of the independent living centers and the employment services vendors /

### **Independent Living Centers**

Individual peer mentoring is an MRC innovation tested by the TPS project: Youth, parents, TPS counselors, and partners highly valued the work of the peer mentors who proved to be flexible in their approach. Interviewees suggested that MRC should consider expanding peer mentor opportunities and build capacity to support students of diverse characteristic and career interests. The ILC peer mentors who worked previously with youth did so on a group basis, whereas through their TPS contract, they were able to work one-on-one with youth on a range of career-related activities, as noted by one peer mentor in the interview:

I've been working individually with students, trying to help them accomplish their specific goals, and that's something that has been more in-depth than the previous work that I have done, and really get to know the students and what their needs are, what their strengths are....The work that I was doing before, it was more oriented towards groups and just a general curriculum rather than an individualized curriculum, while with TPS, it's so individualized because we are working with the MRC counselor, the teachers, and the staff at the school."

The ILC peer mentors noted that most TPS youth were motivated and eager to work with them and that they were very engaged in the process. They found the TPS youth to be no different from the transition youth they typically serve in terms of the youth's support needs. One peer mentor noted that youth in urban settings may have benefited more from TPS, partly because they had access to public transportation and thus were easier to reach and could more easily work with their peer mentors on travel training and similar activities.

Referral slightly different across the implementation sites: Two peer mentors talked about receiving referrals via email that included youth's contact information, what they would like to work on (such as independent living skills, school/work-life balance), and that they are interested in peer mentoring. Once a referral had been made, the peer mentor would arrange an in-person meeting or a call with the youth and do an initial intake, where they would ask questions to get a sense of who the youth were and try to build rapport with them. Questions focused on what personal goals youth were currently working on (if any), their strengths and weaknesses, their interests and hobbies and other topics. Sharing their personal experiences, according to the peer mentors, helped build trust and connection with the youth. A mentor in a different TPS area,

described the process differently. The third peer mentor did not get an email referral but directly participated in the initial intake meetings that the TPS counselor had with the youth. This peer mentor also attended CDT meetings with the TPS youth and their parents, and other outside agencies. The TPS counselor facilitated the meetings, but the mentor was very involved in planning and goal setting and felt this process was helpful in forming relationships.

**Students and Families need more clarity about the mentor role:** Not all TPS youth and their parents came with an understanding of what peer mentoring is and the types of support a peer mentor can offer. Some parents associated peer mentoring with a model like "Big Brother, Big Sister," or thought the peer mentor provided some kind of therapeutic support. Peer mentors felt they needed to explain that:

...a peer mentor is someone that has walked a similar journey, it might not be the same, but someone who has faced stigma and discrimination and judgment, based on their disability, and who has been able to move forward and who can help support you move forward as well.

Reflecting on the referral process, one peer mentor wished he had met with the parents early in the process. He ended up creating a power point presentation that simply explained the role of a peer mentor and the types of supports they offer to youth with disabilities and shared the slides with the TPS families. A lack of understanding or confusion about peer mentoring on the part of families could at times create wrong or unreasonable expectations for the peer mentors, something that they had to address.

The families sometimes asked for more support than we were able to provide or asked for services that were went beyond the TPS model, and so we had to clarify and explain what TPS is and that the goal is for the student to find work through the TPS program but, for the most part, families have been incredibly supportive of the program. They appreciate the peer mentoring, as well as the other services that the program is be able to provide. And, I think the family involvement has been one of the best parts of the program.

Highly flexible and individualized mentoring: Because of the individualized nature of the relationship, the peer mentors were able to support youth in a wide variety of ways, both specifically relating to careers, and also independent living skills that youth may need to get and stay employed, as described by one peer mentor:

I've been working on various goals with them. So, it could be anything from studying for their learner's permit or travel training on the PVTA buses. I also show youth how to search for colleges, how to search for jobs, how to budget money, basic life skills like cooking.

The ILC peer mentors typically met with TPS youth once a week for 45 to 60 minutes. In addition to supporting TPS youth with their individual career-related goals, peer mentoring provided youth with a space and opportunity to reflect on and process their involvement with the TPS program and to learn how to integrate the various services and supports into their lives so that it did not feel overwhelming or unmanageable to them. Peer mentors experimented with different strategies to engage and support youth. One mentor asked youth about how they best learn (e.g., though pictures, videos, talking with the peer mentors etc.) and then used that information to formulate individualized "lesson plans" to guide virtual mentoring sessions.

I had one youth who learned best through videos so we would just watch videos and then talk about their strengths around learning."

All three ILC peer mentors commented in the exit interviews that there was a great deal of flexibility in their role, and that they were able to follow independent living philosophy, where

they could "let the youth direct what they want to work on." At the same time, they noted that this flexibility could make it difficult to determine what to focus on and how directly the activities needed to relate to employment. All three peer mentors pointed to the collaborative, teamoriented nature of the TPS project as its most unique quality and its greatest strength.

**ILCs and the Federation:** Staff from the Federation noted in the interview that families often do not know what the ILCs can offer until they are introduced to them through TPS. This project made the ILCs more visible and expanded their reach to youth with disabilities. Likewise, the peer mentors reported learning about other resources through the collaborations with the schools and community providers on the TPS project. For the peer mentors, attending intake meetings and CDT meetings facilitates these collaborations:

You know by collaborating I felt that that made the program stronger since everybody knew what everybody else was doing, and we would plan, and coordinate based on that [team effort].

Capacity Limitations: ILC capacity to dedicate a peer mentor for individualized services is dependent on TPS funds. Two ILCs had turnover in the position, one due to a promotion. At a PAC meeting, where the peer mentors gave presentations about their work, several PAC members noted that the peer mentors and the relationships with the ILCs was an aspect of the model that should receive the most focus in sustainability planning. The peer mentors talked about "providing another set of ears to listen to a person" and thought that peer mentoring and support had helped to integrate the various TPS components in a meaningful, sustainable and, most of all, student-centered way. More than the services, the peer mentors valued the attention and dedicated focus the youth had received through the TPS model. They agreed that connecting with someone else through the experience of disability was a powerful aspect of the model. In the interviews, the peer mentors also echoed what we heard from other project partners (the Federation) namely that TPS youth and their families were better connected with MRC compared to the typical transition youth they work with who may not even know the name of an independent living center.

It is clear that the individualized support the ILC peer mentors provided is somewhat resource intensive. Growing caseloads were not only an issue for the TPS counselors but also for the peer mentors who expressed concern about being able to provide the same level of support to all of their TPS youth in a timely and consistent manner:

I'm just always looking for ways to see more youth but maintain the thoroughness of the services and maintain these relationships and my ability to be there for them in an attentive way.

To address this issue, one peer mentor tried to meet with several TPS youth at a similar location (such as a school) on certain days (Note that this was pre-COVID). Peer mentors' recommendations for MRC for future iterations of the TPS program were to (1) have smaller TPS caseloads to ensure the provision of individualized services and supports to all TPS youth and their families and (2) to also provide greater clarity on the timing and process for closing cases, as some peer mentors had continued to keep all the youth that had been referred on their caseloads.

Overall, ILC staff found their involvement with the TPS project very rewarding, as noted by one of the peer mentors:

You know it was really a thing to watch them [TPS youth] grow over the year that they spent with the program. I've had consumers go from studying for a learner's permit to getting their own car or being able to go to work on the bus on their own or working at their first job or being ready to go off to college in the fall. [...] and looking back I'm like wow. It's incredible being a part of this."

## **Employment Services Vendors**

**TPS and Pre-ETS confusion:** Most of the Employment Services vendors who had TPS contracts were also Pre-ETS vendors. Thus, they had multiple contractual relationships with MRC. The vendors reported that the TPS counselors referred youth to them, often helped parents complete paperwork, and had an ongoing relationship that was different than other counselors. One vendor reported using the same referral mechanisms and paperwork for TPS as for Pre-ETS. Another reported that the TPS paperwork was different and burdensome.

In Springfield, a vendor reported that their original Pre-ETS contract included 100 hours for a paid internship and 20 hours for classroom-based work. The vendor received a referral for Pre-ETS and then conducted intake, exploration, post-secondary training, job placement, and internships. TPS counselors referred a youth for a paid internship but had not involved them early in the intake process. This meant that they did not know the student and were tasked with placing them in a paid WBL. To get to know the student, the vendor required the student to attend 3 meetings before being moved forward for an internship. They stated that it gave them a chance to know the student and reduce the risk of an unfit placement that could jeopardize their relationship with the employer. The vendor also mentioned having too many people involved in the process complicated the placement process with increased requirements for communication and meeting expectations. They suggested that the time spent to get to know the students from intake to placement could be cut down if the vendors were more involved in the other aspects of the TPS project (from the beginning) and had time to get to know the students. Therefore, the Intake meetings with the family, student, VRC counselor happened when the internship was supposed to happen and that is too late in the process to meet the student for the first time. And then the vendor would start their own intake and introduction process which prolonged the placement timeline. The vendor reported that they did not realize how much work goes into placing someone in an internship. This was something they learned on the project. Some TPS students required job coaching during their internship. The vendor reported that this was not well planned for and that higher hourly rate for the job specialists was not considered. Overall, they felt that the vendor role was not clear, unrealistic, and not sufficiently funded. The vendor stated that they would not take the TPS contract or a similar one again as the amount to job develop, build relationships, get paperwork signed is not worth it for one paid internship. They suggested:

Write into the funding so that the vendor can be involved from the beginning and that's part of the expectation. It's more time consuming, but that the vendor is involved more along the process and is not just getting the student at the end when they're ready for a job and include us more in those conversations.

