

PORTSMOUTH

**STREETLIGHT ACQUISITION AND ENERGY
EFFICIENCY IMPROVEMENT PROGRAM**

**REPORT TO THE TOWN COUNCIL
AUGUST 8, 2017**

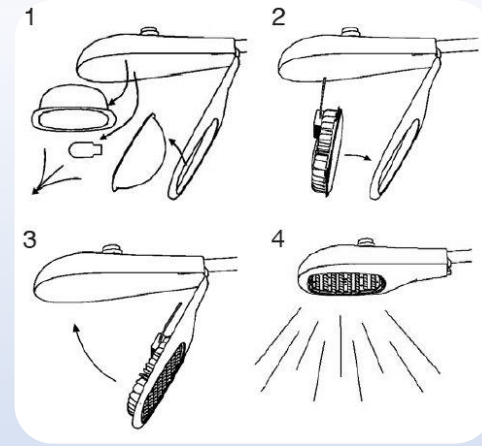
SHORE ISLAND

RI Municipal Streetlight Background

- 2011 the Washington County Regional Planning Council identified the charges National Grid was charging for streetlight services was in excess of \$8.1 million annually for the services performed (per NG PUC filings).
- RIGL 39-30 Municipal Streetlight Investment Act passed in 2013 to allow municipalities to control streetlight costs by purchasing the streetlight assets at a depreciated value, establishing tariffs to properly assess LED energy consumption and managing maintenance through collaborative programs.
- Partnership for Rhode Island Streetlight Management (PRISM), a statewide nonprofit was established to provide a cost effective solution for municipalities to purchase their streetlight assets from National Grid, upgrade the equipment to state of the art LED fixtures, manage service for the systems, and advocate for legislative action to promote affordable and efficient municipal streetlight operation. More on this shortly...

Portsmouth Background

- Portsmouth Leases Approximately 950 streetlights from NGRID
- Annual Cost - \$140,000 (Source: 2013 PUC filing, electricity charges and maintenance)
- Streetlight operational costs \$93,707 (Source: Wind Energy Dev, LLC Analysis: 2014-2016 3-yr avg)
 - 11% of total municipal usage
- Current High-Pressure Sodium bulbs
 - High operational cost
 - High light pollution
- Estimated purchase price of streetlights from NGRID -\$36,000



POTENTIAL BENEFITS

- 40%-60% energy savings
- “Smart” Functionality
 - Automatic, timed dimming in selected areas
 - Emergency evacuation routing
 - Automated outage detection and reporting
 - Ability to remotely brighten lights for emergency responders
- Better quality, area-specific lighting
 - Range of light “color temperatures” and brightness
 - Allows for true color identification to aid law enforcement
- Reduced “upward” lighting spill promoting “dark sky”

Before

After



Before



After



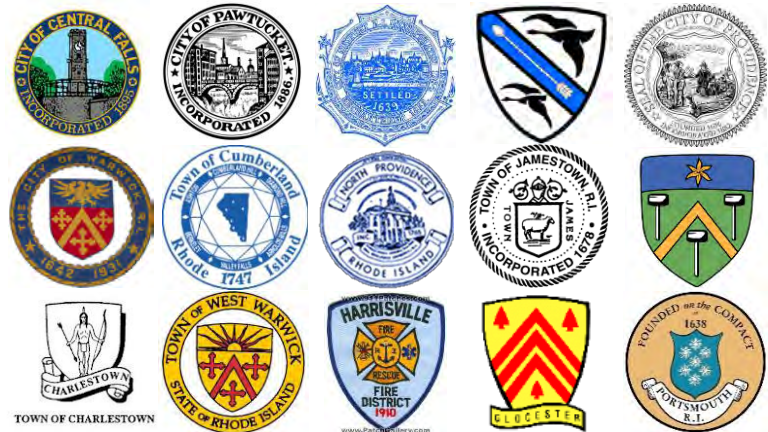
WARM WHITE



NATURAL WHITE



COOL WHITE



PRISM



PARTNERSHIP FOR RHODE ISLAND STREETLIGHT MANAGEMENT

- Formerly a program of the non-profit Washington County Regional Planning Council, **PRISM Streetlights** was incorporated as a non-profit organization in September 2016 to provide municipalities with experienced people to manage the delivery, cost, and maintenance of streetlight systems.
- Acts as lead advocate of out RI to upgrade to LED systems
- Manages services for the systems
- Advocates for municipalities through legislative action to promote affordable and efficient municipal streetlight operation
- Over 23 RI Municipalities have partnered with PRISM

Portsmouth - PRISM Partnership

- Signed Agreement - Oct 2016
- Detailed Cost-Benefit Analysis – Report Complete February 2017*
- Intent to Purchase Notification to NGRID – Submitted June 2017

* “Streetlight Acquisition and Energy Efficiency Improvement Options – Town of Portsmouth”
PRISM and LightSmart Energy Consulting, LLC, Feb 2017 - Delivered August 2017

Phase 2 – Inventory, Analysis and Design

- **Audit and Mapping (\$7,736)**
 - Streetlight Audit
 - Establish GIS Database
 - Review Billing Records
- **Develop Final Plan and Design (\$400)**
- **Plan for Procurement of Materials, Installation Services, Financing and Maintenance Services (\$400)**

Request Town Council Approval for Budgeted Expenditure of \$8,536

Next Steps



• Phase 3

- Conduct Town Stakeholders Meeting
 - TA, School Dept., Finance, Facilities, IT, Fire, Police and EMA
- Socialize Program With Public
 - Public Charrette
 - Informational Webpage
 - Local Media (NDN, Portsmouth Times and Press, Portsmouth This Week TV)
- Establish/Modify Operational, Administrative and Emergency Procedures
- Conduct Workshop with Town Council
- Sign Leasing Agreement with PRISM (with TC Approval)
- Installation