



Figure 1: Test LED Streetlight being installed at the corner of Perkins Rd. and Ocean Blvd. in June

The Streetlight Project is a major initiative of the Jenness Beach District to upgrade about 70 streetlights to LED fixtures in order to reduce energy use, electricity costs, and light pollution, while improving visibility. A \$30,000 warrant article was passed at the District annual meeting in April to fund the project. The economic payback period is under 3 years.

Streetlight Committee

Randy Crapo, Jenness Beach District Commissioner
Sam Winebaum
Jonathan Menes
Michele Sopher

Contact: jennessbeachstreetlights@gmail.com

Updates: www.nextdoor.com, Cable/Perkins neighborhood

Info: www.town.rye.nh.us . Click on the Jenness Beach District page under *Boards/Committees*.

Upon further study, and considering the public comments, no streetlights will be removed from the Jenness Beach residential areas.

Involving Jenness Beach Residents

Notifications

In June, the 600 property owners in the District were notified of the start of the project through mailed postcards, a newspaper press release, a Rye Newsletter article, online postings on *Nextdoor.com*, the District page on the Town of Rye website, and posted notices. A project map and a list of Frequently Asked Questions were also made available.

Marking Utility Poles

Utility poles were marked to indicate the test LED lights and the intended streetlight removals and additions, and a map was published showing streetlight locations and changes to be made.

Streetlight Social & Information Session

A Streetlight Social was held on July 13th to preview test LED fixtures, and an Information Session was held on July 19th at the Rye Public Library. About 25-30 people attended each event.

Figure 2: Residents enjoy desserts under the backlight of a test LED streetlight at the Streetlight Social in July. Notice the good color rendition.



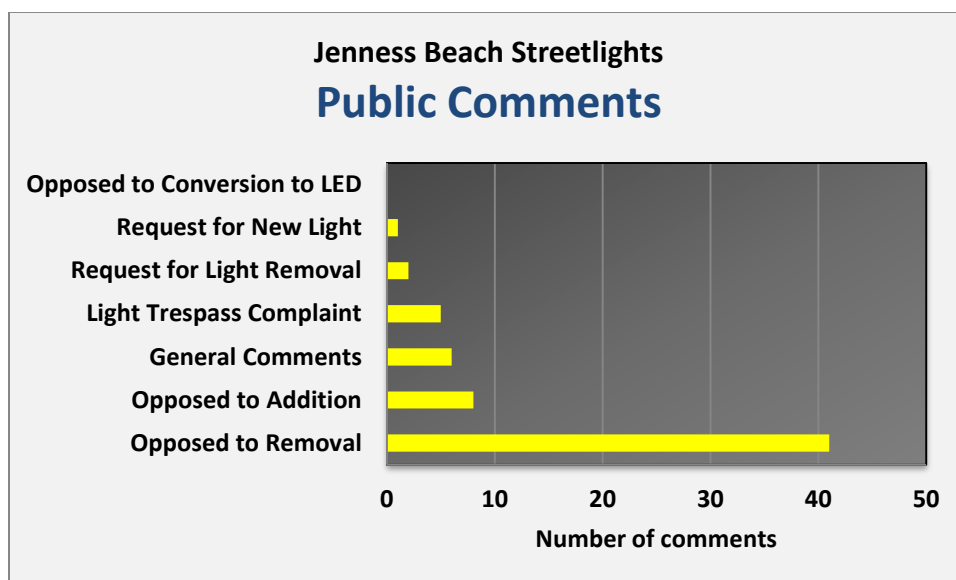
Public Comment Period

The Public Comment Period ran from mid-June to August 31, 2016, and over 60 comments were received. The Streetlight Committee thanks all residents who took the time to comment on the lights near their home and on the project in general.

Public Comment Results

Total Comments: 62

Note that several people sent more than one comment about the same issue. The numbers below refer to the number of comments, not the number of people.



Number opposed to converting to LED lights: 0

Most of the Jenness Beach streetlights use obsolete mercury vapor technology; there are many advantage to upgrading to newer LED technology. All existing streetlights will be converted to LED lights.

Number opposed to removing one or more streetlights: 41

In general, residents claimed that the high rate of pedestrian activity sharing the streets with vehicles makes the lights highly desirable, and the lights contribute to the unique social atmosphere in the District. There was a clear message from the community to keep currently illuminated areas lit. Because the Streetlight Committee supports enhancing the health and social opportunities for residents who walk, meet, or play in the evening or early morning, **the Streetlight Committee has decided not to remove any existing streetlights.** The only exception is that the light at Jenness Beach will be removed because it will be replaced by parking lot lighting during the State Park renovation.

