

# Report of Community Input on Sample LED Fixtures

By the end of the summer of 2016, Northampton plans on replacing all of the city's public streetlights with new LED lights. Over 2,000 city owned streetlights will be replaced, saving the city an estimated \$170,000 in operating costs annually. According to Siemens Industry, Inc., the company chosen by Northampton to upgrade the streetlights, the new LED lights will use 70% less electricity than the current fixtures, further reducing the municipality's greenhouse gas emissions. The new streetlights will also last four times longer than current bulbs and, unlike the current bulbs, they contain no mercury, which is highly toxic to humans and other species if not disposed of properly.

The Northampton City Council has given Mayor Narkewicz approval to advance this \$980,405 project. The city anticipates receiving nearly \$190,000 in electric utility energy efficiency rebates from National Grid to offset this cost. With that level of rebate and given the annual operating cost savings, the LED streetlights are expected to pay for themselves within five years.

The new LED streetlights will also produce less light than the current fixtures, however a person's ability to perceive objects by the LED streetlights will be an improvement over the current technology. This is because the spectrum of light provided by LED light is more compatible with human vision. Therefore, less light is needed to provide the same level of clarity. This is particularly true when compared to the yellow light produced by high-pressure sodium lamps that comprise the bulk of the city's current streetlights.

One thing the new LED lamps will not do is waste any light skyward. Light will instead be directed closer to where it is actually needed, meeting Northampton's Dark Sky requirements. Current streetlights were grandfathered when the city adopted the Dark Sky Ordinance in 2006.

## **City Sought Out Community Input**

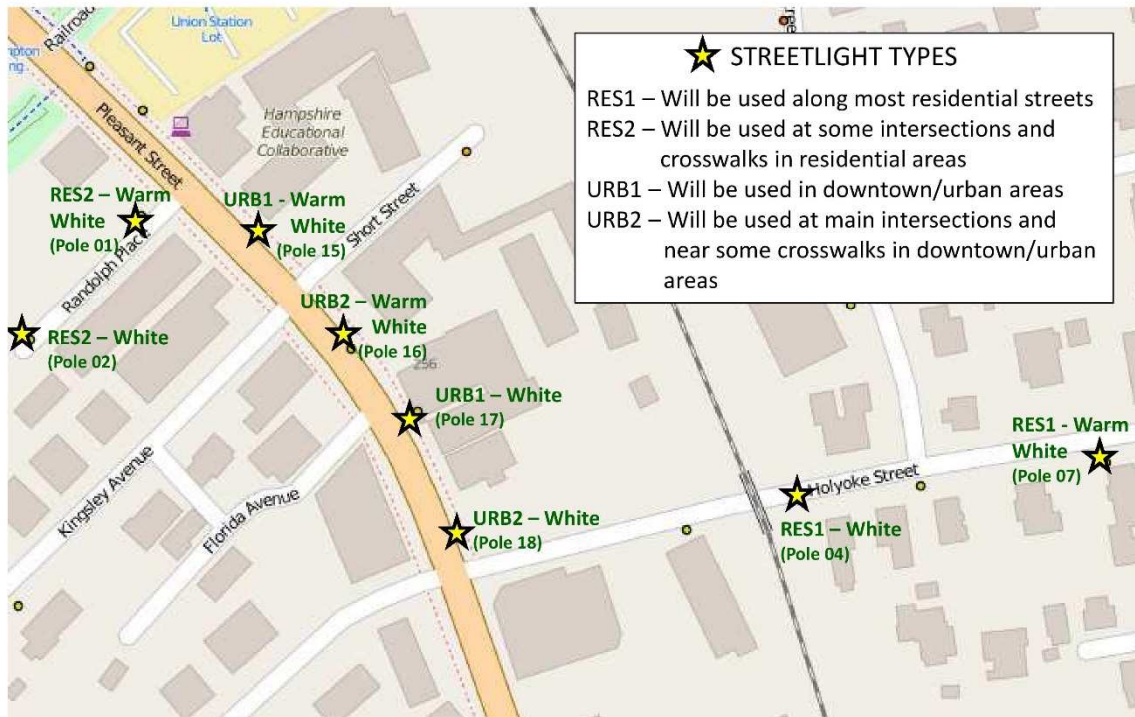
LED fixtures can be made to produce white light ranging from a cooler, bluer light, to a neutral white light, to a warmer, more yellow light. Because City staff and elected officials have previously received comments from residents that they did not want a blue-white light, the City had Siemens install eight sample LED fixtures, four "white" and four "warm white" at four brightness levels sized to represent streetlights the City plans to install in the following situations:

- Residential 1: (RES1 on the map) is a brightness level sized for use along most of the streets in Northampton's residential areas.

