

Transportation Initiative

The Impact of Expanded Transportation Support Services on Community Service Office Outcomes

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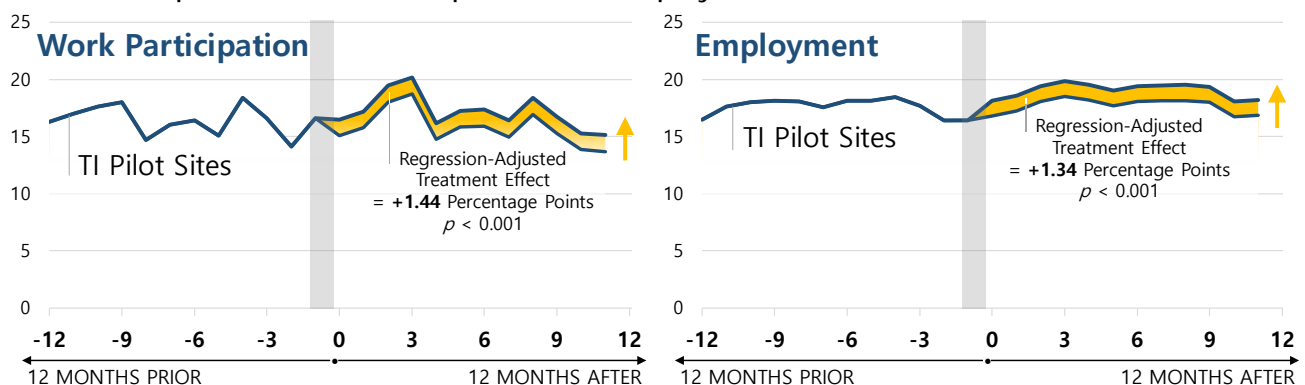
INTRODUCED IN DECEMBER OF 2015, the Transportation Initiative (TI) is a pilot program initially funded under Engrossed Substitute Senate Bill 5883 and implemented by the Department of Social and Health Services' Economic Services Administration (DSHS ESA). The primary goal of the pilot is to eliminate transportation barriers impeding WorkFirst clients' progress toward financial independence, thereby increasing client participation in WorkFirst activities and employment, reducing sanction rates, and helping clients transition off the Temporary Assistance for Needy Families (TANF) caseload. Key interventions include less restrictive eligibility requirements for existing transportation support (TS) services, simplified application processes for TS services, and additional transportation supports. This report describes the impact of the pilot program on outcomes for the 16 Community Service Offices (CSOs) that implemented the pilot in February 2019, relative to a comparison group of CSOs that did not participate in the program. A companion report (Danielson, Sprague, Lucenko, & Felver, 2020) provides summary information on annual TI program expenditures and the characteristics of clients served from January 2016 through June 2019.

Key Findings

- TS service expenditures, vouchers issued, and estimated TS service penetration rates all increased following CSO implementation of the TI pilot program.
- For those CSOs that implemented the TI pilot, work participation rates improved by 1.44 percentage points and employment rates increased by 1.34 percentage points in the post-period (see Figure 1). Pilot participation did not affect TANF sanction rates or caseloads.

FIGURE 1.

TI Pilot Improved Work Participation and Employment Rates



Program Overview

Implemented in December 2015, the TI pilot was originally funded by Washington’s Legislature under ESSB 5883 to address transportation-associated barriers to financial independence for WorkFirst clients by:

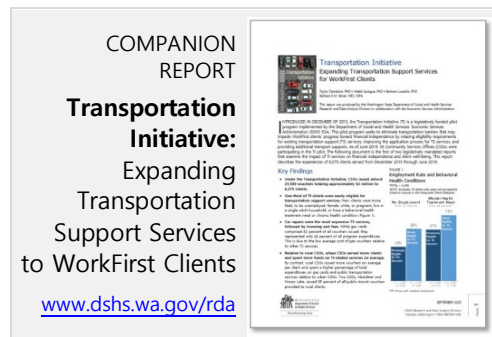
1. Expanding eligibility for transportation support services to include WorkFirst clients who were not working but had an active Individual Responsibility Plan (IRP), participating in other non-work activities, and who were experiencing some form of transportation-related barrier;
2. Simplifying the application process for TS services and easing existing restrictions on the frequency, amount, and type of TS services that a WorkFirst client could receive; and
3. Providing WorkFirst clients with new types of TS services, including: door-to-door transportation services; negotiating with courts and/or collection agencies regarding outstanding vehicle-related fines; and time-limited, post-TANF employment TS services for WorkFirst clients whose families voluntarily exited the TANF caseload or exceeded TANF income requirements.

