From: "Johnston, Sadhu" <Sadhu.Johnston@vancouver.ca>

To: "Direct to Mayor and Council - DL"

CC: "City Manager's Correspondence Group - DL"

"Nelms, Cheryl" <Cheryl.Nelms@vancouver.ca>

Date: 12/3/2019 9:11:13 AM

Subject: Memo - Prioritizing Public Realm Maintenance and Cleanliness in Vancouver

"Impey, Patrice" <Patrice.Impey@vancouver.ca>

Attachments: ENG - Memo to Mayor and Council - Prioritizing Public Realm Maintenance ....pdf

Dear Mayor and Council,

Please see the attached memo from Cheryl Nelms with regards to prioritizing public realm maintenance and cleanliness in Vancouver. A short summary of the memo is as follows:

This memo addresses the issues raised in the motion Back to Basics: Prioritizing Public Realm Maintenance and Cleanliness in Vancouver'.
Post the 2010 Olympics, the budget allocation for street cleaning was reduced by approximately \$2M. The Street cleaning budget stayed at that level until 2015 and cleanliness of the City gradually decayed over the period from 2011 to 2015.
From 2015 to 2017, investments into public realm cleanliness totaled \$5.9M (from \$6.4M to \$12.3M) with the majority being allocated in 2017 after recycling ceased.
Over the past three years, we have seen a significant increase in demand for services in the Downtown Eastside (DTES), and movement of issues further outside of the DTES.
Proposed increases in funding for these areas have been included as part of the 2020 budget and total \$1.3 million in additional or accelerated funding. More significant improvements can be phased in, in

2021 and beyond, to allow sufficient time to ramp up service levels (e.g. order and receive additional

If you have any questions, please feel free to contact Cheryl Nelms at 604-873-7348 or cheryl.nelms@vancouver.ca.

Best, Sadhu

Sadhu Aufochs Johnston | City Manager Office of the City Manager | City of Vancouver 604.873.7627 | sadhu.johnston@vancouver.ca

specialized equipment).

Pronouns: he, him, his







# ENGINEERING SERVICES Cheryl Nelms, P.Eng., PhD

Acting City Engineer/General Manager

## MEMORANDUM

December 2, 2019

TO:

Mayor and Council

CC:

Sadhu Johnston, City Manager

Paul Mochrie, Deputy City Manager

Lynda Graves, Administration Services Manager, City Manager's Office Rena Kendall-Craden, Civic Engagement and Communications Director

Katrina Leckovic, City Clerk

Neil Monckton, Chief of Staff, Mayor's Office

Alvin Singh, Communications Director, Mayor's Office

Anita Zaenker, Chief of Staff, Mayor's Office

FROM:

Cheryl Nelms

Acting General Manager, Engineering Services

SUBJECT:

Back to Basics: Prioritizing Public Realm Maintenance and Cleanliness in

Vancouver

This memo addresses the issues raised in the motion 'Back to Basics: Prioritizing Public Realm Maintenance and Cleanliness in Vancouver.'

The motion passed by Council on October 2, 2019 addresses the cleanliness and state of repair of the City's streets, sidewalks and medians, and asks for clarification on how the Street Cleaning Utility Fee has been applied. In order to address the short time available prior to the presentation of the 2020 budget, we are providing this memo which addresses current practice and proposed improvements for street cleanliness, sidewalks and planted medians; we would be happy to provide a more detailed presentation should Council desire.

In summary, growth, a changing urban context and budget constraints have created pressures on public realm maintenance and cleanliness. Proposed increases in funding for these areas have been included as part of the 2020 budget and total \$1.3 million in additional or accelerated funding. More significant improvements can be phased in, in 2021 and beyond, to allow sufficient time to ramp up service levels (e.g. order and receive additional specialized equipment).

#### Street Cleanliness

Street cleaning programs in the City are provided on a 24 hour per day schedule on weekdays and 20 hours per day on weekends. Services are provided by the Sanitation Branch, which is part of the Zero Waste Division in Engineering.



### **Background and Street Cleaning Utility Fee**

Post the 2010 Olympics, the budget allocation for street cleaning was reduced by approximately \$2M. Staffing levels, equipment, and services were reduced to accommodate the budget reduction. The Street cleaning budget stayed at that level until 2015 and cleanliness of the City gradually decayed over the period from 2011 to 2015.

On November 17, 2015, Council approved terminating the MMBC contract for single family curbside and multi-family collection, and turning over recycling collection to MMBC, as the agency responsible for recycling in the Province, no later than January 2, 2017. Council further directed staff to develop a plan to utilize the approximately \$4M in savings from the transition of recycling to support expansion of programs focussed on the overall cleanliness of the City. In addition, Council further directed that no positions be lost in the transition.