Other vendors had different views as they integrated the TPS contract their Pre-ETS services, used the same paperwork, and included TPS students in group internships along with other Pre-ETS students.

The only challenge around that piece was there was a bit of a hiccup with whether or not the TPS kids, if they graduated could they still do the paid internship. There was this language, and they said no. Because with the pre-ETS, kids can't do a paid internship unless they are in some sort of a training program, so there was back and forth about that. It put a little bit of a halt on us, because we were like wait a minute, oh no, these kids graduated and they are still doing an internship with us, but that was ok to do

The vendor attached to the Lawrence site described participating in CDT meetings but stated that the student and family were not present. Although they tried to focus on internships related to the student's interest, it was not always possible. They focused on group internships. The vendor reported a lot of uncertainty and confusion about paid internships. TPS was focusing on paid internships at the same time that MRC reconfigured Pre-ETS and reduced the possibility of paid

internships. The Lawrence vendor also recommended that MRC create a data collection template as it was unclear what data they were required to report. The Lawrence counselor had asked for data on the 10 components of the TPS model thought Pre-ETS asked for five.

Another Lawrence vendor stated that the TPS partnership when well as the TPS counselor was able to provide job support to students onsite at the internships and that freed up the vendor to concentrate on non-TPS students. The TPS counselor referred students to them and worked with parents to acquire paperwork. The vendor stated that he had not noticed any difference between services for TPS students versus non-TPS students except for the involvement of the TPS counselor. They met monthly with the TPS counselor but were not part of CDT meetings.

# 5.5.4 What do interviewees recommend MRC sustain or build to improve post high school outcomes of high school students with disabilities?

"What am I eligible for? Who does what?" Students and families asked these questions during interviews. Even highly informed parents expressed a high level of confusion. The ICI noted that MRC and partner interviewees had very diverse views on which students were most in need, who should be prioritized, and whether the service models matched those needs. One vendor remarked that some students are overlooked in the early career development process:

When we go to the schools and we talk about pre-ETS, schools a lot of the time want to refer their life skills kids, great, I want to serve those kids, but those kids are already getting a lot of services. There's a lot of money going into the life skills process. The student who is not getting the service is the kid with anxiety who sits in the back of the room who's getting Cs and no one is talking about that kid. That is the perfect referral for me. I can't access that kid.

Many public agencies, schools, partners, and vendors are working to provide transition services. Each of the entities seeks partnerships ranging from clear referral mechanisms to intensive team approaches. Flexibility on the ground, while appreciated by nearly all interviewees, can also lead to confusion, particularly for youth and families. Each interviewee had a different vision of who had the most need and who would benefit from which service. Team approaches are highly dependent upon local relationships such as one MRC counselor with one special education teacher or one Pre-ETS vendor with multiple high schools in a catchment area. These are difficult to sustain. For families, it leads to a lot of confusion because they are getting different messages about services. Solutions offered tended to be very local such as increasing knowledge of special education teachers about Pre-ETS. Others suggested that communication between local offices and superintendents or between leadership levels at MRC and DDS are needed. Efforts to clarify at policy levels while maintaining local flexibility are difficult but may help youth and families.

**Talking to Someone Who Knows:** Youth and families reported that talking to someone who knows, provides practical information, and can help them with problems as they arise was of high value. Time with a counselor is important to youth and families. Counselors reported they wished they had the time to do so. TPS counselors had caseload sizes greater than 100. Finding a balance between time spent with youth and families directly, even if interactions are short but frequent, and other obligations may be needed. TPS counselors, youth, families, and other partners highly valued the involvement of peer mentors. Peer mentors offered career exploration, advocacy training, travel training, motivational support, time management, and college preparation. The SBCs spent time with families and students. The Federation became a source of knowledge for families. How might an MRC counselor, an ILC peer mentor, a Federation family support specialist, and an SBC work together to meet the needs of students and families as they arise?

**Getting a paid job in high school:** MRC contracts with vendors to provide adult job placement and Pre-ETS, among a long list of other services. Vendors report that short-term paid internships

are difficult, time-intensive, and costly to identify. TPS personnel were consistent across the three waves of interviews that internal job placement services were absent or too limited to rely upon. Roxbury office personnel suggested that MRC refer all students to Pre-ETS and only provide job placement services to those graduating high school. One MRC central office interviewee suggested that MRC job placement staff become involved with students more than a year before high school graduation. More investigation about whether and how to assist students to get paid work while in high school is needed. MRCIS data analysis indicates that a large percentage of students and youth disengage from MRC. Youth and family interviewees told us that they pursued their own part-time jobs, sought out other systems to get a job, and wanted a paid job while they were still in high school. Does short-term paid employment (internship or PT job) improve engagement? MRC may want to extend job placement services to high school students and consider part-time employment alongside Pre-ETS services.

# 5.5.5 How did the March 2020 state and federal public health orders change TPS implementation?

Stakeholders described significant disruption after March 13, 2020, when the Governor of Massachusetts declared a public health emergency. The MRC responded quickly to get cell phones, laptops, internet access and other necessary technology to employees and clients alike. Most internships were cancelled, high schools closed and moved to virtual classrooms. Most organizations shifted to serving more students through virtual presentations, one-on-one zoom meetings, and communicating through text. Those providing direct services saw a reduction in commute and preparation hours reporting more time for students. As the months passed, counselors and providers noted that students were "zooming out," and seemed sad, unmotivated, and disconnected. MRC TPS central office staff stated that the economic shock for employers caused reduced opportunities for in-person paid WBLs. TPS district supervisors pointed to an increased used of virtual work-based learning experiences including informational interviews, job tours, and paid internships.

The Federation for Children with Special Needs: Prior to the pandemic, the Federation worked with families through phone and email communication. Periodic free all-day trainings on transition services were available to TPS families and students. Teachers or other school personnel initiated a referral and the Federation connected with families by phone and email. Parents could contact the Federation directly as well. During the pandemic, the counselors developed a system of sending introductory emails to reach out and initiate a referral process. The Federation staff started using videoconferencing. Staff speculated that the on-line forum may have encouraged students to participate in other on-line activities such as attending their free webinars or following the Federation on social media. Switching to online instructions after COVID worked for some students, but not others and there were no alternatives for them. Lack of participation in the community and community activities was a major drawback for students.

**Independent Living Centers:** Staff and mentors reported that switching to online formats was a mixed blessing. Peer mentors were able to do more and serve more people, but students were missing the real experience and had limited privacy if videoconferencing from their home. Poor technology access after COVID created challenges and some students requested fewer meetings until in-person meetings could be resumed. Many students struggled with depression during this time. One peer mentor mentioned that during the height of COVID, out of his 60 students, he only met with 4. Others were zoomed out.

**Student Benefits Counselors (SBC):** One SBC indicated that the pandemic had little impact on how she delivered services. She had met all of her TPS students before the March shutdown and did not have any additional referrals after 2019. She continued to work with all students and families through Zoom. However, the SBCs reported that they increased their outreach to schools

and presented on topics such as how unemployment, job loss, COVID emergency checks, and other activities related to benefits decisions. SBCs found that COVID caused great anxiety for parents who were receiving checks in the mail. They could not report the extra income because no one answered office phones. The SBC worked with Social Security to waive the extra income because the families had no way of reporting the extra income. Before COVID, the Springfield SBC was present at the intake of TPS students. This allowed her to engage with students and families over time. She was not a stranger contacting them about financial matters.

ICI Technical Assistance Fellow: ICI's Neil McNeil reported that covid and the subsequent distancing requirements made all aspects of this project much more challenging. One TPS counselor did not have a fully functioning computer for a length of time. Several MRC staff had no or limited access to the MRCIS which made data tracking more challenging. The TPS counselors recruited students, but it was difficult to know how accurate their follow-up was, whether services were recorded and whether students finished school, found paying jobs, or enrolled in post-secondary education. Prior to the pandemic, ICI evaluation staff created a monthly profile and service delivery briefing that the TA fellow reviewed with each counselor. This was not available after March 2020. MRC and ICI had a data sharing agreement, but MRC staff were not able to enter their offices and access data through the mainframe.

