

# **Streetlight Management Plan Advisory Panel Meeting**

June 19, 2017

- Introduction
- Goal of the SMP Effort
- Role of the SMP Advisory Panel
- Progress Update (Streetlights Program and SMP)
- Questions & Follow-up Panel Emails
- Next Steps



- **Meeting No. 1 - Jan 4, 2017**
  - County's current state of streetlighting
  - Premise of SMP
  - Role of panel
- **Meeting No. 2 - Feb 1, 2017**
  - Lighting design concepts (by designer Randy Burkett)
  - Technology review and concern over LED (by Bruce Kinzey – DOE)
  - State of streetlight maintenance (by Scott Sedwick, TE&O, DES)
- **Meeting No. 3 - Feb 21, 2017** (by Dhruva Lahon – Consultant)
  - Sample Data Verification and Analysis
  - Literature Review (Benchmarking)
  - Consultant's SMP draft report

**Objective:** An administrative document that informs staff decision-making in the planning, design, operation and maintenance of the street lighting in Arlington. This includes decisions related to technology and products that can be supported by County staff, funding levels and associated support facilities.

| Part | Title   |
|------|---|
| I    | Revisit Street Lighting History and Philosophy in Arlington |
| II   | Update Technical Standards                                  |
| III  | Define Implementation Priorities                            |
| IV   | Prepare Maintenance Plan                                    |
| V    | Adaption of SMP with New Technology                         |

- **Advisory Panel Role**
  - Represent guiding principles
  - Add perspective for each principle
- **Areas for Panel Input**
  - Review and discuss technical findings
    - Initial SMP report – Received comments
    - RFI – Received comments
  - Field Demonstration
    - Schedule in Fall 2017
- **Staff Role**
  - Responsible for drafting the Final Policy document
  - Provide subject matter expertise (technical, standard development, O&M assessment)



# Role of Advisory Panel in Outcomes

| Part | Title   | Input sought from the Panel   | Notes  |
|------|---|---|--|
| I    | Revisit Street Lighting History and Philosophy in Arlington | 1. <b>Six Guiding Principles</b>  | 1. Survey?   |
| II   | Technical standards   | 1. Approved hardware  | 1. Incorporates different features such as dark sky  |
| III  | Define Implementation Priorities                            | 1. Ownership matrix & ownership districting<br>2. Streetlight project selection priority matrix   | 1. What should the ownership mix look like?<br>2. How should new projects be selected, weighted? |
| IV   | Prepare Maintenance Plan                                    | 1. Inventory & Resource needs<br>2. Define service expectation  | 1. What ranges of response time are acceptable?  |
| V    | Adaption of SMP with New Technology                         | 1. Research new technology (RFI Input) & information sharing<br>2. Interval for revisiting this SMP<br>3. Plans for adopting new technology | 1. Define expiration date of SMP?<br>2. How do we keep SMP open to new technology?               |

- i. Panel and staff roles in SMP development process
  
- ii. SMP Outcomes

# Progress Update

| Items   | Notes   | Status                |
|---|---|-----------------------|
| Input from Advisory Panel members on RFI document | Some comments already incorporated e.g. three tiers of CCTs, BUG ratings                      | Completed             |
| Input from Panel members on SMP draft report      | Consultant will address comments in the final version   | Completed             |
| Staffing resources                                | Additional resources partly approved in FY18 Budget based on SMP (consultant) recommendations | Completed/<br>Ongoing |
| Staff-led research                                | Ongoing research. e.g. dome shield, additional gateways for better communication              | Ongoing               |
| Ownership analysis                                | Consultant analyzing the cost & operation implications of ownership mix                       | Ongoing               |
| DVP Coordination                                  | County Board DVP joint work session held on June 13, 2017                                     | Ongoing               |
| RFI Process                                       | Pending with Purchasing   | Ongoing               |



