



Public Works Division

Departments include:

Roads and Sewers
Engineering
Geographic Information System (G.I.S)
Parking and Transit
Environmental




Roads and Sewers

Cost Avoidance and Savings

- **Increased revenue for the Road Maintenance Reserve:** Fees collected from Site Alteration Permits will be utilized for road maintenance activities such as resurfacing and operating costs. In 2021, \$95,000 was collected and will be applied to the Bi-Annual Resurfacing program in 2022.
- **Savings of \$15,000 in salt purchasing due to leftover from 2021** (short winter).
- **Deferred purchase of a new street sweeper** (10 years old), valued at \$420,000, due to insufficient funds in the Vehicle Reserve. Instead, it is recommended we spend \$12,000 to repair the existing vehicle in order to keep it operational for 2022.
- **Deferred purchase of a new brush chipper** (9 years old), valued at \$100,000, due to insufficient funds in the Vehicle Reserve. Instead, it is recommended we spend \$3,500 to repair the existing vehicle in order to keep it operational for 2022.
- **Deferred hiring of the third of three General Utility Workers until 2023** (Staff justification report 2019).

Roads and Sewers

Operating Budget Highlights

-  Increased roadside weed control program for non-downtown areas.
-  Additional clothing required for Crossing Guards as per Collective Agreement Terms.
-  Improve drainage behind Nickerson Drive residential properties.

New Staff Hires

- As described in the 2019 staff justification report, the third of three general utility workers was to be hired in 2022. Position is being deferred until 2023.



Roads and Sewers



Large Operating Increases

OSIM Inspections

Refer to page #122 in the Operating Budget.

- **Budget required - \$15,000** (ongoing expense)
- Details: Required every 2 years under O Reg. 104 Public Transportation and Highway Improvement act.

Roadside Weed Control (Non-Downtown Areas)

Refer to page #124 in the Operating Budget.

- **Budget required - \$4,500** (ongoing expense)
- Details: New weed control program requires (3) spray events.

Nickerson Path Drainage Improvements

Refer to page #126 in the Operating Budget.

- **Budget required - \$30,000** (one-time expense)
- Details: Water drains towards Nickerson but can pool behind residential properties. Further investigation and solution to be implemented.

Crossing Guard Clothing

Refer to page #138 in the Operating Budget.

- **Budget required - \$3,500** (ongoing expense)
- Details: High visibility safety clothing, winter jackets and rain suits for eight (8) guards and two (2) spares per the Collective Agreement Terms.

Other Equipment Repair – Parking Lots

Refer to page #148 in the Operating Budget.

- **Budget required - \$5,000** (one-time expense)
- Details: Additional funds required for 2022 due to new rent agreement for Second Street Parking Lot to open additional paved parking area. Costs associated are for line painting and removal of barriers.

Property Improvements Building #7

Refer to page #110 in the Operating Budget.

- **Budget required - \$10,000** (one-time expense)
- Details: Additional budget required to update noxious gas monitoring system in garage (health and safety related)



Roads and Sewers



Special Projects (Operating)

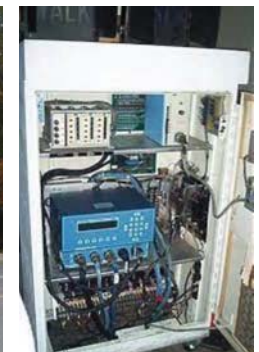
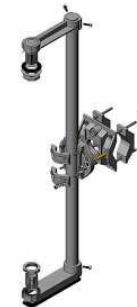
- Not applicable in 2022.

Roads and Sewers

Capital Projects

Traffic Signal Intersection Upgrade & Accessible Pedestrian Signals (APS)

- **Budget required - \$75,000**
Funding available includes:
 - Federal Gas Tax \$75,000
 - Share costs with Northumberland County.
- Details: The Town's traffic signals are aging and many do not all comply with current standards. Upgrading the following traffic signals will bring the intersections up to current standards:
 - D'Arcy Street and King Street East
- APS Installation at Burnham Street and Depalma Drive



Roads and Sewers

Capital Projects

Road Resurfacing Program

- **Budget required - \$600,000**
Funding available includes:
 - Federal Gas Tax \$505,000
 - Road Maintenance Reserve \$95,000
- Details: Staff are currently reviewing the GIS inventory of streets and their associated Pavement Condition Rating (PCI) rating to identify this year's candidates for resurfacing.
 - Staff will bring forward a list of projects for 2022 at the Special Budget Session meeting on November 25, 2021.
- In past years, the Town has allocated \$300,000 annually to resurfacing, however in staff are recommending the allocation of \$600,000 bi-annually instead to attract more bidders and lower unit prices.