- Residential 2: (RES2 on the map) is a brightness level sized for use at some intersections and at some crosswalks in Northampton’s residential areas.
- Downtown/Urban 1: (URB1 on the map) is a brightness level sized for use along the primary streets in downtown Florence and downtown Northampton.
- Downtown/Urban 2: (URB2 on the map) is a brightness level sized for use at intersections of primary streets in downtown Florence and downtown Northampton and near many downtown crosswalks.

From April 29 to May 9 the City requested feedback from community members on these sample LED lamps. The lamps had been installed just south of downtown Northampton along Randolph Place, Holyoke Street and on Pleasant Street between Randolph and Holyoke.

## Seeking Community Input – White or Warm White LEDs? Northampton Sample LED Fixture Locations



*Map provided to guide community input*

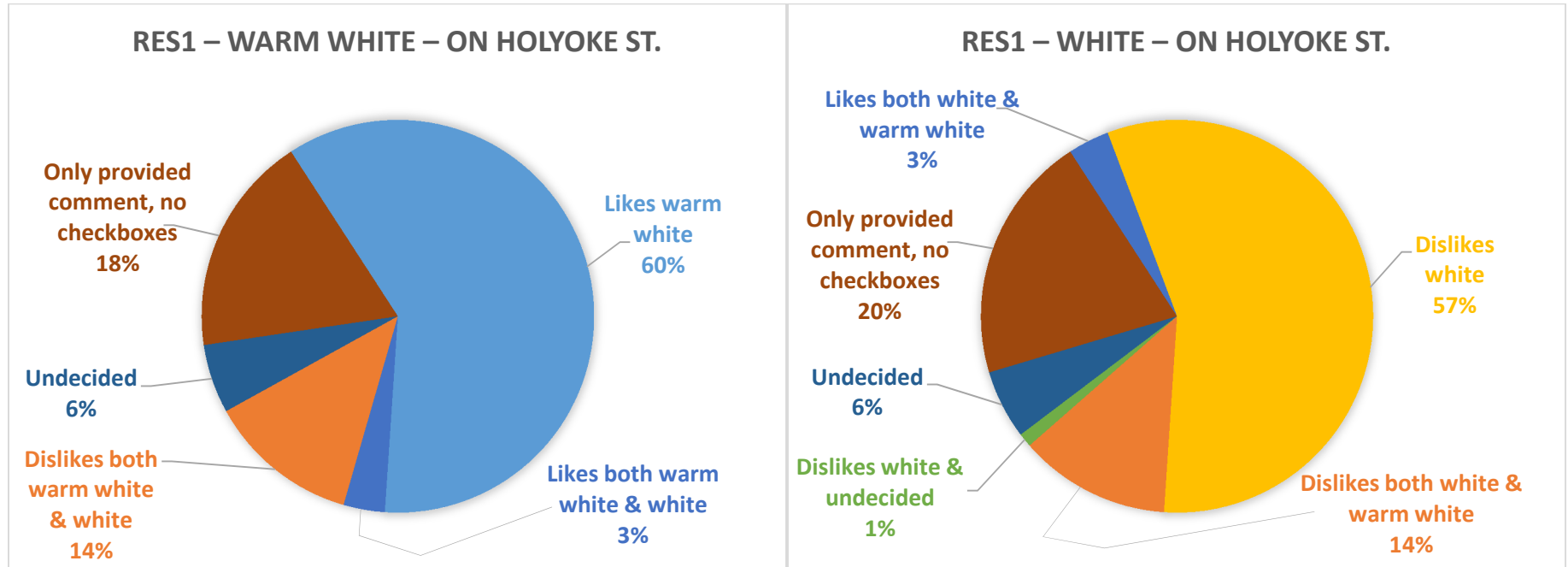
Community members were able to go to a website to see a map of the sample lamp locations and complete a feedback form on what fixtures are preferred. While the City was particularly interested in hearing how well people liked the “white” versus the “warm white” colors, the

feedback form allowed for respondents to comment on any aspect of the lights that they wished.

