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To: "Direct to Mayor and Council - DL"
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Subject: Outdoor lighting questions from Council

Greetings Mayor and Council

I am writing to provide answers to some questions to staff from Council on the Outdoor lighting strategy. Please find below the answers to your questions below.

1. What specific measures are being taken to reduce light pollution for residents who live at floor levels adjacent to street lights?

There are several options

- i. Primarily, the light pollution will be minimized at the design stage. To achieve this goal, we have a wide range of LEDs with multiple distribution patterns. A suitable distribution pattern can be selected to meet the needs of the location to minimize the light pollution. Running lighting simulations (using industry accepted software) will also prove in advance that we have reduced the light trespass while meeting IES (Illuminating Engineering Society) recommended lighting levels for roadway and sidewalks.
- ii. Installation of house side shields ¶If it is not practical to reduce the light trespass (and glare), a house side shield can be installed. The shield will reduce the unnecessary lighting passing into someone's home.
- iii. Adaptive lighting Control – Light output from each fixture can be controlled remotely to manage unique issues. It is also possible to dim based on the time of the night. City expects to buy and install a central monitoring system (Server Computer) with wireless technology to monitor citywide LED lights and dim them as we need.

2. What are the protocols for handling complaints from residents who are negatively affected by light pollution from city lighting?

Citizen can raise the concern related to lighting through 311. The request will be directed (through Hansen) to the electrical design team for review. The citizen will be contacted and informed the outcome of the review and potential solution. The most viable solution will be implemented without compromising public safety.

3. Is downward directed LED lighting as effective for safety?

Light coming out of LED fixtures are easy to control and therefore we can light only the areas to be lit up. Traditional High Pressure Sodium (HPS) fixtures do not have this flexibility in full. Therefore downward directed LED lights are safer and used by many cities in North America (Calgary, Montreal, Burnaby etc). LEDs can be purchased at different color temperatures to suit to different applications. Over the years, it has proven that injuries and fatalities have gone down using LED technology.

Please let me know if there are further questions.

Best

Sadhu

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Pronouns: he, him, his



The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the Musqueam, Squamish, and Tsleil-Waututh peoples.