

## REQUEST FOR COUNCIL ACTION

**SUBJECT:** LED Street Lights

**SUMMARY:** Council direction is needed on the following questions in order to proceed with the LED street light conversion:

1. Phases: One Phase (12mo.) or Three Phases (3 yrs)
2. Labor: Contract (faster, more expensive) vs. In-House (slower, less expensive)
3. Bidding: Which method ?  
**RFP** (Request For Proposal)  
**ESCO-RFP** "Energy Service Company" state contract (Siemens, Chevron, etc)  
**IFB** (Invitation For Bid)
4. Styles: Cobra, Acorn, Bellshade, others?  
To be determined after Project Mgt. Contractor is chosen
5. Funding: Cash, Bond, or both?

### FISCAL

**IMPACT:** No costs to create RFP. Total project estimated at \$3M to \$3.5M after rebates, with 7-12 year payback, depending on actual product costs and energy efficiency.

### STAFF RECOMMENDATION:

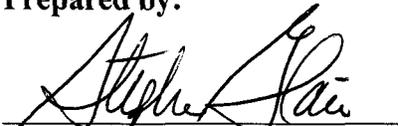
Staff recommends RFP method (or ESCO-RFP state contract), with multiple phases to take advantage of decreasing costs over time. Light fixture styles can be determined after general contractor is selected.

### MOTION RECOMMENDED:

"I move to direct staff to create an LED streetlight plan with (one or three) phases, (Contract or In-House) labor, (RFP, ESCO-RFP, IFB) bidding method, and (Cash, bond, or both) funding approach."

Roll Call vote required

**Prepared by:**

  
Stephen Glain  
Mgt. Asst. to City Mgr.

**Recommended by:**

  
Rick Davis  
City Manager

## **BACKGROUND DISCUSSION:**

At the Request of City Council, City staff from Public Works, Engineering, and City Manager's Office, and the citizen Sustainability Committee have met several times in recent months to create a plan for converting existing street lights to LED (light emitting diode) technology and require LED lights in all new development areas, including major roadways (arterials, collectors) and residential (subdivisions).

During the past several years Public Works staff has researched LED lighting and has observed the conversion of street lights in other Utah cities. Public Works staff recognizes the benefits of LED lights, including reduced long-term maintenance and potential for improved light quality and safety, as long as the products are chosen carefully. Public Works recommends following a process similar to that used by Seattle, WA which is completing a major LED conversion of 84,000 street lights between 2010 and 2014, and included a thorough consideration of many products and applications (major roadway vs. neighborhoods, glare, spacing, light quality/color, etc). West Jordan Public Works staff suggests the following considerations:

- Safety consideration in design with the product selection and application
- Quality vs. Price – not all LED's are created equal
- Look at most current technology
- Two main areas of street lighting:
  - Roadway (arterial and collector roads)
  - Residential (subdivision streets)
- Life cycle costs

LED technology is still changing rapidly and prices are continually decreasing. LED fixtures for major roadways (cobra style on tall poles) have gone through several generations of technology, so the products are more reliable and less expensive. Decorative fixtures, such as Acorn, Town & Country, Bellshade are still much more expensive and technology is still being developed. Also, the cobra lights are higher wattage so the typical 50% energy savings represents a faster payback compared to the smaller neighborhood lights. The City may want to consider beginning with LED conversion of these larger, high wattage fixtures on major roadways for the faster payback, followed by conversion of neighborhood fixtures in later phases.

At this point in the process, the major decisions that need to be made include:

1. Phases:
  - One Phase (12mo.)
  - Three Phases (3 yrs)
2. Labor: Contract (faster, more expensive) vs. In-House (slower, less expensive)
3. Bidding: Which method ?
  - **RFP** (Request For Proposal)
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