Developing Sustainable Systems and Infrastructure with Underserved Communities

(Technical Report)

The Struggle Over Gentrification in Urban America (STS Research Paper)

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by

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Preface

Infrastructure projects that serve community needs well can also make communities more attractive sites for new businesses and residents, an effect which can drive local property values up and thereby make communities too expensive for long-established businesses and residents. Successful community development is therefore best measured not only in terms of provision of sound infrastructure and services, but also in terms of affordability across a broad income range.

Engineers in Action (EIA) finds communities in need of pedestrian footbridges and connects them with engineering students and professional engineers to design and build the bridges. The suspension bridges give residents access to schools, healthcare and fields, thereby improving their opportunities and quality of life. Students develop preliminary designs, source and raise funds for materials, and plan construction schedules. The Coilolo River Pedestrian Bridge Project will serve residents of Coilolo and Tipa Tipa in Coilolo, Jaime Zudáñez, Chuquisaca, Bolivia. The bridge spans 58.3 meters. Besides standard abutments, it has custom abutments designed by the students to meet EIA's geometric, safety and accessibility requirements.

Gentrification stresses low-income communities in cities across America. It attracts new businesses and residents, while driving out many long-term tenants due to higher local rents and prices. To resist gentrification, communities have organized tenant unions, protested, and formed partnerships with government agencies. At every step, however, they come into conflict with groups that support the practices that drive gentrification.