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ROAD MAINTENANCE DELIVERY REVIEW

The Transportation and Works Committee recommends:

1. **The presentation by Brian Harrison, Director, Roads Transportation be received; and**

2. **The recommendations contained in the following report, October 20, 2004, from the Commissioner of Transportation and Works be adopted, provided that the increased staffing referred to in the report is cost neutral:**

1. RECOMMENDATIONS

It is recommended that:

1. Regional Council endorse the Optimized Service Delivery Plan in principle, as outlined in this report.

2. The associated eight positions be referred for discussion in the proposed 2005 Roads Transportation Budget and Business Plan.

2. PURPOSE

The purpose of this report is to provide the Transportation and Works Committee and Regional Council with an update on the Region's recent Road Maintenance Delivery Review, and to seek endorsement of the proposed Optimized Service Delivery Plan.

3. BACKGROUND

Over the past several years, road maintenance staff have encountered increasing frustration in completing many maintenance activities. Routine maintenance activities are scheduled and staff are often called to deal with a request requiring them to stop what they are doing to deal with the request. This has resulted in routine maintenance activities being delayed and sometimes not getting done at all. In addition, there is such an increase in requests that the non-safety activities, for example grass cutting, garbage pick up, pot hole patching, are not being completed within the standard response time.

As a result, in September 2001, Regional Council approved the undertaking of a review of efficiency and effectiveness of the current road maintenance operations and to identify a preferred service delivery strategy. In the spring of 2002, the Region retained the firm of McCormick Rankin Corporation to undertake this Road Maintenance Delivery Review.

3.1 Organizational Restructuring

To remain effective, organizations must continually adapt and respond to changes in the environment. Within this context, the Transportation and Works Department, Roads Transportation Branch reorganized in 1994 and 1997.

The major direction of the 1997 reorganization was to re-focus its organizational structure to address:

- Downloading of complex road systems from the Province.
- Increasing urbanization of the existing road system.
- Expansion of the road system as a result of transfer from the local municipalities.
- Growth rate of traffic equalling twice that of the population.

With these changes, the historic role of the Region being the main supplier of the road maintenance service could no longer be continued. The structure had to focus on the managing and directing of others who perform the “on road” activities rather than the internal performance of the maintenance service itself.

In late 1999, it was realized that the 38% increase to the road system as a result of downloading from the Province and transfers from the local municipalities (1996-2,173 lane-kms, 1999-2,999 lane-kms) was starting to have an impact on the service delivery of non-safety items such as garbage and grass cutting complaints . It was also noted during this period that new provincial legislation increased the level of worker protection on the roadway requiring additional equipment and more person hours being dedicated to work zone safety.

Theses two major items combined to reduce the number of man-hours available to provide timely customer service in the non-safety area.

It should be noted that during this time, the ratio of workers per 100 lane-kms fell from 2.39 in 1996 to 1.43 in 1999 and currently sits at 1.31 in 2004 (a 45% reduction).

3.2 Existing Road Maintenance Staffing

The Region operates its road maintenance activities from four Maintenance Yards, Southwest Yard on Rutherford Road in Vaughan, Southeast Yard at Major Mackenzie Drive and Highway 404 in Richmond Hill, Central Yard on Woodbine Avenue at St. John’s Sideroad in Whitchurch-Stouffville and the North Yard on Baseline Road in Georgina.

Each of these yards has a standard staffing configuration of:

1- Patrol Supervisor
2- Technicians
2- Lead Operators
4- Maintenance Workers

The vacation average for these staff is 20 days per year. Each staff is permitted to accumulate overtime lieu credits up to 15 days. During winter months, staff generally accumulates lieu time to the maximum before taking the overtime pay. The majority of time off is encouraged to be taken during the non-winter months. This is a result of just enough staff available to meet our winter maintenance responsibilities. The greater portions of these days are taken from May to September. This results in an average of three staff members off during this period and contributes to the non-safety items not being addressed in a timely fashion.