With the exception of the court fines component which was expanded statewide in September 2016, the TI pilot was rolled out in four separate waves over the course of a four-year period from December 2015 through February 2019. In total, 26 CSOs participated in the pilot program. A list of participating CSOs by program entry month is provided in Table 1.

TABLE 1.

Participating CSOs by Program Entry Date

WAVE 1 December 2015	WAVE 2 July 2016	WAVE 3 April 2018	WAVE 4 February 2019	
Alderwood Wenatchee	Aberdeen Moses Lake Renton	Chehalis Mount Vernon Shelton Smokey Point Sunnyside	Bellingham Clarkston Colfax Colville Ellensburg Kelso King-Eastside Newport	Oak Harbor Okanogan Port Angeles Port Townsend Republic Stevenson Walla Walla Toppenish



Study Population and Evaluation Approach

Engrossed Substitute Senate Bill 6168 requires the Economic Services Administration to evaluate the impact of the TI pilot on four outcomes of interest: work participation rates (WPR), employment, caseload size, and sanctions. To assess the impact of the pilot on these outcomes, we compared monthly changes in aggregate CSO-level outcomes from February 2018 through January 2020 for the 16 CSOs that implemented the TI pilot in February 2019 and 26 CSOs that did not participate in the program.

We estimated the effect of the TI pilot using generalized linear models with fixed effects (hereafter referred to as "fixed effects models") to control for both period-specific effects and time-invariant differences across CSOs (see Technical Appendix). Additional measures capturing changes in caseload composition over time were included in these models as statistical controls. All analyses were weighted to adjust for differences in CSO caseload size to ensure that smaller CSOs did not have a disproportionate impact on the outcome estimates.

Results

Expenditures and Estimated Service Penetration Rates

Analyses of the 16 TI CSOs that joined the pilot in February 2019 indicate that voucher issuances and TS expenditures spiked immediately following the implementation of the TI pilot, then stabilized at an increased rate over the following months. The average number of TS vouchers issued in a month by participating CSOs increased 36 percent in the post-period relative to pre-pilot levels, while TS service expenditures increased 93 percent (*see* Figures 2 and 3). TS service expenditures and voucher issuances remained mostly unchanged¹ among the 26 non-pilot CSOs (not shown here).

FIGURE 2.

Monthly Voucher Issuances Before and After Pilot Implementation Total for the 16 Pilot CSOs

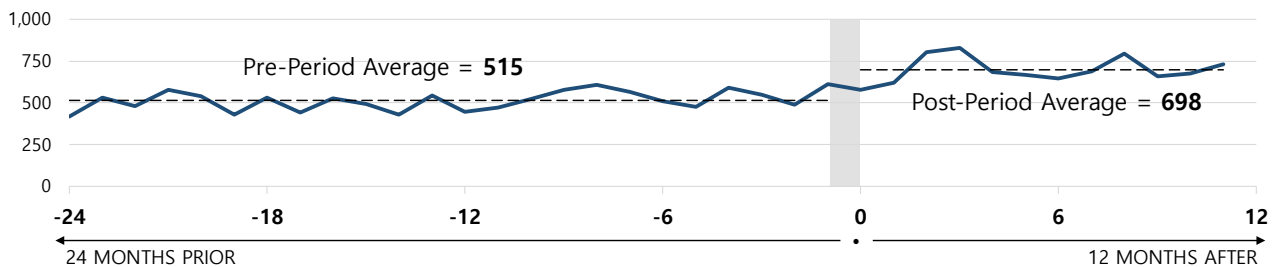
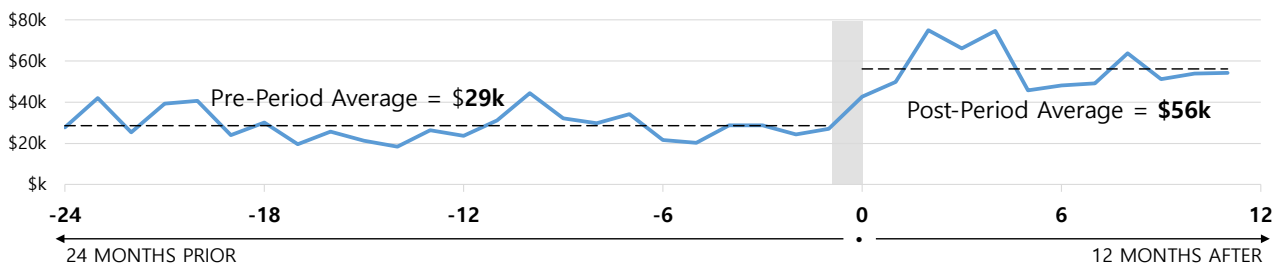


FIGURE 3.

