

PUBLIC WORKS

OPERATING BUDGET



Municipal Council
Town of Cobourg

PUBLIC WORKS SUMMARY SHEET (P.108)

Current increase is showing as 5.75%

Excluding transit – increase is 1.77%

- No opportunity to reduce transit costs other than reducing service and/or increasing fares.
- Only 0.5 of an FTE is attributed to transit – cannot be reduced
- 0% of the Director's time is allocated to transit currently – should be increased



ENGINEERING (P.110)

Resources

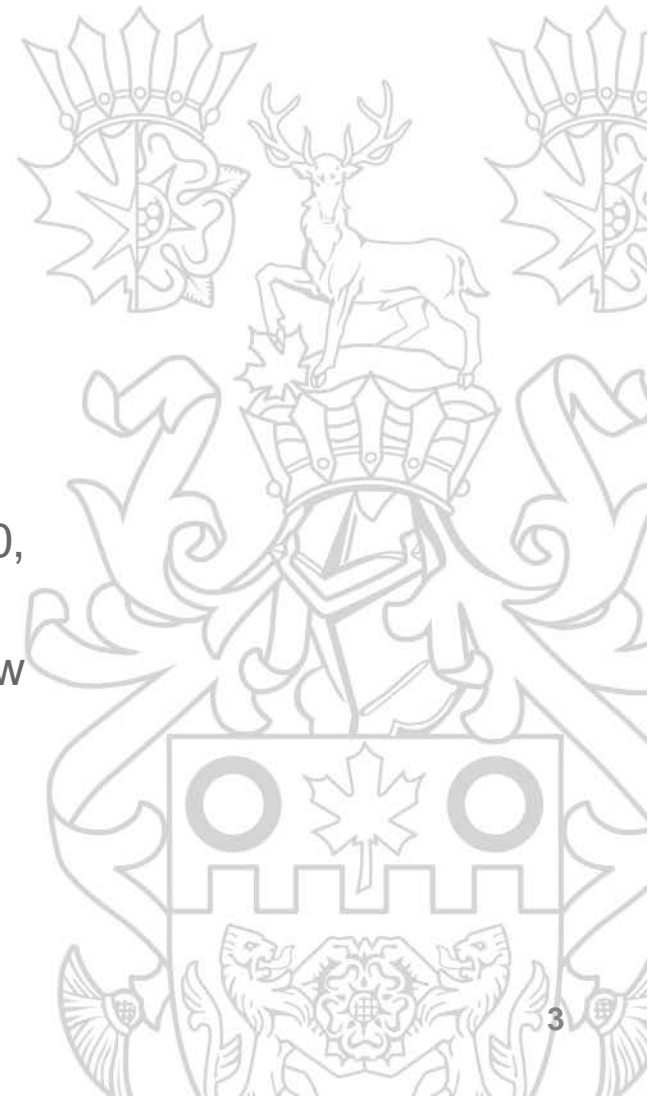
1 Manager

2 Engineering Technicians

0.1 Engineering Administrator

Budget Notable Mentions

- Training reduced by \$2,500 – expecting all online courses, no travel/accommodations
- Brook Creek Flood Reduction Study – approved in 2020, deferred to 2021 \$25,000
- Engineering Review Fees expected to increase with new user fees and charges schedule \$125,000
- Overall reduction of 13.7% (including GIS)



GIS (P.113)

Resources

1 GIS Technician

Budget Notable Mentions

- Training reduced – expecting all online courses, no travel/accommodations
- Transfer to reserve – \$2,500 to be transferred to a GIS computer reserve
- Reduced Hardware Maintenance budget to accommodate reserve contribution.
- Excluded GIS summer student



ROADS & SEWERS (P.117)

Resources

1 Manager	1 Inspector
1 Supervisor	1 Working Foreman
0.75 Administrator	13 General Utility Workers
0.5 Operations Clerk	0.5 Shared General Utility Worker

Budget Notable Mentions

- NEW General Utility Worker
 - In accordance with 2020 Staff Justification Report where a new G UW was proposed annually for 5 years beginning in 2020.
 - Manager taken off standby schedule = savings to put towards new G UW
- Training/Conferences reduced – expecting all online courses, no travel / accommodations
- Increase in Building Maintenance expense for 390 King W facility due to COVID19





Bridges & Culverts (Pg 122)