3.2.2 Activity Response Time

Five activities are listed in Table 1 below, which shows the standard response and the actual response time currently achieved by staff in some of the non-safety activities:

Table 1
Activity Response Times

Activity	Standard Response Times	Actual Response Times
Grass Cutting	3 days	20 days
Debris Pickup	3 days	20 days
Street Sweeping	5 days	12 days
Pot Hole Patching (less than 40mm)	3 days	10 days
Illegal sign removal	5 days	20 days

Regional staff have been assigned to do the above work because the nature of the work does not fit contracted services model of "accomplishment should be measurable and reproducible in order to make payment".

This increase in response time is generally due to a limited number of staff available to do the work and an increase in the number of requests.

3.3 McCormick Rankin Assignment

The McCormick Rankin assignment included the analysis and review of the following:

- Forecast expansion of the road network and its related infrastructure, as a result of downloading from the Province, assumption of roads from the local municipalities and the capital program.

- Assessment of the Region's current practices in relation to industry standards and a peer review of the procedures employed by adjacent Regions of Peel and Durham.

- Implications of recent legislative changes affecting road maintenance and operation procedures.

- A greater emphasis on responsiveness to requests from residents.

- Maintaining the Region's position as a knowledgeable client.
- Introducing the concept of an Optimized Service Delivery Plan.

3.3.1 McCormick Rankin Findings

McCormick Rankin gathered information from various sources including adjacent municipalities and all levels of maintenance staff. The study resulted in the following findings:

- The current standards for road maintenance and operations are consistent with the Region of Durham and the Region of Peel. The data indicated that the Region's service delivery is comparable to the other Regions sampled and in many cases the efficiency measures show York's performance to be nearer the higher end of the scale.
- Management has continued to assess the application of technology to improve responsiveness to requests for service and operating procedures. Management is also initiating the integration of the customer contact system with the tracking system to measure actual response time against its selected performance measures and the setting of priorities for major maintenance and repairs to the network.
- Based on the peer review analysis, current operations are very efficient with average per lane-km costs ranging from 20 to 50% below the adjacent Regions. However, these cost efficiencies may be attributable with variation in service standards.

Table 2
2001 Total Operating Costs Per Lane Kilometres

Region	Cost
York	$4,000
Durham	$4,930
Peel	$8,350

- The level of contracted services is extremely high with expenditures representing approximately 64% of the budget compared to Durham Region at 17% and Peel Region at 30%. This high level of outsourcing may place the Region in a vulnerable position specifically with respect to its capacity to respond to unexpected circumstances (should a contractor not be available or prices are higher than expected) and its ability to maintain a position as a knowledgeable client.
- The internal staffing levels are substantially below those of adjacent municipalities and this finding supports the opinion expressed by the work force interviews. The number of employees per 100 lane-kms for the Region of Durham is 3.5 and for Peel Region is 3.9. This compares to 1.33 per 100 lane-kms in York Region. The principal implications from the lower ratio of employees to lane-kms is that the responsibilities that we cannot contract out are being impacted in the following areas:

- Responses to complaints in non-safety items are not meeting Public expectations.

- Inspection of contracted services is not being carried out consistently resulting in poor contractor performance.

- There is insufficient coverage for vacation, lieu and sick time.

- Appropriate level of staff supervision is lacking as mandated by the Occupational Health and Safety Act.

3.4 Level of Contracted Services

During the period from 1997 to 2004, the level of contracted services has increased by approximately $3.0M, almost a 50% increase over seven years, as show below:

1997 $6,557,000 (for contracted services)

1999 $8,298,000 (for contracted services)

2004 $9,426,000 (for contracted services)

During the same period, Regional in-house costs have stayed at the same level of funding. This review shows that funding for the in-house services has not kept up with the system expansion and has resulted in in-house service response times falling below the standard.

4. ANALYSIS AND OPTIONS

The key outcome of the McCormick Rankin review was to re-establish an optimized service delivery plan. The goal is to create an environment where the Region selects how the service is delivered based on cost and delivery time. An increase in staff will improve service delivery on a range of activities to allow for better customer service response.

An optimized service delivery plan will produce the following benefits.

- The ability for the Region to select the service delivery methods based on the best value for the work done.

