



VILLAGE OF MERRICKVILLE-WOLFORD

**Agenda for Council
Council Chambers**

Regular Council Meeting 7:00 p.m.

Monday April 25, 2022

IMPORTANT NOTICE: This meeting will be held electronically. To ensure transparency, a recording of this meeting will be livestreamed on the "Village of Merrickville-Wolford" YouTube channel at https://www.youtube.com/channel/UC_OEkw3yIMarGSHGeNecrQg

1. **Call to Order**
2. **Disclosure of Pecuniary Interest and the general nature thereof**
3. **Approval of the Agenda**
4. **In Camera**
 1. Advice that is subject to solicitor-client privilege, including communications necessary for that purpose; and
 2. A position, plan, procedure, criteria or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the municipality or local board; and
 3. Personal matters about an identifiable individual, including municipal or local board employees.
5. **Minutes**

Receipt of Minutes of Library Board meeting of March 9 and 31, 2022, &
Receipt of 2021 Library annual report
Receipt of Minutes of Community Development Advisory Committee (CDAC)
meeting of January 31, 2022
6. **Correspondence**

Chantal Roulston re: event endorsement
Christmas in Merrickville re: request for assistance
CDAC re: Electric Vehicle Charging Station Proposal
2021 Household Hazardous Waste Summary
7. **Finance**

Watson & Associates Final Asset Management Plan – Core Assets Final
report
8. **Planning**

Site Plan Control Agreement re: 611 Main St E
Site Plan Control Agreement re: Drummond St W
Site Plan Control Agreement re: 535 Main St E
Consent Applications B-128-20 and B-129-20
Consent Applications B-98-21 and B-99-21
Amend By-Law 49-21 re: Spillway Farms
9. **CAO**

By-Law 24-2022 re: Lame Duck period
Use of Corporate Resources for Election Purposes policy
10. **Deferred Items**

None

11. Public Question Period: Questions may be emailed to: mayor@merrickville-wolford.ca

12. Next meeting of Council: Monday May 9, 2022 at 7:00 p.m.

13. Confirming By-Law: 26-2022 re: Confirm Proceedings of Council meeting of April 25, 2022

14. Adjournment.

Established 1793
Incorporated
Wolford 1850
Merrickville 1860
Amalgamated 1998



Telephone (613) 269-4791
Facsimile (613) 269-3095

VILLAGE OF MERRICKVILLE-WOLFORD

Resolution Number: R - - 22

Date: April 25, 2022

For Clerk's use only, if
required:

**Recorded Vote Requested
By:**

Cameron	Y	N
Foster	Y	N
Ireland	Y	N
Molloy	Y	N
Struthers	Y	N

Moved by: Cameron Foster Molloy Ireland

Seconded by: Cameron Foster Molloy Ireland

Be it hereby resolved that:

The Council of the Corporation of the Village of Merrickville-Wolford does hereby
approve the agenda of the regular Council meeting of April 25, 2022 as:

___ circulated.

___ amended.

Carried / Defeated

J. Douglas Struthers, Mayor

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Recorded Vote Requested By:

Cameron	Y	N
Foster	Y	N
Ireland	Y	N
Molloy	Y	N
Struthers	Y	N

Moved by: Cameron Foster Molloy Ireland

Seconded by: Cameron Foster Molloy Ireland

Be it hereby resolved that:

The Council of the Corporation of the Village of Merrickville-Wolford does hereby move to an "In-Camera" session at _____ p.m. under Section 239 (2) of the *Municipal Act, 2001*, as amended, to address matters pertaining to:

1. Advice that is subject to solicitor-client privilege, including communications necessary for that purpose; and
2. A position, plan, procedure, criteria or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the municipality or local board; and
3. Personal matters about an identifiable individual, including municipal or local board employees.

Carried / Defeated

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Date: April 25, 2022

For Clerk's use only, if required:

Recorded Vote Requested By:

Cameron	Y	N
Foster	Y	N
Ireland	Y	N
Molloy	Y	N
Struthers	Y	N

Moved by: Cameron Foster Molloy Ireland

Seconded by: Cameron Foster Molloy Ireland

Be it hereby resolved that:

The Council of the Corporation of the Village of Merrickville-Wolford does hereby rise and report from the "In Camera" session of the regular Council meeting, with staff being given direction, at _____ p.m.

Carried / Defeated

J. Douglas Struthers, Mayor

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Date: April 25, 2022

For Clerk's use only, if required:

Recorded Vote Requested By:

Cameron	Y	N
Foster	Y	N
Ireland	Y	N
Molloy	Y	N
Struthers	Y	N

Moved by: Cameron Foster Molloy Ireland

Seconded by: Cameron Foster Molloy Ireland

Be it hereby resolved that:

The Council of the Corporation of the Village of Merrickville-Wolford does hereby receive the minutes of the Merrickville Public Library Board meetings of March 9, 2022 and March 31, 2022; and

That Council received the 2021 Library annual report for information purposes.

Carried / Defeated

J. Douglas Struthers, Mayor

MERRICKVILLE PUBLIC LIBRARY

Merrickville Public Library Board's meeting was held on Mar. 9, 2022 at 7:00 pm via Zoom.

Present: M-W: Victor Suthren, John Harris, Brian Reid, Carole Roberts, Timothy Molloy,

Montague: Colleen Perkins

and Mary Kate Laphen (Librarian)

Other: Chris Eyton (Friends of the Library)

Meeting called to order at 7:05 pm.

1. Declaration of Pecuniary Interest: None.

2. Adoption of Agenda: Moved by Brian; seconded by Carole. **ADOPTED.**

3. Approval of Minutes:

- Feb 9/22 board meeting – Moved by Brian; seconded by Colleen. **APPROVED.**

5. Correspondence:

- Update from OLS on the new provincial COVID rules as they pertain to libraries. Mary Kate outlined plans to adapt to the new relaxation on masking, etc.

6. Questions/ Presentations from Public: None

7. Friends of the Library Report: The Friends have decided to sponsor the new equipment for Square. Their next meeting will be in early April to plan for the Community Garage Sale and the Plant Sale

8. Report from Council:

- **Re: Budget 2022** – Mary Kate presented the library's budget at the working meeting on Mar. 7. There was some mention of the building, but the Board's request was not addressed.
- **Re: Board's letter to Council:** The Board still has not had any response from Council on their request from last October. Discussion re: moving this request forward. Timothy requested additional direction from the Board.
- **Motion:** That the Board Chair and Council Representative request a meeting with the Mayor and municipal CAO to discuss the lease, the municipal-library relationship in regard to the building. Moved by John, seconded by Carole. **APPROVED.**

9. Librarian's Report: see notes (below).

10. Other Business:

i. **Updates:**

- **Seed Library:** The Seed Library is open!
- **Website Refresh:** Mary Kate has been in contact with the designer and this is moving forward, but no definite timeline as yet.
- **Emergency Lights:** The lights are on order. Electrician will contact us when they are here.
- **Internet / Hardware:** Fibre internet is available now. Mary Kate would like to proceed with the best speed available, since it will be available for public use. The Board endorses this plan. The increase in internet costs will not be covered by our internet subsidy (that will remain the same for this year, but OLS is working on it for the future). However, we have budgeted money for this project that should cover much of the increase. Mary Kate is also purchasing the upgraded hardware needed and will contact our IT consultant to reconfigure the network.
- **Wifi Hotspots:** Discussed this with a member of the Lions Club as a potential project that the Lions might be interested in sponsoring.
- **Roof:** Had some additional leaking (same area) during mild rainy weather. Have discussed with our roofer.

ii. **Annual Report:** Reviewed the draft 2021 Annual Report.

- **Motion:** to Approve 2021 Annual Report. Moved by Brian, seconded by John. **APPROVED.**
- Mary Kate will post on library website and will contact the municipalities re: presenting it to Council. May wait to see if they plan to resume in-person meetings in the near future.

iii. **Policy Review – Purchasing Policy:** Reviewed proposed changes to update the Purchasing Policy.

- **Motion:** to approve the Purchasing Policy as amended. Moved by Brian, seconded by John, **APPROVED.**

iv. **Financial:**

- **Square:** Will proceed with this later in March, once some of the current projects have been

completed.

- **Resolution: (22-MAR-01):** To authorize the transfer of donations received in 2021 from the Operating account to the Library Reserve (previously discussed at February meeting). Moved by John, seconded by Brian. **APPROVED.**
- **Community Fund Report [John]:** *see report and draft agreement attached*
 - Reviewed John's report and the draft agreement with the Ottawa Community Foundation and discussed some of the terms. John has also gone over this with his brother, who is a lawyer. Mary Kate contacted the municipal Treasurer to see if there were any concerns on that end. It was forwarded to the auditor, but there has been nothing back.
 - The recommendation is to proceed with setting up a Community Fund. John has also created some operational process maps (to be distributed to the board).
 - **Motion: That the Board Chair and CEO proceed with signing the Agreement with OCF to manage the Library Reserve through a Community Fund and that Mary Kate proceed with the necessary administrative steps to implement this. Moved by: Brian, seconded by: Carole. APPROVED.**
 - Mary Kate will forward the signed agreement to our OCF fund manager.

11. **Next meeting:** Regular Board meeting – Wed, April 13, 2022 at 7:00 pm via Zoom.

12. Meeting Adjourned.

Librarian _____

Chairperson _____

Statistics

	February 2022	January 2022	Feb 2021	Feb 2020	Feb 2019
Patrons	659 +34 Zoom + 101 OverDrive users (unique)	590 + 101 OverDrive users (unique)	405 111 OverDrive users (unique)	1058 w/mtgs 1103 +9%	1012 w/mtgs 1012 - 12.5%
(Kids/Youth)	130 (40 k, 90 y)	69 (22 k /47 y)	38 (12k / 26y)	315 (65 / 250)	160 (46 / 114)
(Progs)	In Liby 9 (3 progs) Zoom 14 (4 prog) Vax QR codes - 13	0 – in liby (0 progs) 17 - Zoom programs (4 progs) 20 – Vax QR codes	In Library – 22 (4prg + 1 take home) Virtual Programs 40 (3 progs) 33 views (YouTube)	80-in (10 prgs, 1-CV) 59-out of Lib, (5 prgs)	50-in (8 prgs-in) 104-out of Lib, (2 progs, 5 CV)
Mtg Rm users	In Lib – 6 (1 mtg) Zoom – 20 (4 mtg)	0 – in liby (0 mtg) 46 – Zoom (7 mtg)	0 in liby (0 mtgs) 17 Zoom (2 mtgs)	45 (10 mtgs)	0 (0 mtgs)
Circulation	Total: 2110 Lib: 1324 (A -788, J/T – 536) OverDrive: 652 (circ) Kanopy: 134 plays	Total: 2286 Lib: 1444 (A-943, J/T-501) OverDrive: 672 (circ) Kanopy 170 (plays)	TOTAL: 1863 Lib: 1120 (A-761, J&T-359) OverDrive: 660 (circ) Kanopy 83 (plays)	TOTAL 2413 -3% Library: 1882 -8% (A-1273, J-575, T- 34) OverDrive: 513 (circ) Kanopy: 18 (credits)	TOTAL 2482 - 7% Library: 2053 -13.5% A-1579, J-592 T-10 OverDrive: 429
Internet use (+wireless):	88 (41 / 47 wifi)	74 33 / 41 wifi)	64 (23 / 41 wifi)	354 +28% excl. wireless +84% with wireless (205 / 138w / 11 Tab)	192 -26% (158 / 30w / 10 Tab)
ILL borrowed/lent:	70 in / 48 out	52 in / 44 out	63 in / 47 out	77 / 70	81 / 99

Similar to January but a bit slower. Visits were up because of the Snowflake Festival. Many people came to

the Library and participated in our activities. Things have been picking up in March

Programs & Services: Starting to shift back to in person programs, but mostly waiting until things open up more.

Children's Programs:

Snowflake Festival: This was hugely successful and brought a lot of people to the Library. The play/activity areas were a big hit and saw a lot of use. Picked up some new members and some we haven't seen during the pandemic.

StoryTime: this is back in person, although we did a couple of Zoom sessions when the weather was bad. We've had interest from some new people, so it may pick up.

March Break: Planning to put out the drop-in activity/play stations again for March Break and have some drop-in crafts.

Book Clubs: has continued on Zoom, but will shift back to in person in April. Will be doing a book discussion with the Hospice in May.

Off the Shelf – will be coming back in the library in April

Self-Publishing Seminar: Bruce Kemp will be running an information seminar on self-publishing in the meeting room.

Art Group – There's been interest in starting this up again in the spring

Internet/Computers: Much the same as last month. Use continues to be lower than pre-pandemic.

Vaccination QR codes have been declining, now that the need for them is passing.

InterLibrary Loans: Service continues. Have had more requests lately.

Meeting Room/Zoom Meetings: Continuing to host Zoom meetings, but are getting some requests for the meeting room instead.

Collection: Will be ordering the Spring-Summer books soon.

Volunteers: Our volunteers continue to shelve, process new books, package ILLs, work on the genealogy collection, help with discards, and more.

Donations: Have had a couple of monetary donations. Have had to turn down donations of old books.

Facilities: See Other Business (#10) re: roof, emergency lights, and internet.

Pandemic: Moving out of pandemic restrictions. When the masking requirement drops, will make masks optional in the library. Staff will wear if in close contact with public, but won't need to wear behind the plexiglass shield (that will continue).

Publicity/Outreach: Continuing to put a column in the Phoenix which came out in March and is returning to a monthly schedule. Usual online publicity (website, social media) Continue to post events and new books to the webpage and social media. NG Times did an article on ECO Champions and I was asked for an article about libraries for their International Women's Day issue.

Partnerships/Outreach: Not back visiting as yet, but Ste-Marg has approached me about working together some French programming, and I have been in contact with the daycare re: borrowing and visiting. Working on some programming with Beth Donovan Hospice. Continuing to liaison with the Trails Society (display in library), Sustainable Merrickville-Wolford (Seed Library), Chamber of Commerce, MPS Parent Council. Continuing on the steering committee of ECO Champions. Deadline has been extended because the January shutdown affected group participation. Colleen has helped get this going at Merrickville School.

Professional Development, Meetings, etc: Continuing with LinkedIn Learning courses. Signed up for a webinar on dementia-friendly communities.

Grants, etc: Have submitted the Annual Survey data (required for the PLOG)

Plans for month: Prepare/run March Break, work on getting the new Internet up and running, work on the website content, follow up with the Community Fund and Square, make arrangements re: presenting the Annual Report, continuing with LinkedIn Learning, and, of course, the usual library business.

MERRICKVILLE PUBLIC LIBRARY

Merrickville Public Library Board Special meeting was held March 31, 2022 at 7:30 pm via Zoom.

Present: M-W: Victor Suthren, John Harris, Brian Reid, Carole Roberts, Timothy Molloy,

Montague: Colleen Perkins

and Mary Kate Laphen (Librarian)

Absent:

1. **Meeting Called to Order:** at 7:34 pm

2. **Declaration of Pecuniary Interest:** None.

3. **Adoption of Agenda:** Moved by Brian, seconded by John. APPROVED.

4. **Financial:**

- i. **Resolution re: OCF (22-MAR-02 see file):** Resolution to transfer funds from the Library Reserve to the Library's new fund with Ottawa Community Foundation.
Moved by: Brian, seconded by: Carole. **APPROVED**

5. **Building:**

- i. **Roof:** Although there are still questions re: the building exterior repairs, the Board directed Mary Kate to follow up on the needed roof work and to notify the municipality of the results.

6. **In camera:** Motion to move the meeting in camera to discuss:

- i. Personal matters about an identifiable individual or individuals
Moved by Colleen, seconded by John. APPROVED.

Direction having been given, the Board concluded the in camera session and returned to the open meeting.

7. **Meeting adjourned.**

Next regular board meeting: Wed, April 13/22 at 7:00 pm via Zoom.

Librarian _____

Chairperson _____



Annual Report 2021

COVID Can't Keep Library Down

COVID waves continued through 2021, but the Library Board is pleased to report that the Library was able to provide most of our services to the community — and to offer new ones — in spite of the ups and downs of pandemic restrictions.

The Library had to close our doors to the public for all but 6 weeks of the first half of the year, but service continued! Residents were happy to be able to use our "Porch Pick-up" curbside service, e-collections and InterLibrary Loan throughout this period. Online programs, virtual meeting space, wifi access, and (limited) computer services also remained available. While open in March, the new Seed Library was launched and became an immediate hit with the public (and continued to be accessible during the shutdown) [see p5].

Staff kept informed of changing guidelines and the emerging science to ensure that the Library remained safe and responsive, and able to reopen

to the public as soon as it was possible.

We were happy to open for the summer — and to run the TD Summer Reading Club and Outdoor StoryTime for our younger members [see p4]. And the community has been happy to return! While not up to pre-pandemic levels, use statistics have started to rebound.

The Board and staff have also been busy with 'behind the scenes' projects [see p7] to improve library services through 2021.

We began to offer in-library programs and meetings as the year ended, in response to requests, and hoped to return to regular service; but COVID had other plans. However, the Board remains hopeful for 2022 and continues to adapt our services to the needs of our communities and support municipal goals by contributing to the well-being of Merrickville-Wolford and Montague residents.



Residents appreciated curbside service in the first half of 2021, but were glad to return to the Library for the second half!

2021 Library Use



↑ 1%

Library Visits:
7,330
+ 480 (Zoom)

Circulation:
24,770

↑ 6%



↑ 8%

Includes eBooks:
7,625



↑ 51%

Includes Kanopy Films:
1,065 plays

InterLibrary Loans:

↑ 52%



↑ 21%

714 items
borrowed

571 items
lent



↓ 29%

Internet Use:
1,500

Website Views:
15,185



Active Members:
as Individuals: 975
as Households/Grps: 492



Busiest Month:

August

Library Services Reach Beyond the Walls as Pandemic Lingers

Activities Support Engagement & Community Well-Being



Pandemic Programs

Zoom Programs:	29
Participants:	261
YouTube Stories:	33
Views:	431
Take & Make Kits:	191
Vaccination Proofs:	85

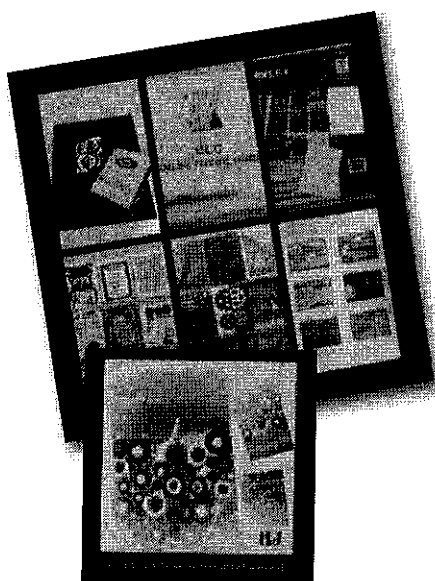
In 2021, in response to new variants and continued restrictions, the Library continued to **support community engagement** with the adapted programming introduced in 2020.



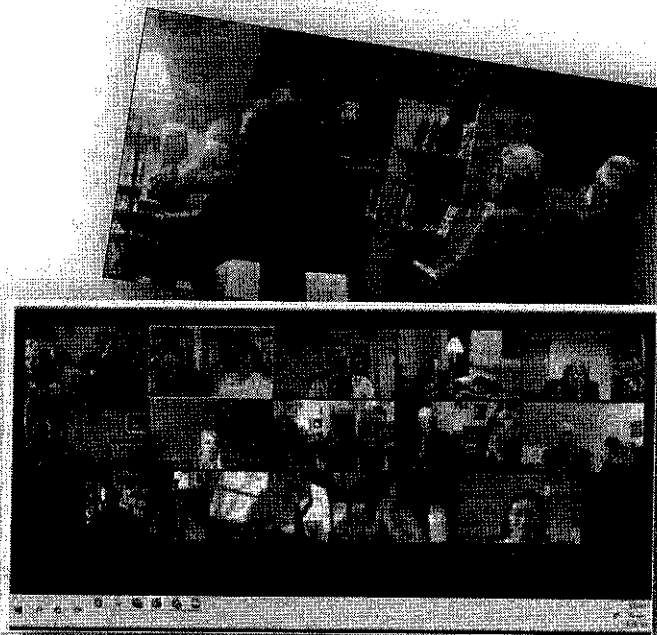
Thanks to our Zoom subscription (sponsored by the Friends of the Library [see p6]), we were able to continue some of our popular programs online, such as:

- **Off The Shelf** - featuring short stories and poetry read by community members, and hosted by Michael Phillips.
- **"The Sketchy Artists"** - this adult art group, organized by Gloria Stowell, met monthly to explore art techniques.
- **Book Clubs** - the Library hosted 4 clubs on Zoom, and supplied books to a total of 6.
- **InterLibrary Loans** - this service, which lets us bring in books from other libraries for our users, was available throughout the lockdowns and changing restrictions.
- **Take & Make Crafts** - maker kits were available for Spring Break and the holidays.

Continued p3



The Sketchy Artists created a series of Artists' Trading Cards during 2021, and were happy to finally be able to exchange them in person.



Off the Shelf met on Zoom for most of 2021, but was excited to return to the Library for December—one step ahead of Omicron!

Take & Make kits are an off-screen activity that encourages handcrafting and fine motor skills, following instructions - and a sense of accomplishment!



Proof of Vaccination

The Library assisted community members without smartphones by printing and laminating vaccination certificates and QR codes. This was an appreciated service and 85 vaccination proofs were printed in the fall of 2021.

Cont from p2

- **Computer Animation Workshop** - this series of workshops by animation teacher Marc Bergeron introducing Blender animation software was perfect for an online program.
- **"Stories with Mary Kate"** - a favourite story was posted to our YouTube channel weekly from April 2020 to Sept 2021 as a note of familiarity for our StoryTime friends.



Computer Animation Workshops with Marc Bergeron

Friday "Stories with Mary Kate" on YouTube

Demand Grows for Online Collections

As more of life moved online during COVID, the Library's e-collections became an increasingly popular and valued resource for the community — a trend expected to continue.



OverDrive

Use of our **OverDrive** eBook/eAudiobook collection jumped by a third in 2020 and continues to grow.

Members appreciate the convenience, large selection (over 75,000 titles), and adjustable font size of this shared provincial collection. OverDrive will add eMagazines in 2022.

Visit : odmc.overdrive.com

Kanopy Film Collection



Use of our **Kanopy** film streaming collection grew by **51%** in 2021. Kanopy includes 30,000+ indie, foreign and award-winning films, documentaries, and children's content.

Visit : merrickvillelibrary.kanopy.com

The Library Makes a Difference

Curbside Service

"We have the best Library and the best librarians! During the lockdowns I have had the Library select books for me on several occasions. Their selections have always been exactly to my taste and they have introduced me to authors that are new to me, that I would never have found on my own and that I have thoroughly enjoyed and will continue to read. Thank you for everything you have done, and continue to do, to keep us all reading." — J.L. [from Facebook]

"Thank you very much. This [curbside pick-up] is a wonderful service." — J. E.

"I appreciate your recommendations. I loved every single book [staff] picked for me ." — R. S.

Online Services

"I have really enjoyed OverDrive, it has helped keep me sane through this pandemic." — P.B.

"When I first moved during lockdown, it was an isolating experience. The Zoom **Off the Shelf** meetings were a gift from the gods which I very much appreciated." — B.F. [from email]

"Thank you so much for providing uninterrupted Zoom sessions to our Book Club ." — N. J.

Recognizing the importance of online resources during this pandemic, the Merrickville-Wolford Community Fund donated \$1,500 to sponsor the Library's OverDrive subscription and ebook purchases in 2021.

Photo (L-R): Ann Martin (Community Fund Officer) with CEO Mary Kate Laphen

Photo credit: Dan Black



A Space To Meet...

