Introduction

In 2010, the City's Chief Financial Officer/Treasurer presented a report to the Policy Committee titled Toward Fiscal Sustainability. Council subsequently adopted Resolution 2010-32 which states "That zero base budgeting be implemented, or alternatively another budget method adopted by Council, to be done department by department, starting in 2012, commencing with Infrastructure Services."

It was determined that staff would implement zero base budgeting for the 2012 Summer Roads Maintenance program.

Methodology for the 2012 Summer Roads Maintenance Budget

The development of a zero base budget for the 2012 Summer Roads maintenance program was completed in five steps described as follows.

The **first step** was to **verify and update the inventory of assets** for which the Roads Division is responsible. In this regard, the Roads Division is responsible for an asset inventory that includes, but is not limited to approximately:

- 3,600 lane km of roadway.
- 350 km of sidewalk.
- 1,100 km of curb and gutter
- 14,000 manholes and catch basins
- 30,000 signs.
- 254 km of storm sewer

The **second step** was to **determine the summer maintenance requirements** on each type of roads asset. This includes the type of work required and the frequency with which this type of work needs to be performed on the asset. The summer maintenance budget is developed using best maintenance practices as described in the Ministry of Transportation Maintenance Manual and local experience of the summer roads maintenance program. While some of the best management practices dictate a frequency of maintenance, others dictate an end result specification. An example of an end result specification is that a catch basin shall not have its sump filled to capacity impeding drainage. The frequency of the maintenance required to remove the debris in the sump is based on the local knowledge of operating the drainage system.

The **third step** was to **define how work was to be performed** in the most effective manner and with the most efficient use of resources. This included reviewing the work process, including the required units of labour, materials, equipment and contractors to perform each type of work.

The fourth step was to apply current unit costs to the work plan developed above.

The **fifth step** was to **review the work program** and re-question all assumptions and processes to ensure that the result is an effective work program that maintains the assets under the responsibility of the Roads Division, provides for public safety and forms the basis for productivity standards which will enable comparison to actual production.

2012 Summer Roads Maintenance Budget

The 2012 Summer Roads Maintenance budget is categorized into seven (7) separate cost centres. These cost centres are delineated based on the assets in the road network. Within each cost centre are separate work activities and the respective budgets that serve to maintain the City's road network. Table 1 below provides the cost centres and the type of work that is budgeted for in each of the cost centres.

TABLE 1 - SUMMER ROADS MAINTENANCE COST CENTRES				
COST CENTRE	TYPE OF WORK			
SURFACE & SHOULDER	Pavement & Gravel Maintenance			
ROADSIDE MAINTENANCE	Brushing, Debris Collection			
SIDEWALK & CURB	Sidewalk & Curb Repairs			
DRAINAGE STRUCTURES	Storm Sewers, Catch Basins, Culverts, Bridges			
TRAFFIC & SAFETY	Signalization, Line Painting, Signs			
FORESTRY	Tree removal, pruning, planting			
MISCELLANEOUS	Inter Departmental Recoveries, Fringe Benefits, Supervision			

Within each cost centre different activities are budgeted for and continue to be tracked monthly both in terms of actual production and cost. This enables supervisory staff to compare production to the budgeted standard and make any adjustments necessary to achieve the standard. The number of work units and unit costs will continue to be reviewed and adjusted annually as necessary.

The 2012 Summer Roads Maintenance Budget developed using a zero base budget methodology resulted in a required budget of \$18 Million or some 34 percent above the 2011 budget. A brief summary on how the Summer Roads Maintenance Budget has evolved since 2006 including the 2012 zero based budgeting result is shown in **Appendix A** attached.

The Infrastructure Services Department and the Finance Department are undertaking the development of a Ten Year Financial Sustainability Plan for Roads. This plan will be available to Council prior to the 2013 Budget. The plan will outline in detail the annual operating budget requirements as highlighted herein, as well as the 10 year Capital requirements.

Therefore, staff developed the 2012 Summer Roads Maintenance Budget utilizing the information obtained from the zero base budget build while adhering to the budgetary guidelines established by Council. The recommended 2012 Summer Roads Maintenance Budget is summarized in Table 2 below.

TABLE 2: Summer Roads Maintenance Budget- 2012 vs. 2011					
Cost Centre	2011 Budget (\$)	2012 Budget (\$)	Variance (\$)	Variance (%)	
Surface & Shoulder	3,747,049	4,056,320	309,271	8.3	
Roadside Maintenance	637,090	485,150	-151,940	-23.8	
Sidewalk & Curb	305,747	268,677	-37,070	-12.1	
Drainage Structures	2,535,982	2,622,056	86,074	3.4	
Traffic & Safety	2,034,645	2,106,081	71,436	3.5	
Forestry	580,390	598,660	18,270	3.1	
Miscellaneous	3,620,573	3,718,792	98,219	2.7	
TOTAL	\$13,461,476	\$13,855,736	\$394,260	3%	

The 2012 zero base budget as compared to the 2011 budget has identified some significant variances in work unit requirements in the various cost centres.

The most notable change is that the 2012 budget for Roadside Maintenance Cost Centre has been reduced by approximately 24 percent or \$152,000. This is a result of the reduced need for the Miscellaneous Roadside maintenance activity within this cost centre. By identifying all the work activities that need to be performed the "miscellaneous" work activity within this cost centre has been significantly reduced. In 2011 the budget for this activity was approximately \$180,000; in 2012 it will be \$15,000.

Conversely, the Surface and Shoulder Cost Centre has been increased by approximately 8 percent or \$309,000. It was identified that more surface and shoulder maintenance of the roads is required. Activities such as gravel resurfacing, gravel shouldering and asphalt patching are activities within this cost centre that have been increased.

In addition to the above changes there are numerous smaller re-allocations between work activities within each cost centre. Some examples are:

- \$85,000 decrease in mechanical ditching
- \$20,000 increase for culvert replacements
- \$43,000 decrease for dust control on gravel shoulders on paved roads
- \$128,000 increase for dust control on gravel roads

Overall, the 2012 Summer Roads Maintenance program has generated a 3 percent increase. However, when combined with the Winter Roads Maintenance budget the overall increase in the Roads Maintenance budget is approximately 2 percent and within budget guidelines.

Next Steps

The Infrastructure Services Department and the Finance Department are undertaking the development of a Ten Year Financial Sustainability Plan for Roads. This plan will be available to Council prior to the 2013 Budget. The plan will outline in detail the annual operating budget requirements as highlighted herein, as well as the 10 year Capital requirements.

Staff will also provide various phase in alternatives for Council's consideration.