

## 2015 Budget Information Request

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Tracking Number:	BIR-2015- 11
Budget Meeting Date:	November 26 <sup>th</sup> to 28 <sup>th</sup>
Author:	Bob Stephen & John Maysky
Department:	Transportation
Date of Response:	November 17, 2014
General Manager:	John Maysky

**Person(s) who requested BIR:** Wayne Bokenfohr

**Question:**

Please compare the differences between Calcium and Oil as a dust control method for Sturgeon County. Ensure that cost, pros and cons, operational considerations, capital needs (equipment), and all other relevant indicators are supplied.

**Response:**

Dust Control Policy; Policy # TRA-DUS-1

Supply and Install Calcium (Current Practice)	\$1,151* (including re-activation)
Supply and install site (County)	\$3,845 **
Supply and install (Contracted)	\$4,881***
(average cost of a 100m x 8m)	

\* Note: Currently subsidized with 30% paid by resident and 70% paid by County.

\*\* Note: Cost of County supplied Calcium will increase if Oil alternative is provided (loss of economies of scale)

\*\*\*Note: Significant potential variation due to volume of work tendered.

**Calcium:**

Pros:

- County is able apply to all 365 sites is approximately 10 days
- Maintenance is executed via water truck re-sprays
- Restoration cost from grading in resources is minimal when compared to oil

Cons:

- Road surface tends to become sloppy after rainfall

- In some cases will dry out and need reapplication
- Only effective for 1 year
- Maintenance will be on going for the season

### **Oil Site**

#### Pros:

- Longer life span than calcium
- Eliminates dust

#### Cons:

- Time it takes to lay down is substantially longer than calcium 67 days.
- Labor intensive to repair, ongoing repairs yearly
- Subgrade condition will impact the life cycle, longer or shorter.
- Surface tends to be more icy than adjoining gravel
- Operationally these will negatively impact the KM's per hour productivity metric when having multiple dust control sites in a row.
- Graders will damage ends of oiled section over time shorting the section. This does generate significant administrative conversations with those residents.
- Heavy loading will shorten life span.
- Within our existing Budget parameters having County forces construct oiled dust control sites it will dramatically affect grading patching and shoulder pulling programs to the extent that both programs would need to be put on hold for 1 year.
- In future years the maintenance (filling potholes) to ensure quality of the oiled sections will spread the current resources across a larger network of roads reducing the current levels of service on hard surfaced roads.