Adolescent girls and young women (AGYW) in Ethiopia, as well as across Eastern and Southern Africa, experience a disproportionate level of new HIV infections. This is due to their elevated biological susceptibility, coupled with multiple vulnerabilities including social isolation, economic insecurity, lack of access to services, and sexual and gender-based violence. AGYW who are out of school face a particular set of vulnerabilities; they are more likely to be sexually active, including engaging in transactional or compensated sex, than their in-school counterparts and have limited engagement in general school-based services. Those living away from parents, including migrants and girls in low status forms of work, may be more susceptible to sexual abuse and violence than those in supportive and protective family environments. Unfortunately, data characterizing unmet HIV prevention needs and risk vulnerabilities among AGYW, especially out-of-school AGYW, are lacking given the challenges in reaching and studying this population.

To address this gap, Project SOAR is conducting an integrated HIV biobehavioral survey (IBBS) focused on out-of-school AGYW in three high HIV prevalence settings of Ethiopia. The study aims to estimate the prevalence of HIV and other sexually transmitted infections (STIs), and to describe vulnerability and risk factors for HIV in this population. In particular, the study will:

- Identify geographic zones within urban areas where programmatic efforts should be focused, given a high concentration of risk among AGYW.
- Map existing HIV prevention and treatment services currently being provided to AGYW in the selected sites.
- Estimate vulnerability and risk factors for HIV and STIs among AGYW.

Findings from this study will inform HIV prevention and care programming efforts for vulnerable adolescent girls and young women in Ethiopia.
Results will inform HIV prevention and care programming efforts for vulnerable AGYW in the country.

OUR RESEARCH
The study is taking place in three urban areas with high HIV prevalence: Addis Ababa, Bahir Dar, and Gambella Town. Within Addis Ababa the study will be conducted in three sub-cities, Addis Ketema, Akaki Kality, and Kolfe Keranio. To inform study recruitment, we will first engage with key informants to identify locations where predominately out-of-school AGYW congregate as well as existing service delivery sites. Study staff will then visit these venues to verify the presence of AGYW or in the case of service delivery sites, to obtain additional details on available services. All venues/sites will be mapped using Global Positioning System (GPS) waypoint coordinates.

The study team will determine days and times, both day and evening hours, when high levels of AGYW congregate in each of the verified venues. The team will conduct visits during these times to recruit approximately 2,100 AGYW into the study. After obtaining informed consent, trained study nurses will administer a questionnaire to ascertain sociodemographic information, followed by an AGYW HIV vulnerability assessment recently implemented in Tanzania, along with questions on stigma, violence, reproductive health, and health service access. Finally, study participants will be asked to provide a blood specimen for HIV and other STI testing, receiving appropriate pre- and post-test counseling. Participants will be informed of their HIV and syphilis test results on the same day and will be informed of their chlamydia test results within 96 hours.

RESEARCH UTILIZATION
The key study stakeholders to be engaged throughout the study include representatives of the Ethiopian government at the regional and national levels (including the Ethiopian Federal Ministry of Health and the Federal HIV/AIDS Prevention and Control Office), USAID/Ethiopia, AGYW and other members of the community, local academia, and implementing partners.

Engagement with these stakeholders helps to ensure support of the study, alignment of the study with in-country data needs and priorities, and translation of findings into implementation of programs and policies. Importantly, the study team will convene an advisory board of out-of-school AGYW representing the three study regions, who will help identify potential venue locations for the study, assess cultural appropriateness of the survey tool, and generally ensure that the voices of AGYW are incorporated into study design, implementation, and interpretation of results.

Research utilization activities will include a data interpretation workshop to present preliminary findings and facilitate discussion of their implications, and a dissemination meeting at which participants will create a data use plan to guide the dissemination process locally.

What will we learn from the study?
We will develop AGYW risk vulnerability scores for the study locations based on questionnaire data. This will provide a better understanding of the extent to which AGYW are vulnerable to HIV and engage in HIV prevention and care services. In addition, HIV, syphilis, and chlamydia prevalence will be generated for each of the three geographic locations using survey weights to account for the size of the venues included. GPS data collected during the community mapping process will be used to produce geospatial analyses of HIV prevalence and AGYW vulnerability.