# Streetlight – Resources & Goals

## Resources will provide

| Resources                     | Consultant Recommended | Provided | FY18 Increases |
|-------------------------------|------------------------|----------|----------------|
| Staff                         |                        |          |                |
| *Program Supervisor           | 1                      |          |                |
| *Engineer                     | 1                      | 2 **     |                |
| *Maintenance Techs            | 3                      | 3 **     |                |
| *Other Support Staff          | 2                      | 0        |                |
| Total Staff & Ongoing Support | 7                      | 5        | \$335k         |
| Vehicles                      | 2                      | 1        | \$47k          |
| Trail Light Assessment Study  |                        |          | \$80k          |
| Total                         |                        |          | \$462k         |

- Improved response time for outages
- Enhanced oversight/coordination of Dominion
- Improved site plan & CIP project development
- Improved capacity to design/manage more complex underground outages
- Eliminate borrowing from other Traffic Ops resources

## In FY18 additional 3 FTEs & operating resources will improve response times:

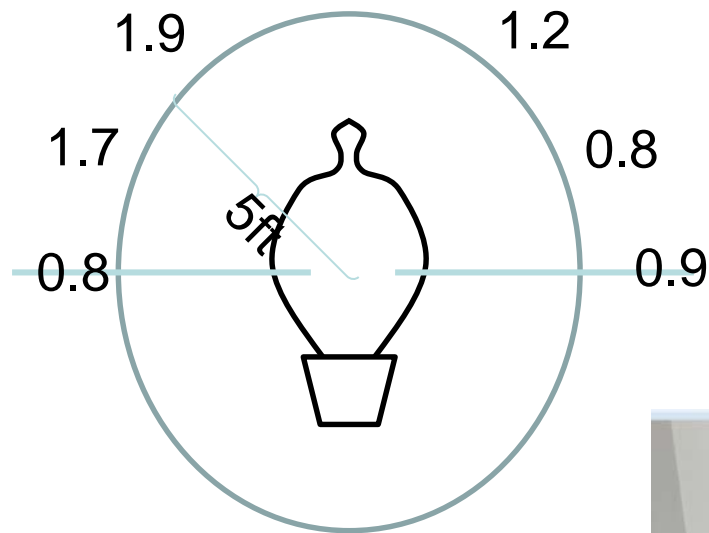
- 30 days to 15 days for routine outages
- Four months to 45 days for underground outages