NEW 2022 Special Project: Biennial OSIM Inspections

- As per Ontario Regulation 104 under the Public Transportation and Highway Improvement Act, Bridge inspections following the Ontario Structural Inspection Manual (OSIM) are required every 2 years. Completed in 2020. \$15,000

Roadside Grass & Weeds (Pg 124)

NEW Contract: Weed Control

- Due to ongoing complaints annually about weeds growing in traffic islands, etc. new annual program will include 2-3 spray events in non-downtown areas. \$5,000

Storm Drain System (Pg 126)

NEW Contract: Stormwater Management Pond Maintenance

- New annual swm pond maintenance program. Intended to eventually be conducted by Town resources when available. Future SWM 'fee' to be proposed to fund maintenance for swm infrastructure. SWM fee currently being studied for implementation. \$50,000



Table 7: Life Cycle Cost Estimate - Pond Specific

Pond Name	Annual Maintenance and Operations	Capital Works			
		Pond Cleanout and Rehabilitation			
		Pond Cleanout and Rehabilitation Cost		Annual Cost of Pond	
Cost	Survey, Design and Tender	Construction Cost	Cleanout Frequency (Years)	Total Cost	
Terry Fox (SWMP ID #1)	\$ 9,951	\$ 36,191	\$ 436,715	11.7	\$ 50,370
Burnham (SWMP ID #3)	\$ 18,909	\$ 53,889	\$ 1,675,799	23.6	\$ 92,201
Densmore Rd. (SWMP ID #4)	\$ 2,546	\$ 36,191	\$ 197,056	24	\$ 12,264
Read/Otto (SWMP ID #5)	\$ 2,140	\$ 30,441	\$ 90,681	12.3	\$ 11,987
Chris Garret (SWMP ID #7)	\$ 11,470	\$ 49,381	\$ 1,003,617	24.8	\$ 53,930
Foote Cres. (SWMP ID #12)	\$ 3,090	\$ 36,191	\$ 178,692	27.6	\$ 10,875
Total Annual Maintenance Cost	\$ 48,106				



Table 8: Life Cycle Cost Estimate - 2020-2040

Year	Annual Maintenance and Operations	Capital Works				Yearly Cost
		Pond Cleanout and Rehabilitation				
		Survey, Design and Tender		Pond Cleanout and Rehabilitation		
Cost	Description	Cost	Description	Cost		
2020	\$ 48,106			Emergency Priorities	\$ 25,000	\$ 73,106
2021	\$ 48,106			Terry Fox	\$ 436,715	\$ 484,821
2022	\$ 48,106	Read Otto	\$ 30,441			\$ 78,546
2023	\$ 48,106			Read Otto	\$ 90,681	\$ 138,787
2024	\$ 48,106	Chris Garrett	\$ 49,381			\$ 97,487
2025	\$ 48,106			Chris Garrett	\$ 1,003,617	\$ 1,051,723
2026	\$ 48,106	Burnham	\$ 53,889			\$ 101,995
2027	\$ 48,106			Burnham	\$ 1,675,799	\$ 1,723,905
2028	\$ 48,106					\$ 48,106
2029	\$ 48,106					\$ 48,106
2030	\$ 48,106					\$ 48,106
2031	\$ 48,106	Terry Fox	\$ 36,191			\$ 84,296
2032	\$ 48,106	Densmore	\$ 36,191	Terry Fox	\$ 436,715	\$ 521,012
2033	\$ 48,106			Densmore	\$ 197,056	\$ 245,162
2034	\$ 48,106	Read Otto	\$ 30,441			\$ 78,546
2035	\$ 48,106			Read Otto	\$ 90,681	\$ 138,787
2036	\$ 48,106					\$ 48,106
2037	\$ 48,106					\$ 48,106
2038	\$ 48,106					\$ 48,106
2039	\$ 48,106	Foote Cres	\$ 36,191			\$ 84,296
2040	\$ 48,106			Foote Cres	\$ 178,692	\$ 226,798





Safety Devices, Information, Traffic Control (Pg 134)

Contract: Line Painting - Rainbow Crosswalk

- Proposed to use new pavement marking product that will last 5-7 years. Annual cost of normal paint \$1500, new product \$8,000
- Typical line painting budget \$50k, proposed budget \$55,000

Sidewalks (Pg 136)

Equipment Rentals: over budget \$3000

- Rental costs associated with plate tamper. New plate tamper was approved in 2020 budget, deferred due to COVID \$10,000

Contracts: increased by \$10,000 for 2021

- Sidewalk pumping contract is last to be done with remaining contract budget. Not enough remaining in budget to complete all repairs noted from sidewalk inspections.