The Library helped people connect throughout 2021 by offering an uninterrupted virtual meeting space via Zoom for book clubs and community groups, as well as for library programs. The Library Board has also used Zoom for their meetings since mid-2020, allowing these to remain accessible to the public. As restrictions eased in the late summer and fall, the Library began to accept requests to hold small in-person gatherings in the meeting room or upstairs.

Library meeting space (real and Zoom) was used **47** times in 2021 by book clubs, the **Merrickville & District Trails Society**, **Regroupement Franco Merrickville**, **The Friends of the Library**, and more.

Meeting Room Use (by Community Groups)



Meetings (Liby): 18
Participation: 63
Zoom Meetings: 29
Participation: 222

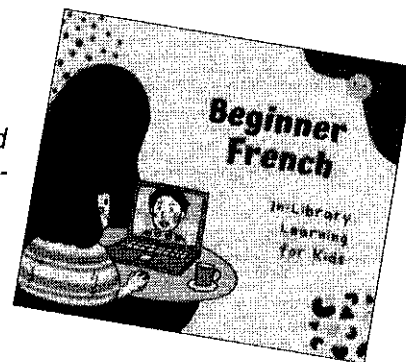
Welcome Back to the Library!



Outdoor StoryTime

Thanks to our fluently bilingual co-op student, Chloé Terpstra, the Library offered **Beginner French** for home-schooled kinders and pre-schoolers to build vocabulary and pronunciation.

Thank you to Mme Perkins and Mme Terpstra for sharing teaching tips and materials to help develop this program.



The Library Makes a Difference

"Thank you so much for running [Beginner French]. It has had a big impact. Even though he didn't say much here, he talked about it [at home] and he recognizes so many more words." — M.F.

"Just wanted to say the kids really liked 'Candy Chemistry'. Thank you for making this event possible." - L.L.

"Your Summer Reading Club works. The [grand]kids have been reading like mad!" — I.M.

"The Summer Reading Club is great. [My kids] aren't the most enthusiastic readers, but they love the summer reading program. I just want you to know it works." — R.S.

Return to In-Library Programs

The Library was delighted to be able to reopen and bring back more in-library programming during the summer. Programs increase library use by families and children, promoting literacy and learning through play. In-person programs encourage engagement and social interaction, particularly for younger children—plus some welcome fun after another lockdown.

We brought back **Outdoor StoryTime** for the summer, gradually moving indoors during the fall, as we transitioned away from online stories.

Aware that some parents were home-schooling their kinders due to COVID, we started a **Beginner French** program in October [see sidebar]. This program started on Zoom, but we were pleased to be able to switch to in-person for November and December.

Summer Reading Club

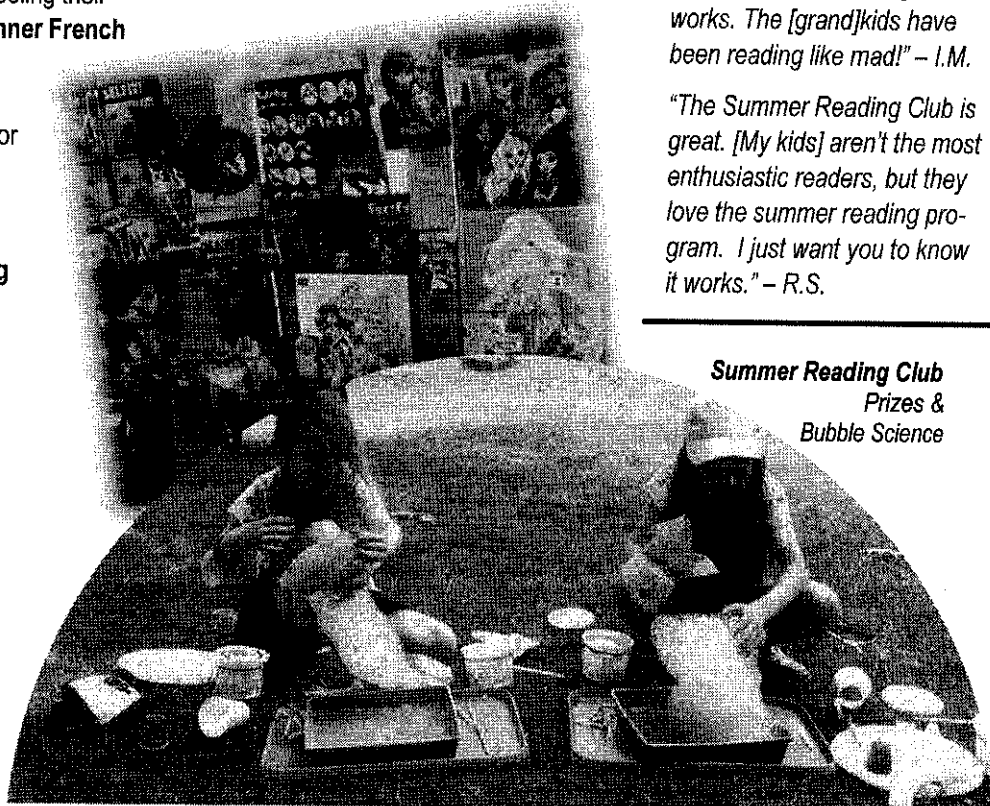
The Library runs the **TD Summer Reading Club** (sponsored by the TD Bank) for school-aged kids to keep up reading skills and prevent 'summer learning loss'.

As in 2020, we combined our very popular Prize Draw (kids earn tickets by reading books) with STEM-based* Take & Make activities. We also offered an online "Candy Chemistry" workshop by Scientists in Situ and were able to run an outdoor in-person 'Bubble Science' activity in August. We were pleased to have **75** kids join the Club (up 50% from 2020).

*STEM=Science, Technology, Engineering, Math

In-Library Programs	
Adult Programs:	4
Participants:	34
Kids Programs:	35
Participants:	201
Summer Reading Club:	75

*Thank You to the
Friends of the Library for
sponsoring our children's programs*



Summer Reading Club
Prizes &
Bubble Science

Partnerships Enhance our Community

The Library partners with local groups to promote shared goals and connect our community with information and special collections.

In 2021, we partnered with **Sustainable Merrickville-Wolford** to launch the **Seed Library**, with support from the Lions Club and seeds from local growers, such as **Pioneer Gardens**, **Connerty Meadows Farm**, and **Jellyby Farm**. The spring lockdown put a damper on use, but over 400 packs of seeds were given out to enthusiastic gardeners. Read more at: <https://tinyurl.com/mwseedlibrary> and see the article in the *Toronto Star*!: <https://tinyurl.com/mvazrt3h>.

The Library also partnered with the **Merrickville & District Trails Society** on an outdoor display case and information backpacks for their new RiverWalk Trail, in addition to our ongoing collaboration on the **Story Trail** [below].

The Library continues to provide access to the **Merrickville & District Historical Society's Digital Archives**.

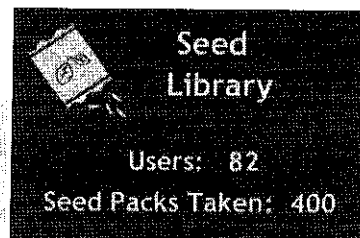
The Library will work to enhance these partnerships and resume those with the schools, daycare, etc in 2022.



The **Story Trail** (along the Woodland-Toboggan Hill Loop Trail) is a community favourite. We were pleased to have a Christmas story donated by local author **Louise Bond-Fraser** in 2021. See our StoryTrail video: <https://fb.watch/3wgLZ5jEcA/>



Lions Club joins us for opening day of the new **Seed Library**



The Library Makes a Difference

"I'd forgotten how good this library is" — P.G. [returning after lockdown]

"Your help with the DAISY reader for my Dad was so appreciated. It made such a difference to him to have a way to still enjoy reading." — B.D.

"The seed library is a wonderful resource and so well set up. Thank you!" — P.M. [from Facebook]

"We've got tomatoes, beans, pumpkins. It's amazing how big they are already. Thanks to the seed library, we'll have a full larder!" — G.G.

"My husband and I took our daughter this morning for a walk on the Story Trail. This was our first time and we loved it. Our daughter loves books and loves the outdoors so we couldn't have asked for a better family outing. Thank you so much to everyone for making the opportunity possible for us." — L.D.

"I am so thankful.... You made it possible for me to connect with a piece of my family heritage" — D.R. [re: Alice Hughes Genealogy Collection search].

And Visitors say...

"What a beautiful building. We're visiting and I love libraries, so I wanted to check out yours. I wasn't expecting anything like this!"

"This is the coolest space ever! It's like a tree house upstairs.. What a sweet beautiful place you have here. I love it!"

"Thank you for helping me. This Library is lovely, so sweet. Just like the town. I love it here."

New! ECO Champions



The Library is excited to partner with local environmentalists on this new contest for kids to raise awareness of species-at-risk in Merrickville-Wolford and how to help them.

This bilingual contest, spearheaded by resident Robbie Giles, encourages kids to research and do a project on one of 16 local species-at-risk.

This initiative has inspired considerable community support, including from Council, and has received funding from the Lions Club. The Library looks forward to displaying the entries in Spring 2022.

Find out more at: www.ecochampions.ca



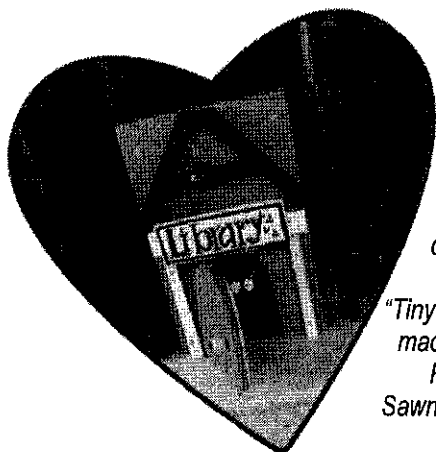
Thank You to the Lions Club for funding all these community projects!



Thank You Donors!

The Library is very grateful to those who donate money or sponsor books.

In 2021, the Library was privileged to receive a large donation from a very generous patron. These funds were used to upgrade to a new cataloguing/circulation system [see p7], purchase a new administrative computer, and to build the Library Reserve for future projects. We also received donations to expand our collection of First Nations authors and Canada Reads titles, and for the Seed Library, as well as a donation from the Merrickville Dart League for future programming. The Library Board sincerely thanks all our donors for their generosity!



The Library was delighted to add one of Merrickville's "Tiny Doors", generously made and donated by Robyn Eagle of SawnYah's Signs & Stuff

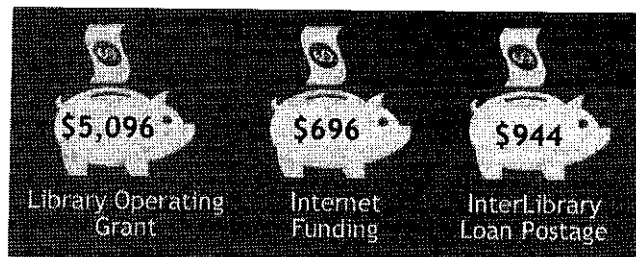


Thank You to the Merrickville & District (MaD) Gardeners for their dedicated plant care all summer



Provincial Funding

The Library continues to receive the annual Provincial Library Operating Grant and funding for our Internet connection and InterLibrary Loan costs from the Ministry of Heritage, Sport, Tourism and Culture Industries.



Thank You Volunteers!

A huge thank you to our many dedicated volunteers who donate their time every week for a variety of essential tasks - such as processing, repairing and shelving books, packaging interlibrary loans, scanning genealogy records and more.

Through the pandemic our volunteers have remained supportive and enthusiastic about returning to assist staff as conditions permitted. Their contribution allows the Library to provide our current high level of service without additional staff.

Our Volunteers

Nancy Cain
Kirsten Finstad
Diana McCavera
Alice Mills
Brenda Reid
Liz Sinclair
Mary Small
Gyn Wylie



A Little Help from Our Friends!

In spite of the ongoing challenges of fundraising during COVID, **The Friends of the Library** continued to sponsor several resources available at the Library in 2021, including subscription services such as

Kanopy's film streaming collection, online reference databases and the DVD pool, as well as children's programs and more. This past year the group also sponsored the Library's subscription to Zoom for programs and meetings. They share the Library's gratitude to the Merrickville-Wolford Community Fund for stepping forward this year to sponsor our popular OverDrive eBook/ eAudiobook subscription, which the Friends had previously funded [see p3]. The Friends contributed **\$2,878** to the Library in 2021.

The Friends are looking forward to resuming their traditional fundraisers in 2022, adapting them as necessary for "the new normal". Friends' president, Chris Eyton, expects some challenges, but is confident that in 2022 the group will be able to continue to fund the resources and services, including OverDrive, that they have traditionally sponsored and that the community enjoys.

The Board thanks the Friends of the Library for their support and enthusiasm



The Friends were happy to be able to run a successful book sale at the 'Fall for Merrickville' Market at Heritage Stables.

Library Services

- Books - for all ages!
- Magazines
- AudioBooks
- DVDs
- eBooks & eAudiobooks
- Kanopy Film Streaming
- eResources
- Large Print Books
- CELA Talking Books
- Teen Space
- Genealogy
- Local History
- Historical Society Digital Archives
- InterLibrary Loan
- Meeting Room
- Museum Passes
- MAPsacks
- Computers & Internet
- Wireless access 24/7
- WordProcessing & more
- Scanner
- Printing, Copying, Fax
- Programs for all ages
- Accessible Services



Library Upgrades

While COVID limited visits and programs, staff took the opportunity to make some upgrades to our "infrastructure". The Library switched to new higher-end circulation/cataloguing software by joining the Ontario Library Service's JASI consortium. This has enabled us to add greater functionality at an affordable cost. Members will have noticed the switch to new library cards and a new online catalogue. Staff also planned an update to the Library's website which will be completed in 2022. A new more colourful sign that incorporates our logo is now out in front of the Library.

Check out our website and catalogue at: <https://merrickvillelibrary.ca>



The Library expanded our collection of titles by First Nations authors, for adults and children, to build diversity and support increased awareness.

Board Makes Plans for 2022

The Library Board and staff continued to face the challenges of providing library service during a pandemic in 2021, but the Board's major focus was moving forward on the building's exterior work (pending since 2019). This project faced some challenges due to the shortage of available contractors and rising materials costs; however, work on the exterior walls (including staining/painting and fixing rotted boards) and on the roof has been completed on some sides of the building and the unanticipated collapse of the rear deck was repaired.

While pleased that this work is underway and hopeful that it will continue in 2022, the Board is concerned about their lack of expertise for the responsibility of exterior maintenance on a municipal building and the amount of board time it requires. The Board has initiated a discussion with Council regarding the municipality taking over this responsibility for the future.

Since 2022 is the last year of this term, the Board plans to address some deferred issues, including management options for the Library Reserve to enhance **fiscal sustainability**, accessibility planning, and end of term responsibilities. The Board also continues to oversee Library operations ensuring staff provide **excellent customer service to support the well-being of the community**. In these ways the Board contributes to the Merrickville-Wolford strategic goal of **Efficient, Effective Services and Civic Engagement**.

*The Library Board
would like to thank
Merrickville-Wolford Council
and Montague Council
for their support*

The Library Makes a Difference

"Libraries are vital to their communities and Merrickville is an unimaginably richer place thanks to its library and its extraordinary library personnel." - M.L. [from email]

The Library is Here to Help

"We truly appreciate everything the Library does for us and all the extra help you give. You always have what we need." — L.C.



Accessible Materials & Services

Although this has been overshadowed by COVID-19, the Library remains committed to connecting community members with disabilities to library services.

Visit our '[Accessible Services](#)' webpage



Library Board Members for 2022

Victor Suthren, Board Chair
John Harris
Brian Reid
Carole Roberts
Timothy Molloy
Council Representative
Colleen Perkins
Montague Representative

And Your Staff ...

Mary Kate Laphen, CEO
Linda Purvis-Carriveau



The Library partners with the Centre for Equitable Library Access (CELA) to provide books in alternate formats for members with print disabilities of all types.



Merrickville Public Library 2021 Financial Summary

Note: Financial data not final. Figures may be subject to revision.

Operating Budget

Revenue

Provincial Grant	\$5,096
Municipal Grant (Merrickville-Wolford)	\$96,000
Montague Grant	\$8,200
SOLS reimbursements (Internet & ILL postage)	\$1,640
In-Library Revenue	\$1,576
Donations (includes Friends of Library)	\$22,840
Special Funding [Seed Library, Story Trail]	\$935
Transfer from Reserve (from 2020)	\$379

Total Operating Revenues

\$136,666

Expenditures

Staffing (includes professional development)	\$83,231
Collections (books, eresources, pools, etc.)	\$10,074
Programs (incl. Seed Library & Story Trail)	\$1,030
Computer/Internet (incl. equipment & IT support)	\$3,851
Administration, etc.	\$8,288
Utilities/Building/Cleaning	\$14,132
Special Projects: JASI (from donations)	\$2,363
Transfer to Reserves: prepaid 2022	\$1,444
Transfer to Reserves: other	\$2,500

Total Operating Expenses

surplus/shortfall

\$126,913

\$9,753

Capital Budget

Revenue

Municipal Building Grant	\$3,000
Transfer from Surplus	\$8,125

Total Capital Revenue

\$11,125

Expenditure

Bldg Exterior - Walls	\$7,491
Bldg Exterior - Deck	\$2,234
Bldg Exterior - Roof	\$1,424

Total Capital Expenses

\$11,149

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Amalgamated 1998



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VILLAGE OF MERRICKVILLE-WOLFORD

Resolution Number: R - - 22

Date: April 25, 2022

For Clerk's use only, if required:

Recorded Vote Requested By:

Cameron	Y	N
Foster	Y	N
Ireland	Y	N
Molloy	Y	N
Struthers	Y	N

Moved by: Cameron Foster Molloy Ireland

Seconded by: Cameron Foster Molloy Ireland

Be it hereby resolved that:

The Council of the Corporation of the Village of Merrickville-Wolford does hereby receive the minutes of the Community Development Advisory Committee meeting of January 31, 2022 for information purposes.

Carried / Defeated

J. Douglas Struthers, Mayor



Community Development Advisory Committee (CDAC)

MINUTES

January 31, 2022 at 7:30 p.m.

Zoom

Members Present: Chair Helen Canjar, Tom Belanger (Secretary), Donna Daw, Mike Zaversenuke, Bob Foster (Council Liaison), Doug Struthers (Mayor Ex-Officio).

1. The meeting called to order at 7:46 p.m.
2. Disclosure of Pecuniary Interest and Nature Thereof: None Declared.
3. Approval of the Agenda.

Moved by: Donna D. Seconded by: Tom B. as amended

Be it hereby resolved that the Community Development Advisory Committee does hereby approve the Agenda as amended.

CARRIED

4. Approval of previous meeting minutes of November 29, 2021

Moved by: Donna D. Seconded by Mike Z.

Be it hereby resolved that the Community Development Advisory Committee does hereby approve the Minutes of November 29, 2021 as presented.

CARRIED

5. Capital Projects Wish List (Bob F.)
 - a. Eastern Ontario Engineers Association has asked for the Municipalities support in building the HF McLean cairn. The "Sons of Martha Cairn Restoration" group intends to build this memorial in Merrickville.
 - b. Lamp-posts Project: The Municipality intends to support the Chamber of Commerce application for funding to install decorative lamp posts throughout town as visualized in the attachments provided.
 - c. Arena Roof and Improvements: it doesn't look like funding for this project will be made available. Mayor suggesting that CDAC assume responsibility for developing some of the next steps, development of

concept/vision, then application to find seed funding to develop a business plan. Raising awareness and issuing a survey to assess opinion from all residents. Bob F. will take this to Council for consideration and direction on the Rink Project.

- d. Mike Z. raised the item of Federal Grants that are available that could possibly be applied for. These grants typically require a clear vision and support from Municipality.
6. Invitation of new EDO Stacy Lloyd to CDAC Meeting – Mayor clarified her role in the town and questioned what the committee would want from her attending the CDAC meeting. Chair explained that CDAC was inviting her to determine if there is a different role or projects that the CDAC needed to focus on.
7. Municipal News Update
 - a. N/A
8. Other Business
 - a. Electric Vehicle Charging Station: Federal grants are being made available to assist with the capital infrastructure costs of building charging stations (50/50). Level 2 connection (\$5,000 per) or fast charging connection (\$15,000 per).

Action Item: Bob F. will speak with Council and assess Council's interest in CDAC investigating the community benefits and opportunities of initiating a policy for electric vehicle charging stations. Upon receiving a positive response from council, Mike Z. will undertake a review and prepare a report for CDAC

- b. Job Posting for Planner1 / Special Projects Coordinator:
 - c. 2022 virtual Rural Ontario Municipal Association Conference (Jan 23 to 25)
 - d. Chamber of Commerce Attendance. CDAC agreed that it would not be appropriate to connect CC with CDAC at this time. CC is looking for assistance that CDAC would not be able to fulfill.
 9. Next Meeting Date: Monday February 21, 2022 @ 7:30 pm
 10. Adjournment; Moved by: Donna D. Seconded by Tom B.
- Be it hereby resolved that the Community Development Advisory Committee does hereby adjourn at 9:02 p.m.

CARRIED

p.p. Tom Belanger, Secretary

Chair: Helen Canjar

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VILLAGE OF MERRICKVILLE-WOLFORD

Resolution Number: R - - 22

Date: April 25, 2022

For Clerk's use only, if
required:

**Recorded Vote Requested
By:**

Cameron	Y	N
Foster	Y	N
Ireland	Y	N
Molloy	Y	N
Struthers	Y	N

Moved by: Cameron Foster Molloy Ireland

Seconded by: Cameron Foster Molloy Ireland

Be it hereby resolved that:

The Council of the Corporation of the Village of Merrickville-Wolford does hereby receive correspondence from Chantal Roulston for information purposes; and

That Council acknowledges that the event is of municipal significance as profits will be going to the food cupboard; and

That Council gives conditional endorsement of the event on County Rd 15 subject to compliance with legislation including, but not limited to, Ontario Building Code, Zoning Bylaw and sign Bylaw.

Carried / Defeated

J. Douglas Struthers, Mayor

Kirsten Rahm

From: Kirsten Rahm
Sent: Tuesday, April 5, 2022 1:01 PM
To: Brad Cole - Public Works Department; Doug Robertson
Subject: FW: Letter of support for event fundraiser

FYI

-----Original Message-----

From: Chantal Roulston <chantal@merrickvillechamber.ca>
Sent: Tuesday, April 5, 2022 11:12 AM
To: Kirsten Rahm <finance@Merrickville-wolford.ca>
Subject: Letter of support for event fundraiser

Hello,
We just spoke!
My name is Chantal Roulston, I am a small business owner just outside the village, also a local chamber director. We host makers markets on our property monthly May - Nov. This Year we wish to add a charitable aspect to the event by way of a beer and wine tent (we have the tent, the tables /decor and bar!) with the designated charity being the food cupboard. To this end we need a letter confirming the support for our event and its charitable aspect. The letter must state that our event is of municipal significance and why (profits going to the food cupboard). The food cupboard is already on board, but it is our understanding I must apply for the permit as I am the host. This Permit is of great significance to us. And unfortunately our window is small. We need to have all paperwork in before April 15.
Your help is greatly appreciated.
Cheers,
Chantal

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VILLAGE OF MERRICKVILLE-WOLFORD

Resolution Number: R - - 22

Date: April 25, 2022

For Clerk's use only, if
required:

**Recorded Vote Requested
By:**

Cameron	Y	N
Foster	Y	N
Ireland	Y	N
Molloy	Y	N
Struthers	Y	N

Moved by: Cameron Foster Molloy Ireland

Seconded by: Cameron Foster Molloy Ireland

Be it hereby resolved that:

The Council of the Corporation of the Village of Merrickville-Wolford does hereby
receive correspondence from Christmas in Merrickville; and

That Council acknowledges the event will result in significant staff overtime and other
costs as stipulated in the attached letter dated April 7, 2022; and

That Council approves their requests.