**Springfield based Transportation Coordinator:** Prior to the pandemic, the Transportation Coordinator worked with Work Without Limits to identify WBL opportunities with large employers across the Commonwealth. During the pandemic, she described numerous highly creative strategies to create WBL opportunities that would engage youth. She noted that many professionals were working from home and were very willing to connect with local high school students and talk about their occupations. A local fire chief donating time to conducting informational interviews and answered students' questions about life as a fire fighter.

TPS counselors: Counselors reported a mixed bag of consequences of the public health emergency response. The Lawrence TPS counselor was able to attend more IPE meetings as they moved online, and travel was not an issue. Working remoted allowed her to reach some people who had been difficult to reach prior and to schedule appointments that were not feasible before. Families and students did not need to travel and most had home computers and cell phones. At the same time, the pandemic made it more difficult to obtain paid or unpaid work experiences. They had planned to send 25 students to a paid work experience which was cancelled. Some vendors tried to think of ways to do virtual job experiences, but that took a while to figure out. They lost a lot of what they had hoped to accomplish in the spring and summer of 2020. In Springfield, before Covid, TPS activities were going well. The biggest challenge was finding internships for the students. People really worked together as a team. Once Covid hit, internships became much more difficult. They started doing informational interviews instead. They were worried students would not be open to them but found that some students really liked them. They helped students determine what fields they might be interested in and what they would want to know. Students asked professionals questions such as how people entered the field, what a day on the job was like, and what they needed to do to enter the field. Students enrolled in colleges that moved to virtual instruction. This was very difficult for many, and some students withdrew. The Roxbury counselor noted that all Pre-ETS activities were virtual and that TPS students had been integrated into those digital spaces. The Roxbury counselor interviewed was replacing a prior counselor and had been in the position for less than 6 weeks as of April 2021.

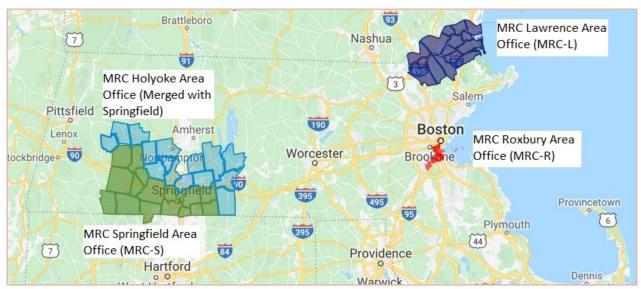
**Travel Training Providers:** Travel training providers moved to online class during COVID to teach soft skills such as how to tell the difference between friendly and potentially dangerous situations and strangers on public transit. Another discussion helped students learn about how to react to public transit passengers who may not be dangerous but may be problematic.

**Vendors:** "Covid's impact was awful." Vendors were notably challenged by the pandemic. Schools were closed and all activities moved to a virtual platform. Many employers were uncertain about how they would continue to employ their workforce and had little interest in paid internships. Prior to Covid, all classes were in person either in the schools or at the office or in a community. After Covid, all classed were virtual until Summer 2021. One vendor reported being able to expand to more schools because travel time was no longer a concern. Virtual classes focused on work readiness, soft skill training, self-advocacy, disability disclosure, counseling and post-secondary education, virtual work-based learning, and virtual job shadows. One vendor created COVID cleaning and preparation internships at the senior center, at their agency and within the school. Another vendor reported that during COVID, TPS was put on a back burner. The agency focused on turning Pre-ETS classes to a virtual platform and businesses were not accepting internships during that time. All of the internships were cancelled at that time. Kristin mentioned that the monetary incentive was so helpful to get student engagement during Covid. At the same time, vendors noted that "zooming out" and lack of meaningful engagement was a real issue.

## **Appendix A: Description of TPS Implementation Sites**

The TPS Project is being implemented in three MRC area offices: Roxbury in MRC's South District, Lawrence in the North District, and Springfield in the West District. Figure A shows the geographic locations of the three MRC area offices and their catchment areas.

## FIGURE A. GEOGRAPHIC LOCATION OF THE THREE TPS IMPLEMENTATION SITES



Following is a description of each TPS implementation site. This includes a demographic profile of the communities served by each MRC area office, demographic and VR outcome information for the youth served by these MRC area offices, information about the schools and school-based programs in the MRC office communities, as well as the constellation of service providers used to deliver the TPS model in the respective sites.

## 5.5.6 MRC Roxbury Area Office (MRC-R)

The MRC Roxbury area office (MRC-R) serves individuals with disabilities in MRC's South District together with nine other area offices (see Figure B). The office is in Roxbury, one of 23 neighborhoods within the city of Boston in Suffolk County. The MRC-R shares contiguous neighborhoods with the MRC Downtown Boston area office.

#### Demographic profile of the MRC-R

catchment area: Demographics vary from neighborhood to neighborhood in the city of Boston, as shown in Table 1. The MRC Roxbury area office serves the Roxbury and Dorchester neighborhoods, among others. We thus chose those neighborhoods, along with Suffolk County, for reporting on the demographic makeup of the MRC-R catchment area. Black/African American residents account for more than half of the Roxbury neighborhood, followed by Hispanic/Latinos and other racial and ethnic groups. Likewise, Black/African Americans make up more than 40% of the people living in Dorchester. Compared to Massachusetts

#### FIGURE B. MAP OF THE MRC-R CATCHMENT AREA



as a whole, both neighborhoods have a lower median income, a higher rate of poverty, and fewer high school graduates.

TABLE 1. DEMOGRAPHICS OF THE ROXBURY NEIGHBORHOOD, DORCHESTER NEIGHBORHOOD, SUFFOLK COUNTY, AND MASSACHUSETTS

	Roxbury Neighborhood*	Dorchester Neighborhood**	Suffolk County	Massachusetts
Total Population				
	54,161	126,909	803,907	6,892,503
Gender				
Male	46.1%	47.4%	48.3%	48.5%
Female	53.9%	52.6%	51.7%	51.5%
Age				
Median age	32.5	33.4	32.6	39.4
Race				
White	11.0%	22.3%	61.7%	80.6%
Black or African American	50.3%	44.0%	24.3%	9.0%
American Indian or Alaska Native	Included in some other race	Included in some other race	0.7%	0.5%
Asian	3.5%	9.9%	9.3%	7.2%
Native Hawaiian and Other Pacific Islander	Included in some other race	Included in some other race	0.2%	0.1%
Some other race	4.5%	4.0%	7.8%	4.6%
Ethnicity (of any race)				
Hispanic or Latino	30.7%	19.9%	23.3%	12.4%
Income				
Median Household Income	\$30,534	\$55,009	\$69,669	\$81,215
Poverty Status (less than 100% of the poverty level)				
Individuals below poverty level	31.7%	22.2%	16.7%	9.4%
Under 18 years	21.9%	22.2%	16.4%	19.6%
With any disability under 65	NA	NA	8.3%	7.8%
Education (25 years and over)				
High school graduate or higher	77.0% (High school graduate, GED, or alternative)	82.0% (High school graduate, GED, or alternative)	86.3%	90.8%

Source: Boston in Context: Neighborhoods (2021), 2015-2019 American Community Survey, Produced by the BPDA Research Division. Retrieved from: http://www.bostonplans.org/getattachment/e2eb8432-ac72-4a7e-8909-57aafdfbecd9

**Demographics and VR outcomes of youth clients served by the MRC-R:** FY2014 RSA-911 data are used in this report to give a sense of the population of youth served by each respective TPS implementation site. RSA-911 data are closure data and therefore are not a picture of all youth served by MRC in FY2014.

Consistent with the demographic profile of the communities served by the MRC-R, FY2014 RSA-911 data indicate that about 70% of the youth served by the Roxbury area office were Black or African American. Youth served by the Roxbury office were also slightly older than youth in Lawrence, Springfield, non-TPS offices, and across all MRC area offices. The distribution of primary disability in Roxbury is similar to that of the total group and to other area offices not implementing TPS, except for a higher percentage of youth with learning disability as a primary disability, and a lower number of youths with hearing disability and other types of disabilities.

With respect to VR youth outcomes, the MRC-R tends to have a higher percentage of youth closed after eligibility but before IPE, and a lower percentage closed into employment. The Roxbury area office also has more days to eligibility than other (TPS and non-TPS) sites, more days from eligibility to IPE than other TPS sites, and slightly fewer days from IPE to close than other TPS sites. Days from IPE to closure are about 400 days across all sites, which is significantly less time compared to the data from 2014 (over 1,000 days).