Despite this decision to not remove lights, the Committee is working hard to achieve its original goals by choosing replacement lights that reduce electrical use by at least 70%, that avoid light trespass into people's homes, and that give off no upward light that contributes to sky glow and obscures the view of the night sky.

Number opposed to adding new lights: 8

Most of the existing streetlights were initially installed over 50 years ago. The Streetlight Project is an opportunity to align the lighting in the District with modern roadway lighting standards and to update lighting patterns for current and future needs. The Rye Police produced a 10-year report of motor vehicle accident and calls in the District, and the Police Chief made requests for lighting in certain areas, such as at intersections and at Ocean Blvd. pedestrian crosswalks. **The Streetlight Committee will add streetlights at the three pedestrian crosswalks on Ocean Blvd.** Every effort will be made to reduce the impact of the lighting on the private properties in those areas.

Number of complaints about light from shining into their windows/skylights: 5

LED lights are more directional than old-style streetlights and provide the opportunity to choose lights with desirable light patterns to match the application. Also, only lights with 0% uplight and low levels of high angle light are being considered. These measures should considerably reduce light trespass into houses.

Number asking for a light to be added (Ocean/Powers): 1

While a light will not be added in this location during this project, a nearby light will be added at the crosswalk in front of the Rye General Store, which will improve lighting in the area.

Number asking for an unmarked light to be removed: 2

One commenter felt that there were too many lights on Old Beach Road, while another felt that there were not enough. The existing lights will be switched to LED, which will improve visibility on the road, while eliminating nuisance light.

Another commenter asked that one of the lights on Cable Rd. near his house be removed. This light is critical in maintaining illumination for pedestrians on the only sidewalk in the District, and it will therefore be maintained. However, every effort will be made to reduce the impact of the light onto the commenter's property.

Number of general comments: 6

Several residents made general remarks about the project or asked for more information. One commenter sees the need for lighting guidelines and for reduced and enforced speed limits in the District. One asked that new lights be concentrated in a narrow area. Another asked that current ambiance of the neighborhood be maintained by not increasing lighting. Two others expressed general support for the project.

Next Steps



Fall 2016 - The Request for Proposals (RFP) for the installation of the streetlights is being finalized and will be sent out to qualified electrical contractors. An installer will be chosen based on the best value for the Jenness Beach District, not necessarily the lowest price. The light at Jenness Beach State Park will be removed by Eversource.

Winter 2016/17 – Streetlights and photocells will be ordered and stored. Some tree trimming will occur to improve access to a few of the streetlights.

Spring 2017 – Existing streetlights will be converted to LED. Eversource will inspect installation and approve conversion from their OL electricity rate to the lower EOL LED rate.

Test LED streetlights installed

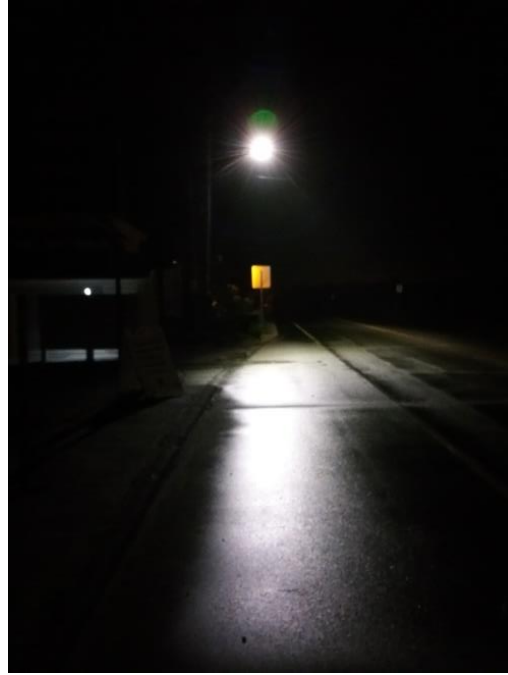
The roads in Jenness Beach are narrow by roadway standards, and the straight sections of road provide a design challenge in providing a streetlight that does not over-light the area and shine into windows, as many of the existing lights do now. To avoid these problems, the Streetlight Committee has established strict criteria in specifying lights with appropriate light patterns. In addition, there has been much publicity this year about the health hazards of blue light at night for humans and for wildlife. For this reason, the Committee has restricted its choice of fixtures to warmer color lights that have been certified by the International Dark Sky Association and endorsed by the American Medical Association.

Two test LED streetlights were installed on Ocean Boulevard. The test LED streetlight on the left, below, is a warmer color (less blue light) with a wide oval light pattern. Its light was preferred by the Streetlight Committee and residents who commented on it. The test LED on the right is a whiter light (more blue light) with a long, narrow light pattern that shines up and down the street. It has a backlight shield on it which keeps it from lighting up the house behind it.