Carried / Defeated

J. Douglas Struthers, Mayor

April 7, 2022

The Corporation of the Village of Merrickville-Wolford,
317 Brock Street West,
Merrickville, Ontario. K0G 1N0
Mr. Doug Robertson
CAO, Village of Merrickville-Wolford

RE: CHRISTMAS IN MERRICKVILLE (CiM) 2022

Post Pandemic, the business community and residents are cooperating once again to launch the season with Christmas in Merrickville (CiM) on Saturday, December 3, 2022. A volunteer organizing committee has been formed to make the day as successful as it has been in previous years.

All activities and events for Christmas in Merrickville (CiM) are scheduled on Saturday, beginning at 8:30am with Breakfast with Santa and finishing at 10:00pm.

The CiM Organizing Committee is requesting assistance from the Village as follows:

1. Council waives the applicable and total charges for rental of the Community Centre on December 2 and 3.
2. Request the closure of St. Lawrence Street and all crossroads from Main Street to the north side of Lewis Street on **Saturday, December 3**, between 10:45am to 9:30pm. These street closures ensure the safety of the many visitors who attend this day-long event
3. CiM will have equipment such as four fire barrels and related safety equipment on St. Lawrence during the day. All equipment can be removed should fire department need access
4. A vendor market will be set up from Noon to 7pm on St. Lawrence between Drummond and Lewis
5. Use of Village equipment, including but not limited to, 15-20 road barricades, 8 picnic tables (2 per fire barrel), 40 traffic cones and 16-20 No Parking signs.
As in previous years, it is requested these items be delivered on Friday, December 2, 2022, to the corners of each St. Lawrence cross streets between Main Street and Lewis Street (Wellington, Brock, Drummond, and Lewis).
6. Two (2) flashing warning sign would also be appreciated to place at the barricades located on St. Lawrence and Lewis Street to visibly advise vehicles of the street closures; **NOTE: To assist our volunteers, I would like to have the road barricades assembled at the drop sites. This would cut down on our time.**
7. **Additional barricades will be needed for St. John and St. Patrick and Read streets based on the change in Parade route and 3 barricades to use at Main and St. Lawrence**
8. Additional waste/recycling bins for each block, including fire barrel stations in the closed section of St. Lawrence Street. **We also request that the waste bins be emptied at least once during the day by Public Works to avoid litter spilling over.**
9. The Tree Lighting Ceremony will be held at 5:00pm Saturday, December 2. We ask that all the lights on the trees in Blockhouse Park be checked and repaired to ensure they are all functional and that we have access to the main switch to turn them on at the appointed time.
10. Please re-string the lights in front of Mainstreet Restaurant
11. Adding lights to the trees in the Main St. area should be an annual line item in your budget for both repairs and additions in order to beautify the village. Estimate \$500-\$600.00 for lights this year for this area.
12. We ask that the By Law Officer be in attendance Saturday, December 2 starting around 10:30 am to assist with any By-law related issues/infractions prior to the start of the Parade (Parade starts at 11:00am)
13. Insurance and liability coverage for the CiM events and activities occurring throughout the Village on December 2. We also request a copy of the insurance coverage and a copy of the policy for our files.
14. CiM will also solicit its own insurance and will name the Village as in past years as well
15. CiM is requesting the use of the Village's sound system as well for the day
16. CiM will coordinate streetscape with the Chamber for this event. No funds are being requested from Council at this time.

17. CiM is THE most popular attraction and understands the budget and budget constraints with supporting various events. However, should there be a surplus or savings, CiM would request consideration for nominal funding allocation of \$5-600.00

The CiM Committee will be meeting to finalize details around the many events scheduled later this year. We will be working with the Chamber to ensure website and Facebook pages are available to visitors. We request the Municipal office to promote CiM fully as well on their social media platforms. CiM will provide content as required.

Your continued support of the annual Christmas in Merrickville events and activities is appreciated.

Sincerely,
Mark Scullino
CiM Organizing Committee

CC: Doug Robertson, CAO
Brad Cole, Fire Chief
Carlos Card, CiM Organizing Committee

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VILLAGE OF MERRICKVILLE-WOLFORD

Resolution Number: R - - 22

Date: April 25, 2022

For Clerk's use only, if
required:

**Recorded Vote Requested
By:**

Cameron	Y	N
Foster	Y	N
Ireland	Y	N
Molloy	Y	N
Struthers	Y	N

Moved by: Cameron Foster Molloy Ireland

Seconded by: Cameron Foster Molloy Ireland

Be it hereby resolved that:

The Council of the Corporation of the Village of Merrickville-Wolford does hereby receive the Electric Vehicle Charging Station Proposal from the Community Development Advisory Committee for information purposes.

Carried / Defeated

J. Douglas Struthers, Mayor

Electric Vehicle (EV) Charging Station Proposal

Author: Mike Zaversenuke

Merrickville-Wolford Community Development Advisory Committee

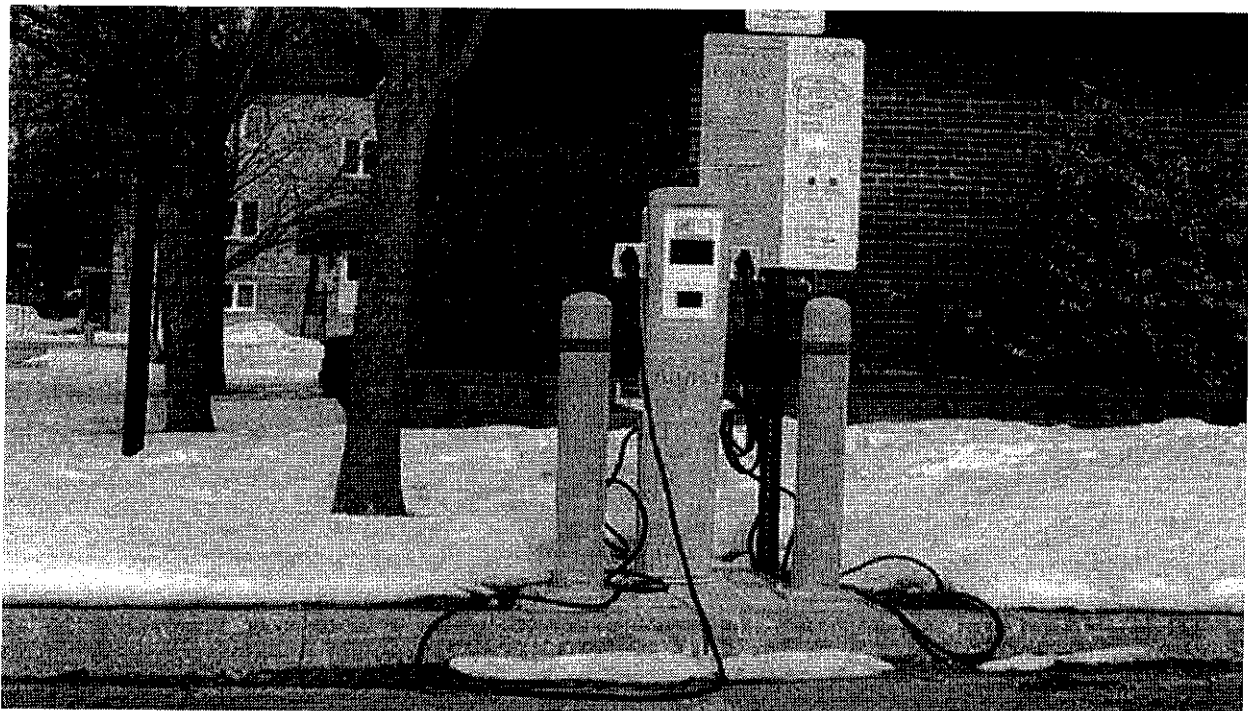
Date: April 13, 2022

Introduction:

This Electric Vehicle (EV) Charging Station presentation will provide the reasoning and rationale for the purchase, installation and operation of **EV Charging infrastructure in Merrickville-Wolford (M-W).**

The **Federal government** is planning to extend their **Zero Emission Vehicle Infrastructure Program (ZEVIP)** grants in 2022 to encourage the ownership of electric vehicles by providing financial incentives for EV Charging infrastructure creation.

The next phase of the ZEVIP funding is scheduled to **open for application in the spring of 2022** and provides up to **50% of the total project cost** (to a fixed maximum value of \$5000.00) for EV Charging infrastructure.



Carleton Place EV Charger Level 2 Installation

Rational For Electric Vehicle Charger Infrastructure Implementation:

Why:

There are many reasons why the Municipality of M-W should purchase and install EV Charging Stations including:

- **Reducing Emissions** (green option): Supports sustainable, environmentally friendly EV transportation option for **net zero future**.
- **Accessibility**: Provides accessible local public **EV charging infrastructure critically needed** for EV car owners (visitors and residents alike).
- **Affordable**: Cost for Municipality is nominal with Federal Zero Emission Vehicle Infrastructure Program (ZEVIP) Level 2 grant.
- **Economic growth**: Access to local EV charging stations will;
 - (a) **Support tourism** from major urban centres (i.e. Ottawa, Montreal, Kingston, etc) to our community to visit and **support local businesses**,
 - (b) Provide **access** to critical EV charging infrastructure,
 - (c) Encourage consumers to **purchase electric vehicles** thereby **reducing green house gases**,
 - (d) Generate sustainable **financial revenue** for Municipality.
- **Source of Revenue**: The electricity cost per charge for a Level 2 charger is approximately \$0.80 per charge kWh while user charging rate is typically \$2.50 to \$3.50 per charge kWh. The price per charge rate covers costs and facilitates a **good return on investment**.
- **Low Start up Cost**: EV infrastructure cost is a one-time installation-fee of approximately \$850 to \$2,200 (dependant on mounting type and location) with monthly Network Operator collection and maintenance service fees i.e. typical service charges are \$300.00 (\$150 per charger) annually.
- **Future Expansion**: Provides opportunity for a more **sustainable option** for our **municipal vehicle fleet** in the future.

When:

The future of Electric Vehicles is now. EV car sales are increasing rapidly but there is a **critical shortage of EV Charging Station infrastructure** to accommodate the demand. Having an EV Charging Station in M-W will provide **economic benefits and enhance economic growth** in our community.

The next phase of the Federal ZEVIP grant program is expected to be announced in **spring of 2022** which will provide **funding for municipalities** and private businesses. Having an **EV infrastructure plan in place** will allow the municipality to **quickly capitalise on the ZEVIP program grants** once announced.

Who:

There are **numerous companies** who are currently providing EV Charging station equipment, maintenance and daily operations which can be **contracted to provide hands off services** (i.e. operations, payment collection and revenue reimbursements).

Installation of the EV Charging stations can be contracted through private EV Infrastructure companies, local businesses, contracting Ottawa Hydro or through partnership as a joint ZEVIP venture with Hydro One, Ontario Power Generation and Natural Resources Canada.

Where:

Presently there are some private and Municipal local area EV Charging Stations in Carleton Place, Smiths Falls, Kemptville, Kingston and along highway 401 which provide some EV charging capability but **as demand for electric cars increase, more will be needed.**

There are **many possible locations** for an EV Charging Station in M-W. Street side or parking lot locations are suitable providing a source of 240 VAC power and physical parking accessibility is available.

Possible **locations for Charging Stations** could be in the Municipal parking lots, street side at the Blockhouse Parkette, Municipal Town Hall, Fire Station or Community Centre or other possible locations around the municipality.

The EV Charging Stations can be installed on buildings, on standalone mounting posts, or on existing utility poles (wherever hydro power is currently available).

What:

There are **three types of EV Charging Station equipment** available today. The costs outlined below are an example of typical costs:

Level 1: 115 VAC overnight charging stations (least expensive i.e. \$1,300 to \$1,500, long **24 hour** charging period);

Level 2: 240 VAC charging station (mid cost i.e. \$3,400 to \$6,000 per plug, with a range of **2 to 5 hour** charging period); and

Level 3: DC Fast charge station (most expensive i.e. \$42,500 to \$68,000 per plug, quick **20 to 30 minute** charging period).

Although **Level 3 DC quick chargers** are the most efficient, quickest charge option they are **extremely expensive** so this proposal **recommends a Level 2 Charging Station with dual (two plug) pole mounted EV chargers.**

Level 2 EV Charger Stations provide the **most cost effective option** with a 2 to 4 hour charging period (typical average charging session duration is 2 hours 36 minutes).

The past 2021 **ZEVIP** government Level 2 EV Charging Station grants provided for **funding of 50% of total project costs to a maximum of \$5000 per plug.** The ZEVIP grants are expected to be reintroduced again in 2022 with similar funding.

With an estimated cost of a Level 2 EV Charging Station of \$3,400 to \$6,000 per plug (dependant on the supplier) and the \$5,000 ZEVIP grant per plug, the **cost to the Municipality is small.**

A recently quoted cost **from XXX for two (2) Level 2 charging stations** with pole mount adapter, cable management system, Global Management service for one year, and shipping fee was **\$11,352.00.** The EV Charging Station installation would **cost the Municipality \$1,352.00** (with the 2021 ZEVIP grant rebate program) and provides the opportunity for a **continuous source of revenue.**

Conclusion:

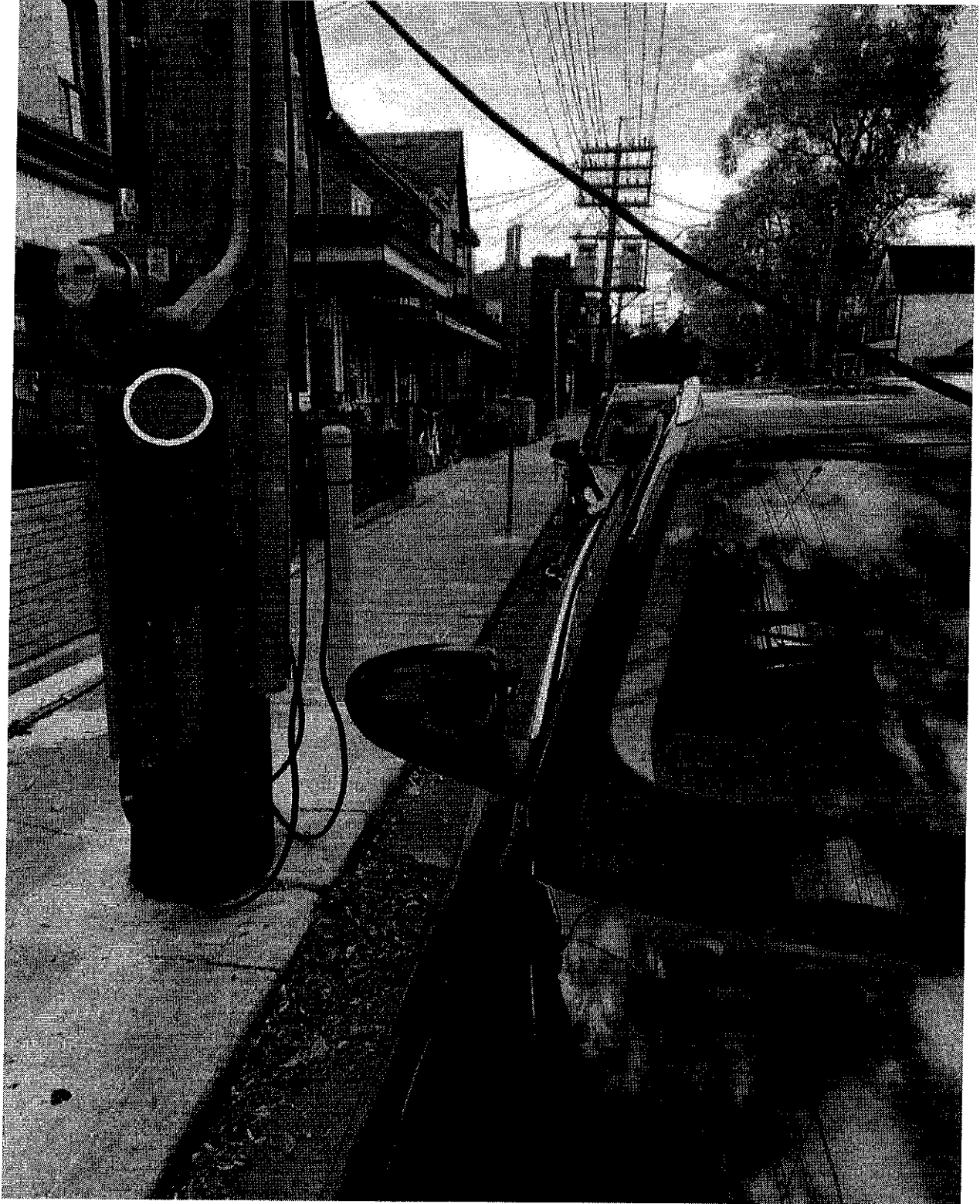
The **accessibility, environmental and financial benefits** to Merrickville-Wolford provides a very strong case for establishing Electric Vehicle Charging Station infrastructure in our community.

Recommendation:

The CDAC committee is making the recommendation that the municipality of Merrickville-Wolford **investigate the opportunity to support electric vehicle charging stations in our community.**

Supporting Documentation Reference Internet Links:

- Carleton Place Adds Three EV Charging Stations Article Link:
<https://www.insideottawavalley.com/news-story/10592824-carleton-place-adds-3-charging-stations-for-electric-vehicles/?s=n1?source=newsletter>
- Your Guide To EV Charging For Your Business Tutorial Link:
https://info.chargepoint.com/rs/079-WYC-990/images/EV-Charging-Business-Guide.pdf?mkt_tok=MDc5LVdZQy05OTAAAAGCqFOwKhv5y8YLbLC5KysalTmxX3rYIGOzkITdCsUgxhtEQo9bXjrWTqjY4yiGX-IDgPUnskIzOv7MPIPiW-8t2cQQsjHZZT_xVgz0N38JXBEvCYM



Toronto Pole Mount EV Charger

Supporting Documentation:

City of Kingston Case Study (Excerpt):

Link: <https://www.flo.com/download/20156/>

The project, which began in 2017, saw the City of Kingston deploy a total of **48 EV charging stations**, broken down as follows:

- **2 Fast DC Level 3 Charging Stations,**
- **4 Level 2 Curb side Charging Stations**
- **42 Level 2 Charging Stations**, deployed in city buildings and municipal parking lots.

Client: City of Kingston, Kingston, Ontario

Population: 123,000

Project Goals:

- Reduce emissions and foster EV adoption
- Drive transit corridor traffic towards city center to support local businesses
- Access Federal Funding to Subsidize the Cost of Deployment
- Deploy Both Level 2 and DC Fast Charging Stations

Key Figures*

Number of Charging Sessions: 9,520

Average Monthly Growth in Users: 2 %

Average Session Duration: 2 hours 36 mins

Total kWh transferred: 91,529

Analytics & Insights

Station Usage: **A majority of charging station users (77%) are non-local and travelled an average of 113KM to use the station**, suggesting the chargers are succeeding in driving business to the city centre

Average Charging Session Duration:

Local (2 hours, 44 minutes)

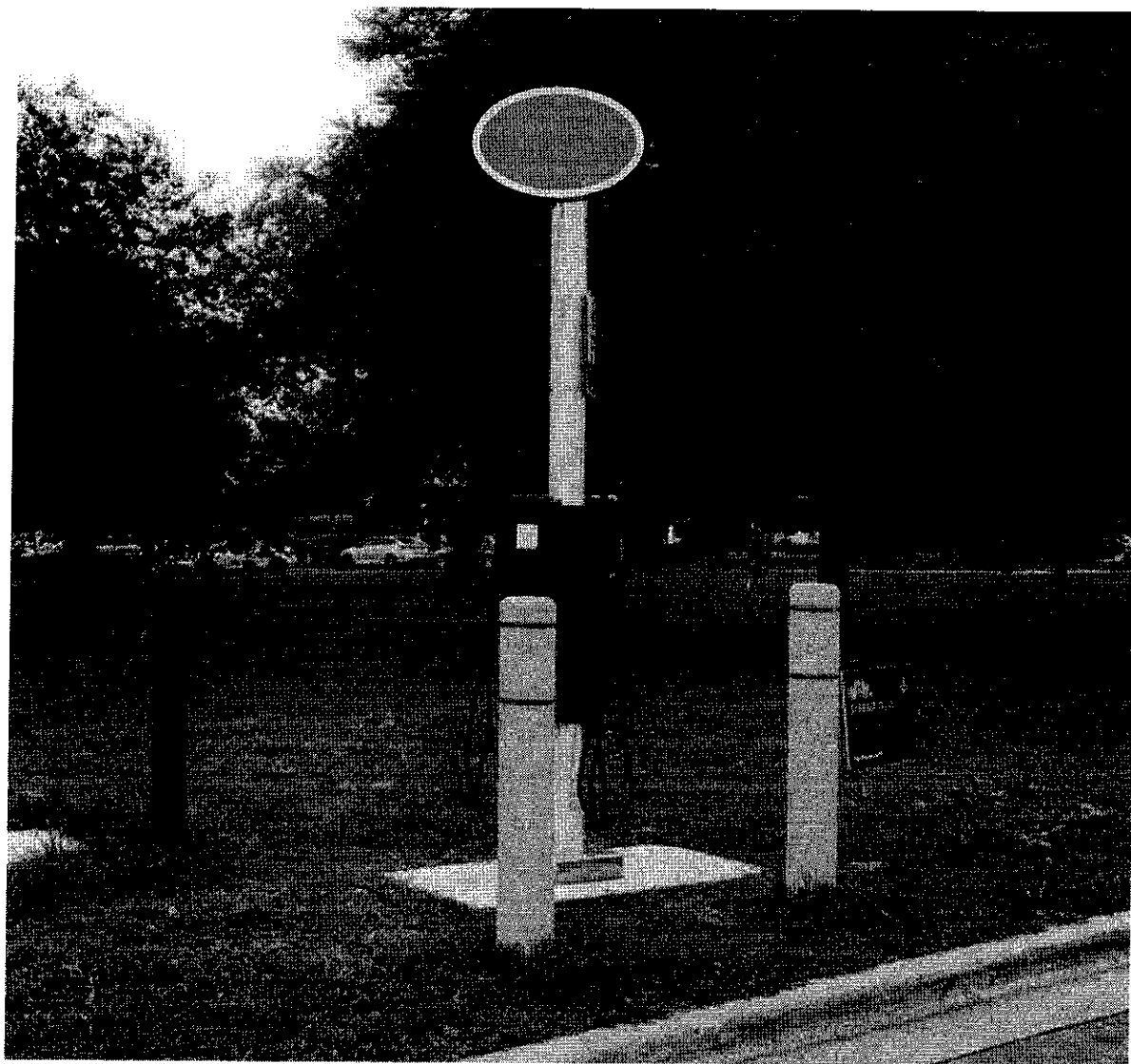
Non-Local (2 hours, 41 minutes)

Most Used Station Park: Frontenac

Municipal Parking Lot, Clarence Street (Shopping & Restaurants)

Since the deployment of their EV charging ecosystem, the City of Kingston has seen charging use equivalent to a **20,000 kilogram reduction in greenhouse gas emissions**.

An analysis of charging network data affirms that Kingston's charging stations are being used in the manner intended by the City by **attracting passersby traffic who might not otherwise stop and frequent local establishments**. Service data illustrates that a majority of the EV drivers using the stations are from out of town; **approximately 77% of users accessing charging services in Kingston are not from the region**.