Roads and Sewers

Capital Projects

Annual Street Light Replacement Program

- **Budget required - \$355,000**
- Details: The Town has been switching to LED lamps since 2019 as older induction style lamps burn out.
- We are currently committed to a three-year maintenance contract (2019-2022), with the option of a two-year extension until July 2024.








Engineering

Cost Avoidance and Savings

- Deferred hiring of the Development Engineering Coordinator to 2023.
- Deferred hiring of the Infrastructure Planning Analyst to 2024.
- Deferred the Transportation Master Plan (operating special project) due to resource shortage to conduct study as well as the Asset Management Plan being a higher priority. The Manager of Infrastructure Planning (new hire) will be dedicated to conducting this study following completion of asset management requirements.
- Deferred the Kerr Street Environmental Study Midtown Creek to William Street (operating special project) until the Manager of Infrastructure Planning (new hire) is hired and can lead project.
- Increased revenue in the engineering review fees in 2022 due to an increase in development applications for large sites. User fee/rate study is also expected to create more minimum application review fees for engineering.

★ Operating Budget Highlights

-  Hiring of one (1) new full-time position.
-  Complete next step of Asset Management Plan.
-  Traffic Control Measures at three intersections.

👤+ New Staff Hires

Manager of Infrastructure Planning

Start date: July 1, 2022

- Costs associated with this new position in 2022 = \$126,250
 - Salary and Benefits \$122,000
 - Additional Materials \$500
 - Equipment \$2,000
 - Training and Membership \$1,750
- This position was identified as part of the Organizational Review and is necessary to meet the requirements of Ontario Regulation 588 whereby every municipality must have a strategic asset management in place by July 1, 2025.



Large Operating Increases

Payroll: Salary and Benefits

- **Budget required - \$120,000** (ongoing expense)
- Details: Hiring of a Manager of Infrastructure Planning.

Equipment, Training and Memberships

- **Budget required = \$7,750**
\$5,000 (equipment, one-time expense)
\$2,750 (training and memberships, ongoing expense)



Special Projects (Operating)

Asset Management Plan

- **Budget required - \$50,000**
Potential funding available - \$50,000 (FCM)
- Ontario Regulation 588/17 requires that all municipalities complete an Asset Management (AM) plan by 2025. To complete and implement a successful and accurate AM plan, the Town requires the guidance of a professional resource to both compile a report and implement AM software.

Traffic Control Measures

- **Budget required - \$25,000**
Potential funding available - \$25,000 (Development Charges)
- Complete reviews to determine if alterations, signals or left turn lanes are required, at the following sites:
 - D'Arcy Street and University Avenue
 - Elgin Street and D'Arcy Street
 - Brook Road and King Street East

Capital Projects

Wood Boardwalk Replacement

- **Budget required - \$1,060,000**

Funding available includes:

- Debentures \$1,000,000
 - 2021 Budget – Gas Tax \$60,000
- Future budget implications include:
 - Short-term: No operating budget effects.
 - Long-term: Wood has a shorter lifecycle and higher operating costs in comparison to composite, concrete or asphalt which have a longer lifecycle and minimal operating costs.
 - Details: In 2020 it was identified that the wood boardwalk has reached the end of its useful life and was becoming a hazard to keep in service. A replacement boardwalk design was approved in 2021 and is expected to go to construction in 2022.



Capital Projects

Burke, Blake and Victoria Street Reconstruction

- **Budget required - \$2,700,000**

Funding available includes:

- Federal Gas Tax 2022 \$120,000 and 2021 \$100,000 for design fees
 - OCIF \$638,000
 - Debentures \$342,000
 - Reserves (Sanitary) \$600,000
 - LUSI \$900,000
- Details: This project is a continuation of the Mathew Street project constructed in 2020. Burke, Blake and Victoria have sanitary, storm and watermain deficiencies. LUSI regularly flushes the watermain in response to water quality complaints.
 - Asset Management data supports the need for replacement of sanitary and watermain. The detailed design is being completed in 2021 and the project will go out for tender this winter for construction to begin in May 2022.