Altogether, eighty-eight people responded to the survey and the City will use this feedback to make final decisions about which lamps are to be installed before the City gives Siemens the go-ahead to proceed with installation.

The following is a compilation of responses received from the community.

## SAMPLE LAMP RES1 – THIS IS THE LIGHT THAT WILL BE INSTALLED ALONG MOST RESIDENTIAL STREETS

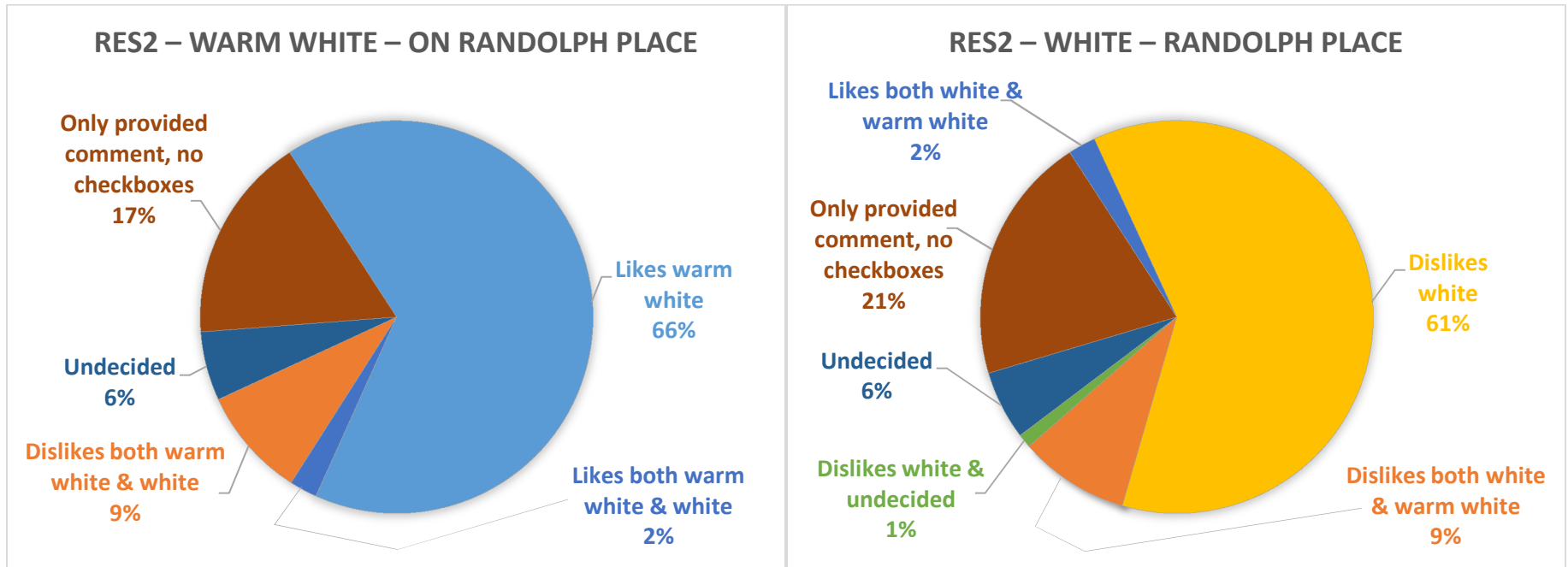


### COMMUNITY'S REPOSE:

Northampton installed two of the RES1 LED streetlights on Holyoke Street, one “white” and one “warm white,” and asked the community to respond. Of the 88 respondents:

- **63% liked the fixture with warm white LEDs** and 3% liked it with either warm white or white LEDs
- **70% disliked the fixture with the white LEDs** and 13% disliked it with either white or warm white LEDs. An additional 1% checked both the dislike and undecided boxes for the white LEDs leading us to think that they were leaning toward not liking the white LEDs.
- **6% were undecided**
- 18% of the respondents for the warm white LEDs and 20% of the respondents for the white LEDs only provided input in the comment box.