Schools and school-based programs in the MRC-R catchment area: We identified 25 schools and school-based programs in the MRC-R catchment area. This includes both public high schools (19) and charter schools (6). Percentages of students with disabilities at these schools range from 3.5% (O'Bryant School of Math and Science) to 42.6% (Dr. William Henderson Upper School) (DESE, 2017). This does not include the two schools that predominantly or solely serve students with disabilities, the William McKinley School, and the Carter School.

TABLE 2. LIST OF SERVICE PROVIDERS BY TPS SERVICE FOR THE MRC-R

TPS Service	Service Provider
1. Vocational Counseling	MRC TPS VR Counselor
2. Career Assessment	MRC TPS VR Counselor
3. Work-Based Readiness Training	Partners for Youth with Disabilities, * Jewish Vocational Services, Community Work Services, Tempus Unlimited Inc., Work Inc., Work Opportunities Unlimited, MassHire Boston Career Center, Boston Public Schools STRIVE
4. Assistive Technology/Job Accommodations (Job Coaching/ Interpretive Services)	MRC VR Services
5. Transportation Coordination	Massachusetts Bay Transit Authority
6. Benefits Counseling	MRC Student Benefits Counseling
7. Family Support Transition Planning	Federation for Children with Special Needs
8. Peer Mentoring	Boston Center for Independent Living
9. Customized Job Placement	MRC VR Services
10. Work-Based Learning Experiences (at least one paid)	Partners for Youth with Disabilities, * Jewish Vocational Services, Community Work Services, Tempus Unlimited Inc., Work Inc., Work Opportunities Unlimited, MassHire Boston Career Center, Boston Public Schools STRIVE

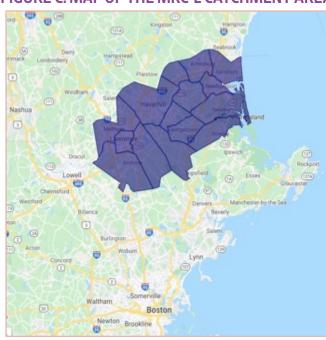
<sup>\*</sup> Partners for Youth with Disabilities is no longer involved with Roxbury. The contract ended as of September 2019.

#### 5.5.7 MRC Lawrence Area Office (MRC-L) FIGURE C. MAP OF THE MRC-L CATCHMENT AREA

The MRC Lawrence area office (MRC-L) serves individuals with disabilities who live in MRC's North District along with six other area offices (see Figure C). The office is located in the city of Lawrence in Essex County in northeastern Massachusetts, about 25 miles north of Boston. Essex County is considered part of the greater Boston area. Out of the 351 Massachusetts cities, Lawrence ranks 13<sup>th</sup> in population (approximately 80,028 in 2019).

#### Demographic profile of the MRC-L catchment area:

Lawrence has a substantially higher percentage of persons who are Hispanic or Latino (over 80% compared to 12% across the state) and a younger population than Massachusetts overall. (Note that more than one-third of the Lawrence population indicated that they are of some other race than those listed in the American Community Survey.) Compared to Massachusetts as a whole, Lawrence also has a



lower median income, a higher rate of poverty, and fewer high school graduates. See Table 3.

TABLE 3. DEMOGRAPHICS OF LAWRENCE CITY, ESSEX COUNTY, AND MASSACHUSETTS

	Lawrence City	Essex County	Massachusetts	
Total Population				
	80,028	789,034	6,892,503	
Gender				
Male	48.9%	48.2%	48.5%	
Female	51.1%	51.8%	51.5%	
Race				
White	52.0%	85.1 %	80.6%	
Black or African American	5.7%	7.1%	9.0%	
American Indian or Alaska Native	0.3%	0.9%	0.5%	
Asian	1.7%	3.9%	7.2%	
Native Hawaiian and Other Pacific Islander	0.0%	0.2%	0.1%	
Ethnicity (of any race)				
Hispanic or Latino	80.6%	22.2%	12.4%	
White alone, not Hispanic or Latino	14.8%	69.0%	71.1%	
Income				
Median Household Income	\$44,613	\$79,263	\$81,215	
Poverty Status (less than 100% of the poverty level)				
Individuals below poverty level	21.4%	8.8%	9.4%	
Under 18 years	26.3%	21.1%	19.6%	
With any disability under 65	9.2%	7.9%	7.8%	
Education (25 years and over)				
High school graduate or higher	67.0%	89.3%	90.8%	

Source: US Census Bureau, 2013–2017 American Community Survey 5-Year Estimates.

Demographics and VR outcomes of youth clients served by the MRC-L: FY2014 RSA-911 data indicate that MRC-L serves a higher percentage of Hispanic/Latino youth (accounting for more than one-third of all youth served) than other MRC offices and fewer Black/African American youth (accounting for 10% of all youth served) than other TPS offices. Both the gender distribution and the mean age of youth at application for VR services for Lawrence were similar to those of other (TPS and non-TPS) sites. Youth with learning disability and mental health disability make up two-thirds of all youth served in Lawrence. This number is slightly lower than the other two TPS sites, but overall, within range of the data on primary disability of youth served by non-TPS sites. This is also within range of the data on primary disability of youth served by all MRC area offices, with the exception of developmental disability as the primary disability is some MRC area offices.

The 2014 dataset reported that Lawrence had better performance outcomes than the other two TPS sites and many other MRC offices. The latest dataset reflects that the performance outcome gap has closed between Lawrence and the other TPS sites in many areas. However, Lawrence still has slightly fewer days from eligibility to IPE than the other two TPS sites. MRC-L also has higher rates of youth closed before IPEs and higher rates of successful IPE outcomes.

Schools and school-based programs in the MRC-L catchment area: Cross-referencing the zip codes of the communities served with DESE school-level data, we were able to identify 28 schools and school-based programs in the MRC-L catchment area. This includes traditional public high schools, charter schools, alternative schools, and other types of schools. Percentages of students with disabilities at these schools range from 9.7% (Newburyport High School) to 27.7% (Phoenix Academy Lawrence School) (DESE, 2017). This does not include the 10 schools or school-based programs that predominantly or solely serve students with disabilities: CREST Collaborative; Greenleaf Academy; LABBB (Lexington, Arlington, Burlington, Bedford, Belmont) Educational Collaborative at Belmont High School and LABBB Educational Collaborative at Burlington High School; Learning for Life: Haverhill; Lighthouse School; Merrimac Heights Academy; Riverview School; School for Exceptional Studies; Transition Opportunities Program (TOP); and Therapeutic Education Assessment Center of Haverhill (TEACH) School. It also does not include Central Catholic High School for which there were no data on students with disabilities available.

**Constellation of TPS service providers working with the MRC-L:** Table 4 lists the service providers by TPS service for the Lawrence area office.

TABLE 4. LIST OF SERVICE PROVIDERS BY TPS SERVICE FOR THE MRC-L

TPS Service	Service Provider
1.Vocational Counseling	MRC TPS VR Counselor
2.Career Assessment	MRC TPS VR Counselor
3.Work-Based Readiness Training	Fidelity House Human Services and Career Resources Corporation, American Training, MassHire Merrimack Valley Career Center
4.Assistive Technology/Job Accommodations (Job Coaching/Interpretive Services)	MRC VR Services
5.Transportation Coordination	Merrimack Valley Regional Transit Authority
6.Benefits Counseling	MRC Student Benefits Counseling
7.Family Support Transition Planning	Federation for Children with Special Needs
8.Peer Mentoring	Northeast Center for Independent Living
9.Customized Job Placement	MRC VR Services
10.Work-Based Learning Experiences (at least one paid)	Fidelity House Human Services and Career Resources Corporation, American Training, MassHire Merrimack Valley Career Center

## 5.5.8 MRC Springfield Area Office (MRC-S)

The MRC Springfield area office (MRC-S) serves individuals with disabilities who live in MRC's West District along with eight other area offices (see Figure D). The office is located in Springfield, which is the third largest city in Massachusetts, after Boston and Worcester, with an estimated population of approximately 153,606 in 2019. It is located in Hampden County, in the southwestern part of the state, approximately 24 miles north of Hartford, Connecticut.

**Demographic profile of the MRC-S catchment area:** Compared to Massachusetts as a whole, Springfield has a younger population and is racially and ethnically more diverse, with a Hispanic/Latino population and a Black/African American population four and three times that of the state, respectively (see Table 5). Springfield also has a lower median income, a higher rate of poverty, and fewer high school graduates, compared to the state overall.