As part of the 2017 Solid Waste Utility Rate Report, the Street Cleaning Utility rate was set at \$19 per household, which applied to all single and multi-family dwellings. This was the same rate that was charged for the recycling program. The source of funding for recycling was the Solid Waste Utility rate and the rate allocation for recycling was therefore repurposed as the rate for street cleaning. The rate did not change in 2018 and in 2019, it was increased by \$2 to \$21 per household, to cover the costs for new bins and enclosures for public realm recycling and waste.

### Service changes

As stated in the 2017 Solid Waste Utility Rate Report, the Street Cleaning Utility rate was to support: increased recovery of litter and abandoned waste; an additional focus on litter and needle collection close to schools and residential areas; higher levels of service and quicker response times to service requests; addressing the overall increasing service demands; as well as new program developments to support Council's goals around increased recovery of materials for recycling and waste diversion in the public realm.

From 2015 to 2017, investments into public realm cleanliness totaled \$5.9M (from \$6.4M to \$12.3M) with the majority being allocated in 2017 after recycling ceased. Approximately 75% of the funding went to core services (litter & abandoned waste pickup, sweeping, and flushing), 10% to micro-cleaning grants, 10% to streetscape recycling, and 5% to education/outreach. Of the 27 positions that were reassigned from recycling, 16 went to litter collection, 2 went to collection of recycling, 5 went to abandoned waste and 4 went to mechanical street sweeping and flushing. The following table outlines service levels improvements by program area.

Program Area	Improvement
Abandoned Waste	<ul> <li>Increase from 4 to 7 nights/week in priority DT/DTES lanes*</li> <li>Increase from 3 to 5 days/week garbage and to daily recyclables/mattresses citywide</li> </ul>
Litter Collection	<ul> <li>Add staff to increase collection of existing littercans to reduce overflow incidents</li> </ul>

	Add an additional 300 street and parks littercans     Add staff for quick response daytime litter cleanup	
Street Sweeping and Flushing	<ul> <li>Increase night shift sweeper service from 4 to 7 nights (+bike lanes)</li> </ul>	
	<ul> <li>Double daytime sweeper service from 1 to 2 sweepers (+bike lanes)</li> </ul>	
	<ul> <li>Increase from 5 to 7 night flushing in DT/DTES* (seasonal)</li> </ul>	
Micro-cleaning	Extend funding to 12 months (from 7 months in 2016)	
Grants	Expand to other areas (i.e. Kingsway/Broadway)	
Anti-Litter Campaign	Enhanced messaging related to anti-litter and illegal dumping including print/social media ads and outreach programming	
Streetscape Recycling	Continue pilot and expand to other areas including parks	

DT=Downtown, DTES=Downtown Eastside

### **Tracking success**

In order to monitor changes and improvements, staff track a number of service related metrics. As part of our efforts, a litter audit was first performed in 2015 and, except in 2016, has been done every year since. The Litter Audit is undertaken by a consultant and involves quantifying the amount and types of litter at 110 sites across the City. In addition, staff have established a Litter Index based on an established rating system and it involves staff rating 610 sites. The first Litter Index rating was completed this fall and it is being contemplated as a quarterly exercise. Sites for both the Audit and Index are randomly generated, consider zoning and street type, and are GIS-based allowing for geographic visualization of results. Tools like these are being used in other cities and, although only a snapshot in time, the results provide a good balance with demand-based metrics (311 generated) and help us target our efforts to problem areas and items.

Staff track the number of 311 related calls for overflowing litter cans on streets and in parks, general litter calls, abandoned waste and illegal dumping. We track the time required to respond to 311 calls as well as the amount of material being collected. The summary table below provides an overview of some of our key metrics. Of interest is the amount of material being collected through the abandoned waste program. Staff are responding more quickly to calls and total calls are starting to decrease, however the amount of material is rising drastically every year.