**SAMPLE LAMP RES2 – TO BE USED PRIMARILY AT SOME INTERSECTIONS AND CROSSWALKS IN RESIDENTIAL AREAS AND POSSIBLY ALONG A FEW RESIDENTIAL STREETS WITH HIGH TRAFFIC FLOW**

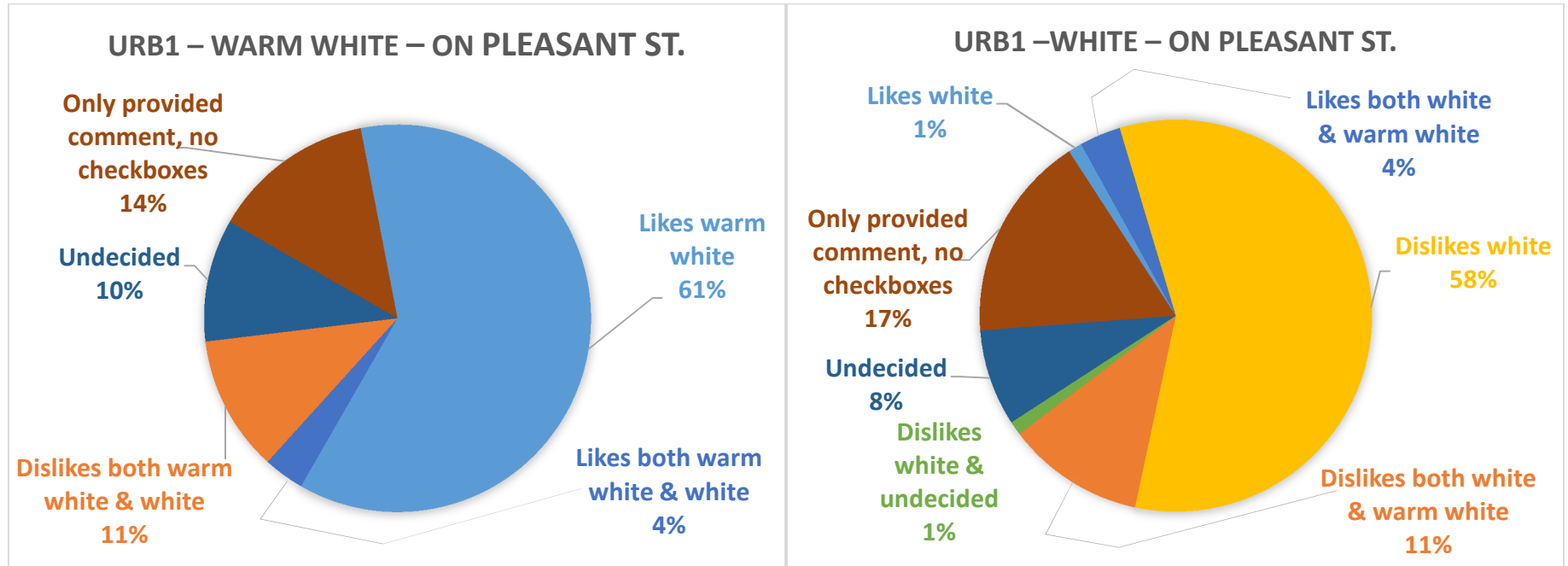


**COMMUNITY’S REPOSE:**

Northampton installed two of the RES2 LED streetlights on Randolph Place, one “white” and one “warm white,” and asked the community to respond. Of the 88 respondents:

- **68% liked the fixture with warm white LEDs** and 2% liked it with either warm white or white LEDs
- **70% disliked the fixture with the white LEDs** and 9% disliked it with either white or warm white LEDs. An additional 1% checked both the dislike and undecided boxes for the white LEDs leading us to think that they were leaning toward disliking the white LEDs.
- **6% were undecided**
- 17% of the respondents for the warm white LEDs and 21% of the respondents for the white LEDs only provided input in the comment box.