\* Other Support Staff: Inspector and Clerk

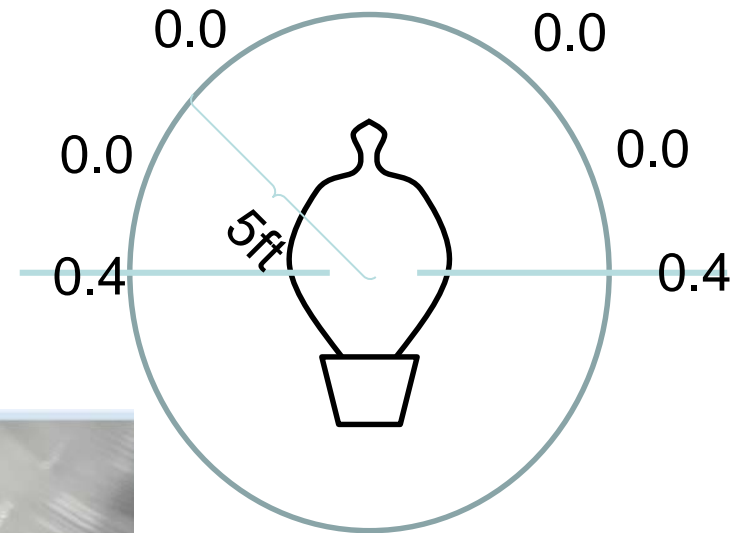
\*\* One existing FTE

# Uplight reduction research

## Without Dome Shield

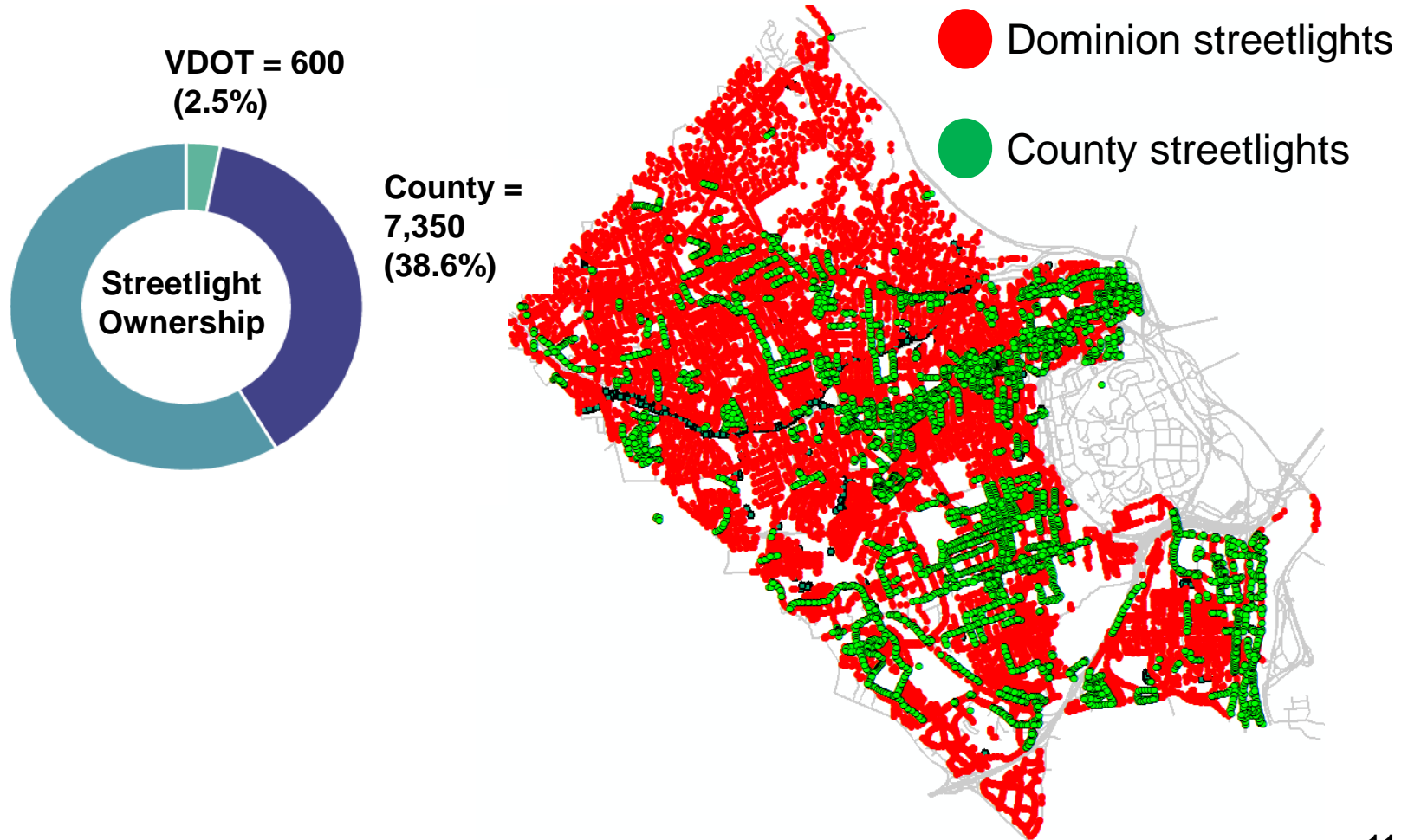


## With Dome Shield



# Ownership Diversity

## Total streetlights ~ 19,000



# Ownership Diversity – Clarendon





# Ownership Diversity – Fairfax Drive



# Next Steps

- Advertise RFI – Two weeks (per Purchasing)
- Complete ownership analysis
- Technology demonstration: Fall 2017
- Technical standards: End of 2017
- SMP documents for review: End of 2017

# Questions?