

REQUEST FOR COUNCIL ACTION

SUBJECT: LED Street Lights

SUMMARY: Staff is requesting direction, whether or not to continue researching technology, funding methods, and implementation options for converting the City's street lights to LED (light-emitting diode) technology.

**FISCAL
IMPACT:**

The upfront cost of LED equipment and installation is estimated at \$2.5M to \$3.5M depending on fixtures and retrofit kits selected, and in-house vs. contracted installations. Energy use may be cut by half and maintenance may be cut by 2/3, giving a payback of 5-10 years, while LED fixtures/bulbs are expected to last 20 years.

STAFF RECOMMENDATION:

Staff recommends further research on:

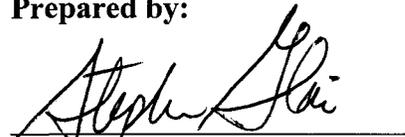
1. Specific LED products
2. Funding mechanisms
3. Implementation options (in-house vs. contracting out installations, upfront conversion vs. phased conversion)

MOTION RECOMMENDED:

"I move to direct staff to conduct further research on technology, funding mechanisms, and implementation options for LED street lights in West Jordan"

Roll Call vote required

Prepared by:



Stephen Glain
Mgt. Asst. to City Mgr.

Recommended by:



Rick Davis
City Manager

BACKGROUND DISCUSSION:

Approximately one year ago, a consulting group from Chevron conducted a free cost-benefit analysis of West Jordan’s street lights and possible conversion to LED (light-emitting diode) technology. City staff and Council determined that the Chevron study did not provide sufficient details of costs, energy savings, and consulting fees. The City felt unsure of its potential savings and how much Chevron would charge for its services.

City Council directed staff to conduct an in-house study. Staff has conducted a preliminary study, including product recommendations from Mountain States Lighting (state contract holder for LED lights), in cooperation with City staff responsible for street light maintenance.

Other cities in Utah have already implemented LED street light conversions, although they are very recent and actual payback on investment is not known. However, UDOT expects a 4-5 year payback and many cities across the nation and have reported payback on investment as follows:

<u>City</u>	<u>Payback</u>	<u>Source</u>
Portland, OR	<10 yrs	U.S. Dept. of Energy SSL report 2012
Anchorage, AK	<5 yrs	T.Rowe Price “Connections” report, June 2012
Seattle, WA	7.7 yrs	Seattle.gov website (2010-2014 conversion)
Los Angeles, CA	6 yrs	T.Rowe Price “Connections” report, June 2012
Ann Arbor, MI	4-5 yrs	National Geographic Daily News, Jan. 20, 2011
Utah DOT	4-5 yrs	Phone interview, Oct. 2013
Herriman, UT	New conversion	Phone interview, Oct. 2013
South Jordan, UT	New conversion	Phone interview, Oct. 2013
Layton, UT	New conversion	Phone interview, Oct. 2013
Holladay, UT	New conversion	Phone interview, Oct. 2013
Sandy, UT	New conversion	Phone interview, Oct. 2013
West Valley, UT	New conversion	Phone interview, Oct. 2013

West Jordan staff’s preliminary analysis estimates payback periods of 5-10 years, depending on the type of light fixture and actual costs of LED products and retrofit kits. These costs can be refined if Council directs staff to conduct further research.

Staff is requesting direction from Council, whether or not to continue researching technology, funding methods, and implementation options (in-house vs. contracting out installations, upfront conversion vs. phased conversion) for converting the City’s street lights to LED technology.