## SAMPLE LAMP URB1 – THIS IS THE LIGHT THAT WILL BE INSTALLED ALONG DOWNTOWN/COMMERCIAL STREETS

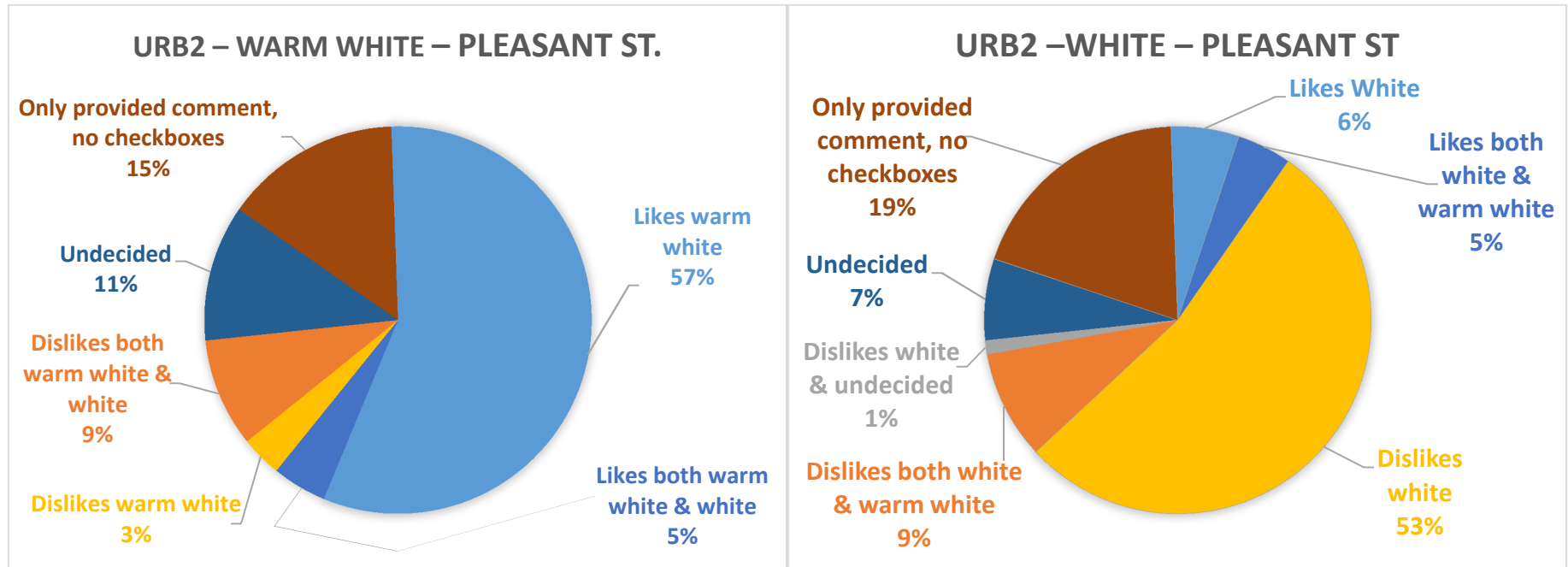


### COMMUNITY'S REPOSENSE:

Northampton installed two of the URB1 LED streetlights on Pleasant Street, one “white” and one “warm white,” and asked the community to respond. Of the 88 respondents:

- **65% liked the fixture with warm white LEDs** and 4% liked it with either warm white or white LEDs
- **10% were undecided on the warm white lights**
- **5% liked the white LEDs** and 4% liked it with either warm white or white LEDs
- **70% disliked the fixture with the white LEDs** and 11% disliked it with either white or warm white LEDs. An additional 1% checked both the dislike and undecided boxes for the white LEDs leading us to think that they were leaning toward disliking the white LEDs.
- **8% were undecided on the white LEDs**
- 14% of the respondents for the warm white LEDs and 17% of the respondents for the white LEDs only provided input in the comment box.