City of Kingston EV Charging Station

Established 1793
Incorporated
Wolford 1850
Merrickville 1860
Amalgamated 1998



Telephone (613) 269-4791
Facsimile (613) 269-3095

VILLAGE OF MERRICKVILLE-WOLFORD

Resolution Number: R - - 22

Date: April 25, 2022

For Clerk's use only, if
required:

**Recorded Vote Requested
By:**

Cameron	Y	N
Foster	Y	N
Ireland	Y	N
Molloy	Y	N
Struthers	Y	N

Moved by: Cameron Foster Molloy Ireland

Seconded by: Cameron Foster Molloy Ireland

Be it hereby resolved that:

The Council of the Corporation of the Village of Merrickville-Wolford does hereby
receive the 2021 Household Hazardous Waste Summary for information purposes.

Carried / Defeated

J. Douglas Struthers, Mayor

APRIL 6, 2022

COMMITTEE OF THE WHOLE REPORT

REPORT NO. CW-021-2022

2021 HOUSEHOLD HAZARDOUS WASTE SUMMARY

**GEOFF MCVEY
FOREST MANAGER**

RECOMMENDATIONS

THAT the Committee of the Whole recommends that staff be authorized to prepare and issue a Request for Proposal investigating options and costs related to the conversion of the current events-based Household Hazardous Waste program to a depot-based program.

FINANCIAL IMPLICATIONS

The final cost of an event is a function of contractor costs (staff, trucking and collection costs by waste class) and miscellaneous costs (Counties staff, advertising, supplies and insurance). Offsetting revenues are generated by per vehicle chargebacks to Prescott and Gananoque as well as a partial reimbursement of collection fees for specific waste classes from four stewardship organizations; 1) Stewardship Ontario; 2) Product Care Association; 3) Automotive Materials Stewardship, and 4) Call2Recycle. The largest controlling factor in total event cost is the class and quantity of waste collected. Although the Counties is charged by the contractor for everything collected, the Counties is reimbursed for only a portion of the total. For example, the Counties is reimbursed \$1.11 /kg for waste classes such as paint, oil, single use batteries, fertilizers and pesticides. The Counties is not reimbursed for gas, oil, fire extinguishers, light bulbs, pharmaceuticals and various household cleaners. Hence the final cost of an event is very unpredictable (as are the revenue streams from the various stewardship organizations).

A new Household Hazardous Waste (HHW) contract was awarded to Drain-All in 2021 which resulted in an increase in pricing. This was partially due to an increase in the fixed costs associated with staffing, transportation and the per unit collection costs by waste class. However, the largest increase in the costs of the 2021 events can be attributed to the significant increase in attendance at the five events and therefore total waste collected. The final cost for the 2021 HHW program was \$235,896.00, \$21,398.23 over the original 2021 forecast.

CLIMATE CHANGE IMPLICATIONS

Collection of hazardous waste and the opportunity to recycle some materials can have positive climate implications

ACCESSIBILITY CONSIDERATIONS

A permanent facility for drop off would allow for increased access for residents.

COMMUNICATIONS CONSIDERATIONS

Changes to service levels would require a communication plan and any investigations of options would involve resident surveys.

BACKGROUND

The pandemic reduced the 2020 season to only two events, however all five events were held as per normal in 2021, i.e., July 10, (Lombardy Fair Grounds), August 21 (Counties Patrol Garages Lansdowne and Frankville) and Sept. 18 (Counties Patrol Garage Kemptville and the Spencerville Fairgrounds). This was the first year that the two September events were held for a full day due to increasing attendance. Total attendance for all events was 2051 vehicles. There were 866 vehicles in 2020 and 1828 in 2019, the last year all five events were held previous to the pandemic.

DISCUSSION/ALTERNATIVES

Notwithstanding the pandemic-influenced low attendance in 2020, there has been a steady increase in attendance at these events. They have become quite popular as evidenced by the increase in attendance and the many positive comments about the provision of this service to the public. However, the increase in attendance has also created operational and safety concerns. Long line-ups of vehicles form while waiting to get into the Patrol Garage yard to be processed by Drain-All staff. It is becoming more common for those lines which can be up to a kilometer in length, to last for two to three hours. This not only creates difficult working conditions for staff, more importantly it is creating a safety hazard along the roadside as they are interfering with the normal flow of weekend traffic. The two events held in Lombardy and Spencerville do not have this problem as they are held at the local agricultural fairgrounds. In the short-term, staff will continue to investigate options to help alleviate this issue. However, in an effort to eliminate the potential for a motor vehicle accident and to perhaps reduce overall program costs and increase efficiencies, it is recommended that a consultant be hired to research and report on all aspects of converting from an events-based program to one based on the location of a depot where residents could drop off their HHW at specified times. The 2022 HHW Budget included the sum of \$25,000 for consulting fees for this purpose.

ATTACHMENTS

Table 1, HHW Attendance and Table 2, 2021 HHW Budget

GEOFF MCVEY
FOREST MANAGER

MARCH 29, 2022
DATE

RICK KESTER
DIRECTOR OF PUBLIC WORKS

MARCH 29, 2022
DATE

PAT HUFFMAN
TREASURER

MARCH 29, 2022
DATE

RAYMOND CALLERY
CHIEF ADMINISTRATIVE OFFICER

MARCH 30, 2022
DATE

COMMITTEE OF THE WHOLE REPORT
REPORT NO. CW-021-2022
2021 HOUSEHOLD HAZARDOUS WASTE (HHW) SUMMARY

ATTACHMENTS

TABLE 1: HHW ATTENDANCE 2017 - 2021

	2017	2018	2019	2020 *	2021
Total Vehicles	1494	1475	1828	866	2051

* Only 2 events held due to Covid-19

TABLE 2: 2021 HHW BUDGET

ITEM	2021 EXPENSES	2021 REVENUES	2021 FINAL COST	2021 APPROVED BUDGET	2021 VARIANCE
Total Contractor Costs (All 5 Events)	330,674.61				
Wages & Benefits	1,196.99				
Materials & Supplies	1,184.39				
Advertising	4,480.91				
Insurance	10,344.24				
Revenue (Industry Stewards)		101,033.06			
Revenue (Prescott & Gananoque)		10,951.85			
TOTAL	347,881.14	111,984.91	235,896.23	214,498.00	21,398.23

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Incorporated
Wolford 1850
Merrickville 1860
Amalgamated 1998



Telephone (613) 269-4791
Facsimile (613) 269-3095

VILLAGE OF MERRICKVILLE-WOLFORD

Resolution Number: R - - 22

Date: April 25, 2022

For Clerk's use only, if
required:

**Recorded Vote Requested
By:**

Cameron	Y	N
Foster	Y	N
Ireland	Y	N
Molloy	Y	N
Struthers	Y	N

Moved by: Cameron Foster Molloy Ireland

Seconded by: Cameron Foster Molloy Ireland

Be it hereby resolved that:

The Council of the Corporation of the Village of Merrickville-Wolford does hereby approve the Asset Management Plan – Core Assets, from Watson & Associates.

Carried / Defeated

J. Douglas Struthers, Mayor



Asset Management Plan – Core Assets

Village of Merrickville-Wolford

December 7, 2021

Watson & Associates Economists Ltd.
905-272-3600
info@watsonecon.ca

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The preparation of this project was carried out with assistance from the Government of Canada and the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accept no responsibility for them.

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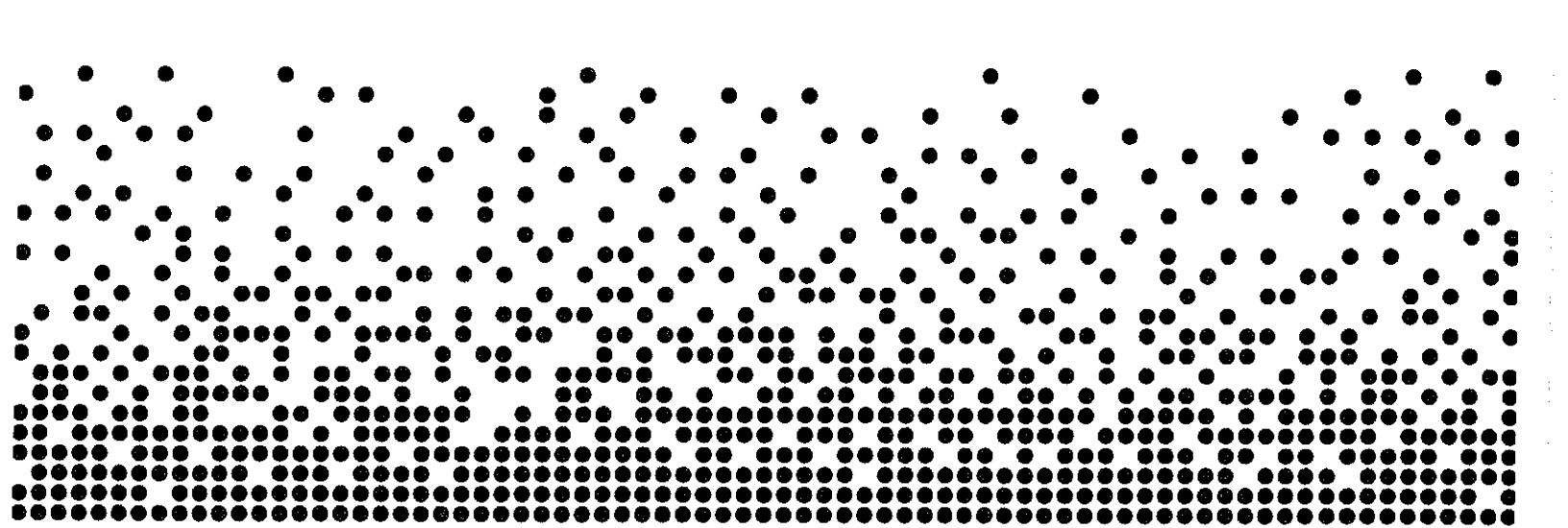


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List of Acronyms and Abbreviations

Acronym	Full Description of Acronym
AC	Asbestos Cement
BCI	Bridge Condition Index
CCTV	Closed-circuit Television
C.I.R.C.	Canadian Infrastructure Report Card
G/S	Gravel
HCB	High-class Bituminous
IJPA	Infrastructure for Jobs and Prosperity Act, 2015
LCB	Low-class Bituminous
OCWA	Ontario Clean Water Agency
O. Reg.	Ontario Regulation
OSIM	Ontario Structure Inspection Manual
PCI	Pavement Condition Index
PSAB	Public Sector Accounting Board
ULC%	Useful Life Consumption Percentage
VFD	Variable Frequency Drive



Report



Chapter 1

Introduction



1. Introduction

1.1 Overview

The main objective of an asset management plan is to use a municipality's best available information to develop a comprehensive long-term plan for capital assets. In addition, the plan should provide a sufficiently documented framework that will enable continuous improvement and updates of the plan, to ensure its relevancy over the long term.

The Village of Merrickville-Wolford (Municipality) retained Watson & Associates Economists Ltd. (Watson) to update the Municipality's 2014 Asset Management Plan. With this update, the intent is to bring the Municipality's asset management plan into compliance with the July 1, 2022 requirements of Ontario Regulation (O. Reg.) 588/17. It is intended to be a tool for the Municipal's staff and Council to use during various decision-making processes, including the annual budgeting process and future capital grant application processes.

The assets included in this iteration of the asset management plan are the core municipal assets which fall into the following broad asset categories:

- Roads;
- Bridges and structural culverts;
- Water treatment, pumping, and distribution;
- Wastewater treatment, pumping, and collection; and
- Stormwater collection.

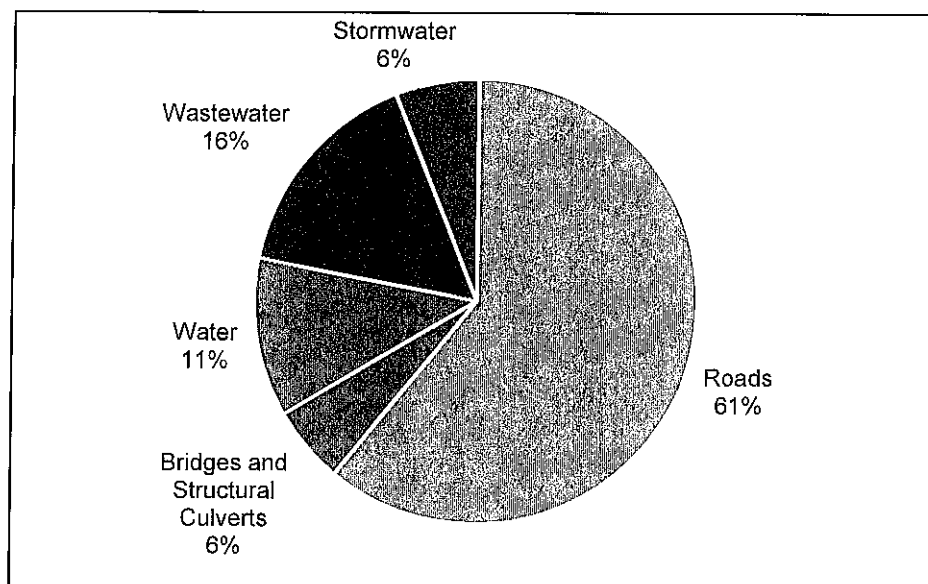
Core assets and their replacement costs are shown in Table 1-1. Figure 1-1 shows the distribution of replacement value by asset class. Roads account for well over half the replacement value (61%), followed by wastewater (16%), water (11%), stormwater (6%), and lastly bridges and structural culverts (6%).



Table 1-1: Asset Classes and Replacement Cost (2021\$)

Asset Class	Replacement Cost
Roads	\$54,310,000
Bridges and Structural Culverts	\$5,040,000
Water	\$10,120,000
Wastewater	\$14,150,000
Stormwater	\$5,420,000
Total	\$89,030,000

Figure 1-1: Distribution of Replacement Value by Asset Class



The Municipality's goals and objectives with respect to asset management are identified in the Municipality's Strategic Asset Management Policy, which was adopted by Council on May 27, 2019 via By-law No. 31-2019. A major theme within that policy is for the Municipality's physical assets to be managed in a manner that will support the sustainable provision of municipal services to residents. Through the implementation of the asset management plan, the Municipality's practice should evolve to be responsive to the levels of service that are being achieved. Moreover, infrastructure and other capital assets should be maintained at condition levels that provide a safe and



functional environment for the Municipality's residents. Therefore, the asset management plan and the progress with respect to its implementation will be evaluated based on the Municipality's ability to meet these goals and objectives.

1.2 Legislative Context for the Asset Management Plan

Asset management planning in Ontario has evolved significantly over the past decade.

Before 2009, capital assets were recorded by municipalities as expenditures in the year of acquisition or construction. The long-term issue with this approach was the lack of a capital asset inventory, both in the municipality's accounting system and financial statements. As a result of revisions to section 3150 of the Public Sector Accounting Board (PSAB) handbook, effective for the 2009 fiscal year, municipalities were required to capitalize tangible capital assets, thus creating an inventory of assets.

In 2012, the Province launched the Municipal Infrastructure Strategy. As part of that initiative, municipalities and local service boards seeking provincial funding were required to demonstrate how any proposed project fits within a detailed asset management plan. In addition, asset management plans encompassing all municipal assets needed to be prepared by the end of 2016 to meet Federal Gas Tax agreement requirements. To help define the components of an asset management plan, the Province produced a document entitled *Building Together: Guide for Municipal Asset Management Plans*. This guide documented the components, information, and analysis that were required to be included in municipal asset management plans under this initiative.

The Province's *Infrastructure for Jobs and Prosperity Act, 2015* (IIPA) was proclaimed on May 1, 2016. This legislation detailed principles for evidence-based and sustainable long-term infrastructure planning. IIPA also gave the Province the authority to guide municipal asset management planning by way of regulation. In late 2017, the Province introduced O. Reg. 588/17 under IIPA. The intent of O. Reg. 588/17 is to establish standard content for municipal asset management plans. Specifically, the regulations require that asset management plans be developed that define the current levels of service, identify the lifecycle activities that would be undertaken to achieve these levels of service, and provide a financial strategy to support the levels of service and lifecycle activities.



This plan has been developed to address the July 1, 2022 requirements of O. Reg. 588/17. It utilizes the best information available to the Municipality at this time.

1.3 Asset Management Plan Development

This asset management plan was developed using an approach that leverages the Municipality's asset management principles as identified within its strategic asset management policy, capital asset database information, and staff input.

The development of the Municipality's asset management plan is based on the steps summarized below:

1. Compile available information pertaining to the Municipality's capital assets to be included in the plan, including attributes such as size, material type, useful life, age, and current replacement cost valuation. Update the current replacement cost valuation, where required, using benchmark costing data or applicable inflationary indices.
2. Define and assess current asset conditions, based on a combination of input from the Municipality's staff, existing background reports and studies (e.g., 2021 Bridge Inspection Report, 2021 Road Needs Study), and an asset age-based condition analysis.
3. Define and document current levels of service based on analysis of available data and consideration of various background reports.
4. Develop lifecycle management strategies that identify the activities required to sustain the levels of service discussed above. The outputs of these strategies are summarized in the forecast of annual capital and operating expenditures required to achieve these levels of service outcomes.
5. Develop a financial summary of the expected costs arising from the lifecycle management strategy. The financial summary compares expected capital expenses to current capital funding.
6. Document the asset management plan in a formal report to inform future decision-making and to communicate planning to municipal stakeholders.



1.4 Maintaining and Integrating the Asset Management Plan

To comply with the July 1, 2024 and July 1, 2025 requirements of O. Reg. 588/17, this plan will need to be expanded to cover all assets, to have targets set for levels of service performance measures, and to include a detailed financial strategy. Further integration into other municipal financial and planning documents would assist in ensuring the ongoing accuracy of the asset management plan, as well as the integrated financial and planning documents.

The asset management plan is a snapshot in time and is based on a number of assumptions regarding expected lifecycles and future performance of assets, lifecycle intervention costs, among others. The Municipality will need to establish processes for reviewing and updating these assumptions on a regular basis to keep the plan relevant.



Chapter 2

State of Local Infrastructure and Levels of Service



2. State of Local Infrastructure and Levels of Service

2.1 Introduction

This chapter provides an analysis of the Municipality's assets and the current service levels provided by those assets.

O. Reg. 588/17 requires that for each asset category included in the asset management plan, the following information must be identified:

- Summary of the assets;
- Replacement cost of the assets;
- Average age of the assets (it is noted that the regulation specifically requires average age to be determined by assessing the age of asset components);
- Information available on condition of assets; and
- Approach to condition assessments (based on recognized and generally accepted good engineering practices where appropriate).

Asset management plans must identify the current levels of service being provided for each asset category. For core municipal infrastructure assets, both the qualitative descriptions pertaining to community levels of service and metrics pertaining to technical levels of service are prescribed by O. Reg. 588/17.

The rest of this chapter addresses the requirements identified above, with each section focusing on a service.

2.2 Transportation Services

2.2.1 *State of Local Infrastructure*

The core assets that support the Municipality's transportation services are roads, bridges, and structural culverts. Other transportation assets such as signs and streetlights are not included in this plan because they are not considered core assets in O. Reg. 588/17.



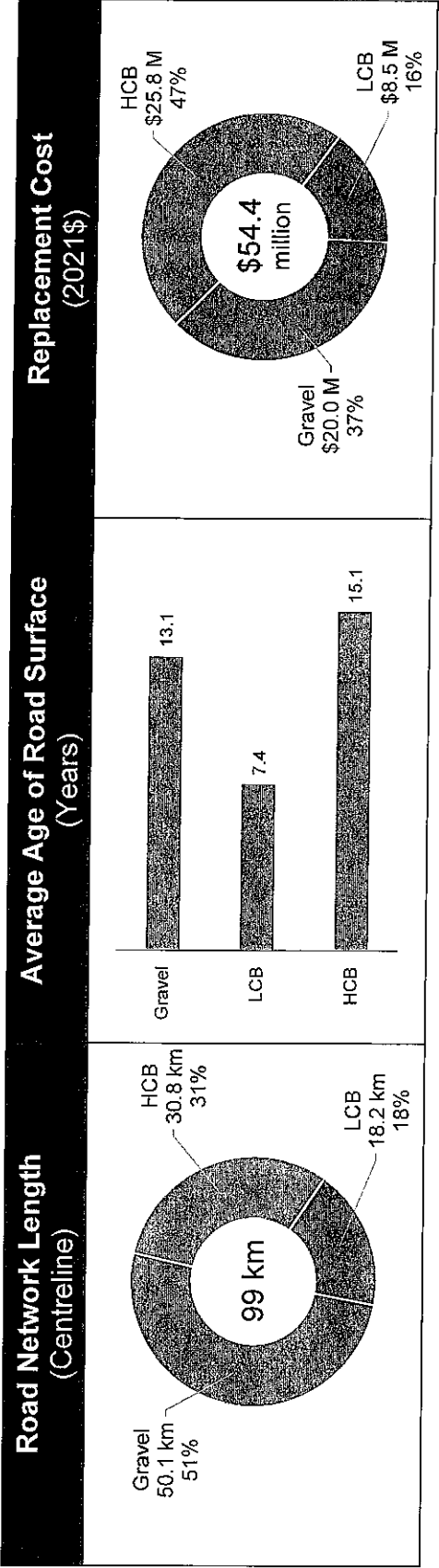
The road network consists of roads with various surface types, including high-class bituminous (HCB), low-class bituminous (LCB), and gravel (G/S). The estimated replacement cost of roads is \$54.3 million. Table 2-1 provides a breakdown of the road network by surface type showing centreline length, average ages of the surface, and replacement cost. Figure 2-1 illustrates the data in Table 2-1 visually. Map 2-1 provides a spatial illustration of the Municipality's road network and its extent.