Streetlights (Pg 141)

Utilities: reduced by \$40,000

- 2020/2019 trending closer or below \$200k



TRANSIT (P.143)

Resources

0.5 Administrator

Budget Notable Mentions

- Conventional Contract: \$650,000
- Wheels Service \$240,000
- Wheels Extended Service \$35,000
- Revenue budgeted at 75% 2019 numbers

NEW Special Project: On Demand Transit

- 12 month pilot project incorporating conventional and Wheels service as well as integrated online booking and payment service. See detailed report. \$40,000



PARKING ON LOTS (P.148)

Resources

0.4 Administrator

Budget Notable Mentions

- Rent: Second Street lot - Increase by \$12,000

NEW Contracts: OPG Electric Vehicle Charger
Maintenance

- Through funding obtained from through Northumberland County Climate Change Action Plan. Through the Zero Emission Vehicle Infrastructure Program Partnership with Ontario Power Generation Inc. and as approved By-law 065-2019 Town signed on for four Level 2 EV chargers to be supplied/installed by OPG. Total of 8 connectors anticipated to cost up to \$2000 per connector annually. Two to be located in parking lots, two at CCC. \$8,000



PUBLIC WORKS

CAPITAL BUDGET



Municipal Council
Town of Cobourg

ENGINEERING (P.28)

Proposed Projects

*Bi-Annual Sidewalk Program	\$200,000
Terry Fox SWM Pond Rehabilitation	\$480,000
Bridge and Culvert Improvements	\$760,000
Wood Boardwalk Replacement	\$30,000
Sanitary Sewer Rehabilitation	\$1,000,000
Albert Street Reconstruction	\$785,000
Harden Street Sanitary Rehabilitation	\$750,000
Blake, Victoria, Burke Reconstruction	\$100,000
King St West Reconstruction	\$150,000





Terry Fox Stormwater Management Pond Rehabilitation (Pg 31)

The Swm pond at the south end of Tillison Ave in the Terry Fox subdivision did not function properly during the extreme rainfall event in July 2017. The pond was surveyed in 2019 to determine the scope of work to bring the pond back up to its design functionality. The pond is 30 years old and has not been cleaned out or had any maintenance conducted to date. The project was previously tendered in early 2020 and received two bides that were both of the approved \$350,000 budget. Also, due to COVID, deferred until 2021.

A SWM pond needs assessment study was completed in 2020 to support the SWM fee rate study currently in progress. The results of the study provided annual operating and capital requirements for Town owned SWM ponds. Annual operating expenses of \$50,000 are now included in the Roads/Sewer operating budget. Full study report is available for review upon request.

Immediate repairs were identified for the Read/Otto, Burnham and Chris Garrett ponds in the amount of \$25,000.

Total budget required including design, survey, construction as well as the repairs at the three additional ponds is \$525,000 of which \$350,000 was approved in 2020.





Bridge and Culvert Improvements (Pg 32)

The 2018 OSIM report recommended follow up inspections on several major culverts and as a result, a list of priorities has been received with cost estimates. Full report is available for review upon request.

In 2019, \$250k was approved for the Elgin Street culvert widening however funds were insufficient for the construction and only the design was completed. In 2020, \$325k was approved for the Elgin St culvert which also included upgrades at Buck, Covert, Park; and deck repairs to University Ave (deferred due to COVID). During the 2020 OSIM inspections, another deficiency was noted at the Danforth Rd culvert which has now been added to the 2021 scope of work.

The 2021 construction contract for bridge work will be much larger than it was 2 years ago however larger contracts receive more bidders and better unit rates. Technically this project will encompass 3 years worth of bridge/culvert rehabilitation work.

Total budget required including design and construction is \$860,000 of which \$325,000 was approved in 2020.





Wood Boardwalk Replacement (Pg 33)

The wooden boardwalk along the north edge of the west beach was constructed in 2005. In recent years, the wooden boardwalk has been deteriorating and rotting out underneath the walking surface so that when deck boards are having to be replaced, there is hardly any material left to secure them down. The wooden frame has been sitting on the sand for 15 years which is often saturated and/or submerged in water.