**SAMPLE LAMP URB2 – THIS IS THE LIGHT THAT WILL BE INSTALLED AT PRIMARY INTERSECTIONS AND SOME CROSSWALKS ALONG DOWNTOWN/COMMERCIAL STREETS**



**COMMUNITY’S REPOSE:**

Northampton installed two of the URB2 LED streetlights on Pleasant Street, one “white” and one “warm white,” and asked the community to respond. Of the 88 respondents:

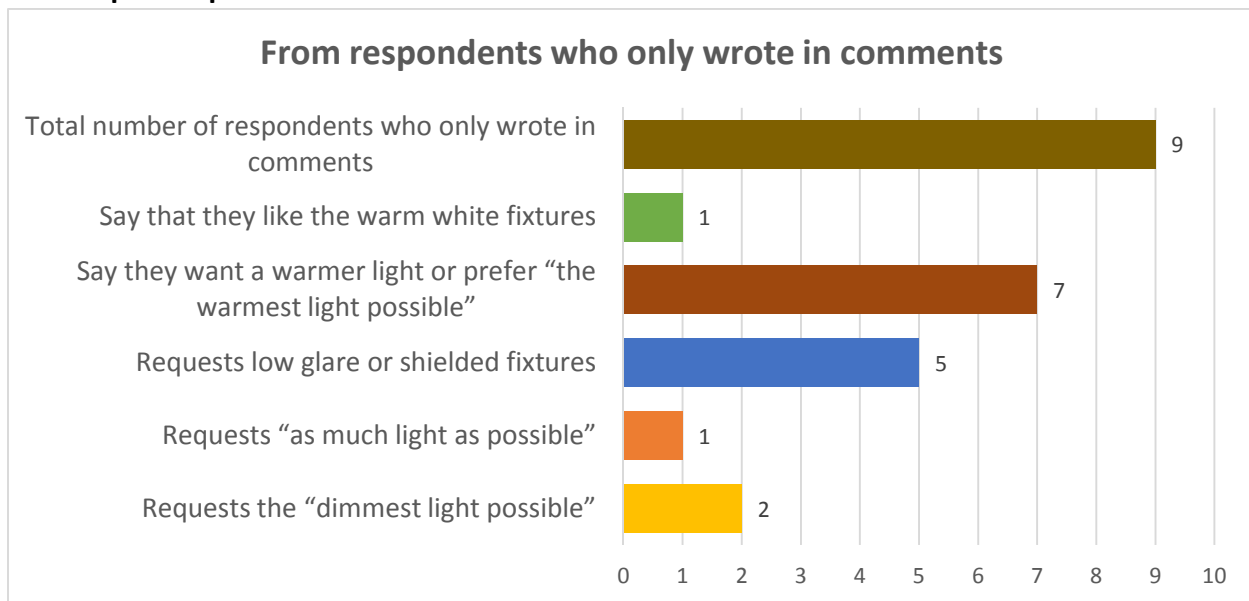
- **62% liked the fixture with warm white LEDs** and 5% liked it with either warm white or white LEDs
- **12% disliked the warm white LEDs** and 9% disliked both the warm white and white LEDs
- **11% were undecided on the warm white lights**
- **11% liked the white LEDs** and 5% liked it with either warm white or white LEDs
- **63% disliked the fixture with the white LEDs** and 9% disliked it with either white or warm white LEDs. An additional 1% checked both the dislike and undecided boxes for the white LEDs leading us to think that they were leaning toward disliking the white LEDs.
- **7% were undecided on the white LEDs**
- 11% of the respondents for the warm white LEDs and 7% of the respondents for the white LEDs only provided input in the comment box.