The Streetlight Committee is considering lights with a warmer color temperature, similar to the left photo, and a narrow light pattern, similar to the right photo, for the narrower streets in the District.



**Test LED streetlight at the corner of Perkins Rd.
& Ocean Blvd.**



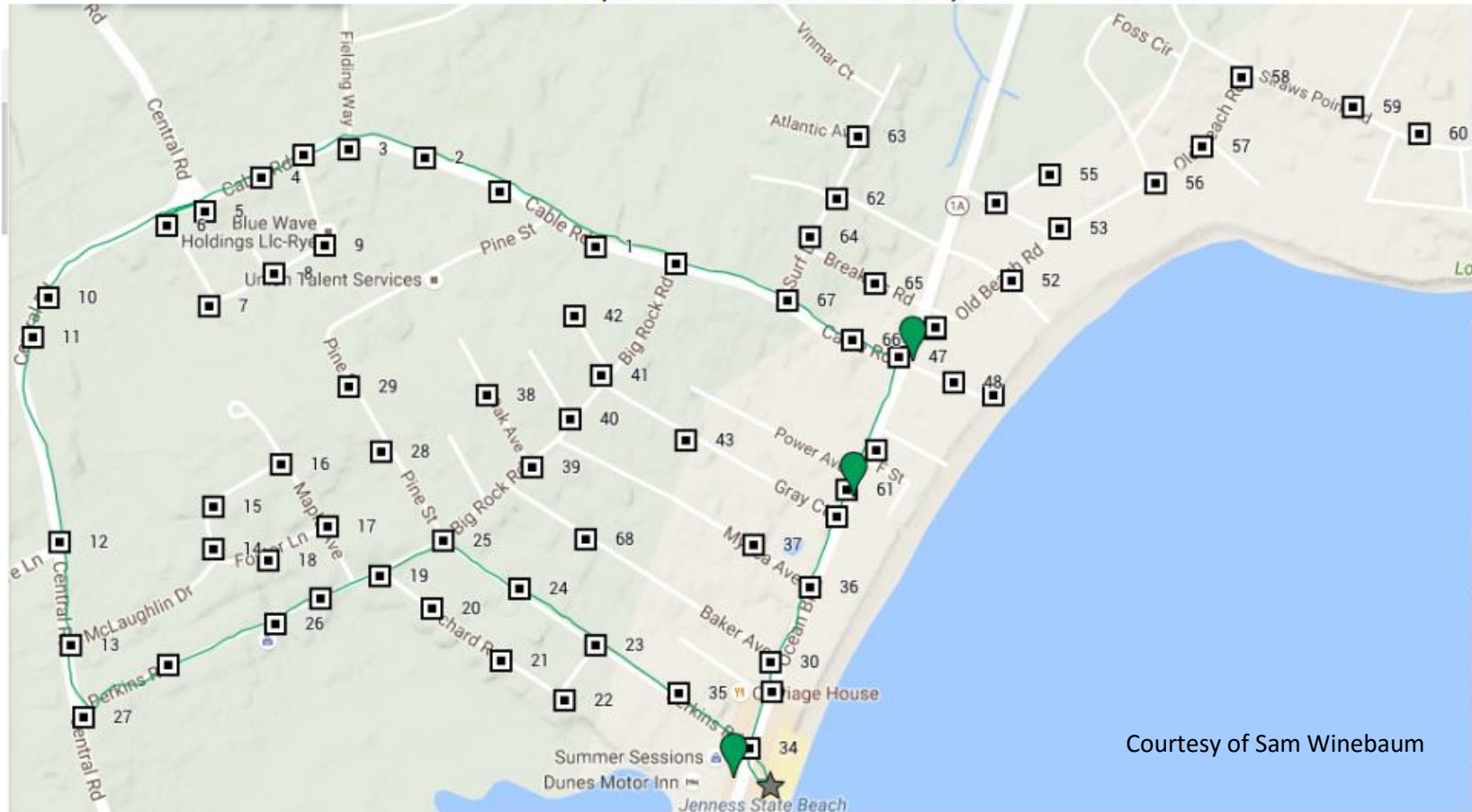
**Test LED streetlight near Jenness Beach
Bathhouse**

Updated Project Map – next page

Following is the updated project map showing streetlights to be converted to LED, streetlights to be removed, and streetlights to be added.

Link to Map: <https://drive.google.com/open?id=1dFBf1IKn5yATmCzgUiBCqt6trTg&usp=sharing>

Jenness Beach Village District Streetlight Replacement Project September 2016 Final Map



Green Pin-New Gray Star-Removed Square with Dot-Replaced/Same Location