Safer. Smarter. Greener.

Smart Lighting Project Public Meeting
Background: Streetlights, By the Numbers

- Only 5% of DC’s 75,000 lights are LED
- 86%
- 5%
- 8%
- 0%
- 1%

- High Pressure Sodium (HPS) - 61359
- Incandescent - 5583
- Light-Emitting Diode (LED) - 3639
- Metal Halide (MH) - 267
- Mercury Vapor (MV) - 775

Over 50 different types of lights/fixtures/poles – repair condition varies greatly

Lights attached to poles owned by DC, Verizon and PEPCO
What are public-private partnerships (P3s)?

**Definition:**
- Long-term, performance-based contract
- Risk transferred to party best able to manage
- Contractor Designs, Builds, Finances, and Maintains public facility (DBFM)

**Examples:**
- Virginia 495 Beltway Express Lanes
- Long Beach Courthouse
- Maryland Purple Line
- LaGuardia Airport

**Benefits of P3s:**
- Incentivizes Innovation
- Life-Cycle Management
- Transfers Risk
- Performance/Outcome-Based
- Debt Capacity

**What a P3 is NOT:**
- Not – Free money
- Not – Privatization or Outsourcing
- Not – Philanthropy
P3 Benefits

Leverage Private Financing
• 1-2-year conversion process, compared to 8-12 under current funding plan

Risk Transfer
• If lights don’t work, we don’t pay

Performance-Based
• Strict requirements (99% availability, repairs in 24 hours or less)
## Project Scope

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>LED Conversion</strong></td>
<td>• Convert all 75,000 lights to more reliable and energy-saving LED</td>
</tr>
<tr>
<td><strong>Remote Monitoring and Control System</strong></td>
<td>• Faster repair and customization by location</td>
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<tr>
<td><strong>Maintenance</strong></td>
<td>• Performance-based requirements and risk transfer</td>
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<tr>
<td><strong>Smart City Technology</strong></td>
<td>• Expanded public Wi-Fi which also helps enable future smart city technologies</td>
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# Project Benefits

## Public & Traffic Safety
- More consistent and reliable light
- Remote control system for incident response

## Environmental
- Eliminate 30 tons of greenhouse gas per year (33 million pounds of coal not burned)
- Shielding and dimming reduce light pollution

## Economic
- 40% to 50% reduction in energy costs ($3 to $4M annually)
- Lights last 3-4x longer and need fewer repairs

## Neighborhood
- Remote monitoring and control system for comprehensive lighting design attuned to needs of each neighborhood
- Faster repair and customization by location

## Smart City
- Expansion of Free Broadband Wi-Fi
- Platform for other Apps (e.g., traffic and air sensors, )

## P3 Risk Transfer
- 1-2 year install, compared to 8-12 currently
- Strict performance requirements (99% avail.)
**Project Timeline**

- **RFI** Jan. ‘17
- **RFQ** June ‘17
- **FHWA Review / Draft RFP / Hire NEPA Consultant** Spring ‘18
- **Shortlist / One-on-One** Fall/Winter ‘18
- **Submit RFP to Council** Fall/Winter ‘18
- **Complete NEPA / FHWA Review Final RFP** Fall/Winter ‘18
- **Issue Final RFP to Shortlist** Spring/Summer ‘19
- **Evaluate and Select** Summer ‘19
- **Submit Contract to Council** Fall ’19

**NEPA Process**
- **FHWA Review Draft RFP / Hire NEPA Consultant**
- **Submit RFP to Council**
- **Complete NEPA / FHWA Review Final RFP**
- **Issue Final RFP to Shortlist**

**Streetlight Advisory Panel**
- **Operations & Maintenance**
  - 10-15 years
- **Construction**
  - 18-24 months
- **Design**
  - 3-6 months
- **Commercial / Financial Close**
  - Winter ‘19

**Streetlight Advisory Panel**
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<th>Application</th>
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Let us know what you think!

Fill out a comment card before your leave, or...

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