## **COMMUNITY COMMENTS**

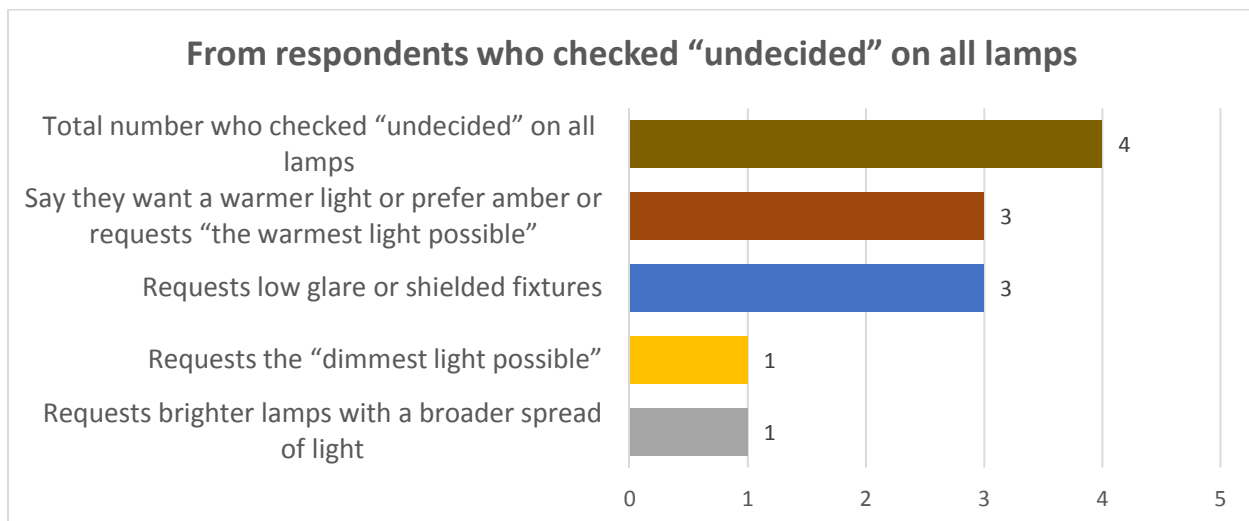
Twenty-two respondents only checked off check boxes. Sixty-six respondents wrote in comments. To look at respondents comments within the context of which, if any, checkboxes each respondent marked, the respondent's comments have been divided into the following categories:

- Respondents who only wrote in comments
- Respondents who checked "undecided" on all lamps
- Respondents who checked "dislike" for at least one warm white lamp
- Respondents who checked "like" for at least one warm white and checked "dislike" for at least one warm white lamp
- Respondents who checked "like" for at least one warm white lamp

- **Nine respondents only wrote in comments, they did not fill out any of the checkboxes for specific sample lamps. Comments received from these nine included:**

