



Ozarks ECC / City of Fayetteville Arkansas Joint LED Street Light Pilot Project

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A report submitted to Senior Management at OECC, Mayor and the City of Fayetteville, Arkansas to explain the results of the 2017 LED Street Light pilot project.

This report aims to provide details of the impact of the LED Pilot Program partnership with the City of Fayetteville. The established neighborhood of Willow Springs on West Wedington Dr. was identified to perform the LED replacement of 16 – 100 W high-pressure sodium lights with 16 - 54 Watt 4000 k LED lights. Installation of the new LED fixtures including wiring schematics and installation of surge protection took approximately one week to complete.

A pre-install light measurements were performed on 9/2/17 and post-install measurements were performed on 11/1/17. Both measurements were performed pre-dawn without the presence of moonlight.

Approximately one month before the installation of the lighting began, we mapped the neighborhood and demarked the location of each new LED fixture (see attached map). This map, along with a presurvey (via Survey Monkey) was attached to an e-mail that was sent to approximately 225 Ozarks Electric members in the neighborhood in order to collect thoughts and opinions on the existing street lighting. The survey was repeated approximately two weeks after the LED retrofit. Results are presented below and on the following page.

Pre-Survey Results:

- 42 total surveys
- 85% of respondents noticed dark spots on street
- 67% of total respondents do not feel safe on the sidewalk after dark due to lack of adequate street lighting
- 33% of total respondents walk sidewalks at night and of those,
- 85% do not feel safe on the sidewalk after dark due to lack of adequate street lighting

Post-Survey Results:

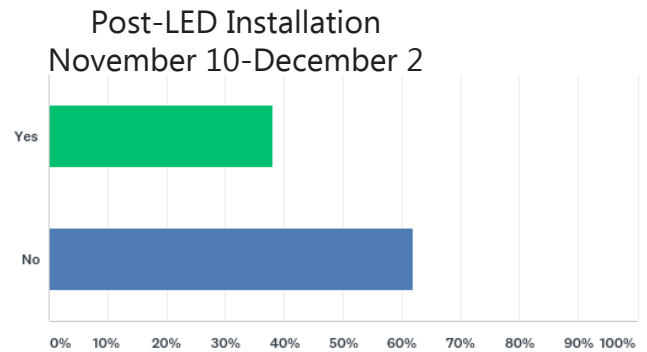
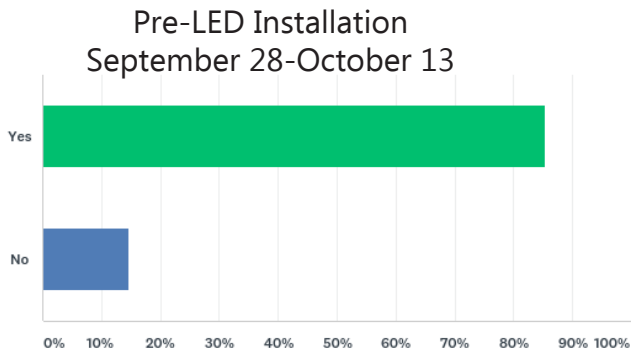
- 40 total surveys
- 33% of respondents noticed dark spots on street
- 24% of total respondents do not feel safe on sidewalk after dark due to lack of adequate street lighting
- 71% of total respondents walk sidewalks at night and of those,
- 29% do not feel safe on the sidewalk after dark due to lack of adequate street lighting
- 95% of the neighborhood would like to see LED street lights in the entire neighborhood

We will continue to track the cost and maintenance associated with the streetlights and potentially develop a white paper to help with an analysis of their performance.

Ozarks ECC/ City of Fayetteville LED Street Pilot

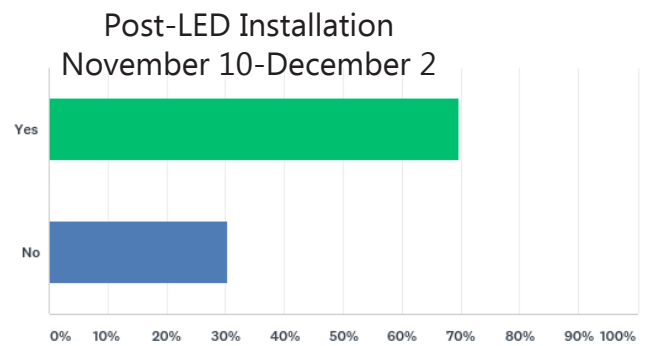
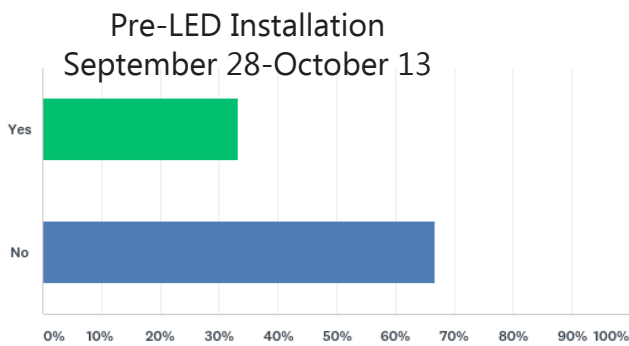
Pre and Post Installation Survey Results

Do you notice dark spots (areas not lit by a street light) on the streets in your neighborhood?



