Attachment A: *Excerpt of UB Study Conclusions from the Executive Summary of the 2009 Mathematica Final Report*

Executive Summary conclusions excerpted from the report: Seftor, N. S., Mamun, A., & Schirm, A. (2009). *The impacts of regular Upward Bound on postsecondary outcomes 7–9 years after scheduled high school graduation*. Princeton, NJ: Mathematica Policy Research.

"By comparing the study's treatment group to its control group, this evaluation estimates the value-added effect of the opportunity to participate in Upward Bound—an unusually intensive precollege program—for the students who seek that opportunity and are eligible to participate in the program. The main finding are:

- ***Upward Bound had no detectable effect on the rate of overall postsecondary enrollment or the type or selectivity of postsecondary institution attended for the average eligible applicant.*** *About four-fifths of both treatment group members and control group members attended some type of postsecondary institution, including four-year institutions, two-year colleges, and vocational schools, and the estimated impact is an increase of less than 2 percentage points in the rate of enrollment (effect size = 4 percent). For enrollment at four-year colleges and universities, the estimated impact is 1 percentage point (effect size = 3 percent). These effects are not statistically significant.*

- ***Upward Bound had no detectable effect on the likelihood of applying for financial aid, or, the likelihood of receiving a Pell Grant.*** *The 1 and 2 percentage point increases in the rates of financial aid application and Pell Grant receipt (effect sizes = 3 and 5 percent) are not statistically significant.*

- ***Upward Bound increased the likelihood of earning a postsecondary certificate or license from a vocational school. It had no detectable effect on the likelihood of earning a bachelor's degree or the likelihood of earning an associate degree.*** *While about 4 percent of control group members received a vocational certificate or license, nearly 9 percent of treatment group members did, implying an impact of 5 percentage points (effect size = 23 percent). The impacts on receiving any postsecondary credential and receiving a bachelor's degree are 2 and 0 percentage points (effect size = 5 and 0 percent), respectively, and are not statistically significant.*

- ***Upward Bound increased postsecondary enrollment or completion rates for some subgroups of students.*** *For the subgroup of students with lower educational expectations at baseline—that is, the students who did not expect to complete a bachelor's degree—Upward Bound increased the rate of postsecondary enrollment and the likelihood of receiving a degree, license, or certificate by 6 and 12*

percentage points, respectively, raising the overall postsecondary completion rate to about the level observed for students with higher expectations. Because targeting on the basis of lower educational expectations might be challenging if it creates an incentive for applicants to understate their expectations, further analyses were conducted to examine the effects of Upward Bound on subgroups that might be more readily targeted. According to these exploratory analyses, Upward Bound increased postsecondary enrollment rates for students who were in tenth grade or above at the time of application, students who took a mathematics course below algebra in ninth grade, and students with a ninth grade GPA above 2.5. The estimated impacts were 3, 7, and 3 percentage points, respectively. Additional analyses suggest that Upward Bound also had positive impacts on postsecondary outcomes for some other subgroups defined by student- and project-level characteristics.

- ***Longer participation in Upward Bound was associated with higher rates of postsecondary enrollment and completion.*** *An additional year of Upward Bound participation was associated with a 9 percentage point increase in the rate of enrollment at four-year institutions and a 5 percentage point increase in the likelihood of receiving a bachelor's degree. Completing the Upward Bound program was associated with increases of 27 and 21 percentage points, respectively. These findings are based on nonexperimental methods, and the validity of causal inferences based on these estimates depends on the validity of strong assumptions. "*