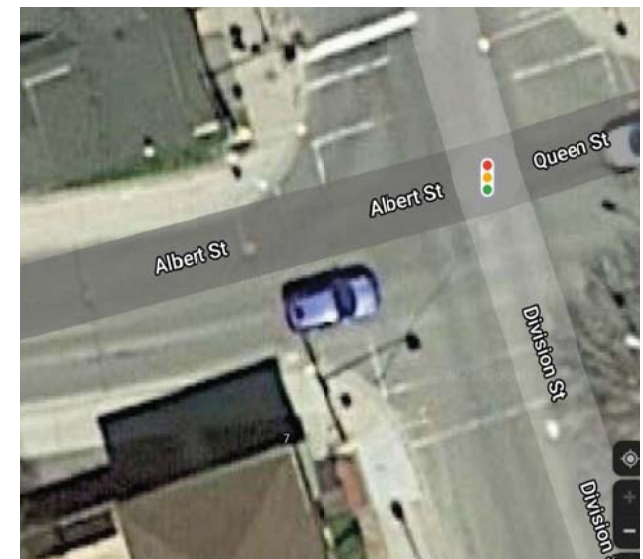
Capital Projects

Albert Street Widening

- **Budget required - \$325,000**

Funding available includes:

- Servicing Cost Recovery \$5,000
 - Debentures \$320,000
- Details: This proposed road widening is being driven by the Beachwalk Flats Development at the south-west corner of Division Street and Albert Street. The Town has secured a 3-metre property widening due to the development and now have the opportunity to improve the geometry of the existing intersection.



Capital Projects

Kerr Street – Wilkins Gate, New Amherst

- **Budget required - \$746,000**
Funding available includes:
 - Reserves - Development \$395,380
 - Debentures \$350,620
- Details: Stage 2, Phase 2 of the New Amherst development required a section of Kerr Street to be constructed between Wilkins Gate and New Amherst Boulevard.
- Kerr Street is part of the Town's Official Plan and Transportation Master Plan as a major arterial road.
- The developer has designed and constructed the road on behalf of the Town and is required to be reimbursed as per the terms of the development agreement.



Capital Projects

King Street West Structural Culvert Replacement (\$1,492,975)

- **Budget required - \$120,000**

Funding available includes:

- Investing in Canada's Infrastructure Program: Rural and Northern Stream - \$99,600
- Debentures - \$20,400

- Effects on future budgets:

- **Budget required in 2024 - \$1,372,975**
- Investing in Canada's Infrastructure Program: Rural and Northern Stream - \$1,144,100
- Debentures - \$228,875

- We were successful in receiving 83% funding to replace the aging structure.
- The culvert is a 3.8m wide x 1.8m high steel multi-plate structure and is the only access to the Pebble Beach residential area. Upon reconstruction, the road width will be widened to permit bicycle lanes on both sides and guiderails.



Capital Projects

Nagle Road Interchange Environmental Assessment

- **Budget required - \$115,000**
Funding available includes:
 - Development charges \$88,250
- In 2017, the MTO retained a consultant to conduct an environmental assessment to widen the 401 between Cobourg and Colborne and offered to include the Town's future interchange at Nagle Road in the Environmental Assessment process to share in the consulting fees to conduct both studies at the same time.
- The Stage 1 archaeological assessment resulted in a recommendation for a Stage 2 assessment involving a detailed subsurface investigation of the entire area



Capital Projects

Active Transportation – Kerr Street to Ontario Street

- **Budget required - \$25,000**
Funding available includes:
 - OMCC \$11,807
 - Federal Gas Tax \$13,193
- As a result of a motion from the Transportation Advisory Committee and following the completion of the new multi-use trail on Kerr Street west of Division, a recommendation was made to Council in the 2021 budget to extend the multi-use path from the end of the new path to Ontario Street.
- Staff have yet to be successful in obtaining a response from CN Rail on whether the project can move ahead or not so construction will be delayed until 2022 pending a response from CN Rail.