Table 2-1: Road Network – Summary of Length, Age, and Replacement Cost by Surface Type

Surface Type	Centreline-Kilometres	Average Age – Surface	Replacement Cost (2021\$)
HCB	30.8	15.1	\$25,840,000
LCB	18.2	7.4	\$8,470,000
Gravel	50.1	13.1	\$20,000,000
Total	99.1	12.4	\$54,310,000

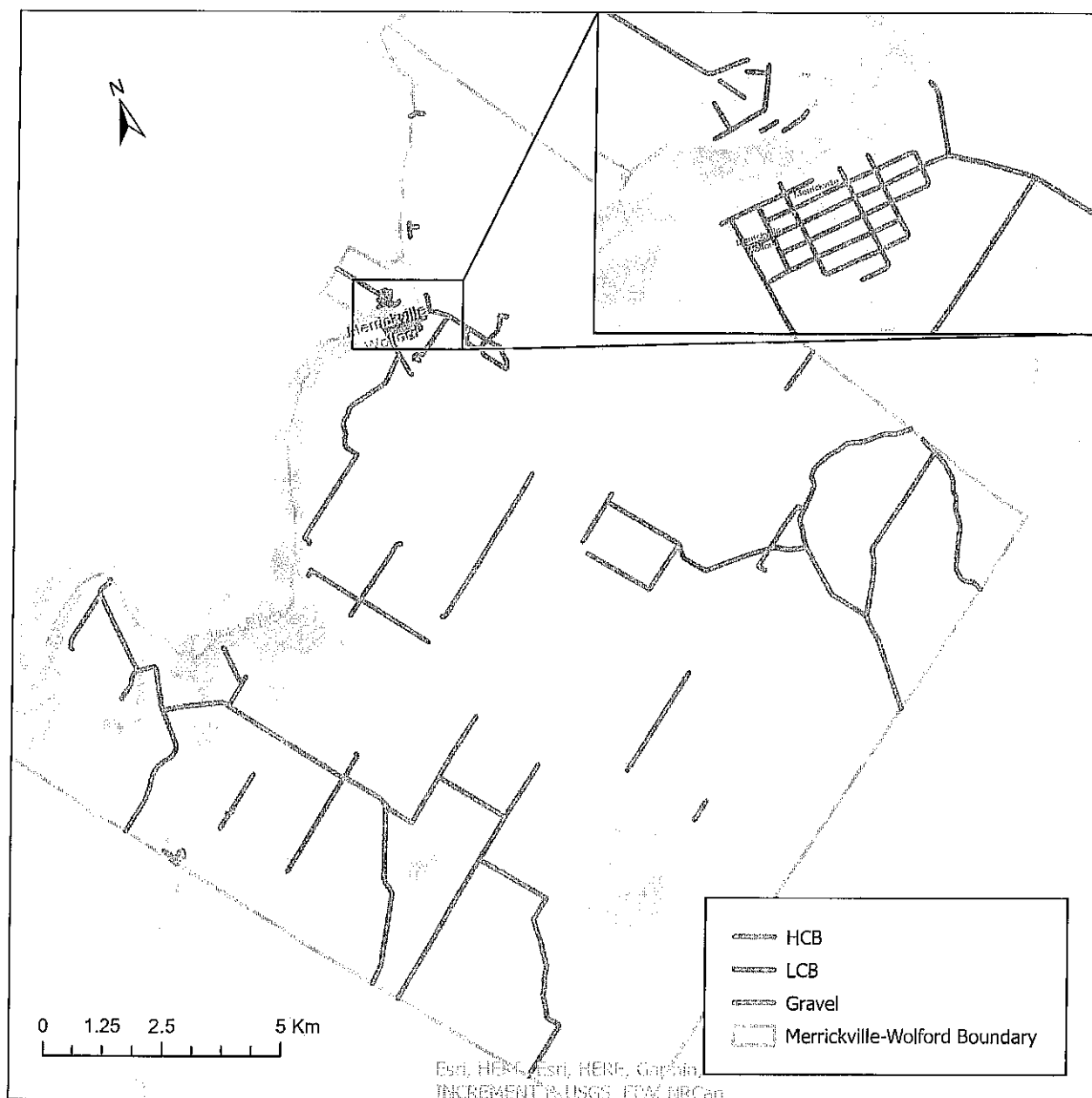


Figure 2-1: Road Network Asset Summary Information





Map 2-1: Roads by Surface Type



The Municipality has five bridges and one structural culvert, with an estimated combined replacement cost of \$5.0 million. The average age of the bridges is 53 years, and the age of the one structural culvert is 51 years. Table 2-2 provides counts, average ages, and replacement costs for bridges and structural culverts. Figure 2-2 illustrates the data in Table 2-1 visually. Map 2-2 provides a spatial illustration of the Municipality's bridges and structural culverts.

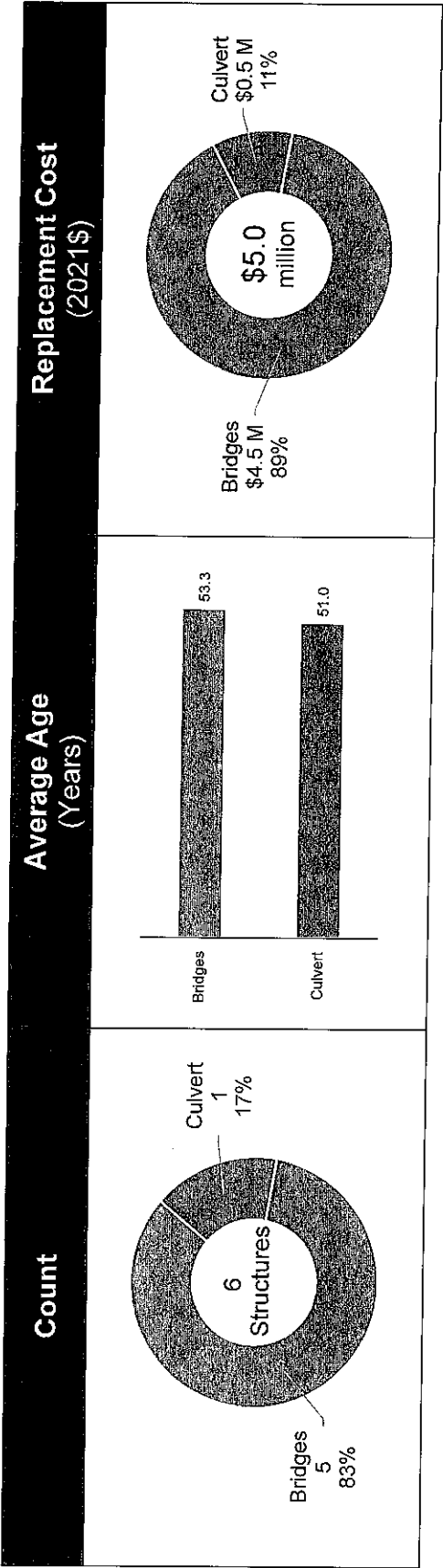


Table 2-2: Bridges and Structural Culverts - Summary of Counts, Age, and Replacement Cost by Structure Type

Structure Type	Count	Average Age	Replacement Cost (2021\$)
Bridges	5	53.3	\$4,510,000
Culvert	1	51.0	\$530,000
Total	6	53.0	\$5,040,000

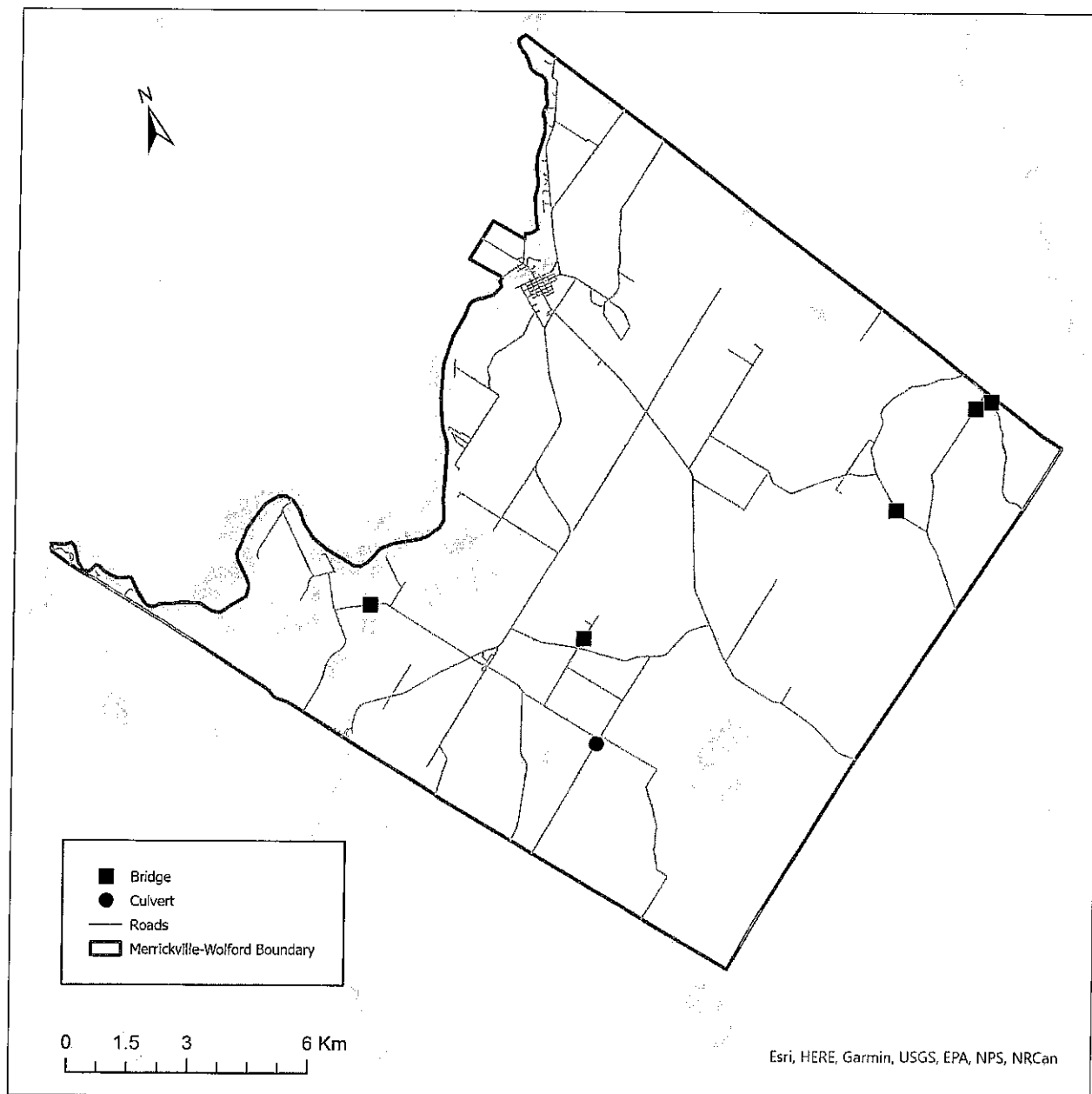


Figure 2-2: Bridge and Structural Culvert Summary Information





Map 2-2: Bridges and Structural Culverts



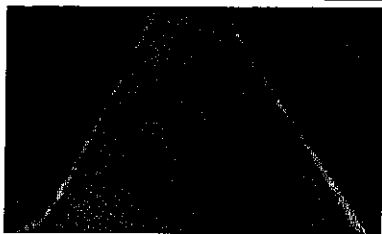

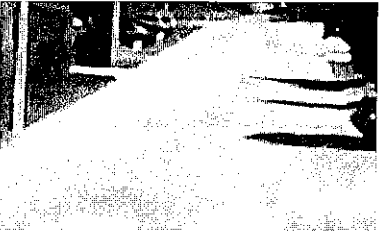

2.2.2 Condition

The condition of the Municipality's paved roads was assessed by StreetScan Inc. in 2020. Each road segment was assigned a condition rating using the Pavement Condition Index (PCI). It is a scale from 0 to 100, with 100 being an asset in as-new condition and 0 being a failed asset.



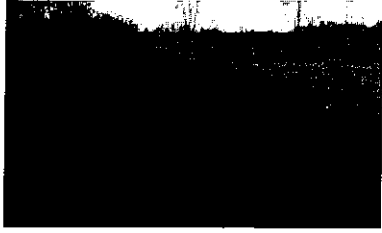
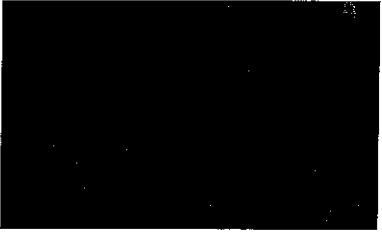
To better communicate the condition of the paved road network, the numeric condition ratings for paved roads have been segmented into qualitative condition states. Moreover, descriptions and photos of roads in these condition states are provided to better communicate the condition to the reader. Table 2-3 summarizes the various physical condition ratings and the condition state they represent for road assets.

Table 2-3: Road Condition States Defined with Respect to Pavement Condition Index

PCI Ranges	Condition State	Example Photo	Description ^[1]
85 < PCI ≤ 100	Excellent		A very smooth ride. Pavement is in excellent condition with few cracks.
70 < PCI ≤ 85	Good		A smooth ride with just a few bumps or depressions. The pavement is in good condition with frequent very slight or slight cracking.
55 < PCI ≤ 70	Fair		A comfortable ride with intermittent bumps or depressions. The pavement is in fair condition with intermittent moderate and frequent slight cracking, and with intermittent slight or moderate alligating and distortion.
40 < PCI ≤ 55	Poor		An uncomfortable ride with frequent to extensive bumps or depressions. Cannot maintain the posted speed at the lower end of the scale. The pavement is in poor to fair condition with frequent moderate cracking and distortion, and intermittent moderate alligating.

^[1] Descriptions are from “SP-024 Manual for Condition Rating of Flexible Pavements” (Ontario Ministry of Transportation, 2016).



PCI Ranges	Condition State	Example Photo	Description ^[1]
$25 < \text{PCI} \leq 40$	Very Poor		A very uncomfortable ride with constant jarring bumps and depressions. Cannot maintain the posted speed and must steer constantly to avoid bumps and depressions. The pavement is in poor condition with moderate alligating and extensive severe cracking and distortion.
$10 < \text{PCI} \leq 25$	Serious		The pavement is in poor to very poor condition with extensive severe cracking, alligating and distortion.
$0 \leq \text{PCI} \leq 10$	Failed	No Municipality roads in this condition state	

The condition of the Municipality's gravel roads was assessed by the Municipality's staff based on their experience and observations. Each segment of gravel roads was assigned a rating on a three-point scale: good (3), fair (2), poor (1).

Table 2-4 shows the average condition of roads by surface type, with averages weighted based on centreline-kilometres. On average, each road surface type is in the Fair condition state. Figure 2-3 and Figure 2-4 show the overall distribution of road condition for the Municipality. Map 2-3 provides a spatial illustration of the condition of the Municipality's roads.

Table 2-4: Road Condition Analysis – Paved Roads

Road Surface	Centreline Kilometres	Condition (Weighted Average)	Average Condition State
HCB	30.8	58	Fair
LCB	18.2	67	Fair
Gravel	50.1	2.2	Fair
Total	99.1	Not Applicable	Not Applicable



Figure 2-3: Distribution of Paved Road Centreline Length by Condition State

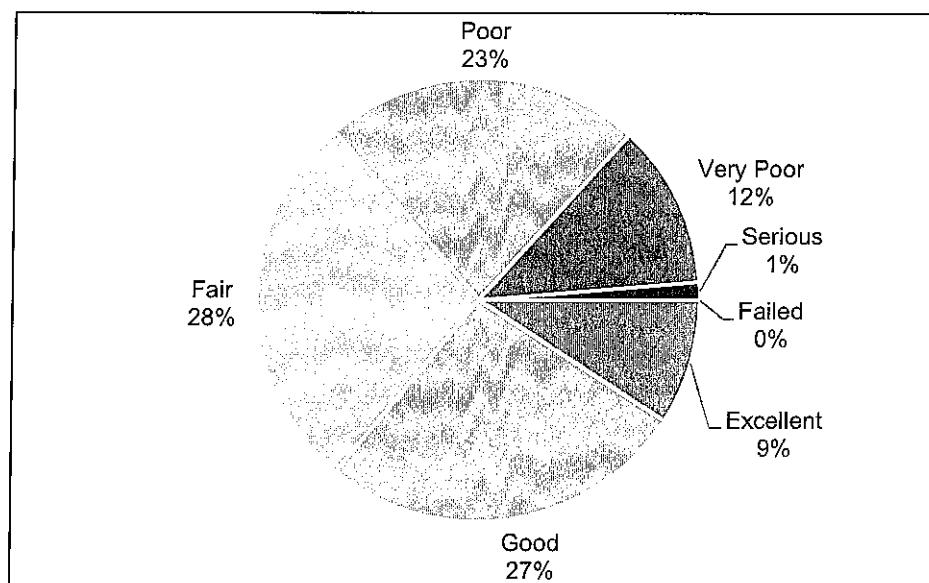
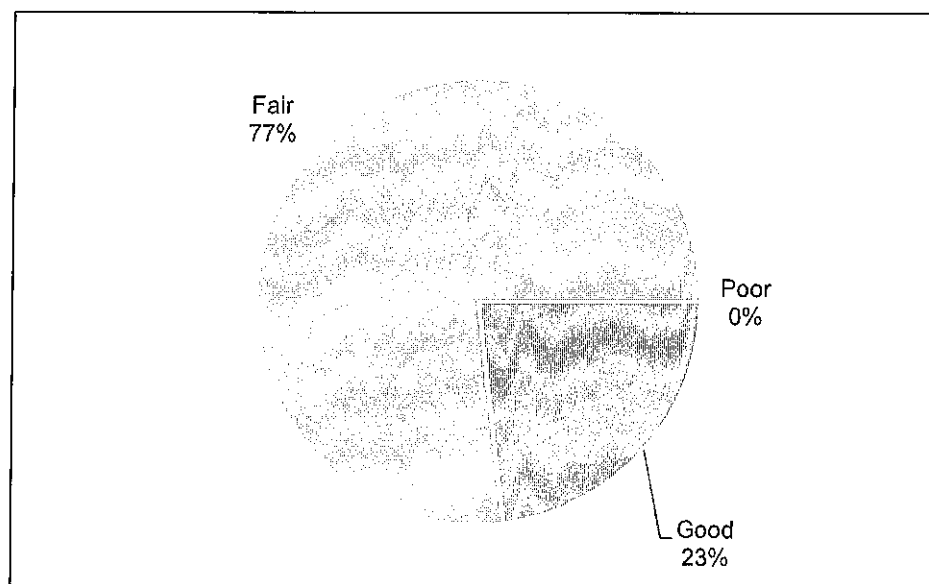
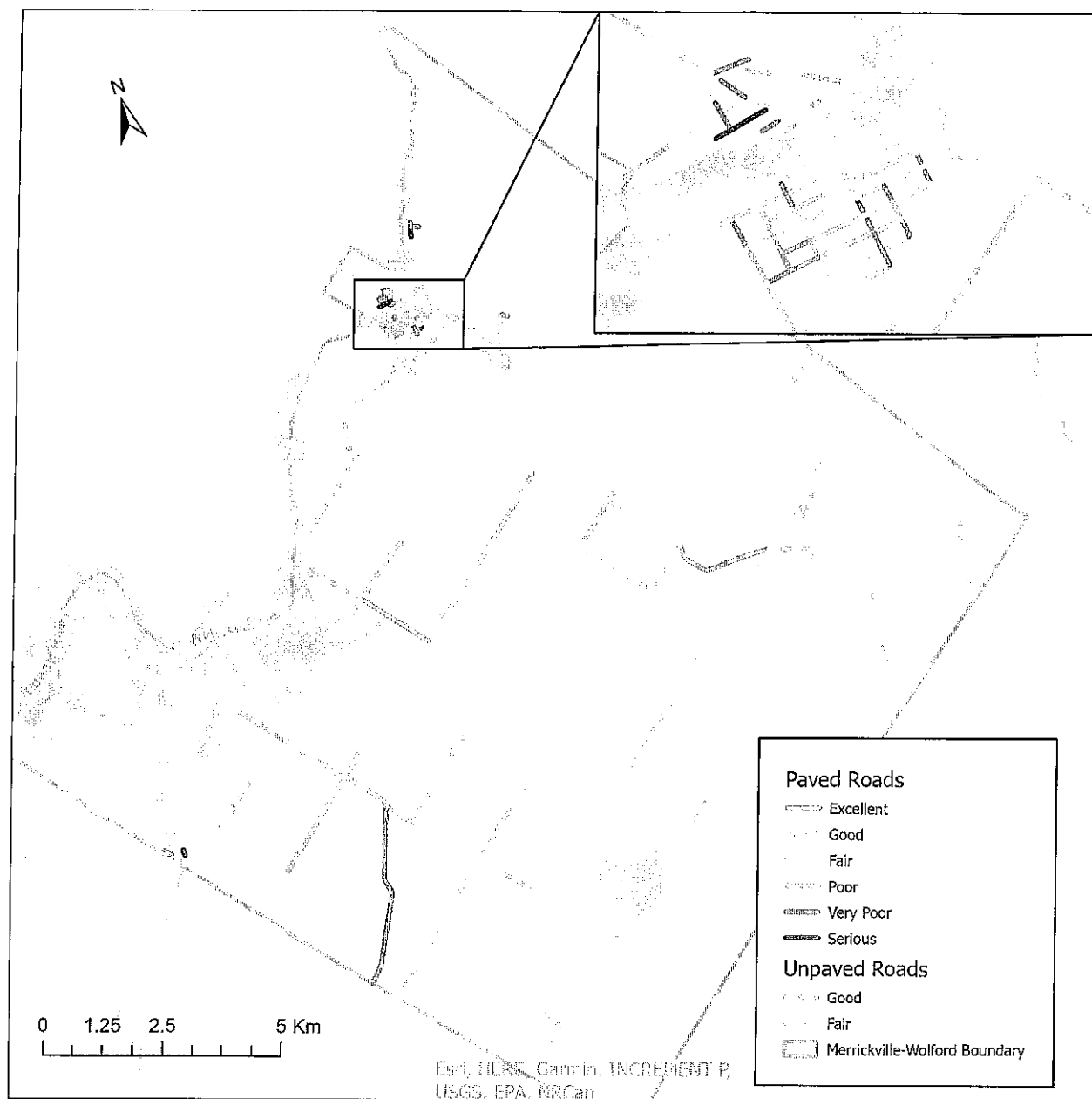


Figure 2-4: Distribution of Gravel Road Centreline Length by Condition State





Map 2-3: Roads by Condition State



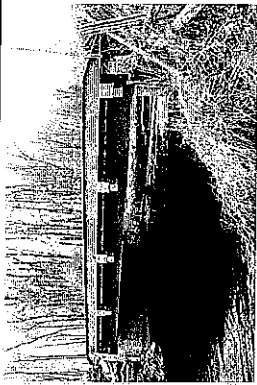

The condition of the Municipality's bridges and structural culverts was assessed by Keystone Bridge Management Corp in 2021. The assessment was completed as part of the biennial inspections required by O. Reg. 104/97, following the Ontario Structure Inspection Manual (OSIM). Each bridge and structural culvert was assigned a Bridge Condition Index (BCI). The BCI is on a scale of 0 to 100, with 100 being an asset in as-new condition and 0 being a failed asset. Similar to the analysis for roads described



above, the numeric condition ratings for bridges and structural culverts have been segmented into qualitative condition states. Photographs and descriptions of these condition states are provided to better communicate the condition to the reader. Table 2-5 summarizes the BCI ratings and the condition state they represent.



Table 2-5: Examples and Descriptions of Bridge and Culvert Condition States

Condition State	Bridge Photos	Culvert Photos	Description ^[1]
Good $70 < \text{BCI} \leq 100$		No Municipality culverts in this condition state	Maintenance is not usually required within the next five years.
Fair $60 < \text{BCI} \leq 70$	No Municipality bridges in this condition state		Maintenance work is usually scheduled within the next five years. This is the ideal time to schedule major bridge repairs to get the most out of bridge spending.
Poor $0 < \text{BCI} \leq 60$	No Municipality bridges in this condition state	No Municipality culverts in this condition state	Maintenance work is usually scheduled within one year. Structure may be at increased risk of requiring a loading restriction to be posted.

^[1] Descriptions are based on descriptions in "Ontario Structure Inspection Manual" (Ontario Ministry of Transportation, 2008).

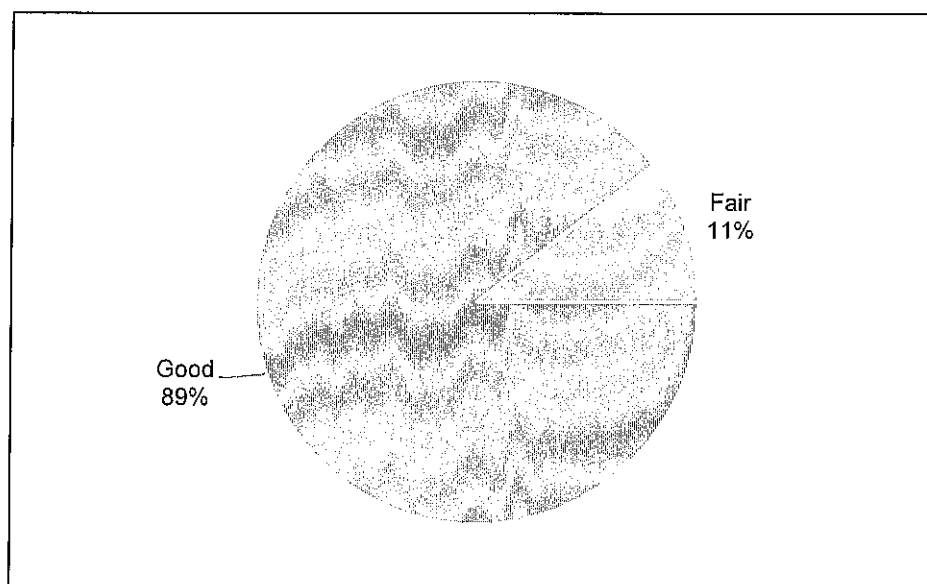


The average BCI ratings and corresponding condition states for bridges and structural culverts are summarized in Table 2-6 below. On average, the bridges are in the Good condition state and the one culvert is in the Fair condition state. Combined, bridges and structural culverts are in the Good condition state on average. Figure 2-5 shows the overall distribution of condition for the Municipality. Map 2-4 provides a spatial illustration of the condition of the Municipality's bridges and structural culverts.