Metric	2015	2016	2017	2018	2019F
Abandoned Waste Incidents (311 cases)	16,580	18,782	20,570	21,611	21,100
Abandoned Waste Response Time (days)	6.5	5.7	4.3	3.5	3.5
Abandoned Waste Collection (items)	N/A	74,527	99,981	129,448	155,000
Incidents of Street Litter (311 cases)	3,055	2,731	2,638	2,266	2,720

Litter & Park Receptacle (311 cases)	1,661	1,135	1,445	2,369	1,986
Litter Audit -# of large items per site	12	N/A	8.1	9.7	10.7
Litter Audit – # of small items per site	7.3	N/A	5.2	8.1	7.5
Litter Audit – Cig butts % of small items	31%	N/A	37%	34%	21%

#### **Current and Ongoing Challenges**

Over the past three years we have seen a significant increase in demand for services in the Downtown Eastside (DTES), and movement of issues further outside of the DTES. As illustrated in the heat map of 311 calls in 2017 vs 2019 provided in Appendix A, the issues of abandoned garbage, needle calls and general litter calls previously focused in the DTES are becoming more widely spread.

This spread has required a reassignment of resources and reduction in servicing in some areas of the City in order to support the increasing demand in the DTES and surrounding areas. Between 2017 and 2019 the general budget allocation towards the DTES area is estimated to have increased from approximately 20% of the street cleaning budget to between 25-30%.

Increasing violence towards our night shift staff continues to create problems. Where previously we were able to use one man crews for litter collection, we now need to have 2 man crews due to safety concerns. Staff working in the DTES and around encampments have been threatened with physical violence and have even discovered Improvised Explosive Devices (IEDs) during cleanups. Staff can no longer work around encampments and in some areas of DTES without Vancouver Police support.

We have noticed an increase in Twitter interactions showing overflowing litter receptacles at special events like the celebration of lights. Over the past 2 years there have been significant changes in how litter receptacles are managed during special events in order to address potential terrorism risk. Existing litter receptacles must be either removed or hooded to prevent use. New receptacles that are transparent are then deployed at specific locations agreed with Vancouver Police, so that they can be effectively monitored during the event. Sanitation restricts their cleanup efforts until after everyone has left the event and then do a cleanup blitz on nightshift in order to ensure the area is clean for the next morning.

Increased theft of waste receptacle liners/totes and vandalism of receptacles, including cigarette butt receptacles, is becoming more and more problematic. Liners/totes and receptacles are routinely vandalized, the containers stolen and if locked the enclosures are set on fire, locks are vandalized, or liners/totes are removed and are dumped on the street.

#### Current and Recommended Service Levels and Budget Impacts

Addressing the street cleanliness issues adequately in an environment where the problems continue to grow each year creates significant challenges. The table below illustrates present service levels and service levels that staff believe are needed to meet Street Cleanliness goals. To achieve the desired levels of service, \$7 million is estimated to be needed phased over the

period from 2020-2023. The draft 2020 budget includes \$1.3 million for public realm maintenance and cleanliness. Staff will continue to review opportunities for operational efficiencies including reallocation of services from lower demand to higher demand areas of the City, as part of future annual budgets.

Program Area	Current (approximate)	Required (estimated)	Est. Increment al Cost	
Abandoned Waste	Downtown and Chinatown lane clean ups 4 days per week KEY DTES lanes nightly Service request response 3.5 days	Downtown and Chinatown lanes nightly DTES lanes nightly Service request time 24 hrs	\$0.8M	
Litter Collection	3000 receptacles	3600 receptacles	\$1.4M	
Mechanical Sweeping	6500hrs of sweeping/yr 22,000km swept/yr	10,000 hrs of sweeping/yr 34,000 km swept/yr	\$1.0M	
Mechanical Flushing	3.5 flushes/week DT/DTES Seasonal	7 flushes/week DT/DTES All year	\$0.5M	
Micro-cleaning Grants	60,000 cleaning hrs/yr	68,000 cleaning hrs/yr	\$0.4M	
Streetscape Recycling	90 station locations 90 tonnes diverted	250 station locations 250 tonnes diverted	\$0.8M	
Support Staff	5 subforeman 5 superintendents	+1 equip coordinator +1 training coordinator +1 superintendent	\$0.7M	
Citywide Sweeping Program	Fall street leaf collection (all streets)	Fall and Spring sweep (all streets)	\$1.4M	
Total			\$7.0M	

Service levels and impacts need to be reviewed annually in order to adapt as the situation changes. Given the ongoing challenges with increased transients and homelessness, without adequate attention we believe the situation will continue to worsen.

#### Sidewalks

The City has 2160km of sidewalks with an estimated replacement value of \$1.1 billion and has a number of maintenance and rehabilitation programs to improve accessibility and address trip hazards in the sidewalk network. Sidewalks are prioritized for repairs based their assessed condition, public requests for service and the City's trip hazard inspection program which is designed to detect and eliminate immediate safety concerns within 7 days of detection.

