

They look good in the daytime



and remind us of a simpler time when streets were lit by gaslight, or subtle incandescent lamps.

But the modern look-alikes we see today are far from subtle, and at night these fixtures reveal their **costly and inefficient** flaws as manufacturers try to pack modern high-intensity lights into fixtures sitting directly in your field of view.

Gone is the soft glow of turn-of-the century illumination, replaced by blinding lamps intended to be mounted high on tall poles and aimed downward (instead of into your face).

City planners think they're getting a 2-for-1 deal when they try to have pretty Victorian fixtures by day, and the same fixture illuminate streets to bright 1980's standards, but that's a costly mistake.

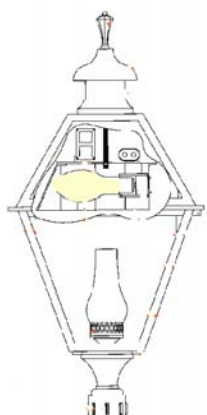
Since the "acorn" antique design only places about 30% of its light on the ground at angles useful to human vision, about **three times as many need to be installed** to do the work of a "normal" streetlight on a high pole. That's about three times more cost for the fixtures (at \$1200 - \$1500 each) plus three times the amount of electricity that must be purchased every month, just to pay for fixtures that **produce more glare than useful light**.

As our population ages, older eyes are less tolerant of the glare produced by modern high-intensity sources, and **public safety** suffers as a result. Direct glare scatters light in older eyes, creating a "luminous veil" similar to what a motorist sees when sunlight shines into a dirty windshield.

Adding more light does not improve vision if you are also adding more direct glare. Fortunately, there are more choices in better lights than we presently see in most city "renovation" projects, and a number of manufacturers offer historic look-alikes that address the problems of glare and energy waste.

Energy-efficient fixtures with optics that focus the light out of our eyes and onto the streets have been available for decades, but are not presently among the outdated list of "approved" fixtures by the City of Tulsa. This is an oversight our city council needs to correct.

By allowing the use of IES-approved "Full Cutoff" fixtures for municipal streetlighting, Tulsa can have more **eye-friendly lighting** for less energy, save tax dollars that are currently wasted up into the clouds, and still have fixtures that look good in the daytime.



Examples of glare-free fixtures are the "Savannah" from Hadco (left) and the "Parklane" from Penn Globe (right).

Each of these hide the lamp from direct view by recessing them beneath solid, opaque crowns that reflect more light down to the pavement, which also reduces the amount of light (and energy) needed for the task. **A sampling of manufacturer's literature:**

www.penn globe.com/

www.aal.net/aal-promenade.pdf

www.hadcolighting.com/pdf/darksky/darksky.pdf

www.ge-lightingsystems.com/gels01/catalog/area/tr1c.pdf

