



To: Public Works and Transportation Committee **Date:** June 10, 2002
From: Jeff Day, P.Eng
 General Manager, Engineering & Public Works **File:** -
Re: **Engineering & Public Works Division - Levels of Service 2002**

Staff Recommendation

That the report (dated June 10, 2002 from the General Manager, Engineering and Public Works), regarding Engineering & Public Works Levels of service for Roads and Fleet programs be received for information.

A handwritten signature in black ink, appearing to read "Jeff Day", written over a large, light-colored oval scribble.

Jeff Day, P.Eng.
General Manager, Engineering & Public Works

Att. 1

June 10, 2002

Staff Report

Origin

At the February 25, 2002 Council Meeting, it was resolved:

“That each General Manager review with their appropriate Committee of Council, departmental programs and service levels prior to the start of the 2003 budget review process;”

This report is in response to that resolution for the roads and fleet programs.

Analysis

Costs for roads and fleet operational budgets are primarily driven by the level of service standard to which the service is delivered. The current level of service for roads and fleet programs is attached as Appendix A.

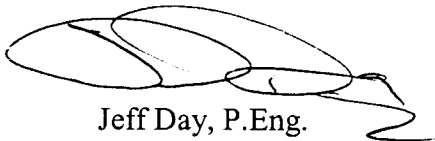
This level of service strikes a fine balance between providing effective service, maximizing infrastructure lifespan, minimizing complaints and providing long term planning in a timely manner. It should be noted that the current funding for these programs could be increased or decreased but would result in a corresponding impact on customer service and the lifespan of the infrastructure.

Financial Impact

The proposed levels of service for roads and fleet are currently accommodated in the 2002 operating budget.

Conclusion

The proposed levels of service provide a reasonable level of service for the provision of Roads and Fleet operating and maintenance programs.



Jeff Day, P.Eng.
General Manager, Engineering & Public Works

JD:jd

June 10, 2002

APPENDIX A

Program	Budget	Level Of Service	Man- Years	IMPACT					
				Tech/Safet	Community	Socioecon.	Political	Environme	
Roads and Construction									
Operating Expenditures	\$ 408,100			X	X	X	X	X	X
Snow Removal	\$ 202,000	As required. Major arterials & bus routes cleared of ice and snow as per Council policy. Salting and sanding all bridge decks as required.	1.7	X	X	X	X	X	X
Street Cleaning	\$ 441,300	Planned & on-demand. Major Arterials on an 8 week rotation, subdivisions 4 times annually, and city centre weekly.	5.4	X	X	X	X	X	X
Dust Control	\$ 29,600	Apply magnesium chloride to all laneways once per year. demand response from public (approx. 20 complaints from public annually)	0.5	X	X	X	X	X	X
Barricade Maintenance	\$ 24,200	As reported by public/ demand response. Removal or moving of concrete barricades or replacement of broken ones. Response to requests within 24 hours	0.5	X	X	X	X	X	X
Street Sweeping	\$ 387,500	To clean and sweep major arterials and subdivisions	4.4	X	X	X	X	X	X
Dyke Maintenance	\$ 213,300	Annual planned repair and erosion controls based upon weekly inspections	1.9	X	X	X	X	X	X
Dyke Brushing	\$ 56,800	Cut brush annually to ensure the integrity of the dyke system	1.3	X	X	X	X	X	X
Dyke Repair	\$ 156,500	Annual planned repair and erosion controls based upon weekly inspections. This only allows for 3 major repairs per annum to our Dyke system.	0.6	X	X	X	X	X	X
Construction & Greenwaste Disposal	\$ 157,200	Monthly & bi-annually	0.6						X
Disposal Area	\$ 19,800	Monthly cleanings of works yard, loading of containers	0.3						X
General Maintenance	\$ 19,800	Bi-annually cleaning of all storm drains and painting of all lane lines in the works yard	0.2						X
Contract Tipping	\$ 117,600	Cost of monthly dumping of disposal containers	0.1						X
Asphalt Rehabilitation	\$ 1,965,000	Annually & bi-annually. Bi-annual program N/S one year, E/W alternate year. Subdivisions done in conjunction with neighbouring main roads. Annual program to repair/upgrade roads & parking lots. 15 year cycle for major roads; 24 year cycle for subdivisions; parking lots as required.	4.9	X	X	X	X	X	X
Asphalt Crack Sealing	\$ 75,100	Bi-annual program N/S one year, E/W alternate year. Subdivisions done in conjunction with neighbouring main roads. Fill approx. 70 kms of cracks per annum. Major roads on 2 year cycle. Average 50-70 km annually.	1.3	X	X	X	X	X	X
Asphalt Capping	\$ 1,889,900	Annual program to repair and upgrade the approx 563 kms roads and parking lots. 15 year cycle for major roads; 24 year cycle for subdivisions; 50 parking lots as required. Approx. 88 lane kms per annum. Annual program only deals with approx 20 lane kms (per annum)	3.6	X	X	X	X	X	X