TABLE 5. DEMOGRAPHICS OF SPRINGFIELD CITY, HAMPDEN COUNTY, AND MASSACHUSETTS

	Lawrence City	Essex County	Massachusetts
Total Population			
	153,606	466,372	6,892,503
Gender			
Male	47.8%	48.3%	48.5%
Female	52.2%	51.7%	51.5%
Race			
White	63.3%	82.6%	80.6%
Black or African American	20.9%	10.9%	9.0%
American Indian or Alaska Native	0.4%	0.8%	0.5%
Asian	2.7%	2.7%	7.2%
Native Hawaiian and Other Pacific Islander	0.0%	0.2%	0.1%
Ethnicity (of any race)			
Hispanic or Latino	45.0%	26.3%	12.4%
White alone, not Hispanic or Latino	31.2%	61.4%	71.1%
Income			
Median Household Income	\$39,432	\$55,429	\$81,215
Poverty Status (less than 100% of the povert	y level)		
Individuals below poverty level	26.9%	13.8%	9.4%
Under 18 years	24.8%	21.3%	19.6%
With any disability under 65	15.5%	11.6%	7.8%
Education (25 years and over)			
High school graduate or higher	78.6%	85.8%	90.8%

Source: U.S. Census Bureau, 2015–2019 American Community Survey 5-Year Estimates.

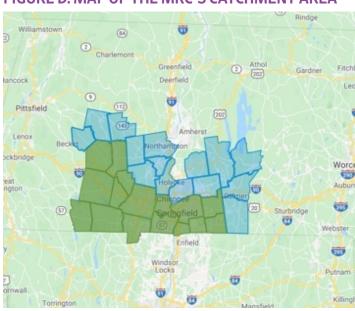
**Demographics and VR outcomes of youth clients served by the MRC-S:** FY2014 RSA-911 data indicate that the youth population served by the Springfield area office is skewed toward male, who made up approximately 58% of all youth served. This is consistent with the other TPS sites, non-TPS sites, and all MRC offices together. There were only minimal differences in the mean age of youth at application for VR services across all (TPS and non-TPS) sites.

FY2014 RSA-911 data also indicate that MRC-S serves a higher percentage of White youth (accounting for more than three-quarters, or 81.6% of all youth served) than other MRC offices.

Less than one-fifth (18.2%) of youth served by MRC-S are Black or African American and one- third is Hispanic or Latino. Youth served by the Springfield and Lawrence area offices are more likely to be Hispanic or Latino, compared to Roxbury and non-TPS sites and compared to all MRC offices together. In terms of disability, Springfield has a similar distribution of primary disability to the other TPS sites and non-TPS sites, and to the total group of MRC area offices, except for a higher percentage of youth with hearing disability.

With respect to VR outcomes, the Springfield area office (like Roxbury) tends to have a higher percentage of youth closed after eligibility but before IPE, and a lower percentage of youth closed into employment, compared to Lawrence, non-TPS sites, and all MRC offices together.

#### FIGURE D. MAP OF THE MRC-S CATCHMENT AREA



Schools and school-based programs in the MRC-S catchment area: We identified 28 schools and school programs located in the MRC-S catchment area by cross-referencing the zip codes of the communities served by the Springfield area office with school-level data from DESE. Schools include traditional public high schools, charter schools, alternative schools, and other types of schools. Percentages of students with disabilities at these schools range from 6.3% (Springfield Technical Community College School) to 39.3% (Springfield High School), with the mean being 22.5% (DESE, 2017). This does not include RFK Academy and Springfield Public Day High School, which serve only students with disabilities, or Pope Francis Preparatory School, for which no data on students with disabilities was available.

**Constellation of TPS service providers working with the MRC-S:** Table 5 lists the service providers by TPS service for the Springfield area office.

TABLE 6. LIST OF SERVICE PROVIDERS BY TPS SERVICE FOR THE MRC-S

TPS Service	Service Provider
1.Vocational Counseling	MRC TPS VR Counselor
2.Career Assessment	MRC TPS VR Counselor
3.Work-Based Readiness Training	Viability, Institute for Abilities, Opportunity Services, New England Business Associates, MassHire Springfield Career Center
4.Assistive Technology/Job Accommodations (Job Coaching/Interpretive Services)	MRC VR Services
5.Transportation Coordination	Pioneer Valley Transit Authority
6.Benefits Counseling	MRC Student Benefits Counseling
7.Family Support Transition Planning	Federation for Children with Special Needs
8.Peer Mentoring	Stavros Center for Independent Living
9.Customized Job Placement	MRC VR Services
10.Work-Based Learning Experiences (at least one paid)	Viability, Institute for Abilities, Opportunity Services, New England Business Associates, MassHire Springfield Career Center

#### **APPENDIX B: TPS SERVICES GUIDE**

# **TPS Services Guide** 1/18/2019 - FINAL

Students must receive at least eight (8) of these services, including 2 WBLE (one paid) by the end of high school to count as having completed TPS:

- 1. Work-Based Learning Experience
- 2. Workplace Readiness Training (includes Employee Rights Training)
- 3. Transportation Coordination
- 4. Benefits Counseling
- 5. Assistive Technology/Job Accommodations (includes Job Coaching, Interpretive Services)
- 6. Vocational/Career Assessment (Includes InfoR and InfoR Alternative)
- 7. Peer Mentoring (includes Self Advocacy Instruction)
- 8. Family Support Transition Planning
- 9. Vocational Counseling (includes Postsecondary Program Counseling and Job Exploration Counseling)

10.Customized Job Placement

#### 1. Work-Based Learning Experience (WBLE)

A WBLE "uses the workplace or real work to provide students with the knowledge and skills that will help them connect school experiences to real-life work activities and future career opportunities." (http://www.wintac.org/topic-areas/pre-employment-transition-services/overview/work-based-learning-experiences) Students should have at least TWO Work-Based Learning Experiences (WBLE), one of which must be paid.

#### WBLE:

- · Is time-limited
- Should occur in an integrated setting
- Must be completed before HS graduation
- Should be discussed as part of vocational counseling
- GPRA surveys must be completed by student and counselor

#### **Examples of unpaid WBLE:**

- Job shadow
- Workplace tour/field trip (can be a group)
- · Mock interview with employer
- Informational interview with employer
- Internship
- Volunteer experience
- Practicum
- Service Learning

#### A paid WBLE:

- Can be paid by employer, VR, or another entity, such as school or nonprofit
- Can vary in length or intensity based on the abilities/interests of the student, but should involve doing functions of the job (i.e., not just an interview or tour)
- Can be an internship, practicum, or temporary job

**A WBLE can be arranged by:** VR staff, schools, vendors, ILCs, community resources, student, or family.

## 2. Workplace Readiness Training/Employee Rights Training

Workplace readiness training (WRT) includes employee rights and responsibilities and preparation to participate in the workplace as an employee. (Note: Counselors should check off each individual service that is provided; evaluation team will "count" Employee Rights Training under this category.)

#### **WRT Examples:**

- · mock interviews with counselor
- PreETS classes
- 688/workplace readiness class
- TIP workshops
- 1:1 training
- job club
- · soft skills training
- resume development

Can be provided by: TPS Counselor, vendors, ILCs, schools, community resources

#### 3. Transportation Coordination

- Transportation coordination is any support, counseling, information/referrals, or assistance with transportation.
- Transportation Coordination Examples:
- Orientation: familiarizing student with riding public transportation and/or related travel issues
  (e.g., personal safety, what to do in the event there is a problem, appropriate interactions,
  safe street crossing); can be done in small group or on an individual basis and may involve
  classroom or community-based instruction (including riding in-service or out-of-service public
  transportation)
- Trip Planning: planning to get to job, planning bus trips, using Google Transit, etc.
- Travel Training: one-on-one instruction so that individual is able to travel safely and independently
- Guidance/assistance with getting a learner's permit, driver's license, driving lessons and evaluations
- Support student on how to access carpool, shared ride or on demand options
- Guidance/assistance with obtaining a reduced fare ID card (Transportation Access Pass)
- Guidance/assistance in applying for or utilizing ADA Paratransit Service (e.g., The Ride)

**Can be provided by:** TPS Counselor, transportation coordinator, vendors, ILCs, schools, community resources

# 4. Benefits Counseling

• Benefits counseling may consist of counseling, information, and referrals to understand or access any public benefits. *Benefits are not just limited to SSI/SSDI consultation*.

#### **Benefits Counseling Examples:**

- SSI/SSDI benefits work incentives, impact on going to work, annual reviews
- Medical benefits planning health insurance options, MassHealth/Health Connector applications, etc.
- Housing public housing, Section 8
- SNAP (food stamps)
- Employment and taxes I-9's w-4, exemptions, employment forms, referral for tax prep, setting up banking and direct deposit, discuss impact of wages from work-based learning

Can be provided by: TPS Counselor, benefits counselor, vendors, ILCs, schools, community resources

# **5. Assistive Technology/Job Accommodations**

Assistive Technology and other Job Accommodations includes Job Coaching and Interpretive Services. (Note: Counselors should check off each individual service that is provided; evaluation team will "count" any of the above services under this category.)

