Subject: DES - Streetlight Staffing Levels and Response Times

FY 2018 Proposed Budget Budget Work Session Follow-up

4/13/2017

The following information is provided in response to a request made by Mr. Jay Fisette at the work session on 3/28/2017: What is the tradeoff for response times if we fund 2, 3 or 4 positions for Streetlights?

DES has developed four program and staffing options as shown in the attached chart, along with the baseline status as currently funded and staffed. These options are described by service level rating, impact of specific staffing levels, and cost. The existing condition yields a poor level of overall service to the community. Option 1 and Option 2 lead to improvements in level of service that is insufficient to achieve more than a fair rating, both in terms of field response and engineering coordination, when bench-marking with peer communities. Option 3 provides staffing for two 2-person crews that can cover two shifts per day for street and trail lighting and leads to a much improved response time for maintenance of the County's streetlight portfolio. Option 4, which is the County Manager's proposed budget, yields to best overall performance with additional capacity being added for overall program coordination and technical oversight.

It is important to note that there are serious staffing issues in both the field support area as well as engineering/program management area. Field support covers all of the field work to maintain and trouble-shoot the County's growing portfolio of more than 7,000 street lights. The existing single technician provides little capacity to maintain this infrastructure. There is also a diverse and substantial body of work in the engineering and program management area. The County currently has one engineer who does all street light reviews for developer and capital projects, leads all of the outage response assignments and is responsible for the procurement of all street light equipment. This position is also responsible for timely and assertive communication and coordination with Dominion Virginia Power (DVP) to assure appropriate response and repairs to issues with their inventory of over 11,200 streetlights. In addition, this position is responsible for strategic efforts with the Virginia Energy Purchasing Governmental Association (VEPGA) related negotiations that govern DVP's relationship and response to localities in Virginia. As with the field repairs, the current staffing level is inadequate to support the program at an appropriate level of service.

Streetlight Staffing Matrix

				Service Rating				Impact of Specific Staffing		Costs	
Staffing Scenarios	Street Light Techs ¹	Engineer ²	Program Manager ³	Repair Response time in days (Major/Minor) ⁴	Trail	Streetlight ⁵	DVP Coordination	Field Support\ Maintenance Services	Program\ Engineering Services	Additional One Time Costs	Additional Recurring Costs
Current Level	1	1	0	120/30	Not addressed	Poor	Fair			\$0	\$0
Option 1	3	1	0	45/15	Poor	Fair	Fair	-		\$39,815	\$273,499
Option 2	3	2	0	45/15	Fair	Fair	Good\Fair	-	0	\$47,165	\$347,084
Option 3	4	2	0	30/3	Good\Fair	Good	Good\Fair		\bigcirc	\$172,650	\$478,150
Option 4 (County Manager Proposal)	4	2	1	30/3	Good\Fair	Excellent	Good		0	\$180,000	\$650,000

- 1. Technicians involved in work that directly impacts the repair response time.
- 2. Engineers improve design services, services to developer projects, faster plan reviews, technology research, contractor management, and streetlight specifications.
- 3. Program manager manages work process efficiency, staff management, contractor management, coordination and negotiation w\DVP on contract level, resource management and improved safety.
- 4. County Response Time
- 5. Trail Lights Specific resource needs to be determined by assessment study.

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Poor

Fair

Good

Very Good

Excellent