Program	Budget	Level Of Service	Man- Years	IMPACT				
				Tech/Safet	Community	Socioecon	Political	Environme
Sidewalk & Bridge Maintenance	\$ 155,600	Demand & annual. Based on Public complaints and planned maintenance	1.3	X	X	X	X	X
Sidewalk Maintenance	\$ 137,600	Demand / Response Based on Council Policy to repair and fix tripping hazards over 3/4 inch in height. Response within 48 hour of being informed. Approx 2 sites reported per week	1.2	X	X	X		X
Miscellaneous Bridge Maintenance	\$ 18,000	Annual Inspection for # 2rd Bridge & scheduled maintenance including cleaning, expansion joints, scuppers, etc. Any repairs to streetlights or hand railings included. Misc repairs to wooden walkway bridges as required.	0.1	X	X	X		X
Street Lights Services	\$ 1,024,100	Demand & planned. Pays for the power costs associated with approx. 10,000 Street lights. Repairs carried out within one day of being informed where risk to Public. Within 4 working days others. Approx 900 Calls in 2001. Includes power costs and planned upgrading of street lights and leased Hydro lights.	2.6	X		X	X	
Street Light Maintenance	\$ 971,500	Demand & Planned repairs + hydro costs	2.0	X		X	X	
Group Relamping	\$ 42,400	Planned replacement of lamps annually	0.3	X		X	X	
Fence Maintenance	\$ 10,200	Demand & planned repairs to all City owned fences. Response determined when informed by staff or public of dangerous or unsightly problems. Approx. 15 calls/year.	0.2	X		X	X	
Signs and Roadmarking	\$ 772,600	Annual - Manufacture and replace as required due to fading or damage. Repair or replacement of approx 5000 separate signs as reported by Staff/Public. Signs are replaced within 24 hours of being reported.	8.3	X	X	X		X
Sign Manufacturing	\$ 221,900	Annual - Manufacture and replace as required due to fading or damage. Repair or replacement of approx 5000 separate signs as reported by Staff/Public. Signs are replaced within 24 hours of being reported.	2.6	X	X	X		X
Sign Installation	\$ 225,900	Annually - as per the above	2.4	X	X	X		X
Crosswalks	\$ 117,400	Annually - Repaint all major traffic intersections, school crosswalks, road markings and stop bars once per annum. Repaint 145 major traffic intersections and yellow curbs as time permits.	1.9	X	X	X		X
Centreline Painting	\$ 194,400	Annual - Repaint all lane lines	1.1	X	X	X		X
Traffic Buttons	\$ 13,000	Replace as required	0.3	X	X	X		X