#### Assistive Technology can be a provision of equipment, recommendations, or referrals, such as:

- formal assistive technology evaluations and service delivery
- recommendations for software or apps for smart phone (such as time management, organization, calendar)
- AT services needed by the student to participate in high school education provided by the school system
- low tech assistance and recommendations
- Information and referrals to the AT loan program

#### Other Job Accommodations can include:

- Counseling about identifying accommodations needs and guidance/coaching on requesting accommodations
- Reviewing accommodations resources such as JAN
- Interpretive Services (check separately in database)
- Job Coaching (check separately in database)

Can be provided by: TPS Counselor, vendors, ILCs, schools, community resources

#### 6. Vocational Assessment

Vocational Assessments may consist of formal or informal career and vocational assessments and evaluations that assess student's interests, values, skills, aptitudes, etc.

#### **Examples of Vocational Assessment:**

- Infor Talent Science
- O\*Net
- MyNextMove
- Career Cruising
- Naviance
- paper/pencil assessments
- card sort activities
- computerized assessments
- on-the-job evaluations and working interviews
- informal assessments

Can be provided by: TPS Counselor, vendors, ILCs, schools, community resources

### 7. Peer Mentoring

Peer Mentoring is usually provided by the designated ILC Peer Mentors who participate as members of the Career Discovery Team, but it can also be provided by other peer mentors from the ILC, DMH, DDS, Youth Leadership Forum, Partners for Youth with Disabilities, the TPS Counselor, schools, or other self-advocacy or community organizations. Includes Self Advocacy Instruction. (Note: Counselors should check off each individual service that is provided; evaluation team will "count" Self-Advocacy Instruction under this category.)

#### Peer Mentoring may consist of activities and services such as:

- peer social skills
- self-advocacy assistance
- information about local recreation programs or community social activities
- communication and conflict resolution skill development
- budgeting and banking assistance
- assistance developing personal life goals, developing independent living goals/plans
- discussing reasonable accommodation requests for school and work, disability disclosure and employment rights
- help with family supports for transition to life after high school.

**Can be provided by:** ILCs, DMH, DDS, Youth Leadership Forum, Partners for Youth with Disabilities, the TPS Counselor, schools, or other self-advocacy or community organizations

#### 8. Family Support Transition Planning

Family Support Transition Planning is direct support that involves the family; may include discussion and support for the family as a whole, parents, siblings, aging parents/grandparent, non-custodial parents, and other relevant family. *Does not need to be provided by the Federation.* 

#### Family Support Transition Planning may include services such as:

- Workshops
- Advocacy
- Family counseling services
- Training for families on the transition process
- 688 referrals individual transition plan

**Can be provided by:** TPS Counselor, Federation, PACs, ARCs, school resources, private counseling, other advocacy groups and community resources.

# 9. Vocational Guidance and Counseling

Vocational Counseling is the main service provided by the TPS Counselor. Vocational counseling should be checked off once the student is enrolled with MRC and meets with the counselor. For the purposes of reporting, this also includes Postsecondary Program Counseling and Job Exploration Counseling. (Note: Counselors should check off each individual service that is provided; evaluation team will "count" any of the above services under this category.)

#### 10. Customized Job Placement

Customized Job Placement can be defined as assisting student in applying for a paid job while in high school (vs. paid internship/WBLE). May be provided at any point in the process. Student does not need to get the job (i.e., this is not equated to a successful integrated employment outcome), but to be aided in finding and applying for one.

#### **APPENDIX C: FIDELITY INSTRUMENT**

# **SCORING CODES**

#### 0

Services are typical of business-as-usual services and do not adhere to the TPS model.

# 1through 2

Attempt to modify business as usual services but either in early implementation or insufficient implementation.

# 3

Adequate implementation in which enough evidence exists to state that implementation is happening for the majority of TPS participants

# 4 through 5

Nearly Universal implementation with innovative practices occurring. Generally, reflects mature implementation.

# 1. Work-Based Learning Experiences (WBLE) Tailored to Students' Interests

**RATIONALE:** Model demonstration's specific purpose is to study the effectiveness of different WBLE models in five state VR agencies to improve college and employment outcomes of high school students with disabilities.

Criterion	Data Source	Anchor
1.1 Students define career exploration interests and work with Career Discovery Team (CDT) to identify WBLE opportunities	Student satisfaction survey  Counselor report	Extent to which WBLE are determined by students' interests.  0 = 80 to 100% of TPS students are referred to slot based or existing WBLE. Few or no students receive WBLE created for their unique interests.  1 = 60 to 79% of TPS students are referred to slot based or existing WBLE. Some students receive WBLE specifically created for their unique interests.  2 = 40 to 59% of TPS students are referred to slot based or existing WBLE. Most students receive WBLE specifically created for their unique interests.  3 = 20 to 39% of students are referred to slot based or existing WBLE opportunities. Most students receive WBLE specifically created for their unique interests.  4 = Up to 19% of students are referred to slot based or exiting WBLE opportunities. Nearly all students receive WBLE based upon their unique interests.  5 = All students receive WBLE specifically created for their unique interests.
1.2 Students' WBLE and lessons learned are taken into consideration for successive WBLE	GPRA 1 Measure Student satisfaction survey	Extent to which students' WBLE are taken into consideration in defining WBL needs and developing a plan to meeting students' needs.  0 = Limited data collection of the GPRA Measure 4 and no evidence that data was used to plan future WBLE.  1 = Some data collection of GPRA Measure 4 and some evidence indicating that TPS Counselor discusses WBLE with student prior to planning next WBLE.  2 = Most paid WBLE have a corresponding GPRA Measure completed and evidence that the findings are discussed with TPS Counselor and potentially with some CDT members  3 = High rates of data collection of GPRA Measure for each paid WBLE and procedure for youth discussing with CDT members students' perspective on WBLE experience. Subsequent WBLE take in to account the previous WBLE.  4 = Meets all criteria for a score of 3 but also has extensive efforts to build a progressive career exploration approach based upon students' perspective of the experiences.  5 = Meets all criteria for a score of 4 but has strong evidence of highly innovative strategies for integrating students' perspectives and experiences in WBLE efforts.
1.3 Students participated in at least one paid WBLE based upon their interests	TPS CMS (WBLexperience WBL_1_wage WBL_2_wage)	Extent to which students participated in a paid WBLE.  0= Fewer than 20% participated in a paid WBLE  1= 20 to 40% participated in a paid WBLE  2= 40 to 60% participated in a paid WBLE  3= 60 to 80% participated in a paid WBLE  4= 80 to 100% participated in a paid WBLE
1.4 Students participated in at least one other WBLE	TPS CMS (WBL_experience2)	Extent to which students participated in a second WBLE.  0= Fewer than 20% participated in a second WBLE  1= 20 to 40% participated in a second WBLE  2= 40 to 60% participated in a second WBLE  3= 60 to 80% participated in a second WBLE  4= 80 to 100% participated in a second WBLE

## 2. Comprehensive Array of Career Exploration Activities

**RATIONALE:** TPS students receive a comprehensive array of career exploration activities based upon their goals and related needs. Not all students will access all services and some services may be needed by a small percentage of students. Some services might be formal services provided through a vending organization or others may be more informal or provided through an expanded network or business (peer mentoring). This measure (item 2.3) also discovers the comprehensiveness of the services required.

Criterion	Data Source	Anchor
2.1 The CDT supports the	Student satisfaction survey	The CDT identifies the array of career exploration activities.
student by identifying career exploration opportunities (other than the WBLE) that		0 = TPS Counselor refers student to career exploration services routinely available to all VR youth
match the students' needs and interests (the 9 other		1 = TPS Counselor and CDT members identify career exploration activities and refer students
career exploration activities)		2 = Student together with TPS Counselor and CDT members identify career exploration activities available across partners
		3 = Student together with TPS Counselor and CDT members access a wide range of career exploration activities
		4 = Student together with TPS Counselor and CDT members access employer-based career exploration activities
		5 = Student together with TPS Counselor and CDT members actively create career exploration activities and have innovative strategies for supporting students' unique career needs.
2.2 Students receive at least 8 out of the 10 career	TPS CMS (WBL_experience;	Students received at least 8 out of the 10 components before graduation from high school.
exploration activities prior to	PreEmployment_Transition_	0 = All youth did not access 8 out of 10
graduation from high school	Services; Assistive_Technology;	1= 1 to 24% of youth accessed 8 out of 10
	Infor_Talent_Science; Vocational_ Counseling; Travel_Training	2 = 25 to 49% of youth accessed 8 out of 10
	Peer_Mentoring.	3 = 50 to 75% of youth accessed 8 out of 10
	Family_Support_Transition_	4 = 75% to 100% of youth accessed 8 out of 10
	Planning; Benefits_Counseling. Customized_Job_Placement)	5 = Meets all criteria for a score of 4 but evidence that significant number of students are accessing innovative career exploration strategies beyond the 10 components identified.
2.3 Most TPS components were accessed by the majority of students	TPS CMS  (WBL_experience; PreEmployment_Transition_ Services; Assistive_Technology; Infor_Talent_Science; Vocational_ Counseling; Travel_Training Peer_Mentoring.	At least 60% of students accessed each of the following services: peer mentoring, benefits counseling, travel training, employee rights and advocacy, InfoR or other job matching assessment, work readiness training, vocational counseling, work experience, assistive technology, family support for transition planning.  0 = Most services were access by fewer than 60% of students
	Family_Support_Transition_	3= Some services were accessed by fewer than 60% of
	Planning; Benefits_Counseling.	students, but most were accessed by 60%
	Customized_Job_Placement)	5= All services were accessed by at least 60% of students

## 3. Team Approach that Encourages Student Engagement and Leadership

**RATIONALE:** The TPS model uses a team approach as the main implementation strategy to create local partnerships at the customer service level. The MRC TPS Counselor is the facilitator of a flexible grouping of partnership organizations to bring resources to individual students and their families. The main goal is to coordinate services in a way that maximizes student and family engagement.