Table 2-6: Bridges and Structural Culverts Condition Analysis

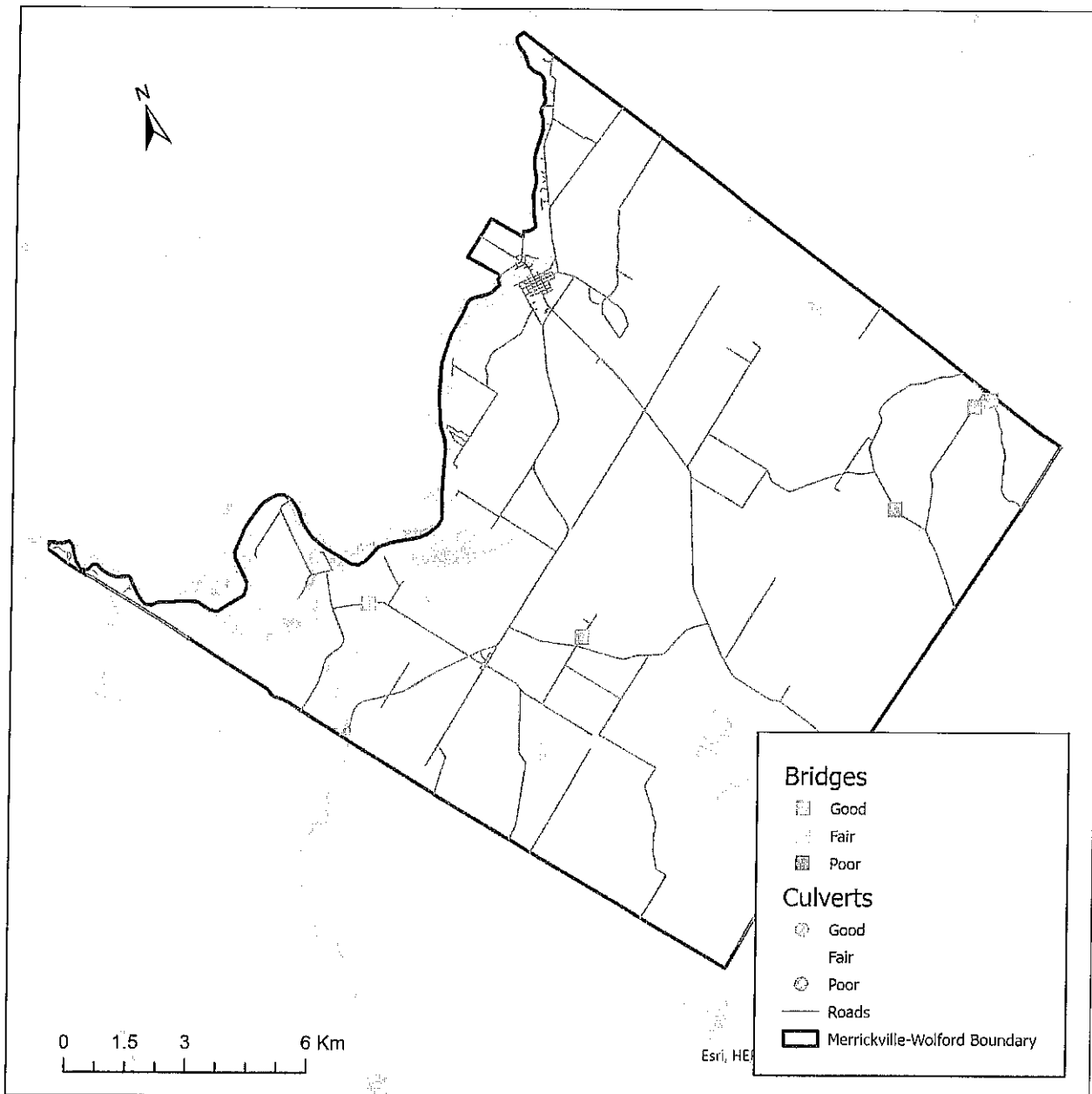
Structure Type	Count	Average Condition	Average Condition State
Bridges	5	72.1	Good
Culverts	1	62.9	Fair
Total	6	71.1	Good

Figure 2-5: Distribution of Bridges and Structural Culverts Replacement Cost by Condition State





Map 2-4: Bridges and Structural Culverts by Condition



2.2.3 Current Levels of Service

The levels of service currently provided by the Municipality's transportation system are, in part, a result of the state of local infrastructure identified above. A levels of service analysis defines the current levels of service that will be tracked over time. In future iterations of the asset management plan, targets will be set for the technical levels of service.



There are prescribed levels of service reporting requirements under O. Reg. 588/17 for some transportation assets (i.e., roads, bridges and culverts). Table 2-7 and Table 2-8 include the prescribed technical levels of service along with additional levels of service developed by the Municipality. The levels of service measures were developed through identification of service aspects that are of interest to the users of transportation assets.

The tables are structured as follows:

- The Service Attribute headings and columns indicate the high-level attribute being addressed;
- The Community Levels of Service column in Table 2-7 explains the Municipality's intent in plain language;
- The Performance Measure column in Table 2-8 describes a performance measure connected to the identified service attribute; and
- The 2020 Performance column in Table 2-8 reports current performance for the performance measure.



Table 2-7: Community Levels of Service – Transportation

Service Attribute	Community Levels of Service
Scope	<p>The Municipality's transportation assets enable the movement of people and goods within the Municipality and provide connectivity to regional roads. The Municipality's transportation assets also support tourism and through traffic from neighbouring municipalities. In addition to passenger traffic, the Municipality's transportation assets also support commercial and industrial truck traffic, movement of agricultural equipment, shipping and receiving of agricultural products, and provide reliable emergency vehicle access to all areas of the Municipality. Transportation assets also support other transportation modes such as walking and cycling.</p>
	<p>The scope of the Municipality's transportation assets is illustrated in Map 2-1 and Map 2-2. The maps show the geographical distribution of roads and identify locations of the Municipality's bridges and structural culverts.</p>
Quality	<p>The Municipality strives to maintain road and bridge surfaces to a level such that they support an adequate travel experience for road users.</p>
	<p>Photos of roads, bridges and structural culverts in different condition states are shown in Table 2-3 and Table 2-5. A general description of how each condition state may affect the use of these assets is also provided in these tables.</p>
Affordability/ Cost	<p>The Municipality strives to deliver transportation services efficiently and at a cost that is acceptable to Municipality taxpayers.</p>
Reliability	<p>The Municipality endeavours to provide transportation services with minimal interruptions.</p>



Table 2-8: Technical Levels of Service – Transportation

Service Attribute	Performance Measure	2020 Performance
Scope	Number of lane-kilometres of arterial roads as a proportion of square kilometres of land area of the Municipality.	Not applicable
	Number of lane-kilometres of collector roads as a proportion of square kilometres of land area of the Municipality.	Not applicable
	Number of lane-kilometres of local roads as a proportion of square kilometres of land area of the Municipality.	0.92 lane-km/km ²
	Percentage of bridges in the Municipality with loading or dimensional restrictions.	20%
Quality	For paved roads in the Municipality, the average pavement condition index value.	61
	Centreline-kilometres of paved roads in condition state of Poor or worse (PCI less than 40).	6.2 km
	For unpaved roads in the Municipality, the average surface condition.	Fair
	Centreline kilometres of gravel roads in Poor condition state.	0 km
	For bridges in the Municipality, the average bridge condition index value.	73.3
	For structural culverts in the Municipality, the average bridge condition index value.	62.9
Affordability/ Cost	For paved roads, average annual lifecycle capital cost per centreline-kilometre.	\$16,123
	For paved roads, average annual lifecycle capital cost per household.	\$568
	Maintenance cost per centreline-kilometre.	
Reliability	Number of unplanned road closures.	0



2.3 Water Service

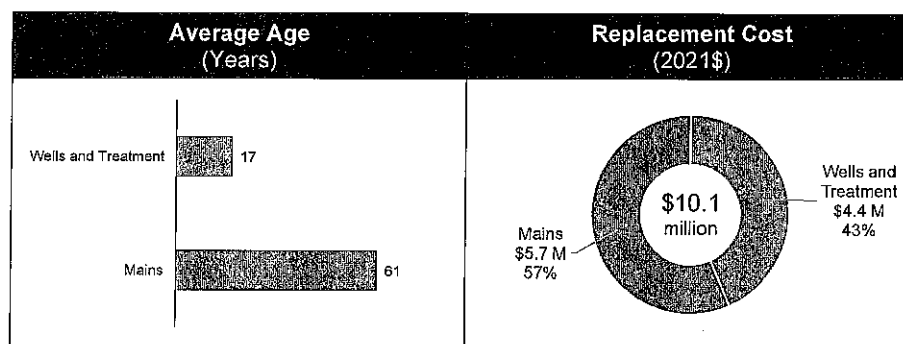
2.3.1 State of Local Infrastructure

The Municipality's water system serves the Village of Merrickville. It is comprised of three wells with associated treatment and pumping and approximately 5.8 km of water mains. The current replacement cost of the system is approximately \$10.1 million. Table 2-9 provides a summary of the assets with quantity, average age where available, and replacement cost. Figure 2-6 illustrates the data in Table 2-9 visually.

Table 2-9: Water System – Summary of Quantities, Age, and Replacement Cost by Asset Type

Asset Type	Quantity	Average Age	Replacement Cost (2021\$)
Wells and Treatment	1 facility	Approximately 17 years ^[1]	\$4,390,000
Water Mains	8.2 km	61 years	\$5,730,000
Total		42	\$10,120,000

Figure 2-6: Water System Summary Information



^[1] The age estimate for wells and treatment is based on the Municipality's 2019 Tangible Capital Asset schedule. This data captures the date of initial construction of the wells and treatment assets but does not account for components that have been replaced since construction.



2.3.2 Condition

The condition of the Municipality's water mains has not been directly assessed through a physical condition assessment. For the purposes of this asset management plan, water main age has been used as a proxy for the condition state. The measure used is the Useful Life Consumption Percentage (ULC%) based on each water main's age and the average life expectancy for the water main, based on industry best practices and discussions with the Municipality's staff. A brand-new water main would have a ULC% of 0%, indicating that zero per cent of the water main's life expectancy has been utilized. On the other hand, a water main that has reached its life expectancy would have a ULC% of 100%. It is possible for water mains to have a ULC% greater than 100%, which occurs if a water main has exceeded its typical life expectancy but continues to be in service. This is not necessarily a cause for concern; however, it must be recognized that water mains that are near or beyond their typical life expectancy are expected to require replacement in the near term.

To better communicate the condition of the network, the ULC% ratings have been segmented into qualitative condition states as summarized in Table 2-10. The scale is designed such that if water mains are replaced around the expected useful life, they would have a rating of Fair at time of replacement.^[1] The rating of Fair extends to 140% of useful life consumption. If an asset is allowed to age beyond 140% of its typical life expectancy, the probability of failure is assumed to have increased to a point where performance would be characterized as Poor and eventually Very Poor.

^[1] Scale is based on guidance in the International Infrastructure Management Manual (Institute of Public Works Engineering Australasia, 2015).

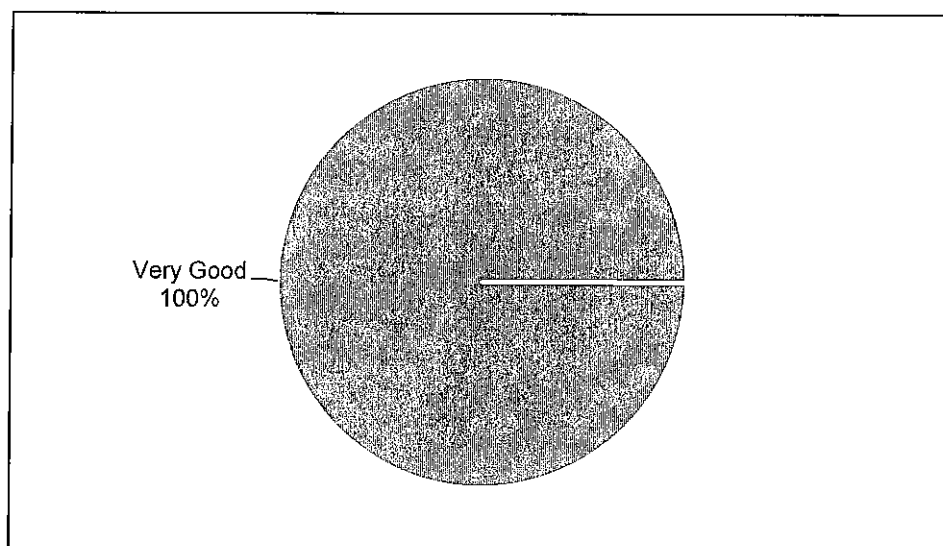


Table 2-10: Water Asset Condition States Defined with Respect to ULC%

ULC%	Condition State
$0\% \leq \text{ULC}\% \leq 45\%$	Very Good
$45\% < \text{ULC}\% \leq 90\%$	Good
$90\% < \text{ULC}\% \leq 140\%$	Fair
$140\% < \text{ULC}\% \leq 200\%$	Poor
$200\% < \text{ULC}\%$	Very Poor

Data on component ages of wells and treatment assets is incomplete. It is known, however, that no components are older than 17 years because the facilities were installed on or after 2004. As a preliminary estimate, these assets will be assessed as being in the Very Good condition state by comparing the maximum age of 17 years to the accounting lifespan of 40 years currently being used by the Municipality. This gives the assets a maximum ULC% of 43%, which is in the Very Good condition state. Figure 2-7 illustrates this result, showing the full replacement cost being in the Very Good condition state. The use of the facility average lifespan of 40 years could result in shorter lived assets being evaluated as being in better condition than they actually are, making this assessment overly optimistic.

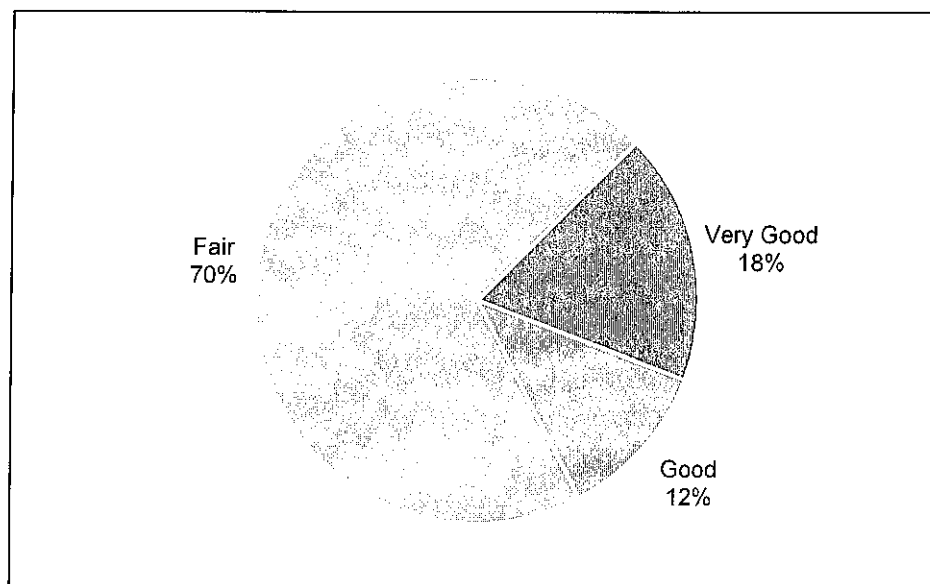
Figure 2-7: Distribution of Wells and Treatment Asset Replacement Costs by Condition State





Data on the installation dates of water mains is complete. On average, the distribution system has a ULC% of 76% which corresponds with the Good condition state. The distribution of water main length by condition state is presented in Figure 2-8 below. A majority of the Municipality's water distribution system dates back to the late 1940s. Based on an estimated useful life of 80 years, over two-thirds of the water distribution system (70% or 5.8 km) is nearing the end of its useful life, with a corresponding condition rating of Fair. Approximately 12% (0.9 km) of the water distribution system dates back to the 1960s and therefore has been assigned a condition rating of Good. The remaining 18% (1.5 km) of the water distribution system is rated as Very Good, largely due to replacements of water mains that occurred around 1995, 1998 and more recently 2008 and 2009.

Figure 2-8: Distribution of Water Main Length by Condition State



2.3.3 Current Levels of Service

The levels of service currently provided by the Municipality's water system are, in part, a result of the state of local infrastructure identified above. A levels of service analysis defines the current levels of service that will be tracked over time. In future iterations of the asset management plan, targets will be set for the technical levels of service.

Water assets have prescribed levels of service reporting requirements under O. Reg. 588/17. These requirements include levels of service reporting at two different levels, i.e., community levels of service and technical levels of service. Community levels of



service objectives describe service levels in terms that customers understand and reflect customers' expectations with respect to the scope, reliability, affordability, and efficiency of the water system. Technical levels of service describe these aspects of the Municipality's water system through performance measures that can be quantified and evaluated. These performance measures can be used to assess how effectively a municipality is achieving its established targets.

Table 2-11 and Table 2-12 present the current levels of service for water. They include the requirements mandated by O. Reg. 588/17 and additional performance measures of interest to the Municipality.

Table 2-11: Community Levels of Service – Water

Service Attribute	Community Levels of Service
Scope	The water system provides potable water for residential, business, and institutional consumption, as well as maintenance operations, and firefighting in the urban area.
	The water system serves the urban areas of the Village of Merrickville both north and south of the Rideau River.
Reliability	The water system is managed with the goal of providing safe and reliable delivery of water, minimizing service interruptions and occurrences of adverse water quality events (measured by occurrences of boil water advisories).
Affordability	The Municipality aims to deliver water services to customers at a reasonable cost while ensuring long-term financial sustainability of the water system.
Efficiency	The Municipality strives to deliver water services efficiently and sustainably.



Table 2-12: Technical Levels of Service – Water Service

Service Attribute	Performance Measure	2020 Performance
Scope	Percentage of properties connected to the municipal water system.	23%
	Percentage of properties where fire flow is available.	23%
Reliability	The number of connection-days per year where a boil water advisory notice is in place compared to the total number of properties connected to the municipal water system.	0 connection-days/ connection
	The number of connection-days per year lost due to water main breaks compared to the total number of properties connected to the municipal water system.	0.043 connection-days/ connection
Affordability	Typical annual residential water bill, based on annual water consumption of 150 cubic metres.	\$740
	Typical annual residential water bill as percentage of median after tax household income.	1.1%
	Percentage of water accounts three months or more in arrears.	3%
Efficiency	Kilowatt-hours of electricity consumption for water treatment and pumping per cubic metre of water produced.	1.35 kWh/m ³

2.4 Wastewater Service

2.4.1 State of Local Infrastructure

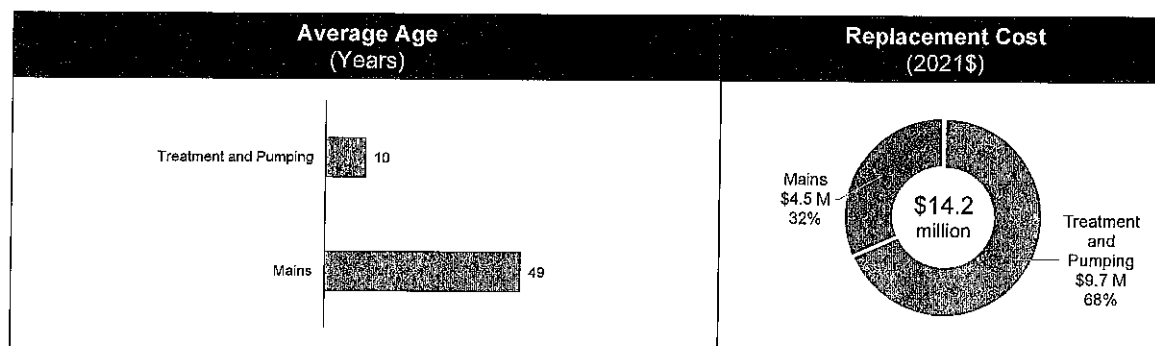
The Municipality's wastewater system serves the urban areas in Village of Merrickville that are south of the Rideau River. It is comprised of a treatment plant, a pumping station, and approximately 5.6 km of mains. The replacement cost of the system is approximately \$14.2 million. Asset summary information for the Municipality's wastewater system, including quantities, average age, and replacement cost by asset type, is presented in Table 2-13 below. Figure 2-9 illustrates the data in Table 2-13 visually.



Table 2-13: Wastewater System - Summary of Quantities, Age, and Replacement Cost by Asset Type

Asset Type	Quantity	Average Age	Replacement Cost (2021\$)
Treatment and Pumping	1 treatment facility 1 pumping station	10 years ^[1]	\$9,690,000
Wastewater Mains	5.6 km	49 years	\$4,460,000
Total		22	\$14,150,000

Figure 2-9: Wastewater System Summary Information



2.4.2 Condition

The condition of the Municipality's wastewater mains has not been directly assessed through a physical condition assessment. For the purposes of this asset management plan, wastewater main age has been used as a proxy for the condition state as was done for water mains. The measure used is the ULC% as defined in the water condition section, 2.3.2.

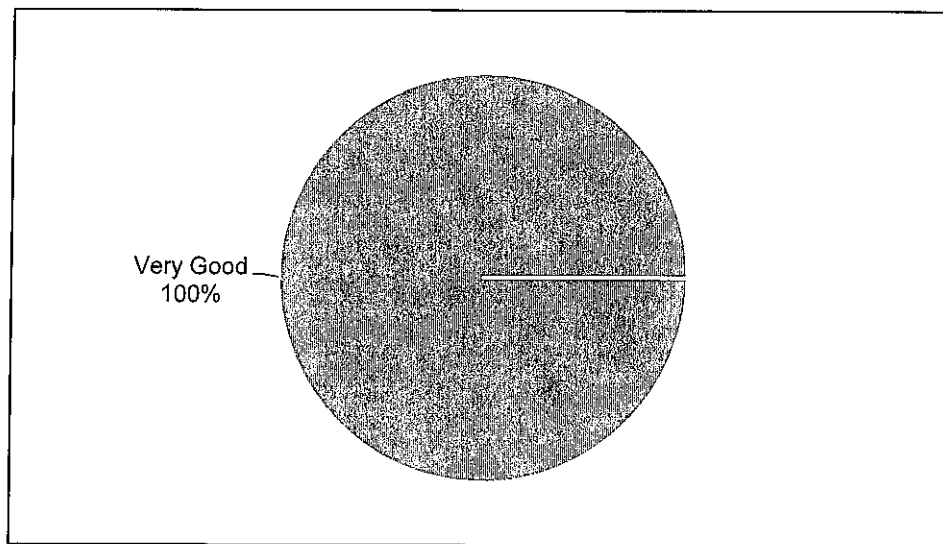
Data on component ages of treatment and pumping assets is incomplete. It is known, however, that no components are older than 10 years because the wastewater treatment plant was replaced in 2011. As a preliminary estimate, these assets will be assessed as being in the Very Good condition state based on the same analysis as was done for water wells and treatment assets. The accounting useful life of 40 years

^[1] The wastewater treatment plant was replaced in 2011. Data on replacement dates for facility components replaced over the past 10 years is incomplete.



indicates that the wastewater treatment assets are in the first half of their life. Figure 2-10 illustrates this result, showing the full replacement cost being in the Very Good condition state. The use of the facility average lifespan of 40 years could result in shorter lived assets being evaluated as being in better condition than they actually are, making this assessment overly optimistic.

