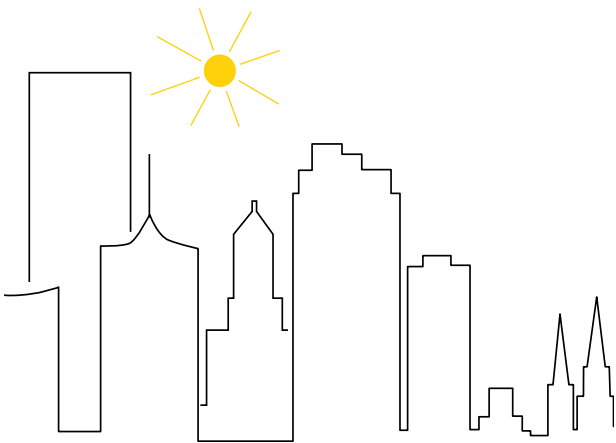


Hot Observations About Shade in **Tulsa**

RESEARCH BRIEF

Shade is the most effective way to cool people outside...



It helps people go about their daily lives [safely and more comfortably](#), even when it's hot outside. Shade plays an important role in bridging cooling infrastructure gaps in places like Tulsa, where extreme heat events are becoming more frequent and severe. Fortunately, shade can be a simple, cost-effective, and flexible solution. It can come from any object that blocks the sun, such as trees, buildings, awnings, and more.

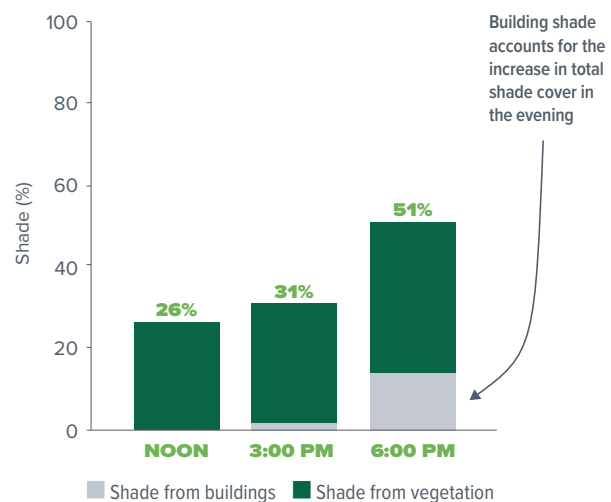
...but most cities do not have enough shade.

The UCLA Luskin Center for Innovation's national [Shade Map](#), created in collaboration with American Forests, makes it easy for leaders in 360 American cities to understand when and where shade is cast and to support taking action where shade is lacking.

American cities don't have much shade at noon, including Tulsa.

In Tulsa, the average shade coverage at noon is 26% (on par with the [national average](#) of 27%). Nearly all of midday shade (99%) comes from trees, underscoring the importance of nature-based shade. By 6 PM, total shade coverage nearly doubles to 51%, which is slightly lower than the national average of 59%. Like most cities, buildings account for about one-quarter of the total shade later in the day. This suggests that buildings may be an underused source of afternoon and evening shade.

Shade throughout the day for the City of Tulsa



Some areas of Tulsa do not have enough shade.

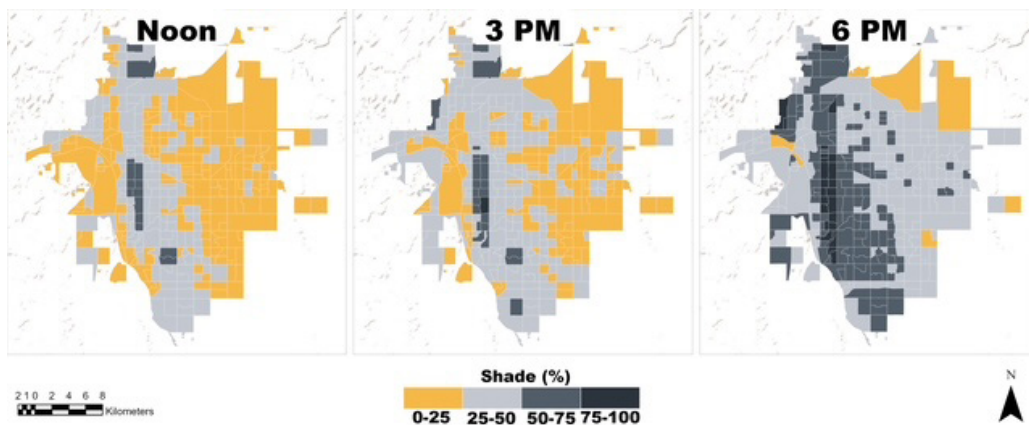
Tulsa has both shade oases, where shade is plentiful, and [shade deserts](#), which are areas lacking adequate shade infrastructure. Some neighborhoods have a lot of shade, and others have little; these shade gaps can worsen health disparities and other inequities.

Where shade is needed most...

Tulsa is a city with a rich heritage, including its connection to Route 66, making it a notable global tourist destination. As it gets hotter, it is important to increase shade in places where people are most exposed to heat, such as [schools](#) and [public transit](#). **Low-shade areas highlight the need for targeted interventions to ensure equitable access to cooler, safer outdoor spaces.**

While Tulsa has about as much shade coverage as the average American city, it is important to address its shade disparities. As the map below illustrates, more than half of the city's neighborhoods have less than 25% shade at noon, while others have much more. **The least shaded areas are in less affluent, more diverse communities, including the city's eastern part, where roughly 50% of residents are people of color and live below the poverty line.** In addition to having less vegetation, [studies](#) show that low-income neighborhoods are also less likely to have access to air conditioning and other cooling infrastructure. Therefore, it is crucial to close the shade gap to ensure the safety and well-being of those most in need.

City of Tulsa shade variation across census block groups



Visit our [Shade Map](#) to see which neighborhoods may need more shade. Learn more about our [heat equity research](#).