Criterion	Data Source	Anchor
3.1 CDTs are composed of members across partnering	TPS CMS or CDT meeting minutes.	CDTs are composed of TPS partners and organizations/persons relevant for the TPS student
organizations	(Mtg_1_comments.  Mtg_2_comments.	0 = Most CDTs are composed of MRC personnel or are IEP meetings at schools.
	Mtg_3_comments)	3 = Most CDTs are composed of personnel in TPS partnering organizations and are not IEPs
		5 = Strong evidence that businesses or non-partnering organizations are involved routinely in CDTs
3.2 TPS Counselor connects student and family to partner	TPS CMS (Date_of_TPS_Eligibility;	Student and family meet with CDT members within X days of TPS consent.
services early in the process	Date_CDT_established.  Date_of_first_Service)	0 = Most students and family are referred to partnering organizations by TPS Counselor (business as usual strategy)
		3 = Most student and family meet with multiple members of the CDT prior to setting a goal or career exploration activity
		5 = All students and families (with rare exceptions) meet with CDT members as a team using such innovative strategies as common intake and eligibility.
3.3 CDT establishes mechanisms for	Student satisfaction survey	Communication channels create a coordinated team meeting the information needs of students and families.
communication with other team members and with		0 = All communications go through TPS Counselor as per business as usual
student/family		3 = Communication strategies support a coordinated team process.
		5 = Student, family, and CDT members have a customized communication strategy as defined by the students' needs
3.4 CDTs meet with the youth	TPS CMS	CDTs meet at least three times while student is still in high school.
at least three times before	(Date_of_Mtg_1.	0= 0 to 24% of TPS students receive 3 CDT meetings
high school graduation.	Date_of_Mtg_2.	1 = 25 to 49% of TPS students receive 3 CDT meetings
	Date_of_Mtg_3)	2= 50 to 74% of TPS students receive 3 CDT meetings
		3 = 75 to 100% of TPS students receive 3 CDT meetings
		4 = Meets criteria for a score of 3 but evidence of innovative strategies for interacting as a team with youth and families such as virtual meetings, inclusion of employer, etc.

## 4. Youth Engagement and Youth Direction

**RATIONALE:** Youth engagement and youth direction are key features of transition programs. The TPS model includes an effort to increase the knowledge, skills, and abilities of high school students with disabilities to advance their post high school goals including post-secondary education and employment. Our theory is that if the TPS model has strong features of youth engagement and youth direction then it encourages students to be more capable of advancing their careers. NOTE: Students may receive accommodations such as a non-MRC spokesperson or family member that supports engagement and direction.

Criterion	Data Source	Anchor
4.1 Students identify	Student satisfaction	Evidence that students selected the CDT members.
members of CDT	survey	0 =No evidence that students are identifying or inviting CDT members. 3= Evidence that most students are selecting or inviting people to be CDT members. 5 = Strong evidence that all students are selecting or inviting CDT members and innovative strategies used to support students who have challenges in asserting interests.
4.2 Students guide CDT meeting discussions	Student satisfaction survey	Evidence that CDT decisions are based upon students' interests, goals, and experiences.
		<ul> <li>0 = No evidence to suggest students are guiding CDT meeting process and discussion.</li> <li>3 = Evidence indicating that students are guiding CDT meeting process and discussion including being supported through accommodations as needed.</li> <li>5 = Strong evidence that CDT meetings and discussions are led by students (including consideration of any accommodations needed).</li> </ul>
4.3 Students are active	Student satisfaction	Evidence that students are active participants.
participants in making decisions about career exploration activities	survey	<ul> <li>0 = No evidence to suggest that students are making decisions but are assigned to slots or services based upon availability rather than choice.</li> <li>3 = The majority of students are making decisions about most elements of their services though some services or some students may be assigned based upon availability decisions.</li> <li>5 = Most to all students are actively making decisions about elements of their services and evidence of innovative efforts to increase active participation of students.</li> </ul>
4.4 Students demonstrate an increase	GPRA 2 Measure	Evidence that students are increasing their knowledge, skills, and abilities in career exploration.
in their knowledge, skills and abilities in career exploration, job search, and rights.		0 = 0 to 19% of students show no change in GPRA 2 pre/post test score 1 = 20 to 39% of students show change in GPRA pre/post test scores 2 = 40 to 59% of students show change in GPRA pre/post test scores 3 = 60 to 79 % of students show change in GPRA pre/post test scores 4 = 80 to 100% of students show change in GPRA pre/post test scores 5 = Meets criteria for score of 4 plus evidence of innovative strategies for enhancing student knowledge skills and abilities particularly of youth with the most significant disabilities.
4.5 Students demonstrate an increase in their knowledge about workplace culture and employee rights.	Student satisfaction survey	Evidence that students are increasing their knowledge about workplace culture and employee rights.  0 = 0 to 19% of students show no change in ADDED GPRA pre/post test score 1 = 20 to 39% of students show change in GPRA pre/post test scores 2 = 40 to 59% of students show change in GRPA pre/post test scores 3 = 60 to 79% of students show change in GPRA pre/post test scores 4 = 80 to 100% of students show change in GPRA pre/post test scores 5 = Meets criteria for score of 4 plus evidence of innovative strategies for enhancing students' knowledge on workplace culture and etiquette and their rights as employees.

# 5. Family Involvement in TPS and Knowledge about Transition to Adult Services System

**RATIONALE:** Family involvement in service delivery efforts supporting the career development of high school youth with disabilities is considered a critical element of successful transition programs. Family is defined as parents / legal guardians or siblings of TPS students.

Criterion	Data Source	Anchor
5.1. Family member	Student satisfaction survey	Evidence of family involvement in TPS activities and model
involvement in TPS process		0= No evidence of family involvement and no formal efforts to engage families.
		3= Sufficient evidence family involvement with formal efforts to engage families.
		5 = Strong evidence of consistent family involvement with formal and innovative efforts to engage families.
5.2 Family knowledge about	Federation for Children with	Evidence of change in family knowledge about career exploration
career exploration	Special Needs information?	0= No evidence of change in family knowledge about career exploration.
		3 = Sufficient evidence of change in family knowledge about career exploration.
		5 = Strong evidence of change in family knowledge about career exploration.

# 6. Partnerships and Use of Local Resources by CDTs

**RATIONALE:** The RSA required partnership activities as part of the Model Demonstration particularly across schools, state VR agencies, workforce systems, and related vendors. MRC and the TPS model see partnership as a major goal and activity to support coordinated timely services for high school students with disabilities.

Criterion	Data Source	Anchor
6.1 Efficient intake and eligibility procedures as both	Key informant interviews? Partner survey?	Evidence that intake and eligibility procedures are customer and partner friendly.
a customer service goal (ease of use) and as a partnership customer service goal.		0 = Partners have their own intake and eligibility procedures that are typical of business as usual and that are likely to be redundant for students and families.
		3 = Evidence indicating improved intake and eligibility (such as sharing information) that addresses challenges for students, families, and partners.
		5= Evidence that partners are using common intake procedures and sharing information to create an ease-of-use customer service goal for students, families, and partners.
6.2 Communication strategies across partners	Key informant interviews?  Partner survey?	Evidence indicates that communication is timely, actionable, and across organizations.
are established, timely and actionable.		0 = Minimal evidence of communication beyond individual actors (such as TPS Counselor emails or phone calls) or as typical of business as usual.
		3 = Local partnering organizations have established communication strategies that allow for timely and actionable service delivery for TPS students.
		5 = Communication strategies at both the local organizational and systems-level enable timely and actionable service delivery.
6.3 Partners have developed data sharing strategies to	Key informant interviews?  Partner survey?	Evidence that data sharing strategies enable customer service and partnership service coordination.
ensure customer service goals (ease of use) and partnerships.	Tarther survey.	0 = No evidence of data sharing beyond direct service personnel individually sharing data or information as needed for referrals or case reporting. Typical of business as usual.
		3 = Evidence indicating local offices have established data sharing procedures to ensure partnership and customer service goals.
		5 = Evidence that local offices are supported by their organizations to have common data sharing procedures to ensure partnership and customer service goals.
6.4 Partners have established shared goals and outcomes in serving youth and recognize the value of each other's specific outcomes.	Key informant interviews? Partner survey?	Evidence that partners have shared goals and outcomes but also that each partner values the required outcomes of the other partners.
		0 = Partners may not be communicating goals and outcomes and are not clear about how the other partners are monitored / measured.
		3 = Local partners are communicating about shared goals and outcomes and understand how the other partners are monitored / measured.
		5 = Local partners are supported by their organizations to have common goals and are supporting the achievement of shared outcomes and unique outcomes.