Sidewalk maintenance programs range from temporary repair measures such as installing asphalt fillets, to more substantive repair measures, such as the replacement of concrete panels at spot locations. When the assessed condition is deemed to be beyond the scope of temporary maintenance repair, it is classified as a candidate for the Sidewalk Rehabilitation Program.

The Sidewalk Rehabilitation Program is funded at a rate of \$1M per year. Historically, this program took a project coordination approach, looking for opportunities to align with other roadway improvement projects in the City with a priority given to high pedestrian zones in commercial districts, school zones and healthcare facilities. In the 2019-22 Capital Plan, the mandate of the sidewalk rehabilitation program is shifting to take a mobility-based approach, to put more weight on prioritizing high pedestrian zones and areas frequented by users with greater mobility needs. Priority is also being given to locations receiving multiple 311 requests or public complaints that temporary repairs are found to be no longer sufficient.

In an attempt to better inform the decision making process related to project prioritization, the City has also conducted a subjective overall sidewalk condition assessment to assign a condition rating of 1 to 5 (best to worst) in 2016 and 2019. Based on the 2016 Sidewalk Condition Assessment, approximately 50% of the City's sidewalk network was rated to be in good condition, with 40% in fair condition and 10% in poor condition respectively. The 2019 Sidewalk Condition Assessment data is currently being analyzed and the results are not available at this time. Renewal of the sidewalk network in poor condition based on the 2016 Sidewalk Condition Assessment is estimated to cost approximately \$30M, assuming that 50% of the block length is replaced.

The City is also accelerating the delivery of the Sidewalk Rehabilitation program in 2020 and an allocation of \$0.4M to support Sidewalk Rehabilitation has been included in the 2020 budget request to support Big Move 1: Easy Walk and Roll, of the Climate Emergency Response.

#### Medians and Horticulture

The Street Horticulture program consists of softscaped elements in the street rights-of-way including turf and planted areas along arterial and local streets. The program has over 2000 assets including boulevards, medians, planters, large landscaped areas and planted traffic calming features. A significant portion of the City's street horticulture within the road right of way is maintained through an agreement with the Park Board, with the remaining maintained by green streets volunteers or external contractors.

The horticulture budget was reduced in 2011 and has gradually recovered; however rising costs and new asset additions continue to create pressure on service levels. City staff work closely with Parks Board staff to address these pressures with several improvements underway or anticipated in 2020 within existing budgets.

- In previous years, the crews were seasonal, but in 2019, a full time, dedicated crew was staffed allowing for maintenance throughout the year.
- With the dedicated staff and improved work planning in 2019, staff are reviewing the service levels and ensuring that the high demand areas, including medians, are able to be maintained as needed; based on the outcomes of this review, potential increases to service levels may be brought forward as part of the 2021 budget.
- For appropriate areas outside of our high foot traffic corridors, plant material will be renovated and replaced with a plant palette specifically chosen to tolerate more extreme weather in our urban environment, reducing operational demands across the City.

Additionally in 2020, staff will work to establish a social enterprise supportive
employment opportunity specifically focused on horticultural maintenance
skills. Professional skills will be developed while caring for areas currently available for
the City's Green Streets volunteers and fill any gaps in areas with no volunteers. Staff
expect to see an overall increase in the cleanliness of the street horticulture in 2020 with
these services in place.

#### Conclusion

Growth, a changing urban context and budget constraints have created pressures on public realm maintenance and cleanliness. Proposed increases in funding for these areas have been included as part of the 2020 budget and total \$1.3 million in additional or accelerated funding. More significant improvements can be phased in, in 2021 and beyond, to allow sufficient time to ramp up service levels (e.g. order and receive additional specialized equipment).

If you have any questions, please do not hesitate to contact me directly at 604-873-7348 or <a href="mailto:cheryl.nelms@vancouver.ca">cheryl.nelms@vancouver.ca</a>.

Cheryl Nelms, P.Eng., PhD

Acting General Manager, Engineering Services

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## Appendix A



Figure 1 - 2015

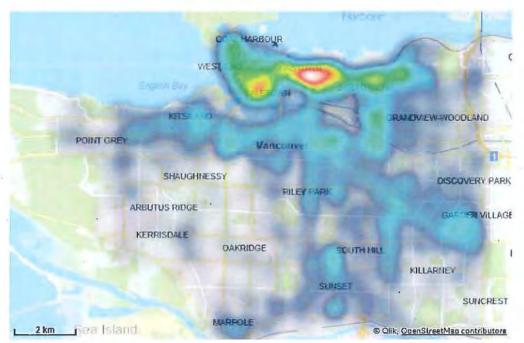


Figure 2 - 2019 YTD