The Crochet Canopy Project Addressing shade desserts, heat islands and providing shade equity at CalState LA

Background

•Heat Islands are urban areas that absorb and radiate heat at a significantly higher level than surrounding areas, disrupting natural weather patterns, increasing overnight temperature, contributing to air pollution and stressing infrastructure.

•Shade deserts are districts within an urban area that have low shade offerings, contributing to heat island effects and resulting in an increase of heat related illness.

•Heat Islands contribute to smog and pollution levels.

 CalEPA- has headlined projects to combat heat island effects.

 According to the interactive heat island map by CalEPA, Cal State LA is in a higher-than-average heat zone.

Urban Heat Island



Fig 1: An illustration of an urban heat island. Image credit: NASA/JPL-Caltech

References and Other Resources



Inspired by similar projects in Mexico and Spain, The Canopy Project seeks to install a crochet canopy over the on-campus Metro bus stop and the pedestrian walkway leading to the center of campus.

- Collect materials through partnerships with businesses and on campus drives standardized swatches
- 2. Do an all-call for students and student organizations to make and submit

- 5. Repeat swatch drive every semester to expand the canopy, replace damaged swatches

• By enlisting the help of students and student groups, this project would help build community on campus.

Proposal/Plan

Pedestrian road leading to the on-campus Metro Bus Centre

73% of Angelenos surveyed reported bus stops lacking shade

www.storymaps.arcgis.com

• The process of implementing this plan includes five steps:

3. Install cables that cross existing infrastructure to cover the exposed area 4. Combine swatches to create the canopy and install on cables

Benefits

 Swatches would provide shade in high exposure areas (such as the bus stop, pictured left).

 Canopy would function as a community art installation that would diffuse direct UV exposure and combat heat island effects. Including mitigating pollution.

Furthermore, swatches:

 are made out of recycled textile and plastic bags reducing landfill accumulation, with new swatches continuously replacing deteriorated segments over the years

• will not increase demands on water supply

can be installed with minor alterations to existing infrastructure would function as a student-driven art installation and campus beautification element

would provide shade for pedestrians

• would diffuse UV exposure reducing heat island effects



Fig 2: community members working on crochet canopy in Mexico

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