Monthly Expenditures Before and After Pilot Implementation Total for the 16 Pilot CSOs



We estimated TS service penetration as the percentage of clients who received any TS service of those eligible for these services under the TI pilot.² Prior to program implementation, trends in TS service penetration rates were similar across TI and non-TI CSOs, with penetration rates across both populations increasing slowly over time. Following TI implementation, the average penetration rate increased more rapidly among pilot CSOs (*see* Figure 4). Average monthly penetration rates in the post-period for pilot CSOs ranged between 16.9 and 22.0 percent. The maximum penetration rate observed at any participating CSO during the 12-month post-period was 42.9 percent, while the minimum was 0 percent. Overall, 19.1 percent of WorkFirst adults at pilot CSOs who met revised TS service eligibility requirements received a TS service in the post-period.³

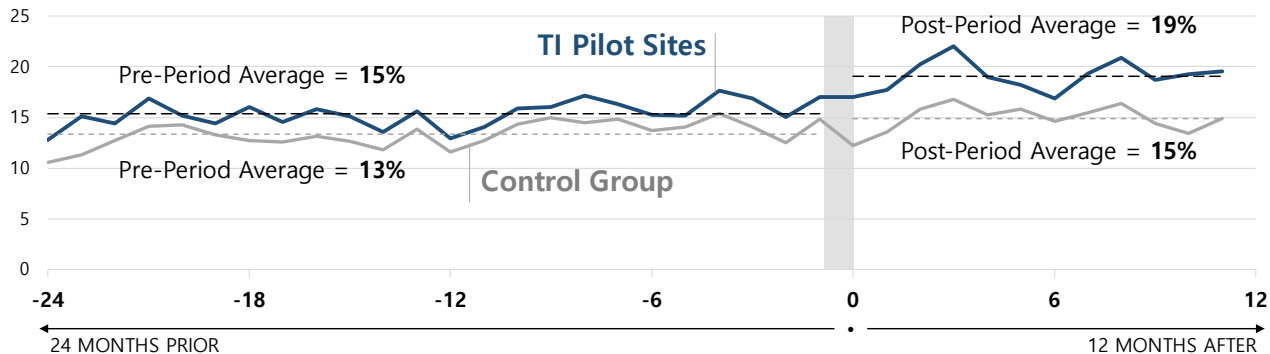
¹ The average total number of vouchers for non-pilot CSOs increased from 1,829 to 1,882 (1.02 times), while average expenditures increased from about \$95,000 to \$107,000 (1.12 times).

² Prior to the implementation of the waiver, only individuals engaged in work activities were eligible to receive TS services. For the purposes of these analyses, the denominator for estimated penetration rates in both the pre- and post-period include all individuals potentially eligible for TS services under the Transportation Initiative.

³ Comparisons within CSOs over time indicated that CSO-specific monthly penetration rates were stable and stayed within two to four percentage points of a CSO's average penetration rate. However, smaller CSOs with average caseloads less than 75 (e.g., the Republic, Oak Harbor, and Stevenson branch offices and Okanogan CSO) experienced higher volatility in their TS service penetration rates.

FIGURE 4.

Average Estimated TS Penetration Rate 24 Months Prior to and 12 Months Following TI Pilot Implementation^a



^a Average rates weighted by the percentage of all active adult cases served by a CSO.

Outcomes

Controlling for changes in caseload composition over time, participation in the TI pilot was associated with modest and immediate increases in the WPR and the percentage of clients employed in the month. Pilot participation increased the WPR and employment rates for participating CSOs by 1.44 and 1.34 percentage points from baseline, respectively, following pilot implementation (see Table 2). Changes in average estimated trends over time for these two outcomes are presented in Figures 5 and 6.⁴ These effects did not vary over time, indicating that the positive impacts of the TI pilot were stable.

TABLE 2.

Results of Fixed Effects Regression Models

	Estimated effect	Statistical significance
Work Participation Rate	+1.44%	p < 0.001
Employment Rate	+1.34%	p < 0.001
Percent Change in Caseload	-0.73%	N.S.
Sanction Rate	+0.32%	N.S.

