

UNPUBLISHED APPENDIX

to

**Evaluating the Differential Effects of Alternative Welfare-to-Work Training Components:
A Re-Analysis of the California GAIN Program**

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Appendix

Potential Contamination of Long-Term Experimental GAIN Estimates due to Expiration of Embargo from GAIN Services for Control Group Members

To investigate the potential importance of the possibility that the improvement in the control group outcomes over Years 4 through 9 after random assignment can account for the decline in the longer-term estimated impacts of GAIN on economic outcomes, we examine the extent to which the improvements in control group economic outcomes might be explained by control group members receiving and benefiting from GAIN services in Years 4 through 9. In Table A-1, we compare the trends in actual control group economic outcomes for each of the four counties with estimates of these outcomes based on the assumption that all control group members that were on AFDC experienced the mean outcomes for their county's experimental group, with a three year lag due to the initial embargo. The notes in Table A-1 explain exactly how we calculated these latter estimates. In that Table, we reproduce the actual mean outcomes for the control groups of each county from Table 3 and compare them with what we estimate their outcomes would have been if the fraction of these groups that were on AFDC in Years 4 through 6 experienced the mean outcome for the experimental group with a three year lag. As seen from Table A-1, we find that for most of the economic outcomes—especially for the earnings outcomes—and in most of the counties these estimated outcomes are, on average, less than the actual outcomes experienced by control group members. That is, it appears that only part of the improvement in the economic outcomes for control group members could be explained by the control group receiving and benefiting from GAIN services after their embargo from receipt of these services was lifted. The one exception to this conclusion is for the annual employment outcome in Riverside County, where the estimates based on this explanation either over-predict or slightly under-predict the actual rise for the control group in this county. We note that this exception is of some

importance, given that Riverside’s GAIN program was demonstrated to be effective at increasing employment rates in the MDRC 3-Year study.

While we cannot rule out the “contaminated control group” explanation for the decline in the longer-term impacts of GAIN in Riverside County shown in Table 3, the calculations presented in Table A-1 certainly raise questions about its validity. As a final consideration, we note that we do not find any differences by experimental-control group status in the trends for the AFDC participation outcomes in Table 3. In particular, for both the Ever-Received AFDC/TANF and Number of Quarters on AFDC/TANF outcome measures, we find that the mean estimates for experimentals and controls decline over time at approximately the same rate in Riverside County as in the other three counties.

Table A-1

Comparison of Control Group Outcomes with Estimates under Assumption that Controls on AFDC had the Same Mean Outcomes as Experimental Group

| Years after Random Assignment | Alameda | | | Riverside | | | San Diego | | | | | |
|--|--------------------------------|----------------------------|---------------------------------|--------------------------------|----------------------------|---------------------------------|--------------------------------|----------------------------|---------------------------------|--------------------------------|----------------------------|---------------------------------|
| | <i>Observed (Mean) Outcome</i> | <i>Est. (Mean) Outcome</i> | <i>% Diff. (Est.– Observed)</i> | <i>Observed (Mean) Outcome</i> | <i>Est. (Mean) Outcome</i> | <i>% Diff. (Est.– Observed)</i> | <i>Observed (Mean) Outcome</i> | <i>Est. (Mean) Outcome</i> | <i>% Diff. (Est.– Observed)</i> | <i>Observed (Mean) Outcome</i> | <i>Est. (Mean) Outcome</i> | <i>% Diff. (Est.– Observed)</i> |
| Ever Employed in Year (%) | | | | | | | | | | | | |
| 1-3 | 28.1 | 28.1 | 0.0% | 24.5 | 24.5 | 0.0% | 35.3 | 35.3 | 0.0% | 40.8 | 40.8 | 0.0% |
| 4-6 | 34.7 | 29.8 | -14.3% | 25.8 | 25.4 | 1.7% | 33.5 | 41.4 | 23.7% | 38.2 | 42.7 | 11.7% |
| 7-9 | 45.3 | 31.6 | -30.1% | 33.1 | 26.1 | -21.1% | 37.8 | 36.8 | -2.8% | 40.9 | 40.8 | -0.3% |
| Number of Quarters Worked in Year | | | | | | | | | | | | |
| 1-3 | 0.75 | 0.75 | 0.0% | 0.67 | 0.67 | 0.0% | 0.90 | 0.90 | 0.0% | 1.09 | 1.09 | 0.0% |
| 4-6 | 1.02 | 0.78 | -23.3% | 0.77 | 0.69 | -10.4% | 0.98 | 1.09 | 10.9% | 1.17 | 1.16 | -1.0% |
| 7-9 | 1.42 | 0.90 | -36.9% | 1.03 | 0.74 | -28.1% | 1.15 | 0.99 | -13.9% | 1.28 | 1.14 | -10.8% |
| Annual Earnings (1999\$) | | | | | | | | | | | | |
| 1-3 | \$1,849 | \$1,849 | 0.0% | \$1,849 | \$1,849 | 0.0% | \$2,253 | \$2,253 | 0.0% | \$3,165 | \$3,165 | 0.0% |
| 4-6 | \$3,342 | \$2,155 | -35.5% | \$2,493 | \$1,846 | -25.9% | \$3,201 | \$2,885 | -9.9% | \$4,315 | \$3,439 | -20.3% |
| 7-9 | \$5,206 | \$2,733 | -47.5% | \$3,386 | \$2,122 | -37.3% | \$4,174 | \$2,853 | -31.6% | \$4,948 | \$3,651 | -26.2% |

NOTE—The values for the “Est. (Mean) Outcome” are calculated as follows. In Years 1-3 ($t=1_3$), $\hat{Y}_{t=1_3}(0) = \bar{Y}_{t=1_3}(0)$ and for Years 4-6 and 7-9 ($t=4_6$ and 7_9), $\hat{Y}_t(0) \equiv P_{t-1}^{AFDC} \times \bar{Y}_{t-1}(k_d) + (1 - P_{t-1}^{AFDC}) \times \bar{Y}_{t=1_3}(0)$, where $\bar{Y}_{t=1_3}(0)$ is the mean outcome for the control group in period Years 1-3; P_{t-1}^{AFDC} is the proportion of control group on AFDC in period $t-1$; and $\bar{Y}_{t-1}(k_d)$ is the mean outcome for experimental group in period $t-1$ ($t-1 = 1_3$ and 4_6 , respectively).