

URBAN HEAT AND SHADE

Urban Heat

Urban Heat Severity Map

Map 15 identifies the relative heat severity in Tempe to help determine areas of the city with above average temperatures. The data shows heat severity from the summer months of 2019 to 2020 with a scale of lowest heat score (slightly above the mean for the city) and severe heat area (significantly above the mean).¹

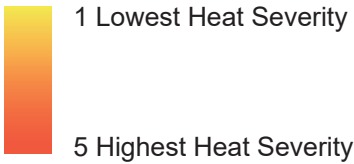
Heat Priority Score (HPS)

Map 14 displays the Heat Priority Score (HPS) in the City of Tempe. The Heat Priority Score was developed from a separate Arizona State University study² that assessed urban heat severity in relationship to areas of high percentages of the population being at most heat-risk (seven socioeconomic and health factors). The map rates census tracts on a scale of 'Very High Heat Risk' to 'Very Low Heat Risk'. The Heat Priority Score map shows almost all of Tempe's western border and the area surrounding ASU as 'High Heat Risk.' The Apache Boulevard corridor and blocks between Broadway Road and Southern Avenue are identified as 'Very High Heat Risk'.



Urban Heat Severity

Percent coverage

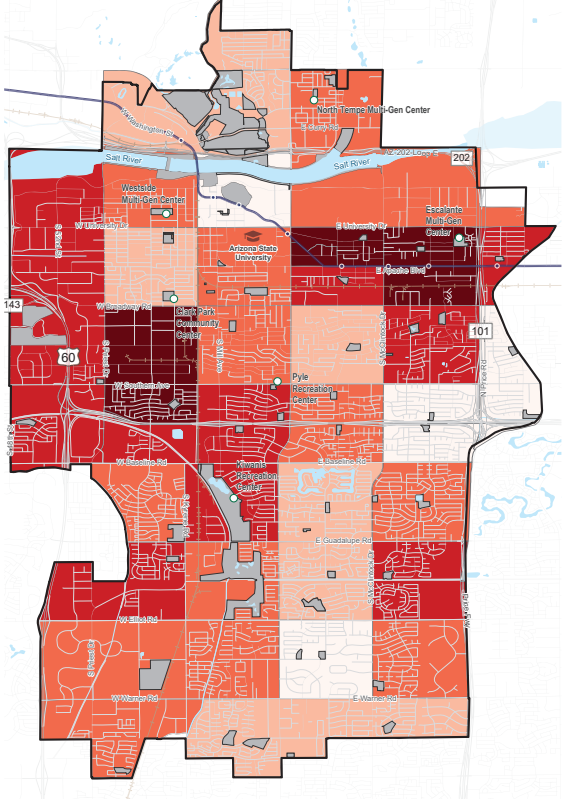


Legend

- Tempe Parks and Recreation
- Recreation Centers
- Valley Metro Light Rail Stations
- Valley Metro Rail Line
- City of Tempe
- Arizona State University

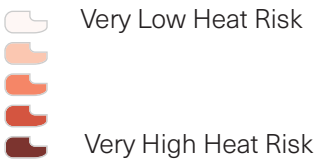
Map 14 Heat Priority Score (HPS)

Source: City of Tempe, ASU Technical Report, Tempe Urban Development II 2020



Heat Priority Score (HPS)

by Census Tract 2015 to 2020



¹ 2022 Trust for Public Land. www.tpl.org
² ASU Technical Report, Tempe Urban Development II 2020, Establishing an Urban Heat Exposure Severity Score for Infrastructure Prioritization in Tempe, Arizona, Using NASA Earth Observations and LiDAR

Map 15 Urban Heat Severity Map

Source: Urban Heat Severity 2019-2020, The Trust for Public Land, Descartes Labs, USGS, Tempe.Gov

