Report of the Ad Hoc Committee on Streetlight Reduction and Safety, a subcommittee of the Climate Smart Task Force, to the New Paltz Town Council May, 2011

The committee was tasked with listing streetlights that can be removed without compromising public safety; asking the Police Department, the Rescue Squad, the Fire Department and the Department of Highways to respond to the list; and presenting to the Council the list, the response of the four Town departments and the Committee's conclusions.

There are 123 streetlights in the Town of New Paltz. The lights and the utility poles they're mounted on belong to Central Hudson, so the Town has limited control over them, and they are not regulated in Town code.

The cost to the Town for these lights in 2009 was \$24,957.97. The bills from Central Hudson show a fixed monthly lamp and fixture charge for each light, depending on the type and lumens, plus the electricity used, which fluctuates according to day length. As a generalization, dividing the 2009 total (\$24,957.97) by the number of lights (123) yields an annual cost per-light of \$202.91.

It should be noted that the monthly lamp and fixture charge is subject to increases, and has, in fact, increased between 2008 and 2010. For example, the Town's most common fixture is the 5800 lumen sodium vapor at 66 lights. The monthly charge for these 66 lights was \$587.40 in 2008, \$731.94 in 2009 and \$767.58 in 2010. The cost of electricity has gone up as well. The Council can reasonably assume that a light removed today will save a steadily increasing dollar amount in the future, though Central Hudson will bill the Town for removal.

The economic cost of unneeded lights is one factor for the Council to consider: another is environmental cost. At its meeting of June 17, 2010, the Council voted unanimously in favor of the Climate Smart Pledge. Item three of the pledge reads, "Decrease Energy Demand for Local Government Operations." For one year, from June, 2009, through May, 2010, the Town's streetlights used 149,147 kilowatt hours of electricity. Using the same rough calculation as for cost, dividing total Kwh's by 123 yields an annual kwh use per light of 1,112 kwh. Removing unneeded streetlights is one step the Council can take to fulfill the Climate Smart Pledge. At least as important, lights, including streetlights, cause "light trespass," "glare," "light clutter" and "skyglow," [fig. 1.] and are known to disrupt wildlife behavior, including that of insects, birds, reptiles, bats and amphibians.

The most important factor is safety. Adequate lighting of thoroughfares and intersections busy with vehicle, pedestrian and bicycle traffic is essential: Main Street and the intersection of Main and Putt corners, for instance. On rural roads streetlights can improve safety by (1) notifying drivers that an intersection or curve is located at the light

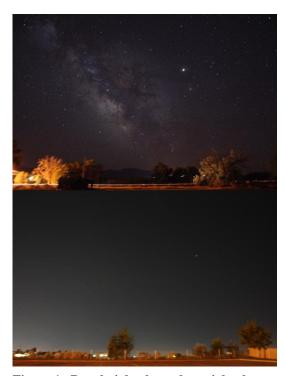


Figure 1. Rural night sky, urban night sky.

and (2) by improving the visibility of dangerous intersections and curves, especially during bad weather. Examples are the light at the curve on Route 299 West of the intersection with Libertyville, and the intersections of Mountain Rest and Canaan Road and North Ohioville and Shivertown. Yet streetlights can also compromise safety. Drivers, older drivers especially, can experience temporary night blindness when passing from a lit area into an unlit one. And car headlights are more noticeable against

a dark background than a lit background. These drawbacks must be weighed against the advantages of streetlights on otherwise unlit rural roads.

To form its list of lights recommended for removal, committee members visited each of the lights and considered the following criteria:

Consistency

If a light at a particular location isn't found at similar locations, what justifies this light? Type of intersection

Commercially developed, residentially developed or rural

Sight distances

Configuration of the intersection (at top or bottom of hill, offset streets etc)

Traffic volume

Other lighting in the area

Signage as alternative

Additional

A mid-block street light, not covering an intersection

Located on a straight-a-way of a roadway, not on a curve

Located on low-speed, residential streets

The committee also considered these facts:

Of the 123 lights in the Town, only six are West of the Wallkill.

Of 75 cul-de sacs on the NYS DOT Local Road Listing for the Town of New Paltz, only six are lighted.

Of sixteen island neighborhoods (defined here as residential areas with more than one street but no thoroughfares), only four are lighted. They are:

Cherry Hill (Cicero, Cherry Hill, etc.) Prospect Street, Millbrook Terrace Brouk Ferris, Grace Ave, Brouk Blvd. Old Mill Road, Elizabeth Ct.