FIGURE 5.

Average Estimated Work Participation Rate 12 Months Prior to and Following TI Pilot Implementation^a

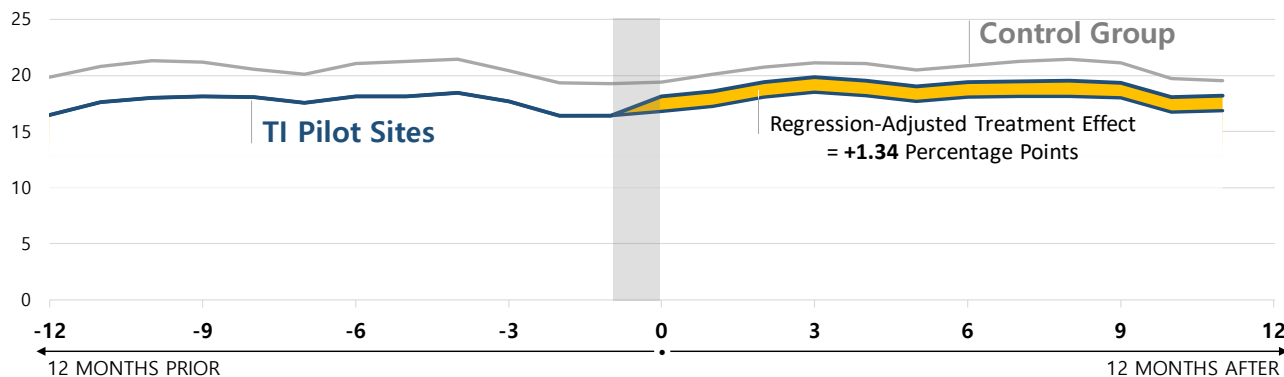


^a Average trends are based on predicted values generated by the fixed effects models.

⁴ Individual effects can be approximated by dividing the estimated treatment effect by the average post-period penetration rate for the treatment groups. Based on these calculations, the individual-level WPR increased by +7.6 percent and the employment rate increased by +7.0 percent in the post-period.

FIGURE 6.

Average Estimated Employment Rate 12 Months Prior to and Following TI Pilot Implementation^a



^a Average trends are based on predicted values generated by the fixed effects models.

There was no evidence that the TI pilot impacted WorkFirst caseload size or sanction rates (see Table 2). However, as noted at the beginning of this report, it was anticipated that the TI pilot would reduce sanction rates and caseload by improving work participation rates and helping WorkFirst clients become financially independent. Further analyses are required to determine if the TI pilot indirectly impacted caseload and sanction rates through its effects on employment and work participation rates.

Conclusion and Study Limitations

Descriptive analyses demonstrated that both the total monthly count of TS service vouchers issued to WorkFirst clients and total monthly expenditures for these services increased in the 12 months following TI pilot implementation. Estimated TS service penetration rates increased modestly over the same period. Despite relatively small increases in TS service penetration rates, these analyses indicate that the expansion of TS services under the Transportation Initiative was associated with improvement in CSO-level work participation and employment rates. However, there is no evidence that the Transportation Initiative had an impact on caseload or sanction rates.

While these findings are encouraging, we acknowledge the following study limitations:

- Important residual differences may exist between pilot CSOs and CSOs in the control group—e.g. local poverty and employment rates—that are not accounted for in these analyses.
- We focused on a relatively narrow set of CSO-level outcomes rather than client-level outcomes. Analyses presented in an earlier report (Danielson et al. 2020) suggest that clients newly eligible for TS services under the pilot were more likely to be unemployed, pregnant, or to have behavioral or chronic health conditions. Future analyses could explore the impact of TS services on client outcomes for newly eligible TI clients separate from clients previously eligible for TS services.
- Data limitations prevented us from: 1) restricting estimates of TS service penetration to WorkFirst participants with a demonstrated need for TS services; and 2) capturing information on the full range of TS services received by clients under the pilot. Consequently, the penetration rates presented here should be interpreted as the lower bounds of TS service utilization by WorkFirst clients under the Transportation Initiative.
- These analyses are not an evaluation of TS services in and of themselves. Instead, the results presented here capture the impact of expanding TS services to previously ineligible clients under the Transportation Initiative. Data on the effectiveness of specific types of TS services are not examined here. Further analyses are required to determine if TS services more broadly impact client outcomes and, if so, which of these services are more effective.

