

## **CROSSWALK IN ROADWAY LIGHTING**

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### **EXECUTIVE SUMMARY**

The safety of pedestrians on Calgary roads is a top priority. Funding is requested through the Council Innovation Fund for an In-Roadway Lighting (IRWL) at Crosswalks trial (Attachment 1). This trial pilot project will be evaluated as a measure to enhance pedestrian safety and reduce pedestrian collisions.

The IRWL is a pedestrian activated system that may enhance safety for pedestrians in crosswalks by making the crosswalks more visible to motorists. The trial will cost up to \$50,000 for two crosswalk locations.

### **ADMINISTRATION RECOMMENDATIONS**

That the Priorities and Finance Committee recommends Council approve the funding request for the In-Roadway Lighting at Crosswalks pilot project from the Council Innovation Fund of up to \$50,000.

### **PREVIOUS COUNCIL DIRECTION / POLICY**

This is an Administration led proposal which aligns with Council's priorities in the Calgary Transportation Plan to ensure that all transportation system users are able to travel safely.

### **BACKGROUND**

The Traffic Safety Group in Roads is focussed on continually improving safety on Calgary's roadways for all modes and users. The group examines innovative ways to enhance safety.

### **INVESTIGATION: ALTERNATIVES AND ANALYSIS**

IRWL uses a series of lights implanted into the roadway to light up the crosswalk (Attachment 2). It is a pedestrian activated intersection safety enhancement. These activated systems increase conspicuity of crosswalks and intersections by increasing their visibility to drivers as compared with uncontrolled locations.

Each system has a five year warranty with an operation life of 10 to 15 years. These systems are used in Banff, Canmore and Airdrie, all of whom enjoy success with the treatment but acknowledge operational challenges in our climate of snow covered roadways and plowing operations.

The cost for IRWL at a crosswalk is approximately \$25,000 per intersection. This is estimated to be 50 percent materials, 40 percent installation and 10 percent additional City costs, including evaluation costs.

### **STAKEHOLDER ENGAGEMENT, RESEARCH AND COMMUNICATION**

The City's Pedestrian Strategy is intended to highlight innovation for pedestrian safety and this pilot project will help to inform the Pedestrian Strategy. This technology is currently being trialed in other jurisdictions and shows promise for application in Calgary.

### **STRATEGIC ALIGNMENT**

The IRWL pilot project aligns with the Calgary Transportation Plan's key directions to promote safety for all transportation system users, enable public transit, walking and cycling as preferred

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mobility choices, and provide transportation services in a safe, effective, affordable and efficient manner.

### **Social, Environmental, Economic (External)**

Innovations in pedestrian crossing safety, such as the use of IRWL at Crosswalks, encourage and empower Calgarians to use active modes of travel.

### **FINANCIAL CAPACITY**

#### **Current and Future Operating Budget:**

There are no direct operating budget implications from this pilot project. The IRWL pilot will quantify future operating budget impacts if successful and implemented in other locations.

#### **Current and Future Capital Budget:**

Implementation of enhancements as a result of the pilot, at more locations, will impact future capital budget. The assumption is that future installation would be funded within the established capital budget.

### **RISK ASSESSMENT**

The implementation of this pilot project will mitigate risks associated with pedestrian safety on Calgary's roadways.

### **REASONS FOR RECOMMENDATIONS:**

The report recommendations ensure that the In-Roadway Lighting at Crosswalks pilot project can produce meaningful results that may set direction for the future of this innovations in the City of Calgary.

### **ATTACHMENTS**

1. Council Innovation Fund Application: In-Roadway Lighting at Crosswalks
2. In-Roadway Lighting at Crosswalks Photos