Program	Budget	Level Of Service	Man- Years	IMPACT				
				Tech/Safet	Community	Socioecon.	Political	Environment
MRN	\$ 809,000	Annual maintenance & transfer to rehabilitation reserve GVTA	0.0	X	X	X	X	X
Transfer to Rehab Reserve	\$ 471,900	Reserve for major rehabilitation	0.0	X	X	X	X	X
Annual Maintenance	\$ 337,100	Provide repair & rehabilitation services to Translink (GVTA)	0.0	X	X	X	X	X
Road Maintenance	\$ 909,000	Planned and demand repairs to asphalt surface including potholes, cracking, large sunken areas, vibration, etc. Annual repairs to all gravel shoulders	8.6	X	X	X	X	X
Shoulder Maintenance	\$ 219,000	Annual planned repairs to all gravel shoulders. Repairs are carried out in early spring and late fall based upon senior staff inspections. Demand response in Summer	2.0	X	X	X	X	X
Road Maintenance	\$ 258,100	Planned and demand repairs to asphalt surface including potholes, cracking, large sunken areas, vibrations etc. based on daily inspections. Response to inspect within 1 hour of being reported	2.1	X	X	X	X	X
Asphalt Road Maintenance	\$ 431,900	Repair road and utility cuts, including asphalt walkways 60 days after initial construction. Regrade and repair roads and laneways as required. Rebuild approx. 20 portions of roadway per year due to excessive vibration on demand	4.5	X	X	X	X	X

Program	Budget	Level Of Service	Man- Years	IMPACT				
				Tech/Safety	Community	Socioecon.	Political	Environment
Fleet								
Operating Expenditures	\$ 435,400	Bi-weekly, monthly, & annual. Hoists & crane inspections bi-annually. Annual insurance on 527 vehicles	0.00	X	X	X	X	X
Equipment Maintenance	\$ 104,600	2 inspections/year & washing of 64 vehicles twice/month	0.63	X				X
Materials	\$ 93,700	Parts and labour required for 2 inspections per year		X				X
Car Washes	\$ 10,900	2 washes per month		X				X
Equipment Repair	\$ 1,992,300	Semi-annual inspections & maintenance of hoists & equipment. Annual Air Care permit fees. PM at 5K or 250 hrs & reactive repairs. 24 hr turn around time.	9.71	X	X	X		X
Supplies - Tools	\$ 24,600		0.0	X	X	X		X
Maintenance - Equip., Tools, Garage	\$ 84,700	Semi-annual inspections and maintenance of hoists & shop equipment.	0.0	X	X	X		X
Inspections, Permit Fees	\$ 22,500	annual Aircare inspection	0.0	X	X	X		X
PM Program Maintenance repairs	\$ 1,307,000	Per manufacturer - 5K or 250 hrs & follow-up and reactive repairs. 24 hr turn around time.	9.7	X	X	X		X
Fuel Requirements	\$ 553,500		0.0	X	X	X		X
Small Equipment	\$ 223,500	Daily - same day service & repair of small equipment.	2.2			X		
Supplies	\$ 217,600		2.2			X		
Monthly Vehicle Charges	\$ 5,900		0.0			X		

Program	Budget	Level Of Service	Man- Years	IMPACT				
				Tech/Safet	Community	Socioecon.	Political	Environme
Utility Operations	\$ 323,700	U2 responds to emergency calls and secures work sites, picks up dead animals & removes illegal signs on demand (24/7). The manufacture of barricades as required.	4.2	X	X			X
Dead Animal Pickup, Illegal Signs	\$ 291,100	Immediate response to pick up dead animals and remove illegal signs.	4.1	X	X			X
Manufacturing Barricades	\$ 4,900	On Demand - In House manufacturing of barricades.	0.2	X	X			X
Monthly Vehicle Charges	\$ 9,200			X	X			X
Materials- Flasher rentals	\$ 18,500			X	X			X
Hired Equipment	\$ 124,000	Daily & on-demand.	1.6	X	X			X
Operator Downtime	\$ 39,690	On Demand	0.6	X	X			X
Maintenance - Equipment & Tools	\$ 78,410			X	X			X
Monthly Vehicle Charges	\$ 5,900		0.0	X	X			X
Contribution to Reserve	\$ 1,164,500	Annual Requirement - Reserve Contribution for replacement plan.						
Fuel Station	\$ 93,100	Bi-weekly salaries & repairs to fuel dispensers	1.00	X				X
Welding Shop	\$ 9,400	Leadhand coordinates work activity for 3 welders	0.1	X				X