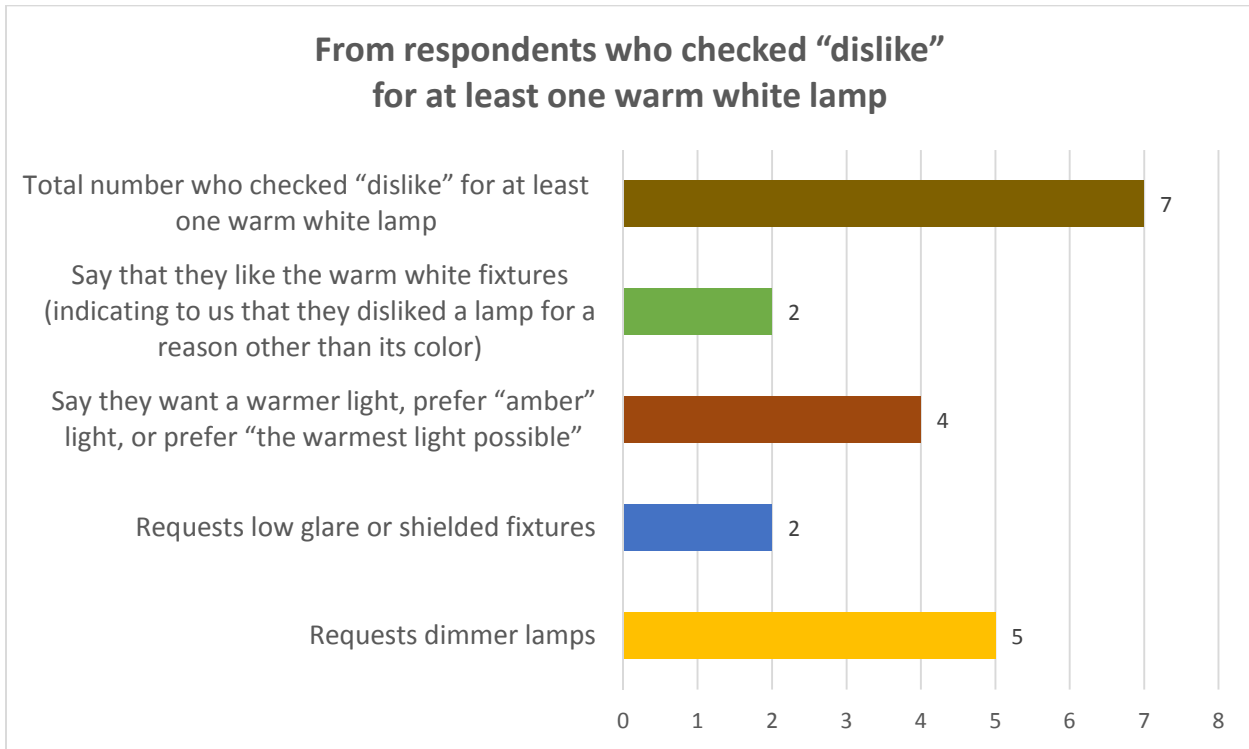


- **Four respondents checked "undecided" on all lamps and left a comment. Comments received from these four included:**

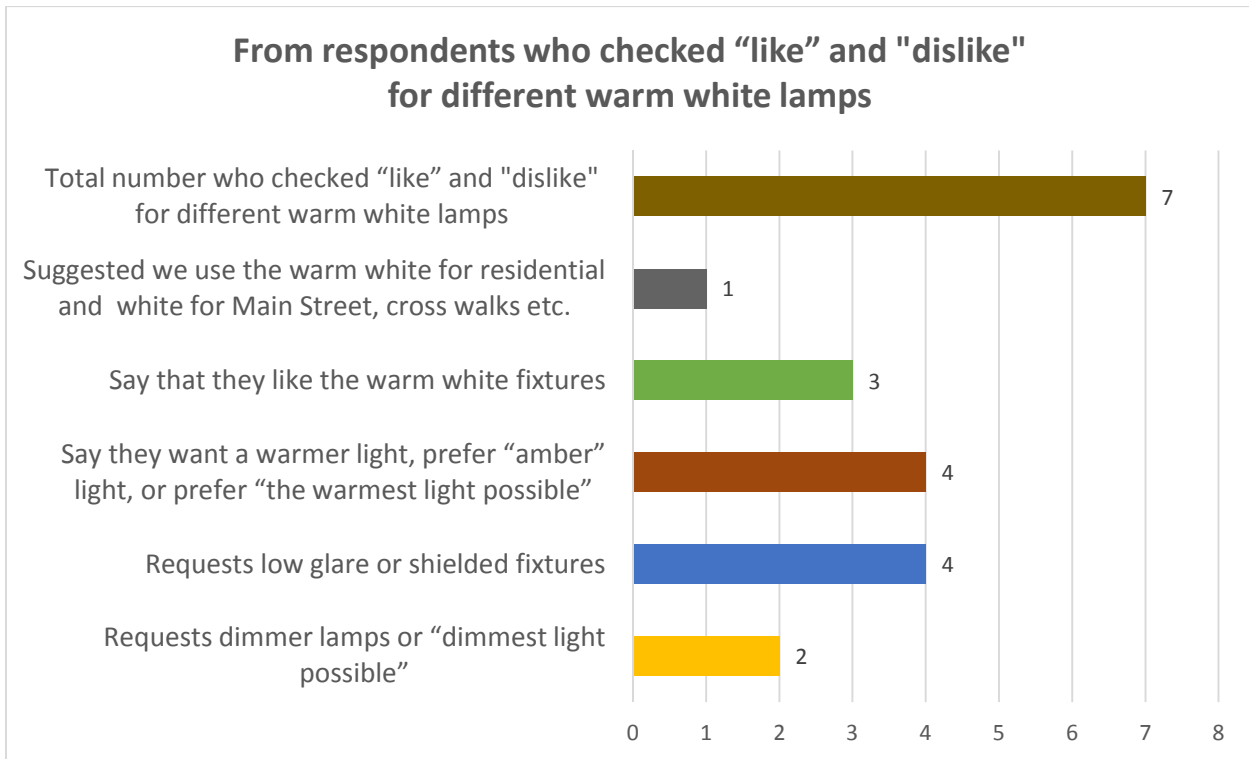




- **Seven respondents checked “dislike” for at least one warm white lamp and left a comment. Comments received from these seven included:**



- **Seven respondents checked “like” for at least one warm white lamp, checked “dislike” for at least one warm white lamp and left a comment. Comments received from these seven included:**



- **Thirty-one respondents checked “like” for at least one warm white lamp and left a comment. Comments received from these thirty-one included:**