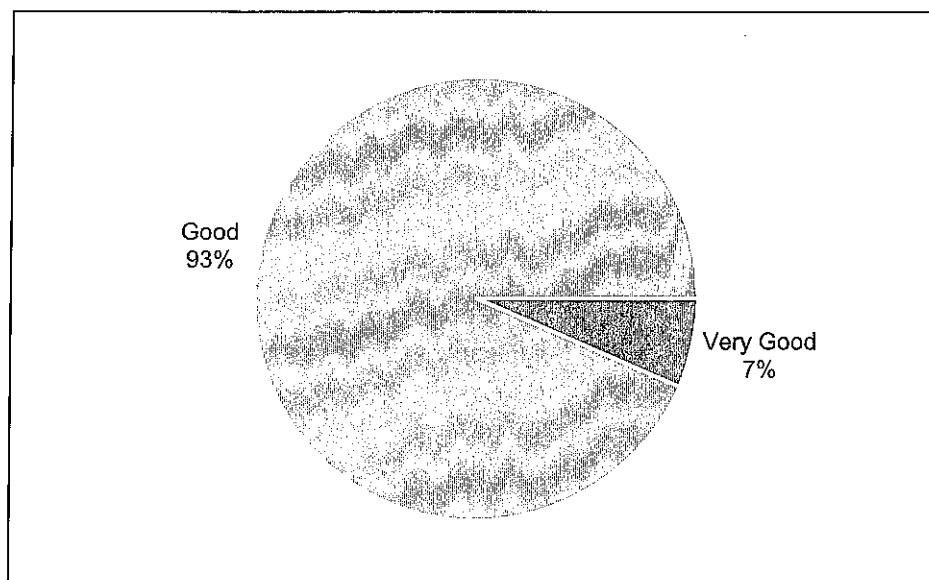
Figure 2-10: Distribution of Treatment and Pumping Asset Replacement Costs by Condition State



Data on the installation dates of wastewater mains is complete. On average, wastewater mains have a ULC% of 61% which is in the Good condition state. Figure 2-11 shows the distribution of wastewater main length by condition state. Most of the Municipality's wastewater collection system was installed in 1970. Based on an estimated useful life of 80 years, most of the water distribution system (93% or 5.3 km) is about two-thirds of the way through its useful life, with a corresponding condition rating of Good. The remaining 7% (0.4 km) of the wastewater collection system is rated as Very Good, largely due to the replacement of wastewater mains that occurred in 2008 and 2010.



Figure 2-11: Distribution of Wastewater Main Length by Condition State



2.4.3 Current Levels of Service

The levels of service currently provided by the Municipality's wastewater system are, in part, a result of the state of local infrastructure identified above. A levels of service analysis defines the current levels of service that will be tracked over time. In future iterations of the asset management plan, targets will be set for the technical levels of service.

Wastewater assets have prescribed levels of service reporting requirements under O. Reg. 588/17. These requirements include levels of service reporting at two different levels, i.e., community levels of service and technical levels of service. Community levels of service objectives describe service levels in terms that customers understand and reflect customers' expectations with respect to the scope, reliability, affordability, and efficiency of the wastewater system. Technical levels of service describe these aspects of the Municipality's wastewater system through performance measures that can be quantified and evaluated. These performance measures can be used to assess how effectively a municipality is achieving its established targets.

Table 2-14 and Table 2-15 present the current levels of service for wastewater. They include the requirements mandated by O. Reg. 588/17 and additional performance measures of interest to the Municipality.



Table 2-14: Community Levels of Service – Wastewater Service

Service Attribute	Community Levels of Service
Scope	The Municipality provides wastewater services to residential, business, and institutional customers in the urban areas of the Village of Merrickville that are south of the Rideau River.
Reliability	The wastewater system is separated, meaning that sanitary and stormwater flows are carried in different pipes with different destinations. Despite this, stormwater can enter the wastewater system through numerous sources. For example, stormwater can enter wastewater mains through cracks in pipe joins.
	The Municipality's Wastewater Treatment Plant discharges effluent into the Rideau River. The Municipality strives to operate the plant at maximum removal efficiencies and within the rated capacity of the facility. The final effluent design objectives are identified in the facility's Environmental Compliance Approval (1121-7YRQLF).
Affordability	The Municipality aims to deliver wastewater services to customers at a reasonable cost while ensuring long-term financial sustainability of the wastewater system.
Efficiency	The Municipality strives to deliver wastewater services efficiently and sustainably.



Table 2-15: Technical Levels of Service – Wastewater Service

Service Attribute	Performance Measure	2020 Performance
Scope	Percentage of properties connected to the municipal wastewater system.	20%
	Septage receiving capacity measured in cubic metres per day.	6.5 m ³ /day
Reliability	The number of connection-days lost per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system.	0 connection-days/connection
	The number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system.	0.0025 violations/connection
	Average annual daily flow as a percentage of treatment capacity.	77%
Affordability	Typical annual residential wastewater bill, based on annual water consumption of 150 cubic metres.	\$1,482
	Typical annual residential wastewater bill as a percentage of median after tax household income.	2.1%
	Percentage of wastewater accounts that are in arrears.	2.5%
Efficiency	Kilowatt-hours of electricity consumption for wastewater treatment and pumping per cubic metre of wastewater treated.	1.50 kWh/m ³

2.5 Stormwater Service

2.5.1 State of Local Infrastructure

The Municipality's stormwater system serves the Village of Merrickville. It is comprised of 8.5 km of mains and associated catch basins and manholes. The replacement value of the system is approximately \$5.4 million. Age data is only available for 65% of the stormwater mains. The average age for mains where the age is known is 48 years.

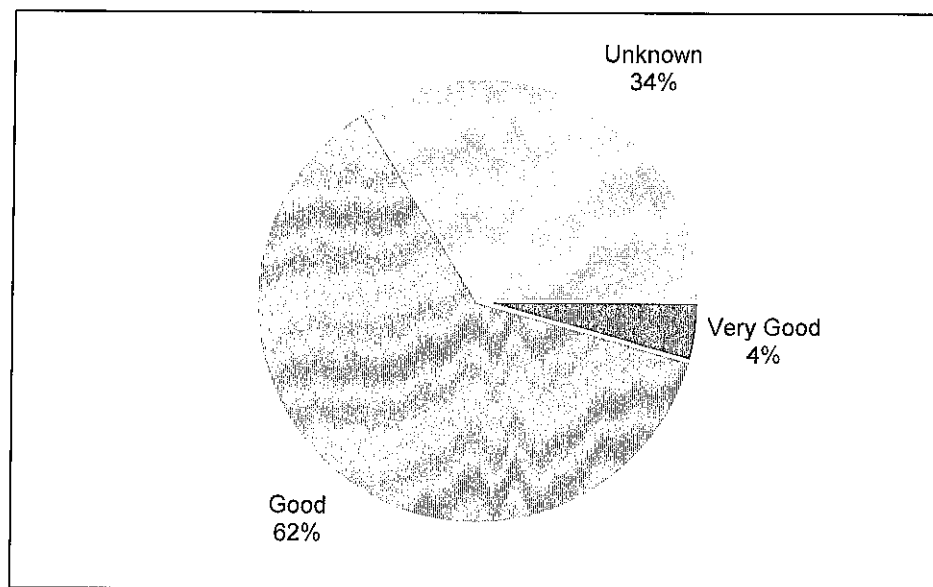


2.5.2 Condition

The condition of the Municipality's stormwater mains has not been directly assessed through a physical condition assessment. For the purposes of this asset management plan, stormwater main age has been used as a proxy for the condition state as was done for water mains when age is known. The measure used is the (ULC%) as defined in the water condition section, 2.3.2.

On average, stormwater mains with known ages have a ULC% of 48% which is in the Good condition state. Figure 2-12 shows the distribution of stormwater main length by condition state.

Figure 2-12: Distribution of Stormwater Main Length by Condition State



2.5.3 Current Levels of Service

The levels of service currently provided by the Municipality's stormwater system are, in part, a result of the state of local infrastructure identified above. A levels of service analysis defines the current levels of service that will be tracked over time. In future iterations of the asset management plan, targets will be set for the technical levels of service.

Stormwater assets have prescribed levels of service reporting requirements under O. Reg. 588/17. These requirements include levels of service reporting at two different levels, i.e., community levels of service and technical levels of service. Community



levels of service objectives describe service levels in terms that customers understand and reflect customers' expectations with respect to the scope and reliability of the stormwater system. Technical levels of service describe these aspects of the Municipality's stormwater system through performance measures that can be quantified and evaluated. These performance measures can be used to assess how effectively a municipality is achieving its established targets.

Table 2-16 and Table 2-17 present the current levels of service for stormwater. They include the requirements mandated by O. Reg. 588/17 and an additional performance measure of interest to the Municipality.

Table 2-16: Community Levels of Service – Stormwater Service

Service Attribute	Community Levels of Service
Scope	The stormwater management system provides for the collection of stormwater in order to protect properties and roads from flooding.
	The stormwater system serves the urban areas of the Village of Merrickville both north and south of the Rideau River.
	The stormwater management system is resilient to 5-year storms and ensures most properties in serviced areas are resilient to 100-year storms.
Reliability	The stormwater system performs as intended most of the time.

Table 2-17: Technical Levels of Service – Stormwater Service

Service Attribute	Performance Measure	2020 Performance
Scope	Percentage of properties in the Municipality resilient to a 100-year storm.	98.4%
	Percentage of the municipal stormwater management system resilient to a 5-year storm.	100%
Reliability	Percentage of catch basins inspected and cleaned out annually.	100%



2.6 Population and Employment Growth

Based on the 2021 Official Plan for the United Counties of Leeds and Grenville, the Municipality had a population of approximately 3,010 in 2021 and the Municipality's population is anticipated to reach 3,100 by 2031. This represents a growth rate of 0.3% per year.

Continued population growth may result in incremental service demands that would impact levels of service. If needed, the Municipality would address these pressures through established planning processes such as development of master plans for specific services. If future master planning studies identify the need for new infrastructure and/or upgrades of existing infrastructure to accommodate future population growth, the Municipality should consider the option of imposing development charges. Utilizing development charges would ensure that the effects of future population growth do not increase the cost of maintaining levels of service for existing taxpayers.



Chapter 3

Lifecycle Management Strategy



3. Lifecycle Management Strategy

3.1 Introduction

This chapter details the lifecycle management strategies required to maintain the current levels of service presented in Chapter 2. Within the context of this asset management plan, lifecycle activities are the specified actions that can be performed on an asset in order to ensure it is performing at an appropriate level, and/or to extend its service life.^[1] These actions can be carried out on a planned schedule in a prescriptive manner, or through a dynamic approach where the lifecycle activities are only carried out when specified conditions are met.

O. Reg. 588/17 requires that all potential lifecycle activity options be presented, with the aim of analyzing these options in search of identifying the set of lifecycle activities that can be undertaken at the lowest cost to maintain current levels of service. What follows are the lifecycle management strategies for all assets contained within this asset management plan, with each section focusing on a service area.

3.2 Transportation Services

3.2.1 *Managing Roads, Bridges, and Structural Culverts*

The Municipality is currently building its understanding of the lifecycle funding needs of roads. It will use the information from the condition assessment done by StreetScan Inc. in 2020 and the analysis of road lifecycle needs in this asset management plan as a starting point for building a systematic approach to addressing short- and medium-term needs. The Municipality will prioritize the needs that have been identified and address the highest priority needs with available funding.

For bridges and structural culverts, O. Reg. 104/97 requires inspections to be done every two years by professional engineers. The Municipality plans to manage bridges and culverts by completing the work recommended in the inspection reports. By

^[1] The full lifecycle of an asset includes activities such as initial planning and maintenance which are typically addressed through master planning studies and maintenance management, respectively.



following the engineering recommendations, the Municipality believes it can continue to operate the bridges safely on an ongoing basis.

The most recent inspection was done in 2021. In the 2021 OSIM report, one project was identified for 2022 for the concrete culvert on Weedmark Road. The cost of the project was estimated to be \$104,000. Averaging this over the next 10 years, the typical period covered by OSIM report forecasts, results in an estimate of average annual funding needs of \$10,400 in the medium term.

3.2.2 Estimating Long-run Needs

A generalized lifecycle model for paved roads was developed through discussions with the Municipality's staff, incorporating local knowledge and costing information. Gravel roads do not require capital investments because they are maintained indefinitely by operating activities alone.

Table 3-1 shows the parameters of the generalized lifecycle model for HCB roads. Average annual lifecycle capital costs are \$18,950 per centreline-kilometre. With 30.8 centreline-kilometres of roads in this category, the total average annual lifecycle capital cost is \$583,000.

Table 3-1: Generalized Lifecycle Model for HCB Roads: Capital

Activity Description	Cost per Centreline-kilometre	Average Annual Cost per Centreline-kilometre	Age	Condition/Performance
Microsurfacing	\$70,000	\$930	25	PCI ~ 55
Overlay	\$441,000	\$5,880	45	PCI ~ 55
Microsurfacing	\$70,000	\$930	60	PCI ~ 55
Full-depth Reconstruction	\$840,000	\$11,200	75	PCI ~ 40
Total	\$1,421,000	\$18,950	-	-

Figure 3-3 shows the parameters of the generalized lifecycle model for LCB roads. Average annual lifecycle capital costs are \$11,360 per centreline-kilometre. With 18.2 centreline-kilometres of roads in this category, the total average annual lifecycle capital cost is \$207,000.



Table 3-2: Generalized Lifecycle Model for HCB Roads: Capital

Activity Description	Cost per Centreline-kilometre	Average Annual Cost per Centreline-kilometre	Age	Condition/ Performance
Single surface treatment + fog seal	\$32,550	\$1,360	6	PCI ~ 55
Single surface treatment + fog seal	\$32,550	\$1,360	12	PCI ~ 55
Single surface treatment + fog seal	\$32,550	\$1,360	18	PCI ~ 55
Pulverize, add gravel, spot base repairs, and resurface double surface treatment + fog seal	\$175,000	\$7,290	24	PCI ~ 40
Total	\$272,650	\$11,360	-	-

Table 3-3 shows the parameters of the lifecycle model for bridges. Average annual lifecycle capital costs are 1.67% of replacement cost. With a total replacement cost of \$4,510,000 for four bridges, the total average annual lifecycle capital cost is \$75,000.

Table 3-3: Generalized Lifecycle Model for Bridges: Capital

Activity Description	Percentage of Replacement Cost	Average Annual Cost	Age
Minor Rehabilitation	15%	0.17%	30
Major Rehabilitation	35%	0.39%	60
Replacement	100%	1.11%	90 ^[1]
Total	150%	1.67%	-

Table 3-4 shows the parameters of the lifecycle model for the concrete culvert. Average annual lifecycle capital costs are estimated to represent approximately 1.5% of

[1] Lifespans for bridges were estimated based on current age and remaining useful life in the 2021 Bridge Inspection Report. These ranged from 90 years to 102 years. For the purposes of this asset management plan, the expected useful life for bridges was assumed to be 90 years to be conservative.



replacement cost. With a replacement cost of \$530,000 for the concrete culvert, the average annual lifecycle capital cost is approximately \$8,000.

Table 3-4: Generalized Lifecycle Model for Concrete Culverts: Capital

Activity Description	Percentage of Replacement Cost	Average Annual Cost	Age
Major Rehabilitation	35%	0.39%	45
Replacement	100%	1.11%	90
Total	135%	1.50%	-

3.2.3 Average Annual Lifecycle Costs and Long-run Forecast

Table 3-5 summarizes the analysis in the previous section. The average annual lifecycle cost for transportation assets is estimated to be \$873,000.

Table 3-5: Average Annual Lifecycle Costs – Transportation Assets

Asset Class	Average Annual Lifecycle Cost (Capital)
HCB Roads	\$583,000
LCB Roads	\$207,000
Bridges	\$75,000
Structural Culvert	\$8,000
Total	\$873,000

The long-run forecast for roads was produced in Assetic Predictor, asset management software by Dude Solutions, using the assumptions in the Estimating Long-run Needs section for HCB and LCB roads. Figure 3-1 shows the cost of forecast lifecycle activities over the next 100 years assuming no funding constraint. The forecast expenditure of \$9.4 million in the first year indicates that there is a significant backlog of renewal needs that should be done immediately.



Figure 3-1: Distribution of Costs of Forecast Lifecycle Activities for Roads – No Funding Constraint (2021\$)

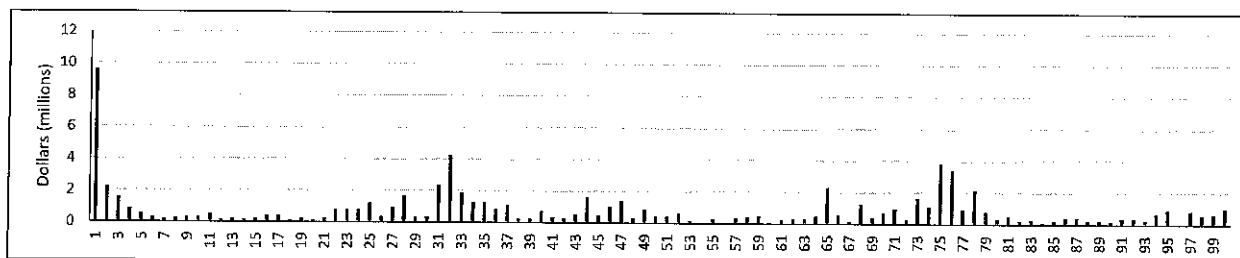


Figure 3-2 shows the cost of forecast lifecycle activities over the next 100 years assuming funding ramps up from 2021 funding of \$284,000 to the average annual lifecycle cost of \$790,000 per year over five years (2021\$). In this scenario, all available funding is used annually for the first 45 to 50 years. This is how long it would take to fully clear the backlog in this scenario. After that, the costs of forecast lifecycle activities fluctuate from year to year with savings from years with low needs funding costs in years with high needs.

Figure 3-2: Distribution of Costs of Forecast Lifecycle Activities for Roads – Ramp Up from \$284,000 to \$790,000 (2021\$)

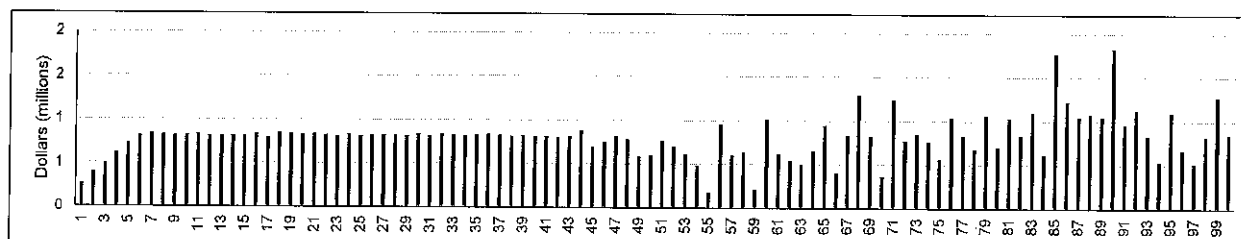


Figure 3-3 and Figure 3-4 show how condition evolves over time in the scenario shown in Figure 3-2. With this funding scenario, average PCI increases from 61 to fluctuate between 70 and 75 over the second half of the forecast period.



Figure 3-3: Condition Profile Forecast for Roads (Constrained) – Ramp up from \$284,000 to \$790,000 (2021\$)

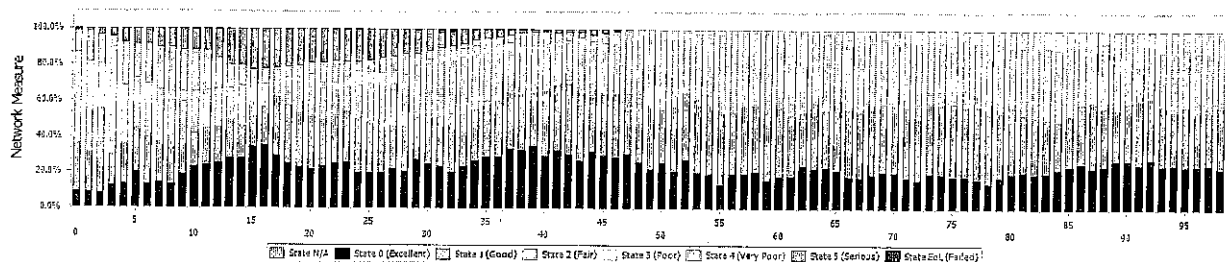
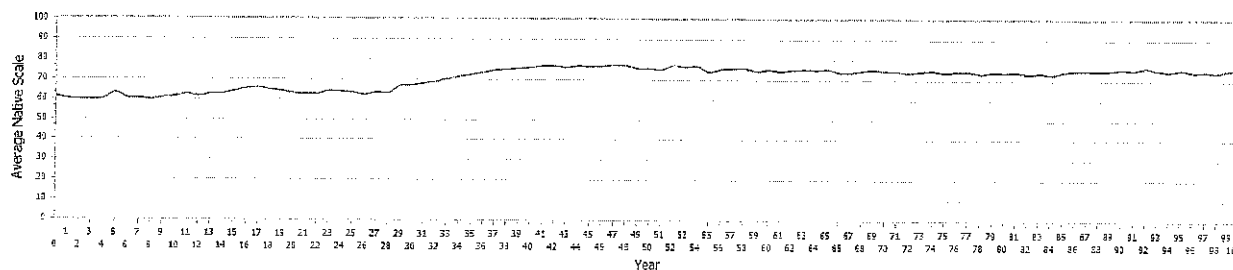


Figure 3-4: Forecast of Average PCI for Roads (Constrained) – Ramp up from \$284,000 to \$790,000 (2021\$)



Funding for roads in the Municipality's current budget is \$284,000. Figure 3-5 and Figure 3-6 show how condition evolves over time if funding is constrained to this level over the next 100 years, adjusting only for inflation. Average PCI falls and fluctuates between 25 and 35 for most of the forecast period.