It should be noted (1) that three of these neighborhoods are adjacent to and therefore in a sense part of the Village; (2) that all four either end in cul-de-sacs or have no significant through traffic; (3) that a fifth neighborhood also adjacent to the Village (Millrock Road, North Manheim Blvd., Harrington Street, Ulster Road) is unlighted; and (4) that, insofar as the Committee is aware, there have been no accidents or crimes associated with the lack of streetlighting in this neighborhood.



Figure 2. Prismatic end-of-road sign

The Committee is recommending removal of 26 lights. The list of lights is end-of-road sign appended, with a reason given for each removal. In general, the committee recommends removal of lights between intersections, lights at some intersections that are similar to unlighted intersections, and at the 6 out of 75 cul-de-sacs. The Committee suggests, and the Superintendant of Highways agrees, that these cul-de-sacs receive the new super-reflective, prismatic end-of-road sign [fig. 2].

Lieutenant Osarczuk, representing the Police Department, has indicated via email and at a meeting that he accepts the Committee's final recommendations. Interim chief Gina Bassinette, representing the Rescue Squad, writes, "I do not have any objections or foresee any problems impacting the Rescue Squad." First Assistant Chief Kevin Maguire, representing the Fire Department, writes, "It is my opinion

that the removal of these streetlights will not affect the operation of the Fire Department." Superintendent of highways Mike Nielson, representing the Highway Department, accepts all of the Committee's recommendations and has comments on 8 lights and some general comments. The relevant documents are appended.

If the Council decides to proceed, the Committee strongly recommends that residents be notified and public input be solicited before a request for removal is sent to Central Hudson.

This concludes the committee's report.

Sincerely,

Norman Turner, Chair, Ad Hoc Committee on Streetlight Reduction and Safety

Members: Michael Zierler Lynn Bowdery Patricia Schwartz Robert Ferri

Liaison, Town Council Jane Ann Williams

Appended documents:
The Committee's list of lights recommended for removal, with explanations
Gina Bassinette's letter
Kevin Maguire's letter
The Committee's list with Supervisor Nielson's comments
"Our Vanishing Night," National Geographic
"Cities Turn off Streetlights to Save Money," USA Today

Island neighborhoods without streetlights:

Nepale, O'rourke
Rocky Hill, Bud, Stonhedge
Sunset, Juniper, Ann, Van Alst
Millrock, Manheim, Ulster, Harrington
Terbar Loop
Andrea, Krisnan, Liberty, Jennifer Ct.
Valdine, Lynn
Woodland Drive
Calvin, Julia
Morningstar Drive
Deerpath, Willow Drive, Crescent Lane
Kleinekill, High Ridge

Island neighborhoods With Streetlights
Cherry Hill (Cicero, Cherry Hill, etc.)
Prospect, Millbrook Terrace
Brouck Ferris, Grace Ave, Brouck Blvd.
Old Mill Road, Elizabeth Ct.

Unlighted Intersections West of Wallkill

Caanan and Dug

Spingtown and Cragswood

Springtown and Coffey

Springtown and Dug

Springtown and Kleinkill

Kleinkill and Dug

Mountain Rest and Morningstar

Butterville and Rose

Butterville and Pine

Butterville and High Pasture

Butterville and Gatehouse

Butterville and 299

Gatehouse and Wood Lot

Gatehouse and White Oaks

Gatehouse and 299

Libertyville and 299

Libertyville and Danica Lane

Libertyville and Unity Lane

Unlighted Intersections East of Wallkill

Plutarch and Weston

Van Nostrand and Burleigh

N. Ohioville and Tracy

- S. Ohioville and Antonio Lane
- S. Ohioville and Terbar Loop
- S. Ohioville and Ligatino Lane
- S. Ohioville and Tiiu Drive
- S. Ohioville and Country Meadows Road
- S. Ohioville and Country Meadows Lane
- S. Ohioville and Shribers Lane

Brookside and Michael Drive

Schreiber and Maple Brook Lane

Schreibers and Meadow Road

Schreibers and Deerfield Lane

Scheibers and Partington Place

Route 32 and Partington Place

Route 32 and Enterprise Road

Route 32 and Valdine Drive

Route 32 and Andrea Drive

Route 32 and Grandview Lane

Route 32 and Cross Creek Road

Jansen and Sarafian Road

Sarafian and Dubois Road

208 and Edgewood Drive

Plains Road and Locust Lane

Plains Road and Shawangunk View Drive

Plains Road and Woodland Drive (1)

Plains Road and Woodland Drive (2)