TECHNICAL NOTES

OVERVIEW AND STUDY POPULATION

The population of interest for these analyses was Community Service Offices (CSOs) operated by the Department of Social and Health Services' Economic Services Administration (DSHS ESA). Other organizations that determine eligibility for financial and food assistance, such as home and community-based service (HCBS) offices and locations operated by the Development Disabilities Administration, were excluded from these analyses because they are overseen by other agencies within DSHS and were not eligible to participate in the Transportation Initiative. The starting population for these analyses included 53 unique CSOs; 10 of these CSOs were removed from the analyses because they joined the TI pilot in an earlier wave of the program, and the Richland CSO was removed because it was no longer active as of the start of the evaluation period. The final population for this study included 42 CSOs: 16 in the treatment group, and 26 in the control group.

We restricted our analyses to CSOs that participated in the final wave of the TI pilot for two reasons. First, this wave included the largest number of newly-inducted CSOs compared to previous waves of the program, which increased the statistical power of our analyses. Second, heterogeneity in wave-specific trends over time may introduce additional complexity into the data, making our analyses more vulnerable to omitted variable bias and potentially masking the true impact of the TI pilot on the outcomes of interest. Sources of wave-specific differences include: 1) declining WorkFirst caseloads during the first two waves of the pilot as the state's economy recovered from the Great Recession; 2) changes in caseload composition, with the caseload in earlier periods more heavily weighted toward "quick leavers" who had higher prior employment rates and less pronounced service needs (*see* Patton, Ford Shah, Felver, & Beall 2015); and 3) the inclusion of the statewide rollout of the licensing and fees component of the pilot in the post-periods of Waves 1 and 2, respectively. By focusing on a single wave of the TI pilot in these analyses, we were able to control for these period-specific, statewide effects by holding them constant across all cases in the analyses.

Outcome Measures

Outcome measures were constructed using information on assistance units (AUs) with at least one adult present (i.e., active adult cases). Work participation rates, employment rates, and changes in caseload size are based on monthly count information available in the Temporary Assistance for Needy Families (TANF) Access Reporting Dynamic Information System (TARDIS). Information on the number of adult cases in sanction status were obtained from ESA's Management Accountability and Performance Statistics (eMAPS) website (<http://emaps.esa.dshs.wa.gov>). Detailed descriptions of each outcome measure are provided below.

- The all-families *work participation rate* (WPR) is the percentage of AUs with at least one adult that met or exceeded federal work participation requirements out of the total number of active adult TANF cases associated with a CSO that are subject to these requirements. Child-only cases, single-parent AUs with a child under the age of one, and AUs sanctioned for three or fewer months in the past year including the measurement month are not subject to federal work requirements and were excluded from the denominator. Work activities that count toward federal participation requirements include: unsubsidized employment; subsidized employment (private or public); work experience; on the job training; job search and job readiness; community service programs; vocational education training; job skills training directly related to employment; education directly related to employment for individuals with no high school diploma or certification of high school equivalency; satisfactory school attendance for individuals with no high school diploma or certification of high school equivalency; providing child care services to individuals in a community service program; and other work activities. To meet federal participation requirements, adults associated with an AU must participate in core work activities for 130 hours in a month. Single custodial parents or caretakers with a child under the age of six are subject to less stringent requirements; they meet federal participation requirements if they participate in core work activities 87 hours per month.
- The monthly *employment rate* is the percentage of AUs with at least one adult participating in subsidized (private or public) or unsubsidized employment out of the total number of active adult cases associated with a CSO in the month. An active adult case was included in the numerator as long as there was any indication of employment regardless of whether or not these work activities met or exceeded state and/or federal participation requirements.

- *Changes in active adult caseload* were calculated using two separate approaches. For the first measure, we calculated changes in caseload size using a standard month-over-month percent change measure by calculating the difference in caseload size between the current and prior months, dividing the resulting value by the prior month's caseload size, and multiplying this value by 100 percent. This measure allowed us to capture rapid month-to-month fluctuations in caseload over time. We also measured changes in caseload by comparing the current month's caseload to the *average* caseload size for the CSO in question over the entirety of the evaluation period. This allowed us to capture deviations in caseload size that were independent of month-to-month variations over time. Both approaches allow us to account for differences in the respective size of the CSOs included in our analyses and standardize caseload change measures so that they are on the same scale. Given that the effect of TI participation on both measures was non-significant, we presented only the month-over-month percent change measures in the body of this report.
- The *sanction rate* is the percentage of adult cases that either received a reduced TANF grant due to non-compliance with WorkFirst requirements or were immediately terminated without a reduction in their TANF grant because they did not attend the non-compliance sanction case meeting or home visit out of the total number of adult cases served by a CSO in a given month.
- The *TI service penetration rate* is calculated as the number of WorkFirst clients who received a TI voucher, gas card, or exception-to-rule (ETR) in a given month divided by the total number of WorkFirst clients in that month who were above the age of 16 and participated in a countable activity allowed under TI eligibility requirements. Information on WorkFirst participation and client age were extracted from ACES. TS service receipt is based on ETR, voucher, and gas card information recorded in ESA's electronic Jobs Automated System (eJAS) and BarCode.

