**2.6.3b Heat Islands**

* What is an Urban Heat Island?
* The term "heat island" refers to air and **surface** that are than nearby areas.
* What factors can cause a Heat Island?
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* Heat Islands
	+ The principal reason for the nighttime is that buildings block surface heat from into the relatively cold night sky.
	+ Tar, , brick and concrete absorb and release it as heat, rather than reflecting it (without heat) like soil does.
* Rural vs Urban
	+ During the day in areas, the solar energy absorbed near the ground evaporates from the vegetation and soil. Thus, causes .
	+ In , where there is less , the buildings, streets and sidewalks absorb the majority of solar energy input.
* What about the buildings and the people in them?
	+ Remember, the way the heat island effect works, is that it the overall temperature of the city.
		- Like the effect: trapping heat on the surface
	+ But in particular, it raises night time temperatures (not always day time) by the of heat, which makes an overall increase
	+ Example: Night temperatures in Phoenix are degrees F warmer than before 1970
* Effects of Heat Islands
	+ Can raise temperatures over 1 to more than 10 degrees F over that of surrounding areas.
	+ Can increase peak demand
	+ Air costs increase
	+ Air increase
	+ -related illness and increase