

## **Name of Project:**

Arizona State University Orange Mall Green Infrastructure Project

#### **Location:**

Tempe, Arizona

## **County:**

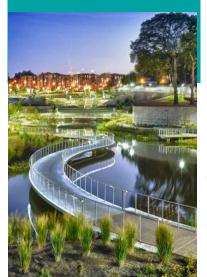
Maricopa County

### **Watershed:**

Salt and Verde River Watershed

## Website:

www.landscapeperforma nce.org/case-studybriefs/arizona-stateuniversity-orange-mallgreen-infrastructureproject



# ARIZONA STATE UNIVERSITY ORANGE MALL GREEN INFRASTRUCTURE PROJECT – TEMPE, ARIZONA

#### **OVERVIEW:**

Transformed an asphalt roadway into a performance-driven pedestrian mall and multi-use plaza for programmed events and informal social gatherings on campus.

#### **BENEFITS:**

- Directs 100% of runoff from a 10-year-storm through a series of biodetention and retention areas and on to an offsite infiltration well that recharges groundwater
- Saves an estimated 1,000 gallons of water annually by using building-generated air conditioner condensate as supplemental irrigation
- Improves water quality with net reduction in total phosphorus of stormwater as it passes through the bioretention basins
- Mitigates flooding by increasing on-site stormwater management capacity, lowering the high water elevation during a 100-year storm event by 1 inch
- Reduces mean radiant temperature by 22-24° F in areas that received added shade and by 4°F in areas that did not receive added shade, as measured on a sunny afternoon, compared to adjacent areas with conditions similar to the site before the redesign
- Diverted 99.9% of demolition materials from the site and buildings from the landfill through recycling, repurposing, and composting

#### **FUNDING SOURCES:**

Most likely state of Arizona, endowments, return on investments, possible grants, private investors, etc.

- Water Storage

- Habitat Restoration

Flood Mitigation

🌿 - Bio-Filtration/Green Infrastructure

New/Improved Drainage Infrastructure