Capital Projects

Multi-Use Trail - Kerr Street: McArthur Street/Cottesmore Avenue to Brook Road North

- **Budget required - \$30,000**
Funding available includes:
 - Federal Gas Tax \$30,000
- The existing multi-use path requires a resurfacing involving regrading and new limestone screenings.
- Labour will be conducted by Public Works staff.



Capital Projects

Multi-Use Trail – Brook Road North Paved Shoulders

- **Budget required - \$50,000**
Funding available includes:
 - Federal Gas Tax \$50,000
- This is a coordinated project with Northumberland County for adding paved shoulders on Brook Road North from 250m north of King Street East to the south side of CN/CPR railway to increase the connectivity for pedestrians and cyclists to the Kerr Street trail.





Capital Projects

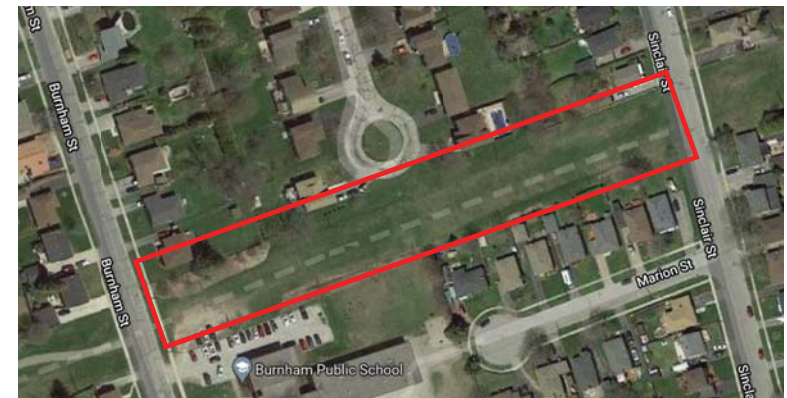
Multi-Use Trail - Elgin Street - William Street to St. Peter's Cemetery Preliminary Design

- **Budget required - \$50,000**
Funding available includes:
 - Active Transportation Funding \$50,000 – The application is not yet open, however the project will not proceed if funding is unsuccessful.
- For the preliminary design and costing to complete the multi-use trail on Elgin Street between William Street and the St. Peter's Cemetery for an approximate length of 1.1 km.
- This project is complex in nature involving utility relocations, a County bridge expansion, as well as a potential County retaining wall rehabilitation.

Capital Projects

Multi-Use Trail - Kerr Street - Burnham to Sinclair

- **Budget required - \$30,000**
Funding available includes:
 - Federal Gas Tax \$30,000
- The block of open land between Burnham Street and Sinclair Street has a well beaten path already and would be a perfect candidate for a more formalized trail.
- Public Works staff will excavate and install a multi-use trail along the Kerr Street road using limestone screenings as a temporary investment in active transportation for this section of Kerr Street prior to its future build out when a paved path will be constructed.



Capital Projects

Sanitary Sewer Replacement

- **Budget required - \$430,000**
Funding available includes:
 - Sanitary Sewer Reserves \$430,000
- LUSI has identified two sections of road where the watermain requires replacement and Staff have confirmed that the sanitary sewer should also be replaced.
- The Town will share costs for the design and construction as well as road restoration.
 - Rankin Blvd - 150m (whole length)
 - Campbell Street - 140m north of University to dead end



Capital Projects

Sanitary Sewer Rehabilitation

- **Budget required - \$1,000,000**
Funding available includes:
 - Sanitary Sewer Reserves \$1,000,000
- In 2019, sanitary budget was approved to annually study the sanitary sewers in floodplain areas to identify where infiltration is happening and estimate costs for the design and construction of repairs.
- 2021 was a successful first year of this sub-surface sewer repair program. 2022 is the second year of a three year contract with a specialized pipe relining/repair contractor.





Capital Projects

Tannery Lands – Environmental Monitoring

- **Budget required - \$27,000**
Funding available includes:
 - Northam Industrial Park Reserves \$27,000
- The Town completed a Phase II Environmental Site Assessment at this site in 2010 when groundwater sampling wells were installed to allow for the testing of ground water quality.
- Recommended next steps are to continue with groundwater monitoring, conduct further soil vapour monitoring onsite as well as the preparation of a remedial cost options report



Geographic Information System (G.I.S.)