The proposed \$30,000 budget in 2021 is for design services for a replacement boardwalk in 2022. A replacement boardwalk will not be as simple as it once was 15 years ago. The design will incorporate a wider platform to accommodate cyclists, accessibility, safety guard rails for areas that are higher than 60cm off the ground, a sustainable and low maintenance construction material, and lighting in accordance with the recommendations of the Waterfront User Needs Study.

The design will also take into consideration environmental impacts associated with construction and a wider platform. GRCA permitting will be required which may require specific environmental impact studies.

The construction budget for 2022 cannot be predicted at this time and will be dependent upon Council's choice of design options.





King Street West Reconstruction (Pg 38)

King Street West, from Burnham Street to William Street is experiencing frequent watermain breaks and ranks high in the asset management model that staff and LUSI have prepared together for the Town's core infrastructure (watermain, storm and sanitary sewers, bridges/culverts and roads). The existing watermain is heavily corroded with mineral build up which results in reduced flows. The road, including storm and sanitary sewers, was constructed in ~1960. Further field investigations are required in 2021 to determine the extent of the necessary sewer rehabilitation and to understand if a full reconstruction of the road is required. The 2022 budget is an estimate based on a full reconstruction.

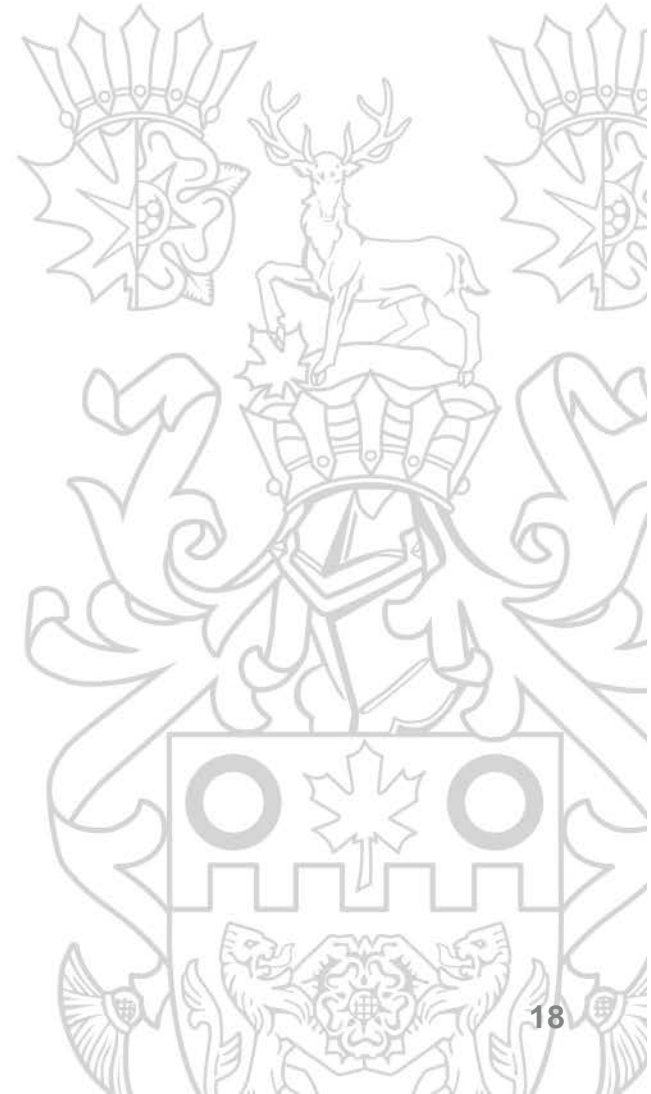
This will be a joint Town/LUSI project and based on the known condition of the watermain, it is imperative to begin the design work in 2021 for replacement in 2022. The full scope of work for design of the remaining infrastructure will be determined during field investigations in 2021 and a construction estimate will be brought back to Council during the 2022 budget deliberations.