Analytical Approach

We employ generalized linear models with fixed effects (i.e., fixed effects models) to examine the impact of time-varying predictors on the outcomes of interest. Fixed effects models were selected for these analyses because they control for all time-invariant CSO/regional differences that may affect the outcome of interest and produce estimated treatment effects that are more robust and conservative compared to related methods (Allison 2005; Angrist & Pischke 2009). All fixed effects models were estimated using PROC GLM in SAS 9.4 (SAS Institute, Cary NC). Because the outcomes of interest were expressed as changes in CSO-specific rates over time, all analyses were weighted by the percentage of the total active adult caseload served by a CSO in a given month to ensure that smaller CSOs did not have an outsized effect on model results.

The estimated effects of TI pilot participation were regression-adjusted to control for time-variant differences in caseload characteristics across CSOs. These control variables were constructed using information from the Automated Client Eligibility System (ACES), Integrated Client Database (ICDB), and TARDIS. With one notable exception (percent minority clients), all control variables were constructed at the individual-level and then aggregated by assistance unit and then CSO, with AUs attributed to CSOs based on issuance data. Bivariate correlations between the outcomes of interest and lagged versions of each of the control variables were estimated using PROC CORR to identify the lag structure for the fixed effects models presented here.

The statistical controls employed in these analyses include the percentage of AUs with:

1. At least one member who received state or federally funded medical assistance in the past year and have some indication of a mental illness in the prior 24 months;
2. At least one member who received state or federally funded medical assistance in the past year and have some indication of a substance use disorder in the prior 24 months;
3. Two or more adults;
4. One or more children under the age of 12;
5. One or more homeless members;
6. One or more members who were employed in the prior year;
7. One or more members who were arrested in the prior year;
8. One or more members who were pregnant (of those AUs with at least one female between the ages of 15-44 years old present in the AU); and
9. One or more vehicles owned by at least one AU member in the month.

The percentage of minority clients served at a CSO in the month was measured as the ratio of minority clients associated with an active adult case to all active adult case clients.

Sensitivity analyses were conducted to determine if the results of our analyses were affected by:

1. The approach used to estimate the impact of TI pilot participation on the WPR, employment rates, sanction rates, and changes in caseload; and
2. The timeframe selected for these analyses.

We estimated a series of additional weighted and unweighted statistical models to determine the degree to which the estimated effect of TI participation was sensitive to weighting for CSO size and selected modeling approach (e.g., pooled discontinuity models with auto-correlated errors estimated using PROC AUTOREG, random effects models estimated using PROC MIXED, dynamic panel models estimated using PROC PANEL, etc.). In models that allowed for the inclusion of time-invariant factors, we included flags indicating whether a CSO was participating in other ESA pilot programs. We also adjusted the length of the pre-/post-period used in our fixed effects models to assess the impact of evaluation window length on observed results. In addition to the 12-month pre-/post-period analyses presented in the body of this report, fixed effects models were also estimated using one-, two-, six-, and nine-month pre- and post-periods, as well as a 24-month pre-period/12-month post-period. The results of these sensitivity analyses were similar to those presented here and indicate that the findings reported in this evaluation are robust to both modeling approach and the length of the evaluation period employed in the analyses.

LIMITATIONS

Omitted variable bias poses a threat to the validity of drawing causal inferences from observational data. We mitigate this risk by: 1) using fixed effects regression to control for period-specific changes common to all CSOs in the analyses and time-invariant differences across CSOs; and 2) including time-varying statistical controls that may be related to the outcomes of interest in our models. However, unobserved variables not captured here may influence the outcomes in our study. Consequently, these results should not be interpreted as statements on the causal impact of TI participation on the outcome measures.

DATA SOURCES AND MEASURES

Summary information on the data sources used to construct the control variables included in these analyses is provided in a companion report (*see* Danielson, Sprague, Lucenko, & Felver 2020).

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