Cost Avoidance and Savings

- Not applicable in 2022.



★ Operating Budget Highlights

- Not applicable in 2022.

👤+ New Staff Hires

- Not applicable in 2022.





Large Operating Increases

- Not applicable in 2022.

Special Projects (Operating)

- Not applicable in 2022.

 **Capital Projects**

Drone Purchasing and Training

- **Budget required - \$4,825**
- Future budget implications include:
 - \$500 annually to maintain insurance and training.
- Benefits include aerial photos and video for data collection and provide safe field work, savings in time/resources and increased traffic management
- Other programs and departments could benefit as well, particularly asset management, risk management, emergency operations, building assessment, forestry and construction (road, building, subdivision, etc.).





Parking and Transit



Parking and Transit



Cost Avoidance and Savings

- **Transit fare increase:** If approved by Council, fare increases are expected to increase revenue by \$25,000 based on pre-COVID ridership statistics.
- **Parking rate increase and expanded paid parking area proposal:** If approved by Council, rate increases are expected to increase revenue by a minimum of \$460,000 based on pre-COVID statistics.



Parking and Transit

★ Operating Budget Highlights

- ✓ Increase transfer to Large Vehicle Reserves.
- ✓ Implementation of Transit Smart Cards.
- ✓ Increase annual fees for additional pay and display machines.
- ✓ On-demand Transit Trial.
- ✓ Electric Bus Feasibility Study.

👤+ New Staff Hires

- Not applicable for 2022.



Parking and Transit



Large Operating Increases

Transfer to Vehicle Reserve

- **Budget required - \$100,000** (ongoing expense)
- Details: Requirement to increase vehicle reserve based on 2021 review of replacement costs.

Transit Smart Cards

- **Budget required - \$15,000** (ongoing expense, fully recoverable through pass sales)
- Details: New smartcard system requires purchasing materials and postage.

Pay and Display Machines

- **Budget required - \$6,700** (ongoing expense)
- Details: Pay & display machines have annual hosting/gateway fees. Town now has 13 operational machines as 5 were added in 2021.



Special Projects (Operating)

Electric Bus Feasibility Study

- **Budget required - \$5,600**
- Details: The Town is a member of the Transit Procurement Initiative (TPI), led by Metrolinx. The TPI has developed a joint procurement initiative for municipalities to conduct a feasibility study for fleet electrification.

On-Demand Transit Pilot – Phone-in Service

- **Budget required - \$27,600**
- Details: The phone-in booking service costs \$2,300/month to cover the hours of 7-8 a.m. and 4-10 p.m. and all operating hours on weekends (outside of Century Transportation office hours). This commits the Town to at least \$9,200 for the remainder of the trial which ends mid-April 2022.
- After the trial ends, if Council chooses to continue with the on-demand transit system, options for the phone-in booking service will include:
 - Continue with existing level of service = \$2,300/month.
 - Reduce phone-in service hours to 8 a.m. to 4 p.m., Monday to Friday only, which would only allow transit bookings by online/mobile app before-and-after hours and on weekends. = \$0





Parking and Transit



Capital Projects

Parking Infrastructure Upgrades

- **Budget required - \$150,000**
Funding available includes Parking Reserves \$150,000
- Pending Council direction
- Details: Please refer to Parking Rate Increase Proposal (Council agenda November 15, 2021)





Parking and Transit



Capital Projects

Transit Vehicle Replacement – Two Minibuses

- **Budget required - \$240,000**
Funding available includes:
 - Canada Infrastructure Program (ICIP) at \$174,992 (73.33%)
 - Vehicle Replacement Reserve \$64,008
- Future budget implications include:
 - Eliminate risk of major mechanical failures.
 - Reduce fuel expenses.
 - Ability to renegotiate contracted hourly rate for operations once all 30-foot buses have been replaced.
- Details: Two of the Town's 30-foot transit buses are at the end of their useful life after 12 years of operation. Once the on-demand trial ends in April 2022, it is anticipated that smaller vehicles (carrying 7-9 people) will be ideal.
- Delivery may take several months or up to a year.