ROADS & SEWERS (P.29)

Proposed Projects

Traffic Signal Intersection Upgrades	\$75,000
Street Light Replacement Program	\$355,000
*Bi-Annual Pavement Resurfacing	\$0
Replace Snow Plow / Dump Truck	\$315,000
Replace Sidewalk Machine	\$185,000
Downtown Streetlight Replacements	\$500,000





Traffic Signal Intersection Upgrade (Pg 45)

The traffic signal budget request is an annual program to continuously upgrade the Town's traffic signals including bringing signals up to current standards, replacement of major components ie. Cabinets, incorporating Accessible Pedestrian Signals (APS). The 2020 budget of \$50,000 was deferred.

The Town shares several traffic signals with the County which is typically 50%. In 2019/2020, the County installed an APS at the intersections of Elgin/Burnham and Elgin/Division. The Town received Council approval to contribute to the Elgin/Burnham intersection utilizing the 2019 Accessibility budget (not yet invoiced). There has been no approvals through Council to contribute to the Elgin/Division intersection as of yet.

In 2021, it is proposed that the Town contribute \$25,000 for the installation of APS at County/Town shared intersections which would include the already completed Elgin/Burnham and Elgin/Division as well as Elgin/Rogers in 2021. The latter intersection was chosen by the Town's Accessibility Advisory Committee on November 25.

In subsequent years, a proposed budget of \$15,000 will be contributed to shared County/Town intersections on top of the \$50,000 annual budget for other traffic signal upgrades as recommended by the Town's contractor, Black & MacDonald. The remaining shared intersections include:

- Burnham/DePalma -Elgin/Frei -Elgin/Birchwood
- Elgin/New Amherst -Elgin/Ontario





Downtown Paver Stones (Pg 48)

In 2020, the Roads and Sewers department identified the need for an annual special project to begin the removal, repair and reinstatement of aging paver stones in the downtown area that are sinking or uneven. Similar to concrete sidewalks, the Town budgets to do a lump sum worth of repairs identified during the annual sidewalk inspection. It is not always possible to repair all identified deficiencies within the sidewalk budget allotment. The paver stone deficiencies are above and beyond the sidewalk maintenance requirements.

The budget in 2020 was \$50,000 and upon expenditure, only 15% of required repairs were able to be completed meaning the remainder of work is expected to cost an additional \$300,000. At \$50,000 per year, it will take 7 years to complete all of the paver repairs. Staff are suggesting capitalizing this project and completing all of the works in one year which will also attract more attention from contractors and potentially more competitive prices.





Bi-Annual Pavement Resurfacing (Pg 49)

Typically, the Roads & Sewers department has maintained a \$300,000 budget to resurface roads where the asphalt is failing but the underground infrastructure and road base is still in good condition. This is typical practice for extending the lifecycle of a road. Ideally a road is resurfaced at least twice before it is entirely reconstructed. A good candidate for resurfacing is a road that has a LOT of cracking sealing but still drives fairly smoothly indicating that the road base is still holding up. Roads with dips and pot holes usually indicates that a full reconstruction is required however the priority for full reconstruct is fully dependent upon the condition of the sewers and watermain.

Staff are recommending that the annual resurfacing contract and the annual sidewalk capital projects happen biennially and on opposite years. This approach will allow for larger contracts (\$200k for sidewalks and \$600k for resurfacing) and will save on staff resources having to prepare a tender for two major capital projects annually.

In 2021, the annual sidewalk contract will proceed as planned on Abbott Blvd and pavement resurfacing will be deferred until 2022.





Downtown Streetlight Replacment (Pg 47)

Preparation for pole and fixture replacement

Budget allocation \$500,000

- Subject to Council approval of fixture type, pole type, and implementation process.

Refer to detailed presentation





Parking

Proposed Projects

Pay & Display Machines

\$21,600



Pay & Display Machines (Pg 56)