- Reduce dependency on contractors should they not be available and/or prices are higher than expected.

- Increase staff to carryout improved service delivery on a range of activities to allow for better customer service response.

McCormick Rankin has indicated that efforts should be made to achieve a worker to 100 lane-kms ratio of 1.80 and that the five to ten year period work towards achieving a ratio of 2.5 employees per 100 lane-kms.

4.1 Five Year Phased Optimized Service Delivery Plan

Staff has completed a review of the McCormick Rankin study. The study is well documented and shows that the Region's road maintenance operation is currently understaffed and relies too much on contracted services.

Region staff has modified the recommendations in the McCormick Rankin report to reflect a more manageable progression to an optimized service delivery. The Optimized Service Delivery Plan is proposed to be phased in over five years with varying impacts on the tax levy.

4.1.1 Year One (2005)

The proposed 2005 Business Plan and Budget includes an additional eight staff for Roads Maintenance and a reduction in contracted services equal to the cost of the additional staff. In effect, the changes proposed in year one are cost neutral.

In order to meet the requirements of the OH&S Act, four of the new staff are proposed to be Patrol Foreman, to provide the required supervisory staff under the Act. The four remaining positions would be worker positions to carry out the level of service removed from contractors.

To improve responsiveness to customer requests, it is proposed to reduce contracted service and increase in-house service delivery. The shift in these services is designed to balance employee workload between summer and winter activities. The following services were selected because they can be implemented utilizing existing equipment and do not require any capital purchases and are up for renewal in 2005.

- Roadway sweeping
- Work zone traffic control
- Bridge washing
- Dump truck rental
- Rural grass cutting
- Safety barrier post repair
- Winter combination units (3)

To accommodate the additional in-house service delivery requirements to allow for an improvement in Table 1 response times and to satisfy the requirements of the OH&S Act, eight new positions are required as follows:

- Patrol Foreman (4)
- Transportation Maintenance Worker (4)

The reduction of contracted service delivery and increased in-house service delivery is expected to be a zero cost based undertaking with no tax levy increase.

4.1.2 Year Two (2006)
In year two, it is proposed to add an additional four maintenance workers.

4.1.3 Year Three (2007)
In year three, it is proposed to add an additional four maintenance workers.

4.1.4 Year Four (2008)
In year four it is proposed to add four Customer Service Representatives, one to be stationed at each of the yards.

4.1.5 Year Five (2009)
In year five it is proposed to add one Road Occupancy Permits Clerk and two Asset technologists.

Upon the completion of the fifth year of the Phased Optimized Service Delivery Plan, the worker to 100 lane-kms ratio will be 1.80. It is expected that the increase in worker to lane-km ratio will result in a reduction in the actual response time of the five activities listed in Table 1, to close to or within the standard response time. This reduction in response time will be gradual over the five year period.

5. FINANCIAL IMPLICATIONS

The proposed annual tax levy costs for the additional staff to implement the Optimized Service Delivery Plan are outlined in Table 3.

Table 3
Optimized Service Delivery Plan

Additional Proposed Staffing	Number	Tax Levy Costs
2005 (4) Transportation Maintenance Workers	4	$218,000
2005 (4) Patrol Foreman	4	$245,000
2005 Remove From Contracted Services	-	-$463,000
Total Tax Levy Impact		**$0**

There are no tax levy costs associated with these staff increases after the savings have been deducted from the reduced contracting out component.

6. LOCAL MUNICIPAL IMPACT

The proposed Optimized Service Delivery Plan will allow for improved service delivery and quicker response to local needs and requirements. This will better align our service delivery with the local municipalities.

7. CONCLUSION

The accelerated growth of the Regional Road system as a result of the accelerated capital program and the downloading from the Province and the transferring from the local municipalities has impacted the Region's ability to maintain an environment of an optimized service delivery. A review by McCormick Rankin has identified a number of key areas for improvement. Staff reviewed these recommendations and created a more manageable progression to an Optimized Service Delivery Plan which are recommended for implementation to help maintain the Region as a knowledgeable client and improve Table 1 response times.

The Senior Management Group has reviewed this report.