# 7. Leadership and Programmatic Support

**RATIONALE:** The TPS is a Model Demonstration that seeks to determine how WBL models help to improve transition outcomes for high school students with disabilities. It is piloted in three local area offices in Massachusetts (Roxbury/Springfield/Lawrence). The TPS model represents substantial changes in business as usual, which require modifications in practices, policies, staffing, and partnerships. Successful implementation requires leadership and programmatic support.

Criterion	Data Source	Anchor
7.1 Adequate staffing to support all TPS activities	Review of project budget and other similar info?	Evidence indicates that
		0 = Staffing insufficient to provide TPS services
		3 = Staffing sufficient for most activities
		5 = Staffing sufficient for all TPS activities, not an issue
7.2 Adequate funding exists	Review of project budget	Evidence indicates that
to fully implement TPS for selected individuals	and other similar info?	0 = Funding insufficient to complete targeted career exploration experiences including WBLE
		3 = Funding sufficient for most TPS activities
		5 = Funding for TPS is significant and allows for pursuing innovative strategies and partnerships
7.3 Ability to identify and	Availability of job	Evidence indicates that
create WBL opportunities for TPS students that are specific to TPS students	placement services	0 = Minimal to no support to create WBL opportunities beyond those available as typical of business as usual.
specific to 173 students		3 = Resources and strategies identified to prioritize WBL development opportunities that are based upon unique career interests of students.
		5 = Considerable and innovative strategies to prioritize WBL development opportunities that are based upon unique career interests of students and local businesses.
7.4 Public agency and non- profit agency partnerships established at leadership levels	Key informant interviews?	Evidence indicates that
		0 = Key partnerships are highly reliant on local staff or specific staff and may dissolve if those staff leave the organization. (Schools, vendors, businesses, workforce systems)
		1 = Some partnerships are established at leadership levels, but key partnerships are dependent upon local staff relationships with peer in other partnering organization
		2 = Local MRC area office has developed partnership strategies that transcend specific counselors or staff and have features of sustainability and growth.
		3 = Meets criteria for a score of 2 but evidence that central office has established sustainable links to key partners
		4 = Meets criteria for a score of 3 with innovative partnership strategies that support youth with disabilities to access a wide range of supports from partners.
		5 = MRC Leadership has established sustainable and mutually beneficial partnerships that are institutionalized and have relevance to local area offices, counselors, and customers.

7.5 Clarity of roles,	Key informant interviews?	Evidence exists that staff roles, supervision, and oversight allow
supervision, oversight, flexibility, and accountability		for TPS implementation including the flexibility and accountability necessary.
		0 = Evidence that TPS roles are not well defined and that integration of TPS Project within typical supervision infrastructure is unclear.
		1 = Evidence that TPS roles are defined but supervision, oversight and accountability are unclear.
		2 = Meets criteria for score 1 and also includes clear supervision, oversight, and accountability.
		3 = Meets criteria for score 2 and also includes a clear link beyond the local office and integrated with Field Services supervision.
		4 = Meets criteria for score 3 and also includes evidence of innovative strategies for implementation of special projects and long-term sustainability
		5= Meets criteria for score 3 and also includes significant innovative strategies for staffing, supervision, and oversight
7.6 MRC leadership establishes coordination between relevant units/ departments that have resources needed by the TPS Project.	Key informant interviews?	Evidence exists that MRC leadership in coordination with local office and TPS personnel make available resources from the relevant units/departments that are needed for implementation.
		0 = No evidence of link between units that have resources needed for project implementation beyond what is typical business as usual strategies.
		1 = Some links are established but missing significant needed resources available within other units
		2 = Multiple links established but a key resource is missing or not clearly linked.
		3 = Adequate links across all key resources needed for implementation.
		4 = Meets criteria for a score of 3 but also includes links beyond key resources needed in order to improve implementation.
		5 = Meets criteria for a score of 4 but also includes links to key resources for the goal of innovation and sustainability.
7.7 MRC Leadership works with partners to ensure effective outreach and adequate enrollment and retention of youth and families.	Key informant interviews; review of MRC TPS procedures documents	Evidence of effective outreach, enrollment, and retention of youth and families for TPS Project goals (n = 651).
		0 = Outreach and enrollment procedures are dependent upon one counselor or a few local office personnel.
		1 = Outreach and enrollment procedures are limited to local office with no evidence that partners are involved.
		2 = Local office partners with key partners to establish outreach and enrollment procedures.
		3 = Local office is supported by central office and field services to establish outreach and enrollment procedures that also include partners
		4 = Formalized procedures at central office, field services, and local offices to establish formal outreach and enrollment procedures with metrics on achieving target sample size
		5 = Meets criteria for a score of 4 with evidence of innovative and broad outreach and enrollment efforts.

7.8 MRC Leadership acts on policy/ procedural challenges and facilitators of TPS implementation	Key informant interviews; review of MRC TPS policies and procedures documents	Evidence that MRC Leadership identify and address policy and procedural challenges/facilitators to TPS Implementation.
		0 = TPS occurs without addressing policy/procedural barriers that have consequences for implementation (i.e., Order of Selection, Processing Lists).
		1 = TPS occurs with some policy/procedural barriers addressed but key policy/procedural challenges to implementation.
		2 = Most policy/procedural barriers addressed but with a key policy impediment to implementation (such as financing or staff deployment).
		3 = Policy and procedural barriers addressed for adequate TPS implementation
		4 = Criteria for score of 3 is met with notable efforts to advance new policies or procedures to improve implementation
		5 = Criteria for a score of 4 is met with substantial efforts to change policies and procedures for long-term sustainability. May be indicative of mature implementation and efforts to scale up beyond pilot sites.

# 8. Data Tracking Systems and Use of Results

**RATIONALE:** Data tracking tools are essential for evaluation but are also essential as a navigation system to understand the quality of partnerships, service implementation and costs.

Criterion	Data Source	Anchor
8.1 TPS activities are captured in the appropriate data systems in a timely and accurate manner	QA of TPS data collection	Evidence of consistent, accurate, and timely data collection of TPS elements in the MRCIS and TPS databases.
		0 = Inconsistent data collection with missing information, accuracy issues, and not timely
		3 = Adequate data collection though there may be minor inaccuracies or limited missing information
		5 = Data systems are integrated and or consolidated as indicative of sustainability.
8.2 GPRA Measures (Youth and Counselor) are completed and reported to RSA		Evidence of consistent and timely data collection of all GPRA measures and instruments as required by RSA.
		0 = Inconsistent data collection with missing information, accuracy issues, and not timely
		3 = Adequate data collection though there may be minor inaccuracies or limited missing information
		5 = Data systems are integrated and or consolidated as indicative of sustainability. =
8.2 Youth satisfaction measures		Evidence that youth satisfaction measures are used to consider TPS student experiences.
		0 = Inconsistent data collection with missing information, accuracy issues, and not timely
		3 = Adequate data collection though there may be minor inaccuracies or limited missing information
		5 = Data systems are integrated and or consolidated as indicative of sustainability.
8.3 Employer satisfaction measures		Evidence that employer perspectives/satisfaction are used to consider employer experiences with TPS
		0 = Inconsistent data collection with missing information, accuracy issues, and not timely
		3 = Adequate data collection though there may be minor inaccuracies or limited missing information
		5 = Data systems are integrated and or consolidated as indicative of sustainability.
8.4 Family satisfaction measures		Evidence that family satisfaction measures are used to consider family experiences with TPS
		0 = Inconsistent data collection with missing information, accuracy issues, and not timely
		3 = Adequate data collection though there may be minor inaccuracies or limited missing information
		5 = Data systems are integrated and or consolidated as indicative of sustainability.
8.5 Partner satisfaction measures?		Evidence that partnership satisfaction is used to consider partner experiences with TPS.
		0 = Inconsistent data collection with missing information, accuracy issues, and not timely
		3 = Adequate data collection though there may be minor inaccuracies or limited missing information
		5 = Data systems are integrated and or consolidated as indicative of sustainability.

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