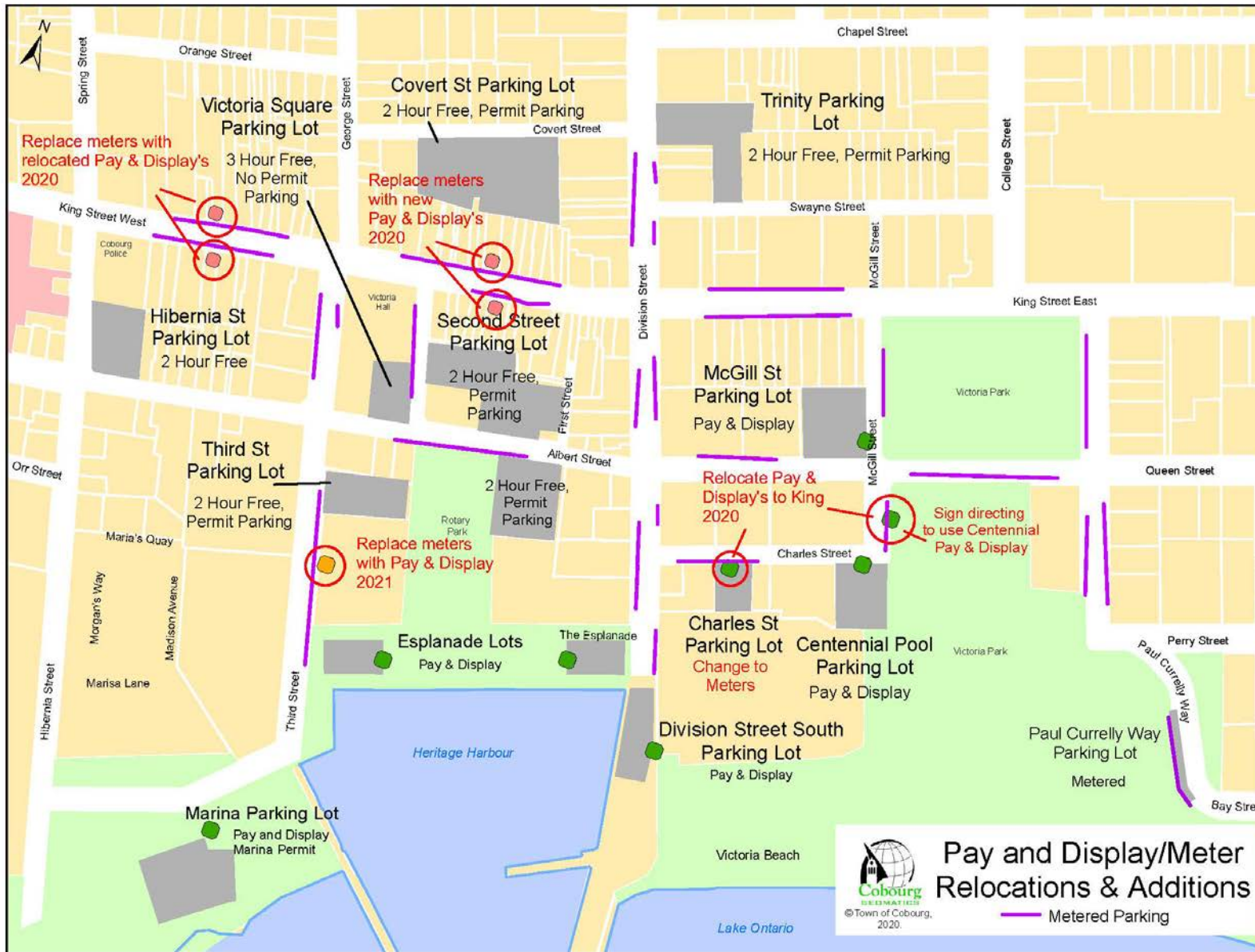
The meters on King Street are averaging 7 years old and are creating a maintenance burden as the mechanisms cannot be fixed locally if at all and typically are replaced when they stop working. In 2019, the Town suffered an extensive amount of damage to parking meters and theft of fares. During busy tourist season, the meters are filled up more frequently than they can be emptied by staff. To empty the meters it takes two staff members nearly a half day to complete plus time for a finance staff member to sort and count.

In 2021/22, Staff are proposing to replace the King Street and Third Street meters with pay & display machines as per the map on the next slide. The benefits of this solution are as follows:

- minimal maintenance requirements
- less replacement parts needed on hand
- less maintenance staff resources required for repairs
- less snow removal expenses
- frees up By-law enforcement resources required to collect coin
- less vandalism opportunity/less chance of lost fares
- more attractive aesthetic for downtown
- credit card payment option

Each machine costs \$7,200 including tax, supply, delivery and installation.







Transit (P.57)

Proposed Projects

Transit Shelters (2)	\$15,000
----------------------	----------



QUESTIONS?



Municipal Council
Town of Cobourg