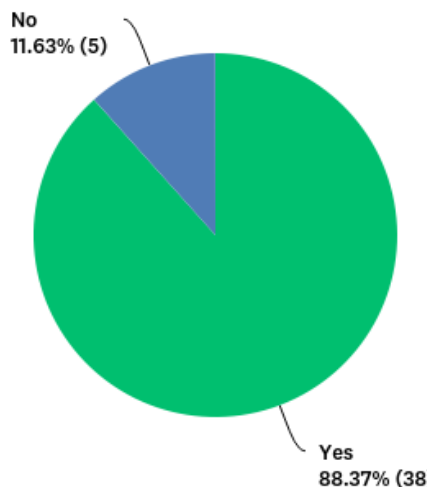
47% fewer respondents noticed dark spots after the LED lights were installed.

Is the current level of light on your street adequate to make you feel safe on the sidewalk after dark?

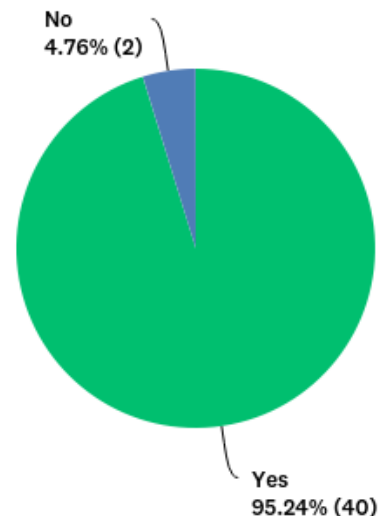


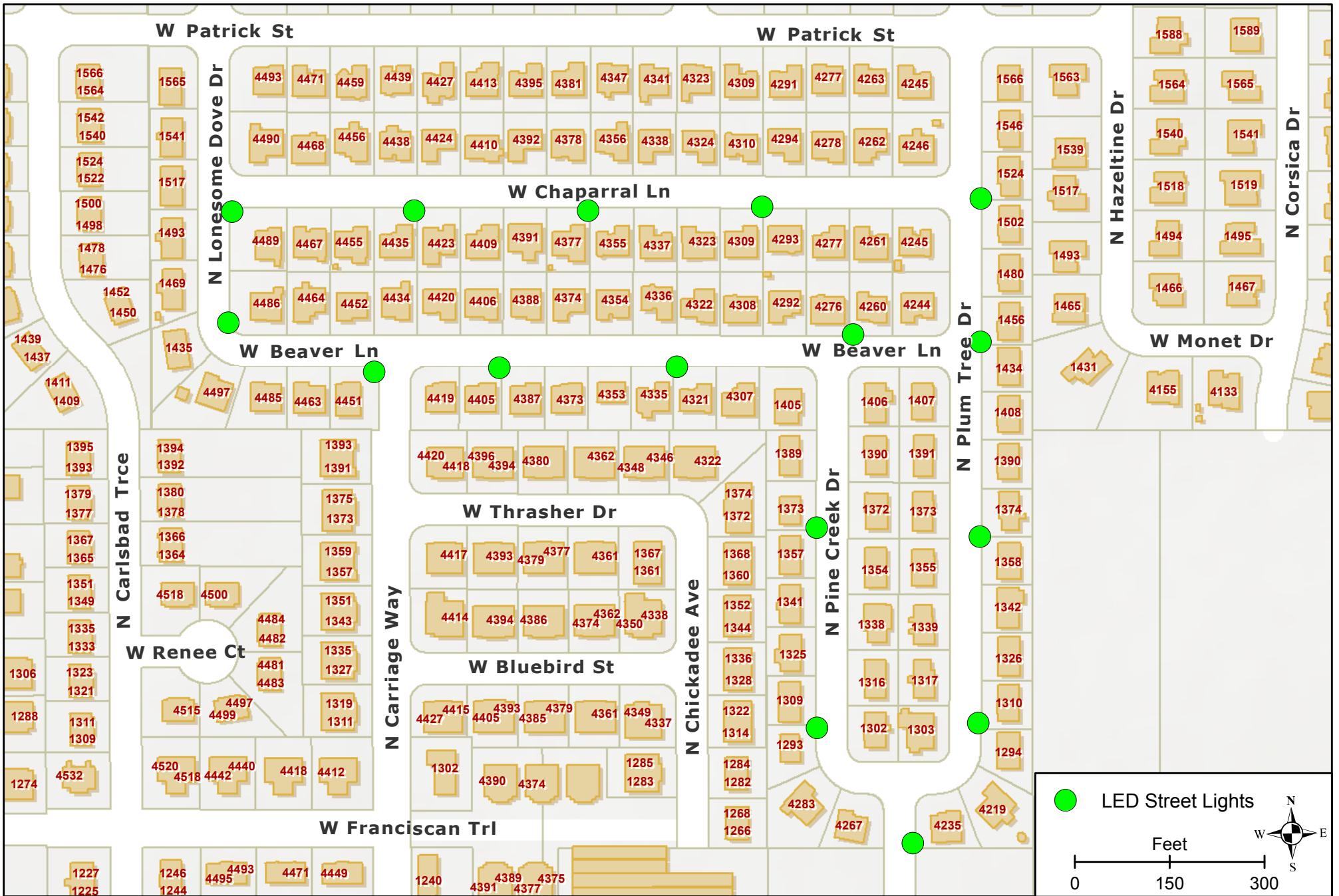
36% more respondents felt safe on the sidewalk at night after the LED lights were installed.

Do you feel that the light color of the LED lights is aesthetically appealing?



Would you like to see LED street lights in the entire neighborhood?





LED Street Light Replacement

Fayetteville, AR



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