

## Expressway Illumination

### ISSUE

Several expressway roadways within and adjacent to City Limits do not have roadway illumination. The Saskatoon Transportation Master Plan identified a need to review this issue.

### RECOMMENDATION

That the Standing Policy Committee on Transportation recommend to City Council:  
That the Highway 16 from Boychuk Drive to Zimmerman Road roadway illumination project be added to the prioritized transportation infrastructure list.

### BACKGROUND

As the city grows, illumination along major roadways has historically lagged behind the development of new neighbourhoods. The absence of roadway illumination can increase the likelihood of collisions and make it less appealing for residents to use this route to access neighbourhoods outside of daylight hours.

The Guide for the Design of Roadway Lighting, published by the Transportation Association of Canada (TAC), provides guidance to transportation engineering practitioners across Canada regarding roadway illumination. The document highlights that until development proceeds and additional intersections are introduced, illumination is not required.

### DISCUSSION/ANALYSIS

In recent years, the installation of illumination on major roadways has been included with larger infrastructure projects. For example, the roadway lighting on College Drive between McKercher Drive and McOrmond Drive was installed as part of the McOrmond Drive interchange project. The current approach to installing illumination for the city's roadways requires years of growth and development before an interchange and the associated roadway lighting is installed.

Studies on the impacts of roadway illumination have found that installing lighting on previously unlit expressways and freeways can lead to a 73% reduction in fatal collisions, 27% reduction in injury-causing collisions, and a 32% reduction in property damage only collisions. A cost-benefit study completed by the US Federal Highway Administration found that there was a \$33.50 benefit for every dollar spent on roadway illumination.

The Administration reviewed nine expressway road segments that currently do not have illumination. The review is summarized in the table below.

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Roadway	From	To	Adjacent Development	Additional Intersection Introduced?	Within City Limits
Highway 16	Boychuk Drive	Zimmerman Road	Partial – Rosewood (growing)	Yes	No
Highway 11	Idylwyld Drive	Wanuskewin Road	No	No	No
Highway 14	Highway 7/ Neault Road	City Limits	No	No	Yes
Highway 7	CNR Overpass	City Limits	No	No	Yes
College Drive	McOrmond Drive	Highway 41	Partial – Willowgrove	No	Yes
Highway 5	Highway 41	City Limits	No	No	Yes
Highway 41	College Drive/ Highway 5	City Limits	No	No	Yes
Highway 11	Vic Boulevard	City Limits	Partial - Stonebridge	No	Yes
Highway 12	71 <sup>st</sup> Street	Township Road 380	No	No	No

In consideration of the TAC guidance document, the segment of Highway 16 between Boychuk Drive and Zimmerman Road is recommended for illumination in the near-term as the Rosewood neighbourhood continues to develop and acknowledging the traffic signals installed at the intersection of Zimmerman Road and Highway 16 in 2018. This segment of expressway is not within the City limits and is under the jurisdiction of the Province. The City of Saskatoon has an operational agreement in place that facilitated the construction of the Boychuk Drive interchange and the Zimmerman intersection. At the appropriate time, discussion with the Province will occur regarding construction and funding of the project.

### FINANCIAL IMPLICATIONS

Saskatoon Light and Power has provided a high-level cost estimate of \$260,000 for the installation of roadway illumination on Highway 16 between Boychuk Drive and Zimmerman Road. There is no funding source identified for this project.

### OTHER IMPLICATIONS

There are no privacy, legal, social, or environmental implications identified.

### NEXT STEPS

In the short-term, the Administration will include the project on the prioritized transportation infrastructure list for the upcoming budget cycle. In the longer term, the Administration will monitor development of Rosewood, traffic volumes and operations on Highway 16, and identify an appropriate time to approach the Province to discuss a funding strategy and construction of this project.

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### Report Approval

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