Figure 3-5: Condition Profile Forecast for Roads (Constrained) - \$284,000 (2021\$)

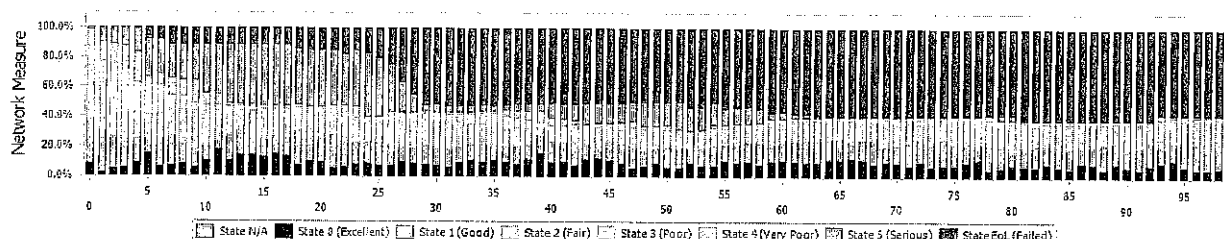
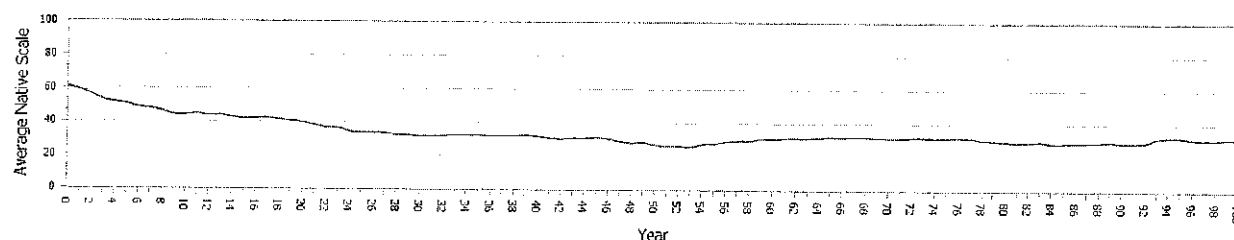


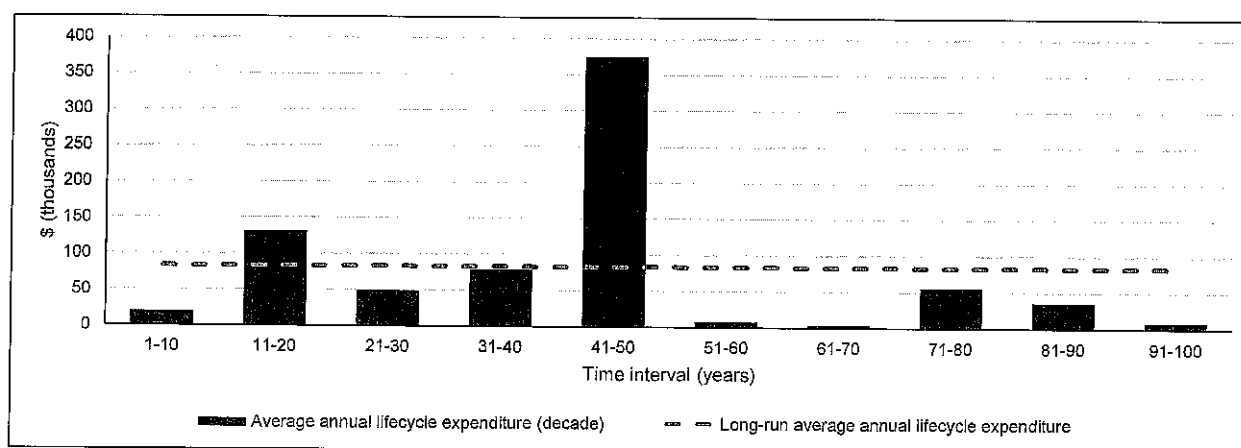


Figure 3-6: Forecast of Average PCI for Roads (Constrained) - \$284,000 (2021\$)



Moving to bridges and structural culverts, combining the average annual lifecycle cost estimates for the Municipality's bridges and structural culvert results in an estimate of the total average annual funding need of \$83,000. A 100-year forecast of funding needs was produced in Excel using the assumptions in the Estimating Long-run Needs section and the cost of the project identified in the 2021 OSIM report. Figure 3-7 shows average annual funding needs by decade for bridges and structural culverts. The dotted horizontal line shows the long-run average annual lifecycle cost of \$83,000.

Figure 3-7: Bridges and Structural Culverts – Average Annual Lifecycle Funding Needs



3.3 Water

3.3.1 Managing Water Assets

Water mains are typically replaced at the end of their useful life. The Municipality does not have a long-term plan to replace aging water mains. Treatment facilities are managed by the Ontario Clean Water Agency (OCWA). OCWA provides the Municipality with a 10-year forecast of capital needs. The forecast identifies lifecycle activities such as replacing component parts – e.g., fire pump Variable Frequency Drive



(VFD) control, well pumps, high lift/distribution pump, etc. The Municipality prioritizes the identified projects and allocates available funding to them.

3.3.2 Estimating Long-run Needs

Data on the lifespans of components of water facilities was not available. In order to establish a sustainable level of annual lifecycle funding for water facilities, the 2016 Canadian Infrastructure Report Card^[1] (2016 C.I.R.C.) was consulted. The 2016 C.I.R.C. identifies ranges of annual reinvestment rates by infrastructure category, based on targets recommended by asset management practitioners. These annual reinvestment rates are expressed as a percentage of asset replacement value. For water facility assets, the suggested reinvestment rates range from 1.7% to 2.5% of asset replacement value. For the purposes of this asset management plan, the average reinvestment rate of 2.1% was utilized to establish a sustainable level of lifecycle funding for water facilities. Applying this reinvestment rate to the estimated replacement cost of the Municipality's water treatment assets (i.e., \$4.39 million) results in an estimated average annual lifecycle cost of \$92,000. The 2020 10-year capital forecast from OCWA identifies \$94,500 in capital projects. This represents slightly over one year of average annual lifecycle costs.

The average annual lifecycle cost for water mains is based on replacement cost and life expectancy of the mains. The useful life of a water main is assumed to be 80 years. The cost of replacing mains is broken down by component as shown in Table 3-6.

^[1] Canadian Infrastructure Report Card: Informing the Future. (The Canadian Council for Public-Private Partnerships, 2016). Accessed from https://www.pppcouncil.ca/web/pdf/infra_report_card_2016.pdf



Table 3-6: Costs - Water Linear Infrastructure

Asset	Cost (2021\$)	Units	Notes and Size Adjustment Factor
Water Main	\$400	Metre	Cost is for 150 mm main. Cost increases by \$22 for every 50 mm increase in diameter.
Valve	\$1,563	Each	Cost is for 150 mm valve. Cost increases by \$521 for every 50 mm increase in diameter.
Hydrant	\$6,862	Each	-
Service Connection	\$2,418	Each	-
Miscellaneous	20% mark up		This is an allowance for miscellaneous costs. It is 20% of the cost of the mains, valves, and hydrants.

Based on these assumptions, the replacement cost of water mains is \$5.7 million, and the average annual lifecycle cost is \$72,000.

3.3.3 Average Annual Lifecycle Costs and Long-run Forecast

Table 3-5 summarizes the analysis in the previous section. The average annual lifecycle cost for water assets is estimated to be \$164,000.

Table 3-7: Average Annual Lifecycle Costs – Water Assets

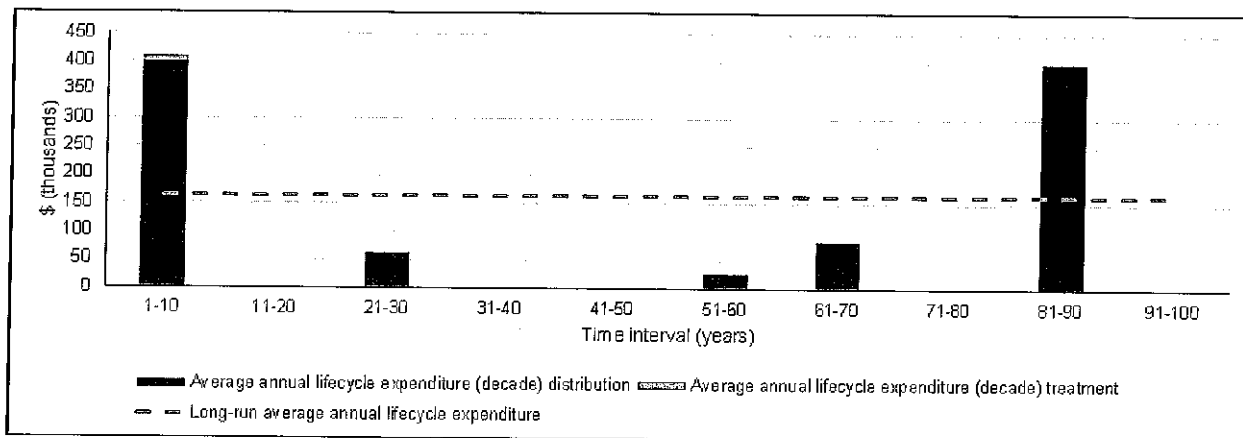
Asset Class	Average Annual Lifecycle Cost (Capital)
Water Facilities	\$92,000
Water Mains	\$72,000
Total	\$164,000

A 100-year forecast could not be produced for water treatment facilities. Figure 3-8 shows the amount identified in OCWA's 10-year water capital forecast.

A 100-year forecast of funding needs for water mains was produced in Excel using the assumptions in the Estimating Long-run Needs section. Figure 3-8 shows average annual funding needs by decade for water assets. The dotted horizontal line shows the long-run average annual lifecycle cost of \$72,000.



Figure 3-8: Water Assets – Average Annual Lifecycle Funding Needs



As can be seen from this age-based forecast of water main replacements, the Municipality may need to replace approximately \$4 million (5.8 km) of water mains over the next decade. The Municipality should consider retaining the expertise of an engineering consultant, or working with its system operator (OCWA), to develop a specific plan for the replacement of water mains before failures start to affect service delivery and costs (e.g., increased number of water main breaks, water loss, and costly emergency repairs). This process may begin with a comprehensive assessment of water main condition and performance, including a thorough analysis of watermain break history to identify potential areas of concern.

3.4 Wastewater

3.4.1 Managing Wastewater Assets

Wastewater mains are typically replaced at the end of their useful life. The Municipality does not have a long-term plan to replace wastewater mains. Treatment facilities are managed by OCWA. OCWA provides the Municipality with a 10-year forecast of capital needs. The forecast identifies lifecycle activities such as replacing component parts – e.g., fire pump VFD control, well pumps, high lift/distribution pump, etc. The Municipality prioritizes the identified projects and allocates available funding to them.



3.4.2 Estimating Long-run Needs

Data on the lifespans of components of wastewater facilities was not available. In order to establish a sustainable level of annual lifecycle funding for wastewater facilities, the 2016 C.I.R.C. was consulted as was done for water treatment. For wastewater facility assets, the suggested reinvestment rates range from 1.7% to 2.5% of asset replacement value. For the purposes of this asset management plan, the average reinvestment rate of 2.1% was utilized to establish a sustainable level of lifecycle funding for wastewater facilities. Applying this reinvestment rate to the estimated replacement cost of the Municipality's wastewater facility assets (i.e., \$9.69 million) results in an estimated average annual lifecycle cost of \$204,000. The 2020 10-year wastewater capital forecast from OCWA identifies \$5,000 in capital projects.

The average annual lifecycle cost for wastewater mains is based on the replacement cost and life expectancy of the mains. The useful life of a wastewater main is assumed to be 80 years. The cost of replacing mains is broken down by component as shown in Table 3-8.

Table 3-8: Costs - Wastewater Linear Infrastructure

Asset	Cost (2021\$)	Units	Notes and Size Adjustment Factor
Wastewater Main	\$387	Metre	Cost is for 200 mm main. Cost increases by \$10 for every 50 mm increase in diameter.
Manholes	\$7,945	Each	-
Service Connection	\$1,648	Each	-
Miscellaneous	20% mark up		This is an allowance for other components of the system not listed. It is 20% of the cost of the mains and manholes.

Based on these assumptions, the replacement cost of wastewater mains is \$4.46 million, and the average annual lifecycle cost is \$56,000.

3.4.3 Average Annual Lifecycle Costs and Long-run Forecast

Table 3-5 summarizes the analysis in the previous section. The average annual lifecycle cost for wastewater assets is estimated to be \$259,000.



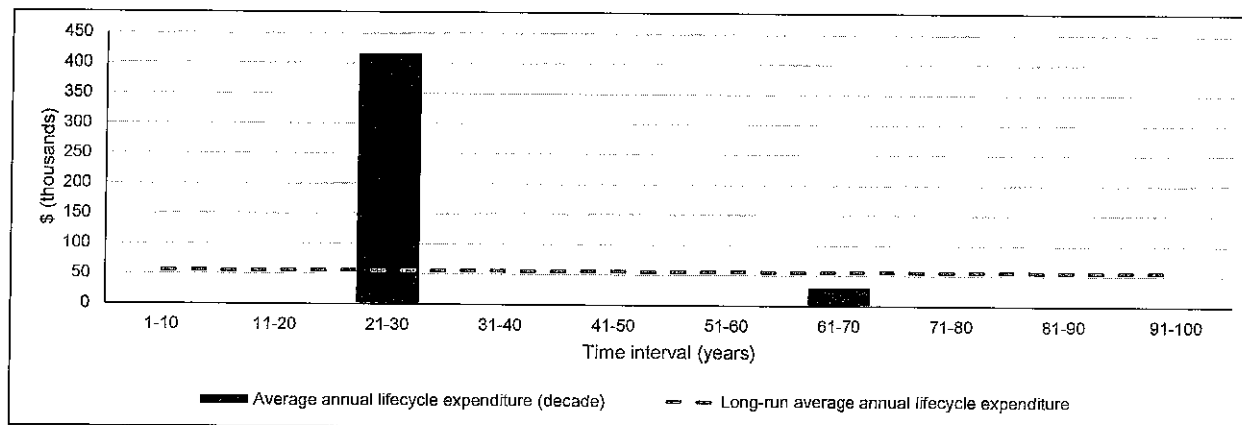
Table 3-9: Average Annual Lifecycle Costs – Wastewater Assets

Asset Class	Average Annual Lifecycle Cost (Capital)
Wastewater Facilities	\$204,000
Wastewater Mains	\$56,000
Total	\$259,000

A 100-year forecast could not be produced for wastewater treatment facilities. Figure 3-8 shows the amount identified in OCWA's 10-year wastewater capital forecast.

A 100-year forecast of funding needs for wastewater mains was produced in Excel using the assumptions in the Estimating Long-run Needs section. Figure 3-9 shows average annual funding needs by decade for wastewater assets. The dotted horizontal line shows the long-run average annual lifecycle cost of \$56,000.

Figure 3-9: Wastewater Distribution Assets – Average Annual Lifecycle Funding Needs



As can be seen from this age-based forecast of water main replacements, the Municipality may need to replace approximately \$4.2 million (5.3 km) of wastewater mains in 20 to 30 years. The Municipality should consider developing a financial plan to address these future replacement needs so that wastewater rates can remain stable over time.



3.5 Stormwater

3.5.1 Managing Stormwater Assets

The Municipality's current plan is to replace stormwater mains at the end of their useful lives. The Municipality does not have a long-term plan to replace stormwater mains.

3.5.2 Estimating Long-run Needs

The useful life of a stormwater main is assumed to be 100 years. The cost of replacing mains is broken down by component as shown in Table 3-10.

Table 3-10: Costs - Stormwater Linear Infrastructure

Asset	Cost (2021\$)	Units	Notes and Size Adjustment Factor
Wastewater Main	\$380	Metre	Cost is for 200 mm main. Cost increases by \$10 for every 50 mm increase in diameter.
Manholes	\$7,427	Each	-
Catch Basins	\$3,431	Each	-
Miscellaneous	20% mark up		This is an allowance for other components of the system not listed. It is 20% of the cost of the mains, manholes, and catch basins.

Based on these assumptions, the replacement cost of stormwater mains is \$5.42 million, and the average annual lifecycle cost is \$54,000.

3.5.3 Average Annual Lifecycle Costs and Long-run Forecast

Without good condition or age data, it is not possible to forecast long-run needs. The Municipality should consider doing a Closed-circuit Television (CCTV) inspection of its stormwater mains to identify current condition and to get a better understanding of the timing of future replacement needs.



Chapter 4

Financial Summary



4. Financial Summary

4.1 Introduction

This chapter details the forecast funding necessary to sustainably finance the lifecycle management strategies presented in Chapter 3 and examines the relationship between these needs and the Municipality's current capital funding capacity.

An annual lifecycle funding target describes the amount of funding that would be required annually to fully finance a lifecycle management strategy over the long term. By planning to achieve this annual funding level, the Municipality would theoretically be able to fully fund capital works as they arise. In practice, capital needs are often "lumpy" in nature due to the value of works being undertaken changing year to year. By planning to achieve this level of funding over the long term, however, the periods of relatively low capital needs would allow for the building up of lifecycle reserve funds that could be drawn upon in times of relatively high capital needs.

4.2 Annual Contribution and Lifecycle Funding Target

Figure 4-1 presents the Municipality's current annual contributions towards capital-related needs – as detailed in the Municipality's 2021 Operating Budget – as well as the annual lifecycle funding target that arises from implementing the previously discussed lifecycle management strategies. For the purposes of the financial analysis, tax-supported (i.e., transportation and stormwater) and rate-supported (i.e., water and wastewater) assets have been aggregated due to the Municipality's operating budget structure.

In total, the Municipality has budgeted to contribute approximately \$786,100 towards capital-related needs in 2021. Included in this are budgeted contributions to capital-related reserve funds, reliable and long-term federal and provincial grants, annual capital-related programs funded through the operating budget (i.e., tar and chip road resurfacings), and the repayment of infrastructure-related debt. The sum of these components comprises the amount of funding the Municipality contributed in 2021 to the provision of capital-related needs.



The annual lifecycle funding target for the Municipality's core infrastructure assets has been estimated to total approximately \$1.44 million. The difference between the annual lifecycle funding target and the current capital budget, referred to as the lifecycle funding gap, indicates that the Municipality is currently underfunding its core infrastructure by approximately \$652,900 annually. While the difference between current contributions and annual targets are balanced for water and wastewater assets, the lifecycle funding gap is a result of underfunding transportation and stormwater assets.

Figure 4-1
Contribution Towards Capital-related Needs and Lifecycle Target (2021\$)

Department	Current Annual Contribution	Annual Lifecycle Funding Target
Transportation & Stormwater		
Capital Works ¹	\$0	
Gas Tax	\$93,041	
OCIF	\$69,742	
Debt Repayments	\$121,345	
Subtotal - Transportation & Stormwater	\$284,128	\$969,000
Water & Wastewater		
Capital Works ¹	\$152,245	
Debt Repayments	\$230,751	
Transfer to Capital Reserve	\$119,000	
Subtotal - Water & Wastewater	\$501,996	\$470,000
Total	\$786,124	\$1,439,000

¹ Net of Transfers from Reserves/Reserve Funds and Grants

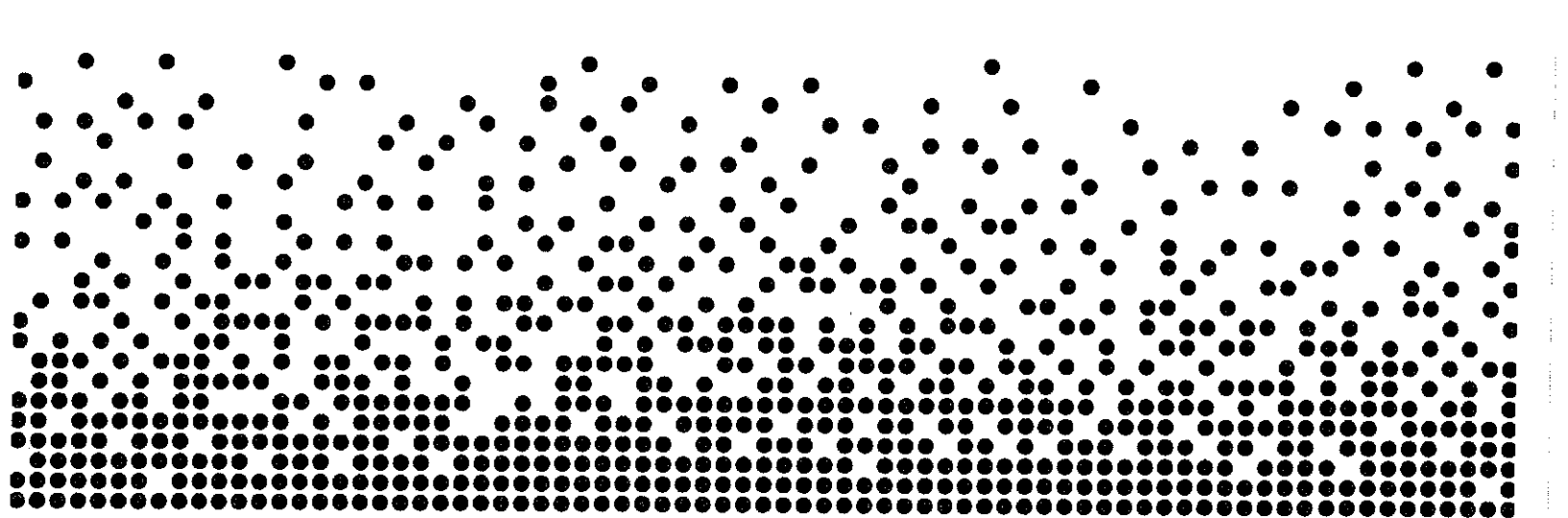
The lifecycle funding gap could be mitigated by increasing contributions to capital reserve funds over time and utilizing external debt financing to cover periods where built-up reserves have not accumulated enough funding. The use of external debt financing may be necessary as the capital expenditures forecast for the next decade exceed the Municipality's capacity to fully fund them from its own sources.



4.3 Future Improvements

The analysis presented herein does not attempt to quantify the increases to the lifecycle funding target that naturally arises due to the acquisition of growth-related capital. These costs should be explored and implemented into the financing strategy in the future. Examining these growth-related capital needs and their impacts on the financing strategy will provide for a comprehensive assessment of the sustainability of the Municipality's overall asset management system.

Once a comprehensive capital needs forecast, including all of the Municipality's assets, has been developed through future expansions of this asset management plan, a full financing strategy can be developed. The future financing strategy should examine how to fund capital needs in the short term while ensuring long-term sustainability. As discussed above, this can be accomplished by exploring strategies to fund any shortfalls as they arise (e.g., through debt or grant funding) while increasing annual contributions towards capital-related needs to lifecycle funding targets.



Appendices



Appendix A

Technical Appendix



Appendix A: Technical Appendix

This appendix documents the source of data and assumptions used in the report.

Asset Class	Notes
Roads	<p>The source of the inventory of paved roads with length, surface type, and condition was the preliminary data from StreetScan's November 2020 road needs study.</p> <p>The inventory of gravel roads was created as follows. The Ontario Road Network GIS file (https://data.ontario.ca/en/dataset/ontario-road-network-road-net-element) was used as a starting point. Paved roads in the StreetScan data and regional and provincial roads were eliminated from the data. The remaining roads were reviewed against a list of gravel roads provided by the Municipality to remove any remaining roads that were not owned by the Municipality. The condition of gravel roads was assessed by the Municipality's staff based on their experience and observations.</p> <p>The average age of road surfaces was calculated using a file provided by the Municipality's staff. When ranges were provided, the mid-point of the range was used.</p> <p>Lifecycle activities, timing, and unit costs were based on discussions with the Municipality's staff.</p> <ul style="list-style-type: none">• LCB road replacement cost was estimated as the cost of HCB full depth reconstruction less the cost of HCB overlay plus two times the cost of a single surface treatment + fog seal.• Gravel replacement cost was estimated as cost of HCB full depth reconstruction less the cost of an HCB overlay.
Bridges	<p>The source of inventory data – structure type, age, condition, and replacement value – was the Municipality's 2021 OSIM Bridge Inspection Report.</p>



Asset Class	Notes
	Lifecycle activities, timing, and percentages of replacement costs were based on discussions with the Municipality's staff.
Water, Wastewater, and Stormwater Linear Assets	The source of inventory data – length, age, and replacement costs - was a file from the Municipality's staff. Unit costs were inflated to 2021\$ using the NRBCPI. Lifespans were based on discussions with the Municipality's staff.
Water and Wastewater Treatment	The source of inventory data – components and replacement costs - was OCWA.